



# Republic of Tanzania The United



# National Bureau of Statistics Ministry of Finance Dodoma



# Office of the Chief Government Statistician Presidents' Office – Finance and Planning Zanzibar

With the Financial Support of







# Annual Agricultural Sample Survey 2023/24

# **National Report**





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The Annual Agricultural Sample Survey (AASS) for the 2023/24 agricultural year is the second in a series of annual surveys conducted in Tanzania by the Government of the United Republic of Tanzania under the 50x2030 Initiative. This initiative addresses the critical need for timely and accurate agricultural data, which is vital for evidence-based decision-making and



policy development. Aligned with the Government's agenda to bridge the

agricultural data gap, it marks a crucial step toward improving regional harmonization, dissemination, and use of core economic and social statistics.

The AASS 2023/24 was jointly implemented by the National Bureau of Statistics (NBS) and the Office of the Chief Government Statistician, Zanzibar (OCGS), in collaboration with Agricultural Sector Lead Ministries (ASLMs). It was financially supported by the World Bank's IDA project under the 50x2030 Initiative, with technical assistance from the Food and Agriculture Organization of the United Nations (FAO), which was instrumental in ensuring the quality and timeliness of survey data.

In line with global and regional development agendas such as the SDGs, CAADP, and the National Five-Year Development Plan 2021/22 – 2025/26, this report provides a detailed overview of statistics on agricultural production and related activities. It contributes to national development objectives and serves as a key resource for research and shaping Government policies, plans, and programs. The data collected from all production seasons, covering crops, livestock, and aquaculture, will greatly enhance decision-making and strengthen the capacity of stakeholders across the agricultural data value chain.

As we commence the dissemination of the main report, we extend our sincere appreciation to all stakeholders for their steadfast commitment and support. It is with great satisfaction that we present the release of the Annual Agricultural Sample Survey (AASS) for the 2023/24 agricultural year, a significant accomplishment achieved through collaborative efforts under the 50x2030 Initiative.

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## **Acronyms and Abbreviations**

AASS Annual Agricultural Sample Survey

ASLMs Agriculture Sector Lead Ministries

CAADP Comprehensive Africa Agriculture Development Programme

FAO Food and Agriculture Organization of the United Nations

GDP Gross Domestic Product

GSARS Global Strategy for Agricultural and Rural Statistics

IDA International Development Association

NBS National Bureau of Statistics

OCGS Office of the Chief Government Statistician Zanzibar

PO-RALG President's Office, Regional Administration and Local Government

SDGs Sustainable Development Goals

TOE Training of Enumerators

TOT Training of Trainers

TSMP II Tanzania Statistical Master Plan II

#### **AASS 2023/24 KEY FINDINGS**

#### 1.0 Agricultural Households by Sex and Activities, Tanzania



8,971,794

**Agricultural Households** 



Male-Headed











15.9 Ha. **Total Planted Area** 



8.16Ha. "Cereal Crops"



6.05 Ha. "Maize"





0.25 Ha. "ca

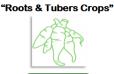
#### 3.0 Production of Selected Crops (Million Tons), Tanzania

10.54 Tons "Cereal Crops"



7.20 Tons

# 1.52 Tons



0.47 Tons "Cassava'

#### 4.0 Ownership of Farmland by Households

26.8% "Customary Right of Occupancy"



#### 5.0 Irrigated Planted Area

688,757 Ha. (4.3%)

"Total Area of Irrigated Crops"



#### 6.0 Seed Type Used by Households

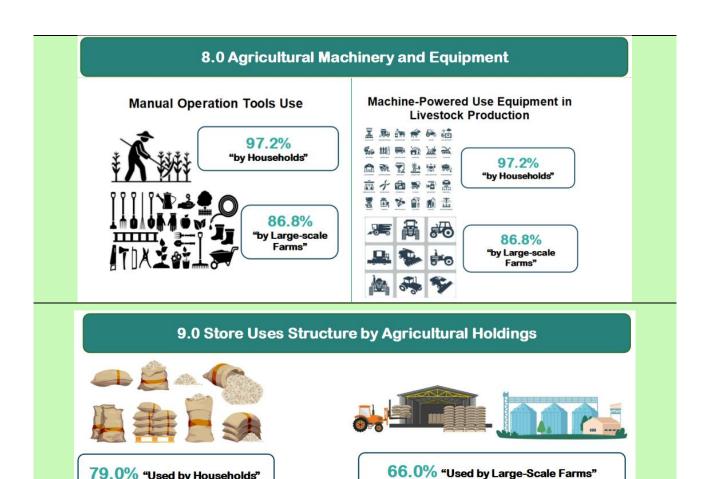
**78.4%** "Local Seeds" 40.8% "Improved Seeds"



#### 7.0 Fertilizer Types Used by **Households**

63.1% "Inorganic Fertilizer" 53.7% "Organic Fertilizer"





79.0% "Used by Households"

## **Definition of Key Terms**

#### **Agricultural Holding**

Is any economic unit of agricultural production (like a garden of temporary and/or permanent crops or cattle rearing/plantation) under single management, without regard to title, legal form, or size.

#### **Agricultural Machinery and Equipment**

Refers to tools, implements, and machines that are used to perform various farm activities, either manually or with power assistance, replacing or augmenting human labor. It includes everything from simple hand tools to complex, motorized farm machinery.

#### **Agricultural Structures**

Refer to physical constructions and facilities that support agricultural production and rural development. It includes all essential structures for various agricultural activities such as crop production, livestock farming, post-harvest handling, storage, and farm management.

#### Aquaculture

Refer to the practice of breeding and raising aquatic organisms in a controlled aquatic environment until they attain the appropriate size as per need, and includes the raising of marine, brackish or freshwater organisms, either caught from their natural or artificial environment as seed and kept until they reach the desired size.

#### **Cropping Household**

A household is referred to be an exclusively cropping household if it has cultivated a piece of land equal to or exceeding 25 square meters, but has no livestock, or it rears a number of animals below the established thresholds (i.e., no cattle or less than 5 goats/sheep/pigs or less than 50 chickens/turkeys/ducks).

#### **Crop and Livestock Household**

A household is referred to be both a crop and livestock household if it has cultivated a piece of land equal to or exceeding 25 square meters and reared at least one cattle or at least five between goats, sheep or pigs, or at least fifty between chicken, ducks or turkeys during the reference agricultural year.

#### **Dry Season**

The dry season in Tanzania typically occurs from June to October. During this period, there is minimal rainfall, and the humidity remains very low.

#### **Field**

It is any piece of land of one land tenure type surrounded by other land, water, road, forest, or other features not forming part of the farm or forming part of the farm under a different land tenure type. This includes fields that were used partially or entirely for crop cultivation (including vegs and fruit trees and kitchen gardens), farm buildings, farmyards, temporary or permanent pastures, forests and other wooded land, and aquaculture. Include also fields that were left temporarily, follow, or unused.

#### Household

It is defined as a person or a group of persons, kin and non-kin, who live in the same dwelling and share income, expenses, daily subsistence tasks, regardless of source of income, and eat from the same pot.

#### **Large-Scale Farms**

These are farms with at least 20 hectares of cultivated land or at least 50 herds of cattle or at least 100 between goats, sheep, and pigs or at least 1,000 chickens. In addition to this, they should fulfill all four of the listed conditions:

- i) The greater part of the produce should go to the market.
- ii) The operation of farm should be continuous.
- iii) There should be an application of machinery/implements on the farm, and
- iv) Should have at least one permanent employee.

#### Livestock Household

A household is referred to be an exclusively livestock household if it reared at least 1 cattle or at least 5 between goats, sheep, and pigs, or at least 50 between chickens, turkeys and ducks during the reference agricultural year and it cultivated no land or less than 25 square meters.

#### **Long Rainy Season**

The long rainy season in Tanzania begins in March up to May of the same year.

#### **Permanent Crops**

This refers to crops which are sown or planted once, and then, they occupy the land for some years and need not to be replanted after each annual harvest.

#### **Plot**

A plot is defined as a continuous piece of land on which a specific crop or a mixture of crops is grown, or which is fallow or waiting to be planted.

#### **Reference Period**

The Annual Agriculture Sample Survey (AASS) covered the agricultural year 2023/24. The agricultural year is a twelve - month cycle in which production of crops takes place. In Tanzania, agricultural year commences on 1<sup>st</sup> October and ends 30<sup>th</sup> September of the following year.

#### **Short Rainy Season**

The short rainy season in Tanzania begins in October up to January of the following year.

#### **Temporary Crops**

This refers to crops that mature within one or more rainy seasons (e.g. beans and maize) and shall be replanted after the harvest.

#### **Tenure**

Refers to the arrangements or rights under which the holder holds or uses land.

#### Chapter.1 Background

#### 1.1 Introduction

The agricultural sector is crucial for Tanzania's economic growth, employment, and poverty reduction, contributing about 26.5 percent of the country's GDP<sup>1</sup>. Given the enormous importance of accurate and reliable agricultural statistics, especially for policy, planning and evidence-based decision making, the National Bureau of Statistics (NBS) and Office of Chief Government Statistician (OCGS) with technical support from the Food and Agriculture Organization of the United Nations (FAO) conducted the Annual Agriculture Sample Survey (AASS) for the Agricultural Year 2023/24. From the beginning and at all stages, NBS and OCGS worked together with Agriculture Sector Lead Ministries (ASLMs) to ensure that the survey considered national policies and other frameworks in the development of the agriculture sector in the country. Tanzania has developed a long and medium-term policy framework for the economy in general and for the agriculture sector in particular, which places agriculture at the center and has evolved various sector and sub-sector policies. Related fields such as natural resources management are addressed, and their complementarity in terms of achieving the long-term social and economic development objective of the country is articulated.

The Annual Agriculture Sample Survey (AASS 2023/24) report focuses on agricultural households, large-scale farms, land use, crop production, input use and acquisition (fertilizers and pesticides), seed and seedling acquisition, agro-processing, irrigation use, livestock product and production aquaculture production. Nonetheless, the survey also collected data on machinery and equipment. The report describes the agricultural activities at the National and Regional levels that took place on both sides of the United Republic of Tanzania during the 2023/24 Agricultural year.

The report is divided into five chapters: Background Information, Demographics, Irrigation and inputs; Area, production and use of major crops; and Machinery and Equipment.

#### 1.2 Survey Objectives

The main objective of the Annual Agriculture Sample Survey (AASS-2023/24) was to generate up-to-date and precise data on the acreage and production of major crops, livestock numbers, livestock products, and aquaculture. Accurate crop production figures are essential for a wide range of stakeholders in the agricultural sector. The data from this survey provides critical insights for farmers, agricultural businesses, government policymakers, and other key players to inform their decisions in both the short and long term.

The specific objectives of the AASS 2023/24:

i. To collect timely data on agricultural production and productivity at both national and regional levels;

<sup>&</sup>lt;sup>1</sup> Economic Survey 2024

- ii. To gather core data to help develop and review agricultural policies and to guide the implementation of agricultural plans at national and regional levels between agricultural census periods;
- iii. To compile fundamental statistics that facilitate comparisons in the development of the agriculture sector across the country; and
- iv. To collect data on agricultural machinery, equipment, and structures, as well as information on women's empowerment and nutrition.

#### 1.3 Methodology

#### 1.3.1 Scope and Coverage

The Annual Agricultural Sample Survey 2023/24 was conducted for both agricultural households and large scale farms. This report covers information on agricultural households as well as large scale farms to provide complete national estimates for some variables such as households rearing livestock, crop production, and households practicing aquaculture.

The main topics covered during the survey were household members and holder identification, field roster, short rainy plot roster, short rainy crop roster, long rainy plot roster, long rainy crop roster, permanent crop production, crop harvest use, input use and acquisition (fertilizers and pesticides), livestock in stock and change in stock, milk production, egg production, other livestock products, aquaculture production, buildings or structures for agriculture, machinery and equipment used for agriculture, women's empowerment and nutrition (dietary diversity).

#### 1.3.2 Sample Design

The sampling frame for the Annual Agricultural Sample Survey (AASS) 2023/24 in Tanzania was derived from the Population and Housing Census (PHC) 2022, which provides a comprehensive listing of all Enumeration Areas (EAs) across the country. The survey was designed to provide reliable agricultural statistics at the regional level for both Mainland Tanzania and Zanzibar.

A stratified two-stage sampling design was employed. In the first stage, EAs served as the primary sampling units (PSUs). Within each domain (region), EAs were stratified into two or three strata, depending on local characteristics. From each stratum, EAs were selected through systematic sampling with probability proportional to size (PPS), where the measure of size was the number of agricultural households in the respective EA.

Before selection, EAs within each stratum and region were sorted hierarchically to ensure geographical spread and implicit stratification. The sorting followed administrative levels in the following sequence: District, Council, Constituency, Division, Ward, Village, and EAs (or hamlets). Each EA/hamlet had a unique identification code that aligns with administrative geographical ordering. Additionally, urban-rural classification at the ward level was applied to further enhance representativeness through implicit stratification.

The second stage involved the selection of agricultural households within each sampled EA. In hamlets with more than 200 households, the EAs/hamlets were segmented into multiple segments with not more than 200 households. At this point, a simple random sampling method was used to select one segment. A listing operation was conducted in each selected EA/hamlet before selection, after which 12 agricultural households were selected using a simple random sampling approach.

In total, 1,504 primary sampling units (Enumeration Areas) were selected from the PHC 2022 sampling frame, comprising 1,375 from Mainland Tanzania and 129 from Zanzibar. This sampling approach yielded a targeted sample of 18,048 agricultural households, with 16,500 households from Mainland Tanzania and 1,548 from Zanzibar, based on a selection of 12 households per EA.

However, following the household listing and screening process, only 17,759 households were confirmed to qualify as agricultural households. This final count reflects the number of households that met the survey's eligibility criteria i.e., those actively engaged in agricultural activities at the time of enumeration.

In contrast to the sampling approach used for agricultural households, no sampling was applied to large-scale farms. Instead, the survey adopted a complete enumeration strategy for this group. That is, all identified large-scale farmers were included and interviewed during the survey. This approach ensured comprehensive coverage of large-scale agricultural operations across the country, allowing for more accurate estimates of production, input use, and other characteristics specific to this segment of the agricultural sector.

#### 1.3.3 Survey Organization

The Annual Agricultural Sample Survey (AASS-2023/24) was a comprehensive effort to collect agricultural data across Tanzania. It comprised 36 teams collecting data from agricultural households, with 31 teams operating in Mainland Tanzania and 5 in Zanzibar. Additionally, 13 teams were dedicated to collecting data from the large-scale farms in Mainland Tanzania. Each team, whether assigned to households or large-scale farms, comprised four enumerators, a team supervisor (Regional Statistical Manager), and a driver.

The data collection process was dynamic, involving teams moving from one Enumeration Area to another to gather information. To maintain accuracy and consistency, a dedicated Quality Control (QC) team was deployed, with each member responsible for supervising data collection activities in two designated regions. The QC team had two main responsibilities: first, to monitor the data daily, and second, to conduct physical visits throughout the entire data collection process. This ensured that the survey maintained high standards while capturing a comprehensive view of agricultural practices and trends across the country.

## Chapter.2 Agricultural Households and Holdings Characteristics

#### 2.1 Introduction

This chapter provides information on the agricultural activities performed by agricultural households, including crop production, livestock keeping, and aquaculture farming. The chapter further presents details on land ownership as well as crop land use by agricultural households and large scale farms in both short and long rainy seasons of the 2023/24 agricultural year.

#### 2.2 Households Engaged in Agriculture

The findings show that the total number of agricultural households in Tanzania was 8,971,794, of which 8,821,600 households were in Mainland Tanzania and 150,194 households in Zanzibar. Among the total agricultural households in Tanzania, 8,848,983 households (98.6 percent) engaged in crop production, while 5,144,067 households (57.3 percent) engaged in livestock rearing (Table 2.1).

In Mainland Tanzania, 8,703,351 households (98.7 percent) engaged in crop production, whereas 5,050,256 households (57.2 percent) engaged in livestock rearing. Similarly, in Zanzibar, 145,632 households (97.0 percent) engaged in crop production, while 93,811 households (62.4 percent) engaged in livestock rearing (Table 2.1).

Table 2.1: Number and Percentage of Agricultural Households by Activity During 2023/24 Agricultural Year,
Tanzania

	Total	Households Involved in Crop Production		Households Involved in Rearing Livestock	
Coverage	Agricultural				
	Households	Number	Percent	Number	Percent
Mainland Tanzania	8,821,600	8,703,351	98.7	5,050,256	57.2
Zanzibar	150,194	145,632	97.0	93,811	62.5
Tanzania	8,971,794	8,848,983	98.6	5,144,067	57.3

Source: Annex Table (2-1) in Statistical Tables of AASS 2023/24

In Mainland Tanzania, regional statistics indicate that Morogoro region had the largest number of households engaged in agriculture (560,402; 6.4 percent), marginally followed by Dodoma (554,229; 6.3 percent) and Kagera (547,688; 6.2 percent), while Katavi had the smallest number of households that engaged in agriculture (150,931; 1.7 percent) (Figure 2.1).

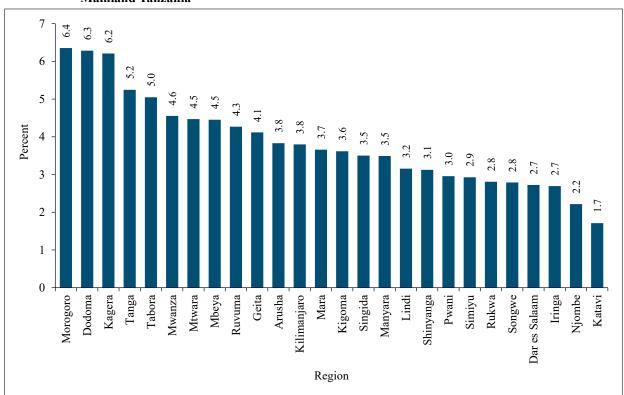


Figure 2.1: Percentage Distribution of Agricultural Households by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (2-1) in Statistical Tables of AASS 2023/24

In Zanzibar, the findings show that Kaskazini Pemba had the largest number of households engaged in agriculture (33,005; 22.0 percent), followed by Mjini Magharibi (32,235; 21.5 percent), while Kusini Unguja had the smallest (27,721; 18.5 percent) (Figure 2.2).

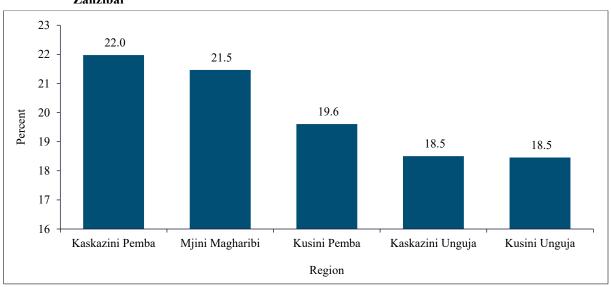


Figure 2.2: Percentage Distribution of Agricultural Households by Region During 2023/24 Agricultural Year, Zanzibar

Source: Annex Table (2-1) in Statistical Tables of AASS 2023/24

#### 2.3 Agricultural Households Engaged in Crop Production

During the short rainy season, a total of 3,631,195 agricultural households were engaged in crop production in Tanzania (3,503,117 households in Mainland Tanzania and 128,078 in Zanzibar). Among the agricultural households engaged in crop production in Mainland Tanzania, Kagera had the largest number (529,821 households;15.1 percent) engaged in crop production, followed by Mwanza (377,689 households; 10.8 percent) and Tanga (346,789 households; 9.9 percent). The smallest number was recorded in Rukwa (1,676 households; 0.04 percent). In Zanzibar, Kaskazini Pemba had the largest number of households involved in crop production (30,247; 23.6 percent), followed by Mjini Magharibi (26,886; 21.0 percent), while Kaskazini Unguja region had the smallest (22,137 households; 17.3 percent).

In the long rainy season, the total number of agricultural households that engaged in crop production in Tanzania was 7,285,813, with 7,167,048 households registering their farming activities in Mainland Tanzania and 118,765 in Zanzibar. For those in Mainland Tanzania, Dodoma had the largest number (516,824 households; 7.2 percent), followed by Morogoro (511,666;7.1 percent) and Kagera (426,982; 6.0 percent). The smallest number was recorded in Kigoma region (45,293 households; 0.6 percent). In Zanzibar, the largest number of households involved in crop production was in Kaskazini Pemba (32,547; 27.4 percent), followed by Kusini Pemba (27,860; 23.5 percent), while Kaskazini Unguja had the smallest (11,302; 9.5 percent) (Table 2.2).

Table 2.2: Number and Percentage of Agricultural Households Engaged in Crop Production by Season and Region During 2023/24 Agricultural Year, Tanzania

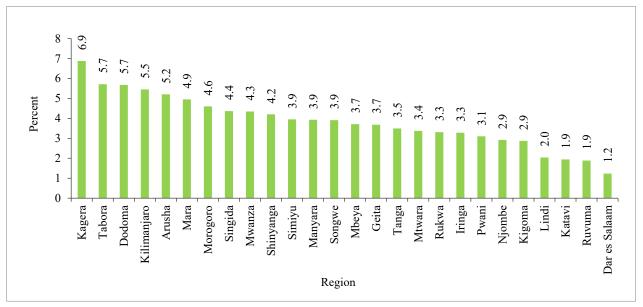
Region	Short Rain	y Season	<b>Long Rainy Season</b>			
Region	Number	Percent	Number	Percent		
Dodoma	39,699	1.1	516,824	7.2		
Arusha	117,166	3.3	287,165	4.0		
Kilimanjaro	260,645	7.4	304,608	4.3		
Tanga	346,789	9.9	367,543	5.1		
Morogoro	124,693	3.6	511,666	7.1		
Pwani	203,460	5.8	162,488	2.3		
Dar es Salaam	119,588	3.4	151,318	2.1		
Lindi	65,827	1.9	278,495	3.9		
Mtwara	-	-	394,185	5.5		
Ruvuma	-	-	375,248	5.2		
Iringa	17,293	0.5	236,251	3.3		
Mbeya	55,696	1.6	382,383	5.3		
Singida	2,125	0.1	307,297	4.3		
Tabora	160,917	4.6	303,919	4.2		
Rukwa	1,676	0.0	246,950	3.4		
Kigoma	290,759	8.3	45,293	0.6		
Shinyanga	5,400	0.2	274,062	3.8		
Kagera	529,821	15.1	426,982	6.0		
Mwanza	377,689	10.8	135,825	1.9		
Mara	277,976	7.9	235,472	3.3		
Manyara	38,416	1.1	279,889	3.9		
Njombe	26,238	0.7	184,937	2.6		
Katavi	-	0.0	150,672	2.1		
Simiyu	98,535	2.8	189,302	2.6		
Geita	334,231	9.5	172,547	2.4		
Songwe	7,512	0.2	245,727	3.4		
Mainland Tanzania	3,503,117	100.0	7,167,048	100.0		
Kaskazini Unguja	22,137	17.3	11,302	9.5		
Kusini Unguja	25,702	20.1	24,727	20.8		
Mjini Magharibi	26,886	21.0	22,328	18.8		
Kaskazini Pemba	30,247	23.6	32,547	27.4		
Kusini Pemba	23,106	18.0	27,860	23.5		
Zanzibar	128,078	100.0	118,765	100.0		
Tanzania	3,631,195	100.0	7,285,813	100.0		

Source: Annex Table (2-1) in Statistical Tables of AASS 2023/24

#### 2.4 Agricultural Households Engaged in Rearing Livestock

The results show that a total of 5,144,067 households (57.3 percent of the total agricultural households) were involved in rearing livestock in Tanzania, whereas 5,050,256 households were in Mainland Tanzania and 93,811 in Zanzibar. In Mainland Tanzania, among the agricultural household that were engaged in rearing livestock, Kagera region had the largest number of households (347,040; 6.9 percent) engaged in rearing livestock, followed by Tabora (288,393; 5.7 percent) and Dodoma (286,646; 5.7 percent). The lowest number was recorded in Dar es Salaam (62,229; 1.2 percent) (Figure 2.3).

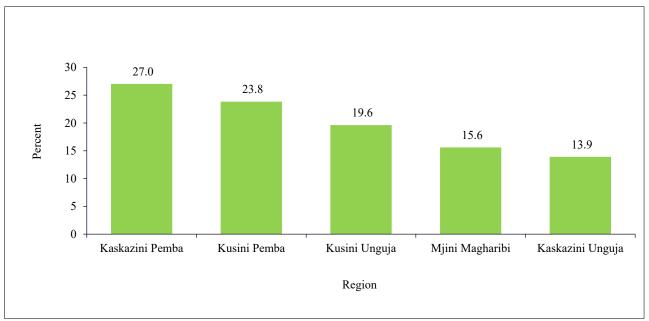
Figure 2.3: Percentage Distribution of Agricultural Households engaged in Rearing Livestock by Region During 2023/24 Agricultural Year, Mainland Tanzania



Source: Annex Table (2-1) in Statistical Tables of AASS 2023/24

In Zanzibar, the largest number of households involved in rearing livestock was in Kaskazini Pemba (25,364; 27.0 percent), followed by Kusini Pemba (22,358; 23.8 percent), while Kaskazini Unguja region had the smallest (13,042; 13.9 percent) (Figure 2.4).

Figure 2.4: Percentage Distribution of Agricultural Households engaged in Rearing Livestock by Region During 2023/24 Agricultural Year, Zanzibar



Source: Annex Table (2-1) in Statistical Tables of AASS 2023/24

# 2.4 Agricultural Households by Sex of Head of Household and Type of Agricultural Activities

The results show that, out of the total agricultural households in Tanzania, 6,800,885 households (75.8 percent) were headed by male and 2,170,909 (24.2 percent) by female. In Mainland Tanzania, 6,681,176 households (75.7 percent) were headed by male and 2,140,424 (24.3 percent) by female. In Zanzibar, 79.7 percent of the agricultural households were headed by male (Figure 2.5 & Table 2.3).

Tanzania Mainland Tanzania Zanzibar

24.2

75.8

Male-headed Female-headed

Male-headed Female-headed

Male-headed Female-headed

Male-headed Female-headed

Figure 2.5: Percentage Distribution of Agricultural Households by Sex of Household Head, During 2023/24
Agricultural Year, Tanzania

Source: Annex Tables (2-2) in Statistical Tables of AASS 2023/24

#### 2.4.2 Cropping Households by Sex of Head

The results indicate that out of the male headed agricultural households in Tanzania, 6,714,796 (98.7 percent) practice cropping, while out of the female headed agricultural households, 2,134,187 (98.3 percent) are engaged in agricultural cropping.

In Mainland Tanzania, 98.7 percent of all agricultural households were involved in crop production. From the total number of male-headed agricultural households, 98.8 percent are engaged in cropping activities, whereas 98.3 percent of female-headed households participated in cropping activities. In nearly all regions, over 90.0 percent of both male- and female-headed households were involved in crop production.

In Zanzibar, 97.0 percent of all agricultural households reported to engage in crop production. Additionally, 96.5 percent of male-headed households reported to practice crop production, and 98.8 percent of female-headed households were engaged in cropping activities. Across all regions, over 90.0 percent of both male- and female-headed households were involved in crop production (Table 2.3).

Table 2.3: Number and Percentage of Agriculture Households Engaged in Crop Production by Sex of Head During 2023/24 Agricultural Year, Tanzania

Region	Numl	ber of Agricu Households	ltural	Number o	of Household cropping	s practicing	Percentage of Households practicing cropping			
Tregivii	Male- headed	Female- headed	All	Male- headed	Female- headed	All	Male- headed	Female- headed	All	
Dodoma	403,573	150,656	554,229	401,417	150,245	551,662	99.5	99.7	99.5	
Arusha	248,822	89,071	337,893	224,923	71,519	296,443	90.4	80.3	87.7	
Kilimanjaro	246,006	89,032	335,038	240,910	87,440	328,350	97.9	98.2	98.0	
Tanga	341,221	121,484	462,705	335,520	118,411	453,930	98.3	97.5	98.1	
Morogoro	419,112	141,290	560,402	418,208	141,290	559,499	99.8	100.0	99.8	
Pwani	203,231	57,639	260,870	194,147	57,639	251,786	95.5	100.0	96.5	
Dar es Salaam	162,214	78,088	240,302	149,537	73,434	222,971	92.2	94.0	92.8	
Lindi	198,820	79,675	278,495	198,820	79,675	278,495	100.0	100.0	100.0	
Mtwara	268,355	125,830	394,185	268,355	125,830	394,185	100.0	100.0	100.0	
Ruvuma	303,889	72,593	376,482	302,656	72,593	375,248	99.6	100.0	99.7	
Iringa	172,067	65,526	237,593	171,186	65,526	236,712	99.5	100.0	99.6	
Mbeya	297,049	95,735	392,784	296,550	94,622	391,172	99.8	98.8	99.6	
Singida	238,369	70,496	308,865	237,701	70,496	308,197	99.7	100.0	99.8	
Tabora	372,818	72,469	445,287	372,038	72,116	444,154	99.8	99.5	99.7	
Rukwa	199,821	47,934	247,755	199,017	47,934	246,950	99.6	100.0	99.7	
Kigoma	247,890	71,151	319,041	246,028	69,838	315,866	99.2	98.2	99.0	
Shinyanga	208,557	67,059	275,616	207,783	66,279	274,062	99.6	98.8	99.4	
Kagera	416,950	130,739	547,688	415,523	128,810	544,333	99.7	98.5	99.4	
Mwanza	300,507	101,310	401,817	298,199	100,735	398,934	99.2	99.4	99.3	
Mara	236,022	86,723	322,745	230,764	86,018	316,782	97.8	99.2	98.2	
Manyara	247,518	60,480	307,998	243,838	58,165	302,003	98.5	96.2	98.1	
Njombe	140,651	54,849	195,500	140,651	54,849	195,500	100.0	100.0	100.0	
Katavi	125,769	25,162	150,931	125,509	25,162	150,672	99.8	100.0	99.8	
Simiyu	189,662	68,542	258,204	189,220	68,542	257,762	99.8	100.0	99.8	
Geita	285,990	77,220	363,210	284,737	77,220	361,957	99.6	100.0	99.7	
Songwe	206,291	39,674	245,965	206,053	39,674	245,727	99.9	100.0	99.9	
Mainland Tanzania	6,681,176	2,140,424	8,821,600	6,599,292	2,104,059	8,703,351	98.8	98.3	98.7	
Kaskazini Unguja	23,169	4,620	27,789	21,622	4,522	26,144	93.3	97.9	94.1	
Kusini Unguja	21,556	6,165	27,721	21,179	6,072	27,252	98.3	98.5	98.3	
Mjini Magharibi	27,011	5,224	32,235	24,788	5,058	29,846	91.8	96.8	92.6	
Kaskazini Pemba	23,831	9,174	33,005	23,831	9,174	33,005	100.0	100.0	100.0	
Kusini Pemba	24,142	5,302	29,444	24,084	5,302	29,386	99.8	100.0	99.8	
Zanzibar	119,709	30,485	150,194	115,504	30,128	145,632	96.5	98.8	97.0	
Tanzania	6,800,885	2,170,909	8,971,794	6,714,796	2,134,187	8,848,983	98.7	98.3	98.6	

Source: Annex Table (2-3) in Statistical Tables of AASS 2023/24

#### 2.4.3 Livestock Households by Sex of Head

Regarding livestock sector in Tanzania, the results show a different households' distribution pattern, whereby 5,144,067 agricultural households (57.3 percent) reported to raise livestock. Furthermore, 60.1 percent of male-headed households were engaged in rearing livestock, whereas 48.7 percent of female-headed households reported to engage in livestock production.

In Mainland Tanzania, 57.2 percent of agricultural households reared livestock. Among the male-headed agricultural households, 60.0 percent reported rearing livestock, while for female-headed headed, it was 48.6 percent. Moreover, in Mainland Tanzania, the Kilimanjaro region had the highest proportion of households rearing livestock for both male-headed and female-headed households, with 82.7 percent and 80.6 percent, respectively. Songwe (81.8 percent) and Simiyu (79.8 percent) were the next best regions with a large proportion of households that reared livestock for male-headed households, while Shinyanga, with 75.3 percent, and Arusha (74.3 percent) came after Kilimanjaro

for female-headed households. On the other hand, Ruvuma was the region with the smallest proportion of households that kept livestock, with 28.0 percent for male-headed households and 14.0 percent for females.

In Zanzibar, 62.5 percent of agricultural households reared livestock. In terms of household headship, 64.3 percent of the male-headed agricultural households reported rearing livestock, while for female-headed agricultural households 55.0 percent reared animals. Regional level statistics showed that Kusini Pemba had the highest proportion of male-headed agricultural households (79.5 percent) that kept livestock, followed by Kaskazini Pemba (77.5 percent), whilst Mjini Magharibi had the lowest (46.0 percent). For female-headed households, Kaskazini Pemba region had the highest proportion (75.2 percent), followed by Kusini Pemba (58.7 percent), whereas Kaskazini Unguja had the lowest (24.2 percent) (Table 2.4).

Table 2.4: Number and Percentage of Agriculture Households Engaged in Rearing Livestock, by Sex of Head During 2023/24 Agricultural Year, Tanzania

p :	Num	ber of Agricu Households		Number	of Household Livestock	ls Rearing	Percent of Household Rearing Livestock			
Region	Male Headed	Female Headed	All	Male Headed	Female Headed	All	Male Headed	Female Headed	All	
Dodoma	403,573	150,656	554,229	230,806	55,840	286,646	57.2	37.1	51.7	
Arusha	248,822	89,071	337,893	196,684	66,172	262,856	79.0	74.3	77.8	
Kilimanjaro	246,006	89,032	335,038	203,487	71,792	275,279	82.7	80.6	82.2	
Tanga	341,221	121,484	462,705	136,162	40,197	176,358	39.9	33.1	38.1	
Morogoro	419,112	141,290	560,402	185,260	47,121	232,381	44.2	33.4	41.5	
Pwani	203,231	57,639	260,870	126,837	29,689	156,526	62.4	51.5	60.0	
Dar es Salaam	162,214	78,088	240,302	46,436	15,794	62,229	28.6	20.2	25.9	
Lindi	198,820	79,675	278,495	77,054	25,741	102,795	38.8	32.3	36.9	
Mtwara	268,355	125,830	394,185	127,058	43,359	170,418	47.3	34.5	43.2	
Ruvuma	303,889	72,593	376,482	85,105	10,193	95,298	28.0	14.0	25.3	
Iringa	172,067	65,526	237,593	126,552	39,195	165,747	73.5	59.8	69.8	
Mbeya	297,049	95,735	392,784	151,543	35,880	187,423	51.0	37.5	47.7	
Singida	238,369	70,496	308,865	177,454	42,977	220,430	74.4	61.0	71.4	
Tabora	372,818	72,469	445,287	247,550	40,843	288,393	66.4	56.4	64.8	
Rukwa	199,821	47,934	247,755	140,059	27,107	167,166	70.1	56.6	67.5	
Kigoma	247,890	71,151	319,041	120,445	24,472	144,918	48.6	34.4	45.4	
Shinyanga	208,557	67,059	275,616	161,827	50,484	212,311	77.6	75.3	77.0	
Kagera	416,950	130,739	547,688	281,691	65,349	347,040	67.6	50.0	63.4	
Mwanza	300,507	101,310	401,817	172,935	46,429	219,364	57.5	45.8	54.6	
Mara	236,022	86,723	322,745	186,072	63,827	249,899	78.8	73.6	77.4	
Manyara	247,518	60,480	307,998	164,691	33,695	198,386	66.5	55.7	64.4	
Njombe	140,651	54,849	195,500	107,776	39,729	147,505	76.6	72.4	75.4	
Katavi	125,769	25,162	150,931	85,222	12,888	98,110	67.8	51.2	65.0	
Simiyu	189,662	68,542	258,204	151,423	48,053	199,475	79.8	70.1	77.3	
Geita	285,990	77,220	363,210	151,105	34,781	185,886	52.8	45.0	51.2	
Songwe	206,291	39,674	245,965	168,698	28,717	197,415	81.8	72.4	80.3	
Mainland Tanzania	6,681,176	2,140,424	8,821,600	4,009,930	1,040,326	5,050,256	60.0	48.6	57.2	
Kaskazini Unguja	23,169	4,620	27,789	11,922	1,120	13,042	51.5	24.2	46.9	
Kusini Unguja	21,556	6,165	27,721	14,980	3,425	18,405	69.5	55.6	66.4	
Mjini Magharibi	27,011	5,224	32,235	12,418	2,224	14,642	46.0	42.6	45.4	
Kaskazini Pemba	23,831	9,174	33,005	18,465	6,899	25,364	77.5	75.2	76.8	
Kusini Pemba	24,142	5,302	29,444	19,246	3,112	22,358	79.7	58.7	75.9	
Zanzibar	119,709	30,485	150,194	77,031	16,780	93,811	64.3	55.0	62.5	
Tanzania	6,800,885	2,170,909	8,971,794	4,086,961	1,057,106	5,144,067	60.1	48.7	57.3	

Source: Annex Table (2-4) in Statistical Tables of AASS 2023/24

#### 2.4.4 Households Engaged in Aquaculture by Sex of Head

Aquaculture production among agricultural households remains a relatively minor activity across the country. In addition to household involvement in crop and livestock production, some were practicing aquaculture production. Results indicate that, only 0.2 percent of agricultural households in Tanzania were engaged in aquaculture activities.

In Mainland Tanzania, only 0.2 percent of male-headed agricultural households practiced aquaculture, while 0.1 percent of female-headed households involved in aquaculture. The engagement was slightly higher in Zanzibar, with 4.5 percent of agricultural households involved in aquaculture production. Furthermore, 4.1 percent of male-headed households reported to involve in aquaculture, while 6.0 percent of female-headed agricultural households reported to practice in aquaculture (Table 2.5).

Table 2.5: Number and Percentage of Agriculture Households Engaged in Aquaculture Farming, by Sex of Head During 2023/24 Agricultural Year, Tanzania

	Number of	Number of Agricultural Households			er of Aquac Households		Percent of Aquaculture Households			
	Male- headed	Female- headed	All	Male- headed	Female- headed	All	Male- headed	Female- headed	All	
Mainland	6,681,176	2,140,424	8,821,600	12,676	1,201	13,877	0.2	0.1	0.2	
Zanzibar	119,709	30,485	150,194	4,946	1,827	6,773	4.1	6.0	4.5	
Tanzania	6,800,885	2,170,909	8,971,794	17,622	3,028	20,650	0.3	0.1	0.2	

Source: Annex Table (2-5) in Statistical Tables of AASS 2023/24

#### 2.5 Land Ownership

Ownership of land for agricultural production during the 2023/24 agricultural year was classified into several categories, including granted right of occupancy, customary right of occupancy, purchased, inherited, rented/leased in, borrowed, shared cropped, communal land rights, moved in without permission, and other forms of tenure. Among the agricultural households in Tanzania, customary right of occupancy was the most common tenure status, accounting for 26.8 percent of the total land owned. Purchased land ranked second, representing 23.3 percent, while shared cropland had the lowest proportion, with 0.1 percent of total ownership.

In Mainland Tanzania, the predominant land tenure was customary right of occupancy (26.9 percent), followed by purchase (23.4 percent) and inheritance (22.0 percent). The least common tenure type was shared cropped (0.1 percent). In Zanzibar, the most prevalent land tenure was by inheritance (31.4 percent), closely followed by borrowing for free (30.5 percent). The least common tenure type was land acquired by moving in without permission, comprising only 0.4 percent of total ownership (Table 2.6).

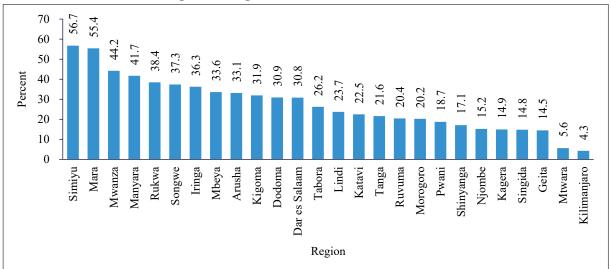
Table 2.6: Percentage of Land by Ownership Status Within Each Region during 2023/24 Agricultural Year

Coverage	Customary Right of Occupancy	Granted Right of Occupancy	Purchased	Rented/Leased in	Sharecropped in	Borrowed for Free	Moved in without Permission	Communal Land Rights	Inherited	Other Tenure Rights	Total
Mainland Tanzania	26.9	6.6	23.4	14.7	0.1	2.6	1.9	1.5	22	0.2	14,023,184
Zanzibar	8	12.6	9.7	2	0.6	30.5	0.4	3	31.4	1.7	80,533
Tanzania	26.8	6.7	23.3	14.7	0.1	2.7	1.9	1.5	22.1	0.2	14,103,717

Source: Annex Table (3-3) in Statistical Tables of AASS 2023/24

Based on the proportion of customary land ownership by region among agricultural households in Mainland Tanzania, Simiyu region had the highest proportion at 56.7 percent, followed by Mara (55.4 percent) and Mwanza (44.2 percent), while Kilimanjaro had the lowest proportion (4.3 percent) (Figure 2.6).

Figure 2.6: Proportion of land owned under Customary Land Ownership by Region among Agricultural Households During 2023/24 Agricultural Year, Mainland Tanzania



Source: Annex Table (3-3) in Statistical Tables of AASS 2023/24

In Zanzibar, customary land ownership among agricultural households was the highest in Kusini Unguja (29.3 percent), followed by Mjini Magharibi (3.9 percent), whilst Kusini Pemba had the lowest (2.1 percent) (Figure 2.7).

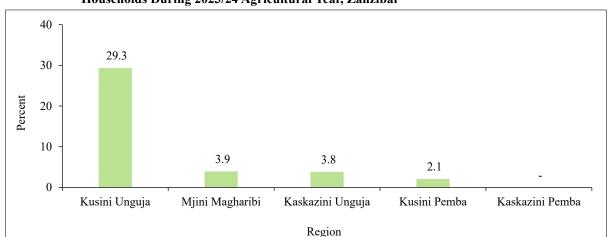


Figure 2.7: Proportion of land owned under Customary Land Ownership by Region among Agricultural Households During 2023/24 Agricultural Year, Zanzibar

Source: Annex Table (3-3) in Statistical Tables of AASS 2023/24

- Low number of observations (n<3)/lack of data/Not applicable

For large-scale farms in Tanzania, granted right of occupancy was the most prevalent tenure type, covering 83.7 percent of total land, followed by rented/leased in at 9.2 percent. The same pattern was observed in Mainland Tanzania, where 83.7 percent of land was held under granted rights of occupancy. Likewise, in Zanzibar, this tenure category dominated, accounting for 89.3 percent of total land ownership (Figure 2.8).

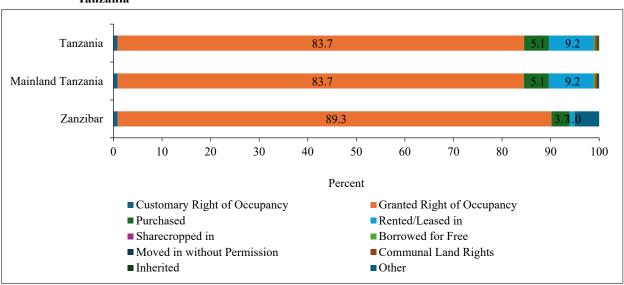


Figure 2.8: Proportion of Land Ownership Status by Large Scale Farms During 2023/24 Agricultural Year, Tanzania

Source: Annex Table (3-3) in Statistical Tables of AASS 2023/24

#### 2.6 Land Use

This section presents land use patterns during the 2023/24 agricultural year in Tanzania, covering both the short and long rainy seasons. It provides comprehensive data for agricultural households and large-scale farms, highlighting the distribution of various farming practices. These include temporary mono-cropping, temporary mixed cropping, fallow land, permanent/temporary mixed cropping, permanent mono-cropping, and permanent mixed cropping.

#### 2.6.1 Land Use by Agricultural Household

Differences in land use practices were observed during the short and long rainy seasons. The findings reveal that temporary mono-cropping was the most common land use practice among households. During the short rainy season, 46.3 percent of households practiced temporary mono-cropping on 1,993,202 hectares, while this increased to 63.1 percent (7,257,190 hectares) in the long rainy season.

Temporary mixed cropping was the second most common method, practiced by 31.1 percent of households (covering 874,514 hectares) in the short rainy season and by 19.4 percent (on 1,345,170 hectares) in the long rainy season.

Some households also left land fallow, with 20.0 percent of them doing so during the short rainy season (1,502,116 hectares) and 7.8 percent during the long rainy season (700,064 hectares). In contrast, the findings indicate that fewer households practiced permanent mono-cropping compared to other farming practices in both the short and long rainy seasons (Table 2.7).

Table 2.7: Land Area by Use of Households for Short and Long Rainy Seasons in Tanzania for 2023/24 Agricultural Year

	5	Short Rainy Seas	on	Long Rainy Season				
Land Use	Percent of Total Area Crop (Ha) Growing Households		Crop Growing Households	Total Area (Ha)	Percent of Crop Growing Households	Crop Growing Households		
Temporary Mono Cropping	1,993,202	46.3	2,001,634	7,257,190	66.3	5,097,037		
Temporary Mixed Cropping	874,514	31.1	1,343,262	1,345,170	19.4	1,487,606		
Fallow	1,502,116	20.0	865,597	700,064	7.8	602,904		
Permanent /Temporary mix	597,940	14.3	619,426	2,091,368	13.7	1,053,884		
Permanent Mono Cropping	336,063	8.5	368,463	887,700	8.7	666,335		
Permanent Mixed Cropping	253,677	16.1	695,986	497,481	11.7	901,147		

Source: Annex Table (3-2) in Statistical Tables of AASS 2023/24

#### 2.6.2 Large Scale Farms Land Use

During the 2023/24 agricultural year, most large-scale farms utilized their land for either permanent or temporary mono-cropping. In the short rainy season, 53.3 percent of these farms cultivated permanent monocrops on 148,742 hectares, while 31.8 percent planted temporary monocrops on 44,439 hectares. In contrast, temporary mixed cropping was the least adopted, with only 3.4 percent of large-scale farms practicing it on 218 hectares.

On the other hand, temporary mono-cropping was the preferred practice during the long rainy season, practiced by 58.4 percent of large-scale farms across 146,466 hectares. Although a smaller proportion of farms (44.8 percent) engaged in permanent mono-cropping, this category occupied a larger total land area of 170,330 hectares, surpassing that of temporary mono-cropping (Table 2.8).

Table 2.8: Large Scale Farms Land Use in Short and Long Rainy Seasons During 2023/24 Agricultural Year, Tanzania

		Sh	ort Rainy Season			Long Rainy Season		
Land Use	Total Area (Ha)	Percent of Crop Growing Large Scale Farms	Crop Growing Large Scale Farms	Total Area (Ha)	Percent of Crop Growing Large Scale Farms	Crop Growing Large Scale Farms		
Temporary Mono Cropping	44,439	31.8	148	146,466	58.4	502		
Temporary Mixed Cropping	218	3.4	16	1,689	8.5	73		
Fallow	27,100	26.0	121	17,815	11.3	97		
Permanent /Temporary mix	3,731	4.3	20	10,438	7.5	64		
Permanent Mono Cropping	148,742	53.3	248	170,330	44.8	385		
Permanent Mixed Cropping	271	4.7	22	1,378	5.7	49		

Source: Annex Table (3-2) in Statistical Tables of AASS 2023/24

# Chapter.3 Area, Production, and Use of Major Crops

#### 3.1 Introduction

Crop production has remained the most dominant type of agricultural activity in Tanzania. The major crops produced in Tanzania are staple food crops (cereals, pulses/legumes and roots/tubers); oil seeds and nuts, horticultural crops (fruits, vegetables, spices and herbs, and flowers) and traditional cash crops. Crops production accounts for a major proportion of agricultural land use, of overall food and nutrition security, and of value added from agriculture. This chapter presents survey findings on crop productions and yield for selected annual crops and perennial crops produced by agricultural households and large-scale farms. In addition, this chapter also presents the results on land area used for crop production by crop.

#### 3.2 Cereals Production

Cereal crops are annual crops grown to produce grains which are mainly used as food and animal feeds. The major cereal crops produced in Tanzania are maize, paddy, sorghum, finger millet, bulrush millet, wheat and barley. However, this report specifically focuses on maize, paddy, sorghum, and bulrush millet.

The results show that, 8,160,758 ha of the selected cereal crops were planted across Tanzania, of which agricultural households accounted for 8,057,163 ha of the total planted area, while large scale farms contributed with 103,593 ha. Out of the area planted with cereals by agricultural households, 8,041,309 ha were in Mainland Tanzania and 15,854 ha in Zanzibar. Furthermore, out of the total planted area, 5,726,667 ha were harvested (5,713,473 ha in Mainland Tanzania and 13,195 ha in Zanzibar) (Table 3.1).

Among the selected cereals in Tanzania, maize occupied the largest planted area of 6,051,149 ha, followed by paddy (1,669,012 ha) and sorghum (360,824 ha), while bulrush millet had the smallest planted area (79,773 ha). However, out of the total area planted with cereals in Tanzania, 5,726,667 ha was harvested.

The total production of selected cereal crops in Tanzania was 10,816,735 tons, with agricultural households producing 10,728,704 tons and large-scale farms contributing 88,025 tons. Maize had the largest production (7,443,199 tons), followed by paddy (3,134,205 tons). Bulrush millet had the smallest production (37,401 tons) (Table 3.1).

Table 3.1: Area Planted, Harvested, Production, Percent of Area Harvested of Selected Cereals Crops During 2023/24 Agricultural Year, Tanzania

Holding Category	Crop	Number of Holdings	Planted (ha)	Harvested Area (ha)	Production (tons)	Yield (tons/ha)
Tanzania						
	Maize	6,671,394	5,984,431	4,061,887	7,397,769	1.8
Agricultural	Paddy	1,607,274	1,635,356	1,285,001	3,092,457	2.4
Households	Sorghum	390,945	357,604	236,670	201,078	0.8
	Bulrush Millet	110,334	79,772	50,175	37,400	0.7
	Maize	470	66,718	59,600	45,430	0.8
I 0 1 F	Paddy	145	33,655	30,875	41,749	1.4
Large Scale Farms	Sorghum	95	3,220	2,458	846	0.3
	Bulrush Millet	-	-	-	-	-
	Maize	6,671,864	6,051,149	4,121,487	7,443,199	1.8
. 11 77 1 1'	Paddy	1,607,419	1,669,012	1,315,876	3,134,205	2.4
All Holdings	Sorghum	391,040	360,824	239,128	201,930	0.8
	Bulrush Millet	110,335	79,773	50,176	37,401	0.7
Mainland Tanzania		,	,	,	,	
	Maize	6,665,186	5,982,709	4,060,299	7,394,401	1.8
Agricultural	Paddy	1,564,232	1,621,472	1,273,644	3,072,357	2.4
Households	Sorghum	389,905	357,438	236,553	200,910	0.8
	Bulrush Millet	109,797	79,690	50,120	37,303	0.7
	Maize	464	66,682	59,565	45,363	0.8
	Paddy	143	33,618	30,845	41,726	1.4
Large Scale Farms	Sorghum	93	3,204	2,446	852	0.3
	Bulrush Millet	-	-	-	-	
	Maize	6,665,650	6,049,391	4,119,864	7,439,763	1.8
	Paddy	1,564,375	1,655,090	1,304,489	3,114,084	2.4
All Holdings	Sorghum	389,998	360,642	238,999	201,756	0.8
	Bulrush Millet	109,798	79,691	50,121	37,304	0.7
Zanzibar		,		,	,	
	Maize	6,208	1,722	1,589	3,368	2.1
Agricultural	Paddy	43,042	13,884	11,357	20,099	1.8
Households	Sorghum	1,040	166	117	169	1.4
	Bulrush Millet	537	82	55	97	1.7
	Maize	6	36	35	67	1.9
	Paddy	-		-	-	-
Large Scale Farms	Sorghum	-		-	-	_
	Bulrush Millet	-		-	-	-
	Maize	6,214	1,758	1,624	3,435	2.1
A 11 TT 1 1'	Paddy	43,044	13,921	11,387	20,122	1.8
All Holdings	Sorghum	1,042	182	129	174	1.4
	Bulrush Millet	537	82	55	97	1.7

### **3.2.1** Maize

The results show that, maize remains the dominant cereal crop planted in Tanzania. A total of 6,671,394 households were engaged in growing maize in Tanzania during 2023/24 agricultural year (6,665,186 households were in Mainland Tanzania and 6,208 in Zanzibar). The total area planted with maize in Tanzania was 6,051,149 ha, of which 5,984,431 ha were planted by agricultural households and 66,718 ha by large scale farms. Moreover, a total of 4,121,487 ha equivalent to 68.1 percent were harvested (Table 3.1).

In Mainland Tanzania, a total of 4,060,299 ha (67.9 percent) were harvested by agricultural households. Out of the area planted with maize, Njombe region reported the highest percentage (92.7)

<sup>&</sup>quot;-" Withheld to avoid disclosing data for individual holdings or insufficient data available from survey (Total includes withheld data)

of area harvested within region, followed by Songwe (91.5 percent), while Kigoma reported the lowest (47.2 percent) (Figure 3.1).

600,000 100 500,000 80 400,000 Area (ha) 300,000 40 200,000 20 100,000 Singida Songwe Dodoma Geita Simiyu Shinyanga Kilimanjaro Region Area Planted (Ha) Area Harvested (Ha) Percent of Area Harvested

Figure 3.1: Area Planted and Area Harvested with Maize by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24: All numbers are based on Agricultural Households

In Zanzibar, 1,589 ha were harvested by agricultural households. Mjini Magharibi harvested 691 ha of the planted area followed by Kusini Unguja region 532 ha while Kaskazini Pemba region harvested the least with 75 ha of area planted (Figure 3.2).

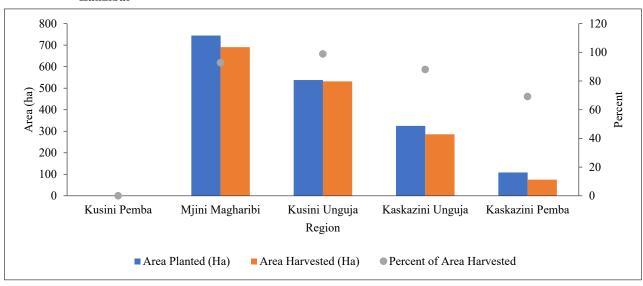


Figure 3.2: Area Planted and Area Harvested with Maize by Region During 2023/24 Agricultural Year, Zanzibar

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

Kusini Pemba withheld to avoid disclosing data for individual holdings or insufficient data available from survey

The total production of maize in Tanzania was 7,443,199 tons of which 7,397,769 tons were from agricultural households and 45,430 tons from large scale farms. Out of the total production by agricultural households, 7,394,401 tons were in Mainland Tanzania and 3,368 tons in Zanzibar (Table 3.1). Ruvuma region had the largest production (911,296 tons), followed by Songwe (596,764 tons) and Tanga (507,767 tons). The lowest production was reported in Lindi region (24,207 tons). In Zanzibar, Mjini Magharibi reported the largest production of maize (2,119 tons), followed by Kusini Unguja (579 tons), while Kaskazini Pemba reported the lowest (280 tons) (Figure 3.3 & 3.4).

The average national yield of maize was 1.8 tons/ha whereby Mainland Tanzania had 1.8 tons/ha and 2.1 tons/ha in Zanzibar. In Mainland Tanzania, Songwe region reported the highest yield of 3.0 tons/ha while Lindi was the region with lowest yield of 0.7 tons/ha. In Zanzibar, Kaskazini Pemba reported the highest yield of 3.7 tons/ha and the least yield was reported in Kusini Unguja (1.1 tons/ha) (Figure 3.3 & 3.4).

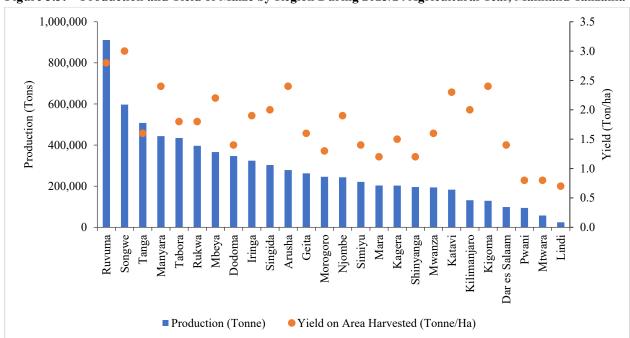


Figure 3.3: Production and Yield of Maize by Region During 2023/24 Agricultural Year, Mainland Tanzania

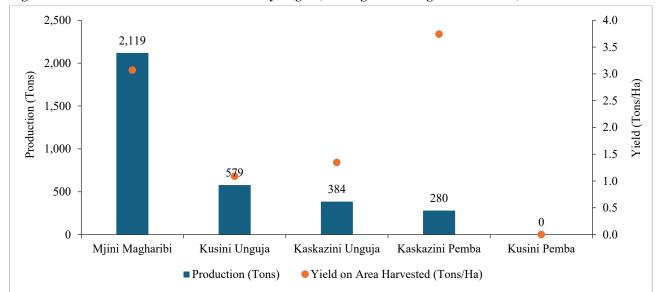


Figure 3.4: Production and Yield of Maize by Region, During 2023/24 Agricultural Year, Zanzibar

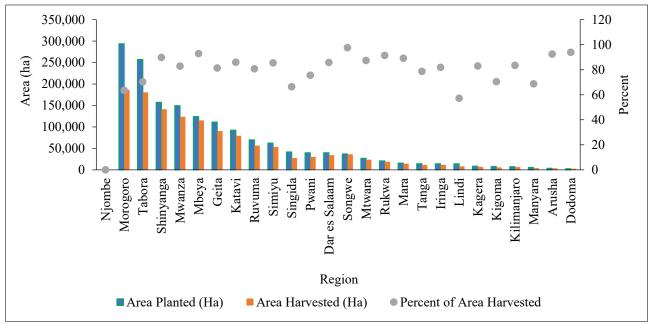
Kusini Pemba withheld to avoid disclosing data for individual holdings or insufficient data available from survey

### **3.2.2 Paddy**

The results show that, 1,607,274 households were engaged in growing paddy in Tanzania during 2023/24 agricultural year. Among those, 1,564,232 households were in Mainland Tanzania and 43,042 in Zanzibar. In Tanzania, the total area planted with paddy was 1,669,012 ha, of which 1,635,356 ha were planted by agricultural households and 33,655 ha by large scale farms. Out of the total area planted by agricultural households, 1,621,472 ha were in Mainland Tanzania and 13,884 ha in Zanzibar. Moreover, a total area of 1,315,876 ha was harvested (Table 3.1).

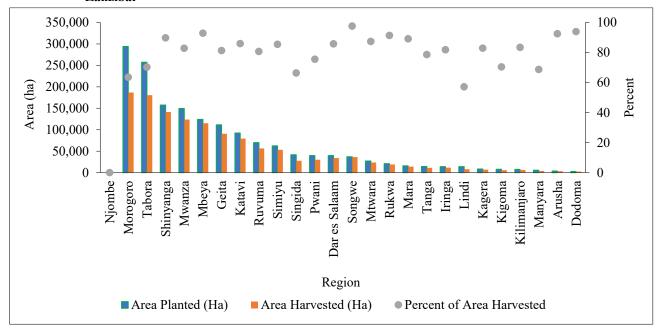
In Mainland Tanzania, agricultural households harvested a total of 1,273,644 hectares, representing 78.5 percent of the total planted area. Across all regions, the harvested area ranged from 57.1 percent in Lindi to 97.6 percent in Songwe. (Table 3.1, Figure 3.5 & 3.6).

Figure 3.5: Area Planted and Area Harvested with Paddy by Region During 2023/24 Agricultural Year, Mainland Tanzania



Njombe withheld to avoid disclosing data for individual holdings or insufficient data available from survey

Figure 3.6: Area Planted and Area Harvested with Paddy by Region During 2023/24 Agricultural Year, Zanzibar



Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

Njombe withheld to avoid disclosing data for individual holdings or insufficient data available from survey

The total production of paddy in Tanzania was 3,134,205 tons, of which 3,092,457 tons were from agricultural households and 41,749 tons from large scale farms. Out of the total quantity produced by agricultural households, 3,072,357 tons were from Mainland Tanzania and 20,099 tons from Zanzibar. Furthermore, average national yield of paddy was 2.4 tons/ha, whereby Mainland Tanzania had 2.4 tons/ha and 1.8 tons/ha in Zanzibar.

In Mainland Tanzania, Mbeya region had the largest production of paddy (462,375 tons), followed by Tabora (406,893 tons) and Shinyanga (370,254 tons), whereas the smallest production was reported in Dodoma region (4,854 tons). Additionally, Manyara region reported the highest yield of 4.3 tons/ha, followed by Mbeya (4.0 tons/ha) and Rukwa (3.4 tons/ha), while Mtwara region reported the least yield of 1.0 tons/ha (Figure 3.7).

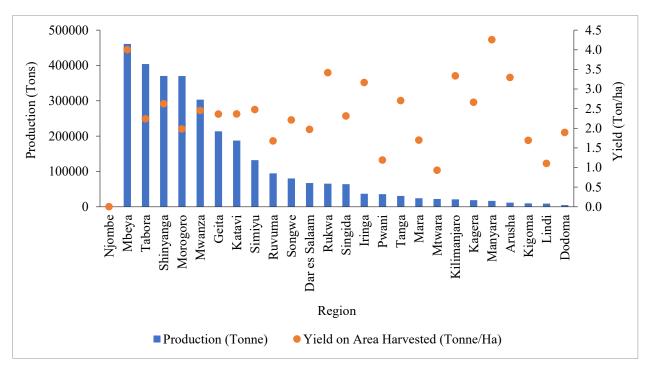


Figure 3.7: Production and Yield of Paddy During the 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

Njombe withheld to avoid disclosing data for individual holdings or insufficient data available from survey

In Zanzibar, Kaskazini Pemba region had the largest production of paddy (6,334 tons), followed by Kusini Pemba (4,962 tons), while Kaskazini Unguja reported the smallest production (2,491 tons). In addition, Mjini Magharibi reported the highest yield of 2.8 tons/ha, followed by Kusini Unguja and Kaskazini Pemba (2.4 tons/ha), while the lowest yield was reported in Kusini Pemba (1.1 tons/ha) (Figure 3.8).

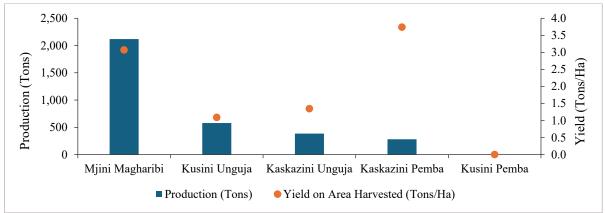


Figure 3.8: Production and Yield of Paddy by Region During 2023/24 Agricultural Year, Zanzibar

### 3.2.3 Sorghum

The results reveal that, 390,945 households were engaged in growing sorghum in Tanzania, of which 389,905 households were in Mainland Tanzania and 1,040 in Zanzibar. A total area of 360,824 ha was planted with sorghum in Tanzania, of which 357,604 ha were planted by agricultural households and 3,220 ha by large scale farms. Out of the total area planted by agricultural households in Tanzania, 357,438 ha were in Mainland Tanzania and 166 ha in Zanzibar. In addition, 66.3 percent of the area planted with sorghum in Tanzania was harvested (Table 3.2).

In Mainland Tanzania, agricultural households harvested a total of 236,553 ha. Dar es Salaam recorded the highest percentage of harvested area (100.0 percent) but on a much smaller planted area (399 ha). Songwe harvested 29,922 ha, representing 92.8 percent of its planted area. In contrast, Iringa had the lowest percentage harvested (41.3 percent; 2,293 ha). In Zanzibar, a total of 117 ha was harvested by agricultural households, with Kaskazini Pemba harvesting 53 ha of the planted area.

The total sorghum production in Tanzania was 201,930 tons, of which 201,078 tons were from agricultural households and 852 tons from large scale farms. Out of the total quantity produced by agricultural households, 200,910 tons were in Mainland Tanzania and 169 tons in Zanzibar. Moreover, results show that, the average yield of sorghum in Tanzania was 0.8 tons/ha, whereby the average yield in Mainland Tanzania was 0.8 tons/ha, while that of Zanzibar was 1.4 tons/ha.

In Mainland Tanzania, Dodoma region had the largest harvest (65,941 tons), followed by Songwe (22,802 tons) and Shinyanga (19,508 tons), while Arusha region reported the smallest harvest (368 tons). In addition, Mwanza region reported the highest yield of 1.8 tons/ha, followed by Iringa (1.7 tons/ha) and Manyara and Dar es Salaam each with a yield of 1.5 tons/ha, while Mtwara had the lowest (0.3 tons/ha). In Zanzibar, Kaskazini Pemba was the only region reported to harvest sorghum with 113 tons and a yield of 2.1 tons/ha (Table 3.2).

Table 3.2: Area Planted, Area Harvested, Production and Yield of Sorghum by Agricultural Households and Large Scale Farms During 2023/24 Agricultural Year, Tanzania

Holding		Number of	Area	(Ha)	- Production	Yield
Category	Region	Holdings Planted Crop	Planted	Harvested	(Tons)	(tons/ha)
	Dodoma	120,078	117,285	63,599	65,941	1.0
	Arusha	1,403	451	290	368	1.3
	Kilimanjaro	2,671	435	348	484	1.4
	Tanga	-	-	-	-	-
	Morogoro	15,923	21,775	11,825	8,500	0.7
	Pwani	-	-	-	-	-
	Dar es Salaam	1,185	399	399	615	1.5
	Lindi	22,626	11,586	7,576	5,219	0.7
	Mtwara	6,256	2,110	1,206	369	0.3
	Ruvuma	· -		_	-	-
	Iringa	7,190	5,546	2,293	3,884	1.6
	Mbeya	-	-	-	-	_
	Singida	56,483	35,544	17,916	18,682	1.0
	Tabora	6,718	8,260	4,971	4,294	0.9
	Rukwa	8,849	3,945	3,556	3,703	1.0
	Kigoma	-	-	-	-	-
Agricultural	Shinyanga	14,729	23,808	20,998	19,508	0.9
Households	Kagera	2,682	1,493	1,222	952	0.8
110400110145	Mwanza	9,674	5,594	4,106	7,346	1.8
	Mara	39,603	28,242	22,439	15,262	0.7
	Manyara	6,642	3,889	2,568	3,770	1.5
	Njombe	0,012	5,007	2,500	5,770	1.5
	Katavi	_	_	_	_	_
	Simiyu	25,970	48,166	35,200	17,062	0.5
	Geita	2,545	1,889	1,739	621	0.3
	Songwe	35,447	32,227	29,922	22,802	0.8
	Mainland Tanzania	389,905	357,438	236,553	200,910	0.8
	Kaskazini Unguja	369,903	337,436	230,333	200,910	0.8
	Kusini Unguja	-	-	-	-	-
	Mjini Magharibi	-	-	-	-	-
	Kaskazini Pemba	699	- 91	53	112	2.1
	Kusini Pemba	099	91		113	2.1
		1,040	166	117	169	1 4
	Zanzibar	· · · · · · · · · · · · · · · · · · ·				1.4
	Tanzania	390,945	357,604	236,670	201,078	0.8
Large Scale	Mainland Tanzania	93	3,204	2,446	846	0.3
Farms	Zanzibar	-	-	-	-	-
A 11 TT - 1 29	Tanzania	200.000	260 642	220.000	201.756	-
All Holdings	Mainland Tanzania	389,998	360,642	238,999	201,756	0.8
	Zanzibar	1,042	182	129	174	1.4
	Tanzania	-	-	-	-	

#### 3.2.4 Bulrush Millet

During the 2023/24 agricultural year, bulrush millet was grown by agricultural households only. The results show that, a total of 110,334 households engaged in growing bulrush millet, of which 109,797 households were in Mainland Tanzania and 537 in Zanzibar. Bulrush millet was planted in an area of 79,773 ha, of which 79,691 ha were in Mainland Tanzania and 82 ha in Zanzibar.

The harvested area for bulrush millet in Tanzania was 50,176 ha, out of which 50,121 ha were in Mainland Tanzania and 55 ha in Zanzibar. Additionally, 37,401 tons of bulrush millet were produced in Tanzania, of which 37,304 tons were in Mainland Tanzania and 97 tons in Zanzibar. On the other hand, the national average yield of bulrush millet was 0.7 tons/ha, whereby Mainland Tanzania had an average yield of 0.7 tons/ha and 1.7 tons/ha in Zanzibar (Table 3.3).

<sup>&</sup>quot;-" Withheld to avoid disclosing data for individual holdings or insufficient data available from survey (Total includes withheld data)

Table 3.3: Area Planted, Area Harvested, Production and Yield of Bulrush Millet During 2023/24 Agricultural Year, Tanzania

Area	Area Planted (ha)	Harvested Area (ha)	Production (tons)	Yield (tons/ha)
Tanzania	79,773	50,176	37,401	0.7
Mainland Tanzania	79,691	50,121	37,304	0.7
Zanzibar	82	55	97	1.7

<sup>&</sup>quot;-" Withheld to avoid disclosing data for individual holdings or insufficient data available from survey (Total includes withheld data)

### 3.3 Roots and Tubers Production

Root and tuber crops are plants that are grown mainly for their underground parts, which are highly rich in starch and are used as food. In the 2023/24 agricultural year, a total of 463,860 ha was planted with cassava, sweet potatoes, irish potatoes and cocoyams, which are among the major roots and tubers crops grown in Tanzania. Out of the total planted area, 460,870 ha were from agricultural households and 2,985 ha from large scale farms. For the area planted by agricultural households, 432,819 ha were in Mainland Tanzania and 28,051 ha in Zanzibar.

Out of the total area planted with roots and tuber, 377,659 ha (81.4 percent) were harvested. Agricultural households harvested a total of 374,758 ha while large scale farms harvested 2,898 ha. Confining the analysis to the area harvested by agricultural households, 350,397 ha were in Mainland Tanzania and 24,361 ha in Zanzibar. Regarding production, the findings show that a total of 1,525,882 tons were produced; of which, agricultural households accounted for 1,524,250 tons (Mainland Tanzania 1,384,882; Zanzibar 139,368), while 1,631 tons were produced by large scale farms (Table 3.4).

Table 3.4: Area Planted, Area Harvested, Production, Yield and Percentage of Roots and Tubers During 2023/24 Agricultural Year, Tanzania

Holding	Cman	Area Planted	Area Harve	ested	Production	Viold (tong/k=)	
Category	Crop	(ha)	Area (ha)	Percent	(Tons)	Yield (tons/ha)	
Tanzania							
	Cassava	246,705	187,580	76.0	467,104	2.0	
Agricultural	Sweet potatoes	126,910	108,463	85.5	300,614	2.8	
Households	Irish potatoes	82,869	75,055	90.6	752,332	10.0	
	Cocoyams	4,386	3,660	83.4	4,200	1.1	
	Cassava	2,210	2,177	98.5	629	0.3	
Large Scale	Sweet potatoes	721	667	92.6	814	1.2	
Farms	Irish potatoes	54	54	100.0	188	3.5	
	Cocoyams	-	-	-	_	-	
	Cassava	248,915	189,757	76.2	467,733	2.5	
A 11 TT 1 1'	Sweet potatoes	127,631	109,130	85.5	301,428	2.8	
All Holdings	Irish potatoes	82,923	75,109	90.6	752,520	10.0	
	Cocoyams	4,391	3,663	83.4	4,201	1.1	
Mainland Tan	zania		<u> </u>	·			
	Cassava	220,838	165,077	74.8	337,827	2.0	
Agricultural	Sweet potatoes	124,923	106,775	85.5	290,757	2.7	
Households	Irish potatoes	82,869	75,055	90.6	752,332	10	
	Cocoyams	4,189	3,490	83.3	3,966	1.1	
	Cassava	2,108	2,087	99.0	185	0.1	
Large Scale	Sweet potatoes	656	620	94.4	769	1.2	
Farms	Irish potatoes	54	54	100.0	188	3.5	
	Cocoyams	-	-	-	-	-	
	Cassava	222,946	167,164	75.0	338,012	2.0	
. 11 77 1 1'	Sweet potatoes	125,579	107,395	85.5	291,526	2.7	
All Holdings	Irish potatoes	82,923	75,109	90.6	752,520	10.0	
	Cocoyams	4,194	3,494	83.3	3,967	1.1	
Zanzibar	·	,					
	Cassava	25,867	22,503	87.0	129,277	5.7	
Agricultural	Sweet potatoes	1,987	1,688	84.9	9,857	5.8	
Households	Irish potatoes		, <u>-</u>	_	_	-	
	Cocoyams	197	170	86.1	234	1.4	
	Cassava	102	90	88.3	444	4.9	
Large Scale	Sweet potatoes	65	47	73.4	45	0.9	
Farms	Irish potatoes	-	<u>-</u>	-	-	-	
	Cocoyams	_	_	_	_	_	
	Cassava	25,970	22,593	87.0	129,721	5.7	
A 11 TT 1 1	Sweet potatoes	2,052	1,735	84.6	9,902	5.7	
All Holdings	Irish potatoes	-, <b>-</b>	-,,	-	- ,- 02	-	
	Cocoyams	197	170	86.1	234	1.4	

"-" Withheld to avoid disclosing data for individual holdings or insufficient data available from survey (Total includes withheld data)

#### 3.3.1 Cassava

Cassava is among the roots and tuber crops grown by both agricultural households and large scale farms in Tanzania. A total of 611,782 households engaged in growing cassava during the 2023/24 agricultural year, of which 523,794 were in Mainland Tanzania and 87,988 in Zanzibar. The total area planted with cassava was 248,915 ha, of which 246,705 ha were occupied by agricultural households and 2,210 ha by large scale farms. Out of the total planted area by agricultural households, 220,838 ha were in Mainland Tanzania and 25,867 ha in Zanzibar. In Mainland Tanzania, 74.7 percent of the area planted with cassava was harvested, whereby Mbeya region harvested all the planted area (100 percent), followed by Arusha (99.1 percent) and Simiyu (94.2 percent). Dodoma had the smallest proportion of area harvested with cassava (49.8 percent) (Figure 3.9).

In Zanzibar, 87.0 percent of the area planted with cassava was harvested. Mjini Magharibi harvested 90.8 percent of the planted area, followed by Kusini Pemba (89.4 percent), while Kaskazini Unguja reported the lowest (68.6 percent) (Figure 3.10).

45,000 120.0 40,000 100.0 35,000 80.0 30,000 25,000 60.0 Area (Ha) 20,000 15,000 40.0 10,000 20.0 5,000 0.0 Rukwa Mwanza Dar es Salaam Geita Singida Simiyu Njombe Oodoma Katavi Morogoro Kigoma Tabora Shinyanga Kilimanjaro Ruvuma ■ Area Planted (Ha) ■ Area Harvested (Ha) Percent of Area Harvested

Figure 3.9: Area Planted, Area Harvested and Percentage of Area Harvested with Cassava by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

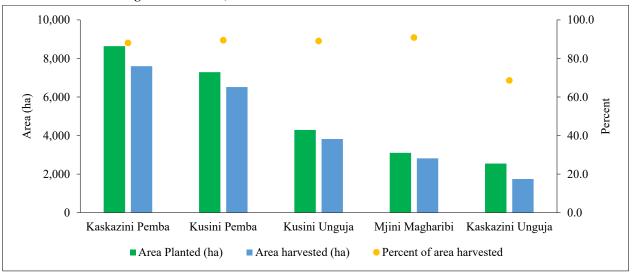


Figure 3.10: Area Planted, Area Harvested and Percentage of Area Harvested with Cassava by Region During 2023/24 Agricultural Year, Zanzibar

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

Regarding production, a total of 467,733 tons of cassava were produced, out of which 467,104 tons were from agricultural households and 629 tons from large scale farms. Out of the total production of cassava produced by agricultural households, 337,827 tons were in Mainland Tanzania and 129,277 tons in Zanzibar. The highest production of cassava in Mainland Tanzania was reported in Pwani region (81,589 tons; 24 percent), followed by Mtwara (40,840 tons; 12 percent) and Mara (32,339 tons;

9.6 percent). The lowest production of cassava was reported in Ruvuma (701 tons; 0.2 percent) (Figure 3.11). In Zanzibar, the highest cassava production was reported in Kaskazini Pemba (45,534 tons; 35.2 percent), followed by Kusini Pemba (40,163 tons; 31.1 percent) while the lowest cassava production was in Kaskazini Unguja (6,914 tons; 5.3 percent) (Figure 3.12).

Furthermore, results show that the average yield of cassava in Tanzania was 2.0 tons/ha, whereby a similar pattern was observed in Mainland Tanzania (2.0 tons/ha), and 6 tons/ha in Zanzibar. In Mainland Tanzania, based on agricultural households, the highest yield was reported in Kilimanjaro and Rukwa regions with 5.3 tons/ha, while Mara and Njombe reported the lowest (1.0 tons/ha). In Zanzibar, Kusini Pemba, Kaskazini Pemba, and Kusini Unguja regions had the highest yield with 6 tons/ha, whereas Kaskazini Unguja reported the lowest yield of 4 tons/ha (Figure 3.12).

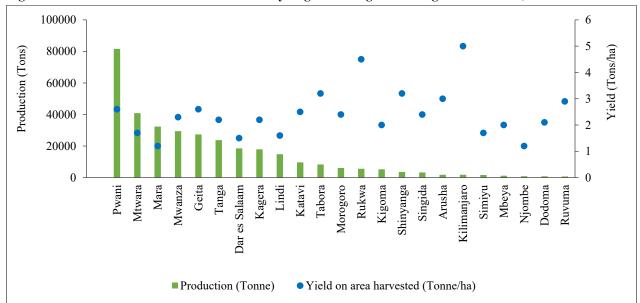


Figure 3.11: Production and Yield of Cassava by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

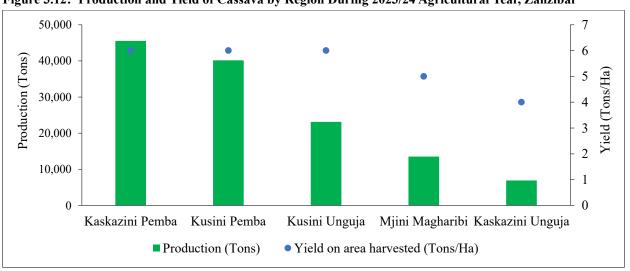


Figure 3.12: Production and Yield of Cassava by Region During 2023/24 Agricultural Year, Zanzibar

#### 3.3.2 Sweet Potato

The results show that a total area of 127,631 ha was planted with sweet potatoes, of which 126,910 ha were occupied by agricultural households and 721 ha by large scale farms. Out of the area planted by agricultural households, 125,579 ha were in Mainland Tanzania and 2,052 ha in Zanzibar. At national level, about 8.5 percent of the area planted with sweet potatoes was harvested. This accounted for 85.5 percent in Mainland Tanzania and 84.6 percent in Zanzibar. In Mainland Tanzania, Iringa, Mbeya, Rukwa, and Manyara regions harvested all the area planted with sweet potatoes (100 percent), followed by Arusha (99.1 percent) and Ruvuma (99.0 percent), while Kigoma region harvested 63.2 percent of the planted area (Figure 3.13).

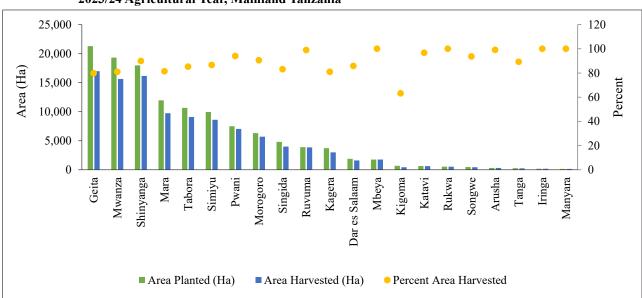


Figure 3.13: Area Planted, Area Harvested with Sweet Potatoes by Agricultural Households and Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

In Zanzibar, 84.6 percent of the area planted with sweet potatoes was harvested. Kusini Unguja harvested 94.5 percent of the area planted, followed by Mjini Magharibi (87.1 percent), while Kaskazini Unguja had the lowest (79.5 percent) (Figure 3.14).

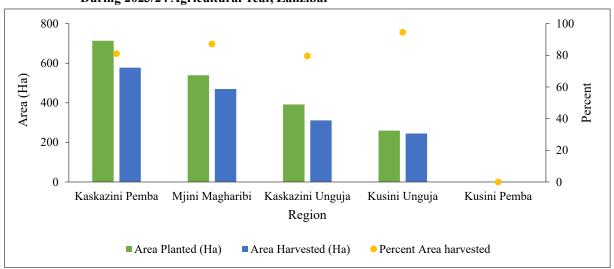


Figure 3.14: Area Planted, Area Harvested and Percentage of Area Harvested with Sweet Potato by Region During 2023/24 Agricultural Year, Zanzibar

The total production of sweet potatoes in Tanzania was 301,428 tons, whereby 300,614 tons were from agricultural households and 814 tons from large scale farms. Out of the total sweet potatoes produced by agricultural households, 291,526 tons were produced in Mainland Tanzania and 9,902 tons in Zanzibar. The largest production of sweet potatoes in Mainland Tanzania was reported in Shinyanga region (58,826 tons; 20.2 percent), followed by Ruvuma (33,178 tons; 11.41 percent) and Mwanza (32,600 tons; 11.2 percent), while Tanga reported lowest (310 tons; 0.1 percent). In Zanzibar, the largest production of sweet potatoes was reported in Kaskazini Pemba (3,852 tons; 39.1 percent), followed by Kusini Unguja (3012 tons; 30.6 percent), while Kaskazini Unguja region reported the smallest (1,002 tons; 10.2 percent) (Figure 3.14).

Furthermore, results show that the average yield of sweet potatoes in Tanzania was 2.8 tons/ha, whereas in Mainland Tanzania the yield was 2.8 tons/ha and 5.7 tons/ha in Zanzibar. In Mainland Tanzania, Ruvuma region reported a yield of 9.0 tons/ha followed by Mbeya (8.5 tons/ha) and Arusha (7.5 tons/ha), while Morogoro region had the lowest yield of 1.2 tons/ha. In Zanzibar, the highest yield was reported in Kusini Unguja region with 12.3 tons/ha, followed by Kaskazini Pemba with 6.7 tons/ha, while Kaskazini Unguja reported the lowest yield of 3.2 tons/ha (Figures 3.15 and 3.16).

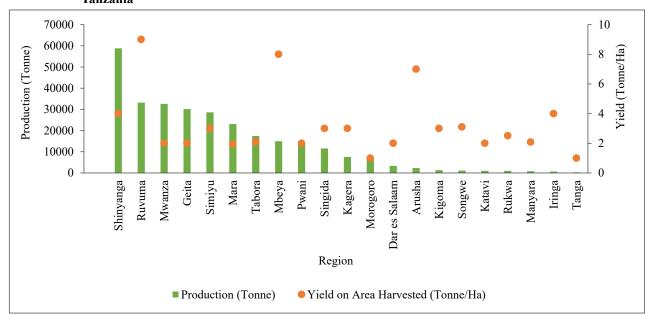


Figure 3.15: Production and Yield of Sweet Potatoes by Region During 2023/24 Agricultural Year, Mainland Tanzania

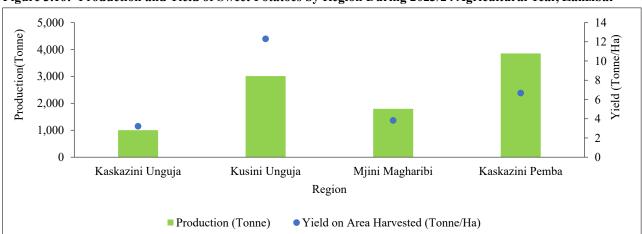


Figure 3.16: Production and Yield of Sweet Potatoes by Region During 2023/24 Agricultural Year, Zanzibar

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

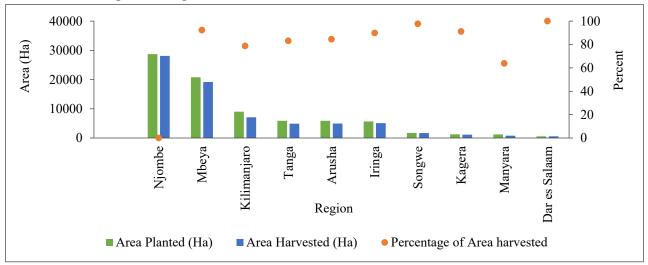
#### 3.3.3 Irish Potatoes

In Tanzania, irish potatoes are grown in Mainland Tanzania, particularly in the Southern Highlands regions. During the 2023/24 agricultural year, a total of 82,923 ha was planted with irish potatoes. Out of this, 82,869 ha were planted by agricultural households and 54 ha by large scale farms. A total of 75,109 ha, which is equivalent to 90.6 percent of the planted area, was harvested. Agricultural households in Dar es Salaam region harvested all the planted area, followed by Njombe with 97.9 percent and Songwe (97.7 percent), while Manyara harvested 63.8 percent of the area planted (Table 3.5; Figure 3.17).

Table 3.5: Area Planted, Area Harvested, Production, Yield of Irish Potatoes During 2023/24 Agricultural Year, Tanzania

Holdings	Coverage	Area Planted (ha)	Area Harvested (ha)	Production (tons)	Yield (tons/ha)
A 1 1, 1	Tanzania	82,869	75,055	752,332	10
Agricultural Households	Mainland Tanzania	82,869	75,055	752,332	10
Households	Zanzibar	*	*	*	*
	Tanzania	54	54	188	3
Large Scale Farms	Mainland Tanzania	54	54	188	3
	Zanzibar	*	*	*	*
All Holdings	Tanzania	82,923	75,109	752,520	9
	Mainland Tanzania	82,923	75,109	752,520	10
	Zanzibar	*	*	*	*

Figure 3.17: Area Planted, Area Harvested and Percentage of Area Harvested with Irish Potatoes by Region During 2023/24 Agricultural Year, Mainland Tanzania



Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

Concerning production, a total of 752,520 tons were produced, of which 752,332 tons were produced by agricultural households and 188 tons by large scale farms. Out of the total production produced by agricultural households, Njombe region had the largest share (327,518 tons; 43.2 percent), followed by Mbeya (243,944 tons; 32.4 percent) and Iringa (243,944 tons; 9.9 percent) while Dar es Salaam region had the least share (2,132 tons; 0.3 percent). Furthermore, results show that the average yield of irish potatoes was 10.0 tons/ha. Regional disaggregation shows a yield of 12.7 tons/ha in Mbeya, followed by Njombe with 11.7 tons/ha and Manyara with 11.6 tons/ha, while Tanga region had the lowest yield of 2.4 tons/ha (Table 3.6).

<sup>&</sup>quot;\*" The crop was not produced for the 2023/24 agricultural year

Table 3.6: Production and Yield of Irish Potatoes by Region During 2023/24 Agricultural Year, Mainland Tanzania

Region	<b>Production (Tons)</b>	Yield on Area Harvested (Tons/Ha)
Dodoma	-	-
Arusha	23,439	5
Kilimanjaro	67,657	10
Tanga	11,704	2
Morogoro	· -	-
Pwani	-	-
Dar es Salaam	2,132	4
Lindi	· -	-
Mtwara	-	-
Ruvuma	-	-
Iringa	37,859	7
Mbeya	243,944	13
Singida	· -	-
Tabora	-	-
Rukwa	-	-
Kigoma	-	-
Shinyanga	-	-
Kagera	8,567	7
Mwanza	-	-
Mara	-	_
Manyara	9,135	12
Njombe	327,518	12
Katavi	-	_
Simiyu	-	-
Geita	-	-
Songwe	14,545	
Mainland Tanzania	752,332	10

### 3.3.4 Cocoyams

In the 2023/24 agricultural year, Cocoyam was planted in 4,391 ha, of which 4,194 ha were in Mainland Tanzania and 197 ha in Zanzibar. Out of the planted area, 3,663 ha (83.4 percent) were harvested, of which 3,494 ha (83.3 percent) were in Mainland Tanzania and 170 ha (86.1 percent) in Zanzibar. Regarding production, a total of 4,201 tons of cocoyam were produced, of which 3,967 tons were in Mainland Tanzania and 234 tons in Zanzibar. On the other hand, the national yield of cocoyam was 1.1 tons/ha. In Mainland Tanzania, the yield was 1.1 tons/ha and in Zanzibar it was 1.4 tons/ha (Table 3.7).

Table 3.7: Area Planted, Area Harvested, Production and Yield of Cocoyam During 2023/24 Agricultural Year, Tanzania

Area	Area Planted (ha)	Area Harvested (ha)	Production (tons)	Yield (tons/ha)
Tanzania	4,391	3,663	4,201	1.1
Mainland Tanzania	4,194	3,494	3,967	1.1
Zanzibar	197	170	234	1.4

#### 3.4 Oil Seeds and Nuts Production

Sesame, sunflower and groundnuts are the major oil seed and nuts grown in Tanzania. During the 2023/24 agricultural year, a total of 1,766,006 ha was planted with oil seeds and nuts, of which 1,753,822 ha were planted by agricultural households and 12,184 ha by large scale farms. Out of the total area planted by agricultural households, 1,753,438 ha were in Mainland Tanzania and 384 ha in Zanzibar.

Out of the total area planted with oil seeds and nuts, 1,174,002 ha (66.5 percent) were harvested, whereby 1,162,739 ha were from agricultural households and 11,262 ha from large scale farms. The results further show that 1,162,381 ha of the area harvested by agricultural households were in Mainland Tanzania and 358 ha in Zanzibar. On the other hand, a total of 788,057 tons of oil seeds and nuts were produced; agricultural households accounted for 785,947 tons of overall production, while 2,110 tons were produced by large scale farms. Considering the production from agricultural households, 785,736 tons were in Mainland Tanzania and 210 tons in Zanzibar (Table 3.8).

Table 3.8: Area Planted, Harvested, Production, Percent of Area Harvested of Selected Oil Seed and Nuts During 2023/24 Agricultural Year, Tanzania

	-	Area Planted	Area Ha	rvested	Production	Yield
Holding Category	Crop	(ha)	Area (ha)	Percent	(Tons)	(tons/ha)
Tanzania						
	Sunflower	551,697	357,861	64.9	274,351	0.8
Agricultural	Groundnuts	642,193	482,329	75.1	367,113	0.8
Households	Sesame	559,932	322,548	57.6	144,483	0.4
	Total	1,753,822	1,162,738	66.3	785,947	
	Sunflower	10,400	9,689	93.2	1,851	0.2
	Groundnuts	721	594	82.4	154	0.3
Large Scale Farms	Sesame	1,063	979	92.1	106	0.1
	Total	12,184	11,262	92.4	2,111	
	Sunflower	562,097	367,551	65.4	276,202	0.8
A 11 TT - 1 45	Groundnuts	642,914	482,923	75.1	367,266	0.8
All Holdings	Sesame	560,996	323,528	57.7	144,589	0.4
	Total	1,766,007	1,174,002	66.5	788,057	
Mainland Tanzania						
	Sunflower	551,697	357,861	64.9	274,351	0.8
Agricultural	Groundnuts	641,809	481,972	75.1	366,902	0.8
Households	Sesame	559,932	322,548	57.6	144,483	0.4
	Total	1,753,438	1,162,381	66.3	785,736	
	Sunflower	10,400	9,689	93.2	1,851	0.2
	Groundnuts	714	591	82.7	150	0.3
Large Scale Farms	Sesame	1,063	979	92.1	106	0.1
	Total	12,177	11,259	92.5	2,107	
	Sunflower	562,097	367,551	65.4	276,202	0.8
A 11 TT 1 1'	Groundnuts	642,523	482,562	75.1	367,052	0.8
All Holdings	Sesame	560,996	323,528	57.7	144,589	0.4
	Total	1,765,616	1,173,641	66.5	787,843	
Zanzibar						
	Sunflower	*	*	*	*	*
Agricultural	Groundnuts	384	358	93.3	210	0.6
Households	Sesame	*	*	*	*	*
	Total	384	358	93.3	210	
	Sunflower	*	*	*	*	
	Groundnuts	*	*	*	*	*
Large Scale Farms	Sesame	*	*	*	*	*
	Total	*	*	*	*	
	Sunflower	*	*	*	*	*
A 11 TT 1 1'	Groundnuts	390	361	92.5	214	0.6
All Holdings	Sesame	*	*	*	*	*
	Total	390	361	92.5	214	

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24 "\*" Data unavailable for the 2023/24 agricultural year

#### 3.4.1 Sunflower

During the 2023/24 agricultural year, sunflower production was only reported in Mainland Tanzania. A total of 673,523 agricultural households were engaged in sunflower production and reported a planted area of 551,696 ha. For large scale farms, the area planted with sunflower was 10,400 ha, thus making a total planted area of 562,097 ha.

Results show that 65.4 percent of the area planted with sunflowers was harvested. Regional wide, Mbeya led by harvesting 95.3 percent of the area planted with sunflower, followed by Songwe (94.8 percent) and Shinyanga (87.3 percent), while Mwanza region was the least, harvesting 40.0 percent of the planted area (Figure 3.18).

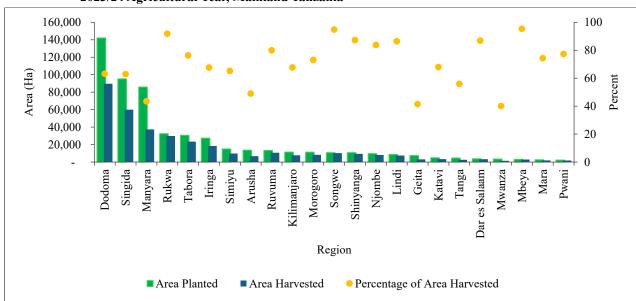


Figure 3.18: Area Planted, Area Harvested and Percentage of Area Harvested with Sunflower by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

The total production of sunflower was 276,202 tons; whereby agricultural households reported a production of 274,351 tons and 1,851 tons from large scale farms. Dodoma region reported the largest production with 77,364 tons (28.2 percent), followed by Singida (46,583 tons; 17.0 percent) and Manyara (37,622 tons; 13.7 percent). On the other hand, Pwani region reported the lowest production with 514 tons (0.2 percent). Regarding yield, the reported national average was 0.8 tons/ha. Arusha had the highest yield of 1.2 tons/ha, followed by Dar Es Salaam 1.1 tons/ha. On the other hand, Lindi region had the lowest yields of 0.1 tons/ha (Figure 3.19).

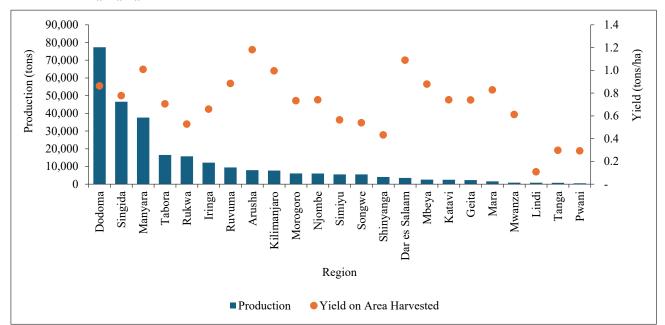


Figure 3.19: Production and Yield of Sunflower by Region During 2023/24 Agricultural Year, Mainland Tanzania

#### **3.4.2** Sesame

Sesame production was reported in Mainland Tanzania only, where 449,015 agricultural households grew this crop. The findings show that a total of 560,996 ha was planted, out of which 559,932 ha were from agricultural households and 1,063 ha from large scale farms. Furthermore, 322,548 ha, equivalent to 57.6 percent of the planted area was harvested. The results show that 86.3 percent of the area planted with sesame in Songwe region was harvested, Mtwara (81.1 percent) and Ruvuma (72.6 percent), while Tabora reported 23.3 percent of the planted area. A total of 144, 589 tons of sesame were produced, of which agricultural households reported a production of 144,483 tons and 106 tons from large scale farms. Production of sesame was highest in Lindi region (47,122 tons; 32.6 percent), followed by Mtwara (29,414 tons; 20.4 percent) and Pwani (14,751 tons; 10.2 percent), while Tabora region reported production 95 tons (0.1 percent). Nationally, an average yield of 0.4 tons/ha was reported. Singida, Manyara and Tabora regions each had a yield of 0.8 tons/ha, while Dodoma, Morogoro, Pwani, Mtwara and Songwe each had 0.4 tons/ha (Table 3.9).

Table 3.9: Area Planted, Area Harvested and Yield of Sesame by Region During 2023/24 Agricultural Year,
Mainland Tanzania

Region	Number of Holdings	Area Planted (Ha)	Area Harvested (Ha)	Percent of Area Harvested	Production (tons)	Yield (tons/ha)
Dodoma	19,227	32,396	21,141	65.3	7,494	0.4
Arusha	-	-	-	-	-	-
Kilimanjaro	-	-	-	-	-	-
Tanga	4,558	4,754	2,564	53.9	1,443	0.6
Morogoro	40,423	46,934	24,442	52.1	10,374	0.4
Pwani	46,970	58,566	38,234	65.3	14,751	0.4
Dar es Salaam	6,297	7,334	5,087	69.4	3,305	0.6
Lindi	138,866	226,998	90,104	39.7	47,122	0.5
Mtwara	93,992	94,971	76,986	81.1	29,414	0.4
Ruvuma	39,191	32,705	23,749	72.6	11,965	0.5
Iringa	1,745	1,812	1,296	71.6	771	0.6
Mbeya	-	-	-	-	-	-
Singida	8,259	7,304	2,048	28.0	1,618	0.8
Tabora	1,179	507	118	23.3	95	0.8
Rukwa	-	-	-	-	-	-
Kigoma	-	-	-	-	-	-
Shinyanga	-	-	-	-	-	-
Kagera	-	-	-	-	-	-
Mwanza	-	-	-	-	-	-
Mara	-	-	-	-	-	-
Manyara	4,782	3,975	1,233	31.0	982	0.8
Njombe	-	-	-	-	-	-
Katavi	1,813	2,735	1,816	66.4	1,300	0.7
Simiyu	-	-	-	-	-	-
Geita	-	-	-	-	-	-
Songwe	38,202	35,165	30,356	86.3	13,085	0.4
Mainland Tanzania	449,015	559,932	322,548	57.6	144,483	0.4

#### 3.4.3 Groundnuts

In the 2023/24 agricultural year, 1,166,561 agricultural households grew groundnuts, whereby 1,165,743 households were from Mainland Tanzania and 819 from Zanzibar. A total of 642,914 ha was planted with ground nuts, of which agricultural households planted an area of 642,193 ha and 721 ha by large scale farms. National estimates depict that; 75.1 percent of the area planted with groundnut was harvested whereby Mainland Tanzania harvested 75.1 percent of the planted area and Zanzibar 93.3 percent.

A total of 367,266 tons of ground nuts were produced, whereby agricultural households reported a production of 367,113 tons while large scale farms reported 154 tons. Out of the quantity produced by agricultural households, 366,902 tons were from Mainland Tanzania and 154 tons from Zanzibar. Furthermore, the national average yield was 0.8 tons/ha whereas, in Mainland Tanzania, the yield matched the national average, while in Zanzibar was 0.6 tons/ha. In Mainland Tanzania, 97.7 percent of the area planted with groundnuts in Songwe region was harvested. Rukwa harvested 97.5 percent and Dar es salaam 97.1 percent, while Kigoma region had least proportion of the harvested area with 52.4 (Figure 3.20).

<sup>&</sup>quot;- "Withheld to avoid disclosing data for individual holdings or insufficient data available from survey (Total includes withheld data)

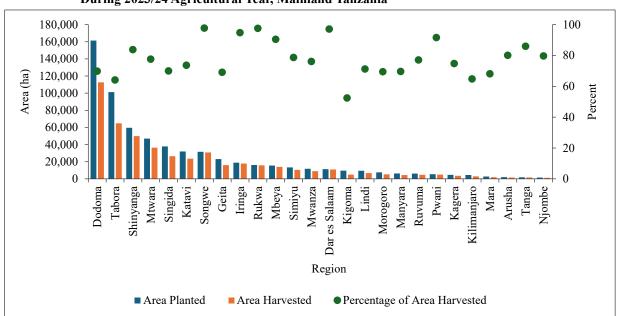


Figure 3.20: Area Planted, Area Harvested and Percentage of Area Harvested with Groundnuts by Region During 2023/24 Agricultural Year, Mainland Tanzania

Considering production, Dodoma region produced 93,534 tons (25.5 percent), making it the leading groundnut producer in the country, followed by Tabora (50,758 tons; 13.8 percent) and Shinyanga (29,437 tons; 8.0 percent) while Tanga region produced the least amount of groundnuts (484 tons; less than 0.1 percent). On the other hand, Manyara region had the highest yield of 1.3 tons/ha followed by Rukwa, Mbeya and Arush regions each with 1.1 tons/ha. The lowest yield was reported in Tanga (0.3 tons/ha) (Figure 3.21).

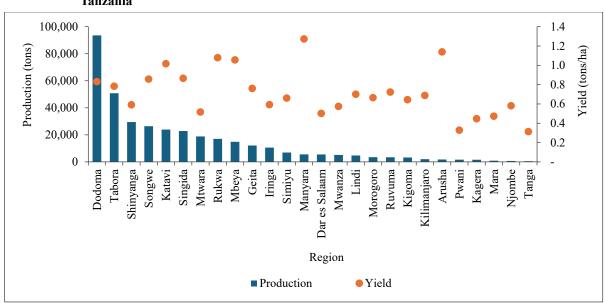


Figure 3.21: Production and Yield of Groundnuts by Region During 2023/24 Agricultural Year, Mainland Tanzania

#### 3.5 Pulses

In Tanzania, the main pulses grown are beans, pigeon peas, and cowpeas. During the 2023/24 agricultural year, a total of 1,291,030 ha was planted with pulses, of which agricultural households occupied 1,267,678 ha whereas 23,601 ha occupied by large scale farms. Out of the total area planted by agricultural households, 1,266,281 ha were in Mainland Tanzania and 1,396 ha in Zanzibar.

Out of the total area planted with pulses, 604,610 ha (46.8 percent) were harvested, whereby 583,182 ha were from agricultural households and 21,664 ha from large scale farms. The results further show that, 582,681 ha of the area harvested by agricultural households were in Mainland Tanzania and 501 ha in Zanzibar. On the other hand, a total of 634,805 tons of pulses were produced; agricultural households accounted for 630,228 tons of overall production, while 4,597 tons were produced by large scale farms. Considering the production from agricultural households, 629,535 tons were in Mainland Tanzania and 693 tons in Zanzibar (Table 3.10).

Table 3.10: Area Planted, Area Harvested, Percentage of Area Harvested, Production and Yield of Pulses During 2023/24 Agricultural Year, Tanzania

		Area	Area Ha	rvested	Duo duo attou	Yield on area
<b>Holding Category</b>	Region	Planted (Ha)	Area (Ha)	Percent	Production (Tons)	harvested (Tons /Ha)
Tanzania						
	Beans	835,913	548,050	65.6	438,392	0.8
Agricultural Households	Cowpeas	49,905	35,132	70.4	12,680	0.4
Agricultural Households	Pigeon peas	381,860	na	na	182,176	0.5
	Total	1,267,678	583,182	46.0	630,228	
	Beans	22,408	21,427	95.6	4,481	0.2
Laura Caala Farma	Cowpeas	251	236	94.3	21	0.1
Large Scale Farms	Pigeon peas	942	na	na	95	0.1
	Total	23,601	21,664	91.79	4,597	
	Beans	858,321	569,477	66.3	439,852	0.8
. 11 TT . 1 1'	Cowpeas	49,905	35,132	70.4	12,680	0.4
All Holdings	Pigeon peas	382,803	na	na	182,273	0.5
	Total	1,291,030	604,610	46.8	634,805	
Mainland Tanzania					,	
	Beans	835,913	548,050	65.6	435,371	0.8
	Cowpeas	49,230	34,631	70.3	12,463	0.4
Agricultural Households	Pigeon peas	381,139	na	na	181,701	0.5
	Total	1,266,281	582,681	46.0	629,535	
	Beans	22,408	21,427	95.6	4,481	0.2
	Cowpeas	251	236	94.3	21	0.1
Large Scale Farms	Pigeon peas	942	na	na	95	0.1
	Total	23,601	21,664	91.8	4,597	
	Beans	858,321	569,477	66.3	439,852	0.8
	Cowpeas	49,480	34,867	70.5	12,484	0.4
All Holdings	Pigeon peas	382,082	na	na	181,796	0.5
	Total	1,289,883	604,344	46.9	634,132	
Zanzibar		1,20>,000	001,011		00 1,102	
ZuiiZioui	Beans	*	*	*	*	*
	Cowpeas	676	501	74.2	218	0.4
Agricultural Households	Pigeon peas	720	201	,2	475	0.7
	Total	1,396	501	35.9	693	<b>.</b> ,,
	Beans	*	*	*	*	*
Large Scale Farms	Cowpeas	*	*	*	*	*
	Pigeon peas	*	*	*	*	*
	Total	*	*	*	*	
	Beans	*	*	*	*	*
	Cowpeas	676	501	74.2	218	0.4
All Holdings	Pigeon peas	722			477	0.7
			na 501	na 25 0		0./
	Total	1,398	501	35.9	694	

<sup>&</sup>quot;- "Withheld to avoid disclosing data for individual holdings or insufficient data available from survey (Total includes withheld data)

<sup>&</sup>quot;\*" Data unavailable for the 2023/24 Agricultural year

<sup>&</sup>quot;na" Not Applicable

#### **3.5.1 Beans**

Beans are commonly grown in Mainland Tanzania unlikely to Zanzibar which has lowland, hot, and humid coastal conditions that are less favorable for beans. In Mainland Tanzania, the findings show that, 1,905,267 agricultural households in Tanzania engaged in beans production during the 2023/24 agricultural year. A total of 858,332 ha was planted with beans, of which 835,923 ha were occupied by agricultural households and 22,408 ha by large scale farms. The total harvested area by agricultural households was 548,050 ha, equivalent to 65.6 percent of the total area planted with beans in Mainland Tanzania. Njombe region harvested 95.1 percent of its area planted, Pwani 92.8 percent and Mbeya 87.7 percent, while Dodoma harvested 41.6 percent of the total planted area in the region (Figure 3.22).

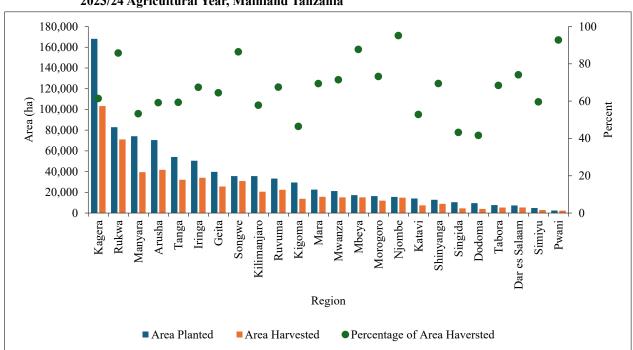


Figure 3.22: Area Planted, Area Harvested and Percentage of Area Harvested with Beans by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

Production of beans in Tanzania was 439,866 tons, out of which 435,385 tons were produced by agricultural households and 4,481 tons by large scale farms. Kagera region produced 81,014 tons (18.6 percent), Rukwa 59,416 tons (13.6 percent) and Arusha (54,918 tons; 12.6 percent), while Simiyu region produced 1,210 tons (0.3 percent). Moreover, results show that, the average yield of beans in Tanzania was 0.8 tons/ha, with regional estimates indicating a yield of 1.4 tons/ha in Pwani and 1.3 tons/ha in Arusha, while Dodoma and Shinyanga each had 0.3 tons/ha (Figure 3.23).

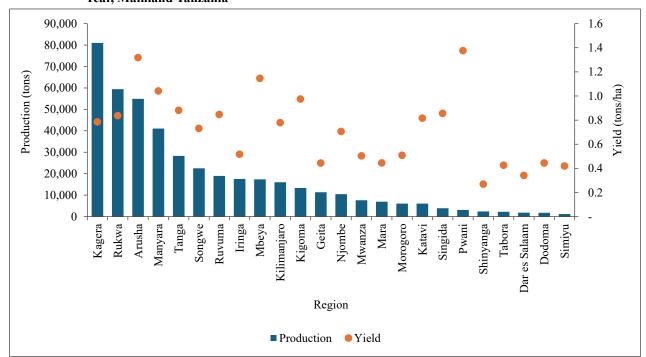


Figure 3.23: Production and Yield of Beans by Agricultural Households by Region During 2023/24 Agricultural Year, Mainland Tanzania

# 3.5.2 Pigeon Peas

The results revealed that 702,058 agricultural households engaged in growing pigeon peas in Tanzania, whereby, 696,431 households were in Mainland Tanzania and 5,627 in Zanzibar. The total area planted with pigeon peas was 382,804 ha, of which 381,860 ha were by agricultural households and 944 ha by large scale farms. Out of the total planted area by agricultural households, 381,139 ha were in Mainland Tanzania and 720 ha in Zanzibar.

Production of pigeon peas in 2023/24 agricultural year was 182,273 tons, out of which 182,176 tons were produced by agricultural households and 97 tons by large scale farms. From the production of agricultural households, 181,701 tons were in Mainland Tanzania and 475 tons in Zanzibar. Of the total production in Mainland Tanzania, Manyara region produced 47,430 tons (26.1 percent), Morogoro 32,926 tons (18.1 percent) and Mtwara 23,357 tons (12.9 percent), while Iringa region had a production of 133 tons (0.1 percent) (Figure 3.24).

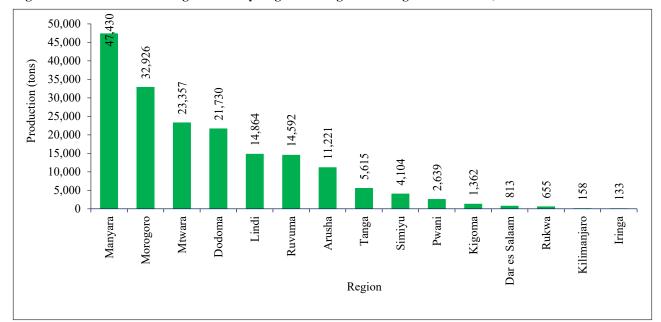


Figure 3.24: Production of Pigeon Peas by Region During 2023/24 Agricultural Year, Mainland Tanzania

In Zanzibar, production of pigeon peas in Kaskazini Unguja was 280 tons (73.1 percent) and Kusini Unguja 103 tons (26.9 percent). For the remaining regions, none of the agricultural households reported the production of pigeon peas (Table 3.11).

Table 3.11: Production of Pigeon Peas by Region During 2023/24 Agricultural Year, Zanzibar

	Agricultural year							
Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tons)	Yield on Area Planted (Tons/Ha)				
Kaskazini Unguja	4,137	475	280	0.6				
Kusini Unguja	1,270	172	103	0.6				
Mjini Magharibi	-	-	-	-				
Kaskazini Pemba	-	-	-	-				
Kusini Pemba	-	-	-	-				
Zanzibar	5,627	720	475	0.7				

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

#### 3.5.3 Cowpeas

The results revealed that 172,702 agricultural households engaged in growing cowpeas in Tanzania, whereby, 168,185 households were in Mainland Tanzania and 4,518 in Zanzibar. The total area planted with cowpeas was 50,156 ha, of which 49,905 ha was occupied by agricultural households and 251 ha by large scale farms. Out of the total planted area by agricultural households, 49,230 ha were in Mainland Tanzania and 676 ha in Zanzibar.

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable during the analysis, the production of few holdings was unknown, and they were excluded

In addition, 70.5 percent of the area planted with cowpeas in Tanzania was harvested. In Mainland Tanzania, a total of 34,631 ha (70.3 percent) was harvested by agricultural households. Shinyanga region harvested 95.3 percent of the area planted with cowpeas, Mtwara 87.2 percent, while Kigoma harvested 33.8 percent (Figure 3.25).

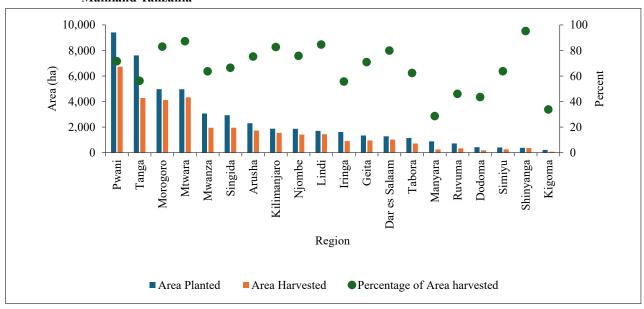


Figure 3.25: Area Planted and Area Harvested of Cowpeas by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

In Zanzibar, 501 ha (74.2 percent) were harvested. Kaskazini Pemba harvested 84.3 percent of the planted area and Kusini Pemba 73.8 percent while Kusini Unguja harvested 41.7 percent (Figure 3.26).

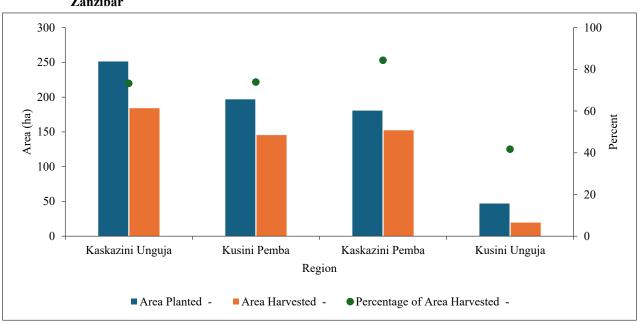


Figure 3.26: Area Planted and Area Harvested of Cowpeas by Region During 2023/24 Agricultural Year, Zanzibar

Production of cowpeas in the 2023/24 agricultural year aggregated to 12,702 tons, out of which 12,680 tons were produced by agricultural households and 21 tons by large scale farms. From the production of agricultural households, 12,463 tons were in Mainland Tanzania and 218 tons from Zanzibar. In Mainland Tanzania, Arusha region produced 3,356 tons (27.0 percent), Pwani 1,602 tons (12.9 percent) and Mwanza 1,329 tons (10.7 percent), while Kigoma region had a production of 7 tons (less than 0.1 percent) (Figure 3.27).

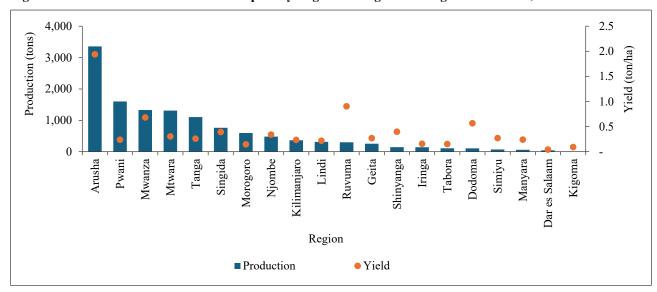


Figure 3.27: Production and Yield of Cowpeas by Region During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

In Zanzibar, Kaskazini Pemba produced 128 tons (58.6 percent) of cowpeas, Kaskazini Unguja had 64 tons (29.6 percent) and Kusini Pemba reported production of 17 tons (7.8 percent). Moreover, results show that, the average yield of cowpeas in Tanzania was 0.4 tons/ha. The yield of cowpeas in Mainland Tanzania was 0.4 tons/ha while Zanzibar had 0.4 tons/ha (Figure 3.28).

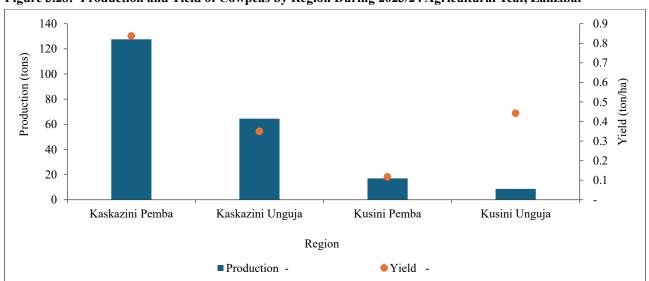


Figure 3.28: Production and Yield of Cowpeas by Region During 2023/24 Agricultural Year, Zanzibar

### 3.6 Cash Crop Production

This section presents the results of major annual and permanent cash crops. Permanent cash crops included cashew nuts, cloves, and sugarcane, while cotton was the only annual cash crop. Cash crops in Tanzania are primarily for sale and export rather than for holding consumption. These crops are vital to the country's economy, generating significant revenue and employment opportunities.

#### **3.6.1** Cotton

Cotton is among the country's cash crop, mainly grown in Lake Zone's regions in Mainland Tanzania. In the 2023/2024 agricultural year, 189,223 agricultural households and 81 large scale farms engaged in cotton production. A total planted area with cotton was 303,173 ha, out of which 301,698 ha were from agricultural households and 1,476 ha from large scale farms. The findings further show that 230,323 ha, equivalent to 76.0 percent of the planted area, were harvested. Agricultural households harvested an estimated area of 228,997 ha (75.9 percent of their planted area) and large scale farms 1,326 ha (89.9 percent of their planted area). Regional estimates show that Shinyanga harvested 82.8 of the planted area, Simiyu 78.2 percent and Mara 77.2 percent, while Tabora region reported the lowest planted area harvested (55.3 percent).

The total production for cotton was 146,798 tons, of which 146,145 tons were produced by agricultural households and 653 tons by large scale farms. Simiyu region reported a production of 64,518 tons (44.1 percent), Shinyanga 36,053 tons (24.7 percent), and Tabora 16,837 tons (11.5 percent), while Katavi had the least (1,569 tons; 1.1 percent). Furthermore, the reported national average yield was 0.6 tons/ha. Regional disaggregation showed that, Tabora had an average yield of 1.1 tons/ha, Mwanza 0.9 tons/ha, Geita and 0.8 tons/ha, while Simiyu reported an average yield of 0.5 tons/ha each (Table 3.12).

Table 3.12: Area, Production and Yields of Cotton during 2023/24 Agricultural Year

	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-
	Arusha	-	-	-	-	-
	Kilimanjaro	-	-	-	-	-
	Tanga	-	-	-	-	-
	Morogoro	-	-	-	-	-
	Pwani	-	-	-	-	-
	Dar es Salaam	-	-	-	-	-
	Lindi	-	-	-	-	-
	Mtwara	-	-	-	-	-
	Ruvuma	-	-	-	-	-
	Iringa	-	-	-	-	-
	Mbeya	-	-	-	-	-
	Singida	-	-	-	-	-
	Tabora	15,143	28,976	16,023	16,837	1
	Rukwa	-	-	-	-	-
	Kigoma	-	-	-	-	-
A ' 1, 177 1 11	Shinyanga	29,903	60,201	49,874	36,053	1
Agricultural Households	Kagera	-	-	-	-	-
	Mwanza	20,430	17,144	11,932	10,623	1
	Mara	14,371	9,980	7,701	6,011	1
	Manyara	-	-	-	-	-
	Njombe	-	_	-	-	-
	Katavi	2,717	4,130	2,441	1,569	1
	Simiyu	83,734	164,282	128,497	64,518	1
	Geita	16,549	13,264	9,710	7,793	1
	Songwe	_	_	_	-	-
	Mainland Tanzania	189,223	301,698	228,997	146,145	1
	Kaskazini Unguja	-	_	_	-	-
	Kusini Unguja	-	_	-	-	-
	Mjini Magharibi	-	_	-	-	-
	Kaskazini Pemba	_	-	_	_	-
	Kusini Pemba	_	-	_	_	-
	Zanzibar	_	_	-	-	-
	Tanzania	189,223	301,698	228,997	146,145	1
	Mainland Tanzania	81	1,476	1,326	653	0
Large Scale Farms	Zanzibar	-	-	-	-	-
-	Tanzania	81	1,476	1,326	653	0
	Mainland Tanzania	189,304	303,173	230,323	146,798	1
All Holdings	Zanzibar	-	-	-	-	-
ū	Tanzania	189,304	303,173	230,323	146,798	1

## 3.6.2 Cashew nuts

In Tanzania, the major cashew nuts growing regions are Mtwara, Lindi, Pwani, Tanga and Ruvuma. However, the crop is also grown in some other parts of the country, including Dar es Salaam. The results indicate that 365,114 agricultural households and 87 large scale farms were involved in cashew

<sup>-</sup> Low number of observations (n $\leq$ 3)/lack of data/Not applicable; during the analysis, the production of few holdings were unknown and they were excluded

nut production. The total planted area with cashew nuts was 1,065,278 ha, out of which 1,039,005 ha were planted by agricultural households and 26,274 ha by large scale farms.

The total production for cashew nuts was 179,326 tons, of which 178,755 tons were produced by agricultural households and 571 tons by large scale farms. Regarding the agricultural households, Mtwara region reported production of 104,128 tons (58.3 percent), Lindi 39,317 tons (22.0 percent), Ruvuma 22,847 tons (12.8 percent), while the lowest production was in Tanga, 228 tons (0.1 percent) (Table 3.13).

Table 3.13: Area, Production and Yields of Cashew nut during 2023/24 Agricultural Year

	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma	-	-	-	-
	Arusha	-	_	_	-
	Kilimanjaro	-	-	-	-
	Tanga	2,345	2,496	228	0
	Morogoro	-	-	-	-
	Pwani	15,990	35,998	5,178	0
	Dar es Salaam	6,131	20,624	4,406	0
	Lindi	81,401	369,034	39,317	0
	Mtwara	202,745	397,777	104,128	0
	Ruvuma	54,585	201,098	22,847	0
	Iringa	_	· <u>-</u>	-	-
	Mbeya	_	-	_	-
	Singida	_	-	_	-
	Tabora	_	-	_	-
	Rukwa	_	_	_	-
	Kigoma	_	_	_	_
	Shinyanga	_	_	_	_
Agricultural Households	Kagera	_	_	_	_
	Mwanza	_	_	_	_
	Mara	_	_	_	_
	Manyara	_	_	_	_
	Njombe	_	_	_	_
	Katavi	_	_	_	_
	Simiyu	_	_	_	_
	Geita	_	_	_	_
	Songwe	_	_	_	_
	Mainland Tanzania	365,114	1,039,005	178,755	0
	Kaskazini Unguja	-	-	-	-
	Kusini Unguja	_	_	_	_
	Mjini Magharibi	_	_	_	_
	Kaskazini Pemba	_	_	_	_
	Kusini Pemba	_	_	_	_
	Zanzibar	_	_	_	_
	Zanzibar Tanzania	365,114	1,039,005	178,755	0
Large Scale Farms	Mainland Tanzania	303,114 87	26,274	571	0
	Zanzibar	-	20,277	3/1	U
	Zanzioai Tanzania	87	26,274	571	0
	Mainland Tanzania	365,201	1,065,278	179,326	0
All Holdings	Zanzibar	303,201	1,003,270	1/9,340	U
		-	1.045.050	-	-
	Tanzania	365,201	1,065,278	179,326	0

<sup>-</sup> Low number of observations (n $\leq$ 3)/lack of data/Not applicable during the analysis, the production of few holdings were unknown and they were excluded

### **3.6.3** Coffee

In Tanzania, the major coffee growing regions are Arusha, Kilimanjaro, Ruvuma, Mbeya, Songwe, and Kagera. In the 2023/24 agricultural year, 322,003 agricultural households and 86 large scale farms were involved in coffee production. The total planted area with coffee was 170,652 ha, out of which 147,765 ha were planted by agricultural households and 22,887 ha by large scale farms.

The total production for coffee was 85,265 tons, of which 78,002 tons were produced by agricultural households and 7,263 tons by large scale farms. Kagera region reported production of 33,120 tons (42.5 percent), Songwe 21,386 tons (27.4 percent), Ruvuma 17,003 tons (21.8 percent), and Mbeya produced 1,118 tons equivalent to 1.4 percent of the total production (Table 3.14).

Table 3.14: Area, Production and Yields of Coffee during 2023/24 Agricultural Year

		Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tons)	Yield on Area Planted (Tons/Ha)
	Dodoma	-	-	-	-
Agricultural Households	Arusha	7,371	4,723	1,169	0.2
	Kilimanjaro	50,154	13,739	2,021	0.1
	Tanga	-	-	-	-
	Morogoro	-	-	-	-
	Pwani	-	-	-	-
	Dar es Salaam	-	-	-	-
	Lindi	-	-	-	-
	Mtwara	-	-	-	-
	Ruvuma	46,197	25,963	17,003	0.7
	Iringa	-	-	-	-
	Mbeya	5,337	3,642	1,118	0.3
	Singida	-	-	-	-
	Tabora	_	-	-	-
	Rukwa	-	-	-	-
	Kigoma	-	-	-	-
	Shinyanga	_	-	-	-
	Kagera	177,672	66,463	33,120	0.5
	Mwanza	-	-	-	-
	Mara	_	-	-	-
	Manyara	_	-	-	-
	Njombe	-	-	_	_
	Katavi	_	-	-	-
	Simiyu	_	_	_	_
	Geita	_	-	-	-
	Songwe	32,802	32,142	21,386	0.7
	Mainland Tanzania	322,003	147,765	78,002	0.5
	Kaskazini Unguja	, -	_	, _	_
	Kusini Unguja	_	_	_	_
	Mjini Magharibi	_	_	_	_
	Kaskazini Pemba	_	_	_	_
	Kusini Pemba	_	_	_	_
	Zanzibar	_	_	_	_
Large Scale Farms	Tanzania	322,003	147,765	78,002	0.5
	Mainland Tanzania	86	22,887	7,263	0.3
	Zanzibar	-	, _ ,	- ,_ 0	-
	Tanzania	86	22,887	7,263	0.3
	Mainland Tanzania	322,089	170,652	85,265	0.5
All Holdings	Zanzibar	-	,	-	-
	Tanzania	322,089	170,652	85,265	0.5

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable during the analysis, the production of few holdings were unknown and they were excluded

### 3.6.4 Sugarcane

The results show that 35,670 agricultural households and 34 large scale farms engaged in growing sugarcane in the country. Among the agricultural households, 34,927 were from Mainland Tanzania and 743 were in Zanzibar. For large scale, 30 farms were in Mainland Tanzania and 4 in Zanzibar. A total of 78,843 ha of sugarcane were planted, of which 22,347 ha were from agricultural households and 56,496 ha from large scale farms. Out of the area planted by agricultural households, 22,057 ha were in Mainland Tanzania and 290 ha in Zanzibar. Similarly, as regards large scale farms, 54,515 ha were planted in Mainland Tanzania and 1,981 in Zanzibar.

The total production of sugarcane was 2,366,853 tons, of which 252,581 tons (10.7 percent) were from agricultural households and 2,114,272 tons (89.3 percent) from large scale farms. For large scale farms, 2,014,643 tons were produced in Mainland Tanzania and 99,628 tons in Zanzibar. Regarding agricultural households, 244,842 tons were produced from Mainland Tanzania and 7,739 tons in Zanzibar (Table 3.15).

Table 3.15: Area, Production and Yields of Sugar cane during 2023/24 Agricultural Year

		Number of Holdings Planted Crop	Area Planted (Ha)	Production (Ton)	Yield on Area Planted (Ton/Ha)
	Dodoma	-	-	-	-
	Arusha	1,176	88	177	2
	Kilimanjaro	5,109	118	343	3
	Tanga	-	-	-	-
	Morogoro	9,844	16,149	132,175	8
	Pwani	-	-	-	-
	Dar es Salaam	2,419	122	104	1
	Lindi	-	-	-	-
	Mtwara	-	-	-	-
	Ruvuma	-	-	-	-
	Iringa	-	-	-	-
	Mbeya	-	-	-	-
	Singida	2,625	741	3,230	4
	Tabora	-	-	-	-
	Rukwa	-	-	-	-
	Kigoma	-	_	-	-
gricultural Households	Shinyanga	-	-	-	-
	Kagera	5,270	2,798	99,239	35
	Mwanza	2,849	414	4,288	10
	Mara	-	-	-	-
	Manyara	-	-	-	-
	Njombe	-	-	-	-
	Katavi	-	-	-	-
	Simiyu	-	-	-	-
	Geita	-	-	-	-
	Songwe	-	-	-	-
	Mainland Tanzania	34,897	22,057	244,842	11
	Kaskazini Unguja	-	-	-	-
	Kusini Unguja	286	76	159	2
	Mjini Magharibi	-	-	-	-
	Kaskazini Pemba	-	-	-	-
	Kusini Pemba	-	-	-	-
	Zanzibar	739	290	7,739	27
	Tanzania	35,636	22,347	252,581	11
	Mainland Tanzania	30	54,515	2,014,643	37
Large Scale Farms	Zanzibar	4	1,981	99,628	50
	Tanzania	34	56,496	2,114,272	37
	Mainland Tanzania	34,927	76,572	2,259,486	30
All Holdings	Zanzibar	743	2,271	107,367	47
-	Tanzania	35,670	78,843	2,366,853	30

<sup>-</sup> Low number of observations (n $\leq$ 3)/lack of data/Not applicable during the analysis, the production of few holdings were unknown and they were excluded

### **3.6.5** Cloves

In Tanzania, cloves are predominantly grown in Zanzibar. During the 2023/24 agricultural year, a total of 6,821 agricultural households engaged in cloves production, of which 1,938 households were in Mainland Tanzania and 4,882 in Zanzibar. The total area planted with cloves was 5,138 ha, whereas 4,970 ha were from agricultural households and 168 ha from the large scale farms. Out of the area planted by agricultural households, 2,399 ha were from Mainland Tanzania and 2,571 from Zanzibar. On the other hand, a total of 1,033 tons of cloves were produced, whereas Zanzibar accounted for 82.2 percent of the total production. Regional estimate showed that, Kusini Pemba produced 330 tons (42.5 percent), Kaskazini Pemba 311 tons (40.0 percent) and Kusini Unguja 68 tons (8.7 percent) (Table 3.16).

Table 3.16: Area, Production and Yields of Clove during 2023/24 Agricultural Year

		Number of	Area	Production	Yield on Area
	Region	Holdings	Planted	(Tonne)	Planted
		Planted Crop	(Ha)		(Tonne/Ha)
	Dodoma	-	-	-	-
	Arusha	-	-	-	-
	Kilimanjaro	-	-	-	-
	Tanga	-	-	-	-
	Morogoro	-	-	-	-
	Pwani	-	-	-	-
	Dar es Salaam	-	-	-	-
	Lindi	-	-	-	-
	Mtwara	-	-	-	-
	Ruvuma	-	-	-	-
	Iringa	-	-	-	-
	Mbeya	-	-	-	-
	Singida	-	-	-	-
	Tabora	-	-	-	-
	Rukwa	-	-	-	-
	Kigoma	-	-	-	-
gricultural Households	Shinyanga	-	-	-	-
	Kagera	-	-	-	-
	Mwanza	-	-	-	-
	Mara	-	-	-	-
	Manyara	-	-	-	-
	Njombe	-	-	-	_
	Katavi	-	-	-	-
	Simiyu	-	-	-	-
	Geita	-	-	-	_
	Songwe	-	-	-	-
	Mainland Tanzania	1,938	2,399	184	0
	Kaskazini Unguja	-	-	-	-
	Kusini Unguja	558	157	68	0
	Mjini Magharibi	-	-	_	_
	Kaskazini Pemba	2,347	1,007	311	0
	Kusini Pemba	1,832	1,336	330	0
	Zanzibar	4,882	2,571	778	0
	Tanzania	6,821	4,970	963	0
	Mainland Tanzania	, <u>-</u>	´ -	-	_
Large Scale Farms	Zanzibar	4	168	70	0
S	Tanzania	4	168	70	0
	Mainland Tanzania	1,938	2,399	184	0
All Holdings	Zanzibar	4,886	2,738	848	0
<b></b>	Tanzania	6,825	5,138	1,033	0

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

<sup>-</sup> Low number of observations (n $\leq$ 3)/lack of data/Not applicable during the analysis, the production of few holdings were unknown and they were excluded

### 3.7 Fruits and Vegetables

Horticultural crops in Tanzania encompass a diverse range of fruits, vegetables spices, herbs, and flowers cultivated primarily for domestic consumption and export. These crops are integral to the country's agricultural sector, with production predominantly managed by smallholder farmers, though larger-scale operations also exist, especially for export-oriented products. In Tanzania, the major horticultural crops grown are mangoes, pineapples, bananas, pawpaw (papayas), guavas, avocados, citrus, tomatoes, onions, sweet peppers, cabbages, chinese, cauliflower, peas, carrots, cucumbers, watermelons, eggplants, okra, amaranths, pumpkin leaves, sweet potato leaves, and Cassava leaves. Others are cinnamon, cardamom, ginger, chillies, black pepper and garlic. However, the 2023/24 AASS focused on eight crops: banana, avocado, mango, orange, pineapple, onion, tomato and okra as they represent both staple and high-value horticultural produce.

### 3.7.1 Banana

The results show that, in Tanzania, a total of 773,153 agricultural households (702,098 in Mainland Tanzania and 71,054 in Zanzibar) and 48 large scale farms (37 in Mainland Tanzania and 11 in Zanzibar) were engaged in banana production. Agricultural households planted banana in an estimated land area of 356,773 ha (337,259 ha in Mainland Tanzania and 19,514 ha in Zanzibar) whereas, large scale farms had a total of 655 ha (Mainland Tanzania 583 ha and Zanzibar 72 ha).

The total production of bananas was 968,910 tons, of which 968,156 tons were produced by agricultural households and 754 tons by large scale farms. Out of the quantity produced by agricultural households, 911,057 tons were in Mainland Tanzania and 57,099 tons in Zanzibar. For large scale farms, 528 tons were produced in Mainland Tanzania and 226 tons in Zanzibar.

In Mainland Tanzania, Kagera region had the largest planted area with banana (128,066 ha), followed by Kilimanjaro (118,453 ha) and Mbeya (23,118 ha), while Mwanza region had the lowest planted area of 132 ha. In Zanzibar, Kusini Pemba recorded the largest planted area with banana (6,314 ha) followed by Kaskazini Pemba (4,624 ha) and Kusini Unguja (4,385 ha), while Kaskazini Unguja recorded 675 ha area planted with banana.

Regarding production, Kagera region recorded the largest production (443,047 tons), followed by Kilimanjaro (225,245 tons) and Mbeya (90,495 tons), while Mwanza region produced 306 tons. For Zanzibar, Mjini Magharibi had the largest production (16,359 tons), followed by Kusini Pemba (14,491 tons) and Kusini Unguja (12,360 tons). On the other hand, Kaskazini Unguja produced the least amount (2,426 tons). In addition, the average national yield of banana for households was recorded at 3 tons/ha (Table 3.17).

Table 3.17: Area Planted, Production and Yield of Banana by Region During 2023/24 Agricultural Year,
Tanzania

		Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma	-	-	-	-
	Arusha	49,956	24,432	45,981	2
	Kilimanjaro	184,535	118,453	225,245	2
	Tanga	12,096	10,334	10,326	1
	Morogoro	11,913	5,609	22,924	4
	Pwani	12,836	3,065	9,377	3
	Dar es Salaam	14,849	4,360	8,041	2
	Lindi	· -	· -	· -	_
	Mtwara	4,916	6,527	3,848	1
	Ruvuma	43,362	5,485	25,694	5
	Iringa	4,872	785	2,388	3
	Mbeya	40,069	23,118	90,495	4
	Singida	1,786	193	870	5
	Tabora	2,196	357	398	1
	Rukwa	· -	_	_	-
	Kigoma	-	_	_	-
Agricultural	Shinyanga	-	_	_	_
Households	Kagera	286,531	128,066	443,047	3
	Mwanza	1,385	132	306	2
	Mara	3,471	667	8,346	13
	Manyara	5,497	779	4,766	6
	Njombe	-	_		_
	Katavi	1,683	316	640	2
	Simiyu	-,,,,,	-	-	_
	Geita	13,099	2,100	1,864	1
	Songwe	5,184	1,388	5,722	4
	Mainland Tanzania	702,098	337,259	911,057	3
	Kaskazini Unguja	5,002	675	2,426	4
	Kusini Unguja	13,910	4,385	12,360	3
	Mjini Magharibi	14,148	3,516	16,359	5
	Kaskazini Pemba	18,296	4,624	11,463	2
	Kusini Pemba	19,699	6,314	14,491	2
	Zanzibar	71,054	19,514	57,099	3
	Tanzania	773,153	356,773	968,156	3
	Mainland Tanzania	37	583	528	1
Large Scale	Zanzibar	11	72	226	3
Farms	Tanzania	48	655	754	1
	Mainland Tanzania	10	337,842	911,585	3
All Holdings	Zanzibar		19,586	57,325	3
An notdings			*		
	Tanzania		357,428	968,910	3

### 3.7.2 Avocado

In Tanzania, 137,757 agricultural households (135,855 in Mainland Tanzania and 1,901 in Zanzibar) were engaged in avocado production. A total of 33,390 ha was planted with avocado, of which 19,166 ha were planted by agricultural households and 14,224 ha by large scale farms. From the total planted area managed by agricultural households, 18,691 ha were in Mainland Tanzania and 475 ha in Zanzibar. The total production of avocados was 38,352 tons; whereby agricultural households produced 31,446 tons and large-scale farms 6,906 tons. Out of the quantity produced by agricultural households, 30,146 tons were in Mainland Tanzania and 1,300 tons in Zanzibar.

<sup>&</sup>quot;- "Low number of observations (n<3)/lack of data/Not applicable during the analysis, the production of few holdings was unknown and they were excluded

In Mainland Tanzania, Mbeya region had the largest planted area with avocado (5,278 ha), followed by Kilimanjaro (3,731 ha) and Kagera (3,642 ha), while Manyara reported 153 ha. Moreover, Kilimanjaro region recorded the largest production (12,435 tons), followed by Kagera (4,969 tons) and Mbeya (4,571 tons), whereas Geita region reported 148 tons.

In Zanzibar, Kusini Unguja region reported 380 ha as the planted area with avocados and Mjini Magharibi reported a planted area of 96 ha. Regarding production, Mjini Magharibi had 737 tons, whereas Kusini Unguja recorded 563 tons of avocado (Table 3.18).

Table 3.18: Area Planted. Production and Yield of Avocado by Region During 2023/24 Agricultural Year,

	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma		- (114)		
	Arusha	6,188	393	1,265	3
	Kilimanjaro	57,589	3,731	12,435	3
	Tanga	51,569	3,731	12,433	3
	Morogoro	-	-	-	-
	Pwani	-	-	-	-
	Dar es Salaam	-	-	-	-
	Lindi	-	-	-	-
	Mtwara	-	-	-	-
	Ruvuma	9,704	1,142	1,359	- 1
	Iringa	3,354	404	256	1
	_	7,863	5,278	4,571	1
	Mbeya	7,803	3,276	4,371	1
	Singida Tabora	-	-	-	-
		-	-	-	-
	Rukwa Kigoma	_	-	-	-
A:1	_	-	-	-	-
Agricultural Households	Shinyanga Kagera	36,474	3,642	4,969	- 1
Houselloids		30,474	3,042	4,909	1
	Mwanza Mara	_	-	-	-
		3,530	153	392	3
	Manyara	3,298	2,992	2,155	1
	Njombe	3,290	2,992	2,133	1
	Katavi	-	-	-	-
	Simiyu	4,847	571	148	0
	Geita	898	212	1,619	8
	Songwe <b>Mainland Tanzania</b>	135,855	18,691	30,146	2
		133,033	10,091	30,140	_
	Kaskazini Unguja	1,385	380	563	1
	Kusini Unguja	517	96	737	8
	Mjini Magharibi Kaskazini Pemba	-	90 -	131	0
	Kaskazini Pemba Kusini Pemba	-	-	-	-
	Zanzibar	1,901	475	1,300	3
	Zanzidar Tanzania	137,757	19,166	31,446	2
		43	14,221	6,887	0
Large Scale	Mainland Tanzania Zanzibar	43	14,221	0,007	U
Farms	Zanzibar <b>Tanzania</b>	45	14,224	6,906	0
		43			
. 11 77 1 1	Mainland Tanzania		32,911	37,033	1
All Holdings	Zanzibar		479	1,319	3
	Tanzania		33,390	38,352	1

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

<sup>&</sup>quot;- "Low number of observations (n<3)/lack of data/Not applicable during the analysis, the production of few holdings was unknown and they were excluded

### 3.7.3 **Mango**

Mango production in Tanzania involved 148,116 agricultural households (140,321 in Mainland Tanzania and 7,795 in Zanzibar) and 45 large scale farms (40 in Mainland Tanzania and 5 in Zanzibar). The total area planted with mango was 35,210 ha, of which 31,151 ha was planted by agricultural households and 4,060 ha by large scale farms. Out of the total planted area by agricultural households, 28,433 ha were in Mainland Tanzania and 2,718 ha in Zanzibar. The total production of mango was 70,933 tons, out of which 70,757 tons were produced by agricultural households and 175 tons by large scale farms. From the production of agricultural households, 61,376 tons were in Mainland Tanzania and 9,382 tons in Zanzibar (Table 3.19).

Table 3.19: Number of Holdings, Area Planted, and Production of Mango by Region During 2023/24 Agricultural Year, Tanzania

Holding Category	Region	Number of Agricultural Holdings	Planted Area (ha)	Production (tons)
	Mainland Tanzania	140,321	28,433	61,376
Agricultural Households	Zanzibar	7,795	2,718	9,382
	Tanzania	148,116	31,151	70,757
	Mainland Tanzania	40	4,046	131
Large Scale Farms	Zanzibar	5	14	44
	Tanzania	45	4,060	175
	Mainland Tanzania		32,478	61,507
All Holdings	Zanzibar		2,732	9,426
	Tanzania		35,210	70,933

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

### **3.7.4 Orange**

The production of oranges in Tanzania involved 45,021 agricultural households, out of these, 41,781 were in Mainland Tanzania and 3,240 in Zanzibar. The total planted area with oranges was 31,668 ha, of which 30,963 ha were from agricultural households and 705 ha from large scale farms. Out of the total planted area by agricultural households, 30,505 ha were in Mainland Tanzania and 458 ha in Zanzibar. A total of 86,857 tons of orange were produced in Tanzania, out of which agricultural households produced 86,440 tons and 416 tons were produced by large scale farms. Out of the total production managed by agricultural households, 84,839 tons were in Mainland Tanzania and 1,601 tons in Zanzibar.

In Mainland Tanzania, Tanga region had the largest planted area with orange (26,707 ha), followed by Pwani (1,622 ha) and Ruvuma (824 ha), whereas Manyara region reported 7 ha. Moreover, Tanga region had the largest orange production (77,033 tons), followed by Ruvuma (2,272 tons) and Pwani (1,817 ha), while Manyara reported 21 tons. In Zanzibar, Kusini Unguja had the largest planted area (344 ha), followed by Mjini Magharibi (71 ha); whereas Kaskazini Pemba reported a planted area of

<sup>&</sup>quot;- "Low number of observations (n<3)/lack of data/Not applicable during the analysis, the production of few holdings was unknown and they were excluded

36 ha. In addition, the largest production was recorded in Kusini Unguja (1,370 tons), followed by Mjini Magharibi (164 tons), while Kaskazini Pemba reported 52 tons (Table 3.20).

Table 3.20: Area Planted, Production and Yield of Oranges by Region During 2023/24 Agricultural Year, Tanzania

	Region	Number of Holdings Planted	Area Planted	Production (Tonne)	Yield on Area Planted
	D. J	Crop	(Ha)		(Tonne/Ha)
	Dodoma Arusha	1 970	28	108	- 4
	Kilimanjaro	1,870	28	108	4
	•	19 202	- 26 707	77.022	- 2
	Tanga	18,293	26,707	77,033	3
	Morogoro	2 920	1 (22	1 017	- 1
	Pwani Dar es Salaam	3,820	1,622	1,817	1
	Lindi	-	-	-	-
		-	-	-	-
	Mtwara	- 5 200	924	2 272	-
	Ruvuma	5,398	824	2,272	3
	Iringa	-	-	-	-
	Mbeya	-	-	-	-
	Singida	-	-	-	-
	Tabora	-	-	-	-
	Rukwa	-	-	-	-
	Kigoma	-	-	-	-
Agricultural Households	Shinyanga	-	-	-	-
	Kagera	2 (40	-	-	-
	Mwanza	2,648	336	228	1
	Mara	-	-	-	-
	Manyara	860	7	21	3
	Njombe	-	-	-	-
	Katavi	-	-	-	-
	Simiyu	-	-	-	-
	Geita	4,767	149	1,017	7
	Songwe	-	-	-	-
	Mainland Tanzania	41,781	30,505	84,839	3
	Kaskazini Unguja	-	-	-	-
	Kusini Unguja	2,180	344	1,370	4
	Mjini Magharibi	718	71	164	2
	Kaskazini Pemba	270	36	52	1
	Kusini Pemba	=	-	-	-
	Zanzibar	3,240	458	1,601	3
	Tanzania	45,021	30,963	86,440	3
Large Scale	Mainland Tanzania	26	698	410	1
Farms	Zanzibar	-	-	-	-
1 411113	Tanzania	28	705	416	1
	Mainland Tanzania	41,807	31,203	85,249	3
All Holdings	Zanzibar	3,242	465	1,608	3
	Tanzania	45,049	31,668	86,857	3

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

<sup>&</sup>quot;- "Low number of observations (n $\leq$ 3)/lack of data/Not applicable during the analysis, the production of few holdings was unknown and they were excluded

# 3.7.5 Pineapple

In Tanzania, 17,623 agricultural households were engaged in growing pineapple, whereby 14,973 were in Mainland Tanzania and 2,650 in Zanzibar. The total area planted with pineapple was 10,554 ha, of which 10,487 ha were from agricultural households and 67 ha from large scale farms. Out of the total planted area by agricultural households, 9,674 ha were in Mainland Tanzania and 813 ha in Zanzibar. Results further reveal that, production of pineapple in Tanzania was 33,087 tons, whereby, agricultural households produced 33,045 tons and 42 tons were produced by large scale farms. Out of the total production by agricultural households, 29,678 tons were from Mainland Tanzania and 3,367 tons from Zanzibar (Table 3.21).

Table 3.21: Number of Holdings, Area Planted, Production and Yield of Pineapple by Region During 2023/24 Agricultural Year, Tanzania

		Number of	Area	Production	Yield on Area
	Region	<b>Holdings Planted</b>	Planted	(Tonne)	Planted
	-	Crop	(Ha)		(Tonne/Ha)
	Dodoma	-	_	-	-
	Arusha	-	-	-	-
	Kilimanjaro	-	-	-	-
	Tanga	1,775	588	277	0
	Morogoro	-	-	-	-
	Pwani	10,027	7,230	26,205	4
	Dar es Salaam	1,207	1,013	1,580	2
	Lindi	· -	-	-	-
	Mtwara	-	-	-	
	Ruvuma	-	-	-	-
	Iringa	-	-	-	-
	Mbeya	-	-	-	-
	Singida	-	-	-	-
	Tabora	-	-	-	-
	Rukwa	-	-	-	-
	Kigoma	-	-	-	-
:	Shinyanga	-	-	-	-
Agricultural Households	Kagera	-	-	-	-
	Mwanza	-	-	-	-
	Mara	-	-	-	-
	Manyara	-	-	-	-
	Njombe	-	_	-	-
	Katavi	-	-	-	-
	Simiyu	-	_	-	-
	Geita	-	_	-	-
	Songwe	-	-	-	-
	Mainland Tanzania	14,973	9,674	29,678	3
	Kaskazini Unguja	578	190	1,912	10
	Kusini Unguja	540	41	49	1
	Mjini Magharibi	_	_	-	
	Kaskazini Pemba	505	213	333	2
	Kusini Pemba	535	36	46	1
	Zanzibar	2,650	813	3,367	4
	Tanzania	17,623	10,487	33,045	3
	Mainland Tanzania	4	60	41	1
Large Scale Farms	Zanzibar	-	_	-	_
-	Tanzania	5	67	42	1
	Mainland Tanzania	14,977	9,735	29,719	3
All Holdings	Zanzibar	2,651	819	3,368	4
5	Tanzania	17,628	10,554	33,087	3

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

<sup>&</sup>quot;- "Low number of observations (n<3)/lack of data/Not applicable during the analysis, the production of few holdings was unknown and they were excluded

#### **3.7.6 Onion**

During the 2023/24 agricultural year, a total of 31,751 agricultural households and 13 large scale farms engaged in onion production. Among the agricultural households, 31,430 were from Mainland Tanzania and 321 from Zanzibar. An area of 34,233 ha was planted with onion by agricultural households and 49 ha by large scale farms, making a total planted area of 34,283 ha. Out of the total planted area by agricultural households, 34,167 ha were in Mainland Tanzania and 66 ha in Zanzibar. A total of 28,474 ha, equivalent to 83.1 percent of the planted area was harvested, whereby 28,434 ha (83.1 percent) was harvested by agricultural households and 40 ha (81.6 percent) by large scale farms.

Regarding production, the results show that 67,095 tons of onion were produced, of which, 66,958 tons were produced by agricultural households and 137 tons by large scale farms. On the other hand, the reported national average yield for onion was 2.4 tons/ha. For agricultural households, yield averaged 2.4 tons/ha while for large scale farms it was 3.4 tons/ha (Table 3.22).

Table 3.22: Area Planted, Area Harvested, Production and Yield of Onion During 2023/24 Agricultural Year,
Tanzania

Holding Category	Area	Number of households	Area Planted (Ha)	Area Harvested (Ha)	Percent of Area Harvested	Production (Tons)	Yield (Tons/Ha)
	Mainland Tanzania	31,430	34,167	28,382	83.1	66,709	2.4
Agricultural Household	Zanzibar	321	66	52	79	249	4.8
Household	Tanzania	31,751	34,233	28,434	83.1	66,958	2.4
Large Scale	Mainland Tanzania	-	-	-	-	-	-
Farms	Zanzibar	-	-	-		-	-
	Tanzania	13	49	40	81.6	137	3.4
	Mainland Tanzania		34,216	28,422	83.1	66,845	2.4
All Holdings	Zanzibar		67	52	78.6	249	4.8
	Tanzania		34,283	28,474	83.1	67,095	2.4

Source: Annex Table (5-1) in Statistical Tables of AASS 2023/24

### **3.7.7** Tomato

In Tanzania, a total of 85,498 agricultural households and 39 large scale farms were involved in tomato production. Among the agricultural households that produced tomatoes, 79,804 were in Mainland Tanzania and 5,694 in Zanzibar. For large scale farms, 32 were in Mainland Tanzania and 7 in Zanzibar. The findings depict that a total of 57,825 ha was planted with tomato, whereas 56,409 ha was planted by agricultural households and 1,417 ha by large scale farms. Out of the total area planted by agricultural households, 54,973 ha were in Mainland Tanzania and 1,436 ha in Zanzibar.

Moreover, a total of 50,347 ha (87.1 percent) of the area planted with tomato was harvested; agricultural households harvested 48,939 ha, equivalent to 86.8 percent of the planted area and 1,407

<sup>&</sup>quot;- "Withheld to avoid disclosing data for individual holdings or insufficient data available from the survey (Total includes withheld data)

ha (99.3 percent) for large scale farms. Considering the area harvested by agricultural households, 47,714 ha (86.8 percent) were in Mainland Tanzania and 1,226 ha (85.4 percent) in Zanzibar. Furthermore, a total of 541,789 tons of tomato were produced, of which 540,338 tons by agricultural households and 1,451 tons by large scale farms. Out the total production by agricultural households, 520,531 tons were in Mainland Tanzania and 19,807 tons in Zanzibar.

In Mainland Tanzania, Shinyanga region recorded the highest harvested area (2,416 ha; 100 percent) of the area planted with tomato, followed by Tanga (2,268 ha; 98.6 percent) and Mbeya (1,379 ha, 98.5 percent), while Pwani harvested 1,232 ha, equivalent to 74.8 percent of the planted area. Moreover, Iringa region accounted for the largest quantity of tomatoes (158,693 tons), followed by Arusha (146,385 tons) and Kilimanjaro (46,954 tons), whereas Shinyanga reported the least production (1,660 tons). In Zanzibar, Kaskazini Pemba harvested the largest part of the area planted (154 ha; 99.6 percent), followed by Kusini Pemba (294 ha; 92.4 percent) and Mjini Magharibi 440 ha; 85.9 percent), while Kaskazini Unguja had 77 ha (70.0 percent).

Further estimates on regional production show that, Mjini Magharibi had the largest production (11,114 tons; 60.4 percent), followed by Kaskazini Pemba (3,364 tons), while Kaskazini Unguja recorded the small production, with 616 tons. Additionally, national yield for tomato was 10.8 tons/ha, with Mainland Tanzania recording a yield of 11.5 tons/ha and 11.0 tons/ha for households and 1.0 for large scale farms (Table 3.23).

Table 3.23: Area Planted, Area Harvested, Production and Yield of Tomato During 2023/24 Agricultural Year, Tanzania

Holding Category	Region	Number of households	Area Planted (ha)	Area Harvested (ha)	Percent of Harvested Area (ha)	Production (tons)	Yield (tons/ha)
	Dodoma	2,799	2,652	2,557	96.4	17,103	6.7
	Arusha	7,289	6,094	5,611	92.1	146,385	26.1
	Kilimanjaro	4,318	2,481	1,993	Area (ha)	23.6	
	Tanga	5,453	2,301	2,268	98.6	12,805	5.6
	Morogoro	3,671	1,830	1,461	79.9	22,548	15.4
	Pwani	2,736	1,647	1,232	74.8	1,870	1.5
	Dar es Salaam	4,556	3,625	3,569	98.4	11,292	3.2
	Lindi	-	-	-		-	-
	Mtwara	3,037	806	653	81.0	7,233	11.1
	Ruvuma	2,123	3,471	3,299	95.0	2,973	0.9
	Iringa	10,898	15,643	11,879	75.9	158,693	13.4
	Mbeya	2,942	1,429	1,379	96.5	15,663	11.4
	Singida	-	-	-		-	-
	Tabora	2,508	1,263	1,051	83.2	4,562	4.3
	Rukwa	-	-	-		-	-
	Kigoma	-	-	-		-	-
Agricultural	Shinyanga	2,315	2,416	2,416	100.0	1,660	0.7
Households	Kagera	5,157	1,379	1,187	86.1	2,917	2.5
	Mwanza	6,258	1,527	1,375	90.1	21,930	15.9
	Mara	2,128	516	427	82.8	3,099	7.3
	Manyara	-	-	-		-	-
	Njombe	-	-	-		-	-
	Katavi	1,572	2,402	2,304	95.9	3,838	1.7
	Simiyu	-	-	-		-	-
	Geita	3,952	2,042	1,827	89.5	30,548	16.7
	Songwe	1,283	311	298	95.9	1,169	3.9
	Mainland Tanzania	79,804	54,973	47,714	86.8	520,531	10.9
	Kaskazini Unguja	972	110	77	70.0	616	8.0
	Kusini Unguja	1,722	341	261	76.5	2,197	8.4
	Mjini Magharibi	1,187	512	440	85.9	11,114	25.3
	Kaskazini Pemba	938	154	154	99.6	3,364	21.9
	Kusini Pemba	875	318	294	92.4	2,516	8.6
	Zanzibar	5,694	1,436	1,226	85.4	19,807	16.2
	Tanzania	85,498	56,409	48,939	86.8	540,338	11.0
	Mainland Tanzania	32	1,378	1,371	99.5	1,391	1.0
Large scale farms	Zanzibar	7	38	36	94.4	60	1.7
	Tanzania	39	1,417	1,407	99.3	1,451	1.0
	Mainland Tanzania		56,351	49,085	87.1	521,922	10.6
All Holdings	Zanzibar		1,474	1,262	85.6	19,867	15.7
	Tanzania		57,825	50,347	87.1	541,789	10.8

<sup>&</sup>quot;- "Withheld to avoid disclosing data for individual holdings or insufficient data available from the survey (Total includes withheld data)

### 3.7.8 Okra

During 2023/24 agricultural year, a total of 37,148 agricultural households grew okra; 33,300 households from Mainland Tanzania and 3,848 in Zanzibar. Additionally, 16 large scale farms (10 in Mainland Tanzania and 6 in Zanzibar) also grew okra. Results depict that, 12,356 ha was planted with okra, with agricultural household planting an area of 11,924 ha and 432 ha by large scale farms. Out of the total area planted by agricultural households, 11,410 ha were in Mainland Tanzania and 514 in Zanzibar.

The results show that 11,621 ha, equivalent to 94.1 percent of the area planted with okra was harvested. Out of the total area harvested, agricultural households had 11,191 ha, accounting for 93.9 percent of the total planted area and large-scale farms had 429 ha (99.4 percent). From the area harvested by agricultural households, 10,701 ha (93.8 percent) was in Mainland Tanzania and Zanzibar 491 ha (95.5 percent) in Zanzibar. National estimates of okra production summed to 18,395 tons, whereby agricultural households reported production of 18,370 tons and large-scale farms 25 tons. Out of the total quantity produced by agricultural households, Mainland Tanzania had 17,481 tons and Zanzibar 914 tons.

Furthermore, regional estimates indicate that Pwani reported the largest production in Mainland Tanzania, accounting to 11,434 tons of the total production, followed by Morogoro (2,737 tons) and Dar es Salaam (1,124 tons), while Katavi produced 50 tons. In Zanzibar, Mjini Magharibi had the highest production (320 tons), followed by Kusini Unguja (214 tons), and Kusini Pemba (186 tons), while Kaskazini Unguja recorded the lowest production (72 tons). Concerning yield, the result showed a national average of 1.6 tons/ha, whereas Mainland Tanzania had an average of 1.6 tons/ha and Zanzibar 1.7 tons/ha (Table 3.24).

Table 3.24: Area Planted, Area Harvested, Production and Yield of Okra During 2023/24 Agricultural Year, Tanzania

Holding Category	Region	Number of households	Area Planted (ha)	Area Harvested (ha)	Percent of Area Harvested	Production (tons)	Yield (tons/ha)
	Dodoma	-	-	-		-	-
	Arusha	-	-	-		-	-
	Kilimanjaro	-	-	-		-	-
	Tanga	1,652	258	181	70.3	59	0.3
	Morogoro	3,162	2,065	1,858	90.0	2,737	1.5
	Pwani	10,277	3,796	3,685	97.1	11,434	3.1
	Dar es Salaam	7,847	2,746	2,674	97.4	1,124	0.4
	Lindi	-	-	-		-	-
	Mtwara	-	-	-		-	-
	Ruvuma	-	-	-		-	-
	Iringa	-	-	-		-	-
	Mbeya	-	-	-		-	-
	Singida	-	-	-		-	-
	Tabora	-	-	-		-	-
	Rukwa	-	-	-		-	-
	Kigoma	-	-	-		-	-
Agricultural	Shinyanga	-	-	-		-	-
Households	Kagera	-	-	-		-	-
	Mwanza	2,587	426	316	74.0	502	1.6
	Mara	-	-	-		-	-
	Manyara	-	-	-		-	_
	Njombe	-	-	-		-	-
	Katavi	1,146	136	136	100.0	50	0.4
	Simiyu	-	-	-		-	-
	Geita	-	-	-		-	-
	Songwe	-	-	-		-	_
	Mainland Tanzania	33,300	11,410	10,701	93.8	17,463	1.6
	Kaskazini Unguja	390	38	38	100.0	72	1.9
	Kusini Unguja	1,169	118	115	97.5	214	1.9
	Mjini Magharibi	1,245	250	230	91.9	320	1.4
	Kaskazini Pemba	534	39	39	100.0	115	2.9
	Kusini Pemba	510	68	68	100.0	186	2.7
	Zanzibar	3,848	514	491	95.5	907	1.8
	Tanzania	37,148	11,924	11,191	93.9	18,370	1.6
	Mainland Tanzania	10	399	398	99.7	18	0.0
Large scale farms	Zanzibar	6	33	32	96.4	7	0.2
Č	Tanzania	16	432	429	99.4	25	0.1
	Mainland Tanzania		11,809	11,098	94.0	17,481	1.6
All Holdings	Zanzibar		547	522	95.5	914	1.7
8	Tanzania		12,356	11,621	94.1	18,395	1.6

# 3.8 Crop Harvest Use

This subsection presents information on how agricultural households and large scale farms used their harvested crops during 2023/24 agricultural year. In this report, crop use was categorized into nine (9) groups: sold unprocessed, household consumption, given to others, used to pay for inputs, animal feeds, seeds, processed school consumption, and other uses.

<sup>&</sup>quot;- "Withheld to avoid disclosing data for individual holdings or insufficient data available from the survey (Total includes withheld data)

### 3.8.1 Cereals

The findings indicate that a large proportion of the production from most of the cereals produced were either consumed by holdings or sold unprocessed, with an aggregate of at least 89.0 percent for each cereal crop, whereas the rest of the uses for each crop were less than or equal to 10.0 percent. Among the cereals, crops that had the largest proportion of their production consumed by holdings were bulrush millet (78 percent), sorghum (67 percent), and maize (53 percent), whereas paddy had the highest percentage sold unprocessed (40 percent). For large scale farms, most of the harvests were sold unprocessed. Paddy had the highest percentage (80 percent), followed by sorghum (74 percent) and maize (50 percent) (Figure 3.29).

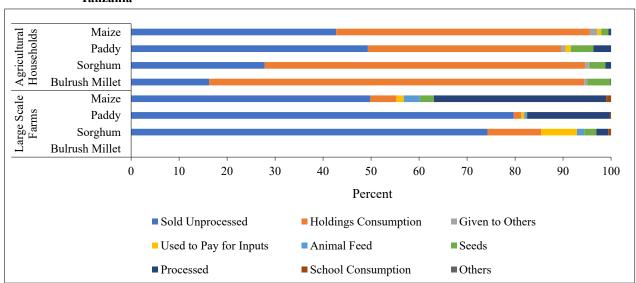


Figure 3.29: Percentage Distribution of Crop Harvest Uses for Cereals During 2023/24 Agricultural Year, Tanzania

Source: Annex Table 5-4 in Statistical Tables of AASS 2023/24

## 3.8.2 Roots and Tuber Crops

Among the roots and tubers, a large proportion of the production for most of the crops produced by agricultural households were used for household consumption, including sweet potatoes (63 percent), cassava (60 percent), and cocoyam (59 percent). The exception was on Irish potatoes, where a large proportion (88 percent) was sold unprocessed and 3 percent was used as seeds. For large scale farms, most of the harvested Irish potatoes (98 percent) were sold unprocessed, while 87 percent of cassava and 23 percent of sweet potatoes were used for consumption (Figure 3.30).

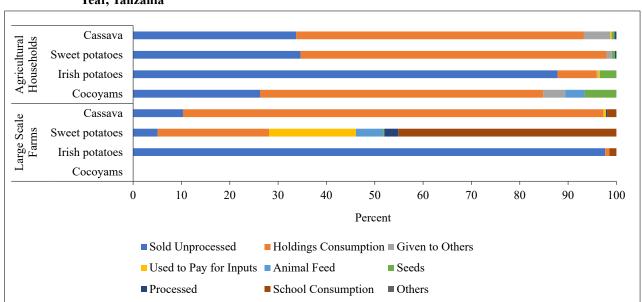


Figure 3.30: Percentage Distribution of Crop Harvest Uses for Roots and Tuber During 2023/24 Agricultural Year, Tanzania

### **3.8.3** Pulses

The major uses of pulses as reported by agricultural households were household consumption and selling in unprocessed form. Pigeon pea was the leading pulse crop whose production was sold unprocessed (83 percent), while cowpeas were mostly consumed by holdings (49 percent). For large scale farms, at least 77 percent of the pulses production was sold unprocessed, while the remaining portion had other uses (Table 3.31).

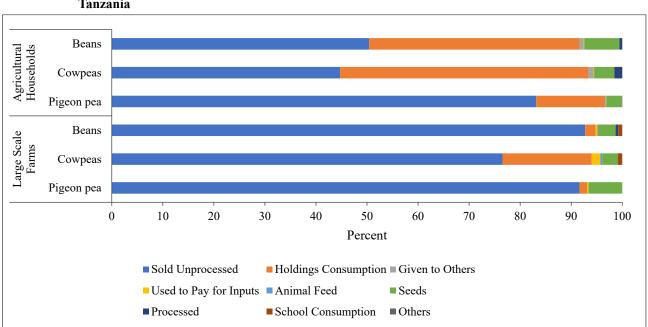


Figure 3.31: Percentage Distribution of Crop Harvest Uses for Pulses During 2023/24 Agricultural Year, Tanzania

Source: Annex Table 5-4 in Statistical Tables of AASS 2023/24

#### 3.8.4 Oil seeds and Nuts

The findings indicate that most of the oil seeds and nuts production by agricultural households was sold in unprocessed form as follows: sesame (94 percent), sunflower (62 percent), and groundnut (55 percent). A significant part of the production for some oil seeds and nuts was used for household consumption too. For example, at least one-third of groundnuts were consumed by households. A relatively small proportion of oil seeds and nuts were used for seeds (for example, 7 percent of groundnuts' production was reserved as seeds).

Similarly, for large scale farms, most of the harvest of oil seeds and nuts was sold unprocessed. Sesame had the highest proportion (92 percent), followed by sunflower (49 percent) and groundnuts (48 percent). The remaining portion of sesame was used for seeds and paying for inputs, each use accounting for almost 3 percent, while 1 percent was processed for sale. For sunflowers and groundnuts, a large part of the remaining proportion was processed for sale and household consumption (Table 3.32).

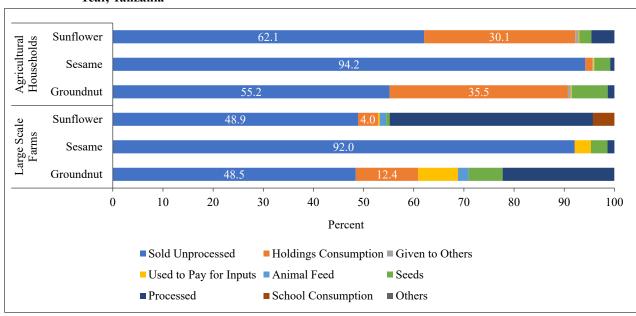


Figure 3.32: Percentage Distribution of Crop Harvest Uses for Oil seeds and nuts During 2023/24 Agricultural Year, Tanzania

Source: Annex Table 5-4 in Statistical Tables of AASS 2023/24

### 3.8.5 Cash Crops

A large proportion of the production from the cash crops harvested in Tanzania were sold in the unprocessed form. For agricultural households, more than 91 percent of the cash crops' production was sold unprocessed. For instance, all cloves (100 percent) were unprocessed, followed by sugar cane (98 percent), coffee (96 percent), cotton (93 percent), and cashew nuts (91 percent). In the large scale farms, a large amount of the harvest was either sold unprocessed or processed. The former dominated with cotton (98 percent), cashew nuts and clove producers selling at 85 percent of each for unprocessed, while sugarcane production had taken 10 percent, which was a lower percentage of all cash crops (Figure 3.33).

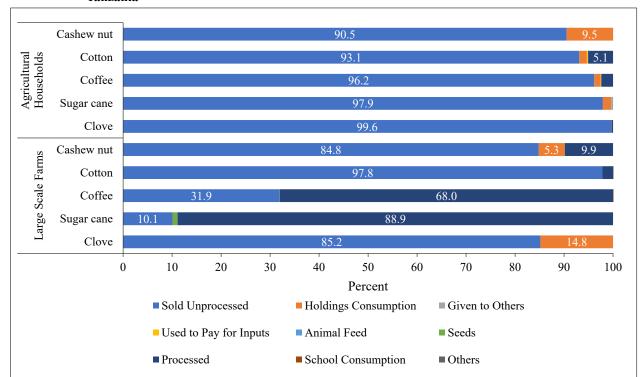


Figure 3.33: Percentage Distribution of Crop Harvest Uses for Cash Crops During 2023/24 Agricultural Year, Tanzania

### **3.8.6 Fruits**

During the 2023/204 agricultural year, the fruits harvested by agricultural households were mainly sold unprocessed, consumed by holdings or given to others. Among the fruits, most of the oranges (87 percent) were sold unprocessed, followed by pineapples (80 percent) and avocados (67 percent). Bananas were mostly used for holding consumption (53 percent), followed by mangoes (41 percent) and avocados (27 percent). The remaining production of the fruits' harvest was given to others in the form of gifts, with mangoes recording (14 percent), bananas and avocados each recorded (4 percent). In large scale farms, over 17 percent of fruits' harvest was sold unprocessed, with 94 percent in pineapple and oranges harvest each, and 82 percent in avocados (Figure 3.34).

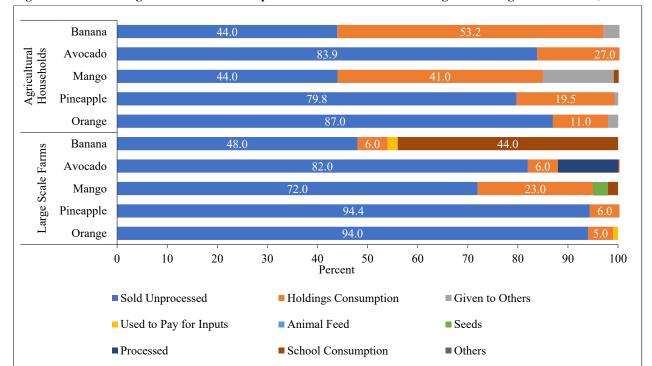
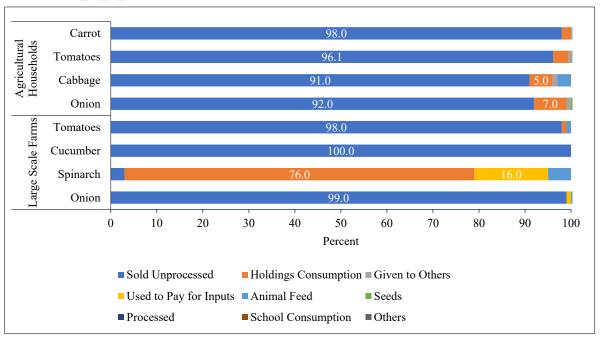


Figure 3.34: Percentage Distribution of Crop Harvest Uses for Fruits During 2023/24 Agricultural Year, Tanzania

# 3.8.7 Vegetables

For the selected vegetables, a large proportion of the harvest was sold unprocessed followed by holdings consumption. In agricultural households, carrots had the largest share of its harvest sold unprocessed (98 percent), followed by tomatoes (96 percent) and onions (92 percent). Holdings consumption was 7 percent for onions, 5 percent for cabbages and 3 percent for tomatoes. Moreover, the proportion of vegetables directed to other uses was minimal. For large scale farms, harvests were mainly sold unprocessed or directed to holdings' consumption. Cucumbers had 100 percent of the harvest sold unprocessed, followed by onions (99 percent) and tomatoes (98 percent). The proportion of harvest used was household consumption in large scale farms was highest in spinach (76 percent), followed by amaranth (66 percent) and okra (29 percent) (Figure 3.35).

Figure 3.35: Percentage Distribution of Crop Harvest Uses for Vegetables During 2023/24 Agricultural Year, Tanzania



# **Chapter.4** Irrigation and Input Use

### 4.1 Introduction

In Tanzania, irrigation and input use are among the essentials in developing the agricultural sector in the country. Irrigation practices in Tanzania are predominantly rain-fed, limiting crop yields and making agriculture vulnerable to climate variability. Additionally, limited access to quality inputs such as fertilizers, pesticides, and improved seeds further hampers agricultural productivity. Addressing these challenges is crucial for ensuring food security, improving farmers' livelihoods, and driving economic development in Tanzania. This section presents the findings on irrigation and input use as reported during the survey.

### 4.2 Irrigation

This sub-section presents various findings regarding irrigation use in agricultural holdings. The explanation focuses on agricultural households that practiced irrigation, methods of irrigation used, and area planted under irrigation during the 2023/24 agricultural year at both regional and national levels. Furthermore, the description covers agricultural holdings (households and large-scale farms) across regions and at the national levels.

### 4.2.1 Agricultural Households Practiced Irrigation

The results reveal that 5.8 percent of the agricultural households that practiced cropping in Tanzania reported irrigating their crops during the 2023/24 agricultural year. Among the households that had irrigation in the Mainland Tanzania, slightly above half of them (55.4 percent) irrigated their crops using flooding/surface irrigation method. Within the regions, the flooding/surface method was predominant in Tabora (93.1 percent) and Mbeya (92.5 percent), while it was practiced less in Njombe (2.2 percent). The manual method of irrigation was practiced by 38.1 percent of irrigating households in the Mainland Tanzania, while within the regions, it was adopted by all irrigating households in Simiyu (100 percent), 94.2 percent of those in Songwe and only by 1.3 percent in Mbeya.

Furthermore, 7.0 percent of the agricultural households that had irrigation in Mainland Tanzania reported using sprinklers, and the method was common in Njombe region (27.5 percent) and Morogoro region (24.3 percent), while Arusha region showed less adoption (1.3 percent). Statistics also indicate that adoption of Pivot irrigation was relatively low, with only 0.6 percent of irrigating agricultural households reporting to practice this method. Despite its low pace of adoption, it was, however, commonly applicable in Manyara region (4.3 percent), Pwani (3.2 percent) and less adopted in Iringa (1.0 percent).

In Zanzibar, the majority of the irrigating households (71.7 percent) used the manual method, followed by flooding/surface (19.6 percent). Manual irrigation was dominant in Kusini Pemba (91.9 percent), followed by Kaskazini Pemba (82.1 percent) and least in Kaskazini Unguja (51.8 percent). With regard to flooding/surface, the findings show that the method was mostly applied in Kaskazini

Unguja (42.7 percent) and Kusini Unguja (20.0 percent), while less practiced in Kusini Pemba (8.1 percent). Additionally, the findings indicate that 11.7 percent and 2.1 percent of the irrigating households reported having practiced drip and sprinkler irrigation, respectively. However, while drip irrigation was common in Kusini Unguja region (16.6 percent) and less practiced in Kaskazini Unguja (3.8 percent), sprinkler irrigation was more prevalent in Kaskazini Unguja (4.5 percent) and lower in Kaskazini Pemba (1.6 percent) (Table 4.1).

Table 4.1: Number and Percentage of Agricultural Holdings Practiced Irrigation by Method of Irrigation and Region During 2023/24 Agricultural Year, Tanzania

		Holdings			Method of	Irrigation										
Holding Category	Region	Engaged in Crop Production	Holdings I	rrigated	Manual		Sprinkler		Drip		Flooding/S	urface	Pivot		Terraced	
category		Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	Dodoma	551,662	6,579	1.2	4,102	62.3	552	8.4	-	0.0	1,925	29.3	-	0.0	-	0.0
	Arusha	296,443	44,806	15.1	2,589	5.8	583	1.3	1,803	4.0	40,232	89.8	-	0.0	-	0.0
	Kilimanjaro	328,350	53,394	16.3	16,680	31.2	6,728	12.6	458	0.9	31,248	58.5	736	1.4	-	0.0
	Tanga	453,930	20,237	4.5	11,826	58.4	1,226	6.1	-	0.0	7,685	38.0	-	0.0	-	0.0
	Morogoro	559,499	20,845	3.7	8,080	38.8	5,066	24.3	307	1.5	8,358	40.1	-	0.0	-	0.0
	Pwani	251,786	11,242	4.5	7,431	66.1	515	4.6	-	0.0	3,446	30.7	365	3.2	-	0.0
	Dar es Salaam	222,971	42,515	19.1	34,487	81.1	7,724	18.2	888	2.1	2,073	4.9	-	0.0	-	0.0
	Lindi	278,495	2,169	0.8	-	-	-	-	-	-	_	-	-	-	-	-
	Mtwara	394,185	1,130	0.3	-	-	-	-	-	-	_	-	-	-	-	-
	Ruvuma	375,248	25,325	6.7	2,459	9.7	-	0.0	1,234	4.9	22,211	87.7	-	0.0	-	0.0
	Iringa	236,712	34,738	14.7	20,703	59.6	-	0.0	542	1.6	14,645	42.2	348	1.0	-	0.0
	Mbeya	391,172	42,951	11.0	540	1.3	1,727	4.0	-	0.0	39,745	92.5	542	1.3	397	0.9
	Singida	308,197	2,433	0.8	1,052	43.2	-	0.0	-	0.0	1,381	56.8	-	0.0	-	0.0
	Tabora	444,154	32,546	7.3	3,813	11.7	-	0.0	-	0.0	30,305	93.1	-	0.0	-	0.0
	Rukwa	246,950	6,737	2.7	1,382	20.5	-	0.0	-	0.0	1,884	28.0	-	0.0	4,183	62.1
Agricultural	Kigoma	315,866	10,753	3.4	5,409	50.3	927	8.6	-	0.0	6,001	55.8	-	0.0	-	0.0
	Shinyanga	274,062	6,798	2.5	6,282	92.4	-	0.0	-	0.0	_	0.0	-	0.0	516	7.6
Households	Kagera	544,333	3,964	0.7	1,895	47.8	-	0.0	-	0.0	2,069	52.2	-	0.0	-	0.0
	Mwanza	398,934	46,244	11.6	16,930	36.6	932	2.0	-	0.0	30,087	65.1	-	0.0	-	0.0
	Mara	316,782	14,671	4.6	4,966	33.8	1,309	8.9	-	0.0	8,396	57.2	-	0.0	-	0.0
	Manyara	302,003	11,264	3.7	3,404	30.2	-	0.0	-	0.0	7,380	65.5	481	4.3	-	0.0
	Njombe	195,500	20,676	10.6	14,246	68.9	5,691	27.5	-	0.0	457	2.2	-	0.0	738	3.6
	Katavi	150,672	9,289	6.2	1,950	21.0	-	0.0	-	0.0	7,749	83.4	203	2.2	-	0.0
	Simiyu	257,762	1,332	0.5	1,332	100.0	-	0.0	-	0.0	_	0.0	-	0.0	-	0.0
	Geita	361,957	6,895	1.9	5,705	82.7	-	0.0	-	0.0	1,190	17.3	-	0.0	-	0.0
	Songwe	245,727	5,455	2.2	5,139	94.2	-	0.0	-	0.0	316	5.8	-	0.0	-	0.0
	Mainland Tanzania	8,703,351	484,989	5.6	184,570	38.1	34,110	7.0	5,231	1.1	268,786	55.4	2,674	0.6	5,834	1.2
	Kaskazini Unguja	26,144	3,848	14.7	1,992	51.8	172	4.5	146	3.8	1,645	42.7	-	0.0	-	0.0
	Kusini Unguja	27,252	6,721	24.7	4,482	66.7	152	2.3	1,113	16.6	1,347	20.0	-	0.0	-	0.0
	Mjini Magharibi	29,846	7,716	25.9	5,566	72.1	138	1.8	1,235	16.0	1,231	15.9	-	0.0	-	0.0
	Kaskazini Pemba	33,005	4,035	12.2	3,311	82.1	63	1.6	220	5.4	518	12.8	-	0.0	-	0.0
	Kusini Pemba	29,386	3,198	10.9	2,939	91.9	-	0.0	280	8.8	259	8.1	-	0.0	-	0.0
	Zanzibar	145,632	25,517	17.5	18,289	71.7	525	2.1	2,993	11.7	5,000	19.6	-	0.0	-	0.0
	Tanzania	8,848,983	510,506	5.8	202,859	39.7	34,635	6.8	8,224	1.6	273,786	53.6	2,674	0.5	5,834	1.1
	Mainland Tanzania	854	215	25.2	61	28.4	59	27.4	62	28.8	48	22.3	12	5.6	2	0.9
Large Scale	Zanzibar	24	13	54.2	4	30.8	1	7.7	9	69.2	1	7.7	_	0.0	-	0.0
Farms	Tanzania	878	228	26.0	65	28.5	60	26.3	71	31.1	49	21.5	12	5.3	2	0.9

<sup>&</sup>quot;- "Withheld to avoid disclosing data for individual holdings or insufficient data available from the survey (Total includes withheld data)

# 4.2.2 Area Planted under Irrigation

National estimates depict that 688,757 ha, equivalent to 4.3 percent of the total area planted with crops during the 2023/24 agricultural year were irrigated, whereby 533,973 ha were irrigated by agricultural households and 154,783 ha by large-scale farms. Out of the area irrigated by agricultural households, 521,698 ha were in Mainland Tanzania and 12,275 ha in Zanzibar (Table 4.2).

Table 4.2: Planted Area, Area Irrigated, and Percentage of Planted Area Irrigated by Method of Irrigation During 2023/24 Agricultural Year, Tanzania

			Agricultur	al Household	s	Large So	cale Farms		All F	Ioldings	
			Mainland Tanzania	Zanzibar	Tanzania	Mainland Tanzania	Zanzibar	Tanzania	Mainland Tanzania	Zanzibar	Tanzania
	Area Planted with	crops (ha)	15,294,312	123,363	15,417,675	519,192	3,178	522,370	15,813,504	126,541	15,940,045
	Total Area	Area (ha)	521,698	12,275	533,973	154,585	199	154,783	676,283	12,474	688,757
	Irrigated (ha)	Percent	3.4	10	3.5	29.8	6.3	29.6	4.3	9.9	4.3
	Manual	Area (ha)	132,402	7,355	139,758	17,366	14	17,380	149,769	7,369	157,138
	Manual	Percent	25.4	59.9	26.2	11.2	7.1	11.2	22	59	22.8
	Sprinkler	Area (ha)	37,164	269	37,434	69,433	2	69,435	106,597	271	106,868
		Percent	7.1	2.2	7.0	44.9	0.8	44.9	16	2	15.5
	ъ.	Area (ha)	13,298	2,837	16,134	11,125	173	11,299	24,423	3,010	27,433
Irrigation	Drip	Percent	2.5	23.1	3.0	7.2	87.2	7.3	3.6	24.1	4.0
Method	El 1: / C	Area (ha)	333,601	1,814	335,415	33,387	10	33,397	366,988	1,824	368,812
	Flooding/ surface	Percent	63.9	14.8	62.8	21.6	4.9	21.6	54.3	14.6	53.5
	D'	Area (ha)	1,663	0	1,663	23,145	0	23,145	24,807	0	24,807
	Pivot	Percent	0.3	0.0	0.3	15.0	0.0	15.0	3.7	0.0	3.6
	Т1	Area (ha)	3,570	0	3,570	128	0	128	3,699	0	3,699
	Terraced	Percent	0.7	0.0	0.7	0.1	0.0	0.1	0.5	0.0	0.5

Source: Annex Table (4-1-2) in the Statistical Tables of AASS 2023/24

Across the regions of Mainland Tanzania, Dar es Salaam reported the highest percent of planted area irrigated by agricultural households (35,037 ha; 12.4 percent), followed by Iringa and Kilimanjaro (58,826 ha and 46610 ha; 11.9 percent) and Mbeya (49,786 ha; 10.6 percent), while Simiyu reported 323 ha (0.1 percent) (Figure 4.1)

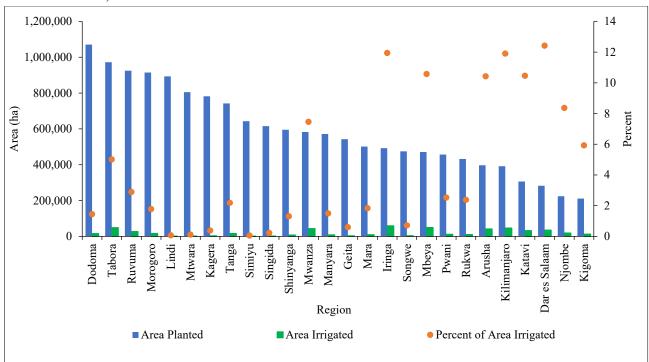


Figure 4.1: Area Planted, Area Irrigated and Percent of Planted Area Irrigated During 2023/24 Agricultural Year, Mainland Tanzania

Source: Annex Table (4-1-2) in the Statistical Tables of AASS 2023/24

In Zanzibar, the highest percent of area irrigated by agricultural households was reported in Mjini Magharibi region (5,131ha; 26.0 percent), followed by Kaskazini Unguja (1,324 ha; 12.7 percent), while Kusini Pemba reported 1,049 ha (3.5 percent) (Figure 4.2).

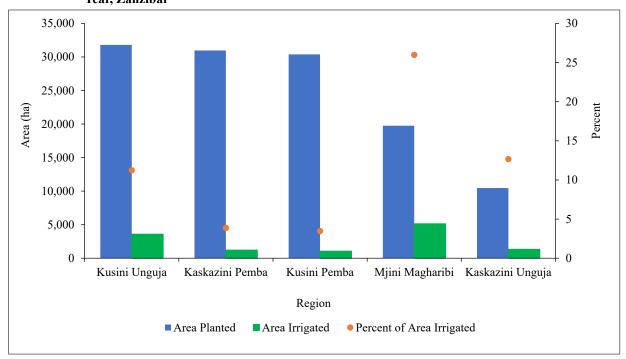


Figure 4.2: Area Planted, Area Irrigated and Percent of Planted Area Irrigated During 2023/24 Agricultural Year. Zanzibar

# 4.3 Input Use

This sub section highlights the results on the use of inputs by both agricultural households and large scale farms. The analysis focuses on area applied with fertilizers (organic and/or inorganic), seeds (local and improved), and pesticides (insecticides, herbicides, rodenticides and fungicides) during 2023/24 agricultural year.

## **4.3.1 Seed Use**

### 4.3.1.1 Percentage Distribution of Agricultural Households Using Seeds

During the 2023/24 agricultural year, agricultural households reported using improved seeds, traditional seeds, or recycled improved seeds. Seed usage among agricultural households was dynamic in the sense that households were able to use either one type or a combination of various seed types for the same crop. The findings showed that out of 8,616,147 agricultural households that used seeds, 8,489,412 were in Mainland Tanzania and 126,736 in Zanzibar.

The findings indicated diverse use of improved, traditional seeds or recycled improved seeds, with households using either one, two, or a combination of all three types. As such, national estimates showed that 40.8 percent and 78.4 percent of all agricultural holdings that used seeds adopted improved and traditional seeds, respectively. In Mainland Tanzania, the use of improved and traditional seeds accounted for 41.1 percent and 78.5 percent, respectively, while in Zanzibar, 21.1 percent reported using improved seeds and 70.0 percent traditional seeds. Similarly, 12.3 percent of all agricultural holdings that used seeds reported having used recycled improved seeds at the national level, 12.0 percent in Mainland Tanzania, and 30.3 percent in Zanzibar (Figure 4.3).

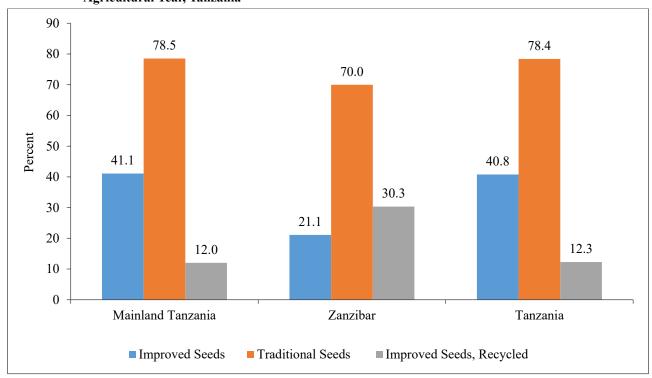


Figure 4.3: Percentage Distribution of Agricultural Households Used Seeds by Type During 2023/24 Agricultural Year, Tanzania

Within the regions in Mainland Tanzania, Simiyu region had the highest percentage of households that used improved seeds (85.2 percent), followed by Arusha (69.7 percent), whereas Lindi reported the lowest (7.6 percent). In Zanzibar, Kusini Unguja region had the highest percent of households that used improved seeds (36.4 percent), followed by Mjini Magharibi (26.1 percent), while Kusini Pemba had the lowest households (11.2 percent).

Mtwara region had the highest percentage of households that used traditional seeds (96.2 percent) in Mainland Tanzania, followed by Lindi (95.4 percent), while Mbeya recorded the lowest (52.4 percent). In Zanzibar, Kaskazini Unguja had the highest percentage of households that used traditional seeds (79.5 percent), followed by Kaskazini Pemba (77.4 percent), whilst Kusini Unguja recorded the lowest (42.0 percent).

In addition, Shinyanga region had the highest percentage of households that used recycled improved seeds (30.8 percent), followed by Mara (27.8 percent), while Mtwara had the lowest (1.0 percent). In Zanzibar, Kusini Unguja region had the highest percent of households that used recycled improved seeds (44.8 percent), followed by Kusini Pemba (39.1 percent), whereas Mjini Magharibi reported the lowest share (19.6 percent) (Table 4.3).

Table 4.3: Percentage Distribution of Agricultural Households by Types of Seed Used by Region During 2023/24 Agricultural Year, Tanzania

		Types of Seeds			
Region	<b>Total Agricultural Households</b> that used Seeds	Improved Seeds Percent	Traditional Seeds Percent	Improved Seeds, Recycled Percent	
Dodoma	549,249	12.2	90.6	8.2	
Arusha	277,472	69.7	69.1	11.5	
Kilimanjaro	270,591	68.2	70.9	9.6	
Tanga	438,074	37.7	77.6	8.7	
Morogoro	550,242	17.5	90.1	3.7	
Pwani	240,797	23.8	78.6	18.9	
Dar es Salaam	195,733	41.5	71.3	6.1	
Lindi	257,319	7.6	95.4	7.9	
Mtwara	371,363	10.5	96.2	1.0	
Ruvuma	370,400	42.6	80.1	8.8	
Iringa	235,791	37.8	89.1	5.8	
Mbeya	378,114	50.7	52.4	20.6	
Singida	308,197	54.0	81.1	5.6	
Tabora	444,154	53.8	78.0	15.9	
Rukwa	246,950	41.8	85.7	6.0	
Kigoma	315,866	42.8	85.3	3.3	
Shinyanga	274,062	53.4	67.4	30.8	
Kagera	539,655	20.6	77.3	25.2	
Mwanza	398,551	50.7	81.8	14.3	
Mara	314,671	51.3	62.2	27.8	
Manyara	301,570	56.2	77.2	9.1	
Njombe	195,043	42.3	71.7	8.9	
Katavi	150,672	54.3	79.6	7.4	
Simiyu	257,762	85.2	63.4	2.0	
Geita	361,386	51.4	74.5	26.5	
Songwe	245,727	57.4	75.6	6.7	
Mainland Tanzania	8,489,412	41.1	78.5	12.0	
Kaskazini Unguja	23,113	16.2	79.5	21.0	
Kusini Unguja	22,946	36.4	42.0	44.8	
Mjini Magharibi	21,192	26.1	77.1	19.6	
Kaskazini Pemba	31,237	19.0	71.9	39.1	
Kusini Pemba	28,248	11.2	77.4	24.6	
Zanzibar	126,736	21.1	70.0	30.3	
Tanzania	8,616,147	40.8	78.4	12.3	

# 4.3.1.2 Area Planted with Improved Seeds

During the 2023/24 agricultural year, a total of 4,035,539 ha (4,022,228 ha in Mainland Tanzania and 13,311 ha in Zanzibar) was planted using improved seeds. In Mainland Tanzania, Simiyu region reported the highest proportion of the area planted with improved seeds (402,402 ha; 63.5 percent), followed by Tabora (347,042 ha; 35.8 percent), and Ruvuma (269,361; 42.2 percent) while Lindi reported the least proportion (23,290 ha; 5.3 percent) (Figure 4.4).

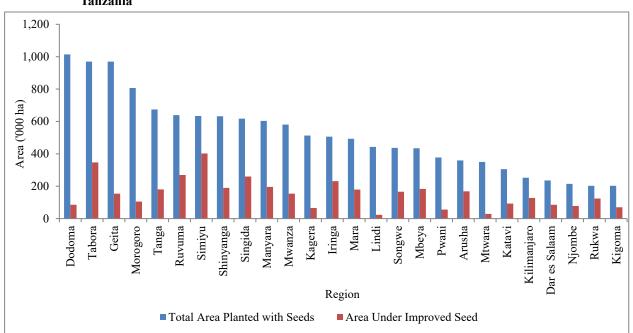


Figure 4.4: Area Planted with Improved Seeds by Region During 2023/24 Agricultural Year, Mainland Tanzania

In Zanzibar, Kusini Unguja region recorded the largest percent of the land area planted with improved seeds (3,974 ha; 29.9 percent), followed by Mjini Magharibi (3,516 ha; 26.4 percent), while Kusini Pemba reported the lowest percent (1,271 ha; 9.5 percent) (Figure 4.5).

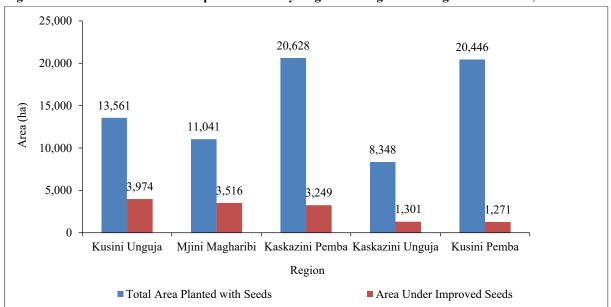


Figure 4.5: Area Planted with Improved Seeds by Region During 2023/24 Agricultural Year, Zanzibar

Source: Annex Table (4-3) in the Statistical Tables of AASS 2023/24

### 4.3.2 Fertilizer Use

## 4.3.2.1 Agricultural Households using Fertilizer

The results reveal that, out of all the agricultural households that engaged in crop production in Tanzania, 40.2 percent reported to have used fertilizer, either organic or inorganic. Among the agricultural holdings that used fertilizer, 53.7 percent and 63.1 percent used organic and inorganic fertilizer, respectively. In Mainland Tanzania, 40.1 percent of agricultural holdings that engaged in crop production reported to use fertilizer, while in Zanzibar, it was 43.7 percent.

Additionally, among the agricultural holdings that applied fertilizers in the Mainland, 63.4 percent applied inorganic fertilizer and 53.3 percent applied organic fertilizer, while in Zanzibar, 46.9 percent applied inorganic fertilizer and 75.7 percent applied organic fertilizer. (Table 4.4).

Table 4.4: Percentage of Agricultural Households using Fertilizers by Type during 2023/24 Agricultural Year,
Tanzania

State	Households Engaged in Crop Production	Households with Crop Production Applying any Fertilizers	Households using Organic Fertilizer among those Applying any Fertilizer	Households using Inorganic Fertilizer among those Applying any Fertilizer
		Percent	Percent	Percent
Mainland Tanzania	8,703,351	40.1	53.3	63.4
Zanzibar	145,632	43.7	75.7	46.9
Tanzania	8,848,983	40.2	53.7	63.1

Source: Annex Table (4-4) in the Statistical Tables of AASS 2023/24

In Mainland Tanzania, Njombe region had the highest percentage of agricultural households that reported to use fertilizer (88.5 percent) out of all cropping households, followed by Kilimanjaro (83.7 percent) and Ruvuma (80.3 percent), whereas Lindi reported the lowest (5.1 percent). In Zanzibar, Kusini Unguja led with 57.0 percent, followed by Mjini Magharibi (44.2 percent), while Kusini Pemba recorded the lowest percent (34.8 percent).

Regional estimates for Mainland Tanzania show that of the total number of agricultural households that used a fertilizer, organic fertilizer was predominantly used in Dodoma (96.0 percent), followed by Kagera (95.8 percent) and Simiyu (91.6 percent), while Kigoma reported the lowest (15.1 percent). In Zanzibar, Kusini Unguja had the highest percentage of agricultural households reported to use organic fertilizer (90.3 percent), followed by Mjini Magharibi (87.1 percent), while Kusini Pemba had the lowest (59.5 percent).

Correspondingly, among the households that used a fertilizer, 63.1 percent applied inorganic fertilizer nationally, 63.4 percent in Mainland Tanzania and 46.9 percent in Zanzibar. Regionally, the use of inorganic fertilizer was mostly reported in Ruvuma (97.5 percent), followed by Njombe (96.7 percent), Iringa (94.1 percent) and Songwe (94.1 percent), while Dodoma was the least with (7.5 percent). On the other hand, the use of inorganic fertilizer in Zanzibar was mostly reported in Kusini

Pemba (64.6 percent), followed by Kaskazini Unguja (61.2 percent) and lowest in Kusini Unguja (24.4 percent) (Table 4.5).

Table 4.5: Percentage of Agricultural Households using Fertilizers by Type and Region during 2023/24 Agricultural Year, Tanzania

Region	Households Engaged in Crop Production	Households with Crop Production Applying any Fertilizers	Households using Organic Fertilizer among those Applying any Fertilizer	Households using Inorganic Fertilizer among those Applying any Fertilizer
		Percent	Percent	Percent
Dodoma	551,662	14.4	96.0	7.5
Arusha	296,443	49.0	73.8	49.7
Kilimanjaro	328,350	83.7	81.6	56.5
Tanga	453,930	21.7	75.4	43.6
Morogoro	559,499	15.7	31.3	70.8
Pwani	251,786	20.2	42.2	69.9
Dar es Salaam	222,971	39.0	71.5	51.4
Lindi	278,495	5.1	32.4	77.4
Mtwara	394,185	7.8	20.3	83.6
Ruvuma	375,248	80.3	17.6	97.5
Iringa	236,712	68.3	45.4	94.1
Mbeya	391,172	77.7	29.8	86.8
Singida	308,197	42.7	84.4	23.6
Tabora	444,154	58.8	46.3	64.4
Rukwa	246,950	34.7	19.8	82.9
Kigoma	315,866	59.2	15.1	93.0
Shinyanga	274,062	40.0	60.4	49.0
Kagera	544,333	22.1	95.8	10.8
Mwanza	398,934	38.2	85.5	32.0
Mara	316,782	48.5	81.4	24.3
Manyara	302,003	34.9	75.7	36.0
Njombe	195,500	88.5	35.2	96.7
Katavi	150,672	49.6	39.5	78.9
Simiyu	257,762	14.8	91.6	10.9
Geita	361,957	28.6	81.2	30.9
Songwe	245,727	64.7	23.7	94.1
Mainland Tanzania	8,703,351	40.1	53.3	63.4
Kaskazini Unguja	26,144	39.5	66.9	61.2
Kusini Unguja	27,252	57.0	90.3	24.4
Mjini Magharibi	29,846	44.2	87.1	40.3
Kaskazini Pemba	33,005	43.3	67.1	54.5
Kusini Pemba	29,386	34.8	59.5	64.6
Zanzibar	145,632	43.7	75.7	46.9
Tanzania	8,848,983	40.2	53.7	63.1

Source: Annex Table (4-4) in the Statistical Tables of AASS 2023/24

### 4.3.2.2 Area Applied with Fertilizer

The results reveal that a total of 4,913,457 ha planted with crops, equivalent to 30.8 percent of the planted area in Tanzania were applied with fertilizer. The total area applied with fertilizer by agricultural households was 4,606,964 ha (29.9 percent) while large scale farms had 306,493 ha (58.7 percent). For agricultural households, out of 15,294,312 ha planted with crops in Mainland Tanzania, 4,568,371 ha (29.9 percent) were applied with fertilizer. In Zanzibar, out of the 123,363 ha planted

with crops by agricultural households, 38,593 ha (31.3 percent) were applied with fertilizer (Table 4.7). For large scale farms, out of 519,192 ha planted with crops in Mainland Tanzania, 303,958 ha (58.5 percent) were applied with fertilizer. In Zanzibar, out of 3,178 ha planted with crops by large scale farms, 2,535 ha (79.8 percent) were applied with fertilizer (Table 4.6).

The analysis of fertilizer uses by type shows that, both agricultural households and large scale farms reported using organic, inorganic or both types of fertilizer. Results show that, 2,408,918 ha (15.1 percent of the planted area) was applied with organic fertilizer and 2,977,801 ha (18.7 percent of the planted area) with inorganic fertilizer. Furthermore, in Mainland Tanzania, 2,376,380 (15.0 percent) ha was applied with organic fertilizer and 2,961,374 ha (18.7 percent) with inorganic fertilizer. In Zanzibar, 32,538 ha (25.7 percent) was applied with organic fertilizer and 16,427 ha (13.0 percent) with inorganic fertilizer (Table 4.6).

Within the regions in Mainland Tanzania, Njombe had the highest percentage of the planted area that was applied with fertilizer (83.9 percent) by agricultural households, followed Mbeya (74.9 Percent) and Kilimanjaro (73.6 percent), while Lindi region had the lowest proportion of the planted area applied with fertilizer (1.5 percent). In Zanzibar, Kusini Unguja had the highest percentage of the planted area applied with fertilizer by agricultural households (47.1 percent), followed by Mjini Magharibi (43.0 percent), whereas Kusini Pemba region recorded the lowest percentage (13.2 percent) (Table 4.6).

Regarding the application of organic fertilizer in Mainland Tanzania, Kilimanjaro region had the highest percentage of the planted area applied with organic fertilizer (49.7 percent), followed by Arusha (38.2 percent) and Mara (29.6 percent), while Lindi had the lowest (0.6 Percent). In Zanzibar, Kusini Unguja had the highest percentage of the planted area applied with organic fertilizer (43.7 percent), followed by Mjini Magharibi (38.1 percent), while Kusini Pemba had the lowest (8.1 percent) (Table 4.7).

Concerning the application of organic fertilizer in Mainland Tanzania, Njombe region had the highest percentage of the planted area applied with inorganic fertilizer (77.5 percent), followed by Mbeya (64.3 percent), and Iringa (63.8 percent), while Kagera had the lowest (0.5 percent). In Zanzibar, Kaskazini Unguja region had highest percentage of the area applied with inorganic fertilizer (25.4 percent), followed by Mjini Magharibi (20.5 percent), while Kusini Unguja region had the lowest (7.3 percent) (Table 4.6).

Table 4.6: Area Applied with Fertilizer by Type and Region during 2023/24 Agricultural Year, Tanzania

		Agricultural Year							
Holding Category	Region	Total Area Planted with Crops	Total Area Applied with any Fertilizer		Total Area Applied with Organic Fertilizer		Total Area Applied with Inorganic Fertilizer		
		(ha)	Area (ha)	Percent	Area (ha)	Percent	Area (ha)	Percent	
	Dodoma	1,070,660	102,696	9.6	95,890	9.0	11,645	1.1	
	Arusha	396,680	196,547	49.5	151,555	38.2	87,699	22.1	
	Kilimanjaro	391,567	288,231	73.6	194,616	49.7	116,224	29.7	
	Tanga	742,042	101,947	13.7	75,726	10.2	35,022	4.7	
	Morogoro	914,592	125,974	13.8	38,991	4.3	89,217	9.8	
	Pwani	456,517	84,363	18.5	41,549	9.1	47,754	10.5	
	Dar es Salaam	282,163	102,768	36.4	65,823	23.3	61,332	21.7	
	Lindi	893,394	13,745	1.5	5,039	0.6	9,273	1.0	
	Mtwara	805,336	33,512	4.2	10,796	1.3	23,211	2.9	
	Ruvuma	925,090	490,549	53.0	45,623	4.9	469,067	50.7	
	Iringa	492,448	335,266	68.1	67,542	13.7	314,223	63.8	
	Mbeya	470,787	352,510	74.9	102,306	21.7	302,724	64.3	
	Singida	615,423	217,174	35.3	179,512	29.2	42,361	6.9	
	Tabora	972,274	368,461	37.9	204,994	21.1	198,819	20.4	
	Rukwa	431,847	138,916	32.2	17,798	4.1	121,749	28.2	
	Kigoma	210,902	112,167	53.2	15,109	7.2	101,718	48.2	
Agricultural	Shinyanga	594,966	159,952	26.9	93,761	15.8	73,909	12.4	
Households	Kagera	782,090	102,273	13.1	99,081	12.7	4,289	0.5	
	Mwanza	582,781	167,486	28.7	138,338	23.7	50,314	8.6	
	Mara	501,211	172,580	34.4	148,271	29.6	30,562	6.1	
	Manyara	571,589	115,435	20.2	85,616	15.0	39,342	6.9	
	Njombe	223,995	187,879	83.9	58,759	26.2	173,657	77.5	
	Katavi	306,222	90,988	29.7	39,122	12.8	65,616	21.4	
	Simiyu	642,751	119,490	18.6	113,401	17.6	7,067	1.1	
	Geita	542,432	123,064	22.7	100,545	18.5	30,661	5.7	
	Songwe	474,553	264,398	55.7	50,159	10.6	236,201	49.8	
	Mainland Tanzania	15,294,312	4,568,371	29.9	2,239,921	14.6	2,743,656	17.9	
	Kaskazini Unguja	10,459	4,351	41.6	2,833	27.1	2,653	25.4	
	Kusini Unguja	31,799	14,973	47.1	13,899	43.7	2,312	7.3	
	Mjini Magharibi	19,752	8,502	43.0	7,522	38.1	4,051	20.5	
	Kaskazini Pemba	30,971	6,743	21.8	5,324	17.2	2,970	9.6	
	Kusini Pemba	30,382	4,025	13.2	2,458	8.1	2,261	7.4	
	Zanzibar	123,363	38,593	31.3	32,036	26.0	14,247	11.5	
	Tanzania	15,417,674	4,606,964	29.9	2,271,957	14.7	2,757,903	17.9	
	Mainland Tanzania	519,192	303,958	58.5	136,459	26.3	217,718	41.9	
Large Scale	Zanzibar					15.8		68.6	
Farms		3,178 <b>522,370</b>	2,535	79.8	502		2,179		
	Tanzania Maintanat Tanzania	522,370	306,493	58.7	136,961		26.2 219,898	42.1	
. 11 77 1 "	Mainland Tanzania	15,813,504	4,872,328	30.8	2,376,380	15.0	2,961,374	18.7	
All Holdings	Zanzibar	126,541	41,129	32.5	32,538	25.7	16,427	13.0	
	Tanzania	15,940,045	4,913,457	30.8	2,408,918	15.1	2,977,801	18.7	

### 4.3.3 Pesticides Use

### 4.3.3.1 Agricultural Households Applied Pesticides

The results reveal that, a total of 3,316,030 agricultural households (37.5 percent) practicing crop production in Tanzania applied pesticides during the 2023/24 agricultural year. In Mainland Tanzania, 3,288,860 households (37.8 percent) applied pesticides, whereas in Zanzibar were 27,171 (18.7 percent). The application of pesticides by agricultural households in Mainland Tanzania was higher in Njombe region (78.8 percent), followed by Lindi (76.3 percent) and Arusha (66.8 percent), while Dodoma region recorded the lowest (3.2 percent). On the other hand, in Zanzibar, the highest percentage was reported in Kusini Unguja region (25.8 percent), followed by Kaskazini Unguja (24.5 percent), while Kaskazini Pemba had the lowest (9.7 percent) (Table 4.7).

Table 4.7: Number and Percentage of Agricultural Households Engaged in Crop Production Applied Pesticides by Region During 2023/24 Agricultural Year, Tanzania

D	Households Engaged in Crop	Households Applied Pesticides			
Region	Production	Number	Percent		
Dodoma	551,662	17,789	3.2		
Arusha	296,443	197,901	66.8		
Kilimanjaro	328,350	176,101	53.6		
Tanga	453,930	94,720	20.9		
Morogoro	559,499	285,952	51.1		
Pwani	251,786	95,656	38.0		
Dar es Salaam	222,971	65,510	29.4		
Lindi	278,495	212,389	76.3		
Mtwara	394,185	247,655	62.8		
Ruvuma	375,248	184,598	49.2		
Iringa	236,712	144,400	61.0		
Mbeya	391,172	196,402	50.2		
Singida	308,197	47,956	15.6		
Tabora	444,154	110,579	24.9		
Rukwa	246,950	107,976	43.7		
Kigoma	315,866	62,870	19.9		
Shinyanga	274,062	76,148	27.8		
Kagera	544,333	64,041	11.8		
Mwanza	398,934	129,309	32.4		
Mara	316,782	64,929	20.5		
Manyara	302,003	126,170	41.8		
Njombe	195,500	153,975	78.8		
Katavi	150,672	54,886	36.4		
Simiyu	257,762	76,071	29.5		
Geita	361,957	163,853	45.3		
Songwe	245,727	131,025	53.3		
Mainland Tanzania	8,703,351	3,288,860	37.8		
Kaskazini Unguja	26,144	6,418	24.5		
Kusini Unguja	27,252	7,022	25.8		
Mjini Magharibi	29,846	4,337	14.5		
Kaskazini Pemba	33,005	3,187	9.7		
Kusini Pemba	29,386	6,207	21.1		
Zanzibar	145,632	27,171	18.7		
Tanzania	8,848,983	3,316,030	37.5		

Source: Annex Table (4-8) in the Statistical Tables of AASS 2023/24

Additionally, among the agricultural households applied pesticides in Tanzania, 81.3 percent reported to apply insecticides, 33.9 percent herbicides, 8.3 percent fungicides and 0.3 percent rodenticides. The application of insecticides, herbicides, fungicides and rodenticides, among agricultural households' applying pesticides in Mainland Tanzania was 81.4 percent, 33.9 percent, 8.3 percent and 0.3 respectively, while in Zanzibar it was 67.7 percent, 40.1 percent, 18.4 percent and 3.5 percent for insecticides, herbicides, fungicides and rodenticides respectively (Table 4.8).

Table 4.8: Percentage of Agricultural Households Engaged in Crop Production Applied Pesticides by Types and Region, During 2023/24 Agricultural Year, Tanzania

	Households A	pplied	Types of Pesticides				
Region		Pesticides		Herbicides	Fungicide	Rodenticide	
	Number	Percent	Percent	Percent	Percent	Percent	
Dodoma	17,789	3.2	96.1	15.3	12.0		
Arusha	197,901	66.8	97.6	9.7	10.8	0.5	
Kilimanjaro	176,101	53.6	97.2	13.3	8.7	1.4	
Tanga	94,720	20.9	96.1	8.5	6.9	-	
Morogoro	285,952	51.1	35.6	77.4	2.6	0.3	
Pwani	95,656	38.0	92.5	22.4	7.9	-	
Dar es Salaam	65,510	29.4	74.0	30.4	10.3	-	
Lindi	212,389	76.3	93.7	70.3	14.6	0.4	
Mtwara	247,655	62.8	90.2	38.7	10.9	-	
Ruvuma	184,598	49.2	45.8	68.3	12.5	-	
Iringa	144,400	61.0	95.4	26.2	23.1	0.6	
Mbeya	196,402	50.2	61.7	66.3	12.1	0.1	
Singida	47,956	15.6	93.3	9.5	2.2	-	
Tabora	110,579	24.9	91.1	10.5	2.5	-	
Rukwa	107,976	43.7	93.7	10.5	-	0.3	
Kigoma	62,870	19.9	92.2	7.8	-	-	
Shinyanga	76,148	27.8	83.6	21.9	0.8	-	
Kagera	64,041	11.8	50.1	53.7	1.6	-	
Mwanza	129,309	32.4	98.0	3.1	3.8	-	
Mara	64,929	20.5	74.2	28.2	7.0	-	
Manyara	126,170	41.8	96.5	7.6	2.8	-	
Njombe	153,975	78.8	85.5	25.2	15.2	0.5	
Katavi	54,886	36.4	95.6	13.2	3.7	-	
Simiyu	76,071	29.5	99.5	1.6	-	0.9	
Geita	163,853	45.3	95.1	8.6	3.9	0.2	
Songwe	131,025	53.3	67.6	62.6	12.1	0.1	
Mainland Tanzania	3,288,860	37.8	81.4	33.9	8.3	0.3	
Kaskazini Unguja	6,418	24.5	65.2	45.6	10.2	1.0	
Kusini Unguja	7,022	25.8	76.3	41.1	23.2	6.0	
Mjini Magharibi	4,337	14.5	77.2	13.8	36.7	7.3	
Kaskazini Pemba	3,187	9.7	87.1	16.6	20.3	-	
Kusini Pemba	6,207	21.1	44.1	63.6	7.7	2.4	
Zanzibar	27,171	18.7	67.7	40.1	18.4	3.5	
Tanzania	3,316,030	37.5	81.3	33.9	8.3	0.3	

Source: Annex Table (4-8) in the Statistical Tables of AASS 2023/24

<sup>&</sup>quot;-" Withheld to avoid disclosing data for individual holdings or insufficient data available from survey (Total includes withheld data)

### 4.3.3.2 Area applied with Pesticides

The results show that, out of the total planted area, 5,777,842 ha (36.2 percent) was applied with pesticides, whereby 5,446,115 ha (35.3 percent) were from agricultural households and 331,727 ha (63.5 percent) from large scale farms. Out of the total area applied with pesticides by agricultural households, 5,429,207 ha were from Mainland Tanzania and 16,908 ha from Zanzibar. In Mainland Tanzania, the highest percent of area applied with pesticides was reported in Njombe (75.5 percent), followed by Lindi (72.0 percent) and Iringa (66.4 percent), while Dodoma region had the lowest (3.2 percent). In Zanzibar, Kaskazini Unguja had the highest percentage of the planted area applied with pesticides (27.1 percent), followed by Kusini Unguja (18.8 percent), whereas Kaskazini Pemba region recorded the lowest (7.3 percent) (Table 4.9).

Table 4.9: Area and Percentage Applied with Pesticides by Region During 2023/24 Agricultural Year, Tanzania

Holding	D .	Area Planted with	Area Applied with Pes	sticides
Category	Region	Crops (ha)	Area (ha)	Percent
<u> </u>	Dodoma	1,070,660	34,382	3.2
	Arusha	396,680	261,327	65.9
	Kilimanjaro	391,567	173,011	44.2
	Tanga	742,042	138,702	18.7
	Morogoro	914,592	445,029	48.7
	Pwani	456,517	167,177	36.6
	Dar es Salaam	282,163	88,399	31.3
	Lindi	893,394	643,455	72.0
	Mtwara	805,336	530,417	65.9
	Ruvuma	925,090	448,193	48.4
	Iringa	492,448	327,106	66.4
	Mbeya	470,787	250,962	53.3
	Singida	615,423	78,350	12.7
	Tabora	972,274	180,033	18.5
	Rukwa	431,847	178,745	41.4
	Kigoma	210,902	43,091	20.4
Agricultural	Shinyanga	594,966	115,078	19.3
Households	Kagera	782,090	59,762	7.6
	Mwanza	582,781	148,906	25.6
	Mara	501,211	94,260	18.8
	Manyara	571,589	182,494	31.9
	Njombe	223,995	169,145	75.5
	Katavi	306,222	79,326	25.9
	Geita	542,432	208,488	38.4
	Songwe	474,553	225,293	47.5
	Mainland Tanzania	15,294,312	5,429,207	35.5
	Kaskazini Unguja	10,459	2,839	27.1
	Kusini Unguja	31,799	5,966	18.8
	Mjini Magharibi	19,752	3,590	18.2
	Kaskazini Pemba	30,971	2,248	7.3
	Kusini Pemba	30,382	2,263	7.4
	Zanzibar	123,363	16,908	13.7
	Tanzania	15,417,674	5,446,115	35.3
Large Scale Farms	Mainland Tanzania	519,192	329,507	63.5
	Zanzibar	3,178	2,220	69.8
	Tanzania	522,370	331,727	63.5
	Mainland Tanzania	15,813,504	5,758,714	36.4
All Holdings	Zanzibar	126,541	19,127	15.1
3	Tanzania	15,940,045	5,777,842	36.2

Source: Annex Table (4-9) in the Statistical Tables of AASS 2023/24

### 4.3.3.3 Area Applied with Pesticides by Type

### **Insecticides**

Insecticides protect crops by controlling or eliminating harmful insects that damage plants and reduce yields. The findings show that, out of the total area applied with insecticides, 4,229,531 ha (77.7 percent) were planted by agricultural households and 263,896 ha (79.9 percent) by large scale farms. In agricultural households, the area applied with insecticides was 4,217,173 ha (77.7 percent) in Mainland Tanzania and 12,358 ha (73.1 percent) in Zanzibar. Furthermore, in Mainland Tanzania, Simiyu had the highest percentage of area applied with insecticides (99.9 percent), followed by Dodoma (97.9 percent), and Arusha and Manyara regions (96.9 percent each), while Morogoro and Kagera regions reported the lowest percentage (35.6 percent each). In Zanzibar, the proportion of area applied with insecticides was highest in Kaskazini Pemba (88.5 percent), followed by Mjini Magharibi (78.4 percent), while Kusini Pemba recorded the lowest (30.9 percent) (Table 4.10).

### Herbicides

Herbicides control or eliminate unwanted weeds that compete with crops for nutrients, water, and sunlight. In Tanzania, 1,798,396 ha (31.1 percent) of the total planted area were applied with herbicides, whereby 1,672,497 ha (30.7 percent) were applied by agricultural households and 125,898 ha (38.0 percent) by large scale farms. Out of the total area applied with herbicides by agricultural households, 1,668,334 ha (30.7 Percent) were in Mainland Tanzania and 4,163 ha (24.6 percent) in Zanzibar. In Mainland Tanzania, Morogoro region had the highest proportion of area applied with herbicides (69.4 percent), followed by Kagera (67.5 percent) and Mbeya (59.2 percent), whereas Simiyu reported the lowest (0.1 percent). In Zanzibar, Kusini Pemba had the highest proportion of area applied with herbicides (44.7 percent), followed by Kusini Unguja (35.2 percent), while Kaskazini Pemba reported the lowest (9.4 percent) (Table 4.10).

### **Fungicides**

Fungicides protect crops by preventing or controlling fungal diseases that can damage plants and reduce yields. During the 2023/24 agricultural year, 613,553 ha (10.6 percent) of the total planted area were applied with fungicides, of which 567,719 ha were occupied by agricultural households and 45,834 ha by large scale farms. Out of the total planted area applied with fungicides by agricultural households, 564,192 ha were in Mainland Tanzania and 3,527 ha in Zanzibar. In Mainland Tanzania, the highest proportion of area applied with fungicides was reported in Iringa (45.5 percent), followed by Ruvuma (22.7 percent) and Mtwara (14.0 percent), while Shinyanga had the lowest proportion (0.1 percent). In Zanzibar, the highest proportion of planted area applied with fungicides was in Mjini Magharibi with 40.1 percent, followed by Kusini Pemba (21.6 percent), whereas the lowest proportion was 13.6 percent in Kaskazini Unguja (Table 4.10).

#### **Rodenticides**

Rodenticides protect crops by killing or repelling rodents that feed on and destroy plants or stored produce.

The findings show that 8,333 ha (0.1 percent) of the total planted area with crops in Tanzania were applied with rodenticides, out of which 7,456 ha were planted by agricultural households and 878 ha by large scale farms. Out of the total planted area applied with rodenticides by agricultural households, 6,901 ha were in Mainland Tanzania and 555 ha in Zanzibar. (Table 4.10).

Table 4.10: Area and Percentage Applied with Pesticides by Type and Region During 2023/24 Agricultural Year, Tanzania

		T-4-1 A	Planted Area	a Applied				Pesticide	s Type			
Holding	Region	Total Area Planted with	with Pest		Insection	eides	Herbici		Fungi	cides	Rodenti	icides
Category	8	Crops (ha)	Area (ha)	Percent	Area (ha)	Percent	Area (ha)	Percent	Area (ha)	Percent	Area (ha)	Percent
	Dodoma	1,070,660	34,382	3.2	33,656	97.9	5,099	14.8	2,444	7.1	=	
	Arusha	396,680	261,327	65.9	253,171	96.9	22,183	8.5	23,532	9.0	357	0.1
	Kilimanjaro	391,567	173,011	44.2	165,806	95.8	21,972	12.7	19,265	11.1	2,353	1.4
	Tanga	742,042	138,702	18.7	133,079	95.9	3,925	2.8	4,196	3.0	-	-
	Morogoro	914,592	445,029	48.7	158,647	35.6	309,019	69.4	6,212	1.4	-	0.1
	Pwani	456,517	167,177	36.6	153,802	92.0	21,709	13.0	8,657	5.2	_	-
	Dar es Salaam	282,163	88,399	31.3	60,047	67.9	20,769	23.5	7,083	8.0	_	-
	Lindi	893,394	643,455	72.0	606,555	94.3	360,186	56.0	80,773	12.6	-	0.1
	Mtwara	805,336	530,417	65.9	481,478	90.8	122,104	23.0	74,174	14.0	_	-
	Ruvuma	925,090	448,193	48.4	214,899	47.9	237,173	52.9	101,844	22.7	-	-
	Iringa	492,448	327,106	66.4	188,477	57.6	41,406	12.7	148,751	45.5	-	0.2
	Mbeya	470,787	250,962	53.3	155,343	61.9	148,644	59.2	19,155	7.6	_	0.1
	Singida	615,423	78,350	12.7	68,831	87.9	9,647	12.3	· -	0.7	-	-
	Tabora	972,274	180,033	18.5	153,635	85.3	17,992	10.0	3,658	2.0	-	-
	Rukwa	431,847	178,745	41.4	166,840	93.3	13,106	7.3	· -	-	-	0.2
	Kigoma	210,902	43,091	20.4	41,375	96.0	1,717	4.0	-	-	-	-
Agricultural	Shinyanga	594,966	115,078	19.3	82,336	71.5	30,772	26.7	-	0.1	-	-
Households	Kagera	782,090	59,762	7.6	21,837	36.5	40,349	67.5	-	1.7	-	-
	Mwanza	582,781	148,906	25.6	139,812	93.9	8,265	5.6	4,267	2.9	-	-
	Mara	501,211	94,260	18.8	64,332	68.2	28,494	30.2	2,432	2.6	-	-
	Manyara	571,589	182,494	31.9	176,928	96.9	11,702	6.4	2,031	1.1	-	-
	Njombe	223,995	169,145	75.5	140,633	83.1	46,662	27.6	22,920	13.6	-	0.6
	Katavi	306,222	79,326	25.9	65,720	82.8	14,572	18.4	6,747	8.5	-	-
	Simiyu	642,751	158,075	24.6	157,853	99.9	-	0.1	-	-	-	0.2
	Geita	542,432	208,488	38.4	188,085	90.2	14,787	7.1	6,281	3.0	-	0.1
	Songwe	474,553	225,293	47.5	143,995	63.9	115,857	51.4	18,186	8.1	-	0.0
	Mainland Tanzania	15,294,312	5,429,207	35.5	4,217,173	77.7	1,668,334	30.7	564,192	10.4	6,901	0.1
	Kaskazini Unguja	10,459	2,839	27.1	1,973	69.5	999	35.2	386	13.6	· <u>-</u>	0.9
	Kusini Unguja	31,799	5,966	18.8	4,416	74.0	1,549	26.0	886	14.9	442	7.4
	Mjini Magharibi	19,752	3,590	18.2	2,815	78.4	392	10.9	1,438	40.1	-	1.6
	Kaskazini Pemba	30,971	2,248	7.3	1,990	88.5	211	9.4	327	14.5	-	-
	Kusini Pemba	30,382	2,263	7.4	1,164	51.4	1,012	44.7	490	21.6	_	1.3
	Zanzibar	123,363	16,908	13.7	12,358	73.1	4,163	24.6	3,527	20.9	555	3.3
	Tanzania	15,417,674	5,446,115	35.3	4,229,531	77.7	1,672,497	30.7	567,719	10.4	7,456	0.1
·	Mainland Tanzania	519,192	329,507	63.5	261,852	79.5	125,746	38.2	45,341	13.8	878	0.3
Large Scale	Zanzibar	3,178	2,220	69.8	2,044	92.1	-	6.9	493	22.2	-	-
Farms	Tanzania	522,370	331,727	63.5	263,896	79.6	125,898	38.0	45,834	13.8	878	0.3
	Mainland Tanzania	15,813,504	5,758,714	36.4	4,479,025	77.8	1,794,080	31.2	609,533	10.6	7,778	0.1
Total	Zanzibar	126,541	19,127	15.1	14,402	75.3	4,315	22.6	4,021	21.0	555	2.9
	Tanzania	15,940,045	5,777,842	36.2	4,493,427	77.8	1,798,396	31.1	613,553	10.6	8,333	0.1

Source: Annex Table (4-9) in the Statistical Tables of AASS 2023/24

# Chapter.5 Machinery and Equipment in Agricultural Holdings

#### 5.1 Introduction

Machinery and agricultural equipment are vital in enhancing productivity, efficiency, and sustainability in modern farming systems. Their availability and proper utilization can significantly influence crop yields, labour demands, and overall agricultural performance. This chapter presents the access to and ownership of machinery and agricultural equipment during the 2023/24 agricultural year, focusing on both agricultural households and large-scale farms. It provides comprehensive insights into the ownership and use of manually operated, animal-powered, and machine-powered tools, as well as irrigation technologies and storage facilities. The analysis also highlights regional and gender disparities, particularly between Mainland Tanzania and Zanzibar. These findings offer valuable information for assessing current levels of agricultural mechanization and identifying areas for improvement and targeted interventions.

## 5.2 Agricultural Machinery and Equipment

Agricultural production in Tanzania remains heavily dependent on manually operated tools, with 98.4 percent of all agricultural households using them. This pattern is consistent across both male- and female-headed households in Mainland Tanzania, where 99.0 percent of female-headed and 98.2 percent of male-headed households reported using manually operated tools. In Zanzibar, use of manually operated tools was universal (100 percent) among agricultural households.

The use of machine-powered equipment such as tractors, bulldozers, and other vehicles remains relatively low among agricultural households, with a national rate of 17.4 percent. Male-headed households reported higher usage (18.5 percent) compared to 14.2 percent among female-headed households. In Mainland Tanzania, the overall usage was 17.7 percent, with 18.8 percent among male-headed and 14.4 percent among female-headed households. In Zanzibar, usage was much lower at 2.7 percent (2.9 percent for male-headed and 1.8 percent for female-headed households).

Among large-scale farms, use of machine-powered tractors, bulldozers, and other vehicles was significantly higher, with 65.2 percent of farms reporting use of such equipment. This rate was slightly higher in Mainland Tanzania (67.5 percent), while Zanzibar reported a much lower share (11.1 percent).

Large-scale farms also reported the use of machine-powered equipment for specific farming activities, though overall usage remains limited. About 27.3 percent of large farms used

machine-powered equipment during land preparation and planting, 23.9 percent for irrigation, and 7.1 percent for crop harvesting. In comparison, only 3.2 percent of agricultural households reported using machine-powered equipment for land preparation, 0.4 percent for irrigation, and 0.4 percent for harvesting.

Animal-powered equipment continues to play an important role in Tanzania's agriculture, with 30.1 percent of agricultural households reporting its use. Usage was higher among male-headed households (31.8 percent) compared to female-headed households (24.7 percent). Mainland Tanzania recorded 30.6 percent usage, while Zanzibar reported just 0.4 percent. Among large-scale farms, the use of animal-powered equipment was lower, at 15.7 percent.

Table 5.1: Type of Machinery and Equipment Used by Agricultural Holdings by Sex of Household Head during Agricultural Year 2023/24

				Agricultural	Households			Large Sc	ale Farms
64-4-	F	Fen	nale	Ma	ale	To	tal	To	otal
State  Mainland Tanzania  Zanzibar	Equipment Category	Number of Holdings	Percentage of Holdings	Number of Holdings	Percentage of Holdings	Number of Holdings	Percentage of Holdings	Number of Holdings	Percentage of Holdings
	Manually Operated	2,118,367	99	6,561,058	98	8,679,425	98	1,025	97
	Animal Powered	535,285	25	2,162,464	32	2,697,749	31	172	16
	Machine-Powered Equipment-Irrigation	2,834	0	31,435	0	34,269	0	238	23
	Machine-Powered Equipment-General Farm Use	-	0	1,150	0	2,058	0	236	22
	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	308,171	14	1,252,707	19	1,560,877	18	711	68
Mainland Tanzania	Machine-Powered Equipment-Land Preparation and Planting Equipment	62,780	3	224,334	3	287,114	3	296	28
	Machine-Powered Equipment-Crop Maintenance	-	0	-	0	-	0	132	13
	Machine-Powered Equipment-Crop Harvesting	9,853	0	29,323	0	39,176	0	78	7
	Machine-Powered Equipment-Post-Harvest	165,061	8	533,617	8	698,678	8	80	8
	Machine-Powered Equipment-Livestock Production	8,578	0	30,979	0	39,557	0	120	11
	Sub Total	2,140,424	100	6,681,176	100	8,821,600	100	1,053	100
	Manually Operated	30,485	100	119,649	100	150,134	100	45	100
	Animal Powered	-	1	236	0	627	0	-	0
	Machine-Powered Equipment-Irrigation	344	1	1,824	2	2,168	1	24	53
	Machine-Powered Equipment-General Farm Use	-	0	618	1	618	0	3	7
	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	560	2	3,481	3	4,041	3	5	11
Zanzibar	Machine-Powered Equipment-Land Preparation and Planting Equipment	-	0	1,639	1	1,688	1	4	9
	Machine-Powered Equipment-Crop Maintenance	-	0	-	0	-	0	-	0
	Machine-Powered Equipment-Crop Harvesting	-	0	_	0	-	0	-	0
	Machine-Powered Equipment-Post-Harvest	979	3	2,949	2	3,928	3	-	4
	Machine-Powered Equipment-Livestock Production	-	0	258	0	258	0	4	9
	Sub Total	30,485	100	119,709	100	150,194	100	45	100
	Manually Operated	2,148,852	99	6,680,707	98	8,829,559	98	1,070	97
	Animal Powered	535,675	25	2,162,700	32	2,698,376	30	172	16
	Machine-Powered Equipment-Irrigation	3,179	0	33,259	0	36,438	0	262	24
	Machine-Powered Equipment-General Farm Use	-	0	1,768	0	2,676	0	239	22
	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	308,731	14	1,256,187	18	1,564,918	17	716	65
Tanzania	Machine-Powered Equipment-Land Preparation and Planting Equipment	62,830	3	225,973	3	288,803	3	300	27
	Machine-Powered Equipment-Crop Maintenance	-	0	-	0	-	0	132	12
	Machine-Powered Equipment-Crop Harvesting	9,853	0	29,433	0	39,286	0	78	7
	Machine-Powered Equipment-Post-Harvest	166,040	8	536,567	8	702,606	8	82	7
	Machine-Powered Equipment-Livestock Production	8,578	0	31,237	0	39,814	0	124	11
	Sub Total	2,170,909	100	6,800,885	100	8,971,794	100	1,098	100

Source: Annex Table (9-2) in Statistical Tables of AASS 2023/24

The percentage may go beyond 100% (Holding may have more than one type of equipment)

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

#### 5.2.1 Machinery and Equipment Used by Type of Ownership in Agricultural Households

Machinery and equipment used during the 2023/24 agricultural year reflect varied ownership patterns across Tanzania. Manually operated equipment remains the most widely used, with over 126 million units reported nationwide. The majority were solely owned by households, accounting for 91.5 percent in Mainland Tanzania and 97.6 percent in Zanzibar.

Animal-powered equipment, just over 4.1 million in Mainland Tanzania, showed a moderate level of shared ownership (45.8 percent) were solely owned and 17.0 percent co-owned with other households or farms. Zanzibar reported far fewer units (843), but with much stronger sole ownership at 92.8 percent, and 7.2 percent being co-owned.

Machine-powered irrigation equipment was predominantly solely owned, with 95.2 percent in Mainland Tanzania and 99.8 percent in Zanzibar. Machinery powered equipment for general farm use in Mainland Tanzania, 83.1 percent were solely owned, while 16.9 percent were rented.

Tractors, bulldozers, and similar machinery showed high dependence on rental services in Mainland Tanzania, where only 19.0 percent were solely owned, and 74.9 percent were rented. In Zanzibar, 68.3 percent of these machines were solely owned and 23.4 percent rented. The pattern of high rental reliance continued for land preparation and planting equipment, with 70.5 percent rented and 17.6 percent solely owned in Mainland, whereas in Zanzibar, 89.5 percent of such equipment were rented.

Crop harvesting equipment in Mainland Tanzania were mainly rented (60.5 percent), while 36.0 percent were owned solely. Post-harvest machinery showed stronger ownership levels with 73.2 percent solely owned in Mainland Tanzania and 86.8 percent in Zanzibar. On the other hand, livestock production equipment showed the highest ownership rates, with 98.2 percent solely owned in Mainland and 100.0 percent in Zanzibar.

Table 5.2: Number of Machinery and Equipment Used and Type of Ownership by Sex of the Household Head during Agricultural Year 2023/24

			Mainl	and					Zanz	ibar					Tanza	nia		
	Total	Percentage Owned Solely	Percentage Coowned with another Household/Farm	Percentage Rented	Percent with other ownership	Average Number Used	Total	Percentage Owned Solely	Percentage Coowned with another Household/Farm	Percentage Rented	Percent with other ownership	Average Number Used	Total	Percentage Owned Solely	Percentage Coowned with another Household/Farm	Percentage Rented	Percent with other ownership	Average Number Used
Manually Operated	124,159,656	91.5	0	0	8.5	14	2,042,983	97.6	0	0	2.4	13.60776	126,202,640	91.6	0	0	8.4	14.3
Animal Powered	4,176,241	45.8	17	0	37.2	2	842.61	92.8	7.2	0	0	1.344736	4,177,083	45.8	17	0	37.2	1.5
Machine-Powered Equipment-Irrigation	108,156	95.2	1.7	0	3.1	3	57,877	99.8	0.2	0	0	26.69362	166,032	96.8	1.2	0	2	4.4
Machine-Powered Equipment-General Farm Use	41,319	83.1	0	16.9	0	1	-	-	-	-	-	-	41,553.30	83.2	0	16.8	0	1.2
Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	2,012,465	19	5.3	74.9	0.8	1	4,120	68.3	8.3	23.4	0	1.019572	2,016,585	19.1	5.3	74.8	0.8	1.3
Machine-Powered Equipment-Land Preparation and Planting Equipment	315,469	17.6	10.5	70.5	1.4	1	3,226	0	6.9	89.5	3.6	1.910568	318,695	17.5	10.5	70.7	1.4	1.1
Machine-Powered Equipment-Crop Harvesting	43,861	36	3.5	60.5	0	1	-	-	-	-	-	-	43,971	36.2	3.5	60.4	0	1.1
Machine-Powered Equipment-Post-Harvest	1,355,019	73.2	1.8	24.4	0.6	2	7,348	86.8	4.9	5.3	3	1.781251	1,362,367	73.3	1.8	24.3	0.6	1.9
Machine-Powered Equipment-Livestock Production	241,527	98.2	1.5	0.1	0.1	4	3,211	100	0	0	0	1.509861	244,738	98.2	1.5	0.1	0.1	3.6

Source: Annex Table (9-2) in Statistical Tables of AASS 2023/24

# 5.2.2 Machinery and Equipment Used by Type of Ownership in Large scale farms

Machinery and equipment used by large-scale agricultural households during the 2023/24 agricultural year reveal a dominant pattern of sole ownership across Tanzania. Manually operated equipment remains the most widely used, with a total of 936,922 units reported nationwide, 98.5 percent of these in Mainland Tanzania and 99.5 percent in Zanzibar were owned solely by the users.

Animal-powered equipment was used only in Mainland Tanzania, with 726 units recorded. Of these, 81.0 percent were owned solely and 4.0 percent were co-owned. In contrast, machine-powered irrigation equipment showed nearly universal sole ownership, with 100.0 percent of the 1,027,281 units in Mainland Tanzania and 98.9 percent of the 1,658 units in Zanzibar owned outright.

General farm-use machinery was almost exclusively owned, 99.7 percent of such equipment in Tanzania was owned solely, while co-ownership and rentals each accounted for 0.1 percent. Similarly, tractors, bulldozers, and other vehicles were largely owned solely where 92.8 percent in both Mainland and Zanzibar while 2.5 percent were co-owned and 4.4 percent rented in the Mainland Tanzania, and 6.9 percent were rented in Zanzibar.

The pattern of high sole ownership continued with land preparation and planting equipment, of which 95.9 percent were owned solely and 2.1 percent co-owned across Tanzania. Rentals accounted for 1.3 percent in the Mainland Tanzania. Crop maintenance equipment, used only in Mainland Tanzania, where 98.3 percent owned solely, with 0.9 percent co-owned and 0.2 percent rented. Crop harvesting equipment showed a similar trend in which 96.4 percent of the 247 units were owned solely, 2.0 percent co-owned, and 0.8 percent rented.

Post-harvest machinery demonstrated slightly more diversity in ownership, with national estimates showing that 93.2 percent were owned solely, 1.7 percent co-owned, and 4.9 percent rented. In Mainland Tanzania, 91.6 were owned solely, 2.2 percent co-owned and 5.9 percent were rented. Equally, livestock production equipment exhibited almost universal sole ownership, which reported 99.4 percent in Mainland Tanzania and 100.0 percent in Zanzibar.

Table 5.3: Number of Machinery and Equipment Used and Type of Ownership Large Scale farms during Agricultural Year 2023/24

			Mainla	nd					Zanz	zibar				Tanzania					
	Total	Percenta ge Owned Solely	Percentage Co- owned with another Household/Farm	Percentage Rented	Percent with other ownership	Average Number Used	Total	Percent age Owned Solely	Percentage Co- owned with another Household/Farm	Percentag e Rented	Percent with other ownership	Average Number Used	Total	Percent age Owned Solely	Percentage Co- owned with another Household/Farm	Percentage Rented	Percent with other ownership	Average Number Used	
Manually Operated	917,276	98.5	0.0	0.0	1.5	896	19,646	99.5	0.0	0.0	0.5	437	936,922	98.5	0.0	0.0	1.5	876	
Animal Powered	724	80.9	4.0	0.0	15.1	4	-	-	-	-	-	-	726	81.0	4.0	0.0	15.0	4	
Machine-Powered Equipment- Irrigation	1,027,281	100.0	0.0	0.0	0.0	4,298	1,658	98.9	0.1	0.0	1.0	69	1,028,939	100.0	0.0	0.0	0.0	3,912	
Machine-Powered Equipment- General Farm Use	2,320	99.7	0.1	0.1	0.0	9	11	100.0	0.0	0.0	0.0	4	2,331	99.7	0.1	0.1	0.0	9	
Machine-Powered Equipment- Tractors, Bulldozers and Other Vehicles	4,214	92.8	2.5	4.4	0.3	6	29	93.1	0.0	6.9	0.0	4	4,243	92.8	2.5	4.4	0.3	6	
Machine-Powered Equipment- Land Preparation and Planting Equipment	1,119	95.9	2.1	1.3	0.6	4	8	100.0	0.0	0.0	0.0	2	1,127	95.9	2.1	1.3	0.6	4	
Machine-Powered Equipment- Crop Maintenance	465	98.3	0.9	0.2	0.6	4	-	-	-	-	-	-	465	98.3	0.9	0.2	0.6	4	
Machine-Powered Equipment- Crop Harvesting	247	96.4	2.0	0.8	0.8	3	-	-		-	-	-	247	96.4	2.0	0.8	0.8	3	
Machine-Powered Equipment- Post-Harvest	370	91.6	2.2	5.9	0.3	4	-	-	-	-	-	-	472	93.2	1.7	4.9	0.2	5	
Machine-Powered Equipment- Livestock Production	1,020	99.4	0.1	0.3	0.2	7	18	100.0	0.0	0.0	0.0	5	1,038	99.4	0.1	0.3	0.2	7	

Source: Annex Table (9-2) in Statistical Tables of AASS 2023/24

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

#### 5.3 Agricultural Structures

During 2023/24 agricultural year, the result show that most frequently reported structure use was for storing crops, utilized by 5,089,725 agricultural households (87.5 percent of all agricultural households) across Tanzania. In Mainland Tanzania, 5,032,382 households (87.7 percent) reported using structures for storing crops, with minimal variation between female-headed households (87.3 percent) and male-headed households (87.7 percent). In Zanzibar, 57,343 households (74.9 percent) used structures for storing crops, including 88.4 percent of female-headed and 71.6 percent of male-headed households. Among large-scale farms, 668 farms (70.0 percent) used structures for storing crops, with 654 in Mainland (70.8 percent) and 14 in Zanzibar (45.2 percent).

The second most reported structure use was for poultry housing. Nationally, this was reported by 1,579,207 households (27.1 percent of all agricultural households), with further estimates by household headship showing 24.4 percent for female-headed and 27.9 percent for male-headed households. In Mainland Tanzania, 1,545,212 households (26.9 percent) reported to use farm structure for housing poultry, while Zanzibar had 33,995 households (44.4 percent). Among large-scale farms the use of structure for poultry housing in Tanzania was 183 farms (19.2 percent) with statistics for Mainland Tanzania standing at 165 (17.9 percent) and 18 equivalents to 58.1 percent, in Zanzibar.

Table 5.4: Number and Percentages of Agricultural Holdings Using a Structure, by Structure Use and Sex of Household Head during Agricultural Year 2023/24

		Fe	emale		al Households Male	Т	otal		Cotal Farms
State	Structure use	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*
	Storing Crops	1,123,996	87.4	3,908,386	88	5,032,382	87.7	654	70.9
	Processing of Crops	10,851	0.8	59,449	1	70,301	1.2	103	11.2
	Storing Plant Protection Products	21,650	1.7	77,871	2	99,522	1.7	69	7.5
	Storing Fertilizers	25,877	2.0	117,498	3	143,374	2.5	188	20.4
	Storing Crop-Related Machinery	43,034	3.3	141,299	3	184,333	3.2	193	20.9
	and Equipment Housing of Poultry	312,875	24.3	1,232,337	28	1,545,212	26.9	165	17.9
	Housing of Livestock Other than								
	Poultry	279,831	21.7	1,274,397	29	1,554,228	27.1	299	32.4
	Milking	13,786	1.1	65,851	1	79,637	1.4	76	8.2
	Production of Dairy Products	238	0.0	1,623	0	1,861	0.0	22	2.4
lainland	Meat Production (Slaughtering and	425	0.0	1,268	0	1,693	0.0	28	3.0
nzania	First Cuts) Meat Processing	0	0.0	300	0	300	0.0	14	1.5
	Preparation of Hides and Skins	0	0.0	0	0	0	0.0	7	0.8
	Storage for Livestock-Related								
	Machinery and Equipment	0	0.0	6,383	0	6,383	0.1	69	7.5
	Other Crop Uses	1,799	0.1	360	0	2,158	0.0	23	2.5
	Other Livestock Uses	9,431	0.7	39,470	1	48,902	0.9	171	18.5
	Storage of Aquaculture Products	0	0.0	0	0	0	0.0	48	5.2
	Storage of Aquaculture-Related	0	0.0	0	0	0	0.0	23	2.5
	Machinery and Equipment	902			0			49	5.3
	Tanks/Water Reservoirs Fish Ponds/Tanks		0.1	5,013		5,916	0.1		
		177 <b>1,286,595</b>	0.0	1,730	0 <b>100</b>	1,907 5 740 406	0.0 <b>100.0</b>	82 <b>924</b>	8.9 <b>100.0</b>
	Sub Total Storing Crops	1,286,595	100.0 88.4	<b>4,453,811</b> 44,052	72	<b>5,740,406</b> 57,343	74.9	924 14	45.2
	Storing Crops Processing of Crops	13,291	88.4 0.5	44,052 228	0	302	74.9 0.4	2	45.2 6.5
	Storing Plant Protection Products	0	0.0	77	0	77	0.4	1	3.2
	Storing Fertilizers	490	3.3	3,263	5	3,754	4.9	10	32.3
	Storing Crop-Related Machinery								
	and Equipment	892	5.9	1,871	3	2,763	3.6	4	12.9
	Housing of Poultry	5,349	35.6	28,646	47	33,995	44.4	18	58.1
	Housing of Livestock Other than	1,208	8.0	9,309	15	10,517	13.7	14	45.2
	Poultry								
	Milking	0	0.0	312	1	312	0.4	1	3.2
	Production of Dairy Products  Meat Production (Slaughtering and	0	0.0	138	0	138	0.2	2	6.5
nzibar	First Cuts)	0	0.0	0	0	0	0.0	0	0.0
iiiioui	Meat Processing	0	0.0	0	0	0	0.0	0	0.0
	Preparation of Hides and Skins	0	0.0	0	0	0	0.0	0	0.0
	Storage for Livestock-Related	0	0.0	82	0	82	0.1	2	6.5
	Machinery and Equipment	-							
	Other Crop Uses	0	0.0	108	0	108	0.1	0	0.0
	Other Livestock Uses	0	0.0	78	0	78	0.1	4	12.9
	Storage of Aquaculture Products	0	0.0	0	0	0	0.0	1	3.2
	Storage of Aquaculture-Related Machinery and Equipment	0	0.0	0	0	0	0.0	0	0.0
	Tanks/Water Reservoirs	0	0.0	82	0	82	0.1	2	6.5
	Fish Ponds/Tanks	0	0.0	0	0	0	0.0	1	3.2
	Sub Total	15,029	100.0	61,523	100	76,553	100.0	31	100.0
	Storing Crops	1,137,287	87.4	3,952,438	88	5,089,725	87.5	668	70.0
	Processing of Crops	10,925	0.8	59,677	1	70,602	1.2	105	11.0
	Storing Plant Protection Products	21,650	1.7	77,948	2	99,598	1.7	70	7.3
	Storing Fertilizers	26,367	2.0	120,761	3	147,128	2.5	198	20.8
	Storing Crop-Related Machinery		2.4		2		2.2	107	20.6
	and Equipment	43,926	3.4	143,170	3	187,096	3.2	197	20.6
	Housing of Poultry	318,224	24.4	1,260,983	28	1,579,207	27.1	183	19.2
	Housing of Livestock Other than	281,039	21.6	1,283,706	28	1,564,745	26.9	313	32.8
	Poultry								
	Milking	13,786	1.1	66,163	1	79,949	1.4	77	8.1
	Production of Dairy Products	238	0.0	1,761	0	1,999	0.0	24	2.5
	Meat Production (Slaughtering and First Cuts)	425	0.0	1,268	0	1,693	0.0	28	2.9
nzania	Meat Processing	0	0.0	300	0	300	0.0	14	1.5
	Preparation of Hides and Skins	0	0.0	0	0	0	0.0	7	0.7
	Storage for Livestock-Related								
	Machinery and Equipment	0	0.0	6,465	0	6,465	0.1	71	7.4
	Other Crop Uses	1,799	0.1	467	0	2,266	0.0	23	2.4
	Other Livestock Uses	9,431	0.7	39,548	1	48,980	0.8	175	18.3
	Storage of Aquaculture Products	0	0.0	0	0	0	0.0	49	5.1
	Storage of Aquaculture-Related								
	Machinery and Equipment	0	0.0	0	0	0	0.0	23	2.4
	Tanks/Water Reservoirs	902	0.1	5,095	0	5,998	0.1	51	5.3
		177	0.0	1,730	0	1,907	0.0	83	8.7
	Fish Ponds/Tanks	1//	0.0						

Source: Annex Table (9-3) in Statistical Tables of AASS 2023/24

<sup>\*</sup> Households Can Have One or More Structure Uses

#### 5.4 Agricultural Storage Capacity and Use

Effective agricultural storage is a critical component of the post-harvest value chain, playing a central role in preserving the quality, quantity, and safety of agricultural produce. Adequate storage capacity reduces losses, stabilizes food supply, supports market access, and enhances food security, particularly in regions where farming is seasonal and highly dependent on rainfall. The choice of storage structures depends on the type of crop, household resources, and access to modern technologies. This section explores the current state of agricultural storage capacity, types of storage used, and the extent of utilization, highlighting regional differences and usage patterns across the country.

### 5.4.1 Storage capacity by type of structure (bag holding 25 kg of maize)

Among Agricultural households in Tanzania, warehouses, machinery sheds, and packhouses were reported to stock the highest number of bags. Warehouses led with an average of 265,584 bags followed by Machinery sheds (4,151bags) and Packhouses (1,708 bags) while grain cribs had the lowest average storage capacity (55 bags). In large-scale farms, modern grain silos led in storage capacity with 168,291 bags, followed by warehouses (71,573 bags) and stores (17,947 bags), while grain cribs held less (1,214 bags).

Agricultural households in Tanzania Mainland and Zanzibar display distinct agricultural storage patterns. In Tanzania Mainland, warehouses demonstrate a high storage average capacity of 265,768 bags, while stores in Zanzibar had an average capacity of 29 bags.

In large scale farms, modern grain silos structures have the highest average capacities of 168,291 bags in Tanzania Mainland while in Zanzibar, storage capacity is highest in warehouses with an average capacity of 213 bags. Furthermore, the results revealed that stores are the most widely used crop storage structures in Tanzania, utilized by 79.3 percent of agricultural households and 66.1 percent of large-scale farms. In both Tanzania Mainland and Zanzibar, stores remain the predominant storage structures, used by 79.1 percent and 76.3 percent of agricultural households, respectively. Most large-scale farms (66.5 percent) use stores for crop storage in Mainland Tanzania, whereas in Zanzibar, a higher proportion (77.4 percent) utilize livestock barns.

Table 5.5: Average storage capacity by type of structure during agricultural year 2023/24, Tanzania

			Agricultural	Households					Large Scal	le Farms		
	Mainland	Tanzania	Zanz	ibar	Tanz	ania	Mainlan	d Tanzania	Zanzik	oar	Tar	ızania
Type of Structure	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Percentage of Holdings*	Average Storage Capacity (25 kg bag)
Traditional Grain Silos	4.5	108	0.9	12	4.4	108	8.7	426	0.0	-	8.4	426
Warehouse	4.0	265,768	0.7	-	4.0	265,584	30.2	72,447	12.9	213	29.6	71,573
Store	79.3	452	76.0	29	79.2	447	66.5	18,500	54.8	202	66.1	17,947
Cold Storage Rooms	0.7	67	0.0	-	0.7	67	4.7	3,384	3.2	-	4.6	3,209
Greenhouses/Screenhouses	0.4	57	0.5	-	0.4	57	2.5	-	6.5	-	2.6	-
Grain Cribs	1.3	55	0.0	-	1.3	55	2.7	1,214	0.0	-	2.6	1,214
Machinery sheds	0.2	4,151	0.0	-	0.2	4,151	12.3	-	3.2	-	12.0	-
Crop Drying Sheds	0.2	410	0.0	-	0.2	410	5.1	-	0.0	-	4.9	-
Packhouses	0.4	1,708	0.0	-	0.4	1,708	5.1	7,687	6.5	-	5.1	7,285
Composting Facilities	0.0	-	0.0	-	0.0	-	1.0	-	6.5	-	1.2	-
Silage Pits/Bunkers	0.0	-	0.0	-	0.0	-	1.1	-	3.2	-	1.2	-
Milking Parlors	0.1	-	0.0	-	0.1	-	6.3	-	0.0	-	6.1	-
Livestock Barns	36.0	-	44.9	-	36.1	-	38.9	-	77.4	-	40.1	-
Skin Drying Sheds	0.0	-	0.0	-	0.0	-	0.8	-	0.0	-	0.7	-
Slaughterhouse	0.0	-	0.0	-	0.0	-	2.4	-	0.0	-	2.3	-
Slaughter Slab	0.0	-	0.0	-	0.0	-	2.7	-	0.0	-	2.6	-
Butchery	0.0	-	0.0	-	0.0	-	1.4	-	0.0	-	1.4	-
Skin Storage Sheds	0.0	-	0.0	-	0.0	-	0.4	-	0.0	-	0.4	-
Permanent Animal Crush	0.0	-	0.0	-	0.0	-	3.9	-	0.0	-	3.8	-
Dam	0.4	-	0.0	-	0.4	-	8.9	-	3.2	-	8.7	-
Water Trough	0.0	-	0.0	-	0.0	-	5.7	-	6.5	-	5.8	-
Dipping Facility for Large Animals	0.7	-	0.0	-	0.7	-	10.3	-	0.0	-	9.9	-
Dipping Facility for Small Animals	0.3	-	0.0	-	0.3	-	2.3	-	0.0	-	2.2	-
Livestock Spray Race	0.0	-	0.0	-	0.0	-	6.5	-	6.5	-	6.5	-
Hatchery	0.0	-	0.0	-	0.0	-	2.1	-	3.2	-	2.1	-
Milk Collection Center	0.0	-	0.0	-	0.0	-	1.9	-	3.2	-	2.0	-
Aquaculture Tanks or Ponds	0.0	-	0.0	-	0.0	-	8.9	-	0.0	-	8.6	-
Fumigation Chambers	0.0	-	0.0	-	0.0	-	1.0	-	0.0	-	0.9	-
Modern Grain Silos	0.0	153	0.0	-	0.0	153	0.6	168,291	0.0	-	0.6	168,291
Sub Total	100.0	=	100.0	-	100.0	=	100.0	-	100.0	-	100.0	-

Source: Annex Table (9-4) in Statistical Tables of AASS 2023/24

#### 5.4.2 Ownership of Agricultural Structures Among Agricultural Households

Across Tanzania, ownership of traditional grain silos is concentrated among the households that use them. Nationally, 99.0 percent of the grain silos reported in the survey were owned by agricultural households, indicating that silo use is largely household-driven rather than dependent on rental or community facilities. In Mainland Tanzania, 99.0 percent of the reported silos were household-owned, while in Zanzibar, all reported silos (100 percent) were owned by agricultural households.

In contrast, warehouse ownership shows a more diversified pattern. At the national level, 49.7 percent of reported warehouses were owned by households, 33.9 percent were rented, while the remainder were owned by government (6.7 percent) or cooperatives (6.0 percent). The Mainland Tanzania reflects a similar structure (49.6 percent owned, 34.0 percent rented). In Zanzibar, however, all reported warehouses were fully owned by households (100 percent).

Storage rooms (or stores) are also predominantly household-owned, with 97.3 percent ownership nationally. Mainland Tanzania matches this rate (97.3 percent), whereas Zanzibar reports a slightly higher proportion (99.9 percent).

Other post-harvest structures display mixed ownership patterns, with most reports coming from Mainland Tanzania. Machinery sheds, for instance, show relatively low household ownership (28.9 percent), with almost half rented (49.5 percent) and 21.6 percent owned by the community. Crop drying sheds and packhouses are more likely to be owned by households, at 87.7 percent and 90.1 percent, respectively. Composting facilities are entirely household-owned. Livestock barns are nearly universal at the household level, with 99.4 percent ownership in Mainland Tanzania and 98.1 percent in Zanzibar.

Table 5.6: Ownership of Agricultural Structures among Agricultural Households

		Mainland Tanzania								Zanzibar						Tanzania		
Type of Structure	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
Traditional Grain Silos	99.0	0.2	0.0	0.3	0.3	0.2	100.0	0.0	0.0	0.0	0.0	0.0	99.0	0.2	0.0	0.3	0.3	0.2
Warehouse	49.6	34.0	6.7	3.4	6.1	0.3	100.0	0.0	0.0	0.0	0.0	0.0	49.7	33.9	6.7	3.4	6.0	0.3
Store	97.3	1.6	0.2	0.3	0.2	0.5	99.9	0.1	0.0	0.0	0.0	0.0	97.3	1.6	0.2	0.3	0.2	0.5
Cold Storage Rooms	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Greenhouses/Screenhouses	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Grain Cribs	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Machinery sheds	28.9	49.5	0.0	21.6	0.0	0.0	-	-	-	-	-	-	28.9	49.5	0.0	21.6	0.0	0.0
Crop Drying Sheds	87.7	5.8	0.0	0.0	6.6	0.0	-	-	-	-	-	-	87.7	5.8	0.0	0.0	6.6	0.0
Packhouses	90.1	5.3	0.0	0.0	4.6	0.0	-	-	-	-	-	-	90.1	5.3	0.0	0.0	4.6	0.0
Composting Facilities	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Silage Pits/Bunkers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milking Parlors	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Livestock Barns	99.4	0.3	0.1	0.1	0.1	0.0	98.1	0.3	0.0	1.2	0.4	0.0	99.4	0.3	0.1	0.1	0.1	0.0
Skin Drying Sheds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Slaughterhouse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Slaughter Slab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butchery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Skin Storage Sheds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permanent Animal Crush	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dam	26.2	0.0	41.0	32.8	0.0	0.0	-	-	-	-	-	-	26.2	0.0	41.0	32.8	0.0	0.0
Water Trough	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Dipping Facility for Large Animals	22.5	0.0	58.1	18.4	1.0	0.0	-	-	-	-	-	-	22.5	0.0	58.1	18.4	1.0	0.0
Dipping Facility for Small Animals	35.5	0.0	50.4	14.1	0.0	0.0	-	-	-	-	-	-	35.5	0.0	50.4	14.1	0.0	0.0
Livestock Spray Race	79.1	20.9	0.0	0.0	0.0	0.0	-	-	-	-	-	-	79.1	20.9	0.0	0.0	0.0	0.0
Hatchery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milk Collection Centre	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Aquaculture Tanks or Ponds	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Fumigation Chambers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Modern Grain Silos	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0

Source: Annex Table (9-4) in Statistical Tables of AASS 2023/24

#### 5.4.3 Ownership of Agricultural Structures Among Large Scale Farms

In Tanzania, ownership of agricultural structures reported by large-scale farms shows that the majority of facilities are farm-owned. Among farms that reported using grain storage, both traditional and modern grain silos were entirely farm-owned (100 percent).

At the national level, 80.6 percent of reported warehouses were owned by farms, In Mainland Tanzania, warehouse ownership displayed a more diverse pattern, with 80.3 percent privately owned by farms, 5.7 percent rented, and 8.2 percent owned by government institutions. In Zanzibar, all reported warehouses (100 percent) were farm-owned.

A similar trend was observed for stores, where 90.1 percent of those reported in Mainland Tanzania were farm-owned and 4.9 percent owned by the government. In Zanzibar, farm ownership accounted for 82.4 percent of reported stores, with 17.6 percent owned by government.

Machinery sheds (82.5 percent) and crop drying sheds (80.9 percent) in Mainland Tanzania were mostly farm-owned, with smaller shares under rental or public ownership.

Livestock facilities also showed strong farm ownership. In Mainland Tanzania, 77.6 percent of milking parlours were farm-owned, while government and cooperatives owned 12.1 percent and 6.9 percent, respectively.

Packhouses reported the lowest farm ownership among the structures reviewed, with farms accounting for 65.3 percent of ownership nationally. Government and cooperatives owned 10.2 percent and 8.2 percent of reported packhouses, respectively, reflecting a more mixed model of control for this facility type.

**Table 5.7: Ownership of Agricultural Structures among Large Scale Farms** 

			Mainla	and Tanzania					Z	Zanzibar					Г	<b>Tanzania</b>		
Type of Structure	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
Traditional Grain Silos	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0
Warehouse	80.3	5.7	8.2	0.7	4.3	0.7	100.0	0.0	0.0	0.0	0.0	0.0	80.6	5.7	8.1	0.7	4.2	0.7
Store	90.1	2.9	4.9	0.0	2.0	0.2	82.4	0.0	17.6	0.0	0.0	0.0	89.9	2.9	5.2	0.0	1.9	0.2
Cold Storage Rooms	81.4	11.6	4.7	0.0	2.3	0.0	-	-	-	-	-	-	81.8	11.4	4.5	0.0	2.3	0.0
Greenhouses/Screenhouses	82.6	0.0	13.0	0.0	4.3	0.0	-	-	-	-	-	-	80.0	0.0	16.0	0.0	4.0	0.0
Grain Cribs	92.0	0.0	4.0	0.0	4.0	0.0	-	-	-	-	-	-	92.0	0.0	4.0	0.0	4.0	0.0
Machinery sheds	82.5	5.3	8.8	0.0	3.5	0.0	-	-	-	-	-	-	81.7	5.2	9.6	0.0	3.5	0.0
Crop Drying Sheds	80.9	10.6	4.3	0.0	4.3	0.0	-	-	-	-	-	-	80.9	10.6	4.3	0.0	4.3	0.0
Packhouses	63.8	17.0	10.6	0.0	8.5	0.0	-	-	-	-	-	-	65.3	16.3	10.2	0.0	8.2	0.0
Composting Facilities	77.8	11.1	0.0	0.0	11.1	0.0	-	-	-	-	-	-	81.8	9.1	0.0	0.0	9.1	0.0
Silage Pits/Bunkers	90.0	0.0	0.0	0.0	10.0	0.0	-	-	-	-	-	-	90.9	0.0	0.0	0.0	9.1	0.0
Milking Parlors	77.6	1.7	12.1	0.0	6.9	1.7	-	-	-	-	-	-	77.6	1.7	12.1	0.0	6.9	1.7
Livestock Barns	88.9	1.1	7.5	0.3	1.7	0.6	91.7	0.0	4.2	0.0	4.2	0.0	89.0	1.0	7.3	0.3	1.8	0.5
Skin Drying Sheds	57.1	0.0	14.3	0.0	14.3	14.3	-	-	-	-	-	-	57.1	0.0	14.3	0.0	14.3	14.3
Slaughterhouse	72.7	0.0	13.6	0.0	13.6	0.0	-	-	-	-	-	-	72.7	0.0	13.6	0.0	13.6	0.0
Slaughter Slab	80.0	0.0	16.0	0.0	4.0	0.0	-	-	-	-	-	-	80.0	0.0	16.0	0.0	4.0	0.0
Butchery	69.2	0.0	23.1	0.0	7.7	0.0	-	-	-	-	-	-	69.2	0.0	23.1	0.0	7.7	0.0
Skin Storage Sheds	75.0	0.0	0.0	0.0	25.0	0.0	-	-	-	-	-	-	75.0	0.0	0.0	0.0	25.0	0.0
Permanent Animal Crush	75.0	0.0	19.4	0.0	2.8	2.8	-	-	-	-	-	-	75.0	0.0	19.4	0.0	2.8	2.8
Dam	79.3	0.0	7.3	9.8	3.7	0.0	-	-	-	-	-	-	78.3	0.0	7.2	9.6	4.8	0.0
Water Trough	75.5	0.0	20.8	0.0	1.9	1.9	-	-	-	-	-	-	76.4	0.0	20.0	0.0	1.8	1.8
Dipping Facility for Large Animals	62.1	1.1	25.3	4.2	6.3	1.1	-	-	-	-	-	-	62.1	1.1	25.3	4.2	6.3	1.1
Dipping Facility for Small Animals	61.9	0.0	19.0	14.3	4.8	0.0	-	-	-	-	-	-	61.9	0.0	19.0	14.3	4.8	0.0
Livestock Spray Race	78.3	1.7	15.0	0.0	3.3	1.7	-	-	-	-	-	-	77.4	1.6	14.5	0.0	4.8	1.6
Hatchery	73.7	5.3	5.3	5.3	10.5	0.0	-	-	-	-	-	-	75.0	5.0	5.0	5.0	10.0	0.0
Milk Collection Centre	61.1	0.0	16.7	0.0	16.7	5.6	-	-	-	-	-	-	63.2	0.0	15.8	0.0	15.8	5.3
Aquaculture Tanks or Ponds	82.9	2.4	8.5	1.2	4.9	0.0	-	-	-	-	-	-	82.9	2.4	8.5	1.2	4.9	0.0
Fumigation Chambers	77.8	0.0	0.0	0.0	11.1	11.1	-	-	-	-	-	-	77.8	0.0	0.0	0.0	11.1	11.1
Modern Grain Silos	100.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	100.0	0.0	0.0	0.0	0.0	0.0

Source: Annex Table (9-4) in Statistical Tables of AASS 2023/24

### 5.5 The use of different storage methods

During the 2023/24 agricultural year, the findings show that sacks were mostly used to store produce across all holding types in Tanzania. Among agricultural households, 88.2 percent used sacks nationwide, and within the state, 88.3 percent and 80.0 percent used them in the Mainland Tanzania and Zanzibar, respectively. Among large-scale farms, sacks were used by 80.6 percent across Tanzania, with 81.1 percent in Mainland Tanzania and 57.1 percent in Zanzibar.

In Tanzania, 7.7 percent of agricultural households reported to use airtight sacks (pics bags). Among large-scale farms, 4.7 percent used airtight sacks across the country.

The use of airtight drums, open drums, and pots was generally low across all agricultural holdings. Among agricultural households, 1.9 percent used airtight drums in Mainland Tanzania and 0.5 percent in Zanzibar. Open drums were used by 0.5 percent of agricultural households in the Mainland Tanzania and 6.5 percent in Zanzibar, while pots were used by 1.0 percent and 0.5 percent in Mainland Tanzania and Zanzibar, respectively. Regarding large-scale farms, 1.9 percent used airtight drums, 1.4 percent used open drums, and 0.5 percent used pots in Mainland Tanzania.

On the other hand, heaping on the ground usage were 5.1 percent among agricultural households with 4.9 and 22.6 percent in Mainland Tanzania and Zanzibar, respectively. In Tanzania 20.4 percent of the large-scale farms used this method, of which 19.3 percent were applied in Mainland Tanzania and 71.4 percent in Zanzibar.

Table 5.8: Use of different storage methods during agricultural year 2023/24

							:	Storage Met	hod						
Holding Category	State	P	ots	Sac	ks	Air Tigh (Pics F		Open	Drum	Air Tigh	t Drum	Heaped on	the Ground	Other	Method
Holding Category	State	Number of Holdings	Percentage of Holdings*	Number of Holdings	percentage of Holdings*	Number of Holdings	percenta ge of Holding s*	Number of Holdings	percentag e of Holdings*	Number of Holdings	f age of Number of		percentage of Holdings*	Number of Holding s	percentage of Holdings*
A : 1, 1	Mainland Tanzania	51,983	1.0	4,443,911	88.3	389,938	7.7	24,390	0.5	96,582	1.9	246,227	4.9	4,647	0.1
Agricultural Households	Zanzibar	306	0.5	45,871	80.0	0	0.0	3,716	6.5	260	0.5	12,979	22.6	145	0.2
	Tanzania Mainland	52,289	1.0	4,489,782	88.2	389,938	7.7	28,106	0.6	96,841	1.9	259,206	5.1	4,792	0.1
	Tanzania	3	0.5	525	81.1	31	4.8	9	1.4	12	1.9	125	19.3	12	1.3
Large Scale Farms	Zanzibar	0	0.0	8	57.1	0	0.0	0	0.0	0	0.0	10	71.4	0	0.0
	Tanzania	3	0.5	533	80.6	31	4.7	9	1.4	12	1.8	135	20.4	12	1.3

Source: Annex Table (9-5) in Statistical Tables of AASS 2023/24

<sup>\*</sup> Households can have one or more storage method

# Chapter.6 Geospatial Analysis

#### 6.1 Introduction

The Annual Agricultural Sample Survey (AASS) serves as a crucial tool for monitoring agricultural production, input use, and farming practices throughout Tanzania. It generates nationally and regionally representative statistics that inform policy design, investment strategies, and the development of agricultural support programs. However, like many large-scale surveys conducted in low- and middle-income countries, the AASS faces inherent limitations, most notably its periodic implementation and limited spatial resolution. These constraints pose challenges for timely and granular decision-making, prompting governments and researchers to explore complementary data sources that enhance the relevance and responsiveness of agricultural statistics.

Geospatial data has emerged as a valuable complement to traditional survey approaches. Sourced from satellite imagery, drone technology, and spatial databases, geospatial datasets provide high-resolution, frequently updated information on environmental and climatic conditions across vast geographic areas. These data are generated at relatively low marginal costs and offer insights into variables that are otherwise difficult or costly to capture through surveys, such as rainfall anomalies, land degradation, vegetation indices (e.g., NDVI), topography, and soil moisture.

When integrated with farm-level survey data, geospatial indicators provide important contextual information and allow for more nuanced analysis. For example, observed disparities in crop yields across regions can be better understood when assessed about rainfall variability or soil quality. Similarly, analyses of household resilience to climatic shocks, such as droughts or floods, are strengthened when behavioral survey data are combined with remote sensing measures of exposure.

The strength of this integrative approach lies in the complementarity of the two data types. Surveys offer rich information on farm behavior, input usage, labor dynamics, and constraints to production, while geospatial data offer consistent, scalable, and objective measures of environmental conditions and accessibility. Together, these sources enable researchers and policymakers to explore questions that would otherwise remain out of reach.

This approach has been applied in a range of settings. In Ethiopia, the combination of satellite-derived rainfall and soil quality data with household survey data has shed light on productivity trends and vulnerability to climatic shocks. In Kenya and Nigeria, spatial analysis has informed the targeting of input subsidy programs by identifying high-potential but underserved areas. Globally, initiatives such as the World Bank's Atlas of Sub-Saharan African Agriculture have demonstrated the power of combining survey and spatial data to produce new insights on land use patterns, crop intensity, and market connectivity.

Despite its promise, the use of geospatial data is not without limitations. Technical challenges may arise in aligning survey and spatial datasets, particularly when geographic identifiers of farms are

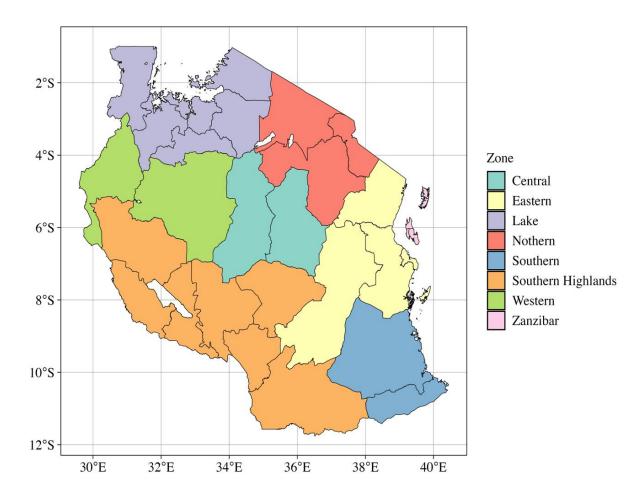
missing or not disseminated (for confidentiality reasons). Satellite-based proxies may fail to accurately reflect on-the-ground realities. NDVI, for instance, can be distorted by cloud cover or may not capture crop stress in densely vegetated regions. Satellite-based rainfall estimates may diverge from ground-station observations, and access to high-resolution or proprietary datasets may be constrained by cost or licensing restrictions. Additionally, predictive models based on geospatial data must be applied cautiously, particularly when transferred across contexts without sufficient local validation.

Nonetheless, the integration of geospatial data with official agricultural statistics holds substantial potential to improve the timeliness, granularity, and policy relevance of agricultural monitoring in Tanzania. This chapter adopts such an approach. By linking AASS data with spatial indicators, including measures of climatic variability, soil characteristics, and accessibility, the analysis demonstrates how geospatial integration can enhance the interpretation of survey findings and contribute to the design of more inclusive and adaptive agricultural policies.

The remainder of this chapter is organized as follows. The first section introduces the geospatial datasets used in the analysis and examines correlations between selected spatial indicators and AASS-based estimates. The second section presents ward-level yield maps, utilizing data from IFPRI's Global Spatially Disaggregated Crop Production Statistics. The third section overlays these yield estimates with a composite index constructed from four geospatial variables, precipitation, accessibility, soil organic carbon, and the Standardized Precipitation-Evapotranspiration Index (SPEI), to explore spatial patterns and identify areas of opportunity and vulnerability within Tanzania's agricultural landscape.

#### 6.2 Geospatial Reference: Zonal distribution of regions

Tanzania is subdivided into eight major crop production zones based on geographical location, climate, and agricultural potential. They include the Northern Zone, Eastern Zone, Southern Zone, Western Zone, Southern Highlands, Central Zone, Lake Zone, and Zanzibar, which comprises the islands of Unguja and Pemba, and functions as an independent agricultural zone. Each of these zones specializes in specific crops suited to their local environmental conditions, which allows for more efficient agricultural planning and development. Map 1 shows the division of these zones and the relevant regions.



Map 1: Distribution of Tanzanian Regions into Zones

#### 6.3 Geospatial Datasets

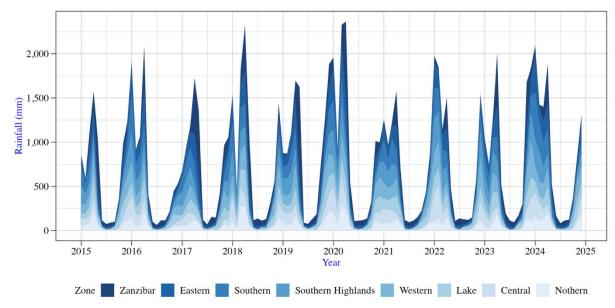
#### 6.3.1 Precipitation

Rainfall data are sourced from the Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS), a dataset that combines satellite imagery with ground station observations to produce high-resolution gridded rainfall time series. Covering the period from 1981 to the present, CHIRPS is widely used across sub-Saharan Africa for trend analysis, agricultural drought monitoring, and early warning systems. Its spatial and temporal coverage make it a valuable tool for assessing rainfall variability and climatic shocks over time.

Map 2 illustrates the evolution of monthly mean precipitation across Tanzania's ecological zones between 2015 and early 2023, highlighting the country's distinct seasonal and spatial rainfall patterns. These trends reflect Tanzania's bimodal and unimodal rainfall regimes, with pronounced peaks observed during the March to May period (Masika) and secondary peaks from October to December (Vuli), particularly in the northern and coastal regions.

Zanzibar, Coastal, and the Lake Zones consistently exhibit the highest rainfall levels, influenced by their proximity to large water bodies and the prevalence of moisture-bearing winds. In contrast, the Central Zone remains comparatively dry throughout the period, consistent with its semi-arid conditions and recurrent drought episodes.

Temporal variations in precipitation, such as elevated rainfall in 2020 and notable declines in 2016 and 2021, correspond with reported extreme weather events, including floods and droughts, as documented by the Tanzania Meteorological Authority (TMA). These observed fluctuations lend credibility to the underlying dataset and reinforce its relevance for climate-related analysis. The spatial heterogeneity and seasonal variability in rainfall patterns have direct implications for agricultural planning, water resource allocation, and the design of climate resilience strategies.



Map 2: Monthly Mean Precipitation by Zone

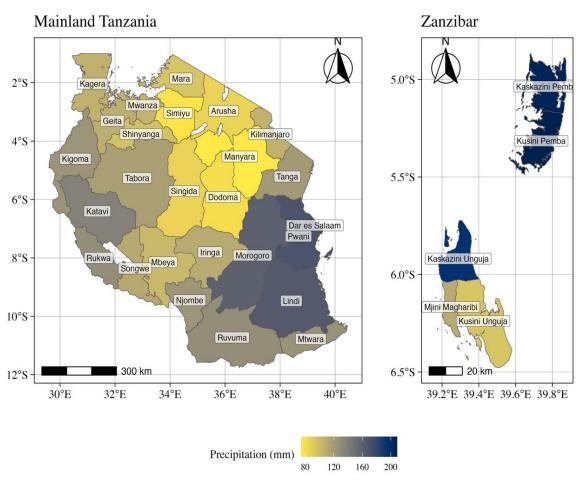
Map 3 illustrates how monthly mean precipitation varies widely across Mainland Tanzania. Dark blue areas on the map including Dar es Salaam, Pwani, Morogoro, and Lindi represent regions that consistently receive high amounts of rainfall each month. These areas are mostly located along the eastern and southeastern zones, where the Indian Ocean supplies abundant moisture, resulting in a wetter climate. This rainfall supports vegetation, agriculture and high-water availability.

In contrast, light-colored regions such as Manyara, Simiyu, Dodoma, and Singida are situated more inland and in the north-central part of the country. These areas receive very low monthly mean precipitation, making them drier and more prone to drought conditions. This lower rainfall affects farming practices, limits water resources, and often requires irrigation or drought-resistant crops to sustain agriculture.

In Zanzibar, the dark blue areas on the map represent regions with high monthly mean precipitation, specifically in Kaskazini Pemba, Kusini Pemba, and Kaskazini Unguja. These areas are influenced heavily by the Indian Ocean's moist air masses. Their geographical position exposes them to consistent rainfall. Due to high humidity and warm ocean currents, these regions experience frequent

and intense precipitation events, especially during the long rains (Masika: March to May) and short rains (Vuli: October to December).

On the other hand, the light-colored areas, which include Kusini Unguja and Mjini Magharibi, show lower monthly mean precipitation compared to the northern parts of the islands.



Source: CHIRPS 2025

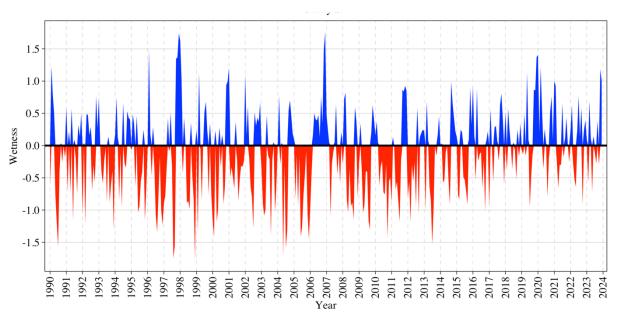
Map 3: Monthly Mean Precipitation by Region 2023/24

#### 6.3.2 Standardized Precipitation Evaporation Index

The Standardized Precipitation Evapotranspiration Index (SPEI) is a composite indicator designed to capture deviations in the climatic water balance, making it particularly suited for assessing drought conditions. Unlike rainfall-only indices, SPEI incorporates both precipitation and potential evapotranspiration, providing a more robust measure of water availability over time. SPEI values are standardized and typically interpreted as follows: values between -0.5 and 0.5 indicate near-normal conditions; values from -0.5 to -1.0 reflect moderate drought; -1.0 to -1.5 indicate severe drought; and values below -1.5 denote extreme drought. Its broad temporal scope and climatic sensitivity make SPEI a key input for monitoring agricultural vulnerability and long-term climate risks.

Map 4 presents the monthly Standardized Precipitation-Evapotranspiration Index (SPEI) for Tanzania over the 1981–2023 period, providing a long-term perspective on fluctuations in the

country's climatic water balance. By incorporating both precipitation and potential evapotranspiration, SPEI offers a more robust indicator of meteorological drought and excess moisture than precipitation data alone. Negative values (shaded in red) denote periods of drought, while positive values (in blue) indicate wetter-than-average conditions. Several prominent drought episodes are clearly visible in the time series. The sharp negative anomalies during 1991/92 and 1996/97 coincide with severe droughts that triggered widespread crop failures and food insecurity, particularly in the Dodoma, Singida, and Shinyanga regions. The 2005/06 drought, also reflected in the index, marked one of the most acute food crises in over a decade and led to emergency grain imports. Conversely, the pronounced positive spike in 1997/98 aligns with the El Niño-induced wet spell, which brought extensive flooding to coastal and lake zones. More recently, the period following 2015 reveals increasing climatic volatility, characterized by shorter and more abrupt shifts between wet and dry conditions. This emerging pattern is consistent with trends highlighted by the Tanzania Meteorological Authority and assessments by the Intergovernmental Panel on Climate Change (IPCC), both of which point to East Africa's heightened vulnerability to climate extremes.



Map 4: Month Standardized Precipitation-Evapotranspiration Index (SPEI)

#### 6.3.3 Soil Organic Carbon (GSOCmap v1.5)

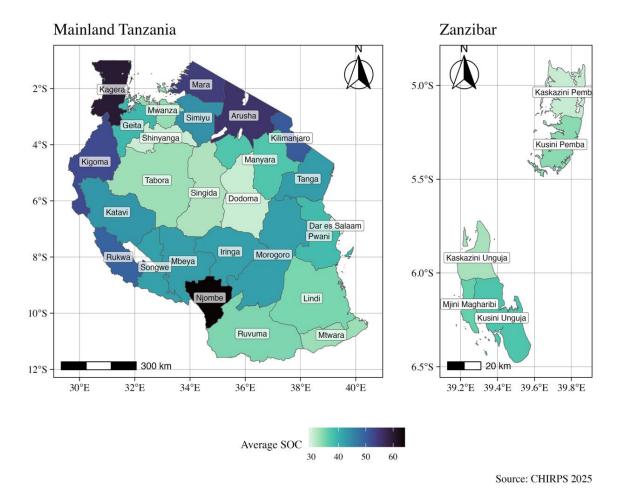
Soil organic carbon (SOC), the primary component of soil organic matter (SOM), plays a critical role in agricultural productivity, climate change mitigation and adaptation, and the broader achievement of the Sustainable Development Goals (SDGs). SOC enhances key soil functions by improving nutrient retention and water availability, thereby supporting plant growth and food security. Estimates of SOC are derived from the Global Soil Organic Carbon Map (version 1.5), which was developed through a collaborative process involving national experts and international partners. The dataset provides topsoil SOC content at a 1 km resolution, offering important insights into soil health and productivity potential across different agro-ecological zones.

Map 5 illustrates the spatial distribution of Soil Organic Carbon (SOC) across Mainland Tanzania and the Zanzibar archipelago for the year 2024. SOC is a vital indicator of soil health, agricultural sustainability, and ecosystem resilience, with its levels strongly influenced by agroecological conditions and land management practices.

Across Mainland Tanzania, high SOC levels (above 50), shown in dark and moderately dark blue, are predominantly found in regions such as Njombe, Kagera, Arusha, Mara, Kigoma, Kilimanjaro, and Rukwa. These areas benefit from higher rainfall, dense vegetation cover, and relatively low levels of land degradation. They often support agroforestry systems, perennial crops, and mixed farming practices that enhance the accumulation and retention of organic matter in soils. In contrast, lower SOC levels (around or below 30), represented by lighter shades, are concentrated in central and southern regions such as Dodoma, Singida, Lindi, and Mtwara. These patterns reflect the impact of semi-arid to sub-humid climates, sparse vegetation, and prolonged land use pressures, including overgrazing and intensive cultivation, which limit biomass input and deplete organic matter content.

Similar trends are observed in Zanzibar, where SOC levels also vary by region and land use intensity. Higher SOC values (above 35), indicated by moderately blue shades, are observed in areas such as Kusini Unguja and Mjini Magharibi. These zones benefit from humid tropical climates, rich vegetation cover, and sustainable land use practices such as perennial cropping and agroforestry that promote soil organic matter buildup. Conversely, parts of Kaskazini Pemba display lower SOC levels (below 30), influenced by land degradation, reduced biomass input, and sub-humid climatic conditions.

The spatial variation in SOC across both Mainland Tanzania and Zanzibar aligns with data from Tanzania's National Soil Information Service (NASIS) and regional surveys, which consistently report declining SOC in areas under high land use pressure. These findings highlight the urgent need for targeted soil conservation and sustainable land management strategies to preserve and enhance SOC levels across the country.



Map 5: Soil Organic Carbon Distribution in Mainland Tanzania and Zanzibar (2024)

#### 6.3.4 Accessibility to Major Cities (FAO GIS-MCDA)

The accessibility dataset used in this analysis models raster-based travel time to Tanzania's major urban centres, incorporating detailed information on road networks, terrain, and land cover. It estimates travel costs to the country's twenty largest cities and towns, each with a population exceeding 110,000, and expresses accessibility on a standardized scale from 0 to 100, where higher scores indicate better connectivity. Developed under the FAO's Hand-in-Hand Initiative, this dataset is designed to support infrastructure planning, market access assessments, and targeted service delivery in both urban and rural areas.

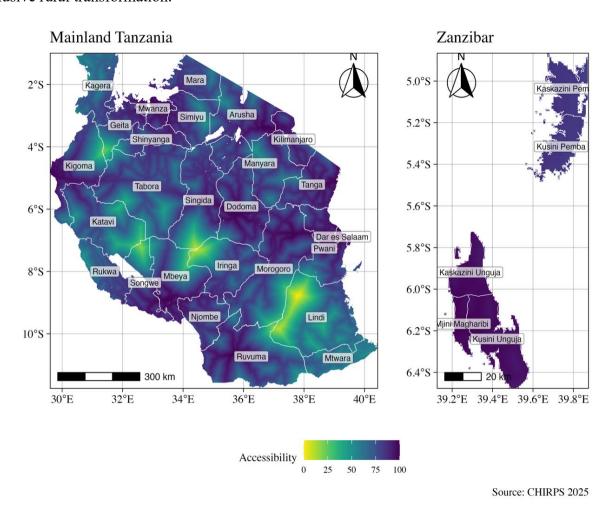
Map 6 illustrates the spatial distribution of road accessibility across Mainland Tanzania and Zanzibar, a key factor influencing agricultural productivity, input access, and market integration. High-accessibility areas such as those surrounding Dar es Salaam, Dodoma, Arusha, Mwanza, and Mbeya benefit from strong transport networks, enabling timely delivery of inputs, efficient market access, and improved extension service coverage.

Moderate-accessibility regions, including parts of Morogoro, Tanga, Singida, Manyara, Kigoma, Lindi, and Ruvuma, have functional connectivity but still face logistical and infrastructural gaps that can hinder commercialization and scale. These areas represent high-potential zones for targeted investment to unlock agricultural growth.

Low-accessibility zones, found mostly in remote parts of western and southern Tanzania, experience poor connectivity, resulting in higher transport costs, limited market access, and reduced resilience to economic and climate shocks.

In Zanzibar, Unguja Island shows high accessibility near Zanzibar City and along coastal areas, supporting localized agricultural trade and input supply. Pemba Island, though more rural, exhibits moderate to high accessibility, particularly along the coasts, highlighting opportunities to better link farmers to markets with improved infrastructure and services.

Improving access in these moderately connected rural areas, especially in Singida, Kigoma, Lindi, and Pemba, can significantly boost agricultural productivity, reduce post-harvest losses, and promote inclusive rural transformation.



Map 6: Accessibility to Major Cities and Towns in Tanzania

## 6.3.5 Correlation Analysis Based on 2024 AASS data for selected crops

This correlation analysis uses data from the 2024 Annual Agricultural Sample Survey (AASS) in Tanzania to examine relationships between five major crops (maize, paddy, sorghum, cassava, and sweet potatoes) and selected environmental variables: mean precipitation, elevation, wetness, accessibility, and soil characteristics, using the Pearson correlation coefficient (r). A 95% confidence interval (CI) was applied to assess statistical significance.

Maize, widely grown across Tanzania, showed no statistically significant correlations with any environmental variables. Correlation coefficients ranged from 0.03 to 0.12, with all CIs including zero, suggesting maize production is relatively unaffected by these environmental gradients.

Paddy (rice) exhibited a strong positive correlation with elevation (r = 0.549, CI: 0.24 to 0.76), indicating a preference for higher-altitude areas, possibly due to cooler climates. Other variables, including rainfall and wetness, showed weak, non-significant correlations. Notably, some high-rainfall regions still report low paddy yields, likely due to factors such as poor water management, soil conditions, or inadequate drainage infrastructure.

Sorghum, typically grown in semi-arid regions, showed significant positive correlations with both mean precipitation and mean accessibility (r = 0.549 for both). Regions like Dar es Salaam, Kilimanjaro, Arusha, Morogoro, and Kaskazini Pemba reported higher sorghum yields, supported by moderate to high rainfall and better infrastructure, indicating that sorghum benefits from improved rainfall and transport access.

Cassava, known for drought tolerance and food security, showed several significant relationships: positive correlations with precipitation (r = 0.419), wetness (r = 0.476), and accessibility (r = 0.419), and a negative correlation with elevation (r = -0.449). This suggests cassava performs best in lowland, wetter, and accessible areas.

Sweet Potatoes showed no statistically significant correlations with any environmental variable. Correlation coefficients were weak (ranging from -0.18 to 0.24), and confidence intervals crossed zero. This implies that sweet potato cultivation is likely shaped more by socio-economic or agronomic factors not captured in this analysis (Table 6.1).

Table 6.1: Correlation between selected Food Crops and selected Environmental Variables

SNo.	Food crops	Environmental parameters	Peason p	CI	CI_low	CI_high
1	Maize	Precipitation	0.123488559	0.95	-0.24781	0.463153
2	Maize	Elevation	0.112091928	0.95	-0.25862	0.454026
3	Maize	Wetness	0.035794751	0.95	-0.32871	0.391021
4	Maize	Accessibility	0.123488559	0.95	-0.24781	0.463153
9	Maize	Soil organic carbon	0.05235782	0.95	-0.31383	0.404988
13	Paddy	Precipitation	0.068632422	0.95	-0.29903	0.418552
14	Paddy	Elevation	0.549413731	0.95	0.235822	0.759375
15	Paddy	Wetness	-0.008514348	0.95	-0.36766	0.352837
16	Paddy	Accessibility	0.068632422	0.95	-0.29903	0.418552
17	Paddy	Soil organic carbon	0.334313793	0.95	-0.02951	0.619918
20	Sorghum	Precipitation	0.548712312	0.95	0.140245	0.79757
21	Sorghum	Elevation	-0.154526705	0.95	-0.55883	0.309133
22	Sorghum	Wetness	0.296410856	0.95	-0.16817	0.653247
23	Sorghum	Accessibility	0.548712312	0.95	0.140245	0.79757
24	Sorghum	Soil organic carbon	-0.192048836	0.95	-0.58486	0.273736
26	Cassava	Precipitation	0.418625296	0.95	0.053979	0.684757
27	Cassava	Elevation	-0.44893841	0.95	-0.70409	-0.09112
28	Cassava	Wetness	0.476342229	0.95	0.125583	0.721245
29	Cassava	Accessibility	0.418625296	0.95	0.053979	0.684757
30	Cassava	Soil organic carbon	-0.238376208	0.95	-0.56152	0.147849
31	Sweet Potatoes	Precipitation	0.213928024	0.95	-0.19793	0.561588
32	Sweet Potatoes	Elevation	-0.182828479	0.95	-0.53902	0.228834
33	Sweet Potatoes	Wetness	0.245724028	0.95	-0.16547	0.584139
34	Sweet Potatoes	Accessibility	0.213928024	0.95	-0.19793	0.561588
35	Sweet Potatoes	Soil organic carbon	-0.08313016	0.95	-0.46305	0.322597

## 6.4 Mapping Productivity Patterns

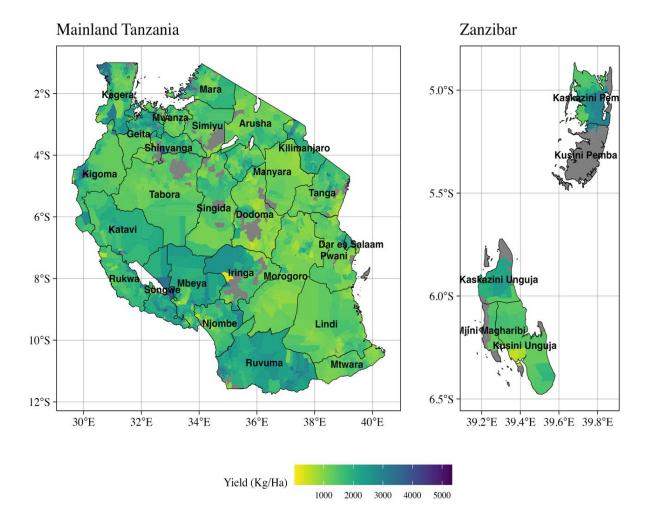
This part of the chapter draws on data from IFPRI's Global Spatially Disaggregated Crop Production Statistics (SPAM), a globally harmonized dataset that provides crop-specific production estimates at a fine spatial resolution. Developed using a combination of household survey data, agricultural censuses, remote sensing, and spatial modeling techniques, SPAM allocates crop area, yield, and production to grid cells of approximately  $10 \text{ km} \times 10 \text{ km}$ . The dataset distinguishes between irrigated and rainfed systems and accounts for both subsistence and commercial production, offering a nuanced picture of agricultural output across diverse farming contexts. For Tanzania, SPAM serves as a valuable complement to survey-based sources such as the AASS by enabling high-resolution mapping of productivity patterns at subnational levels. Its spatial granularity allows for the identification of yield hotspots and gaps across administrative boundaries, below the region.

#### **6.4.1** Maize

Map 7 illustrates the spatial distribution of maize crop yield across Tanzania, including both Mainland Tanzania and Zanzibar, derived from raster data. The map uses a color gradient to represent yield values in kilograms per hectare (Kg/Ha), ranging from yellow (low yield, around 1000 Kg/Ha) to purple (high yield, above 5000 Kg/Ha). This gradient helps in visualizing areas of varying agricultural productivity across the country.

In Mainland Tanzania, higher maize yields are observed in the southern highland regions, such as Songwe, Mbeya, Njombe, Ruvuma and Iringa. These areas are marked with darker blue to purple shades, indicating favourable growing conditions or effective agricultural practices. In contrast, central regions like Dodoma, Singida, and parts of Tabora and Manyara display lower yields, reflected in lighter green and yellow shades. Eastern and Southern regions, including Pwani, Lindi, and Dar es Salaam, also show relatively lower productivity, possibly due to less favourable soils or climate conditions for maize cultivation.

For Zanzibar, regions such as Kusini Unguja and Mjini Magharibi are marked with dark grey or light green, indicating minimal or low productivity. A few areas in Kaskazini Pemba and Kaskazini Unguja show slightly higher yields, but still not comparable to the mainland's top-performing zones.

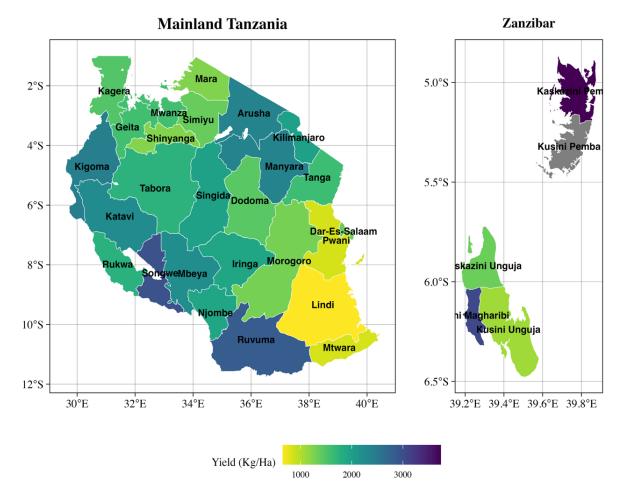


Map 7: Crop Yields of Maize based on Raster Data

Map 8 illustrates the maize crop yield distribution in Tanzania, derived from AASS 2023/24 data. It presents yield estimates in kilograms per hectare (Kg/Ha), using a colour gradient ranging from yellow (lowest yields, around 1000 Kg/Ha) to dark purple (highest yields, over 3000 Kg/Ha). The map is divided into Mainland Tanzania on the left and Zanzibar on the right, providing a clear view of regional differences in maize productivity.

In Mainland Tanzania, high-yielding regions are mostly found in the southern highland zone, especially Rukwa, Songwe, Njombe, Mbeya and Ruvuma, as indicated by the dark blue to purple colours. These areas benefit from favourable agroecological conditions that support higher maize production. Conversely, southern and eastern regions such as Lindi, Mtwara, Dar es Salaam, and Pwani are shown in yellow to light green, reflecting lower maize yields. Central regions like Dodoma and Singida fall within moderate yield categories, with green to blue hues.

In Zanzibar, the pattern is more varied. The northern part of Pemba Island (Kaskazini Pemba) shows the highest yields, highlighted in dark purple, suggesting concentrated areas of high maize productivity. On the other hand, regions like Kaskazini Unguja and Kusini Unguja show lower yields, while Mjini Magharibi appears to perform moderately better, with blueish tones.



Map 8: Crop Yields of Maize based on 2023/24 AASS

Both the raster data (Map 7) and AASS data (Map 8) show similar overall trends in maize yield, especially highlighting high productivity in northern regions like Arusha and Manyara. However, some differences are seen in southern regions, where geospatial data shows higher yields in Mbeya and Njombe compared to AASS 2023/24 data.

In eastern and central areas (Dar es Salaam, Pwani, Dodoma, and Morogoro), both sources report moderate yields, though the geospatial data shows more variation. In the southern zone, there is a significant difference as the geospatial map shows regions like Lindi and Mtwara have slightly moderate yield, while in the AASS 2023/24 map, there is low maize yield.

In Zanzibar, while some areas lack data, noticeable differences appear, such as AASS 2023/24 showing higher yields than the geospatial data in regions like Mjini Magharibi and Kaskazini Pemba, likely due to varying data methods and timeframes. Despite these variations, both datasets generally agree on the broader spatial yield patterns.

#### 6.4.2 Sorghum

Map 9 presents a spatially detailed visualization of sorghum yield (in kilograms per hectare) across Tanzania, using raster data from the FPRI's Global Spatially Disaggregated Crop Production Statistics (SPAM). The map is divided into two panels: Mainland Tanzania on the left, and Zanzibar on the right.

In Mainland Tanzania, Sorghum production exhibits a highly variable yield landscape, as revealed by SPAM raster data, shaped by both agro-ecological and socio-economic factors. Yield intensity is spatially dispersed, with clear regional contrasts.

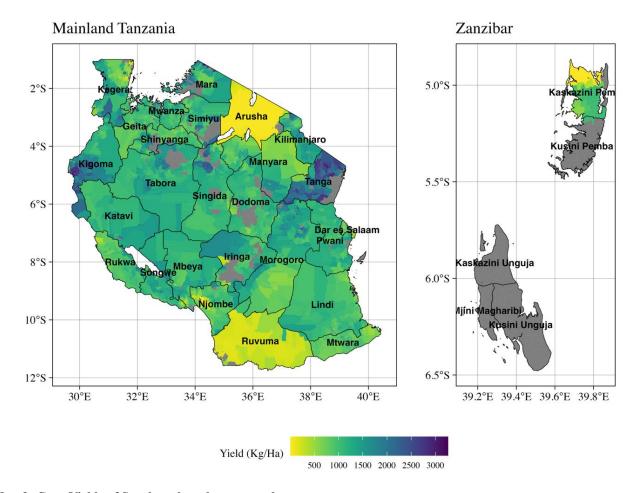
High-yielding areas (≥ 2,000 Kg/Ha), represented in dark purple, appear in localized zones rather than broad regional expanses. Notable pockets occur in parts of Kigoma, Singida, Kagera, and Tanga. These high-yielding clusters likely benefit from favorable altitude, reliable rainfall, and better land productivity, although their small scale suggests limited adoption of high-efficiency practices or niche sorghum production zones rather than widespread commercial cultivation.

Moderate-yield zones (1,000–2,000 Kg/Ha), shown in teal to green shades, cover significant portions of Dodoma, Singida, Morogoro, Mbeya, Ruvuma, and parts of Njombe. These areas are traditionally central to sorghum farming, especially semi-arid zones like Dodoma and Singida, where sorghum is favored for its drought resistance. The yields here reflect a mix of subsistence farming practices, variable rainfall, and partial uptake of improved inputs.

Low-yielding regions (≤ 1,000 Kg/Ha), shown in yellow highlight, dominate a broad swath of the country, including Arusha and Ruvuma. Despite some of these areas receiving moderate to high rainfall, low sorghum productivity may be driven by poor soil compatibility, limited input use, or diversion of land and labor to more favored crops such as maize, rice, or cassava.

Some parts of Iringa, Dodoma, Tabora, Singida, Shinyanga, Simiyu, and Tanga regions shaded in gray had no data. These are likely non-sorghum zones, possibly due to land-use constraints or unsuitable agro-climatic conditions. In such areas, sorghum is either not cultivated or not reported in significant quantities within the SPAM data framework.

In Zanzibar, sorghum cultivation is limited, with only Kaskazini Pemba showing measurable production, yielding around 1,000 Kg/Ha (in light green). The remaining parts in the Pemba and Unguja islands are shaded grey, reflecting either very limited cultivation or no data reported in the SPAM. This suggests that sorghum plays a minimal role in the islands' agricultural systems, where rice, cassava, and sweet potatoes dominate as primary staples.



Map 9: Crop Yields of Sorghum based on raster data

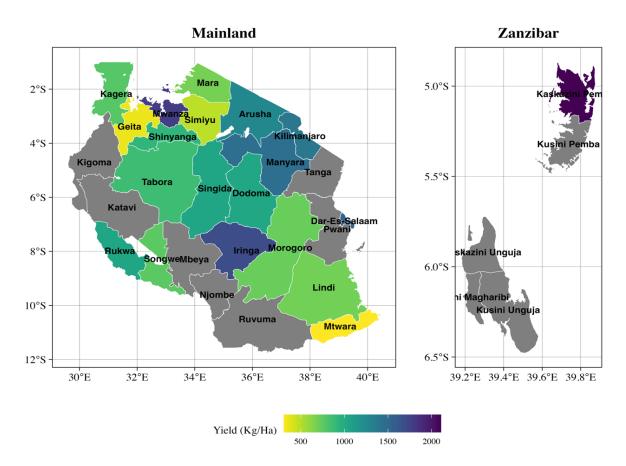
The 2023/24 AASS provides a spatially disaggregated view of sorghum yields across Tanzania, highlighting stark contrasts between regions. Map 10 illustrates yield levels in kilograms per hectare (Kg/Ha), with a gradient from low (yellow) to high (dark purple), and grey indicating areas with no reported production or missing data.

In Mainland Tanzania, Sorghum production displays a highly heterogeneous landscape, shaped by agro-ecological diversity and farming system variation. Iringa and Mwanza emerge as key high-yield regions, with sorghum yields exceeding 1,500 Kg/Ha. This is attributed to favorable climatic conditions, adoption of improved varieties, and consistent land management practices.

Moderate-yield (1,000–1,500 Kg/Ha) is evident in Dodoma, Singida, Morogoro, Mbeya, Rukwa, and Lindi regions. In central semi-arid areas like Dodoma and Singida, sorghum thrives due to its drought resistance. These yields reflect a balance between traditional practices and modest technology uptake.

Low-yield regions (≤ 1,000 Kg/Ha) include areas like Mtwara, Geita, and Mwanza. While some of these regions receive adequate rainfall, unfavorable soil compatibility and a focus on alternative staples such as maize, cassava may explain the underperformance.

In Zanzibar, Sorghum cultivation remains limited across Zanzibar. Kaskazini Pemba is the only region reporting significant yield, with estimates exceeding 2,000 Kg/Ha. This may result from localized agro-climatic advantages or targeted agricultural interventions.



Map 10: Crop Yields of Sorghum based on 2023/24 AASS

Note: For regions shaded grey, datasets are withheld to avoid disclosing data for individual holdings, or insufficient data is available from the survey

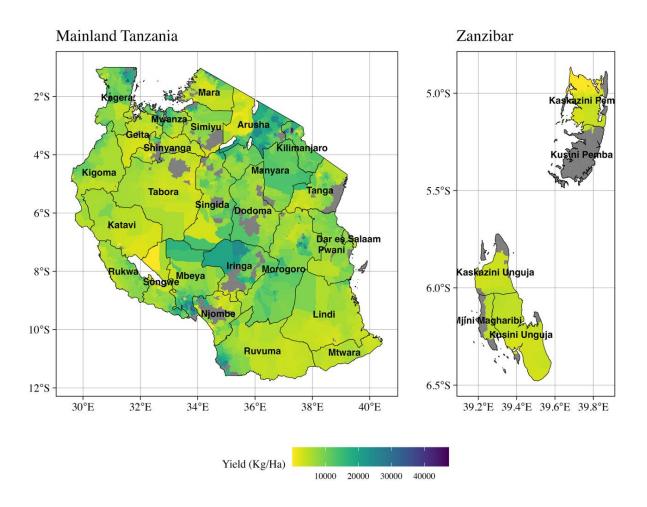
Generally, the 2023/24 AASS and the SPAM crop statistics highlight both alignment and divergence in the spatial distribution of sorghum yields across Tanzania. Both datasets identify high yields in Iringa and moderate productivity in Dodoma and Singida, while low yields are consistently reported in regions like Mtwara, Mwanza, and Geita. However, differences arise from the methods used. AASS provides region-level survey data, whereas SPAM offers finer, grid-based estimates. This allows SPAM to reveal local high-yield patches, such as in Kilimanjaro and Songwe, not captured in AASS. Conversely, AASS reports high yields in Kaskazini Pemba, which SPAM omits, possibly due to recent cultivation trends. Together, these datasets offer complementary value: AASS supports national planning, while SPAM helps identify localized production opportunities.

#### 6.4.3 Banana

Map 11 illustrates the spatial distribution of banana yield (Kg/Ha) across regions in Mainland Tanzania and Zanzibar as per SPAM data of 2020. The continuous color gradient, ranging from yellow (low yield) to dark purple (high yield), represents yield variation from less than 10,000 Kg/Ha to over 40,000 Kg/Ha. In Mainland Tanzania, some parts of Kagera, Arusha, Mbeya, and Iringa

regions exhibit relatively high banana yields, indicated by green shades. Conversely, areas such as Mtwara, Katavi, Tabora, and Geita display lower yields, shown in yellow.

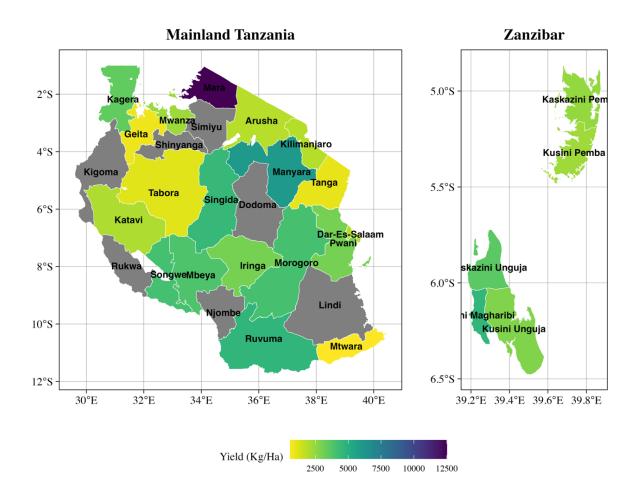
The banana yield distribution in Zanzibar reveals generally low productivity across most regions, with slightly better yields observed in parts of Kaskazini Unguja. Large portions of Kusini Pemba, Mjini Magharibi, and Kaskazini Unguja are shown in grey, indicating areas where no data or insufficient data were recorded. The absence of data in these regions may be due to limited agricultural activity, especially in urbanized zones like Mjini Magharibi or challenges in data collection. Overall, this pattern highlights the influence of both environmental factors and data availability in understanding banana yield distribution across Zanzibar.



Map 11: Crop Yields of Banana based on raster data

Map 12 presents the spatial distribution of banana yield (Kg/Ha) across regions in Mainland Tanzania and Zanzibar based on 2023/2024 AASS data. The color gradient, ranging from yellow (low yield) to dark purple (high yield), indicates yield levels between less than 2,500 Kg/Ha and over 12,500 Kg/Ha. In Mainland Tanzania, Mara region records the highest banana yield, as shown by the dark purple shade, while Mtwara, Tabora, Geita, and Tanga display the lowest yields, represented by yellow. Manyara region exhibits moderate yields, indicated by green shades.

In Zanzibar, higher yields are observed in Mjini Magharibi, whereas the two regions of Pemba (Kusini Pemba and Kaskazini Pemba) show relatively lower yields. The observed spatial variations may be attributed to differences in agro-climatic conditions, soil fertility, and farming practices across the regions.



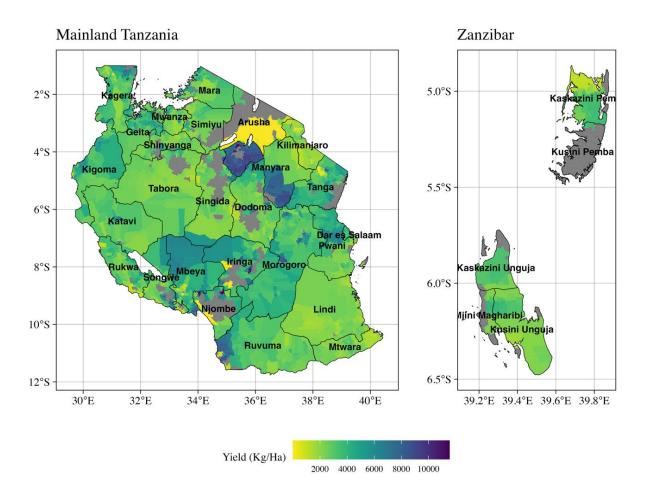
Map 12: Crop Yields of Banana based on 2023/24 AASS

Both the raster data (Map 11) and 2023/2024 AASS data (Map 12) show similar overall trends in banana yield, with high productivity observed in Mara. However, some differences appear in southern highlands areas such as parts of Iringa region, where the raster data indicates moderately higher yields compared to the 2023/2024 AASS data, which shows lower yields.

In Zanzibar, while some areas lack complete data, differences are evident. The 2023/2024 AASS data shows higher yields in Mjini Magharibi compared to the geospatial map, which shows lower yields in some parts of the region reports no data. These differences are likely due to variations in data sources, measurement scales, and timeframes collection. Despite these variations, both datasets generally agree on the broader spatial yield patterns across Mainland Tanzania and Zanzibar.

## **6.4.4 Paddy**

Map 13 shows the spatial distribution of paddy yield (Kg/Ha) across Mainland Tanzania and Zanzibar using raster data. The color gradient ranges from yellow (low yield, around 2,000 Kg/Ha) to dark purple (high yield, around 10,000 Kg/Ha). In Mainland Tanzania, the highest yields are concentrated in parts of Manyara, Ruvuma, Iringa, Pwani, and Mbeya, indicated by blue to purple shades. Moderate yields appear in regions such as Morogoro, Kigoma, and Tanga, shown in green. Lower yields dominate regions like Arusha and Kilimanjaro, represented in yellow. In Zanzibar, higher paddy yields are recorded in Kaskazini Pemba and parts of Kaskazini Unguja, while Kusini Pemba, Kusini Unguja, and Mjini Magharibi display comparatively moderate yields.

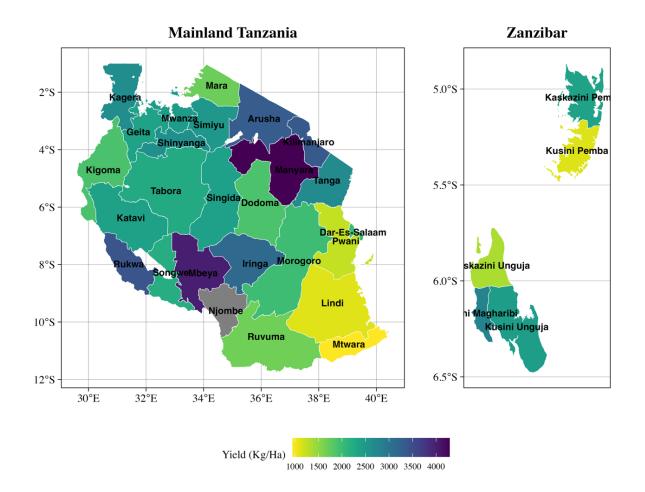


Map 13: Crop Yields of Paddy based on raster data

Map 14 shows the spatial distribution of paddy yield (Kg/Ha) across Mainland Tanzania and Zanzibar based on 2023/24 AASS data. The color gradient ranges from yellow (low yield, around 1,000 Kg/Ha) to dark purple (high yield, around 4,000 Kg/Ha). In Mainland Tanzania, the highest yields are concentrated in parts of Manyara and Mbeya, indicated by purple shades. Moderate yields appear in regions such as Rukwa, Kilimanjaro, Arusha and Iringa shown in dark blue. Lower yields dominate regions like Lindi, Pwani and Mtwara, represented in yellow.

In Zanzibar, higher paddy yields are recorded in Mjini Magharibi, Kusini Unguja and Kaskazini Pemba, shown light blue shades, while Kusini Pemba, Kaskazini Unguja, shown light green to yellow

shades, indicate lower yields. The spatial variation in productivity is likely influenced by differences in irrigation availability, rainfall patterns, and soil suitability.



Map 14: Crop Yields of Paddy based on 2023/24 AASS

Both the Geospatial data (Map 13) and AASS 2023/2024 data (Map 14) show similar overall trends in paddy yield, with high productivity concentrated in parts of Mbeya Ruvuma, and some northern and lake zone regions. In eastern and central regions such as Morogoro, Pwani, and Dodoma, both datasets indicate moderate yields, though the geospatial data reveals more spatial variation. In the southern zone, notable differences appear: the geospatial map shows moderate yields in Ruvuma and parts of Lindi, while the AASS 2023/2024 map records lower yields, particularly in Lindi and Mtwara.

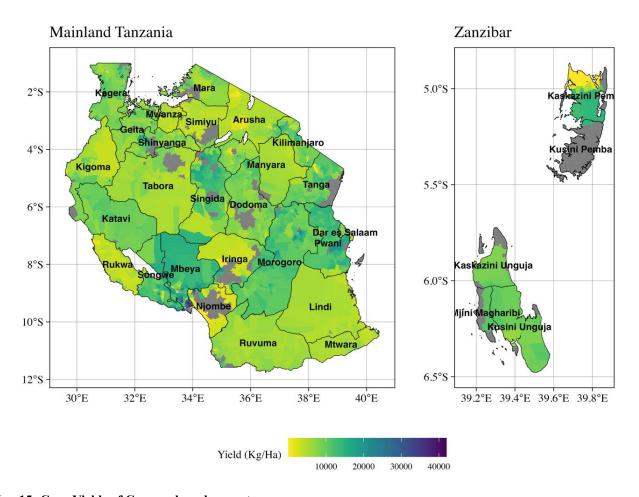
In Zanzibar, yield patterns differ between the datasets. The raster data records higher yields in Kaskazini Pemba and part of Kaskazini Unguja, whereas the AASS 2023/2024 data shows relatively higher yields in Mjini Magharibi, Kusini Unguja, and Kaskazini Pemba, with lower yields in Kusini Pemba and Kaskazini Unguja. These variations are likely due to differences in data sources, measurement resolution, and the timeframe of data collection. Despite these differences, both datasets broadly agree on the overall spatial distribution of paddy yields across Mainland Tanzania and Zanzibar.

#### 6.4.5 Cassava

Map 15 presents the cassava yield distribution in Tanzania, derived from geospatial data. Yield values are measured in kilograms per hectare (Kg/Ha) and displayed using a color gradient, ranging from yellow (low yield, around 10,000 Kg/Ha) to dark purple (very high yield, up to 40,000 Kg/Ha). The map is split into Mainland Tanzania and Zanzibar, allowing for a clear regional comparison of cassava productivity across the country.

In Mainland Tanzania, moderately to higher cassava yields are mostly concentrated in the Songwe, Mbeya, Morogoro, and Pwani regions. In contrast, regions such as Simiyu, Arusha, Lindi, Mtwara, Ruvuma, Iringa, Njombe, Rukwa, and Tabora show relatively lower yields, represented in yellow to light green. These regions may have less favourable conditions for cassava cultivation or limited investment in root crop production.

For Zanzibar, the cassava yield is generally lower, especially in Kusini Unguja and Kaskazini Unguja, as well as Mjini Magharibi, where grey shades dominate, suggesting minimal or no cassava production in certain zones. However, some regions like Kaskazini Pemba show better performance, marked by green shades indicating moderate yields, with a few pockets of lower productivity marked by yellow shades.

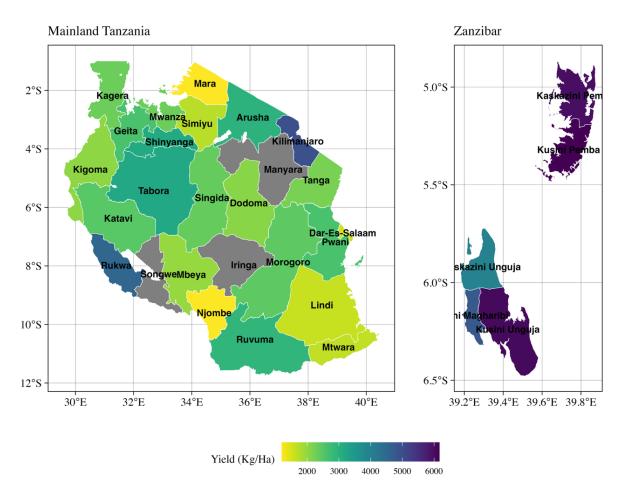


Map 15: Crop Yields of Cassava based on raster

Map 16 illustrates the cassava yield across various regions of Tanzania, measured in kilograms per hectare (Kg/Ha). The regions are color-coded based on yield levels, with yellow indicating lower yields (~2000 Kg/Ha) and dark purple indicating the highest yields (~6000 Kg/Ha). Mainland Tanzania shows considerable variation, with regions such as Kilimanjaro and Rukwa reporting some of the highest yields, while areas like Mara, Njombe, Lindi, Mtwara and Dar es Salaam show relatively lower production. Regions such as Tabora, Shinyanga, Arusha, and Ruvuma have moderate yields, suggesting better cassava performance compared to the low-yielding zones.

On the other hand, Zanzibar generally shows higher cassava yields compared to most of mainland Tanzania. The regions of Kaskazini Pemba, Kusini Pemba, and Kusini Unguja appear in darker purple, indicating very high yields, while Kaskazini Unguja and Mjini Magharibi report moderately high yields, but the lowest for Zanzibar's regions.

This suggests that cassava performs better in Pemba than Unguja and also performs better in many parts of Zanzibar than in most of mainland Tanzania, likely due to localized agroecological advantages or more focused production efforts, attributed to differences in soil fertility, agricultural practices, or climatic conditions.



Map 16: Crop Yields of Cassava based on 2023/24 AASS

Generally, cassava yield across Tanzania using geospatial modelling and the Annual Agricultural Sample Survey (AASS) reveals both overlaps and notable differences. Both datasets use a consistent colour scheme to indicate yield levels yellow for low, green for moderate, and purple for high yield but differ in spatial resolution and methodology. High-yield regions such as Songwe, Mbeya, Morogoro and Pwani (in geospatial data) contrast with AASS findings, which highlight low to moderate across many regions except for Kilimanjaro and Rukwa. This suggests differences in data sources and scales, pixel-level modelling versus regional averages.

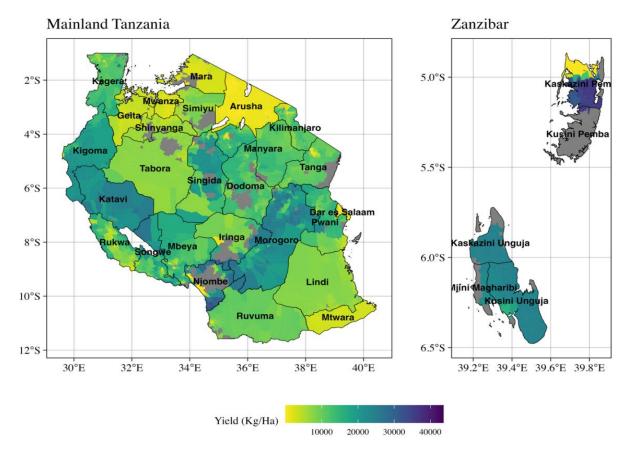
In Zanzibar, both datasets highlight regions like Kusini Unguja and Kaskazini Pemba as high-yielding, but diverge in places such as Kusini Pemba, which is marked as high-yielding in the AASS but lacks geospatial data. Kaskazini Unguja presents another case of mismatch, with AASS labeling it moderate yield, while geospatial data shows varying productivity across the region.

Finally, 2023/24 AASS shows that cassava yield in Zanzibar is better than in Mainland Tanzania, while the geospatial map indicates some parts of regions like Songwe, Mbeya, Singida, Morogoro, and Pwani perform much better compared to many regions of Zanzibar.

#### **6.4.6 Sweet Potatoes**

The SPAM-based yield map shows strong spatial variation in sweet potato productivity across Tanzania (Map 17). Highest yields (over 30,000 Kg/Ha) are found in Kigoma, Morogoro, Katavi, and some parts of the Singida region due to fertile soils, reliable rainfall, and crop integration. Moderate yields (20,000 to 30,000 Kg/Ha) appear in Kagera and Mbeya, where sweet potatoes are part of mixed cropping systems. Lower yields (under 15,000 Kg/Ha) are seen in Arusha, Mara, Mwanza, and Mtwara, likely due to soil or investment constraints.

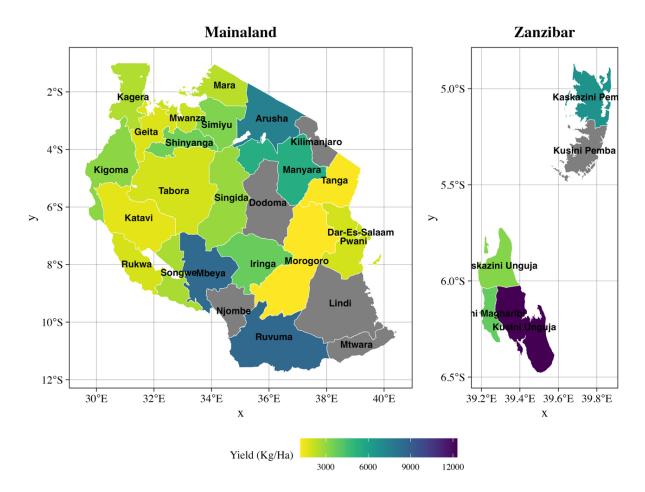
In Zanzibar, sweet potato yields are generally moderate to high, with some parts of Kaskazini Pemba exceeding 30,000 Kg/Ha, possibly due to strong demand and favorable conditions. Unguja's regions (Kaskazini, Mjini Magharibi, Kusini) report 20,000–30,000 Kg/Ha, with sweet potatoes often grown in home gardens.



Map 17: Crop Yields of Sweet Potatoes based on raster data

The 2024 Annual Agriculture Sample Survey (AASS) shows significant regional variation in sweet potato yields across Mainland Tanzania (Map 18). Highest yields are in Ruvuma, Mbeya, and Arusha regions, with yields exceeding 8,000 Kg/Ha. This is likely driven by favorable conditions and strong integration into local farming systems. Equally, yield in Manyara falls in the range of 6,000–8,000 Kg/Ha, confirming its importance in sweet potato production. Moderate yields (4,000–6,000 Kg/Ha) are found in Iringa, Shinyanga, and Kigoma regions, while lower yields (below 4,000 Kg/Ha) occur in Morogoro, Tanga, and Katavi, likely due to unfavorable soil conditions, low investment, or reduced crop focus.

In Zanzibar, yields are highest in Kusini Unguja (over 10,000 Kg/Ha), supported by intensive smallholder systems and urban market access. Kaskazini Pemba also performs well, while Kaskazini Unguja and Mjini Magharibi show moderate yields.



Map 18: Crop Yields of Sweet Potatoes based on 2023/24 AASS

Overall, the SPAM raster data and the 2023/24 AASS dataset both highlight high sweet potato yields in Tanzania's Southern Highlands, particularly in Ruvuma and Mbeya. In Zanzibar, both datasets recognize Kusini Unguja as high-yielding, though SPAM indicates broader high productivity across the islands. Generally, 2023/24 AASS offers accurate, policy-relevant field data, while SPAM provides spatial detail useful for localized planning. Together, they offer a fuller picture of sweet potato yield distribution in Tanzania

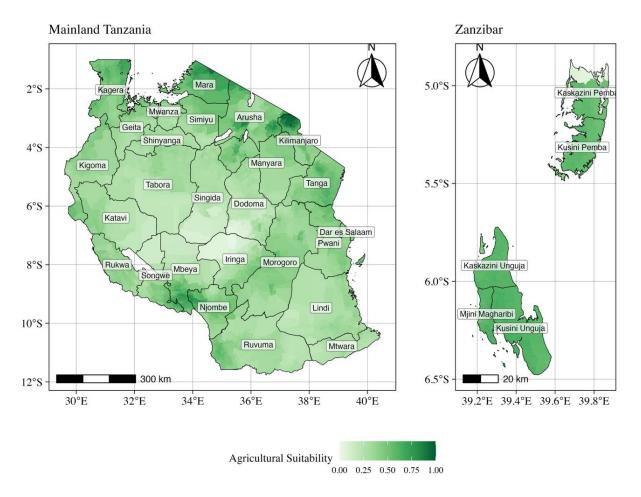
## 6.5 Agricultural Sustainability Index

Part three of this chapter integrates spatial data on crop yields and agricultural suitability across Tanzania to assess how well actual productivity aligns with agroecological potential. It focuses on six key crops: maize, paddy, banana, cassava, sweet potatoes, and sorghum. Central to this assessment is the construction of an Agricultural Suitability Index (ASI), which allows comparison between expected (potential) and realized (actual) performance. The Agricultural Suitability Index was developed using Principal Component Analysis (PCA) on four key geospatial variables: soil organic carbon, rainfall, climatic moisture balance (as captured by the Standardized Precipitation Evapotranspiration Index or SPEI), and physical accessibility. Each variable contributes a unique dimension to agricultural potential:

(i) Soil Organic Carbon reflects soil fertility, structure, and capacity to retain nutrients and moisture, making it a strong predictor of yield potential.

- (ii) Rainfall represents the average long-term water availability, crucial for crop growth, particularly in rainfed systems.
- (iii) SPEI captures deviations in climatic moisture balance over time, identifying areas more prone to drought or water stress.
- (iv) Accessibility reflects proximity to infrastructure such as markets, roads, and services, influencing both input access and post-harvest opportunities.

These four layers were standardized and combined using PCA, with the first principal component retained to form the ASI. This component captures the maximum variance across the four variables and represents a synthetic index of agricultural potential. The index is interpreted such that higher values represent higher agricultural suitability.



Map 19: Agricultural Sustainability Index based on Raster Data

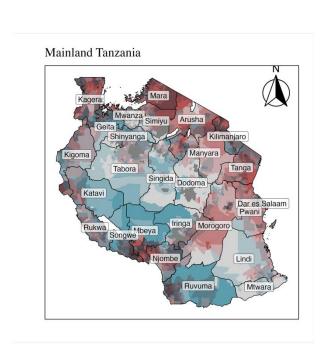
#### **6.5.1** Maize

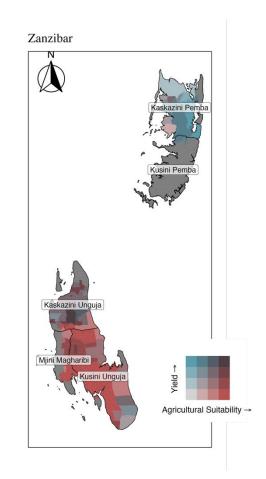
The spatial distribution of maize yield and agricultural suitability in Mainland Tanzania reveals a notable mismatch in several regions (Map 20). In the Southern Highlands, particularly northern Mbeya and Iringa, high yields are achieved despite moderate to low suitability. This suggests that strong local systems, such as improved seed access, input subsidies, and commercialization, play a key role in boosting productivity beyond ecological expectations. Similar patterns of yield

overperformance are evident in parts of Kigoma, Rukwa, and Tabora, where adaptive farming and market access support production.

Conversely, regions like Morogoro, Tanga, and parts of Kilimanjaro show high suitability but low yields. These underperforming zones highlight missed opportunities where ecological potential remains untapped. Rare areas, such as parts of Mara, Arusha, Kagera, and Geita, show good alignment between yield and suitability, but they are exceptions.

Maize production in Zanzibar displays a mixed pattern of yield and suitability across the islands. In Kaskazini Pemba, some areas combine relatively high maize yields with moderate suitability, suggesting targeted cultivation success. In Unguja, especially in Kusini Unguja, there is a noticeable mismatch between areas with good agricultural suitability that show low maize yields. This gap likely reflects constraints such as limited access to improved seed, inputs, or farmer preference for other staple crops. Mjini Magharibi, being more urban, shows low suitability and yield as expected. On the other hand, Kasikazini Unguja depicts signals of having both high yield and suitability.





Map 20: Agricultural Suitability and Maize Yield Based on Raster Data

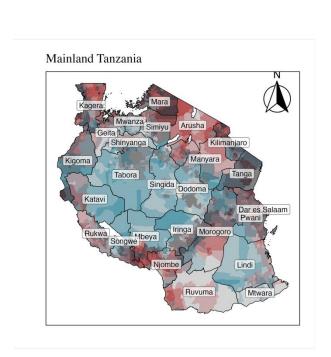
# 6.5.2 Sorghum

Map 21 illustrates the complex relationship between sorghum yield and agricultural suitability, revealing how resilience and tradition often outperform biophysical potential. In mainland Tanzania, blue-dominated regions such as Dodoma and Singida, and parts of Tabora, Katavi, Mbeya, and Lindi

show high sorghum yields despite low agroecological suitability. These are long-standing sorghum-growing areas where the crop's drought tolerance and adaptability make it a vital part of local farming systems.

On the other hand, red-dominated zones like Morogoro, and some parts of Ruvuma, Arusha, and Manyara, though ecologically suitable, show low yields, highlighting where sorghum is marginalized in favor of other crops like maize. Some areas, such as Mara and parts of Kilimanjaro, Tanga, Mbeya, and Songwe, show high yield and high suitability, representing strong candidates for scaling up production.

The Map of Zanzibar (Map 21) shows sorghum yield and agricultural suitability across Zanzibar's regions. In Kaskazini Pemba, blue patches suggest relatively high yields despite only moderate suitability, likely due to local farming practices, favorable microclimates, or effective smallholder management.





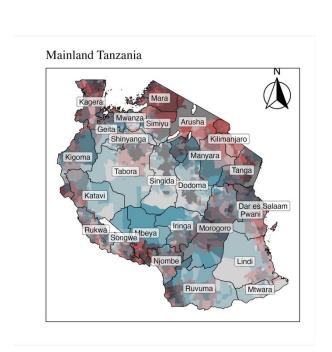
Map 21: Agricultural Suitability and Sorghum Yield Based on Raster Data

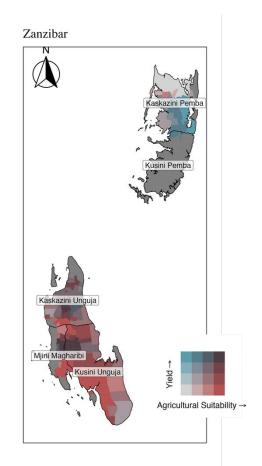
## **6.5.3 Paddy**

Map 22 illustrates the spatial distribution of agricultural suitability for paddy cultivation across Tanzania. The continuous color gradient, ranging from light grey to blue, represents low to high yield, while red to maroon represents low to high suitability for paddy production. In Mainland Tanzania, some parts of Kagera, Tanga, Mbeya, and Ruvuma regions exhibit both high yield and high

suitability. In contrast, areas such as the north part of Mbeya and Iringa and the Morogoro region record high yields but low suitability. Similarly, the regions such as Mara, Kilimanjaro, and some parts of Simiyu display low yields despite high suitability. Extensive light grey areas in Lindi, Mtwara, parts of Tabora, and Singida indicate low yield with low suitability.

In Zanzibar, some parts of Mjini Magharibi and Kusini Unguja demonstrate high yield with high suitability. Most parts of Kusini Unguja has low yield but high suitability. The southern part of Kaskazini Pemba records high yield with low suitability.





Map 22: Agricultural Suitability and Maize Yield Based on Raster Data

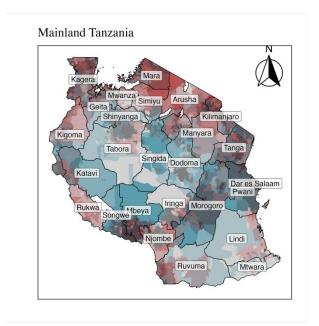
#### 6.5.4 Cassava

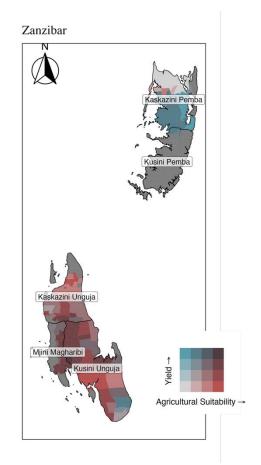
The relationship between cassava yield and agroecological suitability is often inconsistent, with many regions performing contrary to ecological expectations (Map 23). Areas with Low Suitability and Low Yield are shown in light blue on the map and are located primarily in the central and some western parts of Mainland Tanzania. These regions, such as Lindi, Mtwara, and parts of Iringa and Tabora, exhibit both low natural capacity for cassava farming and low actual yields. In Zanzibar, parts of Kaskazini Pemba fall into this category. This suggests that these areas may not be ideal for cassava production without significant investment in agricultural technologies, irrigation, or soil improvement.

In contrast, regions with Low Suitability but High Yield are indicated in dark blue. These are particularly interesting because they demonstrate successful cassava production despite challenging environmental conditions. Some parts of regions such as Morogoro, Songwe, Mbeya, Singida, and Dodoma fall into this category. For Zanzibar, a large part of Kaskazini Pemba shows this pattern. In these regions, high yields in low-suitability areas may result from strong farming techniques, irrigation, resilient cassava varieties, or favourable local microclimates. These regions serve as potential models for how to improve cassava productivity in other low-suitability zones and may benefit from deeper research into their agricultural practices.

High Suitability but Low Yield areas, shaded in light red, represent a mismatch between potential and actual productivity. These areas, including parts of Rukwa, Simiyu, Arusha, and Manyara, have favourable conditions for cassava farming but are not achieving high yields. In Zanzibar is shown in some parts of Kaskazini Unguja and a large area of Kusini Unguja. This underperformance may stem from issues such as limited access to quality inputs, poor extension services, low farmer capacity, or market access challenges. These regions offer significant opportunities for improvement; targeted interventions could unlock their latent productivity and contribute meaningfully to national cassava production.

Accordingly, regions with both High Suitability and High Yield, marked in dark red, are the top-performing zones for cassava cultivation. Examples include parts of Kagera, Mara, Kilimanjaro, Tanga, Arusha, and Mbeya, where environmental conditions are ideal and yields are correspondingly high. For Zanzibar, parts of Kusini Unguja and Mjini Magharibi fall into this category. These areas are the most productive and likely have well-established cassava farming systems. They should be considered priority zones for further investment, seed multiplication programs, processing infrastructure, and export-oriented value chains, given their proven potential



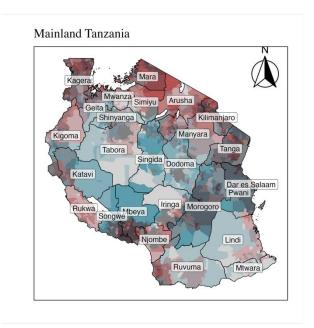


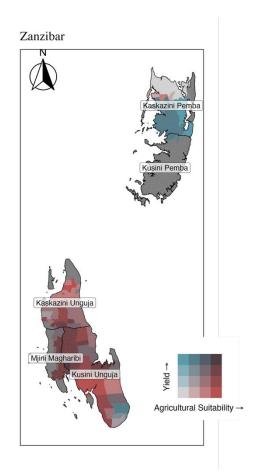
Map 23: Agricultural suitability and maize yield based on raster data

#### 6.5.5 Banana

Map 24 presents the spatial distribution of agricultural suitability for banana cultivation across Tanzania. The continuous color gradient, ranging from light grey to blue, indicates low to high yield and red to maroon, indicating low to high suitability of the banana crop. In Mainland Tanzania, some parts of Kagera, Kilimanjaro, Simiyu, Mbeya, and Mara regions depict high yield with high suitability for banana production, while some parts of Mbeya, Iringa, Dodoma, and Singida are in blue shades, indicating high yield with low suitability. Similarly, some parts of Mara and Arusha presented with red shades, indicating low yield with high suitability. In contrast, light grey patches dominate Tabora, Katavi, Songwe, Lindi, and Mtwara, reflecting low yield with low suitability.

In Zanzibar, the central zone in between Kusini Unguja and Mjini Magharibi, and some parts of Kaskazini Unguja indicate high yield with high suitability, while most areas of Kusini Unguja and some parts of Kaskazini Unguja are presented with red shades, indicating low yield with high suitability. Also, the southern part of Kaskazini Pemba presented with blue shades, indicating high yield with low suitability, while the northern part of Kaskazini Pemba presented with light grey, indicating low yield with low suitability.





Map 24: Agricultural suitability and maize yield based on raster data

## **6.5.6** Sweet potatoes

The spatial distribution of sweet potato yields relative to agroecological suitability was available for Mainland Tanzania only. As evidenced (Map 25), data reveal significant regional contrasts shaped by both environmental conditions and systemic agricultural factors.

Regions in light blue are both poorly suited for sweet potato cultivation and currently produce low yields. These areas face dual constraints, natural limitations (e.g., poor soils, inadequate rainfall), and low productivity. Examples include parts of Katavi, Tabora, Lindi, and Mtwara. These areas may not be ideal for sweet potato development unless backed by significant support through irrigation, improved seed varieties, or soil fertility programs.

Regions coloured in dark blue show high sweet potato yields despite being in areas of low agricultural suitability. This is an encouraging pattern that points to either strong local knowledge, resilient sweet potato varieties, or favourable localized microclimates. Notable examples include parts of Arusha, Manyara, Dodoma and Iringa. These regions are key for learning about best practices in sweet potato cultivation under suboptimal conditions, and they may be critical in breeding or dissemination programs.

Regions in light red have favourable environmental conditions for sweet potatoes but are currently underperforming in yield. Examples include parts of Mara and Arusha. The areas have untapped potential and are prime candidates for targeted interventions such as improved access to inputs, extension services, farmer training, or improved road/market access. Addressing the barriers in these areas could significantly boost national sweet potato production.

The dark red zones represent the ideal regions where both natural conditions and actual productivity are strong. Examples include portions of Kagera, Simiyu, Kilimanjaro, Tanga, Ruvuma and Mbeya. These high-performing areas should be considered for scaling up production, processing, storage, and value chain development. They may also serve as model regions for demonstrating improved practices and policy investment for this crop.

# Mainland Tanzania Arusha Simiyu Shinyanga Kilimanjaro Kigoma Tabora Tanga Singida Dodoma Katavi Dar es Salaam Iringa Morogoro Mbeya Songwe Njombe Lindi Ruvuma Mtwara

Map 25: Agricultural suitability and maize yield based on raster data in mainland Tanzania

# Annex A: Tables

Table 1-1: Survey Response Rate by Regions

		Agricultur	al Households	S		Large S	Scale Farms	
Region	Sample Size	Number of Eligible Cases	Number of Completed Interviews	Response Rate *	Sample Size	Number of Eligible Cases	Number of Completed Interviews	Response Rate *
Dodoma	815	814	813	99.9	20	20	20	100.0
Arusha	924	924	924	100.0	63	62	62	100.0
Kilimanjaro	634	634	633	99.8	76	76	76	100.0
Tanga	928	928	928	100.0	116	107	106	99.1
Morogoro	957	957	954	99.7	39	34	34	100.0
Pwani	373	373	372	99.7	42	40	40	100.0
Dar es Salaam	407	407	403	99.0	60	54	51	94.4
Lindi	288	288	288	100.0	41	38	38	100.0
Mtwara	420	420	420	100.0	61	59	58	98.3
Ruvuma	534	534	534	100.0	25	23	23	100.0
Iringa	588	588	588	100.0	54	54	50	92.6
Mbeya	923	923	923	100.0	68	67	66	98.5
Singida	588	588	588	100.0	26	26	25	96.2
Tabora	1,021	1,021	1,021	100.0	38	37	35	94.6
Rukwa	288	288	288	100.0	13	13	13	100.0
Kigoma	372	372	372	100.0	33	32	32	100.0
Shinyanga	444	444	443	99.8	37	37	37	100.0
Kagera	444	444	444	100.0	36	32	29	90.6
Mwanza	995	995	992	99.7	22	22	22	100.0
Mara	597	597	595	99.7	36	34	34	100.0
Manyara	984	984	984	100.0	36	36	35	97.2
Njombe	300	300	299	99.7	27	27	25	92.6
Katavi	384	384	384	100.0	15	14	14	100.0
Simiyu	552	552	552	100.0	81	81	81	100.0
Geita	888	888	888	100.0	36	32	32	100.0
Songwe	648	648	646	99.7	16	16	16	100.0
Mainland Tanzania	16,296	16,295	16,276	99.9	1,117	1,073	1,054	98.2
Kaskazini Unguja	312	312	312	100.0	12	12	12	100.0
Kusini Unguja	288	288	288	100.0	9	9	9	100.0
Mjini Magharibi	203	203	202	99.5	21	20	20	100.0
Kaskazini Pemba	396	396	396	100.0	3	3	3	100.0
Kusini Pemba	264	264	264	100.0	1	1	1	100.0
Zanzibar	1,463	1,463	1,462	99.9	46	45	45	100.0
Tanzania	17,759	17,758	17,738	99.9	1,163	1,118	1,099	98.3

<sup>(\*)</sup> Calculated on eligible cases

Table 2-1: Number and Percentage of Agricultural Households by Season and Region during 2023/24 Agricultural Year

		Short Ra	iny Season	Long Ra	iny Season			Agric	ultural Year 202	23/24	
Holding Category	Region	Number of Cropping Households	Percentage Cropping Households*	Number of Cropping Households	Percentage Cropping Households*	Number of Cropping Households	Percentage Cropping Households*	Number of Livestock Households	Percentage Livestock Households*	Number Agricultural Households	Percentage Agricultural Households
	Dodoma	39,699	1.1	516,824	7.2	551,662	6.3	286,646	5.7	554,229	6.3
	Arusha	117,166	3.3	287,165	4.0	296,443	3.4	262,856	5.2	337,893	3.8
	Kilimanjaro	260,645	7.4	304,608	4.3	328,350	3.8	275,279	5.5	335,038	3.8
	Tanga	346,789	9.9	367,543	5.1	453,930	5.2	176,358	3.5	462,705	5.2
	Morogoro	124,693	3.6	511,666	7.1	559,499	6.4	232,381	4.6	560,402	6.4
	Pwani	203,460	5.8	162,488	2.3	251,786	2.9	156,526	3.1	260,870	3.0
	Dar es Salaam	119,588	3.4	151,318	2.1	222,971	2.6	62,229	1.2	240,302	2.7
	Lindi	65,827	1.9	278,495	3.9	278,495	3.2	102,795	2.0	278,495	3.2
	Mtwara	-	-	394,185	5.5	394,185	4.5	170,418	3.4	394,185	4.5
	Ruvuma	-	-	375,248	5.2	375,248	4.3	95,298	1.9	376,482	4.3
	Iringa	17,293	0.5	236,251	3.3	236,712	2.7	165,747	3.3	237,593	2.7
	Mbeya	55,696	1.6	382,383	5.3	391,172	4.5	187,423	3.7	392,784	4.5
	Singida	2,125	0.1	307,297	4.3	308,197	3.5	220,430	4.4	308,865	3.5
	Tabora	160,917	4.6	303,919	4.2	444,154	5.1	288,393	5.7	445,287	5.0
	Rukwa	1,676	0.0	246,950	3.4	246,950	2.8	167,166	3.3	247,755	2.8
	Kigoma	290,759	8.3	45,293	0.6	315,866	3.6	144,918	2.9	319,041	3.6
Agricultural	Shinyanga	5,400	0.2	274,062	3.8	274,062	3.1	212,311	4.2	275,616	3.1
Households	Kagera	529,821	15.1	426,982	6.0	544,333	6.3	347,040	6.9	547,688	6.2
	Mwanza	377,689	10.8	135,825	1.9	398,934	4.6	219,364	4.3	401,817	4.6
	Mara	277,976	7.9	235,472	3.3	316,782	3.6	249,899	4.9	322,745	3.7
	Manyara	38,416	1.1	279,889	3.9	302,003	3.5	198,386	3.9	307,998	3.5
	Njombe	26,238	0.7	184,937	2.6	195,500	2.2	147,505	2.9	195,500	2.2
	Katavi	-	0.0	150,672	2.1	150,672	1.7	98,110	1.9	150,931	1.7
	Simiyu	98,535	2.8	189,302	2.6	257,762	3.0	199,475	3.9	258,204	2.9
	Geita	334,231	9.5	172,547	2.4	361,957	4.2	185,886	3.7	363,210	4.1
	Songwe	7,512	0.2	245,727	3.4	245,727	2.8	197,415	3.9	245,965	2.8
	Mainland Tanzania	3,503,117	100.0	7,167,048	100.0	8,703,351	100.0	5,050,256	100.0	8,821,600	100.0
	Kaskazini Unguja	22,137	17.3	11,302	9.5	26,144	18.0	13,042	13.9	27,789	18.5
	Kusini Unguja	25,702	20.1	24,727	20.8	27,252	18.7	18,405	19.6	27,721	18.5
	Mjini Magharibi	26,886	21.0	22,328	18.8	29,846	20.5	14,642	15.6	32,235	21.5
	Kaskazini Pemba	30,247	23.6	32,547	27.4	33,005	22.7	25,364	27.0	33,005	22.0
	Kusini Pemba	23,106	18.0	27,860	23.5	29,386	20.2	22,358	23.8	29,444	19.6
	Zanzibar	128,078	100.0	118,765	100.0	145,632	100.0	93,811	100.0	150,194	100.0
	Tanzania	3,631,195	100.0	7,285,813	100.0	8,848,983	100.0	5,144,067	100.0	8,971,794	100.0
Larga Casts	Mainland Tanzania	375	94.5	820	97.3	854	97.3	613	94.5	993	95.7
Large Scale Farms	Zanzibar	22	5.5	23	2.7	24	2.7	36	5.5	45	4.3
1.411118	Tanzania	397	100.0	843	100.0	878	100.0	649	100.0	1,038	100.0

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

<sup>\*</sup> Column percentage

Table 2-2: Number and Percentage of Agricultural Households by Sex of the Household Head and Region during 2023/24 Agricultural Year

n .	Percentage of Agr	ricultural Households	Number of
Region	Male-Headed	Female-Headed	Agricultural Households
Dodoma	72.8	27.2	554,229
Arusha	73.6	26.4	337,893
Kilimanjaro	73.4	26.6	335,038
Tanga	73.7	26.3	462,705
Morogoro	74.8	25.2	560,402
Pwani	77.9	22.1	260,870
Dar es Salaam	67.5	32.5	240,302
Lindi	71.4	28.6	278,495
Mtwara	68.1	31.9	394,185
Ruvuma	80.7	19.3	376,482
Iringa	72.4	27.6	237,593
Mbeya	75.6	24.4	392,784
Singida	77.2	22.8	308,865
Tabora	83.7	16.3	445,287
Rukwa	80.7	19.3	247,755
Kigoma	77.7	22.3	319,041
Shinyanga	75.7	24.3	275,616
Kagera	76.1	23.9	547,688
Mwanza	74.8	25.2	401,817
Mara	73.1	26.9	322,745
Manyara	80.4	19.6	307,998
Njombe	71.9	28.1	195,500
Katavi	83.3	16.7	150,931
Simiyu	73.5	26.5	258,204
Geita	78.7	21.3	363,210
Songwe	83.9	16.1	245,965
Mainland Tanzania	75.7	24.3	8,821,600
Kaskazini Unguja	83.4	16.6	27,789
Kusini Unguja	77.8	22.2	27,721
Mjini Magharibi	83.8	16.2	32,235
Kaskazini Pemba	72.2	27.8	33,005
Kusini Pemba	82.0	18.0	29,444
Zanzibar	79.7	20.3	150,194
Tanzania	75.8	24.2	8,971,794

Table 2-3: Number and Percentage of Agricultural Households Engaged Cropping by Sex of Head during 2023/24 Agricultural Year

D!	Number of Agricultural Households			Number of	<b>Households Practicing</b>	Cropping	Percentage of Households Practicing Cropping			
Region	Male-Headed	Female-Headed	All	Male-Headed	Female-Headed	All	Male-Headed	Female-Headed	All	
Dodoma	403,573	150,656	554,229	401,417	150,245	551,662	99.5	99.7	99.5	
Arusha	248,822	89,071	337,893	224,923	71,519	296,443	90.4	80.3	87.7	
Kilimanjaro	246,006	89,032	335,038	240,910	87,440	328,350	97.9	98.2	98.0	
Tanga	341,221	121,484	462,705	335,520	118,411	453,930	98.3	97.5	98.1	
Morogoro	419,112	141,290	560,402	418,208	141,290	559,499	99.8	100.0	99.8	
Pwani	203,231	57,639	260,870	194,147	57,639	251,786	95.5	100.0	96.5	
Dar es Salaam	162,214	78,088	240,302	149,537	73,434	222,971	92.2	94.0	92.8	
Lindi	198,820	79,675	278,495	198,820	79,675	278,495	100.0	100.0	100.0	
Mtwara	268,355	125,830	394,185	268,355	125,830	394,185	100.0	100.0	100.0	
Ruvuma	303,889	72,593	376,482	302,656	72,593	375,248	99.6	100.0	99.7	
Iringa	172,067	65,526	237,593	171,186	65,526	236,712	99.5	100.0	99.6	
Mbeya	297,049	95,735	392,784	296,550	94,622	391,172	99.8	98.8	99.6	
Singida	238,369	70,496	308,865	237,701	70,496	308,197	99.7	100.0	99.8	
Tabora	372,818	72,469	445,287	372,038	72,116	444,154	99.8	99.5	99.7	
Rukwa	199,821	47,934	247,755	199,017	47,934	246,950	99.6	100.0	99.7	
Kigoma	247,890	71,151	319,041	246,028	69,838	315,866	99.2	98.2	99.0	
Shinyanga	208,557	67,059	275,616	207,783	66,279	274,062	99.6	98.8	99.4	
Kagera	416,950	130,739	547,688	415,523	128,810	544,333	99.7	98.5	99.4	
Mwanza	300,507	101,310	401,817	298,199	100,735	398,934	99.2	99.4	99.3	
Mara	236,022	86,723	322,745	230,764	86,018	316,782	97.8	99.2	98.2	
Manyara	247,518	60,480	307,998	243,838	58,165	302,003	98.5	96.2	98.1	
Njombe	140,651	54,849	195,500	140,651	54,849	195,500	100.0	100.0	100.0	
Katavi	125,769	25,162	150,931	125,509	25,162	150,672	99.8	100.0	99.8	
Simiyu	189,662	68,542	258,204	189,220	68,542	257,762	99.8	100.0	99.8	
Geita	285,990	77,220	363,210	284,737	77,220	361,957	99.6	100.0	99.7	
Songwe	206,291	39,674	245,965	206,053	39,674	245,727	99.9	100.0	99.9	
Mainland Tanzania	6,681,176	2,140,424	8,821,600	6,599,292	2,104,059	8,703,351	98.8	98.3	98.7	
Kaskazini Unguja	23,169	4,620	27,789	21,622	4,522	26,144	93.3	97.9	94.1	
Kusini Unguja	21,556	6,165	27,721	21,179	6,072	27,252	98.3	98.5	98.3	
Mjini Magharibi	27,011	5,224	32,235	24,788	5,058	29,846	91.8	96.8	92.6	
Kaskazini Pemba	23,831	9,174	33,005	23,831	9,174	33,005	100.0	100.0	100.0	
Kusini Pemba	24,142	5,302	29,444	24,084	5,302	29,386	99.8	100.0	99.8	
Zanzibar	119,709	30,485	150,194	115,504	30,128	145,632	96.5	98.8	97.0	
Tanzania	6,800,885	2,170,909	8,971,794	6,714,796	2,134,187	8,848,983	98.7	98.3	98.6	

Table 2-4: Number and Percentage of Agriculture Households Engaged in Rearing Livestock, by Sex of Head During 2023/24 Agricultural Year

D	Numb	er of Agricu Households		Number (	of Household Livestock	ls Rearing	Percentage of Household Rearing Livestock			
Region	Male- Headed	Female- Headed	All	Male- Headed	Female- Headed	All	Male- Headed	Female- Headed	All	
Dodoma	403,573	150,656	554,229	230,806	55,840	286,646	57.2	37.1	51.7	
Arusha	248,822	89,071	337,893	196,684	66,172	262,856	79.0	74.3	77.8	
Kilimanjaro	246,006	89,032	335,038	203,487	71,792	275,279	82.7	80.6	82.2	
Tanga	341,221	121,484	462,705	136,162	40,197	176,358	39.9	33.1	38.1	
Morogoro	419,112	141,290	560,402	185,260	47,121	232,381	44.2	33.4	41.5	
Pwani	203,231	57,639	260,870	126,837	29,689	156,526	62.4	51.5	60.0	
Dar es Salaam	162,214	78,088	240,302	46,436	15,794	62,229	28.6	20.2	25.9	
Lindi	198,820	79,675	278,495	77,054	25,741	102,795	38.8	32.3	36.9	
Mtwara	268,355	125,830	394,185	127,058	43,359	170,418	47.3	34.5	43.2	
Ruvuma	303,889	72,593	376,482	85,105	10,193	95,298	28.0	14.0	25.3	
Iringa	172,067	65,526	237,593	126,552	39,195	165,747	73.5	59.8	69.8	
Mbeya	297,049	95,735	392,784	151,543	35,880	187,423	51.0	37.5	47.7	
Singida	238,369	70,496	308,865	177,454	42,977	220,430	74.4	61.0	71.4	
Tabora	372,818	72,469	445,287	247,550	40,843	288,393	66.4	56.4	64.8	
Rukwa	199,821	47,934	247,755	140,059	27,107	167,166	70.1	56.6	67.5	
Kigoma	247,890	71,151	319,041	120,445	24,472	144,918	48.6	34.4	45.4	
Shinyanga	208,557	67,059	275,616	161,827	50,484	212,311	77.6	75.3	77.0	
Kagera	416,950	130,739	547,688	281,691	65,349	347,040	67.6	50.0	63.4	
Mwanza	300,507	101,310	401,817	172,935	46,429	219,364	57.5	45.8	54.6	
Mara	236,022	86,723	322,745	186,072	63,827	249,899	78.8	73.6	77.4	
Manyara	247,518	60,480	307,998	164,691	33,695	198,386	66.5	55.7	64.4	
Njombe	140,651	54,849	195,500	107,776	39,729	147,505	76.6	72.4	75.4	
Katavi	125,769	25,162	150,931	85,222	12,888	98,110	67.8	51.2	65.0	
Simiyu	189,662	68,542	258,204	151,423	48,053	199,475	79.8	70.1	77.3	
Geita	285,990	77,220	363,210	151,105	34,781	185,886	52.8	45.0	51.2	
Songwe	206,291	39,674	245,965	168,698	28,717	197,415	81.8	72.4	80.3	
Mainland Tanzania	6,681,176	2,140,424	8,821,600	4,009,930	1,040,326	5,050,256	60.0	48.6	57.2	
Kaskazini Unguja	23,169	4,620	27,789	11,922	1,120	13,042	51.5	24.2	46.9	
Kusini Unguja	21,556	6,165	27,721	14,980	3,425	18,405	69.5	55.6	66.4	
Mjini Magharibi	27,011	5,224	32,235	12,418	2,224	14,642	46.0	42.6	45.4	
Kaskazini Pemba	23,831	9,174	33,005	18,465	6,899	25,364	77.5	75.2	76.8	
Kusini Pemba	24,142	5,302	29,444	19,246	3,112	22,358	79.7	58.7	75.9	
Zanzibar	119,709	30,485	150,194	77,031	16,780	93,811	64.3	55.0	62.5	
Tanzania	6,800,885	2,170,909	8,971,794	4,086,961	1,057,106	5,144,067	60.1	48.7	57.3	

Table 2-5: Number and Percentage of Agriculture Households Engaged in Aquaculture Farming, by Sex of Head during 2023/24 Agricultural Year

Dorion	Numl	per of Agricu Households			er of Aquac Households	ulture	Percentage of Aquaculture Households			
Region	Male- Headed	Female- Headed	All	Male- Headed	Female- Headed	All	Male- Headed	Female- Headed	All	
Dodoma	403,573	150,656	554,229	-	-	-	0.0	0.0	0.0	
Arusha	248,822	89,071	337,893	-	-	-	0.0	0.0	0.0	
Kilimanjaro	246,006	89,032	335,038	-	-	1,296	0.5	0.2	0.4	
Tanga	341,221	121,484	462,705	-	-	-	0.0	0.4	0.1	
Morogoro	419,112	141,290	560,402	-	-	-	0.0	0.0	0.0	
Pwani	203,231	57,639	260,870	-	-	-	0.0	0.0	0.0	
Dar es Salaam	162,214	78,088	240,302	-	-	-	0.6	0.0	0.4	
Lindi	198,820	79,675	278,495	-	-	-	0.0	0.0	0.0	
Mtwara	268,355	125,830	394,185	-	-	-	0.0	0.0	0.0	
Ruvuma	303,889	72,593	376,482	7,107	-	7,107	2.3	0.0	1.9	
Iringa	172,067	65,526	237,593	-	-	-	0.5	0.0	0.3	
Mbeya	297,049	95,735	392,784	-	-	-	0.2	0.0	0.1	
Singida	238,369	70,496	308,865	-	-	-	0.0	0.0	0.0	
Tabora	372,818	72,469	445,287	-	-	-	0.0	0.0	0.0	
Rukwa	199,821	47,934	247,755	-	-	-	0.0	0.0	0.0	
Kigoma	247,890	71,151	319,041	-	-	-	0.0	0.0	0.0	
Shinyanga	208,557	67,059	275,616	-	-	-	0.2	0.0	0.2	
Kagera	416,950	130,739	547,688	-	-	-	0.0	0.0	0.0	
Mwanza	300,507	101,310	401,817	-	-	-	0.0	0.0	0.0	
Mara	236,022	86,723	322,745	-	-	-	0.0	0.0	0.0	
Manyara	247,518	60,480	307,998	-	-	-	0.0	0.0	0.0	
Njombe	140,651	54,849	195,500	-	-	-	0.0	0.0	0.0	
Katavi	125,769	25,162	150,931	-	-	-	0.0	0.0	0.0	
Simiyu	189,662	68,542	258,204	-	-	-	0.0	0.0	0.0	
Geita	285,990	77,220	363,210	-	-	-	0.0	0.0	0.0	
Songwe	206,291	39,674	245,965	1,812	-	2,406	0.9	1.5	1.0	
Mainland Tanzania	6,681,176	2,140,424	8,821,600	12,676	1,201	13,877	0.2	0.1	0.2	
Kaskazini Unguja	23,169	4,620	27,789	-	-	-	0.0	0.0	0.0	
Kusini Unguja	21,556	6,165	27,721	826	277	1,103	3.8	4.5	4.0	
Mjini Magharibi	27,011	5,224	32,235	-	-	-	0.0	0.0	0.0	
Kaskazini Pemba	23,831	9,174	33,005	3,493	1,228	4,720	14.7	13.4	14.3	
Kusini Pemba	24,142	5,302	29,444	628	323	950	2.6	6.1	3.2	
Zanzibar	119,709	30,485	150,194	4,946	1,827	6,773	4.1	6.0	4.5	
Tanzania	6,800,885	2,170,909	8,971,794	17,622	3,028	20,650	0.3	0.1	0.2	

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 2-6: Number and Percentage Distribution of Agricultural Households' Members making Decisions, by Sex during 2023/24 Agricultural Year

Region	Total Number of Decision Makers in Agricultural Households	Males (%)	Females (%)
Dodoma	868,243	53.8	46.2
Arusha	580,549	53.1	46.9
Kilimanjaro	585,261	48.3	51.7
Tanga	808,722	52.8	47.2
Morogoro	1,063,945	48.7	51.3
Pwani	519,963	48.6	51.4
Dar es Salaam	348,600	48.7	51.3
Lindi	529,018	47.2	52.8
Mtwara	672,718	44.8	55.2
Ruvuma	717,667	49.4	50.6
Iringa	464,617	47.5	52.5
Mbeya	666,758	49.5	50.5
Singida	594,141	50.8	49.2
Tabora	874,968	57.6	42.4
Rukwa	352,945	61.8	38.2
Kigoma	595,991	47.9	52.1
Shinyanga	671,960	49.2	50.8
Kagera	1,220,791	47.4	52.6
Mwanza	785,388	50.3	49.7
Mara	705,318	49.6	50.4
Manyara	564,572	54.2	45.8
Njombe	339,541	46.4	53.6
Katavi	300,479	50.3	49.7
Simiyu	689,110	49.9	50.1
Geita	718,843	52.3	47.7
Songwe	522,798	49.1	50.9
Mainland Tanzania	16,762,903	50.3	49.7
Kaskazini Unguja	53,463	49.2	50.8
Kusini Unguja	48,426	56.7	43.3
Mjini Magharibi	54,441	58.1	41.9
Kaskazini Pemba	59,367	57.1	42.9
Kusini Pemba	58,287	55.8	44.2
Zanzibar	273,984	55.4	44.6
Tanzania	17,036,888	50.4	49.6

Table 2-7: Number and Percentage Distribution of Agricultural Households' Members Making Decisions that Received Training in Agriculture, by Age and Sex During 2023/24 Agricultural Year

	Ma	Mainland Tanzania			Zanzibar		Tanzania			
Age category	Sex of Hou Memb		Total Number of Decision Makers	Sex of Hou Mem		Total Number of Decision Makers	Sex of Households' Members		Total Number of Decision Makers	
	Female (%)	Male (%)	(N)	Female (%)	Male (%)	(N)	Female (%)	Male (%)	(N)	
15 - 34	49.7	50.3	295,241	50.6	49.4	12,546	49.8	50.2	307,787	
35 - 44	61.9	38.1	214,915	52.1	47.9	10,711	61.5	38.5	225,627	
45 - 59	63.6	36.4	352,931	60.4	39.6	15,478	63.4	36.6	368,410	
60+	72.5	27.5	206,833	72.5	27.5	9,313	72.5	27.5	216,146	
Total	61.2	38.8	1,069,921	58.3	41.7	48,049	61.0	39.0	1,117,970	

Table 3-1: Holding Land Size and Planted Area by Season During 2023/24 Agricultural Year

		Agricultur 2023		Short Rain	ny Season	Long Rain	y Season
Holding Category	Region	Holding L	and Size	Planted A	Area (ha)	Planted A	rea (ha)
		Total	Average	Total	Average	Total	Average
	Dodoma	1,039,470	1.9	110,088	2.8	960,572	1.9
	Arusha	367,717	1.1	77,725	0.7	318,956	1.1
	Kilimanjaro	305,641	0.9	169,022	0.6	222,544	0.7
	Tanga	540,377	1.2	359,761	1.0	382,281	1.0
	Morogoro	874,649	1.6	145,802	1.2	768,790	1.5
	Pwani	337,263	1.3	234,052	1.2	222,465	1.4
	Dar es Salaam	261,281	1.1	114,631	1.0	167,532	1.1
	Lindi	720,302	2.6	173,091	2.6	720,302	2.6
	Mtwara	806,282	2.0	-	-	805,336	2.0
	Ruvuma	946,977	2.5	-	-	925,090	2.5
	Iringa	532,216	2.2	21,369	1.2	471,079	2.0
	Mbeya	450,981	1.1	27,851	0.5	442,937	1.2
	Singida	629,222	2.0	1,578	0.7	613,845	2.0
	Tabora	986,835	2.2	245,263	1.5	727,011	2.4
	Rukwa	432,473	1.7	5,286	3.2	426,561	1.7
	Kigoma	207,619	0.7	184,088	0.6	26,814	0.6
	Shinyanga	585,159	2.1	15,988	3.0	578,977	2.1
Agricultural Households	Kagera	466,357	0.9	442,746	0.8	339,344	0.8
	Mwanza	506,392	1.3	435,697	1.2	147,084	1.1
	Mara	357,745	1.1	287,419	1.0	213,792	0.9
	Manyara	597,792	1.9	50,204	1.3	521,385	1.9
	Njombe	214,952	1.1	27,087	1.0	196,909	1.1
	Katavi	302,036	2.0	-	-	301,931	2.0
	Simiyu	621,182	2.4	228,266	2.3	414,484	2.2
	Geita	462,753	1.3	374,971	1.1	167,461	1.0
	Songwe	469,507	1.9	7,939	1.1	466,615	1.9
	Mainland Tanzania	14,023,184	1.6	3,744,215	1.1	11,550,097	1.6
	Kaskazini Unguja	9,371	0.3	6,813	0.3	3,646	0.3
	Kusini Unguja	17,570	0.6	16,352	0.6	15,447	0.6
	Mjini Magharibi	13,699	0.4	11,160	0.4	8,593	0.4
	Kaskazini Pemba	19,146	0.6	14,066	0.5	16,905	0.5
	Kusini Pemba	20,747	0.7	13,030	0.6	17,351	0.6
	Zanzibar	80,533	0.5	61,421	0.5	61,942	0.5
	Tanzania	14,103,717	1.6	3,805,636	1.0	11,612,038	1.6
	Mainland Tanzania	630,594	598.9	193,735	516.6	325,457	396.9
Large Scale Farms	Zanzibar	2,405	53.4	2,243	101.9	935	40.7
Large Scale Farms	Tanzania	632,999	576.5	195,978	493.6	326,392	387.2
	Mainland Tanzania	14,653,778	1.7	3,937,950	1.1	11,875,554	1.7
All Holdings	Zanzibar	82,938	0.6	63,664	0.5	62,877	0.5
	Tanzania	14,736,717	1.6	4,001,614	1.1	11,938,431	1.6

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

<sup>\*</sup> Total land area (whether planted with crop or not)

Table 3-2: Land Area Used by Planting system, Season and State during 2023/24 Agricultural Year

				Short Rain	y Season	
Holding Category	State	Land use	Total (Ha)	Percentage of Crop Growing Holdings	Crop Growing Households	Number Agricultural Holdings
		Temporary Mono Cropping	1,968,535	46	1,930,902	4,195,312
		Temporary Mixed Cropping	867,271	31	1,308,629	4,195,312
	Mainland	Temporary Left Fallow	1,500,766	21	861,549	4,195,312
	Tanzania	Permanent & Temporary Mixed Cropping	575,020	14	584,119	4,195,312
		Permanent Mono Cropping	325,534	8	324,301	4,195,312
		Permanent Mixed Cropping	241,086	16	659,509	4,195,312
		Temporary Mono Cropping	24,667	54	70,732	129,900
		Temporary Mixed Cropping	7,243	27	34,633	129,900
Agricultural		Temporary Left Fallow	1,350	3	4,048	129,900
Households	Zanzibar	Permanent & Temporary Mixed Cropping	22,919	27	35,307	129,900
		Permanent Mono Cropping	10,529	34	44,162	129,900
		Permanent Mixed Cropping	12,591	28	36,477	129,900
		Temporary Mono Cropping	1,993,202	46	2,001,634	4,325,212
		Temporary Mixed Cropping	874,514	31	1,343,262	4,325,212
	Tanzania	Temporary Left Fallow	1,502,116	20	865,597	4,325,212
		Permanent & Temporary Mixed Cropping	597,940	14	619,426	4,325,212
		Permanent Mono Cropping	336,063	9	368,463	4,325,212
		Permanent Mixed Cropping	253,677	16	695,986	4,325,212
		Temporary Mono Cropping	44,256	31	137	443
		Temporary Mixed Cropping	217	3	13	443
	Mainland	Temporary Left Fallow	27,100	27	121	443
	Tanzania	Permanent & Temporary Mixed Cropping	3,728	4	17	443
		Permanent Mono Cropping	146,846	53	236	443
		Permanent Mixed Cropping	194	3	14	443
		Temporary Mono Cropping	183	50	11	22
		Temporary Mixed Cropping	2	14	3	22
Large Scale		Temporary Left Fallow	-	0	-	22
Farms	Zanzibar	Permanent & Temporary Mixed Cropping	3	14	3	22
		Permanent Mono Cropping	1,897	55	12	22
		Permanent Mixed Cropping	77	36	8	22
		Temporary Mono Cropping	44,439	32	148	465
		Temporary Mixed Cropping	218	3	16	465
		Temporary Left Fallow	27,100	26	121	465
	Tanzania	Permanent & Temporary Mixed Cropping	3,731	4	20	465
		Permanent Mono Cropping	148,742	53	248	465
		Permanent Mixed Cropping	271	5	22	465

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 3-2: Land Area Used by Planting System, Season and State during 2023/24 Agricultural Year

			Long Rainy Season						
Holding Category	State	Land use	Total (Ha)	Percentage of Crop Growing Holdings	Crop Growing Households	Number Agricultural Holdings			
		Temporary Mono Cropping	7,226,285	66	5,017,029	7,564,911			
		Temporary Mixed Cropping	1,338,871	19	1,459,212	7,564,911			
	Mil IT	Temporary Left Fallow	698,325	8	599,841	7,564,911			
	Mainland Tanzania	Permanent & Temporary Mixed Cropping	2,071,597	14	1,024,568	7,564,911			
		Permanent Mono Cropping	878,547	8	630,496	7,564,911			
		Permanent Mixed Cropping	487,480	12	871,212	7,564,911			
		Temporary Mono Cropping	30,904	66	80,008	120,402			
		Temporary Mixed Cropping	6,299	24	28,393	120,402			
Agricultural		Temporary Left Fallow	1,739	3	3,062	120,402			
Households	Zanzibar	Permanent & Temporary Mixed Cropping	19,771	24	29,315	120,402			
		Permanent Mono Cropping	9,152	30	35,839	120,402			
		Permanent Mixed Cropping	10,000	25	29,934	120,402			
		Temporary Mono Cropping	7,257,190	66	5,097,037	7,685,313			
		Temporary Mixed Cropping	1,345,170	19	1,487,606	7,685,313			
	Tanzania	Temporary Left Fallow	700,064	8	602,904	7,685,313			
		Permanent & Temporary Mixed Cropping	2,091,368	14	1,053,884	7,685,313			
		Permanent Mono Cropping	887,700	9	666,335	7,685,313			
		Permanent Mixed Cropping	497,481	12	901,147	7,685,313			
		Temporary Mono Cropping	146,163	58	489	836			
		Temporary Mixed Cropping	1,685	8	70	836			
		Temporary Left Fallow	17,814	11	96	836			
	Mainland Tanzania	Permanent & Temporary Mixed Cropping	10,433	7	62	836			
		Permanent Mono Cropping	169,930	45	374	836			
		Permanent Mixed Cropping	1,255	5	42	836			
		Temporary Mono Cropping	303	57	13	23			
		Temporary Mixed Cropping	3	13	3	23			
Large Scale		Temporary Left Fallow	-	4	-	23			
Farms	Zanzibar	Permanent & Temporary Mixed Cropping	-	9	-	23			
		Permanent Mono Cropping	400	48	11	23			
		Permanent Mixed Cropping	122	30	7	23			
		Temporary Mono Cropping	146,466	58	502	859			
		Temporary Mixed Cropping	1,689	8	73	859			
		Temporary Left Fallow	17,815	11	97	859			
	Tanzania	Permanent & Temporary Mixed Cropping	10,438	7	64	859			
		Permanent Mono Cropping	170,330	45	385	859			
		Permanent Mixed Cropping	1,378	6	49	859			

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 3-2: Land Area Used by Planting system, Season and State during 2023/24 Agricultural Year

				Agricu	ıltural Year	
Holding Category	State	Land use	Total (Ha)	Percentage of Crop Growing Holdings	Crop Growing Households	Number Agricultural Holdings
		Temporary Mono Cropping	9,194,820	70	6,125,500	8,708,094
		Temporary Mixed Cropping	2,206,142	28	2,409,248	8,708,094
	Mainland	Temporary Left Fallow	2,199,091	16	1,364,497	8,708,094
	Tanzania	Permanent & Temporary Mixed Cropping	2,646,617	15	1,339,102	8,708,094
		Permanent Mono Cropping	1,204,081	8	715,033	8,708,094
		Permanent Mixed Cropping	728,566	13	1,109,541	8,708,094
		Temporary Mono Cropping	55,571	66	95,638	145,632
		Temporary Mixed Cropping	13,542	30	43,151	145,632
Agricultural		Temporary Left Fallow	3,090	5	6,904	145,632
Households	Zanzibar	Permanent & Temporary Mixed Cropping	42,691	29	41,886	145,632
		Permanent Mono Cropping	19,682	35	51,197	145,632
		Permanent Mixed Cropping	22,592	29	41,758	145,632
		Temporary Mono Cropping	9,250,391	70	6,221,138	8,853,726
		Temporary Mixed Cropping	2,219,684	28	2,452,400	8,853,726
		Temporary Left Fallow	2,202,180	15	1,371,401	8,853,720
	Tanzania	Permanent & Temporary Mixed Cropping	2,689,308	16	1,380,988	8,853,720
		Permanent Mono Cropping	1,223,762	9	766,231	8,853,72
		Permanent Mixed Cropping	751,158	13	1,151,299	8,853,72
		Temporary Mono Cropping	190,419	62	529	85
		Temporary Mixed Cropping	1,902	9	78	85
	Mainland	Temporary Left Fallow	44,915	20	168	85
	Tanzania	Permanent & Temporary Mixed Cropping	14,161	8	68	859
		Permanent Mono Cropping	316,776	46	393	859
		Permanent Mixed Cropping	1,449	5	44	859
		Temporary Mono Cropping	486	58	14	24
		Temporary Mixed Cropping	5	17	4	2
Large Scale		Temporary Left Fallow	-	4	-	2
Farms	Zanzibar	Permanent & Temporary Mixed Cropping	8	17	4	24
		Permanent Mono Cropping	2,297	50	12	2
		Permanent Mixed Cropping	199	38	9	2
		Temporary Mono Cropping	190,905	61	543	883
		Temporary Mixed Cropping	1,907	9	82	883
		Temporary Left Fallow	44,915	19	169	883
	Tanzania	Permanent & Temporary Mixed Cropping	14,169	8	72	883
		Permanent Mono Cropping	319,073	46	405	883
		Permanent Mixed Cropping	1,649	6	53	883

Low number of observations (n<3)/lack of data/Not applicable

Table 3-3: Percentage of Land by Ownership Status Within Each Region during 2023/24 Agricultural Year

						Percent	age Land Are	a				
Holding Category	Region	Customary Right of Occupancy	Granted Right of Occupancy	Purchased	Rented/Leased in	Sharecropped in	Borrowed for Free	Moved in without Permission	Communal Land Rights	Inherited	Other Tenure Rights	Total
	Dodoma	30.9	2.2	17.3	22.7	0.0	1.2	1.3	1.5	22.8	0.0	1,039,470
	Arusha	33.1	5.4	8.1	29.4	0.5	1.1	0.0	2.6	19.7	0.0	367,717
	Kilimanjaro	4.3	1.2	22.9	19.3	0.3	3.9	1.3	0.7	45.9	0.2	305,641
	Tanga	21.6	10.2	18.2	3.8	0.0	6.0	0.7	1.7	36.0	1.7	540,377
	Morogoro	20.2	9.3	19.8	25.0	0.4	3.5	4.9	0.1	16.8	0.1	874,649
	Pwani	18.7	3.1	32.3	11.7	0.1	10.8	3.5	8.6	11.2	0.0	337,263
	Dar es Salaam	30.8	33.2	5.1	9.5	2.5	5.3	0.1	0.1	13.4	0.0	261,281
	Lindi	23.7	4.1	19.1	6.2	0.0	4.4	16.0	0.9	25.4	0.1	720,302
	Mtwara	5.6	15.5	23.4	5.3	0.0	4.0	5.2	1.4	39.6	0.0	806,282
	Ruvuma	20.4	6.0	21.3	6.7	0.0	3.0	1.5	1.8	39.4	0.0	946,977
	Iringa	36.3	2.5	17.3	10.4	0.0	2.3	0.1	1.6	29.3	0.3	532,216
	Mbeya	33.6	13.4	11.6	24.3	0.1	1.3	0.1	1.9	13.4	0.2	450,981
	Singida	14.8	1.5	36.4	10.9	0.2	2.0	0.5	1.3	32.4	0.0	629,222
	Tabora	26.2	4.1	42.5	13.5	0.2	1.0	0.0	0.7	10.3	1.5	986,835
	Rukwa	38.4	1.2	38.4	13.7	0.0	1.3	0.0	0.5	6.4	0.0	432,473
	Kigoma	31.9	2.2	32.8	10.5	0.0	1.1	0.6	0.7	19.9	0.2	207,619
Agricultural	Shinyanga	17.1	7.8	22.6	21.3	0.0	3.5	0.0	0.0	27.6	0.0	585,159
Households	Kagera	14.9	27.9	22.7	6.1	0.0	1.7	0.1	0.6	26.0	0.1	466,357
	Mwanza	44.2	2.7	23.6	18.6	0.2	2.6	0.0	0.5	7.5	0.2	506,392
	Mara	55.4	1.5	20.1	11.7	0.0	2.0	0.6	4.9	3.8	0.0	357,745
	Manyara	41.7	2.1	12.0	18.1	0.2	0.5	0.6	1.9	22.6	0.3	597,792
	Njombe	15.2	9.0	28.9	19.4	0.0	3.1	0.0	1.3	23.1	0.0	214,952
	Katavi	22.5	2.3	47.6	12.2	0.0	1.1	1.3	4.4	8.6	0.0	302,036
	Simiyu	56.7	0.2	6.1	21.3	0.0	0.9	0.0	0.9	13.8	0.0	621,182
	Geita	14.5	1.0	44.7	26.0	0.3	1.7	0.6	3.2	8.0	0.0	462,753
	Songwe	37.3	13.4	20.0	6.9	0.0	0.7	0.1	1.5	20.0	0.1	469,507
	Mainland Tanzania	26.9	6.6	23.4	14.7	0.1	2.6	1.9	1.5	22.0	0.2	14,023,184
	Kaskazini Unguja	3.8	5.1	5.9	6.6	0.0	30.9	3.0	6.5	37.3	1.0	9,371
	Kusini Unguja	29.3	3.5	13.5	0.0	2.6	16.2	0.1	6.4	23.8	4.6	17,570
	Mjini Magharibi	3.9	30.8	16.8	3.6	0.0	23.5	0.0	1.7	18.9	0.8	13,699
	Kaskazini Pemba	0.0	12.2	8.9	1.3	0.0	30.2	0.0	0.0	45.7	1.7	19,146
	Kusini Pemba	2.1	12.1	4.4	1.0	0.0	47.5	0.2	2.3	30.3	0.2	20,747
	Zanzibar	8.0	12.6	9.7	2.0	0.6	30.5	0.4	3.0	31.4	1.7	80,533
	Tanzania	26.8	6.7	23.3	14.7	0.1	2.7	1.9	1.5	22.1	0.2	14,103,717
	Mainland Tanzania	0.9	83.7	5.1	9.2	0.0	0.3	0.0	0.5	0.3	0.1	630,594
Large Scale	Zanzibar	0.9	89.3	3.7	1.0	0.0	0.0	0.0	0.0	0.0	5.1	2,405
Farms	Tanzania	0.9	83.7	5.1	9.2	0.0	0.3	0.0	0.5	0.3	0.1	632,999
	Mainland Tanzania	25.8	9.9	22.6	14.5	0.1	2.5	1.8	1.5	21.1	0.2	14,653,778
All Holdings	Zanzibar	7.8	14.9	9.5	1.9	0.6	29.6	0.4	2.9	30.5	1.8	82,938
7 III Holdings		25.7	10.0	22.5	14.4	0.0 <b>0.1</b>	2.6	1.8	1.5	21.2	0.2	14,736,717
	Tanzania	25.7	10.0	22.5	14.4	0.1	2.0	1.8	1.5	21.2	0.2	14,/30,/1/

Table 3-4: Percentage Distribution of Agricultural Households by Type of Land Ownership and Sex of Household Head during 2023/24 Agricultural Year

					Female-Hea	ded Househol	lds				
			Pe	rcentage of Agricul	tural Households	by Type of La	nd Ownership				Total
Arusha Kilimanjaro Tanga Morogoro Pwani Dar es Salaam Lindi Mtwara Ruvuma Iringa Mbeya Singida Tabora Rukwa Kigoma Shinyanga Kagera Mwanza Mara Manyara Njombe Katavi Simiyu Geita Songwe Mainland Tanzania Kaskazini Unguja Kusini Unguja Mjini Magharibi Kaskazini Pemba	Customary Right of Occupancy	Granted Right of Occupancy	Purchased	Rented/Leased in	Sharecropped in	Borrowed for Free	Moved in without Permission	Communal Land Rights	Inherited	Others	Number of Agricultural Households
Dodoma	25.1	2.8	16.8	25.4	0.0	3.1	1.5	0.4	28.6	0.0	150,656
Arusha	56.4	2.0	11.0	12.1	0.0	2.3	0.0	2.4	26.2	0.0	89,071
Kilimanjaro	2.1	1.1	18.8	23.9	0.8	9.4	0.0	0.0	68.2	1.9	89,032
Tanga	27.3	6.4	11.4	4.7	0.0	10.9	1.4	3.4	40.5	0.3	121,484
Morogoro	22.9	6.3	15.8	33.0	0.5	6.6	0.9	0.2	29.0	0.0	141,290
Pwani	22.4	2.5	18.7	13.3	0.0	21.6	3.7	4.2	15.6	0.0	57,639
Dar es Salaam	28.6	36.3	3.9	6.2	0.0	12.9	1.1	0.0	12.1	0.0	78,088
Lindi	16.8	6.7	20.6	8.9	0.0	17.8	8.1	0.0	36.9	1.0	79,675
Mtwara	7.2	6.4	17.3	9.5	0.0	15.8	4.1	4.7	52.4	0.0	125,830
Ruvuma	16.3	5.9	16.7	11.0	0.0	11.9	1.4	0.0	55.1	0.9	72,593
Iringa	20.1	2.4	24.4	27.0	0.4	10.5	0.0	3.5	44.6	0.0	65,526
Mbeya	36.7	14.0	17.1	25.4	0.0	2.7	0.0	0.9	17.9	0.0	95,735
Singida	16.4	1.9	15.8	16.6	0.7	6.8	2.2	3.1	55.2	0.0	70,496
Tabora	27.0	4.7	29.6	29.2	0.0	3.8	0.0	0.0	15.2	2.2	72,469
Rukwa	51.6	1.5	26.4	26.9	0.0	5.7	0.0	0.0	6.1	0.0	47,934
Kigoma	44.9	1.5	21.9	15.6	0.0	2.2	0.7	0.0	21.7	0.0	71,151
Shinyanga	14.5	6.2	27.0	38.9	0.0	7.5	0.0	0.0	40.8	0.0	67,059
Kagera	18.7	29.0	16.1	9.2	0.0	10.3	1.0	0.0	35.0	1.2	130,739
Mwanza	44.2	3.7	18.3	28.3	1.6	6.2	0.2	1.2	13.1	0.3	101,310
Mara	58.5	0.5	21.0	14.6	0.0	5.0	1.0	6.7	5.0	0.4	86,723
Manyara	40.7	2.8	7.2	21.4	0.0	1.3	0.0	2.8	25.5	0.0	60,480
Njombe	18.5	14.5	20.3	26.3	0.0	9.7	0.0	3.7	23.4	0.0	54,849
Katavi	22.2	4.5	24.5	31.1	0.0	4.3	0.0	10.9	5.7	0.0	25,162
Simiyu	36.1	0.0	6.8	41.9	0.0	1.5	0.0	0.5	29.8	0.0	68,542
Geita	15.4	1.9	33.6	40.8	1.8	6.8	1.0	1.9	11.8	0.0	77,220
Songwe	35.8	20.7	16.6	12.4	0.0	2.5	0.0	0.5	21.7	0.0	39,674
Mainland Tanzania	27.2	7.4	17.8	20.6	0.2	7.8	1.2	1.7	30.1	0.3	2,140,424
Kaskazini Unguja	5.1	13.8	1.1	4.9	0.0	29.6	0.0	3.6	44.5	1.5	4,620
	26.2	4.2	20.1	0.0	0.0	31.3	0.0	6.9	28.0	0.5	6,165
	4.8	24.8	14.9	7.0	0.0	30.0	0.0	1.6	23.4	0.0	5,224
	0.0	17.0	9.3	1.1	0.0	44.3	0.0	0.0	63.3	7.4	9,174
Kusini Pemba	0.0	26.8	1.6	0.0	0.0	70.6	0.0	4.6	47.6	2.5	5,302
Zanzibar	6.9	17.0	9.9	2.3	0.0	41.6	0.0	3.0	43.7	3.0	30,485
Tanzania	26.9	7.6	17.6	20.3	0.2	8.3	1.2	1.7	30.3	0.4	2,170,909

Cont... Table 3-4: Percentage Distribution of Agricultural Households by Type of Land Ownership and Sex of Household Head During 2023/24 Agricultural Year

					Male-Heade	ed Households					
				Percentage of Agric	ultural Households by	Type of Land (	Ownership				
Region	Customary Right of Occupancy	Granted Right of Occupancy	Purchased	Rented/Leased in	Sharecropped in	Borrowed for Free	Moved in without Permission	Communal Land Rights	Inherited	Others	Total Number of Agricultural Households
Dodoma	33.2	2.8	15.4	23.3	0.0	2.6	2.0	1.3	27.8	0.0	403,573
Arusha	56.2	2 4.2	10.3	16.5	0.6		0.0	3.0	28.4	0.0	248,822
Kilimanjaro	6.4	1.7	17.4	26.2	1.4	8.2	0.8	0.8	70.4	0.2	
Tanga	26.1	6.9	14.5	6.0	0.1	10.1	0.9	1.7	37.2	2.1	341,221
Morogoro	22.3	9.7	19.6	34.3	0.6	8.5	2.5	0.1	23.2	0.3	3 419,112
Pwani	22.3	1.6	34.0	13.2	0.6	18.4	1.8	4.2	13.3	0.0	203,231
Dar es Salaam	23.1	39.2	4.7	10.4	0.7	11.0	0.6	0.4	13.7	0.0	162,214
Lindi	25.5	5 1.8	14.4	10.2	0.0	9.4	16.6	2.1	36.6	0.0	198,820
Mtwara	7.1	12.9	20.6	10.0	0.0	9.5	6.0	1.3	53.1	0.0	268,355
Ruvuma	19.4	6.2	19.2	16.9	0.0	8.0	1.8	1.2	55.0	0.0	303,889
Iringa	21.2	3.6	30.2	29.3	0.0	11.4	0.2	3.2	42.8	0.0	3 172,067
Mbeya	35.3	3 16.8	13.1	29.0	0.2	2.9	0.2	0.9	16.3	0.2	2 297,049
Singida	18.8	3.0	31.2	20.1	0.2	4.3	0.6	1.9	50.2	0.0	238,369
Tabora	24.4	4 6.0	39.7	24.8	0.5	3.3	0.0	1.1	14.0	1.1	372,427
Rukwa	45.2	2 3.1	29.8	29.6	0.0	3.3	0.0	0.4	11.7	0.0	199,821
Kigoma	34.2	2.8	34.1	15.5	0.0	3.3	0.7	1.2	21.5	0.2	2 247,890
Shinyanga	19.5	5 10.7	21.8	38.1	0.0	7.3	0.0	0.2	33.9	0.0	208,557
Kagera	18.8	3 28.2	24.8	11.8	0.0	3.0	0.0	0.7	34.8	0.2	2 416,950
Mwanza	46.7	7 2.5	20.8	32.8	0.0	5.8	0.2	0.8	11.8	0.7	7 300,507
Mara	57.8	3 1.7	18.9	15.2	0.0	3.2	0.4	6.4	5.2	0.0	235,565
Manyara	31.5	3.7	13.2	23.0	0.5	1.3	0.4	2.8	34.0	0.5	5 247,518
Njombe	20.5	9.7	31.6	25.6	0.0	5.8	0.0	0.9	31.2	0.0	140,651
Katavi	31.3	3 2.2	28.5	27.3	0.0	3.1	2.4	2.3	12.2	0.0	125,769
Simiyu	44.2	2 1.1	12.1	39.6	0.0	2.8	0.0	1.5	23.3	0.0	189,662
Geita	15.2	2.1	41.5	42.9	0.3	4.1	1.2	3.1	8.9	0.1	285,990
Songwe	33.3	3 14.4	23.5	13.9	0.0	2.0	0.2	0.5	28.1	0.1	206,291
Mainland Tanzania	28.1	7.9	22.4	22.4	0.2	5.8	1.4	1.6	28.7	0.3	6,680,328
Kaskazini Unguja	5.0	5.5	10.8	3.6	0.0	36.6	1.0	6.7	40.5	0.0	5 23,169
Kusini Unguja	32.4	4.3	16.8	0.0	1.8	27.5	0.2	7.1	27.9	4.1	21,556
Mjini Magharibi	5.2	2 31.4	15.4	2.9	0.0	31.2	0.0	1.6	17.2	1.3	3 27,011
Kaskazini Pemba	0.0	17.0	11.6	1.7	0.0	47.3	0.0	0.3	64.1	2.0	23,831
Kusini Pemba	2.7	7 21.9	8.7	1.5	0.0	68.5	0.5	3.0	41.9	0.4	4 24,142
Zanzibar	8.5	5 16.7	12.7	2.0	0.3	42.3	0.3	3.6	38.0	1.0	5 119,709
Tanzania	27.7	8.1	22.2	22.0	0.2	6.4	1.4	1.6	28.9	0.3	6,800,037

Cont... Table 3-4: Percentage Distribution of Agricultural Households by Type of Land Ownership and Sex of Household Head During 2023/24 Agricultural Year

						All					
Region  Dodoma Arusha Kilimanjaro Tanga Morogoro Pwani Dar es Salaam Lindi Mtwara Ruvuma Iringa Mbeya Singida				Percentage of Agri	cultural Households b	y Type of Land	Ownership				Total Number
Region	Customary Right of Occupancy	Granted Right of Occupancy	Purchased	Rented/Leased in	Sharecropped in	Borrowed for Free	Moved in without Permission	Communal Land Rights	Inherited	Others	of Agricultural Households
Dodoma	31.0	2.8	15.8	23.9	0.0	2.7	1.9	1.1	28.1	0.0	554,229
Arusha	56.2	3.6	10.5	15.4	0.4	2.4	0.0	2.9	27.8	0.0	337,893
Kilimanjaro	5.3	1.5	17.8	25.6	1.2	8.5	0.6	0.6	69.8	0.7	335,038
Tanga	26.4	6.8	13.7	5.6	0.1	10.4	1.0	2.1	38.1	1.6	462,705
Morogoro	22.5	8.8	18.6	34.0	0.6	8.0	2.1	0.1	24.7	0.2	560,402
Pwani	22.3	1.8	30.6	13.2	0.4	19.1	2.2	4.2	13.8	0.0	260,870
Dar es Salaam	24.9	38.3	4.4	9.0	0.5	11.6	0.7	0.3	13.2	0.0	240,302
Lindi	23.0	3.2	16.2	9.9	0.0	11.8	14.2	1.5	36.7	0.3	278,495
Mtwara	7.1	10.8	19.5	9.8	0.0	11.5	5.4	2.4	52.9	0.0	394,185
Ruvuma	18.8	6.2	18.7	15.7	0.0	8.8	1.7	1.0	55.0	0.2	376,482
Iringa	20.9	3.3	28.6	28.7	0.1	11.2	0.2	3.3	43.3	0.6	237,593
Mbeya	35.6	16.1	14.0	28.1	0.2	2.9	0.2	0.9	16.7	0.1	392,784
Singida	18.2	2.8	27.7	19.3	0.3	4.9	1.0	2.2	51.3	0.0	308,865
Tabora	24.9	5.8	38.1	25.5	0.4	3.4	0.0	0.9	14.2	1.3	444,896
Rukwa	46.5	2.8	29.1	29.1	0.0	3.8	0.0	0.3	10.6	0.0	247,755
Kigoma	36.6	2.5	31.4	15.5	0.0	3.0	0.7	1.0	21.5	0.1	319,041
Shinyanga	18.3	9.6	23.1	38.3	0.0	7.3	0.0	0.2	35.5	0.0	275,616
Kagera	18.8	28.4	22.7	11.2	0.0	4.8	0.2	0.5	34.8	0.5	547,688
Mwanza	46.1	2.8	20.2	31.7	0.4	5.9	0.2	0.9	12.1	0.6	401,817
Mara	58.0	1.4	19.4	15.0	0.0	3.7	0.5	6.5	5.1	0.1	322,288
Manyara	33.3	3.5	12.0	22.7	0.4	1.3	0.3	2.8	32.3	0.4	307,998
Njombe	19.9	11.0	28.4	25.8	0.0	6.9	0.0	1.6	29.0	0.0	195,500
Katavi	29.8	2.6	27.8	27.9	0.0	3.3	2.0	3.7	11.1	0.0	150,931
Simiyu	42.0	0.8	10.7	40.2	0.0	2.4	0.0	1.2	25.0	0.0	258,204
Geita	15.3	2.0	39.8	42.4	0.6	4.7	1.2	2.9	9.5	0.1	363,210
Songwe	33.7	15.4	22.4	13.7	0.0	2.1	0.1	0.5	27.1	0.1	245,965
Mainland Tanzania	27.8	7.8	21.3	22.0	0.2	6.3	1.4	1.6	29.0	0.3	8,820,751
Kaskazini Unguja	5.0	6.9	9.2	3.8	0.0	35.5	0.8	6.2	41.2	0.7	27,789
Kusini Unguja	31.0	4.2	17.5	0.0	1.4	28.3	0.1	7.0	27.9	3.3	27,721
Mjini Magharibi	5.2	30.3	15.3	3.5	0.0	31.0	0.0	1.6	18.2	1.1	32,235
Kaskazini Pemba	0.0	17.0	11.0	1.5	0.0	46.5	0.0	0.2	63.9	3.5	33,005
Kusini Pemba	2.2	22.7	7.4	1.2	0.0	68.8	0.4	3.3	42.9	0.8	29,444
Zanzibar	8.2	16.7	12.1	2.1	0.3	42.1	0.3	3.5	39.1	1.9	150,194
Tanzania	27.5	7.9	21.1	21.6	0.2	6.9	1.4	1.7	29.2	0.3	8,970,945

Table 4-1-1: Number and Percentage of Cropping Households using Irrigation, by Season and Region During 2023/24 Agricultural Year

								Shor	t Rainy Seas	on						
Holding Category	Region	Cropping Holdings	Holdings Irrigat		Holdings Manu Irrigat	ıal	Holdings Sprinl Irrigat	kler	Holdings Drip Irri		Holdings Using Flooding/Surface Irrigation		Holdings Using Pivot Irrigation		Holdings Terraced Ir	
		Number	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
	Dodoma	39,699	3,935	9.9	3,407	86.6	0	0.0	0	0.0	528	13.4	0	0.0	0	0.0
	Arusha	117,166	28,067	24.0	2,310	8.2	0	0.0	703	2.5	25,455	90.7	0	0.0	0	0.0
	Kilimanjaro	260,645	40,840	15.7	13,702	33.6	5,852	14.3	458	1.1	22,693	55.6	0	0.0	0	0.0
	Tanga	346,789	14,772	4.3	9,507	64.4	934	6.3	0	0.0	4,831	32.7	0	0.0	0	0.0
	Morogoro	124,693	5,475	4.4	4,239	77.4	967	17.7	0	0.0	1,236	22.6	0	0.0	0	0.0
	Pwani	203,460	6,917	3.4	3,969	57.4	515	7.4	0	0.0	2,583	37.3	365	5.3	0	0.0
	Dar es Salaam	119,588	26,203	21.9	21,703	82.8	3,538	13.5	888	3.4	732	2.8	0	0.0	0	0.0
	Lindi	65,827	767	1.2	-	-	-	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Iringa	17,293	9,257	53.5	7,594	82.0	0	0.0	0	0.0	2,146	23.2	0	0.0	0	0.0
	Mbeya	55,696	4,642	8.3	0	0.0	1,367	29.5	0	0.0	3,275	70.5	0	0.0	0	0.0
	Singida	2,125	0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
	Tabora	160,917	7,084	4.4	1,501	21.2	0	0.0	0	0.0	5,583	78.8	0	0.0	0	0.0
	Rukwa	1,676	670	40.0	-	-	-	-	-	-	-	-	-	-	-	-
	Kigoma	290,759	10,753	3.7	4,481	41.7	927	8.6	0	0.0	6,001	55.8	0	0.0	0	0.0
A	Shinyanga	5,400	3,481	64.5	2,965	85.2	0	0.0	0	0.0	0	0.0	0	0.0	516	14.8
Agricultural Households	Kagera	529,821	2,069	0.4	0	0.0	0	0.0	0	0.0	2,069	100.0	0	0.0	0	0.0
	Mwanza	377,689	21,647	5.7	8,296	38.3	0	0.0	0	0.0	14,823	68.5	0	0.0	0	0.0
	Mara	277,976	11,822	4.3	3,449	29.2	877	7.4	0	0.0	7,495	63.4	0	0.0	0	0.0
	Manyara	38,416	3,646	9.5	1,050	28.8	0	0.0	0	0.0	2,596	71.2	0	0.0	0	0.0
	Njombe	26,238	5,152	19.6	2,842	55.2	2,767	53.7	0	0.0	0	0.0	0	0.0	0	0.0
	Katavi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
	Simiyu	98,535	463	0.5	-	-	-	-	-	-	-	-	-	-	-	_
	Geita	334,231	3,031	0.9	2,548	84.1	0	0.0	0	0.0	482	15.9	0	0.0	0	0.0
	Songwe	7,512	297	4.0	-	-	-	-	-	-	-	-	-	-	-	-
	Mainland Tanzania	3,503,117	211,602	6.0	96,376	45.5	17,745	8.4	2,049	1.0	102,530	48.5	365	0.2	516	0.2
	Kaskazini Unguja	22,137	2,536	11.5	1,589	62.7	66	2.6	146	5.7	735	29.0	0	0.0	0	0.0
	Kusini Unguja	25,702	5,912	23.0	4,128	69.8	152	2.6	847	14.3	1,051	17.8	0	0.0	0	0.0
	Mjini Magharibi	26,886	7,029	26.1	5,473	77.9	138	2.0	1,127	16.0	744	10.6	0	0.0	0	0.0
	Kaskazini Pemba	30,247	3,435	11.4	2,772	80.7	63	1.8	159	4.6	518	15.1	0	0.0	0	0.0
	Kusini Pemba	23,106	2,712	11.7	2,453	90.4	0	0.0	280	10.3	130	4.8	0	0.0	0	0.0
	Zanzibar	128,078	21,623	16.9	16,414	75.9	419	1.9	2,559	11.8	3,179	14.7	0	0.0	0	0.0
	Tanzania	3,631,195	233,226	6.4	112,790	48.4	18,164	7.8	4,608	2.0	105,708	45.3	365	0.2	516	0.2
	Mainland Tanzania	375	129	34.4	36	27.9	37	28.7	42	32.6	19	14.7	4	3.1	2	1.6
Large Scale Farms	Zanzibar	22	12	54.5	4	33.3	1	8.3	9	75.0	0	0.0	0	0.0	0	0.0
-	Tanzania	397	141	35.5	40	28.4	38	27.0	51	36.2	19	13.5	4	2.8	2	1.4
	Mainland Tanzania	3,503,492	211,731	6.0	96,412	45.5	17,782	8.4	2,091	1.0	102,549	48.4	369	0.2	518	0.2
All Holdings	Zanzibar	128,100	21,635	16.9	16,418	75.9	420	1.9	2,568	11.9	3,179	14.7	0	0.0	0	0.0
	Tanzania	3,631,592	233,367	6.4	112,830	48.3	18,202	7.8	4,659	2.0	105,727	45.3	369	0.2	518	0.2

Cont... Table 4-1-1: Number and Percentage of Cropping Households using Irrigation, by Season and Region During 2023/24 Agricultural Year

									Rainy Seaso	on						
Holding Category	Region	Cropping Holdings	Holdings Irriga		Holdings Manu Irrigat	ıal	Holdings Sprinl Irriga	kler	Holdings Drip Irrig		Holdings Using Flooding/Surface Irrigation		Holdings Using Pivot Irrigation		Holdings Using Terraced Irrigation	
		Number	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
	Dodoma	516,824	5,053	1.0	2,575	51.0	552	10.9	0	0.0	1,925	38.1	0	0.0	0	0.0
	Arusha	287,165	32,806	11.4	1,525	4.6	583	1.8	1,402	4.3	29,296	89.3	0	0.0	0	0.0
	Kilimanjaro	304,608	36,380	11.9	9,184	25.2	2,159	5.9	0	0.0	25,524	70.2	736	2.0	0	0.0
	Tanga	367,543	12,959	3.5	6,058	46.7	1,226	9.5	0	0.0	5,676	43.8	0	0.0	0	0.0
	Morogoro	511,666	15,724	3.1	4,194	26.7	4,099	26.1	307	2.0	7,123	45.3	0	0.0	0	0.0
	Pwani	162,488	5,454	3.4	4,591	84.2	0	0.0	0	0.0	863	15.8	0	0.0	0	0.0
	Dar es Salaam	151,318	24,457	16.2	19,381	79.2	4,845	19.8	888	3.6	1,341	5.5	0	0.0	0	0.0
	Lindi	278,495	1,402	0.5	-	-	-	-	-	-	´-	-	-	-	_	-
	Mtwara	394,185	1,130	0.3	-	-	_	-	-	-	-	-	-	-	_	-
	Ruvuma	375,248	25,325	6.7	2,459	9.7	0	0.0	1,234	4.9	22,211	87.7	0	0.0	0	0.0
	Iringa	236,251	31,482	13.3	18,396	58.4	0	0.0	542	1.7	13,212	42.0	348	1.1	0	0.0
	Mbeya	382,383	42,551	11.1	540	1.3	1,327	3.1	0	0.0	39,745	93.4	542	1.3	397	0.9
	Singida	307,297	2,433	0.8	1,052	43.2	0	0.0	0	0.0	1,381	56.8	0	0.0	0	0.0
	Tabora	303,919	26,567	8.7	3,028	11.4	0	0.0	0	0.0	24,723	93.1	0	0.0	0	0.0
	Rukwa	246,950	6,067	2.5	712	11.7	0	0.0	0	0.0	1,884	31.1	0	0.0	4,183	68.9
	Kigoma	45,293	3,477	7.7	3,477	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Shinyanga	274,062	3,317	1.2	3,317	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Agricultural Households	Kagera	426,982	1,895	0.4	-	-	_	-	-	-	-	-	-	-	-	-
	Mwanza	135,825	29,295	21.6	12,868	43.9	932	3.2	0	0.0	15,495	52.9	0	0.0	0	0.0
	Mara	235,472	9,511	4.0	4,362	45.9	877	9.2	0	0.0	4,273	44.9	0	0.0	0	0.0
	Manyara	279,889	10,244	3.7	2,889	28.2	0	0.0	0	0.0	6,874	67.1	481	4.7	0	0.0
	Njombe	184,937	18,086	9.8	12,595	69.6	4,297	23.8	0	0.0	457	2.5	0	0.0	738	4.1
	Katavi	150,672	9,289	6.2	1,336	14.4	0	0.0	0	0.0	7,749	83.4	203	2.2	0	0.0
	Simiyu	189,302	869	0.5	-	-	-	-	-	-	-	-	-		-	-
	Geita	172,547	5,108	3.0	4,400	86.1	0	0.0	0	0.0	708	13.9	0	0.0	0	0.0
	Songwe	245,727	5,455	2.2	5,139	94.2	0	0.0	0	0.0	316	5.8	0	0.0	0	0.0
	Mainland Tanzania	7,167,048	366,337	5.1	128,245	35.0	22,026	6.0	4,372	1.2	210,776	<b>57.5</b>	2,309	0.6	5,317	1.5
	Kaskazini Unguja	11,302	2,777	24.6	1,056	38.0	172	6.2	0	0.0	1,550	55.8	0	0.0	0	0.0
	Kusini Unguja	24,727	3,547	14.3	1,767	49.8	67	1.9	665	18.7	1,048	29.5	0	0.0	0	0.0
	Mjini Magharibi	22,328	5,089	22.8	3,430	67.4	0	0.0	879	17.3	1,095	21.5	0	0.0	0	0.0
	Kaskazini Pemba	32,547	1,510	4.6	1,221	80.8	0	0.0	61	4.0	229	15.2	0	0.0	0	0.0
	Kusini Pemba	27,860	1,337	4.8	1,208	90.3	0	0.0	0	0.0	130	9.7	0	0.0	0	0.0
	Zanzibar	118,765	14,260	12.0	8,682	60.9	238	1.7	1,605	11.3	4,051	28.4	0	0.0	Ŏ	0.0
	Tanzania	7,285,813	380,597	5.2	136,927	36.0	22,264	5.8	5,977	1.6	214,827	56.4	2,309	0.6	5,317	1.4
	Mainland Tanzania	820	175	21.3	44	25.1	45	25.7	53	30.3	37	21.1	12	6.9	3,317	0.6
Large Scale Farms	Zanzibar	23	10	43.5	3	30.0	1	10.0	6	60.0	1	10.0	0	0.9	0	0.0
Large Scale Pallis	Zanzioar Tanzania	843	185	21.9	3 <b>47</b>	25.4	46	24.9	5 <b>9</b>	31.9	38	20.5	12	6.5	1	0.0
		7,167,868		5.1	128,289	35.0	22,071	6.0	4,425	1.2	210,813	57.5	2,321		5,318	1.5
A 11 TT = 1.45 = =	Mainland Tanzania		366,512											0.6		
All Holdings	Zanzibar	118,788	14,270	12.0	8,685	60.9	239	1.7	1,611	11.3	4,052	28.4	0	0.0	0	0.0
	Tanzania	7,286,656	380,782	5.2	136,974	36.0	22,310	5.9	6,036	1.6	214,865	56.4	2,321	0.6	5,318	1.4

Cont... Table 4-1-1: Number and Percentage of Cropping Households using Irrigation, by Season and Region During 2023/24 Agricultural Year

									ural Year 20	23/24						
Holding Category	Region	Cropping Holdings	Holdings Irrigati		Holdings Manu Irrigat	al	Holdings Sprink Irrigat	ler	Holdings Drip Irrig		Holdings Flooding/S Irrigat	urface	Holdings ( Pivot Irrig		Holdings u Terrace Irrigatio	ed
		Number	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
	Dodoma	551,662	6,579	1.2	4,102	62.3	552	8.4	0	0.0	1,925	29.3	0	0.0	0	0.0
	Arusha	296,443	44,806	15.1	2,589	5.8	583	1.3	1,803	4.0	40,232	89.8	0	0.0	0	0.0
	Kilimanjaro	328,350	53,394	16.3	16,680	31.2	6,728	12.6	458	0.9	31,248	58.5	736	1.4	0	0.0
	Tanga	453,930	20,237	4.5	11,826	58.4	1,226	6.1	0	0.0	7,685	38.0	0	0.0	0	0.0
	Morogoro	559,499	20,845	3.7	8,080	38.8	5,066	24.3	307	1.5	8,358	40.1	0	0.0	0	0.0
	Pwani	251,786	11,242	4.5	7,431	66.1	515	4.6	0	0.0	3,446	30.7	365	3.2	0	0.0
	Dar es Salaam	222,971	42,515	19.1	34,487	81.1	7,724	18.2	888	2.1	2,073	4.9	0	0.0	0	0.0
	Lindi	278,495	2,169	0.8	-	-	-	-	-	-	-	-	_	-	-	
	Mtwara	394,185	1,130	0.3	_	-	_	-	_	-	-	-	_	-	_	
	Ruvuma	375,248	25,325	6.7	2,459	9.7	0	0.0	1,234	4.9	22,211	87.7	0	0.0	0	0.
	Iringa	236,712	34,738	14.7	20,703	59.6	0	0.0	542	1.6	14,645	42.2	348	1.0	0	0.
	Mbeya	391,172	42,951	11.0	540	1.3	1,727	4.0	0	0.0	39,745	92.5	542	1.3	397	0.9
	Singida	308,197	2,433	0.8	1,052	43.2	0	0.0	0	0.0	1,381	56.8	0	0.0	0	0.
	Tabora	444,154	32,546	7.3	3,813	11.7	0	0.0	0	0.0	30,305	93.1	0	0.0	0	0.
	Rukwa	246,950	6,737	2.7	1,382	20.5	0	0.0	0	0.0	1,884	28.0	0	0.0	4,183	62.
	Kigoma	315,866	10,753	3.4	5,409	50.3	927	8.6	0	0.0	6,001	55.8	0	0.0	0	0
	Shinyanga	274,062	6,798	2.5	6,282	92.4	0	0.0	0	0.0	0	0.0	0	0.0	516	7
Agricultural Households	Kagera	544,333	3,964	0.7	1,895	47.8	0	0.0	0	0.0	2,069	52.2	0	0.0	0	0
	Mwanza	398,934	46,244	11.6	16,930	36.6	932	2.0	0	0.0	30,087	65.1	0	0.0	ő	0
	Mara	316,782	14,671	4.6	4,966	33.8	1,309	8.9	0	0.0	8,396	57.2	0	0.0	0	0
	Manyara	302,003	11,264	3.7	3,404	30.2	0	0.0	0	0.0	7,380	65.5	481	4.3	0	0
	Njombe	195,500	20,676	10.6	14,246	68.9	5,691	27.5	0	0.0	457	2.2	0	0.0	738	3
	Katavi	150,672	9,289	6.2	1,950	21.0	0	0.0	0	0.0	7,749	83.4	203	2.2	0	0
	Simiyu	257,762	1,332	0.5	1,332	100.0	0	0.0	0	0.0	7,749	0.0	0	0.0	0	0
	Geita	361,957	6,895	1.9	5,705	82.7	0	0.0	0	0.0	1,190	17.3	0	0.0	0	0
	Songwe	245,727	5,455	2.2	5,139	94.2	0	0.0	0	0.0	316	5.8	0	0.0	0	0
	Mainland Tanzania	8,703,351	484,989	5.6	184,570	38.1	34,110	7.0	5,231	1.1	268,786	55.4	2,674	0.6	5,834	1
	Kaskazini Unguja	26,144	3,848	14.7	1,992	51.8	172	4.5	146	3.8	1,645	42.7	2,074	0.0	0	0
	Kusini Unguja	27,252	6,721	24.7	4,482	66.7	152	2.3	1,113	16.6	1,347	20.0	0	0.0	0	0
	Mjini Magharibi	29,846	7,716	25.9	5,566	72.1	138	1.8	1,235	16.0	1,231	15.9	0	0.0	0	0
	Kaskazini Pemba	33,005	4,035	12.2	3,311	82.1	63	1.6	220	5.4	518	12.8	0	0.0	0	0
	Kusini Pemba	29,386	3,198	10.9	2,939	91.9	0	0.0	280	8.8	259	8.1	0	0.0	0	0
	Zanzibar	145,632	25,517	17.5	18,289	71.7	525	2.1	2,993	11.7	5,000	19.6	0	0.0	0	0
	Tanzania	8,848,983	510,506	5.8	202,859	39.7	34,635	6.8	8,224	1.6	273,786	53.6	2,674	0.5	5,834	1
	Mainland Tanzania	854	215	25.2	61	28.4	<b>54,05</b> 5	27.4	62	28.8	48	22.3	12	5.6	2	0
arge Scale Farms	Zanzibar	24	13	54.2	4	30.8	1	7.7	9	69.2	1	7.7	0	0.0	0	0
arge searc railins	Zanzioar Tanzania	878	228	26.0	65	28.5	60	26.3	71	31.1	49	21.5	12	5.3	2	0
	Mainland Tanzania	8,704,205	485,204	5.6	184,631	38.1	34,169	7.0	5,293	1.1	268,834	55.4	2,686	0.6	5,836	1.
All Holdings	Zanzibar			3.6 17.5			54,169 526			11.8				0.0	5,836 0	0.
All fioldings		145,656	25,530		18,293	71.7		2.1	3,002		5,001	19.6	0		-	
	Tanzania	8,849,861	510,734	5.8	202,924	39.7	34,695	6.8	8,295	1.6	273,835	53.6	2,686	0.5	5,836	1.

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-1-2: Area Planted under Irrigation by Method of Irrigation and Region During 2023/24 Agricultural Year

							,	Short Rai	ny Season							
Holding Category	Region	Total Area Planted	Irrigatio	n Area	Man	ıual	Sprin	ıkler	Dı	rip	Flooding	/Surface	ce Pivot		t Terra	
		Ha	Ha	%	На	%	Ha	%	Ha	%	Ha	%	Ha	%	Ha	%
	Dodoma	110,088	7,476	6.8	7,049	94.3	0	0.0	0	0.0	427	5.7	0	0.0	0	0.0
	Arusha	77,725	13,909	17.9	426	3.1	0	0.0	89	0.6	13,393	96.3	0	0.0	0	0.0
	Kilimanjaro	169,022	24,471	14.5	5,296	21.6	5,459	22.3	1,159	4.7	12,556	51.3	0	0.0	0	0.0
	Tanga	359,761	9,006	2.5	4,373	48.6	914	10.1	0	0.0	3,718	41.3	0	0.0	0	0.0
	Morogoro	145,802	3,504	2.4	2,175	62.1	783	22.3	0	0.0	547	15.6	0	0.0	0	0.0
	Pwani	234,052	5,017	2.1	2,487	49.6	1,042	20.8	0	0.0	1,045	20.8	443	8.8	0	0.0
	Dar es Salaam	114,631	19,244	16.8	14,740	76.6	308	1.6	3,593	18.7	603	3.1	0	0.0	0	0.0
	Lindi	173,091	2	0.0	-	-	-	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	_	-	-	-	-	-	-	-	-	-	-	_
	Iringa	21,369	18,187	85.1	3,915	21.5	0	0.0	0	0.0	14,273	78.5	0	0.0	0	0.0
	Mbeya	27,851	3,207	11.5	0	0.0	1,554	48.4	0	0.0	1,654	51.6	0	0.0	0	0.0
	Singida	1,578	0	0.0	_	-	_	-	-	_	_	_	-	-	-	_
	Tabora	245,263	7,909	3.2	1,922	24.3	0	0.0	0	0.0	5,987	75.7	0	0.0	0	0.0
	Rukwa	5,286	2,711	51.3	-,		_	-	-	-	-	-	-	-	-	-
	Kigoma	184,088	9,471	5.1	1,169	12.3	2,252	23.8	0	0.0	6,051	63.9	0	0.0	0	0.0
Agricultural	Shinyanga	15,988	6,151	38.5	6,046	98.3	0	0.0	0	0.0	0	0.0	0	0.0	104	1.7
Households	Kagera	442,746	2,758	0.6	0	0.0	0	0.0	0	0.0	2,758	100.0	0	0.0	0	0.0
10 40 2110 140	Mwanza	435,697	23,798	5.5	2,791	11.7	0	0.0	0	0.0	21,007	88.3	0	0.0	0	0.0
	Mara	287,419	5,357	1.9	693	12.9	500	9.3	0	0.0	4,164	77.7	0	0.0	0	0.0
	Manyara	50,204	2,592	5.2	754	29.1	0	0.0	0	0.0	1,838	70.9	0	0.0	0	0.0
	Njombe	27,087	6,159	22.7	2,352	38.2	3,807	61.8	0	0.0	0	0.0	0	0.0	0	0.0
	Katavi	-	-	-	-	-	<i>5,607</i>	-	-	-	-	-	U	0.0	U	-
	Simiyu	228,266	- 47	0.0	-	-	-	-	-	-	-	-	-	-	-	-
	Geita	374,971	1,237	0.3	847	68.5	0	0.0	0	0.0	390	31.5	0	0.0	0	0.0
	Songwe	7.939	60	0.3	047	-	U	0.0	U	-	390	-	U	0.0	U	0.0
	Mainland Tanzania	3,744,215	176,493	4.7	64,074	36.3	16,618	9.4	4,841	2.7	90,411	51.2	443	0.3	104	0.1
	Kaskazini Unguja	6,813	670	9.8	476	71.0	0	0.0	<b>4,641</b> 59	8.8	135	20.1	0	0.0	0	0.0
	Kusini Unguja	16,352	2,519	15.4	1,665	66.1	94	3.7	549	21.8	210	8.3	0	0.0	0	0.0
	Mjini Magharibi	11,160	2,319	26.9	1,559	52.0	56	1.9	1,090	36.4	292	6.3 9.7	0	0.0	0	0.0
	Kaskazini Pemba	14,066	604	4.3	409	67.7	10		77	12.7	109	18.0	0		0	0.0
	Kusini Pemba	13,030					0	1.6		16.6			0	$0.0 \\ 0.0$	0	0.0
		,	707	5.4	537	76.0		0.0	117		52 <b>700</b>	7.4	0			
	Zanzibar	61,421	7,497	12.2	4,646	62.0	160	2.1	1,893	25.2	798	10.6		0.0	0 104	0.0
	Tanzania	3,805,636	183,990	4.8	68,720	37.4	16,778	9.1	6,734	3.7	91,209	49.6	443	0.2		0.1
C 1 F	Mainland Tanzania	193,735	64,854	33.5	11,411	17.6	42,855	66.1	2,858	4.4	6,741	10.4	874	1.3	115	0.2
arge Scale Farms	Zanzibar	2,243	126	5.6	9	7.0	1	0.6	117	92.3	0	0.0	0	0.0	0	0.0
	Tanzania	195,978	64,980	33.2	11,420	17.6	42,856	66.0	2,974	4.6	6,741	10.4	874	1.3	115	0.2
	Mainland Tanzania	3,937,950	241,347	6.1	75,486	31.3	59,473	24.6	7,699	3.2	97,152	40.3	1,317	0.5	219	0.1
All Holdings	Zanzibar	63,664	7,623	12.0	4,655	61.1	161	2.1	2,009	26.4	798	10.5	0	0.0	0	0.0
	Tanzania	4,001,614	248,970	6.2	80,140	32.2	59,634	24.0	9,709	3.9	97,950	39	1,317	0.5	219	0.1

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 4-1-2: Area Planted under Irrigation by Method of Irrigation and Region During 2023/24 Agricultural Year

								Long	Rainy Seas	on						
Agricultural louseholds	Region	Total Area Planted	Irrigatio	n Area	Man	ual	Sprin	kler	Dr	ip	Flooding	/Surface	Piv	ot	Terr	aced
		На	Ha	%	Ha	%	Ha	%	Ha	%	Ha	%	Ha	%	Ha	%
	Dodoma	960,572	7,987	0.8	5,584	69.9	56	0.7	0	0.0	2,347	29.4	0	0.0	0	0.
	Arusha	318,956	27,443	8.6	68	0.2	354	1.3	2,076	7.6	24,945	90.9	0	0.0	0	0.
	Kilimanjaro	222,544	22,140	9.9	4,407	19.9	4,308	19.5	0	0.0	13,053	59.0	372	1.7	0	0.
	Tanga	382,281	7,190	1.9	2,302	32.0	733	10.2	0	0.0	4,155	57.8	0	0.0	0	0.
	Morogoro	768,790	12,752	1.7	2,262	17.7	2,600	20.4	1,492	11.7	6,397	50.2	0	0.0	0	0.
	Pwani	222,465	6,515	2.9	6,340	97.3	0	0.0	0	0.0	175	2.7	0	0.0	0	0.
	Dar es Salaam	167,532	15,792	9.4	5,997	38.0	7,130	45.1	2,156	13.7	509	3.2	0	0.0	0	0.
	Lindi	720,302	567	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Mtwara	805,336	915	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Ruvuma	925,090	26,732	2.9	3,589	13.4	0	0.0	978	3.7	22,165	82.9	0	0.0	0	0.
	Iringa	471,079	40,639	8.6	6,681	16.4	0	0.0	1,753	4.3	31,923	78.6	282	0.7	0	0.
	Mbeya	442,937	46,579	10.5	36	0.1	1,141	2.4	0	0.0	45,130	96.9	192	0.4	80	0.
	Singida	613,845	1,352	0.2	669	49.5	0	0.0	0	0.0	683	50.5	0	0.0	0	0.
	Tabora	727,011	40,807	5.6	1,403	3.4	0	0.0	0	0.0	39,404	96.6	0	0.0	0	0.
	Rukwa	426,561	7,564	1.8	72	1.0	0	0.0	0	0.0	5,002	66.1	0	0.0	2,490	32
	Kigoma	26,814	3,026	11.3	3,026	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.
Agricultural	Shinyanga	578,977	1,603	0.3	1,603	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.
	Kagera	339,344	192	0.1	-	-	-	-	-	-	-	-	_	-	-	_
	Mwanza	147,084	19,656	13.4	7,069	36.0	425	2.2	0	0.0	12,162	61.9	0	0.0	0	0.
	Mara	213,792	3,828	1.8	981	25.6	287	7.5	0	0.0	2,560	66.9	Õ	0.0	0	0.
	Manyara	521,385	5,949	1.1	1,780	29.9	0	0.0	0	0.0	3,878	65.2	292	4.9	0	0.0
	Njombe	196,909	12,576	6.4	7,973	63.4	2,598	20.7	0	0.0	1,109	8.8	0	0.0	896	7.
	Katavi	301,931	27,806	9.2	950	3.4	0	0.0	Ö	0.0	26,774	96.3	82	0.3	0	0.0
	Simiyu	414,484	276	0.1	-	-	-	-	-	-	20,774	-	-	-	-	-
	Geita	167,461	2,010	1.2	1,447	72.0	0	0.0	0	0.0	563	28.0	0	0.0	0	0.0
	Songwe	466,615	3,311	0.7	3,055	92.3	0	0.0	0	0.0	256	7.7	0	0.0	0	0.0
	Mainland Tanzania	11,550,097	345,206	3.0	68,328	19.8	20,546	6.0	8,456	2.4	243,190	70.4	1,220	0.4	3,466	1.0
	Kaskazini Unguja	3,646	654	17.9	296	45.3	64	9.8	0,430	0.0	294	44.9	0	0.0	0	0.0
	Kusini Unguja	15,447	1,052	6.8	467	44.4	45	4.3	305	29.0	235	22.3	0	0.0	0	0.0
	Mjini Magharibi	8,593	2,134	24.8	1,085	50.9	0	0.0	627	29.4	422	19.8	0	0.0	0	0.0
	Kaskazini Pemba	16,905	595	3.5	544	91.3	0	0.0	12	2.1	39	6.6	0	0.0	0	0.
	Kusini Pemba	17,351	343	2.0	316	92.4	0	0.0	0	0.0	26	7.6	0	0.0	0	0.
	Zanzibar	61,942	4,778	7.7	<b>2,709</b>	56.7	109	2.3	944	19.8	1,016	21.3	0	0.0	0	0.
	Tanzania	11,612,038	349,983	3.0	71,037	20.3	20,656	5.9	9,400	2.7	244,205	69.8	1,220	0.0	3,466	1.
	Mainland Tanzania	325,457	89,730	27.6				29.6	8,267	9.2	26,647	29.7	22,270	24.8	,	0.
amaa Caala Fame		325,457 935			5,955	6.6	26,578		,		,		0	24.8 0.0	13	0.
Large Scale Farms	Zanzibar		73	7.8	5 5 060	7.2	l 26 579	1.1	57 <b>8,324</b>	78.2	10	13.5			0	0. <b>0.</b>
	Tanzania	326,392	89,803	27.5	5,960	6.6	26,578	29.6	,	9.3	26,656	29.7	22,270	24.8	13	
A 11 TY 1 1'	Mainland Tanzania	11,875,554	434,936	3.7	74,283	17.1	47,124	10.8	16,724	3.8	269,836	62.0	23,490	5.4	3,479	0.
All Holdings	Zanzibar	62,877	4,850	7.7	2,714	56.0	110	2.3	1,001	20.6	1,025	21.1	0	0.0	0	0.
	Tanzania	11,938,431	439,787	3.7	76,997	17.5	47,234	10.7	17,724	4.0	270,862	61.6	23,490	5.3	3,479	0.8

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 4-1-2: Area Planted under Irrigation by Method of Irrigation and Region During 2023/24 Agricultural Year

							A	Agricultur	al Year 202	23/24						
Agricultural Households	Region	Total Area Planted	Irrigation	n Area	Man	ual	Sprin	kler	Dr	ip	Flooding	g/Surface	Piv	ot	Terr	aced
		Ha	Ha	%	Ha	%	Ha	%	Ha	%	Ha	%	Ha	%	Ha	%
	Dodoma	1,070,660	15,463	1.4	12,633	81.7	56	0.4	0	0.0	2,774	17.9	0	0.0	0	0.0
	Arusha	396,680	41,352	10.4	494	1.2	354	0.9	2,165	5.2	38,339	92.7	0	0.0	0	0.0
	Kilimanjaro	391,567	46,610	11.9	9,703	20.8	9,767	21.0	1,159	2.5	25,609	54.9	372	0.8	0	0.0
	Tanga	742,042	16,195	2.2	6,675	41.2	1,647	10.2	0	0.0	7,873	48.6	0	0.0	0	0.0
	Morogoro	914,592	16,256	1.8	4,437	27.3	3,383	20.8	1,492	9.2	6,944	42.7	0	0.0	0	0.0
	Pwani	456,517	11,532	2.5	8,827	76.5	1,042	9.0	0	0.0	1,220	10.6	443	3.8	0	0.0
	Dar es Salaam	282,163	35,037	12.4	20,737	59.2	7,438	21.2	5,749	16.4	1,113	3.2	0	0.0	0	0.0
	Lindi	893,394	569	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Mtwara	805,336	915	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Ruvuma	925,090	26,732	2.9	3,589	13.4	0	0.0	978	3.7	22,165	82.9	0	0.0	0	0.0
	Iringa	492,448	58,826	11.9	10,596	18.0	0	0.0	1,753	3.0	46,195	78.5	282	0.5	0	0.0
	Mbeya	470,787	49,786	10.6	36	0.1	2,694	5.4	0	0.0	46,784	94.0	192	0.4	80	0.2
	Singida	615,423	1,352	0.2	669	49.5	0	0.0	0	0.0	683	50.5	0	0.0	0	0.0
	Tabora	972,274	48,717	5.0	3,325	6.8	0	0.0	0	0.0	45,392	93.2	0	0.0	0	0.0
	Rukwa	431,847	10,274	2.4	2,783	27.1	0	0.0	0	0.0	5,002	48.7	0	0.0	2,490	24.2
	Kigoma	210,902	12,497	5.9	4,194	33.6	2,252	18.0	0	0.0	6,051	48.4	0	0.0	0	0.0
Agricultural	Shinyanga	594,966	7,753	1.3	7,649	98.7	0	0.0	0	0.0	0	0.0	0	0.0	104	1.3
Households	Kagera	782,090	2,949	0.4	192	6.5	0	0.0	0	0.0	2,758	93.5	0	0.0	0	0.0
	Mwanza	582,781	43,454	7.5	9,860	22.7	425	1.0	0	0.0	33,169	76.3	0	0.0	0	0.0
	Mara	501,211	9,185	1.8	1,674	18.2	787	8.6	0	0.0	6,724	73.2	0	0.0	0	0.0
	Manyara	571,589	8,542	1.5	2,533	29.7	0	0.0	0	0.0	5,716	66.9	292	3.4	0	0.0
	Njombe	223,995	18,735	8.4	10,324	55.1	6,405	34.2	0	0.0	1,109	5.9	0	0.0	896	4.8
	Katavi	306,222	32,025	10.5	5,169	16.1	0	0.0	0	0.0	26,774	83.6	82	0.3	0	0.0
	Simiyu	642,751	323	0.1	323	100.0	ő	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Geita	542,432	3,247	0.6	2,294	70.7	0	0.0	0	0.0	953	29.3	0	0.0	0	0.0
	Songwe	474,553	3,371	0.7	3,115	92.4	0	0.0	0	0.0	256	7.6	0	0.0	0	0.0
	Mainland Tanzania	15,294,312	521,698	3.4	132,402	25.4	37,164	7.1	13,298	2.5	333,601	63.9	1,663	0.3	3,570	0.7
	Kaskazini Unguja	10,459	1,324	12.7	772	58.3	65	4.9	59	4.5	429	32.4	0	0.0	0	0.0
	Kusini Unguja	31,799	3,571	11.2	2,132	59.7	139	3.9	854	23.9	445	12.5	0	0.0	0	0.0
	Mjini Magharibi	19,752	5,131	26.0	2,645	51.5	56	1.1	1,717	33.5	713	13.9	0	0.0	0	0.0
	Kaskazini Pemba	30,971	1,199	3.9	953	79.4	10	0.8	89	7.4	148	12.4	0	0.0	0	0.0
	Kusini Pemba	30,382	1,049	3.5	853	81.3	0	0.0	117	11.2	79	7.5	0	0.0	0	0.0
	Zanzibar	123,363	12,275	10.0	<b>7,355</b>	<b>59.9</b>	269	2.2	2,837	23.1	1,814	14.8	0	0.0	0	0.0
	Tanzania	15,417,674	533,973	3.5	139,758	26.2	37,434	7.0	16,134	3.0	335,415	62.8	1,663	0.0	3,570	0.7
	Mainland Tanzania	519,192	154,585	29.8	17,366	11.2				7.2	33,387		23,145	15.0	3,570 128	0.7
Lamas Casla Famera							69,433	44.9	11,125	87.2		21.6				0.1
Large Scale Farms	Zanzibar	3,178	199	6.3	14	7.1	2	0.8	173		10	4.9	0	0.0	0	
	Tanzania	522,370	154,783	29.6	17,380	11.2	69,435	44.9	11,299	7.3	33,397	21.6	23,145	15.0	128	0.1
4 11 YY 1 1'	Mainland Tanzania	15,813,504	676,283	4.3	149,769	22.1	106,597	15.8	24,423	3.6	366,988	54.3	24,807	3.7	3,699	0.5
All Holdings	Zanzibar	126,541	12,474	9.9	7,369	59.1	271	2.2	3,010	24.1	1,824	14.6	0	0.0	0	0.0
	Tanzania	15,940,045	688,757	4.3	157,138	22.8	106,868	15.5	27,433	4.0	368,812	53.5	24,807	3.6	3,699	0.5

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 4-2: Percentage Distribution of Agricultural Holdings, by Type of Seeds used, Region and Season During 2023/24 Agricultural Year

		Short Ra	iny Season			Long Ra	iny Season			Agricult	tural Year	
Region	Improve d Seeds (%)	Traditiona 1 Seeds (%)	Improve d Seeds, Recycled (%)	Total Agricultura I Households that Used Seeds	Improve d Seeds (%)	Traditiona 1 Seeds (%)	Improve d Seeds, Recycled (%)	Total Agricultura I Households that Used Seeds	Improve d Seeds (%)	Traditiona 1 Seeds (%)	Improve d Seeds, Recycled (%)	Total Agricultura I Households that Used Seeds
Dodoma	18.9	85.3	4.7	38,798	11.9	90.6	8.5	514,411	12.2	90.6	8.2	549,249
Arusha	64.7	51.3	7.5	81,001	64.5	65.5	10.6	265,409	69.7	69.1	11.5	277,472
Kilimanjaro	58.9	68.6	6.8	148,391	56.2	68.6	8.0	232,384	68.2	70.9	9.6	270,591
Tanga	36.7	71.0	8.4	331,974	26.0	76.0	7.3	349,068	37.7	77.6	8.7	438,074
Morogoro	22.3	83.2	6.3	113,212	16.0	89.7	3.4	502,121	17.5	90.1	3.7	550,242
Pwani	21.0	78.9	15.8	191,591	20.4	74.1	16.1	155,581	23.8	78.6	18.9	240,797
Dar es Salaam	44.4	68.2	7.1	95,470	38.9	69.6	4.3	132,465	41.5	71.3	6.1	195,733
Lindi	_	_	_	-	7.6	95.4	7.9	257,319	7.6	95.4	7.9	257,319
Mtwara	_	_	_	-	10.5	96.2	1.0	371,363	10.5	96.2	1.0	371,363
Ruvuma	_	_	_	-	42.6	80.1	8.8	370,400	42.6	80.1	8.8	370,400
Iringa	53.6	50.3	8.2	16,019	37.2	88.7	5.7	235,329	37.8	89.1	5.8	235,791
Mbeya	68.0	37.0	7.1	24,076	49.3	52.7	21.4	364,911	50.7	52.4	20.6	378,114
Singida	68.5	31.5	22.6	2,125	53.9	81.4	5.4	307,297	54.0	81.1	5.6	308,197
Tabora	51.4	82.4	11.1	160,034	52.6	75.9	17.6	302,990	53.8	78.0	15.9	444,154
Rukwa	100.0	32.4	0.0	1,676	41.8	85.7	6.0	246,950	41.8	85.7	6.0	246,950
Kigoma	41.9	84.9	3.6	290,759	38.4	80.2	4.7	45,293	42.8	85.3	3.3	315,866
Shinyanga	7.8	75.6	16.6	5,400	53.4	66.5	30.5	274,062	53.4	67.4	30.8	274,062
Kagera	20.0	72.8	25.8	517,543	9.2	79.8	20.3	379,119	20.6	77.3	25.2	539,655
Mwanza	50.0	79.8	13.6	377,383	26.3	72.5	14.1	135,194	50.7	81.8	14.3	398,551
Mara	49.4	56.1	26.1	276,218	39.2	53.1	25.4	232,112	51.3	62.2	27.8	314,671
Manyara	41.6	79.5	8.0	36,867	57.2	76.2	8.9	279,221	56.2	77.2	9.1	301,570
Njombe	17.3	78.1	10.9	25,083	42.8	71.4	8.4	184,937	42.3	71.7	8.9	195,043
Katavi	-	-	-		54.3	79.6	7.4	150,672	54.3	79.6	7.4	150,672
Simiyu	87.6	51.5	1.8	98,535	77.3	66.3	1.8	189,302	85.2	63.4	2.0	257,762
Geita	52.2	70.7	20.6	333,660	23.8	63.8	29.5	154,005	51.4	74.5	26.5	361,386
Songwe	-	-	_	-	57.4	75.6	6.7	245,727	57.4	75.6	6.7	245,727
Mainland					27	,	· · ·	,	٠,	,	· · ·	2.0,.27
Tanzania	41.7	72.4	14.4	3,166,894	36.3	77.5	11.0	6,877,643	41.1	78.5	12.0	8,489,412
Kaskazini Unguja	9.8	80.3	21.8	18,743	25.4	64.9	21.6	10,742	16.2	79.5	21.0	23,113
Kusini Unguja	35.8	39.4	43.6	20,859	29.2	35.1	45.9	19,600	36.4	42.0	44.8	22,946
Mjini Magharibi	29.2	74.9	18.0	16,972	20.5	72.4	15.7	16,711	26.1	77.1	19.6	21,192
Kaskazini Pemba	15.6	54.9	38.1	26,375	15.9	67.4	39.6	30,063	19.0	71.9	39.1	31,237
Kusini Pemba	11.0	75.8	26.8	21,291	6.6	74.4	25.1	26,619	11.2	77.4	24.6	28,248
Zanzibar	19.9	<b>63.9</b>	30.7	104,239	17.7	63.6	31.4	103,735	21.1	70.0	30.3	126,736
Tanzania	41.0	72.1	14.9	3,271,133	36.1	77.3	11.3	6,981,378	40.8	78.4	12.3	8,616,147

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-3: Crop Area Planted with Improved Seeds by Region and Season during 2023/24 Agricultural Year

	Short Rain	ıy Season	Long Rai	ny Season	Agricult	ural Year
Region	Crop Area under Improved Seeds	Total Crop Area Planted with Seeds	Crop Area under Improved Seeds	Total Crop Area Planted with Seeds	Crop Area under Improved Seeds	Total Crop Area Planted with Seeds
Dodoma	12,756	99,497	72,619	914,585	85,375	1,014,082
Arusha	28,008	61,021	140,414	298,104	168,422	359,124
Kilimanjaro	48,756	99,422	78,663	153,236	127,419	252,659
Tanga	109,069	329,933	71,018	343,912	180,087	673,846
Morogoro	18,373	109,099	86,742	697,426	105,115	806,524
Pwani	26,398	187,183	29,127	190,253	55,525	377,436
Dar es Salaam	38,444	94,412	47,004	141,429	85,448	235,841
Lindi	-	-	23,290	442,530	23,290	442,530
Mtwara	-	-	29,139	349,794	29,139	349,794
Ruvuma	-	-	269,361	638,825	269,361	638,825
Iringa	16,290	21,370	214,894	484,727	231,184	506,097
Mbeya	7,790	11,923	175,679	422,439	183,469	434,362
Singida	783	1,578	258,853	615,848	259,637	617,427
Tabora	84,431	243,612	262,611	726,014	347,042	969,625
Rukwa	3,965	5,286	119,865	423,989	123,831	429,275
Kigoma	60,052	178,117	9,939	24,607	69,991	202,724
Shinyanga	-	15,988	189,793	616,027	189,878	632,016
Kagera	52,471	304,355	13,046	208,421	65,517	512,777
Mwanza	129,003	436,362	25,243	144,548	154,246	580,909
Mara	105,976	283,227	73,229	209,831	179,205	493,057
Manyara	11,257	48,178	184,341	555,149	195,598	603,326
Njombe	4,279	21,660	73,540	192,603	77,819	214,262
Katavi	-	-	88,689	301,148	92,909	305,368
Simiyu	167,079	224,519	235,322	409,163	402,402	633,682
Geita	131,944	363,740	22,245	155,832	154,188	519,572
Songwe	-	-	166,004	436,791	166,131	436,919
Mainland Tanzania	1,061,556	3,144,828	2,960,672	10,097,231	4,022,228	13,242,059
Kaskazini Unguja	566	5,014	736	3,334	1,301	8,348
Kusini Unguja	2,235	6,852	1,739	6,710	3,974	13,561
Mjini Magharibi	2,085	5,751	1,431	5,290	3,516	11,041
Kaskazini Pemba	1,436	8,503	1,813	12,125	3,249	20,628
Kusini Pemba	786	8,197	484	12,250	1,271	20,446
Zanzibar	7,107	34,316	6,204	39,709	13,311	74,025
Tanzania	1,068,664	3,179,144	2,966,875	10,136,940	4,035,539	13,316,083

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-4: Percentage of Agricultural Holdings using Fertilizers (Organic and Inorganic) by Season and Region during 2023/24 Agricultural Year

			Short Rainy					ainy Season	
Holding Category	Region	Holdings using Organic Fertiliser among those Applying any Fertiliser (%)	Holdings using Inorganic Fertiliser among those Applying any Fertiliser (%)	Percentage of Agricultural Holdings with Crop Production Applying any Fertilisers (%)	Number of Agricultural Holdings with Crop Production	Holdings using Organic Fertiliser among those Applying any Fertiliser (%)	Holdings using Inorganic Fertiliser among those Applying any Fertiliser (%)	Percentage of Agricultural Holdings with Crop Production Applying any Fertilisers	Number of Agricultural Holdings with Crop Production
	Dodoma	93.6	22.3	14.2	39,699	96.3	7.4	14.7	516,824
	Arusha	78.5	39.7	60.7	117,166	72.6	48.0	45.0	287,165
	Kilimanjaro	89.8	33.6	84.2	260,645	83.3	48.2	80.4	304,608
	Tanga	75.3	40.5	23.0	346,789	72.0	43.6	14.1	367,543
	Morogoro	37.0	66.2	20.9	124,693	28.0	74.0	13.5	511,666
	Pwani	46.1	67.6	18.0	203,460	36.8	68.9	17.8	162,488
	Dar es Salaam	81.0	45.9	44.9	119,588	69.4	51.6	36.3	151,318
	Lindi	-	-	1.2	65,827	28.6	81.8	4.8	278,495
	Mtwara		_	1.2	03,027	20.3	83.6	7.8	394,185
	Ruvuma		_	_		17.6	97.5	80.3	375,248
	Iringa	41.2	91.5	78.1	17,293	44.5	94.1	68.4	236,251
	Mbeya	81.6	37.3	69.4	55,696	29.1	86.2	77.6	382,383
		81.0	37.3	26.1	2,125	84.4	23.6	42.8	307,297
	Singida	29.0	78.5	63.4		57.2	56.1	53.5	307,297
	Tabora	29.0	/8.5		160,917				
	Rukwa	- 14.5	-	0.0	1,676	19.8	82.9	34.7	246,950
	Kigoma	14.5	93.0	58.0	290,759	15.7	93.8	61.5	45,293
Agricultural	Shinyanga	69.7	30.3	78.6	5,400	60.0	48.7	39.6	274,062
Households	Kagera	92.9	11.9	20.7	529,821	95.1	4.9	11.9	426,982
	Mwanza	84.4	30.1	37.2	377,689	90.6	43.0	27.4	135,825
	Mara	81.4	22.9	47.9	277,976	76.2	28.4	35.2	235,472
	Manyara	76.9	41.0	35.5	38,416	75.2	35.7	35.8	279,889
	Njombe	30.7	93.6	93.7	26,238	34.8	96.8	88.2	184,937
	Katavi	-	-	-	-	38.7	78.9	49.6	150,672
	Simiyu	95.4	8.5	12.9	98,535	90.3	11.3	14.4	189,302
	Geita	79.6	30.0	28.2	334,231	79.9	35.6	13.0	172,547
	Songwe	25.3	94.1	100.0	7,512	23.1	94.1	64.7	245,727
	Mainland Tanzania	67.8	45.6	38.7	3,503,117	51.0	65.9	37.6	7,167,048
	Kaskazini Unguja	71.6	54.6	33.3	22,137	64.6	63.8	55.0	11,302
	Kusini Unguja	92.0	21.4	56.0	25,702	88.6	22.1	44.5	24,727
	Mjini Magharibi	94.3	33.8	42.1	26,886	80.6	47.0	35.0	22,328
	Kaskazini Pemba	93.3	24.8	27.2	30,247	61.0	62.6	36.0	32,547
	Kusini Pemba	83.0	37.7	27.9	23,106	41.2	73.5	24.4	27,860
	Zanzibar	88.4	32.2	37.3	128,078	68.9	51.4	36.7	118,765
	Tanzania	68.5	45.1	38.7	3,631,195	51.3	65.7	37.6	7,285,813
	Mainland Tanzania	65.3	62.5	66.9	375	56.0	70.9	65.4	820
Large Scale	Zanzibar	94.1	58.8	77.3	22	93.8	50.0	69.6	23
Farms	Tanzania	67.2	62.3	67.5	397	57.1	70.3	65.5	843
	Mainland Tanzania	67.8	45.6	38.8	3,503,492	51.0	65.9	37.6	7,167,868
All Holdings	Zanzibar	88.4	32.2	37.3	128,100	68.9	51.4	36.7	118,788
7 III Holdings		68.5	45.1			51.3	<b>65.7</b>	37.6	
	Tanzania	68.5	45.1	38.7	3,631,592	51.3	65.7	5/.6	7,286,656

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 4-4: Percentage of Agricultural Holdings using Fertilizers (Organic and Inorganic) by Season and Region during 2023/24 Agricultural Year

				ltural Year	
Holding Category	Region	Holdings using Organic Fertiliser among those Applying any Fertiliser (%)	Holdings using Inorganic Fertiliser among those Applying any Fertiliser (%)	Percentage of Agricultural Holdings with Crop Production Applying any Fertilisers	Number of Agricultural Holdings with Crop Production
	Dodoma	96.0	7.5	14.4	551,662
	Arusha	73.8	49.7	49.0	296,443
	Kilimanjaro	81.6	56.5	83.7	328,350
	Tanga	75.4	43.6	21.7	453,930
	Morogoro	31.3	70.8	15.7	559,499
	Pwani	42.2	69.9	20.2	251,786
	Dar es Salaam	71.5	51.4	39.0	222,971
	Lindi	32.4	77.4	5.1	278,495
	Mtwara	20.3	83.6	7.8	394,185
	Ruvuma	17.6	97.5	80.3	375,248
	Iringa	45.4	94.1	68.3	236,712
	Mbeya	29.8	86.8	77.7	391,172
	Singida	84.4	23.6	42.7	308,197
	Tabora	46.3	64.4	58.8	444,154
	Rukwa	19.8	82.9	34.7	246,950
	Kigoma	15.1	93.0	59.2	315,860
Agricultural	Shinyanga	60.4	49.0	40.0	274,062
Households	Kagera	95.8	10.8	22.1	544,333
	Mwanza	85.5	32.0	38.2	398,934
	Mara	81.4	24.3	48.5	316,782
	Manyara	75.7	36.0	34.9	302,003
	Njombe	35.2	96.7	88.5	195,500
	Katavi	39.5	78.9	49.6	150,672
	Simiyu	91.6	10.9	14.8	257,762
	Geita	81.2	30.9	28.6	361,957
	Songwe	23.7	94.1	64.7	245,727
	Mainland Tanzania	53.3	63.4	40.1	8,703,351
	Kaskazini Unguja	66.9	61.2	39.5	26,144
	Kusini Unguja	90.3	24.4	57.0	27,252
	Mjini Magharibi	87.1	40.3	44.2	29,846
	Kaskazini Pemba	67.1	54.5	43.3	33,005
	Kusini Pemba	59.5	64.6	34.8	29,386
	Zanzibar	75.7	46.9	43.7	145,632
	Tanzania	53.7	63.1	40.2	8,848,983
	Mainland Tanzania	58.5	71.7	69.9	854
Large Scale	Zanzibar	94.4	55.6	75.0	24
Farms	Tanzania	59.5	71.2	70.0	878
	Mainland Tanzania	53.3	63.4	40.1	8,704,205
All Holdings	Zanzibar	75.7	46.9	43.7	145,656
6-	Tanzania	53.7	63.1	40.2	8,849,861

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-5: Percentage Distribution of Agricultural Holdings Using Fertilizer, by Type and Season During 2023/24 Agricultural Year

				Mainland	Tanzai	nia		Zan	zibar			Tan	zania	
			Sh	ort Rainy Season	L	ong Rainy Season	Sh	ort Rainy Season	L	ong Rainy Season	Sh	ort Rainy Season	Long Rainy Season	
Holding Category	Fertilizer Group	Fertilizer Type	%	Total Agricultural Holdings using Organic/Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/Inorganic Fertilizer
		Solid Manure/Farm Yard Manure	55.7	512,852	63.0	859,637	74.3	31,372	77.3	23,195	56.5	544,224	63.3	882,832
		Liquid Manure/Slurry	41.3	380,335	33.4	455,473	18.0	7,592	14.6	4,393	40.3	387,927	33.0	459,866
		Green Manure (Crop Residues)	7.2	66,095	6.5	89,056	7.5	3,155	9.9	2,971	7.2	69,250	6.6	92,027
		Compost	1.2	10,981	1.8	24,673	9.9	4,164	8.5	2,540	1.6	15,145	2.0	27,212
	Organic	Stabilised Sewage Sludge	0.4	3,381	0.8	10,695	0.4	-	0.3	-	0.4	3,558	0.8	10,788
		Biofertilizers	0.4	3,263	0.5	7,487	1.1	483	1.2	368	0.4	3,745	0.6	7,854
		Foliah Fertilizer (Buster)	5.0	45,787	7.0	95,714	1.4	602	1.0	295	4.8	46,389	6.8	96,009
		Other Organic Fertilizers	0.0	-	0.0	-	0.2	-	0.0	-	0.1	-	0.0	-
		Urea	62.1	384,304	72.5	1,290,987	84.7	13,040	88.2	19,750	62.7	397,344	72.7	1,310,737
		Diammonium Phosphate (dap)	41.8	258,579	46.3	824,369	31.4	4,837	23.5	5,252	41.6	263,416	46.0	829,621
		Calcium Ammonium Nitrate(can)	30.6	189,233	40.3	718,713	19.7	3,030	9.5	2,124	30.3	192,263	40.0	720,837
Agricultural Households		Ammonium Sulphate (sa)	3.2	19,606	25.4	453,190	2.0	305	0.4	-	3.1	19,911	25.1	453,290
		Nitrogen, Phosphorus, Potassium (npks)	13.7	84,976	8.9	157,803	24.7	3,805	18.8	4,218	14.0	88,781	9.0	162,021
		Minjingu Nafaka Plus	0.5	3,387	0.3	5,287	0.8	-	0.4	-	0.6	3,507	0.3	5,371
		Nps Zinc	0.5	2,967	0.8	14,857	0.0	-	0.0	-	0.5	2,967	0.8	14,857
	Inorganic	Fomi	0.2	-	0.1	-	0.2	-	0.0	-	0.2	-	0.1	-
		Kenoplus	0.7	4,303	1.1	19,940	0.0	-	0.0	-	0.7	4,303	1.1	19,940
		Pandaplus	0.2	-	0.0	-	0.2	-	0.0	-	0.2	1,194	0.0	-
		Macrop	1.6	9,886	0.2	4,003	0.0	-	0.0	-	1.6	9,886	0.2	4,003
		Amidas	2.7	16,580	0.9	16,446	0.0	-	0.0	-	2.6	16,580	0.9	16,446
		Triplesuperphosphate(tsp)	0.1	-	0.2	4,160	5.8	898	6.8	1,521	0.3	1,825	0.3	5,681
		Muriateofpotash (mop)	0.0	-	0.0	-	2.3	350	2.0	443	0.1	350	0.0	443
		Other Inorganic Fertilizers	0.2	1,538	0.2	4,453	0.7	-	0.2	-	0.3	1,646	0.2	4,561

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 4-5: Percentage Distribution of Agricultural Holdings Using Fertilizer, by Type and Season During 2023/24 Agricultural Year

				Mainland	Tanzaı	nia		Zan	zibar			Tan	zania	
			Short	Rainy Season	Long	Rainy Season	Short	Rainy Season	Long	Rainy Season	Short	Rainy Season	Long	Rainy Season
Holding Category	Fertilizer Group	Fertilizer Type	%	Total Agricultural Holdings using Organic/ Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/ Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/ Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/ Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/ Inorganic Fertilizer	%	Total Agricultural Holdings using Organic/ Inorganic Fertilizer
		Solid Manure/Farm Yard Manure	73.2	120	73.8	220	100.0	16	100.0	15	75.6	136	75.1	235
		Liquid Manure/Slurry	24.4	40	26.8	80	18.8	3	20.0	3	23.9	43	26.5	83
		Green Manure (Crop Residues)	7.9	13	7.7	23	0.0	-	0.0	-	7.2	13	7.3	23
	Omoomio	Compost	4.3	7	6.4	19	0.0	-	0.0	-	3.9	7	6.1	19
	Organic	Stabilised Sewage Sludge	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
		Biofertilizers	0.0	-	0.7	-	0.0	-	0.0	-	0.0	-	0.6	-
		Foliah Fertilizer (Buster)	3.7	6	3.3	10	0.0	-	0.0	-	3.3	6	3.2	10
		Other Organic Fertilizers	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
		Urea	56.7	89	61.4	234	80.0	8	75.0	6	58.1	97	61.7	240
		Diammonium Phosphate (dap)	52.9	83	54.6	208	60.0	6	37.5	3	53.3	89	54.2	211
Large		Calcium Ammonium Nitrate(can)	43.3	68	48.6	185	30.0	3	12.5	-	42.5	71	47.8	186
Scale		Ammonium Sulphate (sa)	14.6	23	12.1	46	0.0	-	0.0	-	13.8	23	11.8	46
Farms		Nitrogen, Phosphorus, Potassium (npks)	47.8	75	43.0	164	70.0	7	50.0	4	49.1	82	43.2	168
		Minjingu Nafaka Plus	4.5	7	1.6	6	0.0	-	0.0	-	4.2	7	1.5	6
		Nps Zinc	5.7	9	6.6	25	0.0	-	0.0	-	5.4	9	6.4	25
	Inorganic	Fomi	0.0	-	0.3	-	0.0	-	0.0	-	0.0	-	0.3	-
		Kenoplus	6.4	10	3.1	12	0.0	-	0.0	-	6.0	10	3.1	12
		Pandaplus	0.0	-	0.3	-	0.0	-	0.0	-	0.0	-	0.3	-
		Macrop	3.2	5	1.6	6	0.0	-	12.5	-	3.0	5	1.8	7
		Amidas	2.5	4	3.7	14	0.0	-	0.0	-	2.4	4	3.6	14
		Triplesuperphosphate(tsp)	0.6	-	0.8	3	0.0	-	12.5	-	0.6	-	1.0	4
		Muriateofpotash (mop)	7.6	12	2.4	9	20.0	-	0.0	-	8.4	14	2.3	9
		Other Inorganic Fertilizers	1.9	3	1.9	10	0.0	-	0.0	-	1.8	3	1.8	10

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-6: Fertilizer Consumption (Kg of Nutrients per Hectare of Arable Land) During 2023/24 Agricultural Year

		-		iny Season				ny Season	
Holding Category	Region	Quantity of Fertilizer per Land Unit (Kg/ha)	Quantity of Nitrogen per Land Unit (Kg/ha)	Quantity of Phosphorus per Land Unit (Kg/ha)	Quantity of Potassium per Land Unit (Kg/ha)	Quantity of Fertilizer per Land Unit (Kg/ha)	Quantity of Nitrogen per Land Unit (Kg/ha)	Quantity of Phosphorus per Land Unit (Kg/ha)	Quantity of Potassium per Land Unit (Kg/ha)
	Dodoma	-	-	-	-	62	20	13	0
	Arusha	157	61	15	0	119	43	11	0
	Kilimanjaro	137	45	21	1	131	47	15	1
	Tanga	84	28	16	0	85	26	20	1
	Morogoro	82	31	4	0	71	26	5	1
	Pwani	80	29	2	1	53	19	4	1
	Dar es Salaam	73	24	8	1	114	33	11	1
	Lindi	-	_	-	-	39	15	4	0
	Mtwara	-	_	-	_	54	21	3	0
	Ruvuma	-	_	-	-	217	67	4	0
	Iringa	127	36	14	1	123	37	20	1
	Mbeya	402	104	69	9	267	81	32	5
	Singida	-	_	-	_	60	17	13	1
	Tabora	266	66	31	27	156	43	19	9
	Rukwa	<del>-</del>	-	-	-	112	36	21	0
	Kigoma	122	35	24	2	91	24	20	2
	Shinyanga	-	-	-	_	244	62	33	22
Agricultural Households	Kagera	17	6	1	0	-	_	_	-
	Mwanza	65	22	6	2	62	22	4	2
	Mara	101	28	26	2	109	27	30	2
	Manyara	203	72	34	0	92	26	24	0
	Njombe	229	59	50	2	256	75	41	1
	Katavi		-	-	-	164	49	14	9
	Simiyu	_	_	_	_	18	5	0	0
	Geita	95	28	13	3	69	18	15	4
	Songwe	314	91	38	7	282	84	46	2
	Mainland Tanzania	145	42	21	6	185	56	21	3
	Kaskazini Unguja	88	30	12	3	109	38	11	3
	Kusini Unguja	102	34	11	3	148	46	23	3
	Mjini Magharibi	89	24	15	4	146	42	21	8
	Kaskazini Pemba	26	8	5	1	26	10	2	0
	Kusini Pemba	48	18	5	0	32	13	2	0
	Zanzibar	79	25	11	2	82	27	10	3
	Tanzania	144	41	20	6	184	56	21	3
	Mainland Tanzania	102	38	10	2	83	26	10	3
Large Scale Farms	Zanzibar	204	41	86	0	7	3	1	0
ange seale I ailiis	Tanzania	105	38	12	2	82	26	10	3
	Mainland Tanzania	140	41	19	6	179	54	20	3
All Holdings	Zanzibar	104	28	26	2	79	26	10	3
iii iioidiiiga	Tanzania	139	41	19	6	178	54	20	<b>3</b>

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-7: Area Applied with Fertilizer (ha), by Type, Season, and Region During 2023/24 Agricultural Year

Holding Region		Short Rainy Season			Long Rainy Season			Agricultural Year		
Holding Category	Region	Total Area Applied with Organic Fertilizer	Total Area Applied with Inorganic Fertilizer	Total Area Applied with any Fertilizer	Total Area Applied with Organic Fertilizer	Total Area Applied with Inorganic Fertilizer	Total Area Applied with any Fertilizer	Total Area Applied with Organic Fertilizer	Total Area Applied with Inorganic Fertilizer	Total Area Applied with any Fertilizer
	Dodoma	9,414	=	10,140	86,476	8,732	92,556	95,890	11,645	102,696
	Arusha	34,505	16,558	46,839	117,049	71,140	149,708	151,555	87,699	196,547
	Kilimanjaro	96,182	42,297	126,276	98,434	73,927	161,955	194,616	116,224	288,231
	Tanga	44,303	20,613	59,488	31,423	14,409	42,459	75,726	35,022	101,947
	Morogoro	13,268	22,354	35,202	25,723	66,864	90,772	38,991	89,217	125,974
	Pwani	19,702	23,474	40,827	21,847	24,279	43,535	41,549	47,754	84,363
	Dar es Salaam	35,361	28,760	50,896	30,461	32,572	51,872	65,823	61,332	102,768
	Lindi	-	-	-	5,037	9,273	13,743	5,039	9,273	13,745
	Mtwara	-	-	-	10,796	23,211	33,512	10,796	23,211	33,512
	Ruvuma	-	-	-	45,623	469,067	490,549	45,623	469,067	490,549
	Iringa	12,759	16,399	18,996	54,783	297,823	316,270	67,542	314,223	335,266
	Mbeya	14,071	7,014	19,243	88,235	295,710	333,267	102,306	302,724	352,510
	Singida	-	-	-	179,287	42,361	216,949	179,512	42,361	217,174
	Tabora	31,002	87,998	114,405	173,992	110,821	254,056	204,994	198,819	368,461
	Rukwa	-	-	-	17,798	121,749	138,916	17,798	121,749	138,916
	Kigoma	11,384	85,656	93,753	3,725	16,062	18,414	15,109	101,718	112,167
Agricultural	Shinyanga	5,207	-	7,390	88,555	71,726	152,562	93,761	73,909	159,952
Households	Kagera	68,259	3,288	70,451	30,822		31,822	99,081	4,289	102,273
	Mwanza	111,493	40,946	138,306	26,845	9,368	29,180	138,338	50,314	167,486
	Mara	91,711	16,098	104,314	56,560	14,464	68,266	148,271	30,562	172,580
	Manyara	6,623	6,224	11,896	78,992	33,119	103,539	85,616	39,342	115,435
	Njombe	9,389	18,017	22,790	49,370	155,640	165,089	58,759	173,657	187,879
	Katavi	´ -	, <u>-</u>		34,902	61,396	86,768	39,122	65,616	90,988
	Simiyu	52,968	_	53,437	60,433	6,146	66,054	113,401	7,067	119,490
	Geita	85,865	23,977	102,722	14,680	6,684	20,341	100,545	30,661	123,064
	Songwe	2,306	5,978	7,939	47,853	230,224	256,459	50,159	236,201	264,398
	Mainland Tanzania	760,219	475,887	1,139,757	1,479,702	2,267,769	3,428,614	2,239,921	2,743,656	4,568,371
	Kaskazini Unguja	1,636	1,561	2,559	1,197	1,092	1,792	2,833	2,653	4,351
	Kusini Unguja	8,116	1,416	8,725	5,783	896	6,248	13,899	2,312	14,973
	Mjini Magharibi	4,526	2,308	4,949	2,996	1,743	3,553	7,522	4,051	8,502
	Kaskazini Pemba	2,554	697	2,744	2,771	2,274	3,999	5,324	2,970	6,743
	Kusini Pemba	1,655	876	2,047	803	1,385	1,977	2,458	2,261	4,025
	Zanzibar	18,486	6,857	21,024	13,550	7,390	17,569	32,036	14,247	38,593
	Tanzania	778,705	482,744	1,160,781	1,493,252	2,275,159	3,446,183	2,271,957	2,757,903	4,606,964
	Mainland Tanzania	62,401	69,442	111,934	74,059	148,276	192,023	136,459	217,718	303,958
Large Scale	Zanzibar	288	1,851	2,021	213	329	514	502	2,179	2,535
Farms	Tanzania	62,689	71,293	113,956	74,272	148,605	192,537	136,961	219,898	306,493
	Mainland Tanzania	822,619	545,329	1,251,691	1,553,761	2,416,045	3,620,637	2,376,380	2,961,374	4,872,328
All Holdings	Zanzibar	18,775	8,708	23,046	13,763	7,719	18,083	32,538	16,427	41,129
1101011150	Tanzania	841,394	554,037	1,274,736	1,567,524	2,423,764	3,638,720	2,408,918	2,977,801	4,913,457

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-8: Percentage of Agricultural Holdings Engaged in Crop Production Applying Pesticides by Type, Season and Region During 2023/24 Agricultural Year

					Short Rainy Sea	ison		
Holding Category	Region	Holdings Engaged in Crop Production	Holdings A			Type of Pes	ticides (%)	
		Number	Number	%	Insecticides	Herbicides	Fungicide	Rodenticide
	Dodoma	39,699	2,222	5.6	100.0	40.5	0.0	0.0
	Arusha	117,166	62,582	53.4	99.4	12.5	14.0	0.0
	Kilimanjaro	260,645	96,021	36.8	95.9	13.1	9.1	0.7
	Tanga	346,789	71,450	20.6	95.8	6.9	5.0	0.0
	Morogoro	124,693	31,873	25.6	74.8	36.8	10.1	0.0
	Pwani	203,460	64,930	31.9	91.8	22.2	4.5	0.0
	Dar es Salaam	119,588	37,016	31.0	82.2	22.8	10.1	0.0
	Lindi	65,827	25,868	39.3	100.0	61.5	0.0	0.0
	Mtwara	-	-	-	-	-	-	
	Ruvuma	-	-	-	-	-	-	
	Iringa	17,293	10,358	59.9	84.2	0.0	42.5	0.0
	Mbeya	55,696	7,523	13.5	73.5	64.7	37.6	0.0
	Singida	2,125	-	0.0	-	-	-	
	Tabora	160,917	47,679	29.6	95.9	7.3	1.5	0.0
	Rukwa	1,676	-	72.4	-	-	-	
	Kigoma	290,759	61,922	21.3	92.8	7.2	0.0	0.0
Agricultural	Shinyanga	5,400	2,475	45.8	69.1	30.9	0.0	0.0
Households	Kagera	529,821	55,628	10.5	55.3	49.1	1.9	0.0
	Mwanza	377,689	116,430	30.8	98.0	2.6	2.5	0.0
	Mara	277,976	55,126	19.8	71.5	31.4	4.4	0.0
	Manyara	38,416	13,216	34.4	84.9	12.5	12.3	0.0
	Njombe	26,238	21,314	81.2	79.7	22.2	24.0	0.0
	Katavi	966	-	-	-	-	-	
	Simiyu	98,535	26,542	26.9	100.0	0.0	0.0	2.:
	Geita	334,231	154,183	46.1	96.8	5.0	2.4	0.0
	Songwe	7,512	6,457	86.0	96.1	27.5	60.3	0.0
	Mainland Tanzania	3,503,117	972,642	27.8	90.5	15.8	6.2	0.1
	Kaskazini Unguja	22,137	4,377	19.8	70.3	36.8	14.9	1.4
	Kusini Unguja	25,702	5,851	22.8	82.1	32.2	23.7	7.2
	Mjini Magharibi	26,886	3,587	13.3	77.6	7.7	29.3	8.8
	Kaskazini Pemba	30,247	1,976	6.5	94.8	4.2	29.6	0.0
	Kusini Pemba	23,106	1,966	8.5	92.4	0.0	18.3	7.0
	Zanzibar	128,078	17,756	13.9	80.8	21.7	22.7	5.3
	Tanzania	3,631,195	990,398	27.3	90.3	15.9	6.5	0.2
	Mainland Tanzania	375	233	62.1	91.0	38.6	35.2	0.4
Large Scale Farms	Zanzibar	22	12	54.5	91.7	16.7	91.7	0.0
1 611110	Tanzania	397	245	61.7	91.0	37.6	38.0	0.4
	Mainland Tanzania	3,503,492	972,875	27.8	90.5	15.8	6.2	0.1
All Holdings	Zanzibar	128,100	17,768	13.9	80.9	21.7	22.8	5.3
	Tanzania	3,631,592	990,643	27.3	90.3	15.9	6.5	0.2

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 4-8: Percentage of Agricultural Holdings Engaged in Crop Production Applying Pesticides by Type, Season and Region During 2023/24 Agricultural Year

					Long Rainy Sea	ison		
Holding Category	Region	Holdings Engaged in Crop Production	Holdings A any Pest			Type of Pes	ticides (%)	
		Number	Number	%	Insecticides	Herbicides	Fungicide	Rodenticide
	Dodoma	516,824	17,019	3.3	95.9	16.0	12.5	0.0
	Arusha	287,165	180,159	62.7	96.8	9.4	9.9	0.5
	Kilimanjaro	304,608	141,214	46.4	97.3	11.3	9.0	1.8
	Tanga	367,543	60,359	16.4	95.7	8.0	7.6	0.0
	Morogoro	511,666	267,129	52.2	32.7	79.6	1.9	0.3
	Pwani	162,488	60,934	37.5	92.3	20.9	7.6	0.0
	Dar es Salaam	151,318	41,190	27.2	70.7	27.9	11.7	0.0
	Lindi	278,495	211,240	75.9	93.6	70.1	14.7	0.4
	Mtwara	394,185	247,655	62.8	90.2	38.7	10.9	0.0
	Ruvuma	375,248	184,598	49.2	45.8	68.3	12.5	0.0
	Iringa	236,251	144,400	61.1	95.1	26.2	21.5	0.6
	Mbeya	382,383	194,709	50.9	61.7	66.2	11.6	0.1
	Singida	307,297	47,956	15.6	93.3	9.5	2.2	0.0
	Tabora	303,919	65,493	21.5	88.0	12.5	4.3	0.0
	Rukwa	246,950	107,432	43.5	93.7	10.6	0.0	0.3
	Kigoma	45,293	4,426	9.8	90.3	9.7	0.0	0.0
Agricultural	Shinyanga	274,062	74,094	27.0	84.2	21.5	0.8	0.0
Households	Kagera	426,982	31,624	7.4	26.5	77.5	3.3	0.0
	Mwanza	135,825	31,742	23.4	97.2	2.8	8.1	0.0
	Mara	235,472	32,751	13.9	77.1	23.3	7.7	0.0
	Manyara	279,889	121,516	43.4	96.8	6.9	2.9	0.0
	Njombe	184,937	143,097	77.4	85.8	24.7	13.7	0.5
	Katavi	150,672	54,886	36.4	95.6	13.2	2.6	0.0
	Simiyu	189,302	51,729	27.3	99.3	2.3	0.0	0.0
	Geita	172,547	39,709	23.0	88.8	16.2	10.8	0.7
	Songwe	245,727	131,025	53.3	66.0	62.6	10.1	0.1
	Mainland Tanzania	7,167,048	2,688,086	37.5	78.9	38.2	8.9	0.3
	Kaskazini Unguja	11,302	4,546	40.2	66.3	37.3	8.4	0.0
	Kusini Unguja	24,727	4,436	17.9	72.8	42.4	20.9	5.8
	Mjini Magharibi	22,328	2,968	13.3	71.6	20.2	42.7	0.0
	Kaskazini Pemba	32,547	2,217	6.8	81.4	23.9	16.2	0.0
	Kusini Pemba	27,860	5,393	19.4	33.2	73.2	5.0	0.0
	Zanzibar	118,765	19,562	16.5	61.2	44.2	16.4	1.3
	Tanzania	7,285,813	2,707,647	37.2	78.8	38.3	9.0	0.3
	Mainland Tanzania	820	588	71.7	92.0	40.5	29.8	0.7
Large Scale Farms	Zanzibar	23	11	47.8	90.9	18.2	54.5	0.0
: at 1118	Tanzania	843	599	71.1	92.0	40.1	30.2	0.7
	Mainland Tanzania	7,167,868	2,688,674	37.5	78.9	38.2	8.9	0.3
All Holdings	Zanzibar	118,788	19,573	16.5	61.2	44.2	16.4	1.3
J	Tanzania	7,286,656	2,708,246	37.2	78.8	38.3	9.0	0.3

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 4-8: Percentage of Agricultural Holdings Engaged in Crop Production Applying Pesticides by Type, Season and Region During 2023/24 Agricultural Year

		Agricultural Year 2023/24											
Holding Category	Region	Holdings Engaged in Crop Production	Holdin Applied Pesticio	any		Type of Pes	sticides (%)						
		Number	Number	%	Insecticides	Herbicides	Fungicide	Rodenticide					
	Dodoma	516,824	17,019	3.3	95.9	16.0	12.5	0.0					
	Arusha	287,165	180,159	62.7	96.8	9.4	9.9	0.5					
	Kilimanjaro	304,608	141,214	46.4	97.3	11.3	9.0	1.8					
	Tanga	367,543	60,359	16.4	95.7	8.0	7.6	0.0					
	Morogoro	511,666	267,129	52.2	32.7	79.6	1.9	0.3					
	Pwani	162,488	60,934	37.5	92.3	20.9	7.6	0.0					
	Dar es Salaam	151,318	41,190	27.2	70.7	27.9	11.7	0.0					
	Lindi	278,495	211,240	75.9	93.6	70.1	14.7	0.4					
	Mtwara	394,185	247,655	62.8	90.2	38.7	10.9	0.0					
	Ruvuma	375,248	184,598	49.2	45.8	68.3	12.5	0.0					
	Iringa	236,251	144,400	61.1	95.1	26.2	21.5	0.6					
	Mbeya	382,383	194,709	50.9	61.7	66.2	11.6	0.1					
	Singida	307,297	47,956	15.6	93.3	9.5	2.2	0.0					
	Tabora	303,919	65,493	21.5	88.0	12.5	4.3	0.0					
	Rukwa	246,950	107,432	43.5	93.7	10.6	0.0	0.3					
Agricultural	Kigoma	45,293	4,426	9.8	90.3	9.7	0.0	0.0					
	Shinyanga	274,062	74,094	27.0	84.2	21.5	0.8	0.0					
Households	Kagera	426,982	31,624	7.4	26.5	77.5	3.3	0.0					
	Mwanza	135,825	31,742	23.4	97.2	2.8	8.1	0.0					
	Mara	235,472	32,751	13.9	77.1	23.3	7.7	0.0					
	Manyara	279,889	121,516	43.4	96.8	6.9	2.9	0.0					
	Njombe	184,937	143,097	77.4	85.8	24.7	13.7	0.5					
	Katavi	150,672	54,886	36.4	95.6	13.2	2.6	0.0					
	Simiyu	189,302	51,729	27.3	99.3	2.3	0.0	0.0					
	Geita	172,547	39,709	23.0	88.8	16.2	10.8	0.7					
	Songwe	245,727	131,025	53.3	66.0	62.6	10.1	0.1					
	Mainland Tanzania	7,167,048	2,688,086	37.5	78.9	38.2	8.9	0.3					
	Kaskazini Unguja	11,302	4,546	40.2	66.3	37.3	8.4	0.0					
	Kusini Unguja	24,727	4,436	17.9	72.8	42.4	20.9	5.8					
	Mjini Magharibi	22,328	2,968	13.3	71.6	20.2	42.7	0.0					
	Kaskazini Pemba	32,547	2,217	6.8	81.4	23.9	16.2	0.0					
	Kusini Pemba	27,860	5,393	19.4	33.2	73.2	5.0	0.0					
	Zanzibar	118,765	19,562	16.5	61.2	44.2	16.4	1.3					
	Tanzania	7,285,813	2,707,647	37.2	78.8	38.3	9.0	0.3					
	Mainland Tanzania	820	588	71.7	92.0	40.5	29.8	0.7					
Large Scale Farms	Zanzibar	23	11	47.8	90.9	18.2	54.5	0.0					
1 411113	Tanzania	843	599	71.1	92.0	40.1	30.2	0.7					
	Mainland Tanzania	7,167,868	2,688,674	37.5	78.9	38.2	8.9	0.3					
All Holdings	Zanzibar	118,788	19,573	16.5	61.2	44.2	16.4	1.3					
Holuligs	Tanzania	7,286,656	2,708,246	37.2	78.8	38.3	9.0	0.3					

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-9: Area and Percentage Applying with Pesticides by Type and Region during 2023/24 Agricultural Year

		Total Area Planted with	Planted Area						Pesticide T	ype				
<b>Holding Category</b>	Region	Crops	with Pestic	cides	Insectici	des	Herbicio	les	Fungicio	les	Rodentic	ides	Other Pest	icides
		Area (ha)	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%
	Dodoma	1,070,660	34,382	3.2	33,656	97.9	5,099	14.8	2,444	7.1	-	0.0	-	0.0
	Arusha	396,680	261,327	65.9	253,171	96.9	22,183	8.5	23,532	9.0	357	0.1	-	0.0
	Kilimanjaro	391,567	173,011	44.2	165,806	95.8	21,972	12.7	19,265	11.1	2,353	1.4	-	0.0
	Tanga	742,042	138,702	18.7	133,079	95.9	3,925	2.8	4,196	3.0	-	0.0	-	0.0
	Morogoro	914,592	445,029	48.7	158,647	35.6	309,019	69.4	6,212	1.4	-	0.1	-	0.0
	Pwani	456,517	167,177	36.6	153,802	92.0	21,709	13.0	8,657	5.2	-	0.0	-	0.0
	Dar es Salaam	282,163	88,399	31.3	60,047	67.9	20,769	23.5	7,083	8.0	-	0.0	-	0.0
	Lindi	893,394	643,455	72.0	606,555	94.3	360,186	56.0	80,773	12.6	-	0.1	-	0.0
	Mtwara	805,336	530,417	65.9	481,478	90.8	122,104	23.0	74,174	14.0	_	0.0	-	0.0
	Ruvuma	925,090	448,193	48.4	214,899	47.9	237,173	52.9	101,844	22.7	_	0.0	-	0.0
	Iringa	492,448	327,106	66.4	188,477	57.6	41,406	12.7	148,751	45.5	_	0.2	_	0.0
	Mbeya	470,787	250,962	53.3	155,343	61.9	148,644	59.2	19,155	7.6	_	0.1	-	0.0
	Singida	615,423	78,350	12.7	68,831	87.9	9,647	12.3	-	0.7	_	0.0	-	0.0
	Tabora	972,274	180,033	18.5	153,635	85.3	17,992	10.0	3,658	2.0	_	0.0	_	0.0
	Rukwa	431,847	178,745	41.4	166,840	93.3	13,106	7.3	´ -	0.0	_	0.2	_	0.0
	Kigoma	210,902	43,091	20.4	41,375	96.0	1,717	4.0	_	0.0	_	0.0	_	0.0
Agricultural	Shinyanga	594,966	115,078	19.3	82,336	71.5	30,772	26.7	_	0.1	_	0.0	_	0.0
Households	Kagera	782,090	59,762	7.6	21,837	36.5	40,349	67.5	_	1.7	_	0.0	_	0.0
	Mwanza	582,781	148,906	25.6	139,812	93.9	8,265	5.6	4,267	2.9	_	0.0	_	0.0
	Mara	501,211	94,260	18.8	64,332	68.2	28,494	30.2	2,432	2.6	_	0.0	_	0.0
	Manyara	571,589	182,494	31.9	176,928	96.9	11,702	6.4	2,031	1.1	_	0.0	_	0.0
	Njombe	223,995	169,145	75.5	140,633	83.1	46,662	27.6	22,920	13.6	_	0.6	_	0.0
	Katavi	306,222	79,326	25.9	65,720	82.8	14,572	18.4	6,747	8.5	_	0.0	_	0.0
	Simiyu	642,751	158,075	24.6	157,853	99.9	- 1,5,2	0.1		0.0	_	0.2	_	0.0
	Geita	542,432	208,488	38.4	188,085	90.2	14,787	7.1	6,281	3.0	_	0.1	_	0.0
	Songwe	474,553	225,293	47.5	143,995	63.9	115,857	51.4	18,186	8.1	_	0.0	_	0.0
	Mainland Tanzania	15,294,312	5,429,207	35.5	4,217,173	77 <b>.</b> 7	1,668,334	30.7	564,192	10.4	6,901	0.1	_	0.0
	Kaskazini Unguja	10,459	2,839	27.1	1,973	69.5	999	35.2	386	13.6	0,501	0.9	_	0.0
	Kusini Unguja	31,799	5,966	18.8	4,416	74.0	1,549	26.0	886	14.9	442	7.4		0.0
	Mjini Magharibi	19,752	3,590	18.2	2,815	78.4	392	10.9	1,438	40.1	-	1.6	_	0.0
	Kaskazini Pemba	30,971	2,248	7.3	1,990	88.5	211	9.4	327	14.5	_	0.0	_	0.0
	Kusini Pemba	30,382	2,263	7.4	1,164	51.4	1,012	44.7	490	21.6		1.3		0.0
	Zanzibar	123,363	16,908	13.7	12,358	73.1	4,163	24.6	3,527	20.9	555	3.3	_	0.0
	Tanzania	15,417,674	5,446,115	35.3	4,229,531	77.7	1,672,497	30.7	567,719	10.4	7, <b>456</b>	0.1	-	0.0
	Mainland Tanzania	519,192	329,507	63.5	261,852	79.5	125,746	38.2	45,341	13.8	878	0.1	-	0.0
Large Scale Farms	Zanzibar	3,178	2,220	69.8	2,044	92.1	143,740	6.9	45,341	22.2	0/0	0.3	-	0.0
Large Scale Fairlis	Tanzania		331,727	63.5	263,896	79.6	125,898	38.0	45,834	13.8	878	0.0	-	0.0 <b>0.0</b>
	Tanzania Mainland Tanzania	522,370 15,813,504	5,758,714	36.4	4,479,025	79.6 77.8	1,794,080	31.2	609,533	10.6	7,778	0.3 0.1	-	0.0
All Holdings													-	
All Holdings	Zanzibar	126,541	19,127	15.1	14,402	75.3	4,315	22.6	4,021	21.0	555	2.9	-	0.0
	Tanzania	15,940,045	5,777,842	36.2	4,493,427	77.8	1,798,396	31.1	613,553	10.6	8,333	0.1	-	0.0

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 4-10: Percentage Distribution of the Number of Households' Members that Received Training in Agricultural by Source and Region during 2023/24 Agricultural Year

	Number of Agricultural			Sour	ce of Train	ing (%)			
Region	Households that Received Training	Government Extension Services	Non- Governmental Extension Services	Academic Institutions	From another Farmer	Farmer Group or Association	Farmer Field School	Trader or Market Stakeholder	Other
Dodoma	16,709	38.6	12.2	8.4	6.1	46.1	21.7	0.0	0.0
Arusha	17,332	14.6	19.0	15.8	26.6	8.0	35.8	3.8	1.4
Kilimanjaro	54,921	36.5	21.5	4.9	4.8	18.8	15.5	0.8	0.3
Tanga	26,019	39.1	13.8	1.7	13.8	10.3	19.7	0.0	1.6
Morogoro	53,126	31.5	24.0	5.8	0.0	14.7	29.5	1.5	0.0
Pwani	15,136	25.0	28.6	18.8	15.4	4.0	12.2	0.0	0.0
Dar es Salaam	13,252	36.6	54.0	0.0	13.0	3.6	9.4	6.7	0.0
Lindi	19,400	66.5	12.7	26.4	3.0	4.0	0.0	0.0	0.0
Mtwara	19,268	40.6	23.8	7.8	3.5	39.8	3.5	0.0	0.0
Ruvuma	58,842	32.8	8.3	6.4	25.1	8.7	43.6	4.4	1.0
Iringa	66,068	35.1	39.5	3.2	11.7	10.0	23.2	19.0	0.7
Mbeya	62,222	28.8	7.8	4.8	19.9	6.4	42.3	1.5	0.4
Singida	43,494	42.3	6.4	3.9	33.1	1.1	16.3	0.5	0.0
Tabora	43,735	20.6	14.0	10.7	17.9	6.8	39.3	3.0	0.0
Rukwa	21,118	15.2	19.1	7.3	15.8	14.7	25.9	7.3	6.1
Kigoma	59,266	6.0	13.2	6.0	15.9	5.1	54.9	1.9	0.0
Shinyanga	184,934	2.1	1.7	0.0	93.1	1.8	1.9	0.2	0.0
Kagera	55,769	42.2	22.3	10.6	2.6	0.0	24.2	0.0	0.0
Mwanza	28,360	25.5	34.5	5.3	4.6	12.6	26.0	4.2	5.4
Mara	36,846	62.2	8.1	6.5	4.0	5.2	16.9	2.5	0.0
Manyara	56,832	15.5	13.6	7.2	60.3	8.8	7.2	0.5	0.0
Njombe	32,497	31.2	1.3	9.9	4.0	10.9	45.0	1.5	2.1
Katavi	14,154	28.7	5.6	33.5	29.6	5.8	7.6	2.7	0.0
Simiyu	13,865	13.8	16.9	0.0	0.0	15.2	54.1	0.0	0.0
Geita	39,583	16.6	7.0	3.0	27.1	6.9	47.0	2.9	0.0
Songwe	17,172	23.2	13.9	6.3	9.7	26.0	22.6	2.0	1.0
Mainland Tanzania	1,069,921	25.5	14.3	6.0	29.5	8.6	23.6	2.6	0.5
Kaskazini Unguja	4,082	76.6	12.1	2.9	3.2	2.3	0.0	4.8	0.0
Kusini Unguja	7,805	77.7	7.3	8.0	5.6	1.2	1.2	0.0	1.9
Mjini Magharibi	9,039	62.7	24.8	9.9	1.2	7.0	4.6	0.0	0.0
Kaskazini Pemba	16,515	22.7	3.4	0.9	72.0	1.5	5.2	0.0	0.5
Kusini Pemba	10,609	89.4	10.0	0.0	0.0	3.5	0.0	0.0	0.0
Zanzibar	48,049	58.5	10.3	3.7	26.2	3.0	2.9	0.4	0.5
Tanzania	1,117,970	26.9	14.2	5.9	29.4	8.4	22.7	2.5	0.5

Only the households' members aged 15+ and making decisions over the households were considered

Table 5-1: Area, Production and Yields of Maize during 2023/24 Agricultural Year

				Short Rainy Season			Long Rainy Season						
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)		
	Dodoma	32,202	54,241	50,107	56,023	1.1	361,802	351,053	189,732	290,461	1.5		
	Arusha	59,063	29,066	22,078	50,521	2.3	204,823	151,571	96,120	227,748	2.4		
	Kilimanjaro	100,754	45,079	28,451	49,065	1.7	136,664	72,301	38,322	82,600	2.2		
	Tanga	272,425	246,334	161,533	269,777	1.7	241,223	231,465	151,994	237,990	1.6		
	Morogoro	92,342	74,541	49,157	55,371	1.1	250,374	233,347	141,069	190,225	1.3		
	Pwani	127,140	80,902	59,666	49,335	0.8	79,020	66,591	51,714	44,937	0.9		
	Dar es Salaam	32,866	29,323	23,375	30,910	1.3	42,613	54,155	49,342	67,580	1.4		
	Lindi	-	-	-	-	-	105,963	66,301	37,087	24,207	0.7		
	Mtwara	-	-	-	-	-	219,555	92,579	67,965	57,170	0.8		
	Ruvuma	-	-	-	-	-	344,213	422,630	320,513	911,296	2.8		
	Iringa	10,226	5,306	4,105	7,096	1.7	212,073	294,294	165,668	316,782	1.9		
	Mbeya	19,607	7,163	6,169	12,024	1.9	242,357	175,939	158,393	354,079	2.2		
	Singida	-	-	-	-	-	256,480	305,771	152,575	301,942	2.0		
	Tabora	145,702	110,068	61,930	159,322	2.6	247,600	317,154	186,226	275,122	1.5		
	Rukwa	-	-	-	-	-	222,967	242,173	221,343	394,512	1.8		
	Kigoma	265,076	104,219	47,798	119,690	2.5	21,249	8,981	5,582	9,267	1.7		
Agricultural	Shinyanga	-	-	-	-	-	222,588	197,824	159,265	195,862	1.2		
Households	Kagera	473,314	168,474	119,979	187,652	1.6	65,290	28,179	17,020	15,285	0.9		
	Mwanza	292,395	155,943	102,813	170,613	1.7	33,927	23,114	19,792	23,197	1.2		
	Mara	219,868	144,721	100,415	136,251	1.4	131,101	92,019	63,979	67,053	1.0		
	Manyara	27,800	26,317	12,241	28,377	2.3	238,764	316,967	175,853	415,103	2.4		
	Njombe	17,647	10,802	10,619	15,183	1.4	167,129	126,863	117,032	228,106	1.9		
	Katavi	-	-	-	-	-	139,274	126,437	81,079	183,209	2.3		
	Simiyu	92,390	100,978	71,754	85,087	1.2	140,670	131,680	89,811	135,665	1.5		
	Geita	313,828	207,477	142,549	237,304	1.7	48,921	28,456	23,443	25,278	1.1		
	Songwe	-	-	-	-	-	205,010	219,655	200,974	596,764	3.0		
	Mainland Tanzania	2,597,385	1,605,210	1,078,403	1,722,961	1.6	4,581,650	4,377,500	2,981,896	5,671,440	1.9		
	Kaskazini Unguja	968	84	70	97	1.4	1,151	240	216	288	1.3		
	Kusini Unguja	1,681	467	461	509	1.1	291	71	71	70	1.0		
	Mjini Magharibi	1,725	529	475	1,204	2.5	679	216	216	915	4.2		
	Kaskazini Pemba	339	44	29	87	3.0	319	64	46	194	4.2		
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-		
	Zanzibar	4,863	1,130	1,040	1,902	1.8	2,439	591	549	1,466	2.7		
	Tanzania	2,602,248	1,606,340	1,079,443	1,724,863	1.6	4,584,090	4,378,091	2,982,444	5,672,906	1.9		
Large Scale	Mainland Tanzania	95	8,587	7,741	2,084	0.3	404	58,095	51,824	43,278	0.8		
Farms	Zanzibar	-	-	-	-	-	5	33	32	64	2.0		
1 411113	Tanzania	97	8,590	7,744	2,087	0.3	409	58,128	51,856	43,343	0.8		
	Mainland Tanzania	2,597,480	1,613,797	1,086,144	1,725,045	1.6	4,582,054	4,435,595	3,033,720	5,714,718	1.9		
All Holdings	Zanzibar	4,865	1,133	1,043	1,905	1.8	2,444	624	581	1,530	2.6		
2	Tanzania	2,602,345	1,614,930	1,087,187	1,726,951	1.6	4,584,499	4,436,219	3,034,301	5,716,248	1.9		

Cont... Table 5-1: Area, Production and Yields of Maize during 2023/24 Agricultural Year

			Aş	gricultural year		
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	394,005	405,294	239,839	346,484	1.4
	Arusha	236,513	180,637	118,198	278,269	2.4
	Kilimanjaro	198,712	117,380	66,773	131,665	2.0
	Tanga	381,463	477,799	313,527	507,767	1.6
	Morogoro	315,023	307,888	190,226	245,596	1.3
	Pwani	160,081	147,493	111,381	94,271	0.8
	Dar es Salaam	69,920	83,477	72,717	98,490	1.4
	Lindi	105,963	66,301	37,087	24,207	0.7
	Mtwara	219,555	92,579	67,965	57,170	0.3
	Ruvuma	344,213	422,630	320,513	911,296	2.3
	Iringa	215,248	299,599	169,774	323,878	1.9
	Mbeya	259,060	183,102	164,563	366,103	2.2
	Singida	256,961	306,385	153,035	303,066	2.0
	Tabora	392,999	427,222	248,156	434,445	1.
	Rukwa	222,967	245,222	223,952	396,601	1.
	Kigoma	282,751	113,201	53,381	128,956	2.
Agricultural Iouseholds	Shinyanga	222,588	198,418	159,859	196,010	1.
	Kagera	478,956	196,653	136,999	202,937	1.
	Mwanza	305,744	179,057	122,604	193,810	1.
	Mara	248,872	236,739	164,394	203,304	1.
	Manyara	264,188	343,284	188,094	443,479	2.
	Njombe	180,079	137,665	127,652	243,289	1.
	Katavi	139,274	126,437	81,079	183,209	2.
	Simiyu	229,018	232,658	161,565	220,752	1.
	Geita	336,025	235,933	165,992	262,582	1.
	Songwe	205,010	219,655	200,974	596,764	3.
	Mainland Tanzania	6,665,186	5,982,709	4,060,299	7,394,401	1.
	Kaskazini Unguja	1,888	325	286	384	1.
	Kusini Unguja	1,786	538	532	579	1.
	Mjini Magharibi	1,725	745	691	2,119	3.
	Kaskazini Pemba	658	108	75	280	3.
	Kusini Pemba	-	-	-	-	
	Zanzibar	6,208	1,722	1,589	3,368	2.
	Tanzania	6,671,394	5,984,431	4,061,887	7,397,769	1.8
	Mainland Tanzania	464	66,682	59,565	45,363	0.
Large Scale Farms	Zanzibar	6	36	35	67	1.9
	Tanzania	470	66,718	59,600	45,430	0.5
	Mainland Tanzania	6,665,650	6,049,391	4,119,864	7,439,763	1.8
All Holdings	Zanzibar	6,214	1,758	1,624	3,435	2.1
	Tanzania	6,671,864	6,051,149	4,121,487	7,443,199	1.8

Cont... Table 5-1: Area, Production and Yields of Paddy during 2023/24 Agricultural Year

				Short Rainy Season	1			]	Long Rainy Season		
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	4,824	2,649	2,481	4,810	1.9
	Arusha	2,404	1,224	1,118	3,364	3.0	5,609	2,591	2,408	8,339	3.5
	Kilimanjaro	7,981	3,194	2,993	10,870	3.6	6,497	4,388	3,329	10,424	3.1
	Tanga	10,137	6,243	4,966	14,612	2.9	12,269	8,207	6,392	16,085	2.5
	Morogoro	10,910	8,321	5,495	10,816	2.0	245,658	285,565	181,185	359,336	2.0
	Pwani	23,786	17,288	14,492	16,532	1.1	33,310	22,583	15,600	20,914	1.3
	Dar es Salaam	18,685	17,494	13,768	12,397	0.9	15,577	22,355	20,381	55,493	2.7
	Lindi	-	-	· -	, <u>-</u>	-	22,026	14,165	8,090	8,978	1.1
	Mtwara	-	-	-	_	_	44,572	27,145	23,703	22,587	1.0
	Ruvuma	-	-	-	_	_	77,627	70,029	56,492	94,741	1.7
	Iringa	_	_	_	_	_	10,710	14,203	11,617	36,762	3.2
	Mbeya	2,385	2,062	2,062	5,775	2.8	113,767	122,130	113,174	456,601	4.0
	Singida	-,	-,	-,**-	-		40,888	41,726	27,670	66,621	2.4
	Tabora	45,208	40,980	26,303	65,134	2.5	156,331	216,168	154,261	341,759	2.2
	Rukwa	.5,200	-	20,505	-	2.0	24,928	20,964	19,145	65,383	3.4
	Kigoma	11,031	7,766	5,388	10,242	1.9	21,720	20,501		05,505	5.1
Agricultural	Shinyanga	11,031	7,700	5,500	10,212	1.5	142,978	157,455	141,261	370,254	2.6
Households	Kagera	8,062	7,115	5,748	17,104	3.0	4,459	1,421	1,325	1,719	1.3
Trousenoids	Mwanza	121,949	106,369	87,572	233,498	2.7	48,871	43,117	36,166	69,977	1.9
	Mara	11,908	8,169	6,552	15,289	2.3	7,362	7,763	7,640	8,785	1.1
	Manyara	1,256	2,477	1,834	7,285	4.0	5,552	3,240	2,091	9,534	4.6
	Njombe	1,230	2,477	1,034	1,263	4.0	3,332	3,240	2,091	9,334	4.0
	Katavi	-	-	-	-	-	41,203	92,470	79,406	188,612	2.4
		12,049	8,091	7,078	13,920	2.0	76,583	54,342	46,235	119,604	2.4
	Simiyu Geita	51,356	46,963	37,046	95,237	2.6	76,383 58,488		53,508	118,585	
		31,330	40,903	37,040	93,237	2.0		64,462			2.2 2.2
	Songwe	220, 202	202.041	222 400	522 110	2.4	35,403	37,117	36,211	80,065	
	Mainland Tanzania	339,382	283,841	222,498	532,119	2.4	1,236,606	1,337,631	1,051,146	2,540,239	2.4
	Kaskazini Unguja	4,398	1,344	1,074	1,386	1.3	3,583	930	746	1,105	1.5
	Kusini Unguja	2,055	764	555	1,175	2.1	2,079	728	620	1,696	2.7
	Mjini Magharibi	1,509	653	457	1,139	2.5	2,299	855	773	2,303	3.0
	Kaskazini Pemba	1,131	324	212	600	2.8	14,351	3,276	2,466	5,734	2.3
	Kusini Pemba	2,412	652	543	525	1.0	13,852	4,358	3,910	4,437	1.1
	Zanzibar	11,506	3,736	2,841	4,825	1.7	36,164	10,147	8,516	15,275	1.8
	Tanzania	350,888	287,578	225,339	536,944	2.4	1,272,769	1,347,778	1,059,662	2,555,513	2.4
Large Scale	Mainland Tanzania	23	9,033	7,667	7,672	1.0	120	24,585	23,177	34,055	1.5
Farms	Zanzibar	-	-	-	-	-	-	-	-	-	-
1 al 1118	Tanzania	23	9,033	7,667	7,672	1.0	122	24,622	23,208	34,077	1.5
	Mainland Tanzania	339,405	292,874	230,165	539,790	2.3	1,236,726	1,362,216	1,074,323	2,574,293	2.4
All Holdings	Zanzibar	11,506	3,736	2,841	4,825	1.7	36,166	10,185	8,546	15,297	1.8
	Tanzania	350,911	296,611	233,007	544,615	2.3	1,272,891	1,372,401	1,082,869	2,589,590	2.4
T 1 1	of observations (n<3)/lack of		270,011	200,007	511,015	2.0	1,2,2,071	1,0 / 2,701	1,002,007	=,507,570	2,7

Cont... Table 5-1: Area, Production and Yields of Paddy during 2023/24 Agricultural Year

		Agricultural year									
<b>Holding Category</b>	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)					
	Dodoma	5,098	2,732	2,564	4,854	1.9					
	Arusha	6,410	3,815	3,526	11,703	3.3					
	Kilimanjaro	11,651	7,582	6,322	21,293	3.4					
	Tanga	22,406	14,450	11,358	30,698	2.7					
	Morogoro	254,157	293,887	186,680	370,152	2.0					
	Pwani	55,741	39,871	30,092	37,447	1.2					
	Dar es Salaam	34,263	39,850	34,149	67,890	2.0					
	Lindi	22,026	14,165	8,090	8,978	1.1					
	Mtwara	44,572	27,145	23,703	22,587	1.0					
	Ruvuma	77,627	70,029	56,492	94,741	1.7					
	Iringa	10,710	14,203	11,617	36,762	3.2					
	Mbeya	115,382	124,193	115,236	462,375	4.0					
	Singida	40,888	41,726	27,670	66,621	2.4					
	Tabora	201,539	257,149	180,564	406,893	2.3					
	Rukwa	24,928	20,964	19,145	65,383	3.4					
	Kigoma	11,687	8,032	5,653	10,761	1.9					
Agricultural	Shinyanga	142,978	157,455	141,261	370,254	2.6					
Households	Kagera	12,521	8,536	7,074	18,822	2.7					
	Mwanza	169,131	149,486	123,738	303,475	2.5					
	Mara	18,651	15,932	14,192	24,074	1.7					
	Manyara	6,808	5,716	3,925	16,819	4.3					
	Njombe	-	-	-	-	-					
	Katavi	41,203	92,470	79,406	188,612	2.4					
	Simiyu	88,632	62,432	53,313	133,524	2.5					
	Geita	109,362	111,426	90,553	213,823	2.4					
	Songwe	35,403	37,117	36,211	80,065	2.2					
	Mainland Tanzania	1,564,232	1,621,472	1,273,644	3,072,357	2.4					
	Kaskazini Unguja	7,239	2,274	1,821	2,491	1.4					
	Kusini Unguja	3,291	1,491	1,175	2,871	2.4					
	Mjini Magharibi	2,639	1,509	1,230	3,441	2.8					
	Kaskazini Pemba	14,621	3,600	2,678	6,334	2.4					
	Kusini Pemba	15,253	5,010	4,453	4,962	1.1					
	Zanzibar	43,042	13,884	11,357	20,099	1.8					
	Tanzania	1,607,274	1,635,356	1,285,001	3,092,457	2.4					
	Mainland Tanzania	143	33,618	30,845	41,726	1.4					
Large Scale Farms	Zanzibar	-	-	-	-	-					
	Tanzania	145	33,655	30,875	41,749	1.4					
	Mainland Tanzania	1,564,375	1,655,090	1,304,489	3,114,084	2.4					
All Holdings	Zanzibar	43,044	13,921	11,387	20,122	1.8					
, and the second	Tanzania	1,607,419	1,669,012	1,315,876	3,134,205	2.4					

Cont... Table 5-1: Area, Production and Yields of Sorghum during 2023/24 Agricultural Year

				Short Rainy Sea	ason		Long Rainy Season					
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	2,092	2,424	1,644	880	0.5	117,985	114,861	61,955	65,060	1.1	
	Arusha	-	-	-	-	-	1,403	451	290	368	1.3	
	Kilimanjaro	-	-	-	-	-	2,216	389	302	438	1.5	
	Tanga	-	-	-	-	-	-	-	-	-	-	
	Morogoro	2,556	2,233	1,205	1,765	1.5	13,690	19,542	10,619	6,735	0.6	
	Pwani	-	-	-	-	-	-	-	-	-	-	
	Dar es Salaam	-	-	-	-	-	-	-	-	-	-	
	Lindi	-	-	-	-	-	22,626	11,586	7,576	5,219	0.7	
	Mtwara	-	-	-	-	-	6,256	2,110	1,206	369	0.3	
	Ruvuma	-	-	-	-	-	-	-	-	-	-	
	Iringa	-	-	-	-	-	7,190	5,546	2,293	3,884	1.7	
	Mbeya	-	_	_	-	_	-	_	· -	-	-	
	Singida	-	-	-	-	-	56,483	35,544	17,916	18,682	1.0	
	Tabora	677	868	761	1,021	1.3	6,041	7,393	4,211	3,274	0.8	
	Rukwa	-	_	_	· -	_	8,849	3,945	3,556	3,703	1.0	
	Kigoma	-	-	-	-	-	-		-	-	-	
Agricultural	Shinyanga	-	-	-	-	-	14,729	23,808	20,998	19,508	0.9	
Households	Kagera	-	-	-	-	-	-		-	-	-	
	Mwanza	4,944	2,999	2,389	6,654	2.8	4,970	2,595	1,717	693	0.4	
	Mara	33,378	19,975	15,188	11,236	0.7	11,286	8,267	7,251	4,025	0.6	
	Manyara	-	-	-	-	-	6,277	3,653	2,438	3,682	1.5	
	Njombe	-	-	-	-	-	-	_	-	-	-	
	Katavi	-	-	-	-	-	-	-	-	-	-	
	Simiyu	7,091	17,307	16,065	4,874	0.3	18,879	30,859	19,136	12,188	0.6	
	Geita	-	-	-	-	-	2,287	1,842	1,692	590	0.3	
	Songwe	-	-	-	-	-	35,447	32,227	29,922	22,802	0.8	
	Mainland Tanzania	54,651	47,626	38,659	27,466	0.7	340,877	309,811	197,894	173,444	0.9	
	Kaskazini Unguja		· -	· -		-	-	· -	· -	· -	-	
	Kusini Unguja	-	-	-	-	-	-	-	-	-	-	
	Mjini Magharibi	-	-	-	-	-	-	-	-	-	-	
	Kaskazini Pemba	-	-	-	-	-	635	80	50	102	2.1	
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-	
	Zanzibar	323	39	20	32	1.6	791	127	97	137	1.4	
	Tanzania	54,974	47,665	38,679	27,498	0.7	341,669	309,939	197,991	173,580	0.9	
T C 1	Mainland Tanzania	4	513	513	169	0.3	90	2,691	1,934	677	0.4	
Large Scale	Zanzibar	-	_	_	-	-	-	-	· -	-	-	
Farms	Tanzania	5	523	523	174	0.3	91	2,697	1,935	678	0.4	
	Mainland Tanzania	54,655	48,140	39,172	27,635	0.7	340,967	312,502	199,828	174,121	0.9	
All Holdings	Zanzibar	324	48	30	37	1.2	792	133	99	138	1.4	
. III Holdings	Tanzania	54,979	48,188	39,202	27,671	0.7	341,760	312,635	199,926	174,259	0.9	
T 1 4		34,979	40,100	37,202	47,071	U. /	341,700	312,033	177,720	174,239	0.9	

Cont... Table 5-1: Area, Production and Yields of Sorghum during 2023/24 Agricultural Year

		Agricultural year									
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)					
	Dodoma	120,078	117,285	63,599	65,941	1.					
	Arusha	1,403	451	290	368	1.					
	Kilimanjaro	2,671	435	348	484	1.					
	Tanga	-	-	-	-						
	Morogoro	15,923	21,775	11,825	8,500	0.					
	Pwani	-	-	-	-						
	Dar es Salaam	1,185	399	399	615	1					
	Lindi	22,626	11,586	7,576	5,219	0					
	Mtwara	6,256	2,110	1,206	369	0					
	Ruvuma	-	-	-	-						
	Iringa	7,190	5,546	2,293	3,884	1					
	Mbeya	-	-	-	-						
	Singida	56,483	35,544	17,916	18,682	1					
	Tabora	6,718	8,260	4,971	4,294	0					
	Rukwa	8,849	3,945	3,556	3,703	1					
agricultural Iouseholds	Kigoma	-	-	-	-						
	Shinyanga	14,729	23,808	20,998	19,508	C					
	Kagera	2,682	1,493	1,222	952	C					
	Mwanza	9,674	5,594	4,106	7,346	1					
	Mara	39,603	28,242	22,439	15,262	0					
	Manyara	6,642	3,889	2,568	3,770	1					
	Njombe	· -	-	-	_						
	Katavi	-	-	-	-						
	Simiyu	25,970	48,166	35,200	17,062	0					
	Geita	2,545	1,889	1,739	621	0					
	Songwe	35,447	32,227	29,922	22,802	0					
	Mainland Tanzania	389,905	357,438	236,553	200,910	0					
	Kaskazini Unguja	-	· -	-	· -						
	Kusini Unguja	-	_	_	_						
	Mjini Magharibi	_	_	_	_						
	Kaskazini Pemba	699	91	53	113	2					
	Kusini Pemba	-	_	-	_						
	Zanzibar	1,040	166	117	169	1					
	Tanzania	390,945	357,604	236,670	201,078	0					
	Mainland Tanzania	93	3,204	2,446	846	0					
Large Scale	Zanzibar	-	-	-,	-	· ·					
Farms	Tanzania	95	3,220	2,458	852	0					
	Mainland Tanzania	389,998	360,642	238,999	201,756	0					
All Holdings	Zanzibar	1,042	182	129	174	1					
All Holdings	Zanzibar  Tanzania	391,040	360,824	239,128	201,930	0					

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

During the analysis, the production of few holdings were unknown and they were excluded

Cont... Table 5-1: Area, Production and Yields of Bulrush Millet during 2023/24 Agricultural Year

				Short Rainy Sea	son	Long Rainy Season						
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	1,907	1,482	1,482	283	0.2	71,686	48,382	32,380	22,931	0.7	
	Arusha	-	-	-	-	-	-	-	-	-	-	
	Kilimanjaro	-	-	-	-	-	-	-	-	-	-	
	Tanga	-	-	-	-	-	-	-	-	-	-	
	Morogoro	-	-	-	-	-	-	-	-	-	-	
	Pwani	-	-	-	-	-	-	-	-	-	-	
	Dar es Salaam	-	-	-	-	-	-	-	-	-	-	
	Lindi	-	-	-	-	-	-	-	-	-	-	
	Mtwara	-	-	-	-	-	-	-	-	-	-	
	Ruvuma	-	-	-	-	-	-	-	-	-	-	
	Iringa	-	-	-	-	-	-	-	-	-	-	
	Mbeya	-	-	-	-	-	-	-	-	-	-	
	Singida	-	-	-	-	-	30,378	21,677	10,321	10,788	1.0	
	Tabora	-	-	-	-	-	-	-	-	-	-	
	Rukwa	-	-	-	-	-	-	-	-	-	-	
	Kigoma	-	-	-	-	-	-	-	-	-	-	
Agricultural	Shinyanga	-	-	-	-	-	-	-	-	-	-	
Households	Kagera	-	-	-	-	-	-	-	-	-	-	
	Mwanza	-	-	-	-	-	3,237	5,371	3,539	1,997	0.6	
	Mara	-	-	-	-	-	-	-	-	-	-	
	Manyara	-	-	-	-	-	-	-	-	-	-	
	Njombe	-	-	-	-	-	-	-	-	-	-	
	Katavi	-	-	-	-	-	-	-	-	-	-	
	Simiyu	-	-	-	-	-	-	-	-	-	-	
	Geita	-	-	-	-	-	-	-	-	-	-	
	Songwe	-	-	-	-	-	-	-	-	-	-	
	Mainland Tanzania	1,907	1,482	1,482	283	0.2	107,890	78,208	48,638	37,020	0.8	
	Kaskazini Unguja	· -	-	-	-	-	-	-	-	-	-	
	Kusini Unguja	-	-	-	-	-	-	-	-	-	-	
	Mjini Magharibi	-	-	-	-	-	-	-	-	-	-	
	Kaskazini Pemba	243	56	29	45	1.6	179	19	19	35	1.9	
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-	
	Zanzibar	412	63	37	62	1.7	179	19	19	35	1.9	
	Tanzania	2,319	1,545	1,519	345	0.2		78,227	48,657	37,055	0.8	
	Mainland Tanzania	-	-	-	-	_		-	-	-	-	
Large Scale	Zanzibar	-	-	_	-	_	-	-	_	-	-	
Farms	Tanzania	_	_	_	_	_	_	_	_	_	_	
	Mainland Tanzania	1,907	1,482	1,482	283	0.2	107,891	78,209	48,639	37,021	0.8	
All Holdings	Zanzibar	412	63	37	62	1.7		19	19	37,021	1.9	
7 m Holdings	Tanzania	2,319	1,545	1,519	345	0.2		78,228	48,658	<b>37,057</b>	0.8	
		2,319		1,519	343	0.2	108,070	/0,428	48,038	37,057	0.8	

Cont... Table 5-1: Area, Production and Yields of Bulrush Millet during 2023/24 Agricultural Year

			P	Agricultural year		
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	73,593	49,864	33,862	23,214	0.7
	Arusha	-	-	-	-	-
	Kilimanjaro	-	-	-	-	-
	Tanga	-	-	-	-	-
	Morogoro	-	-	-	-	-
	Pwani	-	-	-	-	-
	Dar es Salaam	-	-	-	-	-
	Lindi	-	-	-	_	-
	Mtwara	-	-	-	_	-
	Ruvuma	-	-	-	_	-
	Iringa	-	_	-	_	-
	Mbeya	-	_	-	_	-
	Singida	30,378	21,677	10,321	10,788	1.0
	Tabora	-		-	, _	-
	Rukwa	-	_	-	_	-
	Kigoma	-	_	-	_	-
Agricultural	Shinyanga	-	_	_	_	_
Households	Kagera	-	_	_	_	_
	Mwanza	3,237	5,371	3,539	1,997	0.6
	Mara	-	-	-	-	_
	Manyara	-	_	_	_	_
	Njombe	-	_	_	_	_
	Katavi	-	_	_	_	_
	Simiyu	_	_	_	_	_
	Geita	_	_	_	_	_
	Songwe	_	_	_	_	_
	Mainland Tanzania	109,797	79,690	50,120	37,303	0.7
	Kaskazini Unguja	-		-	-	-
	Kusini Unguja	_	_	_	_	_
	Mjini Magharibi	_	_	_	_	_
	Kaskazini Pemba	368	74	48	80	1.7
	Kusini Pemba	300	, .	-	-	1.7
	Zanzibar	537	82	55	97	1.7
	Tanzania	110,334	79,772	50,175	37,400	0.7
	Mainland Tanzania	110,554	17,112	50,175	57,400	-
Large Scale	Zanzibar	-	-	-	-	-
Farms	Zanzioar <b>Tanzania</b>	-	-	-	-	-
		100 700	70.601	50 101	27.204	-
A 11 TT 1 1'	Mainland Tanzania	109,798	79,691	50,121	37,304	0.7
All Holdings	Zanzibar	537	82	55	97	1.7
	Tanzania f observations (n<3)/lack	110,335	79,773	50,176	37,401	0.7

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cassava during 2023/24 Agricultural Year

				Short Rainy S	eason		Long Rainy Season					
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	-	-	-	-	-	2,637	802	399	828	2.1	
	Arusha	-	-	-	-	-	-	-	-	-	-	
	Kilimanjaro	1,970	272	169	674	4.0	2,341	231	185	1,079	5.8	
	Tanga	20,438	10,483	7,951	18,125	2.3	9,003	4,977	2,818	5,628	2.0	
	Morogoro	4,378	1,883	1,343	4,386	3.3	5,663	1,877	1,174	1,724	1.5	
	Pwani	64,167	34,337	27,822	72,593	2.6	4,566	3,995	3,242	8,996	2.8	
	Dar es Salaam	14,600	8,538	7,072	10,323	1.5	10,051	5,009	5,009	8,220	1.6	
	Lindi	-	_	_	_	-	22,128	17,486	9,140	14,797	1.6	
	Mtwara	-	_	-	-	_	89,578	29,821	24,586	40,840	1.7	
	Ruvuma	-	_	-	-	_	2,010	482	241	701	2.9	
	Iringa	_	_	_	_	_	_,,	-		-		
	Mbeya	_	_	_	_	_	1,699	599	599	1,181	2.0	
	Singida	_	_	_	_	_	3,253	2,117	1,382	3,263	2.4	
	Tabora	2,111	1,327	1,003	5,921	5.9	3,592	2,147	1,604	2,393	1.5	
	Rukwa	2,111	1,527	1,005	5,721	5.7	4,023	1,358	1,232	5,601	4.5	
	Kigoma	9,184	3,305	2,483	5,122	2.1	7,023	1,556	1,232	5,001	<b>4.</b> 3	
Agricultural	Shinyanga	9,184	3,303	2,403	3,122	2.1	3,833	1,304	1,129	3,558	3.2	
Households	Kagera	53,834	6,704	5,627	15,874	2.8	5,620	2,543	2,151	2,067	1.0	
Households			17,047	11,974		2.6	2,628		784	751	1.0	
	Mwanza	63,203			28,666	1.2		1,347		5,452	1.0	
	Mara	62,537	33,833	22,746	26,887	1.2	15,150	6,354	4,185	5,452	1.5	
	Manyara	-	-	-	-	-	2.012	- 015	-	0.46	1.0	
	Njombe	-	-	-	-	-	2,013	815	693	846	1.2	
	Katavi	-	-	-	-	-	10,303	4,850	3,878	9,642	2.5	
	Simiyu		<del>-</del>				2,711	1,003	944	1,629	1.7	
	Geita	18,369	6,821	5,386	17,084	3.2	12,028	5,957	5,050	10,258	2.0	
	Songwe	-	-	-	-	-	-	-	-	-	-	
	Mainland Tanzania	315,750	124,657	93,678	206,225	2.2	217,766	96,180	71,399	131,601	1.8	
	Kaskazini Unguja	10,890	1,718	1,162	4,545	3.9	3,195	830	585	2,370	4.1	
	Kusini Unguja	15,803	3,259	2,942	17,995	6.1	6,473	1,034	880	5,135	5.8	
	Mjini Magharibi	10,597	2,206	2,018	10,606	5.3	2,683	898	800	2,928	3.7	
	Kaskazini Pemba	23,694	6,677	5,965	37,644	6.3	6,606	1,959	1,635	7,890	4.8	
	Kusini Pemba	18,764	5,845	5,480	36,454	6.7	5,008	1,442	1,034	3,710	3.6	
	Zanzibar	79,748	19,704	17,568	107,244	6.1	23,965	6,164	4,934	22,033	4.5	
	Tanzania	395,498	144,361	111,247	313,470	2.8	241,731	102,344	76,333	153,634	2.0	
T C . 1	Mainland Tanzania	5	1,461	1,460	40	0.0	23	647	627	146	0.2	
Large Scale	Zanzibar	5	51	46	227	4.9	4	51	44	217	4.9	
Farms	Tanzania	10	1,512	1,506	267	0.2	27	698	671	362	0.5	
	Mainland Tanzania	315,755	126,118	95,139	206,265	2.2	217,789	96,828	72,026	131,747	1.8	
All Holdings	Zanzibar	79,753	19,755	17,614	107,471	6.1	23,969	6,214	4,979	22,250	4.5	
Holdings	Tanzania	395,508	145,874	112,753	313,736	2.8	241,758	103,042	77,004	153,997	2.0	
		373,300 3 / 1 - 1 - C 1 - 4 / N I - 4	145,074	114,/33	313,/30	2.0	241,/30	103,042	77,004	133,997	2.0	

Cont... Table 5-1: Area, Production and Yields of Cassava during 2023/24 Agricultural Year

			A	gricultural yea	r	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	2,637	802	399	828	2.
	Arusha	1,153	609	604	1,797	3.
	Kilimanjaro	3,512	503	353	1,753	5.
	Tanga	26,465	15,459	10,769	23,753	2.
	Morogoro	10,041	3,759	2,518	6,111	2.
	Pwani	68,181	38,332	31,064	81,589	2
	Dar es Salaam	24,074	13,547	12,081	18,543	1
	Lindi	22,128	17,486	9,140	14,797	1
	Mtwara	89,578	29,821	24,586	40,840	1
	Ruvuma	2,010	482	241	701	2
	Iringa	-	-	-	-	
	Mbeya	1,699	599	599	1,181	2
	Singida	3,253	2,117	1,382	3,263	2
	Tabora	5,383	3,475	2,606	8,313	3
	Rukwa	4,023	1,358	1,232	5,601	4
	Kigoma	10,030	3,476	2,569	5,215	2
Agricultural	Shinyanga	3,833	1,304	1,129	3,558	3
Households	Kagera	57,211	9,247	7,777	17,941	2
	Mwanza	65,269	18,394	12,758	29,417	2
	Mara	76,329	40,187	26,931	32,339	1
	Manyara	-	-	-	-	
	Njombe	2,013	815	693	846	1
	Katavi	10,303	4,850	3,878	9,642	2
	Simiyu	2,711	1,003	944	1,629	1
	Geita	30,036	12,778	10,435	27,342	2
	Songwe	-	_	-	-	
	Mainland Tanzania	523,767	220,838	165,077	337,827	2
	Kaskazini Unguja	12,810	2,548	1,747	6,914	4
	Kusini Unguja	16,641	4,293	3,822	23,131	Ć
	Mjini Magharibi	10,903	3,104	2,819	13,535	2
	Kaskazini Pemba	27,232	8,636	7,600	45,534	$\epsilon$
	Kusini Pemba	20,396	7,287	6,515	40,163	6
	Zanzibar	87,981	25,867	22,503	129,277	5
	Tanzania	611,748	246,705	187,580	467,104	2
	Mainland Tanzania	27	2,108	2,087	185	C
Large Scale	Zanzibar	7	102	90	444	4
Farms	Tanzania	34	2,210	2,177	629	0
	Mainland Tanzania	523,794	222,946	167,164	338,012	2
All Holdings	Zanzibar	87,988	25,970	22,593	129,721	5
	Tanzania	611,782	248,915	189,757	467,733	2

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Sweet potatoes during 2023/24 Agricultural Year

			Short Rainy Season						ong Rainy Seas	on	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	-	-	-	-	-
	Arusha	1,197	310	307	2,329	7.6	-	-	-	-	-
	Kilimanjaro	-	-	-	-	-	-	-	-	-	-
	Tanga	1,549	275	246	310	1.3	-	-	-	-	-
	Morogoro	-	-	-	-	-	6,202	6,302	5,703	6,840	1.2
	Pwani	-	-	-	-	-	8,172	7,134	6,763	13,319	2.0
	Dar es Salaam	1,297	286	170	158	0.9	7,599	1,592	1,441	3,197	2.2
	Lindi	-	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	-	-	9,983	3,893	3,853	33,178	8.6
	Iringa	-	-	-	-	-	1,618	170	170	637	3.8
	Mbeya	-	-	-	-	-	3,766	1,765	1,765	14,986	8.5
	Singida	-	-	-	-	-	10,807	4,803	3,989	11,576	2.9
	Tabora	10,204	3,955	3,446	7,447	2.2	15,765	6,709	5,642	10,001	1.8
	Rukwa	-	-	-	-	-	2,049	529	529	999	1.9
	Kigoma	3,312	410	365	1,258	3.4		-	_	_	-
Agricultural	Shinyanga	· -	-	-	· -	_	37,158	17,981	16,164	58,826	3.6
Households	Kagera	16,528	1,693	1,277	5,767	4.5	6,684	2,018	1,727	1,766	1.0
	Mwanza	43,565	10,456	8,094	20,127	2.5	20,599	8,860	7,546	12,473	1.7
	Mara	30,759	8,289	6,493	11,503	1.8	11,436	3,673	3,249	11,561	3.6
	Manyara	-	-	-		-	1,377	149	149	807	5.4
	Njombe	_	_	_	_	_	-,		-	-	-
	Katavi	_	_	_	_	_	2,318	645	624	1,021	1.6
	Simiyu	5,506	2,156	1,805	4,430	2.5	27,084	7,791	6,808	24,182	3.6
	Geita	19,475	7,614	6,053	15,172	2.5	31,968	13,680	10,930	15,000	1.4
	Songwe	15,175	7,011	- 0,033	13,172	2.5	1,610	460	431	1,130	2.6
	Mainland Tanzania	135,815	36,292	29,023	68,945	2.4	209,260	88,631	77,752	221,812	2.9
	Kaskazini Unguja	2,064	314	248	763	3.1	691	78	64	239	3.8
	Kusini Unguja	1,035	69	67	799	11.8	994	190	177	2,213	12.5
	Mjini Magharibi	1,033	-	-	-	-	1,632	482	412	1,389	3.4
	Kaskazini Pemba	1,232	262	211	1,105	5.2	3,115	451	367	2,747	7.5
	Kusini Pemba	1,232	202	211	1,105	3.2	5,115	431	307	2,747	7.5
	Zanzibar	4,812	786	667	3,269	4.9	6,432	1,201	1,020	6,588	6.5
	Tanzania	140,626	37,078	29,690	72,214	2.4	215,693	89,832	78,773	228,400	2.9
	Mainland Tanzania	7	46	46	281	6.2	76	610	574	488	0.9
Large Scale	Zanzibar	-	-	-	201	0.2	5	63	46	20	0.4
Farms	Tanzania	8	47	47	305	6.5	81	673	620	508	0.8
	Mainland Tanzania	135,822	36,337	29,068	69,226	2.4	209,336	89,242	78,326	222,300	2.8
All Holdings	Zanzibar	4,813	788	668	3,294	4.9	6,437	1,264	1,067	6,608	6.2
All Holdings		140,634	37,125	<b>29,737</b>	72,519	2.4	215,774	90,506	79,393	228,908	2.9
	Tanzania	-2)/11C-1-+-/N		29,/3/	12,519	2.4	215,//4	90,506	19,393	228,908	2.9

Cont... Table 5-1: Area, Production and Yields of Sweet potatoes during 2023/24 Agricultural Year

			A	Agricultural year	•	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	
	Arusha	1,197	315	312	2,343	7.5
	Kilimanjaro	-	-	-	-	
	Tanga	1,549	275	246	310	1.3
	Morogoro	6,202	6,302	5,703	6,840	1.3
	Pwani	9,202	7,488	7,039	13,684	1.5
	Dar es Salaam	8,896	1,878	1,611	3,355	2.
	Lindi	-	-	-	-	
	Mtwara	-	-	-	-	
	Ruvuma	9,983	3,893	3,853	33,178	8.
	Iringa	1,618	170	170	637	3.
	Mbeya	3,766	1,765	1,765	14,986	8.
	Singida	10,807	4,803	3,989	11,576	2.
	Tabora	25,969	10,665	9,088	17,448	1.
	Rukwa	2,049	529	529	999	1.
	Kigoma	4,678	687	434	1,346	3.
Agricultural Households	Shinyanga	37,158	17,981	16,164	58,826	3.
	Kagera	21,261	3,711	3,003	7,533	2.
	Mwanza	62,028	19,316	15,640	32,600	2.
	Mara	39,337	11,962	9,741	23,065	2.
	Manyara	1,377	149	149	807	5.
	Njombe	-	-	-	-	
	Katavi	2,318	645	624	1,021	1.
	Simiyu	32,158	9,948	8,613	28,613	3.
	Geita	50,192	21,295	16,983	30,172	1.
	Songwe	1,610	460	431	1,130	2.
	Mainland Tanzania	336,165	124,923	106,775	290,757	2.
	Kaskazini Unguja	2,293	392	311	1,002	3.
	Kusini Unguja	1,397	259	245	3,012	12.
	Mjini Magharibi	1,632	539	470	1,797	3.
	Kaskazini Pemba	4,295	713	578	3,852	6.
	Kusini Pemba	-	-	-	-	
	Zanzibar	9,832	1,987	1,688	9,857	5.
	Tanzania	345,997	126,910	108,463	300,614	2.
	Mainland Tanzania	81	656	620	769	1.
Large Scale Farms	Zanzibar	5	65	47	45	0.
i alilis	Tanzania	86	721	667	814	1.
	Mainland Tanzania	336,246	125,579	107,395	291,526	2.
All	Zanzibar	9,837	2,052	1,735	9,902	5.
Holdings	Tanzania	346,083	127,631	109,130	301,428	2.

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Irish potatoes during 2023/24 Agricultural Year

			Sho	1		Long Rainy Season					
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	-	-	-	-	-
	Arusha	1,739	971	898	6,125	6.8	8,827	4,909	4,072	17,313	4.3
	Kilimanjaro	6,866	4,237	4,108	47,378	11.5	8,280	4,784	2,992	20,279	6.8
	Tanga	8,999	3,236	2,537	6,177	2.4	6,846	2,663	2,366	5,527	2.3
	Morogoro	-	-	-	-	-	-	-	-	-	-
	Pwani	-	-	-	-	-	-	-	-	-	-
	Dar es Salaam	-	-	-	-	-	1,003	259	259	1,891	7.3
	Lindi	-	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	-	-	-	-	-	-	-
	Iringa	2,171	2,079	1,958	9,836	5.0	9,131	3,578	3,123	28,023	9.0
	Mbeya	2,194	794	738	6,005	8.1	28,768	19,996	18,444	237,939	12.9
	Singida	-	-	-	-	-	-	-	-	-	-
	Tabora	-	-	-	-	-	-	-	-	-	-
	Rukwa	-	-	-	-	-	-	-	-	-	-
Agricultural Households	Kigoma	-	-	-	-	-	-	-	-	-	-
	Shinyanga	-	-	-	-	-	-	-	-	-	-
	Kagera	5,768	865	752	4,860	6.5	-	-	-	-	-
	Mwanza	-	-	-	-	-	-	-	-	-	-
	Mara	-	-	-	-	-	-	-	-	-	-
	Manyara	1,223	459	195	3,414	17.6	3,227	780	596	5,720	9.6
	Njombe	12,710	6,687	6,516	51,403	7.9	35,396	22,005	21,596	276,116	12.8
	Katavi	· <u>-</u>	-	-	-	-	· -	-	-	_	-
	Simiyu	-	-	-	-	-	-	-	-	-	-
	Geita	-	-	_	-	-	_	-	-	-	-
	Songwe	-	-	_	-	-	3,276	1,676	1,636	13,750	8.4
	Mainland Tanzania	43,159	20,058	18,166	136,406	7.5	109,704	62,811	56,889	615,926	10.8
	Kaskazini Unguja	· -	-	-	-	-	· -	-	· -	-	-
	Kusini Unguja	-	-	-	-	-	-	-	-	-	-
	Mjini Magharibi	-	-	-	-	-	-	-	-	-	-
	Kaskazini Pemba	-	-	-	-	-	-	-	-	-	-
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-
	Zanzibar	_	-	-	-	-	_	-	_	_	-
	Tanzania	43,159	20,058	18,166	136,406	7.5	109,704	62,811	56,889	615,926	10.8
r 6 1	Mainland Tanzania				_	-	14	54	54	187	3.5
Large Scale	Zanzibar	_	-	-	-	-	-	-	-	-	-
Farms	Tanzania	_	-	_	_	-	14	54	54	187	3.5
	Mainland Tanzania	43,160	20,058	18,167	136,408	7.5	109,718	62,865	56,942	616,113	10.8
All Holdings	Zanzibar	-,	-	-		-		- ,,,,,,		-	-
	Tanzania	43,160	20,058	18,167	136,408	7.5	109,718	62,865	56,942	616,113	10.8

Cont... Table 5-1: Area, Production and Yields of Irish potatoes during 2023/24 Agricultural Year

				Agricultural yea	r	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-
	Arusha	9,839	5,880	4,970	23,439	4.7
	Kilimanjaro	11,208	9,021	7,099	67,657	9.5
	Tanga	11,611	5,898	4,903	11,704	2.4
	Morogoro	-	-	-	-	-
	Pwani	-	-	-	-	-
	Dar es Salaam	1,264	577	577	2,132	3.7
	Lindi	-	-	-	-	-
	Mtwara	-	-	-	-	-
	Ruvuma	-	-	-	-	-
	Iringa	11,078	5,657	5,081	37,859	7.5
	Mbeya	29,445	20,789	19,182	243,944	12.7
	Singida	-	-	-	-	-
	Tabora	-	-	-	-	-
	Rukwa	-	_	-	-	-
	Kigoma	-	-	_	-	-
Agricultural Households	Shinyanga	_	_	_	_	-
	Kagera	5,768	1,272	1,159	8,567	7.4
	Mwanza	· -		· -	· -	-
	Mara	_	-	_	-	-
	Manyara	3,753	1,239	791	9,135	11.6
	Njombe	44,506	28,691	28,111	327,518	11.7
	Katavi	-	-	-	-	_
	Simiyu	_	_	_	_	_
	Geita	_	_	_	_	_
	Songwe	3,442	1,743	1,703	14,545	8.5
	Mainland Tanzania	136,921	82,869	75,055	752,332	10.0
	Kaskazini Unguja	-	-			-
	Kusini Unguja	_	_	_	_	_
	Mjini Magharibi	_	_	_	_	_
	Kaskazini Pemba	_	_	_	_	_
	Kusini Pemba	_	_	_	_	_
	Zanzibar	_	_	_	_	_
	Tanzania	136,921	82,869	75,055	752,332	10.0
	Mainland Tanzania	150,721	54	54	188	3.5
Large Scale	Zanzibar	-	-	-	-	-
Farms	Tanzania	15	54	54	188	3.5
	Mainland Tanzania	136,936	82,923	75,109	752,520	10.0
All	Zanzibar	130,930	02,923	75,109	132,320	10.0
Holdings		126.026	92.022	- 75 100	- 752 530	100
	Tanzania	136,936	82,923	75,109	752,520	10.0

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cocoyams during 2023/24 Agricultural Year

		Short Rainy Season						Long Rainy Season					
<b>Holding Category</b>	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)		
	Dodoma	-	-	-	-	-	-	-	-	-	-		
	Arusha	-	-	-	-	-	-	-	-	-	-		
	Kilimanjaro	4,687	510	209	316	1.5	5,571	282	216	267	1.2		
	Tanga	-	-	-	-	-	-	-	-	-	-		
	Morogoro	-	-	-	-	-	-	-	-	-	-		
	Pwani	-	-	-	-	-	-	-	-	-	-		
	Dar es Salaam	-	-	-	-	-	-	-	-	-	-		
	Lindi	-	-	-	-	-	-	-	-	-	-		
	Mtwara	-	-	-	-	-	-	-	-	-	-		
	Ruvuma	-	-	-	-	-	-	-	-	-	-		
	Iringa	-	-	-	-		-	-	-	-	-		
	Mbeya	1,531	97	97	167	1.7	1,531	97	97	133	1.4		
	Singida	-	-	-	-	-	-	-	-	-	-		
	Tabora	-	-	-	-	-	-	-	-	-	-		
	Rukwa	-	-	-	-	-	-	-	-	-	-		
A	Kigoma	-	-	-	-	-	-	-	-	-	-		
Agricultural Households	Shinyanga	20.500	1.074	1.746	2 100	1.3	-	-	-	-	-		
Housenoids	Kagera Mwanza	20,580	1,974	1,746	2,199	1.3	-	-	-	-	-		
	Mara	-	-	-	-	-	-	-	-	-	-		
	Manyara	-	-	-	-	-	-	-	-	-	-		
	Njombe	-	-	-	-	-	-	-	-	-	-		
	Katavi	-	-	-	-	-	-	-	-	-	-		
	Simiyu	-	-	-	-	-	-	-	-	-	-		
	Geita	_	_	_	_	_	-	_	-	-	-		
	Songwe			_	_		2,783	607	552	213	0.4		
	Mainland Tanzania	28,329	2,678	2,149	2,792	1.3	14,495	1,511	1,341	1,174	0.9		
	Kaskazini Unguja	20,527	2,070	2,147	2,772	1.5	14,475	1,511	1,541	1,174	-		
	Kusini Unguja	781	36	34	74	2.2	_	_	_	_	_		
	Mjini Magharibi	500	106	90	108	1.2	_	_	_	_	_		
	Kaskazini Pemba	-	-	-	-	-	_	_	_	_	_		
	Kusini Pemba	389	24	15	15	1.0	_	_	-	_	_		
	Zanzibar	1,764	178	151	202	1.3	322	19	19	32	1.7		
	Tanzania	30,093	2,856	2,300	2,994	1.3	14,817	1,530	1,360	1,206	0.9		
	Mainland Tanzania	-	-,	-		-		,,-	-	-,	-		
Large Scale Farms	Zanzibar	-	_	-	_	_	_	_	-	_	-		
3	Tanzania	_	_	_	_	_	_	_	_	_	_		
	Mainland Tanzania	28,329	2,678	2,149	2,792	1.3	14,497	1,517	1,345	1,175	0.9		
All Holdings	Zanzibar	1,764	178	151	202	1.3	322	19	19	32	1.7		
	Tanzania	30,093	2,856	2,300	2,994	1.3	14,819	1,535	1,363	1,207	0.9		

Cont... Table 5-1: Area, Production and Yields of Cocoyams during 2023/24 Agricultural Year

			$\mathbf{A}$	gricultural year		
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	
	Arusha	-	-	-	-	
	Kilimanjaro	8,646	792	425	583	1.4
	Tanga	-	-	-	-	
	Morogoro	-	-	-	-	
	Pwani	-	-	-	-	
	Dar es Salaam	-	-	-	-	
	Lindi	-	-	-	-	
	Mtwara	-	-	-	-	
	Ruvuma	-	-	-	-	
	Iringa	-	-	-	-	
	Mbeya	1,531	194	194	300	1.
	Singida	-	-	-	-	
	Tabora	-	-	-	_	
	Rukwa	-	-	-	-	
	Kigoma	-	-	-	_	
Agricultural	Shinyanga	-	-	-	_	
Households	Kagera	21,801	2,115	1,841	2,257	1.
	Mwanza	-	-	-	-	
	Mara	-	-	-	_	
	Manyara	-	-	-	_	
	Njombe	-	-	-	_	
	Katavi	-	-	-	_	
	Simiyu	-	-	-	_	
	Geita	-	-	-	_	
	Songwe	2,783	607	552	213	0.
	Mainland Tanzania	38,723	4,189	3,490	3,966	1.
	Kaskazini Unguja	-	-	-	, -	
	Kusini Unguja	781	48	46	101	2.
	Mjini Magharibi	500	106	90	108	1.
	Kaskazini Pemba	-	-	-	_	
	Kusini Pemba	389	31	22	20	0.
	Zanzibar	1,764	197	170	234	1.
	Tanzania	40,486	4,386	3,660	4,200	1.
	Mainland Tanzania	-	-	-	_	
Large Scale Farms	Zanzibar	-	-	-	_	
_	Tanzania	_	_	_	_	
	Mainland Tanzania	38,725	4,194	3,494	3,967	1.
All Holdings	Zanzibar	1,764	197	170	234	1.
in Holdings	Tanzania	40,488	4,391	3,663	4,201	1.

Cont... Table 5-1: Area, Production and Yields of Onion during 2023/24 Agricultural Year

			Short Rainy Season						Long Rainy Seas	on	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	-		-		-
	Arusha	-	-	-	-	-	3,066	2,547	1,842	9,399	5.1
	Kilimanjaro	-	-	-	-	-	-	-	-	-	-
	Tanga	-	-	-	-	-	-	-	-	-	-
	Morogoro	-	-	-	-	-	-	-	-	-	-
	Pwani	-	-	-	-	-	-	-	-	-	-
	Dar es Salaam	-	-	-	-	-	-	-	-	-	-
	Lindi	-	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	-	-	2 470	17.457	17.256	5 207	- 0.2
	Iringa	-	-	-	-	-	3,478	17,457	17,356	5,207	0.3
	Mbeya	-	-	-	-	-	5.040	5 15C	2.404	12 200	- 5.4
	Singida	-	-	-	-	-	5,949	5,156 624	2,494	13,398	5.4
	Tabora Rukwa	-	-	-	-	-	1,322	624	556	3,349	6.0
		-	-	-	-	-	-	-	-	-	-
Agricultural	Kigoma Shinyanga	-	-	-	-	-	-	-	-	-	-
Agricultural Iouseholds	Kagera	-	-	-	-	-	-	-	-	-	-
nouscholds	Mwanza	-	-	-	-	-	-	-	-	-	-
	Mara	_	_	-	-	-	-	_	_	-	-
	Manyara	_	_	-	-	-	1,812	1,580	657	4,638	7.1
	Njombe		_	_	_		4,156	635	635	5,808	9.1
	Katavi		_	_	_		4,130	-	-	5,000	<i>7.1</i>
	Simiyu	_	_	_	_	_	_	_	_	_	_
	Geita	_	_	_	_	_	_	_	_	_	_
	Songwe	_	_	_	_	_	_	_	_	_	_
	Mainland Tanzania	6,073	3,763	2,636	13,030	4.9	26,500	30,404	25,745	53,679	2.1
	Kaskazini Unguja	-	-	-,000	-	-		-		-	
	Kusini Unguja	_	_	_	_	_	_	_	_	_	_
	Mjini Magharibi	-	_	-	_	_	_	_	_	_	_
	Kaskazini Pemba	-	_	-	_	-	_	_	_	-	_
	Kusini Pemba	-	-	-	_	-	_	_	_	_	_
	Zanzibar	-	_	_	-	-	276	49	37	127	3.4
	Tanzania	6,254	3,780	2,652	13,152	5.0	26,776	30,454	25,782	53,806	2.1
	Mainland Tanzania	3	29	21	65	3.1	10	20	20	72	3.7
Large Scale Farms	Zanzibar	-	_	-	_	-	-	_	_	-	-
Č	Tanzania	3	29	21	65	3.1	11	20	20	72	3.7
	Mainland Tanzania	6,076	3,792	2,657	13,094	4.9	26,510	30,424	25,765	53,751	2.1
All Holdings	Zanzibar	-	-	-	-	_	277	50	37	127	3.4
	Tanzania	6,257	3,809	2,672	13,217	4.9	26,787	30,474	25,802	53,878	2.1

Cont... Table 5-1: Area, Production and Yields of Onion during 2023/24 Agricultural Year

				Agricultural yea	ar	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-
	Arusha	3,291	2,819	2,114	12,090	5.7
	Kilimanjaro	-	-	-	-	-
	Tanga	-	-	-	-	-
	Morogoro	-	-	-	-	-
	Pwani	-	-	-	-	-
	Dar es Salaam	-	-	-	-	-
	Lindi	-	-	-	-	-
	Mtwara	-	-	-	-	-
	Ruvuma	-	-	-	-	-
	Iringa	3,478	17,457	17,356	5,207	0.3
	Mbeya	-	-	-	-	-
	Singida	5,949	5,156	2,494	13,398	5.4
	Tabora	1,712	1,726	1,107	3,555	3.2
	Rukwa	-	-	-	-	-
Agricultural Households	Kigoma	3,130	1,384	1,025	5,506	5.4
	Shinyanga	-	-	-	-	
	Kagera	-	-	-	-	
	Mwanza	-	-	-	-	
	Mara	-	-	-	-	-
	Manyara	1,812	1,580	657	4,638	7.1
	Njombe	4,156	635	635	5,808	9.1
	Katavi	-	-	-	-	
	Simiyu	-	-	-	-	
	Geita	-	-	-	-	
	Songwe	-	-	-	-	
	Mainland Tanzania	31,430	34,167	28,382	66,709	2.4
	Kaskazini Unguja	-	-	-	-	-
	Kusini Unguja	185	39	27	32	1.2
	Mjini Magharibi	-	-	-	-	
	Kaskazini Pemba	-	-	-	-	
	Kusini Pemba	-	-	-	-	-
	Zanzibar	321	66	52	249	4.8
	Tanzania	31,751	34,234	28,434	66,958	2.4
	Mainland Tanzania	12	49	40	136	3.4
Large Scale Farms	Zanzibar	-	-	-	-	-
	Tanzania	13	49	40	137	3.4
	Mainland Tanzania	31,442	34,216	28,422	66,845	2.4
All Holdings	Zanzibar	322	67	52	249	4.8
	Tanzania	31,764	34,283	28,474	67,095	2.4

Cont... Table 5-1: Area, Production and Yields of Ginger during 2023/24 Agricultural Year

		Short Rainy Season								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	-	-	-	-					
	Arusha	-	-	-	-					
	Kilimanjaro	4,995	4,054	3,312	7,999	2.				
	Tanga	-	-	-	-					
	Morogoro	-	-	-	-					
	Pwani	-	-	-	-					
	Dar es Salaam	-	-	-	-					
	Lindi	-	-	-	-					
	Mtwara	-	-	-	_					
	Ruvuma	-	-	-	_					
	Iringa	-	-	-	_					
	Mbeya	-	-	-	_					
	Singida	_	_	-	_					
	Tabora	-	-	_	_					
	Rukwa	_	_	-	_					
	Kigoma	_	_	-	_					
	Shinyanga	-	_	_	-					
Agricultural Households	Kagera	-	_	-	-					
	Mwanza	-	_	_	_					
	Mara	_	_	_	-					
	Manyara	-	_	_	_					
	Njombe	_	_	_	-					
	Katavi	_	_	_	-					
	Simiyu	_	_	_	_					
	Geita	_	_	_	_					
	Songwe	_	_	_	_					
	Mainland Tanzania	4,995	4,054	3,312	7,999	2				
	Kaskazini Unguja	-	-	-	_					
	Kusini Unguja	_	_	_	_					
	Mjini Magharibi	_	_	_	_					
	Kaskazini Pemba	_	_	_	_					
	Kusini Pemba	_	_	_	_					
	Zanzibar	_	_	_	_					
	Tanzania	4,995	4,054	3,312	7,999	2				
	Mainland Tanzania	-	-	-	-					
Large Scale Farms	Zanzibar	_	_	_	_					
	Tanzania	_	_	_	_					
	Mainland Tanzania	4,995	4,054	3,312	7,999	2				
All Holdings	Zanzibar	т,223	7,054	3,312	1,773	2				
in moraniga	Zanzioar Tanzania	4,995	4,054	3,312	7,999	2				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Ginger during 2023/24 Agricultural Year

				Agricultural	year	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	
	Arusha	-	-	-	-	
	Kilimanjaro	4,995	4,054	3,312	7,999	2.4
	Tanga	-	-	-	-	
	Morogoro	-	-	-	-	
	Pwani	-	-	-	-	
	Dar es Salaam	-	-	-	-	
	Lindi	-	-	-	-	
	Mtwara	-	-	-	-	
	Ruvuma	-	-	-	-	
	Iringa	-	-	-	-	
	Mbeya	-	-	-	-	
	Singida	-	-	-	-	
	Tabora	-	-	-	-	
	Rukwa	-	-	-	-	
	Kigoma	-	-	-	-	
	Shinyanga	-	-	-	-	
Agricultural Households	Kagera	-	-	-	-	
	Mwanza	-	-	-	-	
	Mara	-	-	-	-	
	Manyara	-	-	-	-	
	Njombe	-	-	-	-	
	Katavi	-	-	-	-	
	Simiyu	-	-	-	-	
	Geita	-	-	-	-	
	Songwe	-	-	-	-	
	Mainland Tanzania	4,995	4,054	3,312	7,999	2.
	Kaskazini Unguja	-	-	-	-	
	Kusini Unguja	-	-	-	-	
	Mjini Magharibi	-	-	-	-	
	Kaskazini Pemba	-	-	-	-	
	Kusini Pemba	-	-	-	-	
	Zanzibar	-	_	-	_	
	Tanzania	4,995	4,054	3,312	7,999	2.
	Mainland Tanzania	-	-	-	-	
Large Scale Farms	Zanzibar	-	-	-	-	
-	Tanzania	-	_	_	_	
	Mainland Tanzania	4,995	4,054	3,312	7,999	2.
All Holdings	Zanzibar	-	-	- /	-	
	Tanzania	4,995	4,054	3,312	7,999	2.

Cont... Table 5-1: Area, Production and Yields of Garlic during 2023/24 Agricultural Year

				Short Rainy Se	eason		Long Rainy Season					
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	-	-	-	-	-	-	-	-	-	-	
	Arusha	-	-	-	-	-	-	-	-	-	-	
	Kilimanjaro	-	-	-	-	-	-	-	-	-	-	
	Tanga	-	-	-	-	-	-	-	-	-	-	
	Morogoro	-	-	-	-	-	-	-	-	-	-	
	Pwani	-	-	-	-	-	-	-	-	-	-	
	Dar es Salaam	-	-	-	-	-	-	-	-	-	-	
	Lindi	-	-	-	-	-	-	-	-	-	-	
	Mtwara	-	-	-	-	-	-	-	-	-	-	
	Ruvuma	-	-	-	-	-	-	-	-	-	-	
	Iringa	-	-	-	-	-	1,774	93	93	240	2.6	
	Mbeya	-	-	-	-	-	-	-	-	-	-	
	Singida	-	_	-	-	_	_	-	_	_	-	
	Tabora	-	-	-	-	-	-	-	-	_	-	
	Rukwa	-	_	-	-	_	_	-	_	_	-	
	Kigoma	-	_	-	-	_	_	-	_	_	_	
	Shinyanga	-	_	-	-	_	-	-	_	_	-	
Agricultural Households	Kagera	-	_	-	-	_	_	-	_	-	-	
	Mwanza	-	_	-	-	_	-	-	_	_	-	
	Mara	-	-	-	-	_	-	-	_	_	_	
	Manyara	-	-	-	-	_	-	-	_	_	_	
	Njombe	-	-	-	-	_	-	-	_	_	_	
	Katavi	-	-	-	-	_	-	-	_	_	_	
	Simiyu	-	_	_	-	_	_	_	_	_	_	
	Geita	-	_	_	-	_	_	_	_	_	_	
	Songwe	-	_	_	-	_	_	_	_	_	_	
	Mainland Tanzania	_	_	_	_	_	2,396	199	196	691	3.5	
	Kaskazini Unguja	-	_	_	-	_	-,			-	-	
	Kusini Unguja	-	_	_	-	_	_	_	_	_	_	
	Mjini Magharibi	-	_	_	-	_	_	_	_	_	_	
	Kaskazini Pemba	_	_	_	_	_	_	_	_	_	_	
	Kusini Pemba	_	_	_	_	_	_	_	_	_	_	
	Zanzibar	_	_	_	_	_	_	_	_	_	_	
	Tanzania	_	_	_	_	_	2,396	199	196	691	3.5	
	Mainland Tanzania	_	_	_	_	_		-	-	-		
Large Scale Farms	Zanzibar	_	_	_	_	_	_	_	_	_	_	
cango seure i unino	Tanzania	_	_	_	_	_	_	_	_	_	_	
	Mainland Tanzania						2,396	199	196	691	3.5	
All Holdings	Zanzibar	-				-	2,390	139	190	091	3.3	
An Holdings	Tanzania	-	-	-	-	-	2,396	199	196	691	3.5	
	1 anzania	- 		-	-	-	2,396	199	196	691	ა.ა	

Cont... Table 5-1: Area, Production and Yields of Garlic during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	-	-	-	-	-				
	Arusha	-	-	-	-	-				
	Kilimanjaro	-	-	-	-	-				
	Tanga	-	-	-	-	-				
	Morogoro	-	-	-	-	-				
	Pwani	-	-	-	-	-				
	Dar es Salaam	-	-	-	-	-				
	Lindi	-	-	-	-	-				
	Mtwara	-	-	-	-	-				
	Ruvuma	-	-	-	-	-				
	Iringa	1,774	93	93	240	2.6				
	Mbeya	-	-	-	-	-				
	Singida	-	-	-	-	-				
	Tabora	-	-	-	-	-				
Agricultural Households	Rukwa	-	-	-	-	-				
	Kigoma	-	-	-	-	-				
	Shinyanga	-	-	-	-	-				
	Kagera	-	-	-	-	-				
	Mwanza	-	-	-	-	-				
	Mara	-	-	-	-	-				
	Manyara	888	160	157	531	3.4				
	Njombe	-	-	-	-	-				
	Katavi	-	-	-	-	-				
	Simiyu	-	-	-	-	-				
	Geita	-	-	-	-	-				
	Songwe	-	-	-	-	-				
	Mainland Tanzania	2,662	253	250	771	3.1				
	Kaskazini Unguja	-	-	-	-	-				
	Kusini Unguja	-	-	-	-	-				
	Mjini Magharibi	-	-	-	-	-				
	Kaskazini Pemba	-	-	-	-	-				
	Kusini Pemba	-	-	-	-	-				
	Zanzibar	-	-	-	-	-				
	Tanzania	2,662	253	250	771	3.1				
	Mainland Tanzania	-	-	-	-	-				
Large Scale Farms	Zanzibar	-	-	-	-	-				
	Tanzania	-	-	-	-	-				
	Mainland Tanzania	2,662	253	250	771	3.1				
All Holdings	Zanzibar	-	_	-	-	-				
Č	Tanzania	2,662	253	250	771	3.1				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Beans during 2023/24 Agricultural Year

				Short Rainy Sea	son	Long Rainy Season						
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	_	-	_	-	_	13,097	7,527	1,968	1,093	0.6	
	Arusha	29,346	20,644	12,145	17,197	1.4	108,242	49,781	29,533	37,888	1.3	
	Kilimanjaro	43,007	8,793	4,481	3,684	0.8	99,484	26,831	16,109	12,558	0.8	
	Tanga	27,902	10,189	5,779	3,665	0.6	63,875	43,945	26,350	24,623	0.9	
	Morogoro	4,751	1,925	1,153	264	0.2	21,658	14,413	10,807	5,806	0.5	
	Pwani	2,785	1,249	1,249	370	0.3	-	-	-	-	-	
	Dar es Salaam	6,396	4,914	3,940	1,305	0.3	3,156	2,408	1,487	545	0.4	
	Lindi	· -	_	· -	· -	_	· -	_	· -	_	-	
	Mtwara	_	_	_	_	_	_	_	_	_	_	
	Ruvuma	_	_	_	_	_	63,628	33,230	22,431	18,976	0.8	
	Iringa	3,295	3,326	2,380	1,154	0.5	90,057	47,123	31,627	16,429	0.5	
	Mbeya	1,031	282	282	160	0.6	54,386	16,983	14,861	17,239	1.2	
	Singida	1,001	202	-02	-	-	37,523	10,476	4,527	3,865	0.9	
	Tabora	9,722	2,145	1,077	708	0.7	18,721	5,592	4,214	1,545	0.4	
	Rukwa	1,676	1,577	1,313	1,006	0.8	99,178	81,260	69,736	58,486	0.8	
	Kigoma	112,190	25,717	11,625	12,443	1.1	13,634	3,785	2,075	1,043	0.5	
Agricultural	Shinyanga	112,170	23,717	11,025	12,443	1.1	32,294	12,779	8,873	2,386	0.3	
Households	Kagera	409,056	93,611	57,149	54,270	0.9	200,511	74,481	46,047	28,659	0.6	
Trouscholds	Mwanza	70,138	17,697	11,957	5,810	0.5	12,541	3,488	3,181	1,867	0.6	
	Mara	54,738	16,600	11,530	5,310	0.5	16,074	5,996	4,146	1,680	0.4	
	Manyara	7,015	3,583	1,753	1,300	0.7	87,362	70,535	37,717	39,796	1.1	
	Njombe	1,622	708	708	1,222	1.7	45,122	14,857	14,099	9,217	0.7	
	Katavi	1,022	700	700	1,222	1.7	33,201	14,011	7,403	6,210	0.8	
	Simiyu	5,633	1,334	724	327	0.5	15,666	3,516	2,167	894	0.8	
	Geita	130,749	32,821	20,470	9,530	0.5	21,514	6,895	5,124	1,885	0.4	
		130,749	32,021	20,470	9,330	0.3	58,880	35,695	30,838	22,545	0.4	
	Songwe Mainland Tanzania	922,867	249,111	151,711	120,393	0.8	1,211,644	586,802	396,338	317,986	0.7 <b>0.8</b>	
	Kaskazini Unguja	922,007	249,111	151,/11	120,393	0.0	1,211,044	300,002	390,336	317,900	0.0	
	Kusini Unguja	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	
	Mjini Magharibi Kaskazini Pemba	-	-	-	-	-	-	-	-	-	-	
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-	
	Zanzibar	-	-	-	-	-	-	-	-	-	-	
	Zanzidar Tanzania	922,936	249,122	151,722	120,407	0.8	1,211,644	586,802	396,338	317,986		
	Mainland Tanzania	28	11,828	151,722	322	0.0	1,211,644	10,580	9,636	4,159	0.8	
Large Scale	Zanzibar	28	11,828	11,/91	322	0.0		10,380	9,036	4,139	0.4	
Farms		-	11,828	11,791	322	0.0	102	10,580	9,636	4,159	0.4	
	Tanzania Maintand Tanania	28					1 211 746					
A 11 TT 1 T	Mainland Tanzania	922,895	260,939	163,503	120,715	0.7	1,211,746	597,382	405,975	322,145	0.8	
All Holdings	Zanzibar	-	-	-	-	-	-	-	-	-	-	
	Tanzania	922,964	260,950	163,513	120,729	0.7	1,211,746	597,382	405,975	322,145	0.8	

Cont... Table 5-1: Area, Production and Yields of Beans during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	14,911	9,524	3,964	1,760	0.4				
	Arusha	123,091	70,425	41,677	55,085	1.3				
	Kilimanjaro	119,721	35,624	20,590	16,242	0.8				
	Tanga	82,315	54,134	32,129	28,288	0.9				
	Morogoro	25,278	16,338	11,960	6,070	0.5				
	Pwani	4,622	2,444	2,267	3,118	1.4				
	Dar es Salaam	9,109	7,322	5,427	1,850	0.3				
	Lindi	-	-	-	-	-				
	Mtwara	-	-	-	-	-				
	Ruvuma	63,628	33,230	22,431	18,976	0.8				
	Iringa	92,877	50,449	34,006	17,583	0.5				
	Mbeya	55,417	17,265	15,143	17,399	1.1				
	Singida	37,523	10,476	4,527	3,865	0.9				
	Tabora	28,443	7,737	5,291	2,253	0.4				
	Rukwa	99,178	82,837	71,048	59,492	0.8				
	Kigoma	124,920	29,501	13,699	13,486	1.0				
	Shinyanga	32,294	12,779	8,873	2,386	0.3				
Agricultural Households	Kagera	453,349	168,091	103,196	82,928	0.8				
	Mwanza	77,978	21,185	15,139	7,678	0.5				
	Mara	63,391	22,596	15,676	6,990	0.4				
	Manyara	92,149	74,118	39,470	41,096	1.0				
	Njombe	46,744	15,564	14,806	10,439	0.7				
	Katavi	33,201	14,011	7,403	6,210	0.8				
	Simiyu	20,622	4,850	2,891	1,222	0.4				
	Geita	145,626	39,716	25,595	11,415	0.4				
	Songwe	58,880	35,695	30,838	22,545	0.7				
	Mainland Tanzania	1,905,267	835,913	548,050	438,379	0.8				
	Kaskazini Unguja	-	-	· -	-	-				
	Kusini Unguja	-	-	_	-	-				
	Mjini Magharibi	-	-	_	-	-				
	Kaskazini Pemba	-	-	_	-	-				
	Kusini Pemba	-	-	_	-	-				
	Zanzibar	-	-	_	_	-				
	Tanzania	1,905,336	835,923	548,060	438,392	0.8				
	Mainland Tanzania	118	22,408	21,427	4,481	0.2				
Large Scale Farms	Zanzibar	-	-	· -	-	-				
-	Tanzania	118	22,408	21,427	4,481	0.2				
	Mainland Tanzania	1,905,385	858,321	569,477	442,859	0.8				
All Holdings	Zanzibar	-	_	-	-	-				
All Holdings										

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cowpeas during 2023/24 Agricultural Year

		Short Rainy Season							Long Rainy S	eason	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	_	-	-	-	2,628	429	187	105	0.6
	Arusha	-	-	-	-	-	-	-	-	-	-
	Kilimanjaro	6,421	751	677	106	0.2	4,631	1,128	876	257	0.3
	Tanga	12,698	5,798	3,232	741	0.2	6,758	1,818	1,047	362	0.3
	Morogoro	3,822	1,084	979	112	0.1	8,005	3,886	3,142	485	0.2
	Pwani	31,009	4,893	3,438	1,030	0.3	14,396	4,518	3,293	572	0.2
	Dar es Salaam	1,691	204	170	29	0.2	-	-	-	-	-
	Lindi	-	-	-	-	-	5,877	1,706	1,442	312	0.2
	Mtwara	-	-	-	-	-	10,255	4,967	4,333	1,310	0.3
	Ruvuma	-	-	-	-	-	3,769	725	333	301	0.9
	Iringa	-	-	-	-	-	6,863	1,621	902	140	0.2
	Mbeya	-	-	-	-	-	-	_	-	-	-
	Singida	-	-	-	-	-	9,007	2,937	1,951	761	0.4
	Tabora	2,328	479	314	45	0.1	2,141	668	400	64	0.2
	Rukwa	-	-	-	-	-	-	-	-	-	-
	Kigoma	-	-	-	-	-	-	-	-	-	-
	Shinyanga	-	-	-	-	-	2,659	382	363	144	0.4
Agricultural Households	Kagera	-	-	-	-	-	-	-	-	-	-
	Mwanza	16,878	3,010	1,896	1,289	0.7	1,111	55	55	40	0.7
	Mara	-	_	-	-	-	-	-	-	-	-
	Manyara	-	-	-	-	-	1,912	773	231	56	0.2
	Njombe	-	-	-	-	-	4,063	1,868	1,415	481	0.3
	Katavi	-	-	-	-	-	-	-	-	-	-
	Simiyu	-	-	-	-	-	2,364	250	145	63	0.4
	Geita	5,311	1,287	939	255	0.3	-	-	-	-	-
	Songwe	· -	_	-	-	-	-	_	-	-	-
	Mainland Tanzania	84,025	17,963	11,898	3,655	0.3	91,867	31,266	22,733	8,808	0.4
	Kaskazini Unguja	1,277	136	112	40	0.4	1,076	115	72	24	0.3
	Kusini Unguja	326	27	14	4	0.3	269	20	6	4	0.7
	Mjini Magharibi	-	_	_	-	-	-	_	_	_	-
	Kaskazini Pemba	815	152	129	101	0.8	346	29	24	26	1.1
	Kusini Pemba	1,109	197	145	17	0.1	-	_	_	_	-
	Zanzibar	3,526	512	400	163	0.4	1,692	164	102	55	0.5
	Tanzania	87,552	18,475	12,298	3,818	0.3	93,559	31,430	22,834	8,863	0.4
	Mainland Tanzania	-	-	-	-	-	19	248	233	21	0.1
Large Scale Farms	Zanzibar	_	-	-	-	_	-	-	-		-
2	Tanzania	_	-	-	_	_	19	248	233	21	0.1
	Mainland Tanzania	84,026	17,966	11,901	3,655	0.3	91,886	31,514	22,966	8,829	0.4
All Holdings	Zanzibar	3,526	512	400	163	0.4	1,692	164	102	55	0.5
	Tanzania	87,553	18,478	12,301	3,818	0.3	93,578	31,678	23,068	8,884	0.4

Cont... Table 5-1: Area, Production and Yields of Cowpeas during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	2,628	429	187	105	0.6				
	Arusha	1,474	2,303	1,731	3,356	1.9				
	Kilimanjaro	9,002	1,879	1,553	363	0.2				
	Tanga	17,615	7,615	4,279	1,103	0.3				
	Morogoro	11,827	4,970	4,122	597	0.1				
	Pwani	42,196	9,410	6,731	1,602	0.2				
	Dar es Salaam	4,810	1,284	1,026	43	0.0				
	Lindi	5,877	1,706	1,442	312	0.2				
	Mtwara	10,255	4,967	4,333	1,310	0.3				
	Ruvuma	3,769	725	333	301	0.9				
	Iringa	6,863	1,621	902	140	0.2				
	Mbeya	-	-	-	-	-				
	Singida	9,007	2,937	1,951	761	0.4				
	Tabora	4,468	1,147	715	109	0.2				
	Rukwa	-	-	-	-	-				
	Kigoma	1,559	215	73	7	0.1				
A ' 1, 177 1 11	Shinyanga	2,659	382	363	144	0.4				
Agricultural Households	Kagera	-	-	-	-	-				
	Mwanza	17,716	3,065	1,952	1,329	0.7				
	Mara	-	-	-	-	-				
	Manyara	2,277	884	253	60	0.2				
	Njombe	4,063	1,868	1,415	481	0.3				
	Katavi	-	-	-	-	-				
	Simiyu	3,165	412	263	71	0.3				
	Geita	5,544	1,346	954	255	0.3				
	Songwe	-	-	-	-	-				
	Mainland Tanzania	168,185	49,230	34,631	12,463	0.4				
	Kaskazini Unguja	1,885	251	184	64	0.3				
	Kusini Unguja	362	47	20	9	0.4				
	Mjini Magharibi	-	-	-	-	-				
	Kaskazini Pemba	1,161	181	152	128	0.8				
	Kusini Pemba	1,109	197	145	17	0.1				
	Zanzibar	4,518	676	501	218	0.4				
	Tanzania	172,702	49,905	35,132	12,680	0.4				
	Mainland Tanzania	19	251	236	21	0.1				
Large Scale Farms	Zanzibar	-	-	-	-	-				
	Tanzania	19	251	236	21	0.1				
	Mainland Tanzania	168,204	49,480	34,867	12,484	0.4				
All Holdings	Zanzibar	4,518	676	501	218	0.4				
All roldings	Tanzania	172,721	50,156	35,369	12,702	0.4				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Pigeon pea during 2023/24 Agricultural Year

		Agricultural year							
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)				
	Dodoma	57,830	39,170	21,730	0.6				
	Arusha	30,943	16,717	11,221	0.7				
	Kilimanjaro	1,358	248	158	0.6				
	Tanga	13,173	14,852	5,615	0.4				
	Morogoro	124,055	71,395	32,926	0.5				
	Pwani	30,059	5,869	2,639	0.4				
	Dar es Salaam	5,515	1,624	813	0.5				
	Lindi	85,335	49,615	14,864	0.3				
	Mtwara	155,602	54,777	23,357	0.4				
	Ruvuma	49,378	25,051	14,592	0.6				
	Iringa	801	194	133	0.7				
	Mbeya	_	_	_	-				
	Singida	_	_	_	-				
	Tabora	_	_	_	_				
	Rukwa	5,173	2,355	655	0.3				
	Kigoma	13,851	2,471	1,362	0.6				
	Shinyanga	´ <u>-</u>	, <u>-</u>	_	-				
Agricultural Households	Kagera	_	_	_	-				
	Mwanza	_	_	_	-				
	Mara	_	_	_	-				
	Manyara	97,562	87,195	47,430	0.5				
	Njombe			_	-				
	Katavi	_	_	_	-				
	Simiyu	23,822	9,307	4,104	0.4				
	Geita	_	-	-	_				
	Songwe	_	_	_	-				
	Mainland Tanzania	696,431	381,139	181,701	0.5				
	Kaskazini Unguja	4,137	475	280	0.6				
	Kusini Unguja	1,270	172	103	0.6				
	Mjini Magharibi	-	_	_	_				
	Kaskazini Pemba	_	_	_	-				
	Kusini Pemba	_	_	_	-				
	Zanzibar	5,627	720	475	0.7				
	Tanzania	702,058	381,860	182,176	0.5				
	Mainland Tanzania	30	942	95	0.1				
Large Scale Farms	Zanzibar	-	-	-	-				
Č	Tanzania	31	944	97	0.1				
	Mainland Tanzania	696,461	382,082	181,796	0.5				
All Holdings	Zanzibar	5,628	722	477	0.7				
	Tanzania	702,089	382,804	182,273	0.5				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Sunflower during 2023/24 Agricultural Year

				Short Rainy S	eason				Long Rainy Se	ason	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	14,102	21,780	21,670	16,870	0.8	154,191	120,312	68,011	60,494	0.9
	Arusha	2,375	566	474	724	1.5	12,858	13,090	6,220	7,184	1.2
	Kilimanjaro	17,087	5,662	4,314	3,469	0.8	25,266	5,780	3,426	4,235	1.2
	Tanga	1,607	913	800	352	0.4	2,736	3,731	1,798	420	0.2
	Morogoro	6,855	3,686	2,729	1,710	0.6	18,114	7,667	5,565	4,372	0.8
	Pwani	-	-	-	-	-	-	-	-	-	-
	Dar es Salaam	2,990	1,798	1,556	2,654	1.7	3,054	1,952	1,700	890	0.5
	Lindi	· -	_	· -	· -	_	7,223	8,635	7,464	805	0.1
	Mtwara	_	_	_	-	_	-	-	-	-	-
	Ruvuma	_	_	_	-	_	31,912	13,363	10,688	9,454	0.9
	Iringa	_	_	_	_	_	32,621	27,350	18,499	12,184	0.7
	Mbeya	_	_	_	_	_	7,070	3,072	2,929	2,573	0.9
	Singida	_	_	_	_	_	95,052	94,865	59,544	46,487	0.8
	Tabora	5,207	3,015	1,957	2,033	1.0	23,043	27,666	21,455	14,468	0.7
Rukwa Kigoma Shinyanga		5,207			2,000	-	53,908	31,824	29,563	15,653	0.5
		_	_	_	_	_	55,700	31,021	25,505	15,055	-
	Shinyanga	_	_	_	_	_	9,848	6,802	5,432	3,294	0.6
Agricultural Households	Kagera						7,040	0,002	5,452	3,274	0.0
	Mwanza	1,761	284	219	442	2.0	2,476	3,192	1,172	408	0.3
	Mara	3,237	1,286	854	1,139	1.3	2,345	1,307	1,073	456	0.4
	Manyara	11,419	7,374	4,405	4,389	1.0	58,826	78,520	32,930	33,233	1.0
	Njombe	11,419	7,374	4,403	4,369	1.0	18,999	9,511	7,944	5,636	0.7
	Katavi	-	-	-	-	-	8,335	4,919	3,341	2,475	0.7
		6.070	4 961	2 727	1.060						
	Simiyu	6,970	4,861	3,737	1,960	0.5	11,429 3,575	10,137	6,044	3,557 710	0.6
	Geita	3,841	2,923	1,463	1,579	1.1		4,545	1,632		0.4
	Songwe	01 000	-	40.606	20.270	-	15,197	10,768	10,212	5,502	0.5
	Mainland Tanzania	81,999	60,327	49,606	39,279	0.8	601,999	491,370	308,256	235,071	0.8
	Kaskazini Unguja	-	-	-	-	-	-	-	-	-	-
	Kusini Unguja	-	-	-	-	-	-	-	-	-	-
	Mjini Magharibi	-	-	-	-	-	-	-	-	-	-
	Kaskazini Pemba	-	-	-	-	-	-	-	-	-	-
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-
	Zanzibar	-	-	40.606	-	-	-	404.250	200.256	-	-
	Tanzania	81,999	60,327	49,606	39,279	0.8	601,999	491,370	308,256	235,071	0.8
	Mainland Tanzania	10	728	637	51	0.1	112	9,672	9,052	1,800	0.2
Large Scale Farms	Zanzibar	-	-	-	-	-	-	-	-	-	-
	Tanzania	10	728	637	51	0.1	112	9,672	9,052	1,800	0.2
	Mainland Tanzania	82,009	61,055	50,243	39,330	0.8	602,111	501,042	317,308	236,871	0.7
All Holdings	Zanzibar	-	-	-	-	-	-	-	-	-	-
	Tanzania	82,009	61,055	50,243	39,330	0.8	602,111	501,042	317,308	236,871	0.7

Cont... Table 5-1: Area, Production and Yields of Sunflower during 2023/24 Agricultural Year

		Agricultural year							
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)			
	Dodoma	168,293	142,093	89,681	77,364	0.9			
	Arusha	14,715	13,656	6,694	7,907	1.2			
	Kilimanjaro	34,104	11,441	7,740	7,704	1.0			
	Tanga	4,343	4,644	2,598	772	0.3			
	Morogoro	24,670	11,353	8,294	6,082	0.7			
	Pwani	2,550	2,277	1,761	514	0.3			
	Dar es Salaam	6,043	3,750	3,256	3,545	1.1			
	Lindi	7,223	8,635	7,464	805	0.1			
	Mtwara	-	-	-	-	-			
	Ruvuma	31,912	13,363	10,688	9,454	0.9			
	Iringa	32,621	27,350	18,499	12,184	0.7			
	Mbeya	7,070	3,072	2,929	2,573	0.9			
	Singida	95,533	95,253	59,933	46,583	0.8			
	Tabora	28,250	30,681	23,412	16,501	0.7			
	Rukwa	53,908	32,484	29,827	15,726	0.5			
	Kigoma	-	_	-	<u>-</u>				
	Shinyanga	10,254	10,747	9,377	4,054	0.4			
Agricultural Households	Kagera	-		-,	-	-			
	Mwanza	4,237	3,475	1,391	851	0.6			
	Mara	5,145	2,592	1,927	1,595	0.8			
	Manyara	69,819	85,894	37,336	37,622	1.0			
	Njombe	19,456	9,696	8,129	6,019	0.7			
	Katavi	8,335	4,919	3,341	2,475	0.7			
	Simiyu	18,399	14,998	9,781	5,518	0.6			
	Geita	7,416	7,467	3,096	2,289	0.7			
	Songwe	15,197	10,768	10,212	5,502	0.7			
	Mainland Tanzania	673,523	551,697	357,861	274,351	0.8			
	Kaskazini Unguja	075,325	331,077	337,001	274,331	0.0			
	Kusini Unguja	_	_	_	_	_			
	Mjini Magharibi	-	_	_	_	_			
	Kaskazini Pemba	-	_	_	_	-			
	Kusini Pemba	-	_	_	_	_			
	Zanzibar	-	-	-	-	-			
	Tanzania	673,523	551,697	357,861	274,351				
	Mainland Tanzania					0.8			
I C1- E-		118	10,400	9,689	1,851	0.2			
Large Scale Farms	Zanzibar	-	- 40.400		- 4.05:	-			
	Tanzania	118	10,400	9,689	1,851	0.2			
	Mainland Tanzania	673,641	562,097	367,551	276,202	0.8			
All Holdings	Zanzibar	-	-	-	-	-			
	Tanzania	673,641	562,097	367,551	276,202	0.8			

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Sesame during 2023/24 Agricultural Year

			1	Short Rainy Se	ason				Long Rainy Se	ason	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	18,395	28,297	17,042	5,846	0.3
	Arusha	-	-	-	-	-	-	-	-	-	-
	Kilimanjaro	-	-	-	-	-	-	-	-	-	-
	Tanga	3,581	3,190	1,532	812	0.5	1,742	1,565	1,033	631	0.6
	Morogoro	2,668	1,073	814	248	0.3	37,754	45,860	23,628	10,126	0.4
	Pwani	14,763	11,613	10,050	4,084	0.4	32,208	46,952	28,185	10,667	0.4
	Dar es Salaam	3,817	4,872	3,319	2,436	0.7	2,480	2,462	1,769	870	0.5
	Lindi	· -	_	-	-	-	138,866	226,998	90,104	47,122	0.5
	Mtwara	-	_	-	-	-	93,992	94,971	76,986	29,414	0.4
	Ruvuma	-	_	-	-	-	39,191	32,705	23,749	11,965	0.5
	Iringa	-	_	-	-	-	1,745	1,812	1,296	771	0.6
	Mbeya	-	_	-	-	-	· -	_	_	_	-
	Singida	_	_	-	-	_	8,259	7,304	2,048	1,618	0.8
	Tabora	_	_	_	-	-	1,179	507	118	95	0.8
	Rukwa	_	_	_	-	-	-	-	_	-	-
Kigon	Kigoma	_	_	_	_	_	_	_	_	_	_
	Shinyanga	_	_	_	_	_	_	_	_	_	_
Agricultural Households	Kagera	_	_	_	_	_	_	_	_	_	_
	Mwanza	_	_	_	_	_	_	_	_	_	_
	Mara	_	_	_	_	_	_	_	_	_	_
	Manyara	769	778	223	185	0.8	4,012	3,196	1,010	797	0.8
	Njombe	-	-		-	-	.,012	-	-		-
	Katavi	_	_	_	_	_	1,813	2,735	1,816	1,300	0.7
	Simiyu	_	_	_	_	_	1,015	2,755		1,500	0.7
	Geita	_	_	_	_	_	_	_	_	_	_
	Songwe	_	_	_	_	_	38,202	35,165	30,356	13,085	0.4
	Mainland Tanzania	28,065	27,868	22,238	9,858	0.4	421,715	532,064	300,310	134,626	0.4
	Kaskazini Unguja	20,003	27,000	22,230	7,030	-	421,713	332,004	500,510	154,020	-
	Kusini Unguja	_	_	_	_	_	_	_	_	_	_
	Mjini Magharibi	_	_					_		_	_
	Kaskazini Pemba	_	_					_		_	_
	Kusini Pemba	_	_					_		_	_
	Zanzibar	-	-	-	-	-	-	-	-	-	-
	Tanzania	28,065	27,868	22,238	9,858	0.4	421,715	532,064	300,310	134,626	0.4
	Mainland Tanzania	20,005	27,000	22,236	9,030	- 0.4	421,713	997	913	134,020	0.1
Langa Saala Farma	Zanzibar	-	-	-	-		48		913	104	0.1
Large Scale Farms		-	-	-	-	-	-	-	- 0.13	-	-
	Tanzania	-			-	-	48	997	913	104	0.1
	Mainland Tanzania	28,066	27,934	22,304	9,859	0.4	421,763	533,062	301,223	134,730	0.4
All Holdings	Zanzibar	-	-	-	-	-	-	-	-	-	-
	Tanzania	28,066	27,934	22,304	9,859	0.4	421,763	533,062	301,223	134,730	0.4

Cont... Table 5-1: Area, Production and Yields of Sesame during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	19,227	32,396	21,141	7,494	0.4				
	Arusha	-	-	-	-	-				
	Kilimanjaro	-	-	-	-	-				
	Tanga	4,558	4,754	2,564	1,443	0.6				
	Morogoro	40,423	46,934	24,442	10,374	0.4				
	Pwani	46,970	58,566	38,234	14,751	0.4				
	Dar es Salaam	6,297	7,334	5,087	3,305	0.6				
	Lindi	138,866	226,998	90,104	47,122	0.5				
	Mtwara	93,992	94,971	76,986	29,414	0.4				
	Ruvuma	39,191	32,705	23,749	11,965	0.5				
	Iringa	1,745	1,812	1,296	771	0.6				
	Mbeya	-	-	-	-	-				
	Singida	8,259	7,304	2,048	1,618	0.8				
	Tabora	1,179	507	118	95	0.8				
	Rukwa	-	-	-	-	-				
	Kigoma	-	-	-	-	-				
	Shinyanga	-	-	-	-	-				
Agricultural Households	Kagera	-	-	-	-	-				
	Mwanza	-	-	-	-	-				
	Mara	-	-	-	-	-				
	Manyara	4,782	3,975	1,233	982	0.8				
	Njombe	-	-	-	-	-				
	Katavi	1,813	2,735	1,816	1,300	0.7				
	Simiyu	-	_	_	-	-				
	Geita	-	-	-	-	-				
	Songwe	38,202	35,165	30,356	13,085	0.4				
	Mainland Tanzania	449,015	559,932	322,548	144,483	0.4				
	Kaskazini Unguja	-	-	-	_	-				
	Kusini Unguja	-	-	-	-	-				
	Mjini Magharibi	-	_	-	_	-				
	Kaskazini Pemba	-	-	-	-	-				
	Kusini Pemba	-	_	_	_	-				
	Zanzibar	-	_	_	_	-				
	Tanzania	449,015	559,932	322,548	144,483	0.4				
	Mainland Tanzania	49	1,063	979	106	0.1				
Large Scale Farms	Zanzibar	-	-	_	_	-				
	Tanzania	49	1,063	979	106	0.1				
	Mainland Tanzania	449,064	560,996	323,528	144,589	0.4				
All Holdings	Zanzibar	,	-	-		-				
All Holdings	Tanzania	449,064	560,996	323,528	144,589	0.4				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Groundnut during 2023/24 Agricultural Year

				Short Rainy S	eason				Long Rainy Sea	ason	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	5,136	2,511	2,511	777	0.3	206,873	158,880	110,104	92,756	0.8
	Arusha	-	-	-	-	-	1,948	1,635	1,286	1,530	1.2
	Kilimanjaro	7,700	2,250	1,347	1,077	0.8	7,644	2,181	1,521	894	0.6
	Tanga	2,271	629	566	251	0.4	4,286	1,172	982	233	0.2
	Morogoro	2,909	2,385	2,113	1,406	0.7	6,074	5,193	3,148	2,085	0.7
	Pwani	4,315	1,393	1,155	667	0.6	4,970	4,019	3,801	954	0.3
	Dar es Salaam	4,861	6,301	6,059	2,829	0.5	6,549	4,988	4,898	2,662	0.5
	Lindi	-	-	-	-	-	16,395	9,424	6,710	4,694	0.7
	Mtwara	-	-	-	-	-	108,358	46,970	36,418	18,775	0.5
	Ruvuma	-	-	-	-	-	14,842	6,118	4,713	3,403	0.7
	Iringa	-	-	-	-	-	9,851	18,759	17,768	10,554	0.6
	Mbeya	-	-	-	-	-	26,697	15,161	13,678	14,785	1.1
	Singida	-	-	-	-	-	64,705	37,796	26,422	22,843	0.9
	Tabora	78,244	41,800	27,001	25,125	0.9	97,330	59,406	37,846	25,633	0.7
	Rukwa	-	-	-	-	-	39,711	16,176	15,779	17,011	1.1
Kigoma	Kigoma	34,432	8,799	4,451	3,047	0.7	3,202	722	538	159	0.3
	Shinyanga	· <u>-</u>	-	-	-	-	102,856	58,372	48,658	29,286	0.6
Agricultural Households	Kagera	13,119	4,521	3,417	1,537	0.4	, <u> </u>	_	· -	· -	_
	Mwanza	41,146	11,078	8,408	5,062	0.6	3,027	686	538	67	0.1
	Mara	5,237	1,409	805	310	0.4	3,569	1,318	1,052	567	0.5
	Manyara	2,197	1,387	1,064	1,226	1.2	6,742	4,861	3,281	4,302	1.3
	Njombe	-	-	-	, -	-	3,273	1,522	1,213	703	0.6
	Katavi	-	-	_	-	-	53,252	31,943	23,517	23,870	1.0
	Simiyu	9,058	4,759	3,059	1,214	0.4	17,947	8,547	7,404	5,689	0.8
	Geita	72,942	20,875	14,066	11,208	0.8	5,529	2,214	1,878	906	0.5
	Songwe		,-,-		,	-	70,053	31,530	30,795	26,370	0.9
	Mainland Tanzania	286,418	112,056	77,946	56,149	0.7	886,734	529,753	404,026	310,754	0.8
	Kaskazini Unguja	-	-	-	-	-	-	-	-		-
	Kusini Unguja	_	_	_	_	_	_	_	_	_	_
	Mjini Magharibi	-	-	_	-	-	_	_	-	_	_
	Kaskazini Pemba	-	-	_	-	-	_	_	-	_	_
	Kusini Pemba	432	86	60	35	0.6	282	95	95	65	0.7
	Zanzibar	529	130	104	49	0.5	380	253	253	162	0.6
	Tanzania	286,947	112,187	78,050	56,197	0.7	887,114	530,006	404,279	310,915	0.8
	Mainland Tanzania	10	45	26	8	0.3	107	670	564	142	0.3
Large Scale Farms	Zanzibar	-	_	-	-	-	-	_	-	_	-
	Tanzania	11	48	28	9	0.3	108	673	566	145	0.3
	Mainland Tanzania	286,428	112,101	77,972	56,157	0.7	886,841	530,422	404,590	310,895	0.8
All Holdings	Zanzibar	530	134	106	50	0.5	381	257	255	165	0.6
6	Tanzania	286,958	112,235	78,078	56,206	0.7	887,222	530,679	404,845	311,060	0.8

Cont... Table 5-1: Area, Production and Yields of Groundnut during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	212,009	161,390	112,614	93,534	0.8				
	Arusha	1,948	1,917	1,534	1,746	1.1				
	Kilimanjaro	13,051	4,431	2,868	1,971	0.7				
	Tanga	6,183	1,801	1,548	484	0.3				
	Morogoro	8,983	7,578	5,260	3,491	0.7				
	Pwani	7,049	5,412	4,956	1,621	0.3				
	Dar es Salaam	11,410	11,289	10,957	5,492	0.5				
	Lindi	16,395	9,424	6,710	4,694	0.7				
	Mtwara	108,358	46,970	36,418	18,775	0.5				
	Ruvuma	14,842	6,118	4,713	3,403	0.7				
	Iringa	10,074	18,827	17,836	10,557	0.6				
	Mbeya	27,694	15,532	14,049	14,828	1.1				
	Singida	64,705	37,796	26,422	22,843	0.9				
	Tabora	175,575	101,206	64,846	50,758	0.8				
	Rukwa	39,711	16,176	15,779	17,011	1.1				
	Kigoma	37,634	9,522	4,988	3,206	0.6				
	Shinyanga	103,621	59,610	49,897	29,437	0.6				
Agricultural Households	Kagera	14,173	4,681	3,497	1,558	0.4				
	Mwanza	43,149	11,764	8,946	5,129	0.6				
	Mara	8,187	2,727	1,857	877	0.5				
	Manyara	8,939	6,247	4,345	5,528	1.3				
	Njombe	3,273	1,522	1,213	703	0.6				
	Katavi	53,252	31,943	23,517	23,870	1.0				
	Simiyu	27,006	13,306	10,463	6,903	0.7				
	Geita	78,470	23,089	15,944	12,114	0.8				
	Songwe	70,053	31,530	30,795	26,370	0.9				
	Mainland Tanzania	1,165,743	641,809	481,972	366,902	0.8				
	Kaskazini Unguja	-	-	-	-	-				
	Kusini Unguja	-	-	-	_	-				
	Mjini Magharibi	-	_	_	-	-				
	Kaskazini Pemba	-	-	-	_					
	Kusini Pemba	624	181	155	100	0.6				
	Zanzibar	819	384	358	210	0.6				
	Tanzania	1,166,561	642,193	482,329	367,113	0.8				
	Mainland Tanzania	116	714	591	150	0.3				
Large Scale Farms	Zanzibar	-	_	-	-	-				
<u> </u>	Tanzania	117	721	594	154	0.3				
	Mainland Tanzania	1,165,859	642,523	482,562	367,052	0.8				
All Holdings	Zanzibar	820	390	361	214	0.6				
7111 1101dillig5	Tanzania	1,166,678	642,914	482,923	367,266	0.8				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cashew nut during 2023/24 Agricultural Year

			Agricu	ltural year	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma	-	-	-	-
	Arusha	-	-	-	-
	Kilimanjaro	-	-	-	-
	Tanga	2,345	2,496	228	0.1
	Morogoro	-	-	-	-
	Pwani	15,990	35,998	5,178	0.1
	Dar es Salaam	6,131	20,624	4,406	0.2
	Lindi	81,401	369,034	39,317	0.1
	Mtwara	202,745	397,777	104,128	0.3
	Ruvuma	54,585	201,098	22,847	0.1
	Iringa	-	-	-	-
	Mbeya	-	-	-	-
	Singida	-	-	-	-
	Tabora	-	-	-	-
	Rukwa	-	-	-	-
	Kigoma	-	-	-	-
A ami aultumal Hausah alda	Shinyanga	-	-	-	-
Agricultural Households	Kagera	-	-	-	-
	Mwanza	-	-	-	-
	Mara	-	-	-	-
	Manyara	-	-	-	-
	Njombe	-	-	-	-
	Katavi	-	-	-	-
	Simiyu	-	-	-	-
	Geita	-	-	-	-
	Songwe	-	-	-	-
	Mainland Tanzania	365,114	1,039,005	178,755	0.2
	Kaskazini Unguja	-	-	-	-
	Kusini Unguja	-	-	-	-
	Mjini Magharibi	-	-	-	-
	Kaskazini Pemba	-	-	-	-
	Kusini Pemba	-	-	-	-
	Zanzibar	-	-	-	-
	Tanzania	365,114	1,039,005	178,755	0.2
	Mainland Tanzania	87	26,274	571	0.0
Large Scale Farms	Zanzibar	-	-	-	-
	Tanzania	87	26,274	571	0.0
	Mainland Tanzania	365,201	1,065,278	179,326	0.2
All Holdings	Zanzibar	-	-	-	-
	Tanzania	365,201	1,065,278	179,326	0.2

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cotton during 2023/24 Agricultural Year

		Short Rainy Season					Long Rainy Season				
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	-	-	-	-	
	Arusha	-	-	-	-	-	-	-	-	-	
	Kilimanjaro	-	-	-	-	-	-	-	-	-	
	Tanga	-	-	-	-	-	-	-	-	-	
	Morogoro	-	-	-	-	-	-	-	-	-	
	Pwani	-	-	-	-	-	-	-	-	-	
	Dar es Salaam	-	-	-	-	-	-	-	-	-	
	Lindi	-	-	-	-	-	-	-	-	-	
	Mtwara	-	-	-	-	-	-	-	-	-	
	Ruvuma	-	-	-	-	-	-	-	-	-	
	Iringa	-	-	-	-	-	-	-	-	-	
	Mbeya	-	-	-	-	-	-	-	-	-	
	Singida	-	-	-	-	-	-	-	-	-	
	Tabora	768	753	608	1,194	2.0	14,375	28,224	15,414	15,643	1.0
	Rukwa	-	-	-	-	-	-	-	-	-	
	Kigoma	-	-	-	-	-	-	-	-	-	
Agricultural Households	Shinyanga	-	-	-	-	-	29,903	60,201	49,874	36,053	0.7
Agricultural Households	Kagera	-	-	-	-	-	-	-	-	-	
	Mwanza	18,754	15,475	10,488	9,158	0.9	1,677	1,669	1,444	1,465	1.0
	Mara	10,146	7,029	5,060	4,292	0.8	4,225	2,952	2,641	1,718	0.7
	Manyara	-	-	-	-	-	-	-	-	-	
	Njombe	-	-	-	-	-	-	-	-	-	
	Katavi	-	-	-	-	-	2,717	4,130	2,441	1,569	0.0
	Simiyu	18,768	65,408	54,748	20,199	0.4	64,966	98,874	73,749	44,320	0.0
	Geita	12,062	9,544	6,760	4,651	0.7	4,745	3,720	2,950	3,141	1.
	Songwe	-	-	-	-	-	-	-	-	-	
	Mainland Tanzania	62,392	98,668	78,125	40,366	0.5	127,089	203,029	150,872	105,779	0.3
	Kaskazini Unguja	-	-	-	-	-	-	-	-	-	
	Kusini Unguja	-	-	-	-	-	-	-	-	-	
	Mjini Magharibi	-	-	-	-	-	-	-	-	-	
	Kaskazini Pemba	-	-	-	-	-	-	-	-	-	
	Kusini Pemba	-	-	-	-	-	-	-	-	-	
	Zanzibar	-	-	-	-	-	-	-	-	-	
	Tanzania	62,392	98,668	78,125	40,366	0.5	127,089	203,029	150,872	105,779	0.7
	Mainland Tanzania	5	32	27	14	0.5	76	1,444	1,299	639	0.5
Large Scale Farms	Zanzibar	-	-	-	-	-	-	-	-	-	
	Tanzania	5	32	27	14	0.5	76	1,444	1,299	639	0.5
	Mainland Tanzania	62,397	98,700	78,152	40,380	0.5	127,165	204,473	152,171	106,418	0.7
All Holdings	Zanzibar	-	_	_	-	-	-	-		-	
	Tanzania	62,397	98,700	78,152	40,380	0.5	127,165	204,473	152,171	106,418	0.7

Cont... Table 5-1: Area, Production and Yields of Cotton during 2023/24 Agricultural Year

				Agricultural	year	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	
	Arusha	-	-	-	-	
	Kilimanjaro	-	-	-	-	
	Tanga	-	-	-	-	
	Morogoro	-	-	-	-	
	Pwani	-	-	-	-	
	Dar es Salaam	-	-	-	-	
	Lindi	-	-	-	-	
	Mtwara	-	-	-	-	
	Ruvuma	-	-	-	-	
	Iringa	-	-	-	-	
	Mbeya	-	-	-	-	
	Singida	-	-	-	-	
	Tabora	15,143	28,976	16,023	16,837	1
	Rukwa	-	-	-	_	
	Kigoma	-	-	-	-	
	Shinyanga	29,903	60,201	49,874	36,053	0
Agricultural Households	Kagera	-	-	-	-	
	Mwanza	20,430	17,144	11,932	10,623	0
	Mara	14,371	9,980	7,701	6,011	0
	Manyara	-	-	-	-	
	Njombe	-	-	-	_	
	Katavi	2,717	4,130	2,441	1,569	0
	Simiyu	83,734	164,282	128,497	64,518	0
	Geita	16,549	13,264	9,710	7,793	0
	Songwe	-	_	_	_	
	Mainland Tanzania	189,223	301,698	228,997	146,145	0
	Kaskazini Unguja	-	-	-	-	
	Kusini Unguja	-	-	-	_	
	Mjini Magharibi	-	-	-	_	
	Kaskazini Pemba	-	_	_	_	
	Kusini Pemba	-	-	-	_	
	Zanzibar	-	-	-	-	
	Tanzania	189,223	301,698	228,997	146,145	0.
	Mainland Tanzania	81	1,476	1,326	653	0
Large Scale Farms	Zanzibar	-	-	-	-	
	Tanzania	81	1,476	1,326	653	0
	Mainland Tanzania	189,304	303,173	230,323	146,798	0.
All Holdings	Zanzibar	-	_		-	
Ü	Tanzania	189,304	303,173	230,323	146,798	0.

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Coffee during 2023/24 Agricultural Year

		Agricultural year						
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)			
	Dodoma	-	-	-	-			
	Arusha	7,371	4,723	1,169	0.2			
	Kilimanjaro	50,154	13,739	2,021	0.1			
	Tanga	-	-	-	-			
	Morogoro	-	-	-	-			
	Pwani	-	-	-	-			
	Dar es Salaam	-	-	-	-			
	Lindi	-	-	-	-			
	Mtwara	-	-	-	-			
	Ruvuma	46,197	25,963	17,003	0.7			
	Iringa	-	-	-	-			
	Mbeya	5,337	3,642	1,118	0.3			
	Singida	-	-	-	-			
	Tabora	-	-	-	-			
	Rukwa	-	-	-	-			
	Kigoma	-	-	-	-			
A ' 1/ 1TT 1 11	Shinyanga	-	-	-	-			
Agricultural Households	Kagera	177,672	66,463	33,120	0.5			
	Mwanza	-	-	-	-			
	Mara	-	-	-	-			
	Manyara	-	-	-	-			
	Njombe	-	-	-	-			
	Katavi	-	-	-	-			
	Simiyu	-	-	-	-			
	Geita	-	-	-	-			
	Songwe	32,802	32,142	21,386	0.7			
	Mainland Tanzania	322,003	147,765	78,002	0.5			
	Kaskazini Unguja	-	-	-	-			
	Kusini Unguja	-	-	-	-			
	Mjini Magharibi	-	-	-	-			
	Kaskazini Pemba	-	-	-	-			
	Kusini Pemba	-	-	-	-			
	Zanzibar	-	-	-	-			
	Tanzania	322,003	147,765	78,002	0.5			
	Mainland Tanzania	86	22,887	7,263	0.3			
Large Scale Farms	Zanzibar	-	-	-	-			
	Tanzania	86	22,887	7,263	0.3			
	Mainland Tanzania	322,089	170,652	85,265	0.5			
All Holdings	Zanzibar	-	-	-	-			
<i>5</i>	Tanzania	322,089	170,652	85,265	0.5			

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Sugar cane during 2023/24 Agricultural Year

			Agricultu	ral year	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma	-	-	-	-
	Arusha	1,176	88	177	2.0
	Kilimanjaro	5,109	118	343	2.9
	Tanga	-	-	-	-
	Morogoro	9,844	16,149	132,175	8.2
	Pwani	-	-	-	-
	Dar es Salaam	2,419	122	104	0.9
	Lindi	-	-	-	-
	Mtwara	-	-	-	-
	Ruvuma	-	-	-	-
	Iringa	-	-	-	-
	Mbeya	-	_	-	_
	Singida	2,625	741	3,230	4.4
	Tabora	-	_	-	-
	Rukwa	-	_	-	-
	Kigoma	-	_	-	-
	Shinyanga	-	_	-	-
Agricultural Households	Kagera	5,270	2,798	99,239	35.5
	Mwanza	2,849	414	4,288	10.4
	Mara	-	_	-	-
	Manyara	_	_	_	-
	Njombe	-	_	-	-
	Katavi	-	_	_	
	Simiyu	-	_	-	-
	Geita	_	_	_	-
	Songwe	_	_	_	-
	Mainland Tanzania	34,897	22,057	244,842	11.1
	Kaskazini Unguja	-	· -	, _	-
	Kusini Unguja	286	76	159	2.1
	Mjini Magharibi	_	_	_	-
	Kaskazini Pemba	-	_	-	
	Kusini Pemba	_	_	-	-
	Zanzibar	739	290	7,739	26.7
	Tanzania	35,636	22,347	252,581	11.3
	Mainland Tanzania	30	54,515	2,014,643	37.0
Large Scale Farms	Zanzibar	4	1,981	99,628	50.3
3	Tanzania	34	56,496	2,114,272	37.4
	Mainland Tanzania	34,927	76,572	2,259,486	29.5
All Holdings	Zanzibar	743	2,271	107,367	47.3
11010111190	Tanzania	35,670	78,843	2,366,853	30.0

Cont... Table 5-1: Area, Production and Yields of Cardamom during 2023/24 Agricultural Year

			Agricultur	ral year	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma	-	-	-	-
	Arusha	-	-	-	-
	Kilimanjaro	2,429	574	25	0.0
	Tanga	-	-	-	-
	Morogoro	-	-	-	-
	Pwani	-	-	-	-
	Dar es Salaam	-	-	-	-
	Lindi	-	-	-	-
	Mtwara	-	-	-	-
	Ruvuma	-	-	-	-
	Iringa	-	-	-	-
	Mbeya	-	-	-	-
	Singida	-	-	-	-
	Tabora	-	-	-	-
	Rukwa	-	-	-	
	Kigoma	-	-	-	
A ' 1/ 1 TT 1 1 1 1	Shinyanga	-	-	-	
Agricultural Households	Kagera	-	-	-	
	Mwanza	-	-	-	
	Mara	-	-	-	
	Manyara	-	-	-	
	Njombe	-	-	-	
	Katavi	-	-	-	
	Simiyu	-	-	-	
	Geita	-	-	-	
	Songwe	3,574	1,560	326	0.2
	Mainland Tanzania	6,346	2,597	385	0.1
	Kaskazini Unguja	-	-	-	
	Kusini Unguja	-	-	-	
	Mjini Magharibi	-	-	-	
	Kaskazini Pemba	-	-	-	
	Kusini Pemba	-	-	-	
	Zanzibar	-	-	-	
	Tanzania	6,346	2,597	385	0.1
	Mainland Tanzania	-	-	-	,
Large Scale Farms	Zanzibar	-	-	-	
	Tanzania	-	-	-	
	Mainland Tanzania	6,346	2,597	385	0.1
All Holdings	Zanzibar	-	-	-	
C	Tanzania	6,346	2,597	385	0.1

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cinnamon during 2023/24 Agricultural Year

		Agricultural year						
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)			
	Dodoma	-	-	-				
	Arusha	-	-	-				
	Kilimanjaro	-	-	-				
	Tanga	-	-	-				
	Morogoro	-	-	-				
	Pwani	-	-	-				
	Dar es Salaam	-	-	-				
	Lindi	-	-	-				
	Mtwara	-	-	-				
	Ruvuma	-	-	-				
	Iringa	-	-	-				
	Mbeya	-	-	-				
	Singida	-	-	-				
	Tabora	-	-	-				
	Rukwa	-	-	-				
	Kigoma	-	-	-				
A ' 1/ 1TT 1 11	Shinyanga	-	-	-				
Agricultural Households	Kagera	-	-	-				
	Mwanza	-	-	-				
	Mara	-	-	-				
	Manyara	-	-	-				
	Njombe	-	-	-				
	Katavi	-	-	-				
	Simiyu	-	-	-				
	Geita	-	-	-				
	Songwe	-	-	-				
	Mainland Tanzania	-	-	_				
	Kaskazini Unguja	-	-	-				
	Kusini Unguja	-	-	-				
	Mjini Magharibi	-	-	-				
	Kaskazini Pemba	857	449	44	(			
	Kusini Pemba	-	-	-				
	Zanzibar	857	449	44	(			
	Tanzania	857	449	44	(			
	Mainland Tanzania	-	-	-				
Large Scale Farms	Zanzibar	-	-	-				
-	Tanzania	-	-	-				
	Mainland Tanzania	-	-	-				
All Holdings	Zanzibar	857	449	44	(			
C	Tanzania	858	450	44	(			

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Clove during 2023/24 Agricultural Year

		Agricultural year							
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)				
	Dodoma	-	-	-					
	Arusha	-	-	-					
	Kilimanjaro	-	-	-					
	Tanga	-	-	-					
	Morogoro	-	-	-					
	Pwani	-	-	-					
	Dar es Salaam	-	-	-					
	Lindi	-	-	-					
	Mtwara	-	-	-					
	Ruvuma	-	-	-					
	Iringa	-	-	-					
	Mbeya	-	-	-					
	Singida	-	-	-					
	Tabora	-	-	-					
	Rukwa	-	-	-					
	Kigoma	-	-	-					
	Shinyanga	-	-	-					
Agricultural Households	Kagera	-	-	-					
	Mwanza	-	-	-					
	Mara	-	-	-					
	Manyara	_	-	-					
	Njombe	-	-	-					
	Katavi	_	-	-					
	Simiyu	_	-	-					
	Geita	_	-	-					
	Songwe	_	-	-					
	Mainland Tanzania	1,938	2,399	184	0.1				
	Kaskazini Unguja	_	-	-					
	Kusini Unguja	558	157	68	0.4				
	Mjini Magharibi	_	_	-					
	Kaskazini Pemba	2,347	1,007	311	0.3				
	Kusini Pemba	1,832	1,336	330	0.2				
	Zanzibar	4,882	2,571	778	0.3				
	Tanzania	6,821	4,970	963	0.3				
	Mainland Tanzania		-	-					
Large Scale Farms	Zanzibar	4	168	70	0.4				
<i>5</i>	Tanzania	4	168	70	0.4				
	Mainland Tanzania	1,938	2,399	184	0.				
All Holdings	Zanzibar	4,886	2,738	848	0.3				
in Holdings	Tanzania	6,825	5,138	1,033	0.2				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Banana during 2023/24 Agricultural Year

		Agricultural year							
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)				
	Dodoma	-	-	-					
	Arusha	49,956	24,432	45,981	1.				
	Kilimanjaro	184,535	118,453	225,245	1.				
	Tanga	12,096	10,334	10,326	1.				
	Morogoro	11,913	5,609	22,924	4.				
	Pwani	12,836	3,065	9,377	3.				
	Dar es Salaam	14,849	4,360	8,041	1.				
	Lindi	-	-	-					
	Mtwara	4,916	6,527	3,848	0.				
	Ruvuma	43,362	5,485	25,694	4.				
	Iringa	4,872	785	2,388	3.				
	Mbeya	40,069	23,118	90,495	3				
	Singida	1,786	193	870	4				
	Tabora	2,196	357	398	1				
	Rukwa	-	-	-					
	Kigoma	-	-	-					
	Shinyanga	-	-	-					
Agricultural Households	Kagera	286,531	128,066	443,047	3				
	Mwanza	1,385	132	306	2				
	Mara	3,471	667	8,346	12				
	Manyara	5,497	779	4,766	6				
	Njombe	-	-	-					
	Katavi	1,683	316	640	2				
	Simiyu	-	-	_					
	Geita	13,099	2,100	1,864	0				
	Songwe	5,184	1,388	5,722	4				
	Mainland Tanzania	702,098	337,259	911,057	2				
	Kaskazini Unguja	5,002	675	2,426	3				
	Kusini Unguja	13,910	4,385	12,360	2				
	Mjini Magharibi	14,148	3,516	16,359	4				
	Kaskazini Pemba	18,296	4,624	11,463	2				
	Kusini Pemba	19,699	6,314	14,491	2				
	Zanzibar	71,054	19,514	57,099	2.				
	Tanzania	773,153	356,773	968,156	2				
	Mainland Tanzania	37	583	528	0				
Large Scale Farms	Zanzibar	11	72	226	3				
	Tanzania	48	655	754	1				
	Mainland Tanzania	702,135	337,842	911,585	2				
All Holdings	Zanzibar	71,065	19,586	57,325	2.				
Ü	Tanzania	773,201	357,428	968,910	2.				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Avocado during 2023/24 Agricultural Year

		Agricultural year						
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha			
	Dodoma	-	-	-				
	Arusha	6,188	393	1,265	3.3			
	Kilimanjaro	57,589	3,731	12,435	3			
	Tanga	-	-	-				
	Morogoro	-	-	-				
	Pwani	-	-	-				
	Dar es Salaam	-	-	-				
	Lindi	-	-	-				
	Mtwara	-	-	-				
	Ruvuma	9,704	1,142	1,359	1.			
	Iringa	3,354	404	256	0.			
	Mbeya	7,863	5,278	4,571	0.			
	Singida	-	-	-				
	Tabora	-	-	-				
	Rukwa	-	-	-				
	Kigoma	-	-	-				
A:161 TT11.4-	Shinyanga	-	-	-				
Agricultural Households	Kagera	36,474	3,642	4,969	1.			
	Mwanza	-	-	-				
	Mara	-	-	-				
	Manyara	3,530	153	392	2.			
	Njombe	3,298	2,992	2,155	0.			
	Katavi	-	-	-				
	Simiyu	-	-	-				
	Geita	4,847	571	148	0.			
	Songwe	898	212	1,619	7.			
	Mainland Tanzania	135,855	18,691	30,146	1.			
	Kaskazini Unguja	-	-	-				
	Kusini Unguja	1,385	380	563	1.			
	Mjini Magharibi	517	96	737	7.			
	Kaskazini Pemba	-	-	-				
	Kusini Pemba	-	-	-				
	Zanzibar	1,901	475	1,300	2.			
	Tanzania	137,757	19,166	31,446	1.			
	Mainland Tanzania	43	14,221	6,887	0.			
Large Scale Farms	Zanzibar	-	-	-				
	Tanzania	45	14,224	6,906	0.			
	Mainland Tanzania	135,898	32,911	37,033	1.			
All Holdings	Zanzibar	1,903	479	1,319	2.			
	Tanzania	137,802	33,390	38,352	1.			

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Pineapple during 2023/24 Agricultural Year

			Agr	icultural year	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma	-	-	-	
	Arusha	-	-	-	
	Kilimanjaro	-	-	-	
	Tanga	1,775	588	277	0.3
	Morogoro	-	-	-	
	Pwani	10,027	7,230	26,205	3.0
	Dar es Salaam	1,207	1,013	1,580	1.
	Lindi	-	-	-	
	Mtwara	-	-	-	
	Ruvuma	-	-	-	
	Iringa	-	-	-	
	Mbeya	-	-	-	
	Singida	-	-	-	
	Tabora	-	-	-	
	Rukwa	-	-	-	
	Kigoma	-	-	-	
Agricultural Households	Shinyanga	-	-	-	
	Kagera	-	-	-	
	Mwanza	-	-	-	
	Mara	-	-	-	
	Manyara	-	-	-	
	Njombe	-	-	-	
	Katavi	-	-	-	
	Simiyu	-	-	-	
	Geita	-	-	-	
	Songwe	-	-	-	
	Mainland Tanzania	14,973	9,674	29,678	3.
	Kaskazini Unguja	578	190	1,912	10.
	Kusini Unguja	540	41	49	1.
	Mjini Magharibi	-	-	-	
	Kaskazini Pemba	505	213	333	1.
	Kusini Pemba	535	36	46	1.
	Zanzibar	2,650	813	3,367	4.
	Tanzania	17,623	10,487	33,045	3.
	Mainland Tanzania	4	60	41	0.
Large Scale Farms	Zanzibar	-	-	-	
	Tanzania	5	67	42	0.
	Mainland Tanzania	14,977	9,735	29,719	3.
All Holdings	Zanzibar	2,651	819	3,368	4.
	Tanzania	17,628	10,554	33,087	3.

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Orange during 2023/24 Agricultural Year

		Agricultural year						
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)			
	Dodoma	-	-	-				
	Arusha	1,870	28	108	3.			
	Kilimanjaro	-	-	-				
	Tanga	18,293	26,707	77,033	2.			
	Morogoro	-	-	-				
	Pwani	3,820	1,622	1,817	1.			
	Dar es Salaam	-	-	-				
	Lindi	-	-	-				
	Mtwara	-	-	-				
	Ruvuma	5,398	824	2,272	2.			
	Iringa	-	-	-				
	Mbeya	-	-	-				
	Singida	-	-	-				
	Tabora	-	-	-				
	Rukwa	-	-	-				
	Kigoma	-	-	-				
Agricultural	Shinyanga	-	-	-				
Households	Kagera	-	-	-				
	Mwanza	2,648	336	228	0			
	Mara	-	-	-				
	Manyara	860	7	21	2.			
	Njombe	-	-	-				
	Katavi	-	-	-				
	Simiyu	-	-	-				
	Geita	4,767	149	1,017	6.			
	Songwe	-	-	-				
	Mainland Tanzania	41,781	30,505	84,839	2.			
	Kaskazini Unguja	-	-	-				
	Kusini Unguja	2,180	344	1,370	4.			
	Mjini Magharibi	718	71	164	2.			
	Kaskazini Pemba	270	36	52	1.			
	Kusini Pemba	-	-	-				
	Zanzibar	3,240	458	1,601	3.			
	Tanzania	45,021	30,963	86,440	2.			
	Mainland Tanzania	26	698	410	0.			
Large Scale Farms	Zanzibar	-	-	-				
	Tanzania	28	705	416	0.			
	Mainland Tanzania	41,807	31,203	85,249	2.			
All Holdings	Zanzibar	3,242	465	1,608	3.			
- C	Tanzania	45,049	31,668	86,857	2.			

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Grapes during 2023/24 Agricultural Year

			Agricu	ltural year	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Production (Tonne)	Yield on Area Planted (Tonne/Ha)
	Dodoma	4,175	4,665	4,307	(
	Arusha	-	-	-	
	Kilimanjaro	-	-	-	
	Tanga	-	-	-	
	Morogoro	-	-	-	
	Pwani	-	-	-	
	Dar es Salaam	-	-	-	
	Lindi	-	-	-	
	Mtwara	-	-	-	
	Ruvuma	-	-	-	
	Iringa	-	-	-	
	Mbeya	-	-	-	
	Singida	-	-	-	
	Tabora	-	-	-	
	Rukwa	-	-	-	
	Kigoma	-	-	-	
Agricultural	Shinyanga	-	-	-	
Households	Kagera	-	-	-	
	Mwanza	-	-	-	
	Mara	-	-	-	
	Manyara	-	-	-	
	Njombe	-	-	-	
	Katavi	-	-	-	
	Simiyu	-	-	-	
	Geita	-	-	-	
	Songwe	-	-	-	
	Mainland Tanzania	4,619	5,025	4,307	(
	Kaskazini Unguja	-	-	-	
	Kusini Unguja	-	-	-	
	Mjini Magharibi	-	-	-	
	Kaskazini Pemba	-	-	-	
	Kusini Pemba	-	-	-	
	Zanzibar	-	_	_	
	Tanzania	4,619	5,025	4,307	(
	Mainland Tanzania	6	75	121	
Large Scale Farms	Zanzibar	-	-	-	
0 <b>2 1 m</b>	Tanzania	6	75	121	1
	Mainland Tanzania	4,625	5,100	4,428	(
All Holdings	Zanzibar	1,023	5,100	1, 120	`
in Holdings	Tanzania	4,625	5,100	4,428	(

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cabbage during 2023/24 Agricultural Year

				Short Rainy S	Season		Long Rainy Season					
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	-	-	-	-	-	-	-	-	-	-	
	Arusha	1,985	1,085	1,085	9,740	9.0	-	-	-	-	-	
	Kilimanjaro	-	-	-	-	-	-	-	-	-	-	
	Tanga	1,781	591	591	3,163	5.4	-	-	-	-	-	
	Morogoro	-	-	-	-	-	-	-	-	-	-	
	Pwani	-	-	-	-	-	-	-	-	-	-	
	Dar es Salaam	=	-	-	-	-	-	-	-	-	-	
	Lindi	-	-	-	-	-	-	-	-	-	-	
	Mtwara	=	-	-	-	-	-	-	-	-	-	
	Ruvuma	=	-	-	-	-	-	-	-	-	-	
	Iringa	=	-	-	-	-	-	-	-	-	-	
	Mbeya	=	-	-	-	-	938	170	170	930	5.5	
	Singida	-	-	-	-	-	-	-	-	-	-	
	Tabora	-	-	-	-	-	-	-	-	-	-	
	Rukwa	=	-	-	-	-	-	-	-	-	-	
	Kigoma	-	-	-	-	-	-	-	-	-	-	
Agricultural Households	Shinyanga	=	-	-	-	-	-	-	-	-	-	
15.104114141110400110145	Kagera	-		-		-	-	-	-	-	-	
	Mwanza	1,830	791	676	7,745	11.5	-	-	-	-	-	
	Mara	-	-	-	-	-	-	-	-	-	-	
	Manyara	-	-	-	-	-	-	-	-	-	-	
	Njombe	-	-	-	-	-	-	-	-	-	-	
	Katavi	-	-	-	-	-	-	-	-	-	-	
	Simiyu	-	-	-	-	-	-	-	-	-	-	
	Geita	-	-	-	-	-	-	-	-	-	-	
	Songwe	-	<del>-</del>	-		<del>-</del>	-	<u>-</u>	<u>-</u>		- -	
	Mainland Tanzania	8,893	4,501	4,328	26,752	6.2	6,701	2,717	2,687	41,715	15.5	
	Kaskazini Unguja	-	-	-	-	-	-	-	-	-	-	
	Kusini Unguja	-	-	-	-	-	-	-	-	-	-	
	Mjini Magharibi	-	-	-	-	-	-	-	-	-	-	
	Kaskazini Pemba	-	-	-	-	-	-	-	-	-	-	
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-	
	Zanzibar	-	-	-	-	-	-		-			
	Tanzania	8,893	4,501	4,328	26,752	6.2	6,701	2,717	2,687	41,715	15.5	
	Mainland Tanzania	5	543	535	42	0.1	3	2	2	13	6.1	
Large Scale Farms	Zanzibar	-	-	-	-	-	-	-	-	-	-	
	Tanzania	5	543	535	42	0.1	5	3	3	18	7.2	
	Mainland Tanzania	8,898	5,044	4,863	26,794	5.5	6,704	2,719	2,690	41,728	15.5	
All Holdings	Zanzibar	-	-	-	-	-	-	-	-	-	-	
	Tanzania	8,898	5,044	4,863	26,794	5.5	6,706	2,720	2,690	41,733	15.5	

Cont... Table 5-1: Area, Production and Yields of Cabbage during 2023/24 Agricultural Year

			<i>A</i>	Agricultural year	i	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	
	Arusha	1,985	1,102	1,102	10,239	9.
	Kilimanjaro	-	-	-	-	
	Tanga	2,172	749	749	3,812	5.
	Morogoro	-	-	-	-	
	Pwani	-	-	-	-	
	Dar es Salaam	-	-	-	-	
	Lindi	-	-	-	-	
	Mtwara	-	-	-	-	
	Ruvuma	-	-	-	-	
	Iringa	-	-	-	-	
	Mbeya	938	170	170	930	5
	Singida	-	-	-	-	
	Tabora	-	-	-	-	
	Rukwa	-	-	-	-	
	Kigoma	-	-	-	-	
Agricultural	Shinyanga	-	-	-	-	
Households	Kagera	-	-	-	-	
	Mwanza	2,377	846	731	8,921	12
	Mara	-	-	-	-	
	Manyara	-	-	-	-	
	Njombe	-	-	-	-	
	Katavi	-	-	-	-	
	Simiyu	-	-	-	-	
	Geita	-	-	-	-	
	Songwe	-	-	-	-	
	Mainland Tanzania	14,213	7,218	7,016	68,467	9
	Kaskazini Unguja	-	-	-	-	
	Kusini Unguja	-	-	-	-	
	Mjini Magharibi	-	-	-	-	
	Kaskazini Pemba	-	-	-	-	
	Kusini Pemba	-	-	-	-	
	Zanzibar	-	-	-	-	
	Tanzania	14,213	7,218	7,016	68,467	9
	Mainland Tanzania	8	545	537	55	0
Large Scale Farms	Zanzibar	-	-	-	-	
	Tanzania	10	546	538	60	0
	Mainland Tanzania	14,221	7,762	7,553	68,522	9
All Holdings	Zanzibar	-	-	-	-	
	Tanzania	14,223	7,763	7,553	68,527	9.

Cont... Table 5-1: Area, Production and Yields of Spinach during 2023/24 Agricultural Year

				Short Rainy So	eason		Long Rainy Season					
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	-	-	-	-	-	-	-	-	-	-	
	Arusha	-	-	-	-	-	-	-	_	-	-	
	Kilimanjaro	-	-	-	-	-	-	-	_	-	-	
	Tanga	-	-	-	-	-	-	-	-	-		
	Morogoro	-	-	-	-	-	-	-	-	-		
	Pwani	-	-	-	-	-	-	-	-	-		
	Dar es Salaam	1,664	50	50	74	1.5	1,336	50	50	31	0.0	
	Lindi	-	-	-	-	-	-	-	-	-		
	Mtwara	-	-	-	-	-	-	-	-	-		
	Ruvuma	-	-	-	-	-	2,073	80	80	21	0.3	
	Iringa	-	-	-	-	-	3,078	194	194	57	0.3	
	Mbeya	-	-	-	-	-	-	-	-	-		
	Singida	-	-	-	-	-	-	-	-	-		
	Tabora	-	-	-	-	-	-	-	-	-		
	Rukwa	-	-	-	-	-	-	-	-	-		
	Kigoma	-	-	-	-	-	-	-	-	-		
Agricultural Households	Shinyanga	-	-	-	-	-	-	-	-	-		
Agricultural Households	Kagera	-	-	-	-	-	-	-	-	-		
	Mwanza	1,797	205	187	507	2.7	3,322	763	728	870	1.3	
	Mara	-	-	-	-	-	-	-	-	-		
	Manyara	-	-	-	-	-	-	-	-	-		
	Njombe	-	-	-	-	-	-	-	-	-		
	Katavi	-	-	-	-	-	-	-	-	-		
	Simiyu	-	-	-	-	-	-	-	-	-		
	Geita	-	-	-	-	-	-	-	-	-		
	Songwe	-	-	-	-	-	-	-	-	-		
	Mainland Tanzania	6,157	563	543	633	1.2	14,035	1,612	1,577	1,202	0.8	
	Kaskazini Unguja	-	-	-	-	-	-	-	-	-		
	Kusini Unguja	-	-	-	-	-	-	-	-	-		
	Mjini Magharibi	-	-	-	-	-	-		-	-		
	Kaskazini Pemba	-	-	-	-	-	-	-	-	-		
	Kusini Pemba	-	-	-	-	-	-		-	-		
	Zanzibar	-	-	-	-	-	-	-	-	-		
	Tanzania	6,542	584	548	673	1.2	14,350	1,644	1,609	1,226	0.0	
	Mainland Tanzania	17	6,110	6,110	25	0.0	15	65	64	50	0.8	
Large Scale Farms	Zanzibar	-	-	-	-	-	-	-	-	-		
-	Tanzania	18	6,111	6,110	25	0.0	15	65	64	50	0.3	
	Mainland Tanzania	6,174	6,674	6,653	659	0.1	14,050	1,676	1,642	1,253	0.	
All Holdings	Zanzibar	386	21	5	39	8.0	· -	-	· -	· <u>-</u>		
Z .	Tanzania	6,560	6,695	6,658	698	0	14,365	1,708	1,673	1,276	0.8	

Cont... Table 5-1: Area, Production and Yields of Spinach during 2023/24 Agricultural Year

				Agricultural year	r	
<b>Holding Category</b>	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-
	Arusha	-	-	-	-	-
	Kilimanjaro	-	-	-	-	-
	Tanga	-	-	-	-	-
	Morogoro	-	-	-	-	-
	Pwani	-	-	-	-	-
	Dar es Salaam	2,612	101	101	106	1.1
	Lindi	-	-	-	-	-
	Mtwara	-	-	-	-	-
	Ruvuma	2,073	80	80	21	0.3
	Iringa	3,301	226	224	66	0.3
	Mbeya	-	-	-	-	-
	Singida	_	_	-	_	-
	Tabora	_	_	-	_	-
	Rukwa	_	_	_	_	-
	Kigoma	_	_	_	_	
	Shinyanga	_	_	_	_	
Agricultural Households	Kagera	_	_	_	_	
	Mwanza	4,214	967	915	1,377	1.5
	Mara	_	_	_		
	Manyara	_	_	_	_	
	Njombe	_	_	_	_	
	Katavi	_	_	_	_	
	Simiyu	_	_	_	_	
	Geita	_	_	_	_	
	Songwe	_	_	_	_	
	Mainland Tanzania	17,541	2,175	2,120	1,836	0.9
	Kaskazini Unguja		2,175	2,120	-	0.5
	Kusini Unguja	_	_	_	_	
	Mjini Magharibi	_	_	_	_	
	Kaskazini Pemba	_	_	_	_	
	Kusini Pemba	_	_	_	_	
	Zanzibar	701	52	37	63	1.7
	Tanzania	18,242	2,227	2,157	1,899	0.9
	Mainland Tanzania	21	6,175	6,175	76	0.0
Large Scale Farms	Zanzibar	21	0,173	0,1/3	-	0.0
Large Scale Pallis	Tanzania	22	6,176	6,175	76	0.0
	Mainland Tanzania	17,562	8,350	8,295	1,912	
All Haldings						0.2
All Holdings	Zanzibar	702	53	37	63	1.7
Low number of observ	Tanzania	18,264	8,403	8,331	1,975	0.2

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Carrot during 2023/24 Agricultural Year

			Long Rainy Season								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	-	-	-	-	-
	Arusha	-	-	-	-	-	3,722	1,604	1,234	7,950	6.4
	Kilimanjaro	4,029	943	892	2,715	3.0	3,264	1,024	806	2,879	3.6
	Tanga	-	-	-	-	-	-	-	-	-	-
	Morogoro	-	-	-	-	-	-	-	-	-	-
	Pwani	-	-	-	-	-	-	-	-	-	-
	Dar es Salaam	-	-	-	-	-	-	-	-	-	-
	Lindi	-	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	-	-	-	-	-	-	-
	Iringa	-	-	-	-	-	-	-	-	-	-
	Mbeya	-	-	-	-	-	-	-	-	-	-
	Singida	-	-	-	-	-	-	-	-	-	-
	Tabora	-	-	-	-	-	-	-	-	-	-
	Rukwa	-	-	-	-	-	-	-	-	-	-
	Kigoma	-	-	-	-	-	-	-	-	-	-
Agricultural Households	Shinyanga	-	-	-	-	-	-	-	-	-	-
Agricultural Households	Kagera	-	-	-	-	-	-	-	-	-	-
	Mwanza	-	-	-	-	-	-	-	-	-	-
	Mara	-	-	-	-	-	-	-	-	-	-
	Manyara	708	349	335	1,514	4.5	1,504	498	371	1,706	4.6
	Njombe	-	-	-	-	-	-	-	-	-	-
	Katavi	-	-	-	-	-	-	-	-	-	-
	Simiyu	-	-	-	-	-	-	-	-	-	-
	Geita	-	-	-	-	-	-	-	-	-	-
	Songwe	-	-	-	-	-	-	-	-	-	-
	Mainland Tanzania	5,749	1,631	1,567	5,019	3.2	10,639	3,836	3,122	14,867	4.8
	Kaskazini Unguja	-	-	-	-	-	-	-	-	-	-
	Kusini Unguja	-	-	-	-	-	-	-	-	-	-
	Mjini Magharibi	-	-	-	-	-	-	-	-	-	-
	Kaskazini Pemba	-	-	-	-	-	-	-	-	-	-
	Kusini Pemba	-	-	-	-	-	-	-	-	-	-
	Zanzibar	-	-	-	-	-	-	-	-	-	-
	Tanzania	5,749	1,631	1,567	5,019	3.2	10,639	3,836	3,122	14,867	4.8
<u> </u>	Mainland Tanzania	-	-	-	-	-	-	-	-	-	-
Large Scale Farms	Zanzibar	-	-	-	-	-	-	-	-	-	-
•	Tanzania	_	_	-	_	_	_	-	-	_	-
	Mainland Tanzania	5,751	1,664	1,599	5,021	3.1	10,640	3,839	3,124	14,868	4.8
All Holdings	Zanzibar	-,,	-	,- · · · -	-,,	-	- ,,,,,,,,		-,	-	-
	Tanzania	5,751	1,664	1,599	5,021	3.1	10,640	3,839	3,124	14,868	4.8

Cont... Table 5-1: Area, Production and Yields of Carrot during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	-	-	-	-					
	Arusha	3,954	1,628	1,258	8,212	6.				
	Kilimanjaro	4,681	1,967	1,698	5,595	3.				
	Tanga	1,562	593	593	1,544	2.				
	Morogoro	-	-	-	-					
	Pwani	-	-	-	-					
	Dar es Salaam	-	-	-	-					
	Lindi	-	-	-	-					
	Mtwara	-	-	-	-					
	Ruvuma	-	-	-	-					
	Iringa	-	-	-	-					
	Mbeya	-	-	-	-					
	Singida	-	-	-	-					
	Tabora	-	-	-	-					
	Rukwa	-	-	-	-					
	Kigoma	-	-	-	-					
	Shinyanga	-	-	-	-					
Agricultural Households	Kagera	-	-	-	-					
	Mwanza	-	-	-	-					
	Mara	-	-	-	-					
	Manyara	1,504	847	707	3,221	4				
	Njombe	-	-	_	-					
	Katavi	-	-	_	-					
	Simiyu	-	-	_	-					
	Geita	-	-	_	-					
	Songwe	-	-	_	_					
	Mainland Tanzania	13,069	5,467	4,688	19,886	4				
	Kaskazini Unguja	-	· -	-	· -					
	Kusini Unguja	_	_	_	_					
	Mjini Magharibi	-	-	_	_					
	Kaskazini Pemba	_	_	_	_					
	Kusini Pemba	-	-	_	_					
	Zanzibar	_	_	_	_					
	Tanzania	13,069	5,467	4,688	19,886	4				
	Mainland Tanzania	-								
arge Scale Farms	Zanzibar	-	-	-	_					
-	Tanzania	_	_	_	_					
	Mainland Tanzania	13,071	5,503	4,724	19,889	4				
All Holdings	Zanzibar	-		- 1,721		•				
	Tanzania	13,071	5,503	4,724	19,889	4.				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Amaranths during 2023/24 Agricultural Year

			Short Rainy Season					Long Rainy Season				
<b>Holding Category</b>	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	-	-	-	-	-	-	-	-	-	-	
	Arusha	812	43	43	148	3.5	-	-	-	-	-	
	Kilimanjaro	2,043	132	129	90	0.7	1,619	102	76	48	0.6	
	Tanga	-	-	-	-	-	-	-	-	-	-	
	Morogoro	-	-	-	-	-	-	-	-	-	-	
	Pwani	-	-	-	-	-	-	-	-	-	-	
	Dar es Salaam	12,370	2,459	2,120	2,402	1.1	12,201	2,449	2,449	2,863	1.2	
	Lindi	-	-	-	-	-	-	-	-	-	-	
	Mtwara	-	-	-	-	-	-	-	-	-	-	
	Ruvuma	-	-	-	-	-	-	-	-	-	-	
	Iringa	-	-	-	-	-	2,586	151	144	894	6.2	
	Mbeya	-	-	-	-	-	-	-	-	-	-	
	Singida	-	-	-	-	-	-	-	-	-	-	
	Tabora	-	-	-	-	-	-	-	-	-	-	
	Rukwa	-	-	-	-	-	-	-	-	-	-	
	Kigoma	-	-	-	-	-	-	-	-	-	-	
Agricultural Households	Shinyanga	-	-	-	-	-	-	-	-	-	-	
Agricultural Households	Kagera	-	-	-	-	-	-	-	-	-	-	
	Mwanza	3,752	302	302	1,329	4.4	6,700	1,426	1,391	2,477	1.8	
	Mara	-	-	-	-	-	-	-	-	-	-	
	Manyara	-	-	-	-	-	-	-	-	-	-	
	Njombe	-	-	-	-	-	-	-	-	-	-	
	Katavi	-	-	-	-	-	-	-	-	-	-	
	Simiyu	-	-	-	-	-	-	-	-	-	-	
	Geita	-	-	-	-	-	-	-	-	-	-	
	Songwe	-	-	-	-	-	-	-	-	-	-	
	Mainland Tanzania	21,887	3,221	2,864	5,026	1.8	31,473	5,525	5,168	6,818	1.3	
	Kaskazini Unguja	-	-	-	-	-	-	-	-	-	-	
	Kusini Unguja	511	39	39	235	6.1	446	29	17	45	2.7	
	Mjini Magharibi	2,757	153	136	887	6.5	1,057	95	92	447	4.9	
	Kaskazini Pemba	1,578	85	84	389	4.6	632	51	50	349	7.0	
	Kusini Pemba	728	46	46	67	1.5	615	61	58	107	1.8	
	Zanzibar	5,573	323	305	1,578	5.2	2,879	244	225	956	4.2	
	Tanzania	27,460	3,544	3,168	6,604	2.1	34,352	5,769	5,393	7,775	1.4	
	Mainland Tanzania	16	785	785	20	0.0	14	768	767	25	0.0	
Large Scale Farms	Zanzibar	5	10	6	19	3.0	-	-	-	-	-	
	Tanzania	21	795	791	39	0.0	15	768	768	30	0.0	
	Mainland Tanzania	21,903	4,006	3,648	5,046	1.4	31,487	6,292	5,935	6,843	1.2	
All Holdings	Zanzibar	5,578	333	311	1,598	5.1	2,880	245	226	961	4.3	
-	Tanzania	27,481	4,340	3,960	6,644	1.7	34,367	6,537	6,160	7,805	1.3	

Cont... Table 5-1: Area, Production and Yields of Amaranths during 2023/24 Agricultural Year

			A	gricultural ye	ear	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-
	Arusha	1,114	55	55	157	2.9
	Kilimanjaro	2,471	234	205	138	0.7
	Tanga	-	-	-	-	-
	Morogoro	-	-	-	-	-
	Pwani	-	-	-	-	-
	Dar es Salaam	16,634	4,908	4,568	5,265	1.2
	Lindi	-	-	-	-	-
	Mtwara	-	-	-	-	-
	Ruvuma	-	-	-	-	-
	Iringa	2,586	160	151	962	6.4
	Mbeya	-	-	-	-	-
	Singida	-	-	-	-	-
	Tabora	-	-	-	-	-
	Rukwa	-	-	-	-	-
	Kigoma	-	-	-	-	-
A'141 TT11.1-	Shinyanga	-	-	-	-	-
Agricultural Households	Kagera	-	-	-	-	-
	Mwanza	7,578	1,728	1,693	3,806	2.2
	Mara	-	-	-	-	-
	Manyara	-	-	-	-	-
	Njombe	-	-	-	-	-
	Katavi	-	-	-	-	-
	Simiyu	-	-	-	-	-
	Geita	-	-	-	-	-
	Songwe	-	-	-	-	-
	<b>Mainland Tanzania</b>	39,684	8,746	8,031	11,844	1.5
	Kaskazini Unguja	-	-	-	-	-
	Kusini Unguja	692	68	55	279	5.0
	Mjini Magharibi	2,757	248	228	1,334	5.9
	Kaskazini Pemba	1,660	135	134	739	5.5
	Kusini Pemba	979	107	104	174	1.7
	Zanzibar	6,217	567	530	2,535	4.8
	Tanzania	45,901	9,313	8,561	14,379	1.7
	Mainland Tanzania	21	1,553	1,552	45	0.0
Large Scale Farms	Zanzibar	5	11	7	24	3.6
	Tanzania	26	1,563	1,559	69	0.0
	Mainland Tanzania	39,705	10,299	9,583	11,889	1.2
All Holdings	Zanzibar	6,222	578	537	2,559	4.8
C	Tanzania	45,927	10,877	10,120	14,448	1.4

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Cucumber during 2023/24 Agricultural Year

				Short Rainy Sea	son				Long Rainy Se	eason	
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-			-	-	-		-	-	-
	Arusha	_	_	-	-		-	-	-	-	-
	Kilimanjaro	_	_	-	-	-	-	_	-	-	-
	Tanga	-	_	-	-	-	-	_	-	-	-
	Morogoro	-	_	-	-	-	-	_	-	-	-
	Pwani	-	_	-	-	-	-	_	-	-	-
	Dar es Salaam	_	_	-	-		-	-	-	-	-
	Lindi	_	_	-	-		-	-	-	-	-
	Mtwara	_	_	-	-		-	-	-	-	-
	Ruvuma	_	_	-	-		-	-	-	-	-
	Iringa	_	_	-	-		-	-	-	-	-
	Mbeya	_	_	-	-	_	_	_	-	-	_
	Singida	_	_	-	-	_	_	_	-	-	_
	Tabora	_	_	-	-	_	_	_	-	-	_
	Rukwa	_	_	_	_		_	_	_	_	_
Ki	Kigoma	_	_	_	_		_	_	_	_	_
	Shinyanga	_	_	_	_	_	_	_	_	_	_
Agricultural Households	Kagera	_	_	_	_		_	_	_	_	_
	Mwanza	_	_	_	_		_	_	_	_	_
	Mara	_	_	_	_		_	_	_	_	_
	Manyara	_	_	_		_	_	_	_	_	_
	Njombe	_	_	_		_	_	_	_	_	_
	Katavi			_		_			_	_	
	Simiyu			_		_			_	_	
	Geita	_	_	_	_	_	_	_	_	_	_
	Songwe	-	-	-	-	-	-	-	-	-	-
	Mainland Tanzania	_	_	_	_	_	4,633	1,946	1,912	4,715	2.5
	Kaskazini Unguja	-	-	-	-	-	4,033	1,540	1,912	4,/13	2.3
	Kusini Unguja	428	97	69	401		-	-	-	-	-
	Mjini Magharibi	428	-	-	701			_	-	-	
	Kaskazini Pemba	236	34	23	32		261	100	96		6.8
	Kusini Pemba	230	-	-	32	1.4	201	100	-		0.8
	Zanzibar	1,329	277	212	904	4.3	980	235	212		5.4
	Zanzibar Tanzania	2,217	996	931	1,170		5,613		2,124		2.8
	Mainland Tanzania	<u> </u>	142	142			5,013		185		0.4
I S1- E	Zanzibar	,			28 4		0	18/	183	19	0.4
Large Scale Farms		3	4	2		1.8	-	100	100	-	- 0.5
	Tanzania	10	146	144			8	190	188		0.5
	Mainland Tanzania	895	860	860	295		4,639		2,097		2.3
All Holdings	Zanzibar	1,332	281	214	908		982		215		5.3
	Tanzania	2,227	1,141	1,075	1,203	1.1	5,621	2,371	2,312	5,936	2.6

Cont... Table 5-1: Area, Production and Yields of Cucumber during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	-	-	-	-	-				
	Arusha	-	-	-	-	-				
	Kilimanjaro	-	-	-	-	-				
	Tanga	-	-	-	-	-				
	Morogoro	-	-	-	-	-				
	Pwani	-	-	-	-	-				
	Dar es Salaam	-	-	-	-	-				
	Lindi	-	-	-	-	-				
	Mtwara	-	-	-	-	-				
	Ruvuma	-	-	-	-	-				
	Iringa	-	-	-	-	-				
	Mbeya	-	-	-	-	-				
	Singida	-	-	-	-	-				
	Tabora	-	-	-	_	-				
	Rukwa	-	-	-	_	-				
	Kigoma	-	-	-	_	-				
	Shinyanga	-	_	-	_	-				
Agricultural Households	Kagera	-	_	-	_	-				
	Mwanza	-	_	_	_	-				
	Mara	_	_	_	_	-				
	Manyara	_	_	_	_	-				
	Njombe	_	_	_	_	-				
	Katavi	_	_	_	_	-				
	Simiyu	_	_	_	_	-				
	Geita	_	_	_	_	-				
	Songwe	_	_	_	_	_				
	Mainland Tanzania	4,633	2,665	2,630	4,982	1.9				
	Kaskazini Unguja	397	110	94	485	5.1				
	Kusini Unguja	523	169	138	704	5.1				
	Mjini Magharibi	-	-	-	-	-				
	Kaskazini Pemba	420	134	119	686	5.8				
	Kusini Pemba	-	_	-	_	-				
	Zanzibar	1,809	511	424	2,039	4.8				
	Tanzania	6,442	3,176	3,054	7,021	2.3				
	Mainland Tanzania	8	329	327	108	0.3				
Large Scale Farms	Zanzibar	3	7	5	10	1.9				
Large Seare I arms	Tanzania	11	336	332	118	0.4				
	Mainland Tanzania	4,641	2,994	2,957	5,089					
All Holdings						1.7				
All Holdings	Zanzibar	1,812	519	429	2,050	4.8				
	Tanzania	6,453	3,512	3,386	7,139	2.1				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Water melon during 2023/24 Agricultural Year

			Short Rainy Season						Long Rainy Season				
<b>Holding Category</b>	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)		
	Dodoma	-	-	-	-	-	-	-	-	-	-		
	Arusha	-	-	-	-	_	-	_	-	-	_		
	Kilimanjaro	-	-	-	-	_	1,294	1,877	1,628	4,963	3.0		
	Tanga	-	-	-	-	-	-	-	-	-	-		
	Morogoro	-	-	-	-	-	-	_	-	-	-		
	Pwani	-	-	-	-	-	-	_	-	-	-		
	Dar es Salaam	-	-	-	-	-	-	_	-	-	-		
	Lindi	-	-	-	-	-	-	_	-	-	-		
	Mtwara	-	-	-	-	-	-	_	-	-	_		
	Ruvuma	-	-	-	-	_	-	_	_	-	-		
	Iringa	-	-	-	-	-	-	_	-	-	-		
	Mbeya	-	-	-	-	_	-	_	-	-	-		
	Singida	-	-	-	-	_	-	_	-	-	-		
	Tabora	-	-	-	-	_	-	_	-	-	-		
	Rukwa	-	-	-	-	_	-	_	-	-	-		
	Kigoma	_	_	_	_	_	_	_	_	_	_		
Chinyanga	Shinyanga	_	_	_	_	_	_	_	_	_	_		
Agricultural Households	Kagera	_	_	_	_	_	_	_	_	_	_		
	Mwanza	_	_	_	_	_	1,594	870	723	6,627	9.2		
	Mara	_	_	_	_	_		-	,25		-		
	Manyara	_	_	_	_	_	_	_	_	_	_		
	Njombe	_	_	_	_	_	_	_	_	_	_		
	Katavi	_	_	_	_	_	_	_	_	_	_		
	Simiyu	_	_	_	_	_	_	_	_	_	_		
	Geita	_	_	_	_	_	_	_	_	_	_		
	Songwe	_	_	_	_	_	_	_	_	_	_		
	Mainland Tanzania	2,944	3,524	2,781	14,129	5.1	11,793	8,244	7,510	47,678	6.3		
	Kaskazini Unguja	<del>-</del> /		-,.01		-	-	-	.,010		-		
	Kusini Unguja	257	112	112	1,301	11.6	_	_	_	_	_		
	Mjini Magharibi				-,	-	_	_	_	_	-		
	Kaskazini Pemba	321	47	47	442	9.4	529	241	189	1,963	10.4		
	Kusini Pemba	-	-	-		-	-		-		-		
	Zanzibar	1,180	393	393	3,380	8.6	894	361	284	2,806	9.9		
	Tanzania	4,124		3,174	17,509				7,794	50,483	6.5		
	Mainland Tanzania	6						138	126	70	0.6		
Large Scale Farms	Zanzibar	-	-	-	-	0.2	-	-	120	-	-		
Large Scale Failis	Tanzania	6	78		18			139	127	74	0.6		
	Mainland Tanzania	2,950			14,146			8,382	7,636	47,748	6.3		
A 11 TT -1 4:	Zanzibar												
All Holdings		1,180		393	3,380			362	285	2,810	9.9		
	Tanzania	4,130	3,995	3,252	17,527	5.4	12,699	8,744	7,921	50,557	6.4		

Cont... Table 5-1: Area, Production and Yields of Water melon during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	-	-	-	-	-				
	Arusha	-	-	-	-	-				
	Kilimanjaro	1,294	1,877	1,628	4,963	3.0				
	Tanga	-	-	-	-	-				
	Morogoro	-	-	-	-	-				
	Pwani	-	-	-	-	-				
	Dar es Salaam	-	-	-	-	-				
	Lindi	-	-	-	-	-				
	Mtwara	-	-	-	-	-				
	Ruvuma	-	-	-	-	-				
	Iringa	-	-	-	-	-				
	Mbeya	-	-	-	-	-				
	Singida	-	-	-	-	-				
	Tabora	-	-	-	-	-				
	Rukwa	-	-	-	-	-				
	Kigoma	-	-	-	_	-				
	Shinyanga	-	-	-	_	-				
Agricultural Households	Kagera	-	_	_	_	-				
	Mwanza	2,031	1,136	988	9,688	9.8				
	Mara	-	-	_	-	-				
	Manyara	-	_	_	_	-				
	Njombe	-	-	-	-	-				
	Katavi	-	_	_	_	-				
	Simiyu	-	_	_	_					
	Geita	-	_	_	_					
	Songwe	-	_	_	_	-				
	Mainland Tanzania	13,844	11,768	10,291	61,806	6.0				
	Kaskazini Unguja	-	_	, -	· -	-				
	Kusini Unguja	310	138	114	1,306	11.5				
	Mjini Magharibi	342	127	125	562	4.5				
	Kaskazini Pemba	593	288	236	2,405	10.2				
	Kusini Pemba	361	73	73	390	5.3				
	Zanzibar	1,713	754	677	6,186	9.1				
	Tanzania	15,557	12,522	10,968	67,992	6.2				
	Mainland Tanzania	14	216	204	88	0.4				
Large Scale Farms	Zanzibar	-	-	_	_	-				
g <del></del>	Tanzania	15	217	205	92	0.4				
	Mainland Tanzania	13,858	11,984	10,495	61,894	5.9				
All Holdings	Zanzibar	1,714	755	678	6,190	9.1				
in nomings	Tanzania	15,572	12,739	11,173	68,084	6.1				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Okra during 2023/24 Agricultural Year

Short Rainy Season

	Region		Long Rainy Season								
Holding Category		Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma	-	-	-	-	-	-	-	-	-	-
	Arusha	-	-	-	-	-	-	-	-	-	-
	Kilimanjaro	-	-	-	-	-	-	-	-	-	-
	Tanga	-	-	-	-	-	1,652	207	168	58	0.3
	Morogoro	-	-	-	-	-	2,433	1,627	1,479	2,152	1.5
	Pwani	5,014	1,092	1,019	2,278	2.2	5,263	2,705	2,665	9,156	3.4
	Dar es Salaam	3,626	850	822	627	0.8	5,632	1,896	1,852	497	0.3
	Lindi	-	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	-	-	-	-	-	-	-
	Iringa	-	-	-	-	-	-	-	-	-	-
	Mbeya	-	-	-	-	-	-	-	-	-	-
	Singida	-	-	-	-	-	-	-	-	-	-
	Tabora	-	-	-	-	-	-	-	-	-	-
	Rukwa	-	-	-	-	-	-	-	-	-	-
	Kigoma	-	-	-	-	-	-	-	-	-	-
A . 1. 177 1 11	Shinyanga	-	-	-	_	-	-	_	-	-	-
Agricultural Households	Kagera	-	-	-	-	-	-	-	-	-	-
	Mwanza	1,688	178	178	336	1.9	1,257	248	138	166	1.2
	Mara	-	-	-	-	-	-	-	-	-	-
	Manyara	-	-	-	-	-	-	-	-	-	-
	Njombe	-	-	-	_	-	-	_	-	-	-
	Katavi	-	-	-	_	-	1,146	136	136	50	0.4
	Simiyu	-	-	-	_	-	· -	_	-	-	-
	Geita	-	-	-	_	-	-	_	-	-	-
	Songwe	-	-	-	_	-	-	_	-	-	-
	Mainland Tanzania	13,027	3,348	3,063	4,043	1.3	23,185	8,062	7,637	13,420	1.8
	Kaskazini Unguja	-	_	´ -	´ -	-	267	22	22	56	2.5
	Kusini Unguja	889	63	60	88	1.5	373	55	55	126	2.3
	Mjini Magharibi	661	81	74	260	3.5	584	169	155	60	0.4
	Kaskazini Pemba	473	18	18	41	2.4	359	21	21	73	3.4
	Kusini Pemba	510	38	38	98	2.6	-	-	-	-	-
	Zanzibar	2,656	215	206	504	2.4	1,884	299	285	402	1.4
	Tanzania	15,683	3,563	3,269	4,548	1.4	25,069	8,361	7,922	13,822	1.7
	Mainland Tanzania	5	259	259	9	0.0	6	140	139	9	0.1
Large Scale Farms	Zanzibar	5	27	26	4	0.1	3	5	5	3	0.6
<i>6</i>	Tanzania	10	287	286	13	0.0	9	145	144	12	0.1
-	Mainland Tanzania	13,032	3,607	3,323	4,053	1.2	23,191	8,202	7,776	13,429	1.7
All Holdings	Zanzibar	2,661	243	232	508	2.2	1,887	304	290	406	1.4
101011150	Tanzania	15,693	3,850	3,555	<b>4,561</b>	1.3	25,078	8,506	8.066	13,834	1.7

Cont... Table 5-1: Area, Production and Yields of Okra during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	-	-	-	-	-				
	Arusha	-	-	-	-	-				
	Kilimanjaro	-	-	-	-	-				
	Tanga	1,652	258	181	59	0.3				
	Morogoro	3,162	2,065	1,858	2,737	1.5				
	Pwani	10,277	3,796	3,685	11,434	3.1				
	Dar es Salaam	7,847	2,746	2,674	1,124	0.4				
	Lindi	-	-	-	-	-				
	Mtwara	-	-	-	-	-				
	Ruvuma	-	-	-	-	-				
	Iringa	-	-	-	-	-				
	Mbeya	-	-	-	-	-				
	Singida	-	-	-	-	-				
	Tabora	-	-	-	_	-				
	Rukwa	-	-	-	_	-				
	Kigoma	-	_	-	_	-				
	Shinyanga	-	_	-	_	-				
Agricultural Households	Kagera	_	_	_	_	-				
	Mwanza	2,587	426	316	502	1.6				
	Mara	· -	-	_	_	_				
	Manyara	_	_	-	_	_				
	Njombe	_	_	-	_	-				
	Katavi	1,146	136	136	50	0.4				
	Simiyu	, -	_	-	_	_				
	Geita	_	_	-	_	_				
	Songwe	_	_	-	_	_				
	Mainland Tanzania	33,300	11,410	10,701	17,463	1.6				
	Kaskazini Unguja	390	38	38	72	1.9				
	Kusini Unguja	1,169	118	115	214	1.9				
	Mjini Magharibi	1,245	250	230	320	1.4				
	Kaskazini Pemba	534	39	39	115	2.9				
	Kusini Pemba	510	68	68	186	2.7				
	Zanzibar	3,848	514	491	907	1.8				
	Tanzania	37,148	11,924	11,191	18,370	1.6				
	Mainland Tanzania	10	399	398	18	0.0				
Large Scale Farms	Zanzibar	6	33	32	7	0.2				
0 <b>w</b>	Tanzania	16	432	429	25	0.1				
	Mainland Tanzania	33,310	11,809	11,098	17,481	1.6				
All Holdings	Zanzibar	3,854	547	522	914	1.7				
m nomings	Tanzania	37,164	12,356	11,621						
I ary number of observat			12,330	11,021	18,395	1.6				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Tomatoes during 2023/24 Agricultural Year

				Short Rainy S	eason		Long Rainy Season					
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	
	Dodoma	-	-	-	-	-	2,799	1,859	1,764	2,379	1.3	
	Arusha	2,895	723	638	13,270	20.8	4,395	5,370	4,974	133,115	26.8	
	Kilimanjaro		_	_	· -	_	3,310	1,992	1,504	32,463	21.6	
	Tanga	3,338	899	899	7,066	7.9	3,073	1,402	1,369	5,739	4.2	
	Morogoro	1,532	812	738	6,907	9.4	2,139	1,018	723	15,641	21.6	
	Pwani	-	_	-	-	· -	2,371	1,537	1,121	1,788	1.6	
	Dar es Salaam	2,260	1,719	1,673	5,812	3.5	3,634	1,907	1,896	5,480	2.9	
	Lindi	2,200				-		-		-	2.7	
	Mtwara	_	_	_	_	_	3,037	806	653	7,233	11.1	
	Ruvuma	_	_	_	_	_	2,123	3,471	3,299	2,973	0.9	
	Iringa	2,277	9,896	6,919	19,157	2.8	9,375	5,747	4,960	139,536	28.1	
	Mbeya	2,277	7,070	0,717	17,137	2.0	2,942	1,090	1,040	14,801	14.2	
	Singida		_	_	_	_	2,742	1,000	1,040	14,001	17.2	
	Tabora		_	_	_	_	2,112	636	578	597	1.0	
	Rukwa		_	_	_	_	2,112	-	576	371	1.0	
	Kigoma						_					
	Shinyanga	1,710	2,355	2,355	1,296	0.6	_	_	_			
Agricultural Households	Kagera	3,262	342	198	961	4.8	-	_	_	_	_	
	Mwanza	4,283	1,030	878	20,356	23.2	1,975	497	497	1,574	3.2	
	Mara	1,683	403	342	2,921	8.5	1,973	497	49/	1,374	3.2	
	Manyara	1,005	403	342	2,921	0.5	-	-	-	-	-	
	Njombe	-	-	-	-	-	-	-	-	-	-	
	Katavi	-	-	-	-	-	-	-	-	-	-	
	Simiyu	-	-	-	-	-	-	-	-	-	-	
	Geita	1,746	1 212	1,173	17,067	14.5	2,558	830	654	13,481	20.6	
		1,740	1,212	1,1/3	17,007	14.3	1,283	311	298	1,169	3.9	
	Songwe <b>Mainland Tanzania</b>	31,707	24,092	20,292	122 252	-	54,854		27,422		14.2	
		899	103	70	<b>132,353</b> 361	<b>6.5</b> 5.2	54,854	30,881	27,422	388,178	14.2	
	Kaskazini Unguja		183			9.0	1 115	150	120	925	- 7.7	
	Kusini Unguja	1,381 491	378	141	1,272		1,115 696	158 135	120		7.7	
	Mjini Magharibi			323	8,809	27.3				2,305	19.6	
	Kaskazini Pemba	642	67	66	821	12.4	392	88	88	2,543	29.0	
	Kusini Pemba	523	168	150	1,755	11.7	593	150	144	761	5.3	
	Zanzibar	3,936	898	749	13,018	17.4	2,868	537	477	6,789	14.2	
	Tanzania	35,644	24,991	21,041	145,371	6.9	57,722	31,418	27,899	394,967	14.2	
	Mainland Tanzania	16	1,142	1,138	651	0.6	26	237	233	740	3.2	
Large Scale Farms	Zanzibar	7	35	32	42	1.3	-	-	-	-	-	
	Tanzania	23	1,176	1,170	693	0.6	27	240	237	758	3.2	
	Mainland Tanzania	31,723	25,234	21,430	133,004	6.2	54,880	31,117	27,655	388,918	14.1	
All Holdings	Zanzibar	3,943	933	781	13,060	16.7	2,869	541	480	6,807	14.2	
	Tanzania	35,667	26,167	22,211	146,064	6.6	57,749	31,658	28,136	395,725	14.1	

Cont... Table 5-1: Area, Production and Yields of Tomatoes during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	2,799	2,652	2,557	17,103	6.7				
	Arusha	7,289	6,094	5,611	146,385	26.1				
	Kilimanjaro	4,318	2,481	1,993	46,954	23.6				
	Tanga	5,453	2,301	2,268	12,805	5.6				
	Morogoro	3,671	1,830	1,461	22,548	15.4				
	Pwani	2,736	1,647	1,232	1,870	1.5				
	Dar es Salaam	4,556	3,625	3,569	11,292	3.2				
	Lindi	-	-	-	-	-				
	Mtwara	3,037	806	653	7,233	11.1				
	Ruvuma	2,123	3,471	3,299	2,973	0.9				
	Iringa	10,898	15,643	11,879	158,693	13.4				
	Mbeya	2,942	1,429	1,379	15,663	11.4				
	Singida	-	-	-	-	-				
	Tabora	2,508	1,263	1,051	4,562	4.3				
	Rukwa	-	-	-	-	-				
	Kigoma	-	-	-	-	-				
A:141 TT11.1-	Shinyanga	2,315	2,416	2,416	1,660	0.7				
Agricultural Households	Kagera	5,157	1,379	1,187	2,917	2.5				
	Mwanza	6,258	1,527	1,375	21,930	15.9				
	Mara	2,128	516	427	3,099	7.3				
	Manyara	-	-	-	-	-				
	Njombe	-	-	-	-	-				
	Katavi	1,572	2,402	2,304	3,838	1.7				
	Simiyu	-	-	-	-	-				
	Geita	3,952	2,042	1,827	30,548	16.7				
	Songwe	1,283	311	298	1,169	3.9				
	Mainland Tanzania	79,804	54,973	47,714	520,531	10.9				
	Kaskazini Unguja	972	110	77	616	8.0				
	Kusini Unguja	1,722	341	261	2,197	8.4				
	Mjini Magharibi	1,187	512	440	11,114	25.3				
	Kaskazini Pemba	938	154	154	3,364	21.9				
	Kusini Pemba	875	318	294	2,516	8.6				
	Zanzibar	5,694	1,436	1,226	19,807	16.2				
	Tanzania	85,498	56,409	48,939	540,338	11.0				
	Mainland Tanzania	32	1,378	1,371	1,391	1.0				
Large Scale Farms	Zanzibar	7	38	36	60	1.7				
	Tanzania	39	1,417	1,407	1,451	1.0				
	Mainland Tanzania	79,836	56,351	49,085	521,922	10.6				
All Holdings	Zanzibar	5,701	1,474	1,262	19,867	15.7				
-	Tanzania	85,537	57,825	50,347	541,789	10.8				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Bitter tomato during 2023/24 Agricultural Year

				Long Rainy Season							
<b>Holding Category</b>	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)
	Dodoma		-	-	-	-	-	_	-	-	-
	Arusha	-	-	-	-	-	-	-	-	-	-
	Kilimanjaro	_	_	-	-	-	_	_	-	-	-
	Tanga	-	_	-	-	-	_	_	-	_	-
	Morogoro	-	_	-	-	-	_	_	-	_	-
	Pwani	-	-	_	-	-	-	_	-	-	_
	Dar es Salaam	_	-	-	-	-	-	_	-	-	-
	Lindi	-	-	_	-	-	-	_	-	-	_
	Mtwara	_	_	_	_	_	_	_	_	_	_
	Ruvuma	_	_	_	_	_	_	_	_	_	_
	Iringa	_	_	_	_	_	1,488	422	313	2,860	9.1
	Mbeya	_	_	_	_	_	-,	-	-	-,	-
	Singida	_	_	_	_	_	_	_	_	_	_
	Tabora	_	_	_	_	_	_	_	_	_	_
	Rukwa	_	_	_	_	_	_	_	_	_	_
	Kigoma	_	_	_	_	_	_	_	_	_	_
	Shinyanga	_	_	_	_	_	_	_	_	_	_
Agricultural Households	Kagera	_	_	_	_	_	_	_	_	_	_
	Mwanza	_	_	_	_	_	2,659	944	753	6,477	8.6
	Mara	_	_	_	_	_	2,037		,55	0,177	-
	Manyara	_	_	_	_	_	_	_	_	_	_
	Njombe	_	_	_	_	_	_	_	_	_	_
	Katavi	_	_	_	_	_	_	_	_		_
	Simiyu										
	Geita			_	_	_		_			
	Songwe			_	_	_		_			
	Mainland Tanzania	7,113	1,219	1,175	3,510	3.0	8,504	4,730	3,854	13,333	3.5
	Kaskazini Unguja	7,113	1,217	1,175	3,310	5.0	0,504	4,730	3,034	13,333	<b>J.</b> J
	Kusini Unguja	453	75	75	158	2.1	_	_	_		
	Mjini Magharibi	451	85	85	340			125	125	417	3.3
	Kaskazini Pemba	731	-	-	340	4.0	731	123	123	71/	5.5
	Kusini Pemba	_	_	_	_	_	_	_	_	_	_
	Zanzibar	1,658	269	259	1,377	5.3	806	201	191	941	4.9
	Tanzania	8,771			4,887	3.4	9,310		4,045	14,274	3.5
	Mainland Tanzania	4							124	10	0.1
I C1- F		4		0	9					10	0.1
Large Scale Farms	Zanzibar	-	-	-	-	1.6	-	125	124	- 12	-
	Tanzania	5			2.510	1.6			124	12 242	0.1
	Mainland Tanzania	7,117		1,180		3.0			3,978	13,343	3.4
All Holdings	Zanzibar	1,659				5.3		201	191	942	4.9
	Tanzania	8,776	1,493	1,440	4,896	3.4	9,316	5,056	4,169	14,286	3.4

Cont... Table 5-1: Area, Production and Yields of Bitter tomato during 2023/24 Agricultural Year

		Agricultural year								
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)				
	Dodoma	-	-	-	-					
	Arusha	-	-	-	-					
	Kilimanjaro	-	-	-	-					
	Tanga	-	-	-	-					
	Morogoro	-	-	-	-					
	Pwani	1,971	157	133	1,341	10				
	Dar es Salaam	-	-	-	-					
	Lindi	-	-	-	-					
	Mtwara	-	-	-	_					
	Ruvuma	-	-	-	_					
	Iringa	1,718	446	336	3,150	9				
	Mbeya	-	_	_	_					
	Singida	-	_	_	-					
	Tabora	-	_	_	_					
	Rukwa	-	_	_	_					
	Kigoma	-	_	_	-					
gricultural Households	Shinyanga	_	_	_	_					
	Kagera	_	_	_	_					
	Mwanza	2,659	970	778	6,597	8				
	Mara	_,	-	-	-					
	Manyara	-	_	_	_					
	Njombe	_	_	_	_					
	Katavi	_	_	_	_					
	Simiyu	_	_	_	_					
	Geita	_	_	_	_					
	Songwe	_	_	_	_					
	Mainland Tanzania	13,727	5,949	5,029	16,843	3				
	Kaskazini Unguja	246	81	61	489	8				
	Kusini Unguja	558	80	80	162	2				
	Mjini Magharibi	451	210	210	757	3				
	Kaskazini Pemba	-	210	210	-	-				
	Kusini Pemba		_	_	_					
	Zanzibar	1,862	469	450	2,318	5				
	Tanzania	15,588	6,419	5,479	19,161	3				
	Mainland Tanzania	8	130	130	19,101	0				
arge Scale Farms	Zanzibar	0	130	150	19	·				
arge scale Pallis		-	121	120	- 21	n				
	Tanzania	12.725	131	5 150	16.962	0				
11.77 1.12	Mainland Tanzania	13,735	6,079	5,159	16,862	3				
All Holdings	Zanzibar	1,863	470	450	2,320	5				
	Tanzania tions (n<3)/lack of dat	15,597	6,549	5,609	19,182	3				

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-1: Area, Production and Yields of Sweet-bell pepper during 2023/24 Agricultural Year

			Short Rainy Season							Long Rainy Season			
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)		
	Dodoma	-	-	-		-	-	-	-	-	-		
	Arusha	-	-	-			-	-	-	-	-		
	Kilimanjaro	-	-	-			-	-	-	-	-		
	Tanga	-	-	-			-	-	-	-	-		
	Morogoro	-	-	-			-	-	-	-	-		
	Pwani	-	-	-			-	-	-	-	-		
	Dar es Salaam	-	-	-			-	-	-	-	-		
	Lindi	-	-	_		. <u>-</u>	_	_	-	_	_		
	Mtwara	_	-	_		. <u>-</u>	_	-	-	_	_		
	Ruvuma	-	-	-			-	_	-	_	-		
	Iringa	_	-	-			_	-	-	_	_		
	Mbeya	_	_	_			_	_	_	_	_		
	Singida	_	_	_			_	_	_	_	_		
	Tabora	_	_	_			_	_	_	_	_		
	Rukwa	_	_	_			_	_	_	_	_		
	Kigoma	_	_	_			_	_	_	_	_		
	Shinyanga	_	_	_			_	_	_	_	_		
Agricultural Households	Kagera	_	_	_			_	_	_	_	_		
	Mwanza	_	_	_			1,291	1,359	877	1,876	2.1		
	Mara	_	_	_		_	1,271	1,337	-	1,070	2.1		
	Manyara												
	Njombe		_				_	_					
	Katavi	-	-	-	·	-	-	-	-	-	-		
	Simiyu	-	-	-	·	-	-	-	-	-	-		
	Geita	-	-	-	•	-	-	-	-	-	-		
		-	-	-	•	-	-	-	-	-	-		
	Songwe <b>Mainland Tanzania</b>	6,141	3,187	3,087	£ 200	1.7	9,127	- - 0/7	5,233	9,504	1.8		
		*		3,087	5,366			5,967	5,233	9,504	1.8		
	Kaskazini Unguja	-	-	-		-		-	-	-	-		
	Kusini Unguja	-	-	-		-	- (25	250	250	- 001	2.5		
	Mjini Magharibi Kaskazini Pemba	-	-	-		-	625	359	359	891	2.5		
	Kaskazini Pemba Kusini Pemba	-	-	-		-	-	-	-	-	-		
		-	262	150			-	202	- 202	1.010	2.6		
	Zanzibar	1,144	263	179				393	393	1,018	2.6		
	Tanzania	7,285	3,450	3,265				6,360	5,626	10,522	1.9		
	Mainland Tanzania	5	270	269	13		4	2,033	2,033	105	0.1		
Large Scale Farms	Zanzibar	-		-		. <u>-</u>		-	-	-	-		
	Tanzania	6	271	270				2,033	2,033	105	0.1		
	Mainland Tanzania	6,146	3,457	3,356				8,001	7,267	9,609	1.3		
All Holdings	Zanzibar	1,145	264	179				393	393	1,018	2.6		
	Tanzania	7,291	3,721	3,535	6,308	1.8	9,928	8,394	7,659	10,627	1.4		

Cont... Table 5-1: Area, Production and Yields of Sweet-bell pepper during 2023/24 Agricultural Year

		Agricultural year									
Holding Category	Region	Number of Holdings Planted Crop	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonne)	Yield on Area Harvested (Tonne/Ha)					
	Dodoma	-	-	-	-	-					
	Arusha	-	-	-	-	-					
	Kilimanjaro	1,551	747	667	1,597	2.4					
	Tanga	-	-	-	-	-					
	Morogoro	-	-	-	-	-					
	Pwani	-	-	-	-	-					
	Dar es Salaam	-	-	-	-	-					
	Lindi	-	-	-	-	-					
	Mtwara	-	-	-	-	-					
	Ruvuma	-	-	-	-	-					
	Iringa	1,375	460	351	1,975	5.6					
	Mbeya	-	_	_	· -	-					
	Singida	-	_	_	_	-					
	Tabora	-	_	_	_	-					
	Rukwa	-	_	-	-	-					
	Kigoma	-	_	-	-	-					
	Shinyanga	_	_	_	_	_					
Agricultural Households	Kagera	_	_	_	_	-					
	Mwanza	1,291	1,359	877	1,876	2.1					
	Mara			-							
	Manyara	_	_	_	_	_					
	Njombe	_	_	_	_	_					
	Katavi	_	_	_	_	_					
	Simiyu	_	_	_	_	_					
	Geita		_	_	_	_					
	Songwe	_	_	_	_	_					
	Mainland Tanzania	11,899	9,154	8,320	14,870	1.8					
	Kaskazini Unguja	11,077	7,134	0,520	14,070	1.0					
	Kusini Unguja	-				_					
	Mjini Magharibi	625	480	480	1,565	3.3					
	Kaskazini Pemba	236	47	47	1,303	3.8					
	Kusini Pemba	230	-	<del>-</del> -	170	5.0					
	Zanzibar	1,497	656	571	1,944	3.4					
	Zalizibai Tanzania	13,396	9,810	8,891	16,814	3. <del>4</del> 1.9					
	Mainland Tanzania	7	2,304	2,302	118	0.1					
Large Scale Farms	Zanzibar	/	2,304	2,302	110	0.1					
Large Scale Parilis		-	2 204	2 202	101	-					
	Tanzania	11.006	2,304	2,303	14 000	0.1					
4 11 TT 1 1'	Mainland Tanzania	11,906	11,458	10,622	14,988	1.4					
All Holdings	Zanzibar	1,498	656	572	1,946	3.4					
	Tanzania	13,404	12,114	11,194	16,934	1.5					

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 5-2: Area, Production and Yields by Sex of the Household Head During 2023/24 Agricultural Year

			Short	Rainy Season			Long 1	Rainy Season		Agricultural Year				
Crop	Sex of Household Head	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonnes)	Yield on Area Harvested (Tonne/Ha)	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonnes)	Yield on Area Harvested (Tonne/Ha)	Area Planted (Ha)	Area Harvested (Ha)	Production (Tonnes)	Yield on Area Harvested (Tonne/Ha)	
	Female-headed	308,389	202,620	289,061	1.4	726,019	503,994	839,673	1.7	1,034,408	706,614	1,128,734	1.6	
Maize	Male-headed	1,297,951	876,823	1,435,802	1.6	3,652,072	2,478,450	4,833,233	2.0	4,950,023	3,355,273	6,269,035	1.9	
	Total	1,606,340	1,079,443	1,724,863	1.6	4,378,091	2,982,444	5,672,906	1.9	5,984,431	4,061,887	7,397,769	1.8	
	Female-headed	50,638	37,238	83,676	2.2	212,512	163,512	406,263	2.5	263,150	200,750	489,939	2.4	
Paddy	Male-headed	236,940	188,101	453,267	2.4	1,135,267	896,149	2,149,250	2.4	1,372,206	1,084,251	2,602,518	2.4	
	Total	287,578	225,339	536,944	2.4	1,347,778	1,059,662	2,555,513	2.4	1,635,356	1,285,001	3,092,457	2.4	
	Female-headed	6,701	4,215	3,037	0.7	50,205	29,734	27,732	0.9	56,906	33,949	30,769	0.9	
Sorghum	Male-headed	40,964	34,464	24,461	0.7	259,733	168,256	145,848	0.9	300,698	202,721	170,309	0.8	
	Total	47,665	38,679	27,498	0.7	309,939	197,991	173,580	0.9	357,604	236,670	201,078	0.8	
	Female-headed	30,739	23,546	54,105	2.3	23,782	17,216	34,032	2.0	54,521	40,762	88,137	2.2	
Cassava	Male-headed	113,622	87,701	259,365	3.0	78,562	59,117	119,602	2.0	192,184	146,818	378,967	2.6	
	Total	144,361	111,247	313,470	2.8	102,344	76,333	153,634	2.0	246,705	187,580	467,104	2.5	

Table 5-3: Planted Area Affected by Climate-related Shocks During 2023/24 Agricultural Year

							Mainland	Tanzania					
				Short R	ainy Season			Long Rainy Season					
Holding Category	Стор	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks
	Maize	1,730,569	93,659	32,333	166,347	192,008	167,819	4,719,421	175,373	168,456	524,726	379,479	448,857
	Paddy	298,263	9,604	4,818	31,043	16,853	13,447	1,411,953	59,499	14,985	174,422	44,527	59,704
	Sorghum	53,275	3,655	1,993	3,794	2,135	3,038	333,938	12,660	11,467	49,807	28,504	23,770
	Bulrush Millet	1,945	173	290	0	0	0	89,362	1,172	9,982	9,738	10,455	4,764
	Cassava	252,997	5,472	122,868	5,779	21,303	3,897	304,196	7,088	200,928	1,506	20,339	466
	Sweet Potatoes	37,583	81	1,210	2,702	3,275	1,292	95,108	1,099	5,378	4,551	5,418	785
	Irish Potatoes	20,851	744	49	817	337	738	71,527	1,564	7,152	2,946	1,313	1,558
	Cocoyams	5,806	2,087	1,041	216	313	0	4,918	93	3,314	54	116	0
	Onion	4,506	743	0	0	1,127	0	30,993	0	589	3,003	654	1,001
	Ginger	4,221	0	167	69	673	0	-	-	-	-	-	-
	Garlic	-	-	-	-	-	-	199	0	0	1	0	3
	Beans	260,787	8,170	4,154	45,780	25,975	24,997	660,764	33,676	40,458	90,968	44,997	47,423
	Cowpeas	21,167	1,398	1,806	2,515	1,778	1,772	37,426	2,041	4,119	2,739	2,983	2,077
	Chickpeas	-	-	-	-	-	-	123,766	6,644	0	3,158	4,215	2,757
Agricultural	Sunflower	61,816	1,017	473	4,812	4,036	1,873	513,150	13,601	8,179	84,823	47,902	37,023
Households	Sesame	32,312	4,411	32	2,614	1,143	1,872	565,153	27,880	5,209	133,152	41,438	54,687
	Groundnut	115,606	3,509	137	13,609	13,563	6,842	545,215	4,882	10,776	59,161	42,851	21,351
	Cotton	112,871	10,617	3,658	7,989	6,390	6,092	229,439	19,755	6,655	23,153	10,767	16,478
	Tobacco	32,742	0	275	3,297	1,299	2,662	106,060	284	496	5,552	1,774	5,409
	Cabbage	4,842	202	138	0	128	44	2,797	0	80	0	29	0
	Spinach	563	0	0	2	18	0	1,744	0	132	0	35	0
	Carrot	1,631	0	0	20	44	0	4,203	109	258	338	328	48
	Amaranths	6,579	3,357	0	354	4	0	5,558	0	33	7	323	28
	Cucumber	-	-	-	-	-	-	1,946	0	0	0	34	0
	Water Mellon	3,942	417	0	633	110	0	8,475	0	232	141	344	95
	Okra	3,729	50	360	107	90	59	8,704	1	640	216	89	120
	Tomatoes	27,791	601	3,097	287	3,403	112	33,563	582	2,396	737	1,633	793
	Bitter Tomato	1,241	22	0	0	44	0	4,878	12	136	12	864	0
	Sweet/Bell Pepper	3,187	0	0	0	0	100	5,967	0	0	80	504	49

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-3: Planted Area Affected by Climate-related Shocks During 2023/24 Agricultural Year

							Mainland	Tanzania							
				Short I	Rainy Season				Long Rainy Season						
Holding Category	Crop	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks		
	Maize	8,884	286	11	160	151	536	70,025	22	11,932	2,358	3,066	777		
	Paddy	9,062	18	11	73	0	1,292	29,515	38	4,892	411	990	3		
	Sorghum	547	34	0	0	1	0	3,110	410	9	470	24	7		
	Bulrush Millet	-	-	-	-	-	-	-	-	-	-	-	-		
	Cassava	1,821	4	356	1	0	0	941	0	294	1	16	3		
	Sweet Potatoes	46	0	0	0	0	0	611	0	0	23	10	0		
	Irish Potatoes	-	-	-	-	-	-	338	0	284	0	0	0		
	Cocoyams	-	-	-	-	-	-	-	-	-	-	-	-		
	Onion	29	0	0	8	0	0	20	0	0	0	0	0		
	Beans	11,849	18	3	36	1	0	10,700	96	23	417	485	7		
	Cowpeas	-	-	-	-	-	-	256	2	6	13	1	0		
	Chickpeas	-	-	-	-	-	-	720	2	2	131	13	6		
Large	Sunflower	734	6	0	90	1	0	10,115	104	352	435	20	24		
Scale	Sesame	-	-	-	-	-	-	1,013	8	8	42	39	3		
Farms	Groundnut	45	0	0	18	0	0	675	3	3	75	13	16		
	Cotton	32	0	0	1	0	4	1,479	38	0	41	66	35		
	Tobacco	53	0	0	10	0	0	973	0	302	152	0	0		
	Cabbage	543	0	0	0	7	0	2	0	0	0	0	0		
	Spinach	6,157	0	47	0	0	0	66	0	1	0	0	0		
	Carrot	-	-	-	-	-	-	-	-	-	-	-	-		
	Amaranths	831	0	46	0	0	0	768	0	0	0	0	0		
	Cucumber	142	0	0	0	0	0	187	0	0	0	3	0		
	Water Mellon	81	0	3	0	0	0	139	0	1	0	12	0		
	Okra	259	0	0	0	0	0	140	0	0	0	1	0		
	Tomatoes	1,145	0	3	0	3	0	247	3	7	3	1	0		
	Bitter Tomato	6	0	0	0	0	0	125	0	0	0	1	0		
	Sweet/Bell Pepper	270	0	0	0	0	1	2,033	0	0	0	0	0		

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-3: Planted Area Affected by Climate-related Shocks During 2023/24 Agricultural Year

							Zanz	zibar					
				Short R	ainy Season					Long R	ainy Season		
Holding Category	Сгор	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks
	Maize	1,186	17	39	0	90	0	738	0	146	0	36	0
	Paddy	4,193	384	103	245	407	212	11,281	818	316	979	381	254
	Sorghum	52	13	0	6	13	0	134	6	0	11	20	0
	Bulrush Millet	63	0	0	27	0	0	19	0	0	0	0	0
	Cassava	22,106	414	1,989	572	1,451	112	21,600	135	15,302	189	972	30
	Sweet Potatoes	849	45	17	57	62	0	1,293	8	84	46	122	13
	Irish Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
	Cocoyams	394	0	215	4	23	0	279	9	251	0	0	0
	Onion	53	0	36	0	1	0	66	0	17	11	0	0
	Ginger	-	-	-	-	-	-	-	-	-	-	-	-
	Garlic	-	-	-	-	-	-	-	-	-	-	-	-
	Beans	-	-	-	-	-	-	-	-	-	-	-	-
	Cowpeas	586	27	47	10	46	55	164	0	0	3	54	2
	Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-
Agricultural	Sunflower	-	-	-	-	-	-	-	-	-	-	-	-
Households	Sesame	-	-	-	-	-	-	-	-	-	-	-	-
	Groundnut	130	0	0	0	8	18	253	0	0	0	0	0
	Cotton	-	-	-	-	-	-	-	-	-	-	-	-
	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
	Cabbage	-	-	-	-	-	-	-	-	-	-	-	-
	Spinach	-	-	-	-	-	-	-	-	-	-	-	-
	Carrot	-	-	-	-	-	-	-	-	-	-	-	-
	Amaranths	323	0	0	13	5	1	245	1	0	11	4	0
	Cucumber	314	0	37	22	43	0	326	92	0	6	16	0
	Water Mellon	410	0	17	0	0	0	419	0	58	51	26	0
	Okra	221	6	0	6	3	0	318	20	0	0	14	0
	Tomatoes	933	68	21	13	51	29	623	30	56	29	16	9
	Bitter Tomato	388	118	2	10	0	0	206	0	6	10	0	0
	Sweet/Bell Pepper	285	22	0	84	0	0	409	0	16	0	0	0

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-3: Planted Area Affected by Climate-related Shocks During 2023/24 Agricultural Year

							Zanz	ibar					
				Short Rai	ny Season					Long Rai	ny Season		
Holding Category	Сгор	Area	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks
	Maize	-	-	-	-	-	-	33	0	0	0	1	0
	Paddy	-	-	-	-	-	-	-	-	-	-	-	-
	Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
	Bulrush Millet	-	-	-	-	-	-	-	-	-	-	-	-
	Cassava	61	0	10	0	5	0	79	0	28	0	7	0
	Sweet Potatoes	-	-	-	-	-	-	75	12	0	16	0	0
	Irish Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
	Cocoyams	-	-	-	-	-	-	-	-	-	-	-	-
	Onion	-	-	-	-	-	-	-	-	-	-	-	-
	Beans	-	-	-	-	-	-	-	-	-	-	-	-
	Cowpeas	-	-	-	-	-	-	-	-	-	-	-	-
	Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-
Large Scale	Sunflower	-	-	-	-	-	-	-	-	-	-	-	-
Farms	Sesame	-	-	-	-	-	-	-	-	-	-	-	-
1 411110	Groundnut	-	-	-	-	-	-	-	-	-	-	-	-
	Cotton	-	-	-	-	-	-	-	-	-	-	-	-
	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
	Cabbage	-	-	-	-	-	-	-	-	-	-	-	-
	Spinach	-	-	-	-	-	-	-	-	-	-	-	-
	Carrot	-	-	-	-	-	-	-	-	-	-	-	-
	Amaranths	10	0	0	0	4	0	-	-	-	-	-	-
	Cucumber	4	0	0	0	0	2	-	-	-	-	-	-
	Water Mellon	-	-	-	-	-	-	-	-	-	-	-	-
	Okra	27	0	0	0	1	0	5	0	0	0	0	0
	Tomatoes	35	0	0	0	0	2	-	-	-	-	-	-
	Bitter Tomato Sweet/Bell Pepper	-	-	-	-	-	-	-	-	-	-	-	-

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-3: Planted Area Affected by Climate-related Shocks During 2023/24 Agricultural Year

							Tanz	zania					
				Short R	ainy Season					Long R	ainy Season		
Holding Category	Сгор	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks
	Maize	1,731,755	93,675	32,372	166,347	192,098	167,819	4,720,158	175,373	168,603	524,726	379,515	448,857
	Paddy	302,456	9,988	4,921	31,288	17,260	13,659	1,423,234	60,317	15,300	175,401	44,908	59,958
	Sorghum	53,326	3,668	1,993	3,800	2,148	3,038	334,072	12,667	11,467	49,817	28,524	23,770
	Bulrush Millet	2,008	173	290	27	0	0	89,381	1,172	9,982	9,738	10,455	4,764
	Cassava	275,103	5,885	124,857	6,352	22,753	4,009	325,796	7,222	216,230	1,695	21,311	497
	Sweet Potatoes	38,432	126	1,228	2,760	3,336	1,292	96,402	1,107	5,462	4,597	5,540	798
	Irish Potatoes	20,851	744	49	817	337	738	71,527	1,564	7,152	2,946	1,313	1,558
	Cocoyams	6,200	2,087	1,257	221	336	0	5,197	102	3,565	54	116	0
	Onion	4,559	743	36	0	1,128	0	31,060	0	606	3,015	654	1,001
	Ginger	4,221	0	167	69	673	0	-	-	-	-	-	-
	Garlic	-	-	-	-	-	-	199	0	0	1	0	3
	Beans	260,798	8,170	4,154	45,780	25,975	24,997	660,764	33,676	40,458	90,968	44,997	47,423
	Cowpeas	21,752	1,425	1,853	2,525	1,824	1,827	37,590	2,041	4,119	2,742	3,036	2,079
Agricultural	Chickpeas	-	-	-	-	-	-	123,766	6,644	0	3,158	4,215	2,757
Households	Sunflower	61,816	1,017	473	4,812	4,036	1,873	513,150	13,601	8,179	84,823	47,902	37,023
Households	Sesame	32,312	4,411	32	2,614	1,143	1,872	565,153	27,880	5,209	133,152	41,438	54,687
	Groundnut	115,736	3,509	137	13,609	13,571	6,861	545,468	4,882	10,776	59,161	42,851	21,351
	Cotton	112,871	10,617	3,658	7,989	6,390	6,092	229,439	19,755	6,655	23,153	10,767	16,478
	Tobacco	32,742	0	275	3,297	1,299	2,662	106,060	284	496	5,552	1,774	5,409
	Cabbage	4,842	202	138	0	128	44	2,797	0	80	0	29	0
	Spinach	584	0	0	15	21	0	1,776	0	132	0	35	0
	Carrot	1,631	0	0	20	44	0	4,203	109	258	338	328	48
	Amaranths	6,902	3,357	0	366	9	1	5,803	1	33	18	327	28
	Cucumber	1,032	0	37	22	43	0	2,272	92	0	6	50	0
	Water Mellon	4,351	417	17	633	110	0	8,894	0	289	193	370	95
	Okra	3,951	56	360	114	93	59	9,022	21	640	216	103	120
	Tomatoes	28,723	669	3,118	300	3,454	141	34,186	611	2,452	765	1,650	803
	Bitter Tomato	1,629	140	2	10	44	0	5,084	12	142	22	864	0
	Sweet/Bell Pepper	3,472	22	0	84	0	100	6,377	0	16	80	504	49

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-3: Planted Area Affected by Climate-related Shocks During 2023/24 Agricultural Year

							Tan	zania					
				Short I	Rainy Season					Long I	Rainy Season		
Holding Category	Сгор	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks	Total Area Planted	Fully Affected by Climate Shocks	Fully Affected by Non- Climate Shocks	Partially Affected by Climate Shocks	Partially Affected by Non- Climate shocks	Partially Affected by Both Climate and Non- Climate Shocks
	Maize	8,886	286	11	160	151	536	70,058	22	11,932	2,358	3,066	777
	Paddy	9,062	18	11	73	0	1,292	29,552	38	4,892	411	997	3
	Sorghum	557	34	0	0	1	0	3,116	410	9	475	24	7
	Bulrush Millet	-	-	-	-	-	-	-	-	-	-	-	-
	Cassava	1,882	4	366	1	5	0	1,020	0	322	1	22	3
	Sweet Potatoes	47	0	0	0	0	0	686	12	0	39	10	0
	Irish Potatoes	-	-	-	-	-	-	338	0	284	0	0	0
	Cocoyams	-	-	-	-	-	-	-	-	-	-	-	-
	Onion	29	0	0	8	0	0	20	0	0	0	1	0
	Beans	11,849	18	3	36	1	0	10,700	96	23	417	485	7
	Cowpeas	-	-	-	-	-	-	256	2	6	13	1	0
	Chickpeas	-	-	-	-	-	-	720	2	2	131	13	6
Large	Sunflower	734	6	0	90	1	0	10,115	104	352	435	20	24
Scale	Sesame	-	-	-	-	-	-	1,013	8	8	42	39	3
Farms	Groundnut	48	0	0	20	0	0	679	3	3	77	13	16
	Cotton	32	0	0	1	0	4	1,479	38	0	41	66	35
	Tobacco	53	0	0	10	0	0	973	0	302	152	0	0
	Cabbage	543	0	0	0	7	0	3	0	0	0	1	0
	Spinach	6,158	0	47	0	1	0	66	0	1	0	0	0
	Carrot	-	-	-	-	-	-	-	-	-	-	-	-
	Amaranths	842	0	46	0	4	0	768	0	0	0	0	0
	Cucumber	146	0	0	0	0	2	190	0	0	0	3	0
	Water Mellon	82	0	4	0	0	0	140	0	1	0	12	0
	Okra	287	0	0	0	1	0	145	0	0	0	1	0
	Tomatoes	1,179	0	3	0	4	2	251	3	7	3	1	0
	Bitter Tomato	6	0	0	0	0	0	125	0	0	0	1	0
	Sweet/Bell Pepper	271	0	0	0	0	1	2,033	0	0	0	0	0

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 5-4: Harvest Disposition (Use) by Crop during 2023/24 Agricultural Year

	_			Dispo	sition (to	otal pro	duction	uses in %	)		
Holding Category	Crops	Sold Unprocessed	Holdings Consumption	Given to Others	Used to Pay for Inputs	Animal Feed	Seeds	Processed	School Consumption	Others	Tota
	Maize	42.8	52.8	1.6	0.8	0.1	1.5	0.5	0.0	0.0	100
	Paddy	49.2	40.4	0.9	1.1	0.0	4.7	3.7	0.0	0.0	100
	Sorghum	27.7	67.0	0.7	0.0	0.1	3.3	1.2	0.0	0.0	100
	Bulrush Millet	16.8	77.6	0.7	0.0	0.0	4.7	0.2	0.0	0.0	100
	Cassava	33.7	59.6	5.4	0.3	0.0	0.6	0.4	0.0	0.0	100
	Sweet potatoes	34.6	63.3	1.0	0.0	0.0	0.7	0.3	0.0	0.0	100
	Irish potatoes	87.8	8.1	0.2	0.4	0.0	3.4	0.0	0.0	0.0	100
	Cocoyams	26.3	58.6	4.6	0.0	4.1	6.5	0.0	0.0	0.0	100
	Onion	92.0	7.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	100
	Ginger	89.3	0.0	0.0	0.0	0.0	10.7	0.0	0.0	0.0	100
	Garlic	98.2	0.1	0.0	0.0	0.0	1.7	0.0	0.0	0.0	100
	Beans	50.5	41.2	0.8	0.1	0.0	6.9	0.5	0.0	0.0	100
	Cowpeas	44.7	48.6	1.0	0.1	0.0	4.0	1.6	0.0	0.0	100
	Pigeon pea	83.2	13.5	0.2	0.0	0.0	3.1	0.0	0.0	0.0	100
	Sunflower	62.1	30.1	0.7	0.2	0.0	2.4	4.6	0.0	0.0	100
	Sesame	94.2	1.4	0.2	0.2	0.0	3.2	0.8	0.0	0.0	100
	Groundnut	55.2	35.5	0.6	0.2	0.0	7.1	1.3	0.0	0.0	100
	Cashew nut	97.4	2.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100
	Cotton	93.1	1.6	0.0	0.2	0.0	0.0	5.1	0.0	0.0	100
Agricultural	Coffee	96.2	1.3	0.0	0.1	0.0	0.0	2.4	0.0	0.0	100
Households	Sugar cane	97.9	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100
	Cardamom	96.2	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
	Cinnamon	96.9	2.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	100
	Clove	95.4	0.8	0.3	0.0	0.0	0.0	3.6	0.0	0.0	100
	Banana	43.5	52.6	3.8	0.0	0.1	0.0	0.0	0.0	0.0	100
	Avocado	68.7	27.1	4.1	0.0	0.1	0.0	0.0	0.0	0.0	100
	Mango	44.2	40.6	14.5	0.3	0.4	0.0	0.0	0.0	0.0	100
	Pineapple	79.8	19.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	100
	Orange	86.7	11.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	100
	Grapes	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
	Cabbage	91.1	5.4	0.7	0.0	2.7	0.0	0.1	0.0	0.0	100
	Spinach	83.3	12.9	3.8	0.0	0.0	0.0	0.0	0.0	0.0	100
	Carrot	98.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
	Amaranths	85.2	12.7	1.5	0.0	0.6	0.0	0.0	0.0	0.0	100
	Cucumber	86.7	8.7	4.6	0.0	0.0	0.0	0.0	0.0	0.0	100
	Water mellon	91.4	5.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	100
	Okra	90.4	6.2	0.4	0.0	0.0	0.0	3.0	0.0	0.0	100
	Tomatoes	96.1	3.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100
	Bitter tomato	86.1	13.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	100
	Sweet/bell pepper of observations (n<3	91.8	5.3	1.4	0.0	0.0	0.0	1.6	0.0	0.0	100

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 5-4: Harvest Disposition (Use) by Crop during 2023/24 Agricultural Year

				Dispo	osition (t	otal pro	duction	uses in %)			
Holding Category	Crops	Sold Unprocessed	Holdings Consumption	Given to Others	Used to Pay for Inputs	Animal Feed	Seeds	Processed	School Consumption	Others	Total
	Maize	49.9	5.4	0.0	1.5	3.4	2.9	35.9	1.0	0.0	100
	Paddy	79.7	1.6	0.0	0.6	0.5	0.2	17.2	0.2	0.0	100
	Sorghum	74.3	11.2	0.0	7.5	1.5	2.5	2.5	0.6	0.0	100
	Bulrush Millet	-	-	-	-	-	-	-	-	-	-
	Cassava	10.3	87.0	0.0	0.5	0.0	0.0	0.3	1.9	0.0	100
	Sweet potatoes	5.1	23.0	0.0	18.0	5.6	0.3	2.9	45.1	0.0	100
	Irish potatoes	97.7	0.9	0.0	0.0	0.0	0.0	0.0	1.5	0.0	100
	Cocoyams	-	-	-	-	-	-	-	-	-	-
	Onion	99.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	100
	Beans	92.7	2.0	0.0	0.4	0.2	3.4	0.5	0.8	0.0	100
	Cowpeas	76.5	17.5	0.0	1.7	0.4	3.0	0.0	0.9	0.0	100
	Pigeon pea	91.6	1.5	0.0	0.2	0.0	6.6	0.0	0.0	0.0	100
	Sunflower	48.9	4.0	0.0	0.3	1.3	0.7	40.5	4.3	0.0	100
	Sesame	92.0	0.1	0.0	3.2	0.0	3.3	1.4	0.0	0.0	100
	Groundnut	48.5	12.4	0.0	7.9	2.1	6.8	22.3	0.0	0.0	100
	Cashew nut	93.1	1.4	0.0	0.0	0.0	0.5	4.9	0.0	0.0	100
	Cotton	97.8	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	100
Large	Coffee	31.9	0.0	0.0	0.0	0.0	0.0	68.0	0.0	0.0	100
Scale Farms	Sugar cane	10.1	0.0	0.0	0.0	0.0	1.0	88.9	0.0	0.0	100
1 aiiis	Clove	99.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
	Banana	48.1	5.9	0.1	1.3	0.2	0.0	0.0	44.5	0.0	100
	Avocado	82.4	6.0	0.0	0.0	0.0	0.1	11.6	0.0	0.0	100
	Mango	71.8	22.8	0.0	0.3	0.0	3.2	0.0	1.9	0.0	100
	Pineapple	94.4	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
	Orange	94.1	5.2	0.0	0.2	0.0	0.5	0.0	0.0	0.0	100
	Grapes	17.3	0.0	0.0	0.0	0.0	0.0	82.6	0.0	0.0	100
	Cabbage	75.6	0.0	0.0	0.2	10.9	10.6	0.0	2.7	0.0	100
	Spinach	2.6	76.5	0.0	16.2	4.6	0.0	0.0	0.1	0.0	100
	Carrot	-	-	-	-	-	-	-	-	-	-
	Amaranths	22.5	66.1	0.0	1.9	8.5	0.0	0.2	0.8	0.0	100
	Cucumber	99.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	100
	Water mellon	98.4	0.0	0.0	0.6	1.0	0.0	0.0	0.0	0.0	100
	Okra	67.4	29.1	0.0	0.5	0.0	0.0	0.6	2.3	0.0	100
	Tomatoes	97.8	1.3	0.0	0.0	0.6	0.0	0.0	0.2	0.0	100
	Bitter tomato	34.5	29.1	0.0	0.3	31.3	0.0	0.0	4.8	0.0	100
	Sweet/bell pepper	96.7	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	100

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 6-1: Number of Agricultural Holdings Rearing Livestock, Total and Average Number of Livestock Raised, by Type and Region During Agricultural Year 2023/24

			Cattle		Iı	ndigenous Cat	tle	I	mproved Catt	le
Holding Category	Region	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*
	Dodoma	118,210	1,015,335	9	116,712	1,005,294	9	1,498	10,041	7
	Arusha	192,876	1,106,074	6	146,739	951,266	6	50,131	154,808	3
	Kilimanjaro	131,054	477,057	4	78,609	375,597	5	53,856	101,459	2
	Tanga	71,479	451,429	6	59,055	415,382	7	14,767	36,047	3
	Morogoro	48,862	662,427	14	48,503	660,637	14	-	-	-
	Pwani	13,098	475,718	39	11,408	468,112	41	2,565	-	-
	Dar es Salaam	9,831	37,415	4	4,630	16,487	4	5,711	20,928	4
	Lindi	3,411	-	-	3,411	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-
	Ruvuma	40,981	118,473	3	32,664	94,700	3	9,029	23,773	3
	Iringa	24,441	311,457	13	20,911	264,697	13	3,530	46,760	13
	Mbeya	78,928	974,583	13	71,141	951,291	14	8,797	23,292	3
	Singida	113,681	1,129,483	10	111,820	1,123,000	10	1,861	6,483	3
	Tabora	141,527	1,797,006	13	141,527	1,797,006	13	-	-	-
	Rukwa	68,129	324,560	5	68,129	324,560	5	-	-	-
	Kigoma	4,837	36,906	8	4,837	36,906	8	-	-	-
Agricultural	Shinyanga	94,465	990,536	11	93,195	983,606	11	-	-	-
Households	Kagera	60,245	504,043	8	54,792	494,563	9	5,453	9,480	2
	Mwanza	97,982	816,309	8	96,897	813,987	8	1,085	2,322	2
	Mara	144,809	1,933,911	14	144,809	1,933,911	14	-	-	-
	Manyara	136,361	2,195,930	16	130,732	2,180,226	17	7,489	15,704	2
	Njombe	31,518	248,854	8	28,136	240,462	9	3,830	8,391	2
	Katavi	25,944	372,469	14	25,944	372,469	14	-	-	-
	Simiyu	93,964	1,094,066	12	93,964	1,094,066	12	-	-	-
	Geita	52,779	633,468	12	52,779	633,100	12	-	-	-
	Songwe	100,626	624,257	6	98,349	610,622	6	4,730	13,635	3
	Mainland Tanzania	1,902,301	18,349,706	10	1,741,954	17,859,890	10	176,330	489,818	3
	Kaskazini Unguja	3,710	13,013	4	3,554	12,605	4	-	-	-
	Kusini Unguja	6,743	30,651	5	6,380	28,093	5	692	2,558	4
	Mjini Magharibi	4,423	14,798	3	3,992	13,596	3	431	1,202	3
	Kaskazini Pemba	8,754	27,041	3	8,659	26,685	3	-	-	-
	Kusini Pemba	9,265	33,900	4	8,940	32,221	4	442	1,679	4
	Zanzibar	32,895	119,403	4	31,524	113,200	4	1,898	6,202	3
	Tanzania	1,935,196	18,469,110	10	1,773,478	17,973,090	10	178,228	496,020	3
	Mainland Tanzania	475	108,084	229	310	49,319	160	228	58,765	259
Large Scale Farms	Zanzibar	11	266	24	5	87	17	9	179	20
	Tanzania	486	108,350	224	315	49,406	158	237	58,944	250
4.11	Mainland Tanzania	1,902,776	18,457,790	10	1,742,264	17,909,208	10	176,558	548,583	3
All Holdings	Zanzibar	32,906	119,669	4	31,529	113,287	4	1,907	6,381	3
~	Tanzania	1,935,682	18,577,460	10	1,773,793	18,022,496	10	178,465	554,964	3

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

The total and average number of animals refer to the stock of livestock at the beginning of October 2024

Cont... Table 6-1: Number of Agricultural Holdings Rearing Livestock, Total and Average Number of Livestock Raised, by Type and Region During Agricultural Year 2023/24

			Goats		Iı	ndigenous Goa	its	I	mproved Goa	ts
Holding Category	Region	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*
	Dodoma	95,194	801,440	8	94,157	797,095	8	2,077	4,346	2
	Arusha	161,196	1,640,420	10	151,410	1,586,153	11	10,946	54,267	5
	Kilimanjaro	128,598	860,608	7	102,250	760,983	8	27,706	99,625	4
	Tanga	66,325	414,020	6	64,005	407,784	6	2,320	6,235	3
	Morogoro	42,990	441,493	10	42,990	441,493	10	-	-	-
	Pwani	15,428	285,954	19	15,428	285,954	19	-	-	-
	Dar es Salaam	4,891	26,612	5	4,891	26,612	5	-	-	-
	Lindi	10,280	72,409	7	9,053	67,500	7	-	-	-
	Mtwara	14,021	94,182	7	14,021	94,182	7	-	-	-
	Ruvuma	53,156	283,489	6	53,156	283,489	6	-	-	-
	Iringa	15,624	236,516	15	15,181	235,632	16	-	-	-
	Mbeya	28,381	231,346	9	28,381	231,346	9	-	-	-
	Singida	76,403	672,424	9	76,403	672,424	9	-	-	-
	Tabora	105,516	1,019,959	10	105,516	1,019,959	10	-	-	-
	Rukwa	41,615	195,159	5	41,615	195,159	5	-	-	-
	Kigoma	64,809	352,141	5	64,809	352,141	5	-	-	-
Agricultural	Shinyanga	60,908	445,423	7	60,908	445,423	7	-	-	-
Households	Kagera	176,661	831,421	5	172,582	807,453	5	5,039	23,968	5
	Mwanza	75,499	369,006	5	75,217	368,160	5	-	-	-
	Mara	102,069	846,122	9	102,069	846,122	9	-	-	-
	Manyara	100,105	1,851,640	18	99,927	1,833,243	18	-	-	-
	Njombe	15,609	89,807	6	15,609	89,807	6	-	-	_
	Katavi	32,791	253,499	8	32,791	253,499	8	-	-	-
	Simiyu	66,374	740,004	11	66,374	740,004	11	-	-	_
	Geita	88,409	528,044	6	88,102	528,044	6	-	-	_
	Songwe	75,671	497,091	7	75,671	497,091	7	-	-	_
	Mainland Tanzania	1,718,525	14,080,230	8	1,672,518	13,866,752	8	50,802	213,478	4
	Kaskazini Unguja	2,201	14,850	7	2,201	14,850	7	-	-	-
	Kusini Unguja	3,825	22,336	6	3,740	22,165	6	-	-	-
	Mjini Magharibi	1,142	10,629	9	1,142	10,629	9	-	-	-
	Kaskazini Pemba	3,131	9,616	3	3,131	9,616	3	-	-	-
	Kusini Pemba	4,366	17,104	4	4,366	17,104	4	-	-	-
	Zanzibar	14,666	74,534	5	14,580	74,364	5	-	-	-
	Tanzania	1,733,190	14,154,764	8	1,687,099	13,941,116	8	50,887	213,648	4
	Mainland Tanzania	343	27,549	80	307	21,181	69	52	6,368	122
Large Scale Farms	Zanzibar	8	558	70	7	552	79	-	-	-
1 411110	Tanzania	351	28,107	80	314	21,733	69	53	6,374	120
	Mainland Tanzania	1,718,868	14,107,779	8	1,672,825	13,887,933	8	50,854	219,846	4
All Holdings	Zanzibar	14,674	75,092	5	14,587	74,916	5	-	-	_
11010111188	Tanzania	1,733,541	14,182,871	8	1,687,413	13,962,849	8	50,940	220,022	4

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

The total and average number of animals refer to the stock of livestock at the beginning of October 2024

Cont... Table 6-1: Number of Agricultural Holdings Rearing Livestock, Total and Average Number of Livestock Raised, by Type and Region During Agricultural Year 2023/24

			Sheep			Pigs			Chicken	
Holding Category	Region	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*
	Dodoma	21,107	120,665	6	60,153	211,413	4	164,470	2,298,014	14
	Arusha	117,892	1,461,315	12	5,454	32,413	6	110,827	2,511,830	23
	Kilimanjaro	28,072	176,123	7	41,031	164,470	4	220,525	3,249,067	15
	Tanga	20,614	81,404	4	1,428	11,055	8	90,121	1,638,839	19
	Morogoro	19,623	203,060	10	29,092	129,754	5	195,313	4,174,447	22
	Pwani	3,691	87,784	24	2,402	5,125	3	147,491	2,980,306	21
	Dar es Salaam	-	-	-	3,081	34,360	11	52,011	3,016,319	59
	Lindi	-	-	-	-	-	-	95,550	1,412,960	15
	Mtwara	-	-	-	5,983	24,298	4	161,277	1,578,656	10
	Ruvuma	-	-	-	27,663	139,927	5	51,010	810,907	16
	Iringa	3,416	42,034	12	42,955	124,053	3	145,275	2,031,177	15
	Mbeya	7,126	62,722	9	46,737	148,289	3	126,783	1,797,573	15
	Singida	43,628	261,247	6	9,140	32,134	4	191,568	2,315,714	12
	Tabora	36,751	254,436	7	7,925	40,420	5	237,422	3,126,315	13
	Rukwa	4,027	22,028	5	17,021	46,017	3	132,405	1,242,511	10
	Kigoma	6,607	37,021	6	17,116	72,307	4	92,544	922,494	10
Agricultural	Shinyanga	35,079	250,059	7	4,272	47,852	11	188,852	1,943,927	11
Households	Kagera	26,812	119,462	4	83,759	159,827	2	240,349	1,937,609	8
	Mwanza	28,483	317,269	11	3,928	88,184	25	157,095	1,987,043	13
	Mara	55,647	673,746	12	-	-	-	179,563	2,418,862	14
	Manyara	75,427	906,296	12	17,825	50,784	3	116,487	1,628,695	14
	Njombe	6,940	37,892	5	39,232	73,773	2	133,071	2,228,890	18
	Katavi	5,898	42,155	7	7,814	26,307	4	88,814	1,073,745	13
	Simiyu	60,088	516,812	9	-	-	-	180,718	2,164,908	12
	Geita	10,540	38,655	4	5,531	19,382	4	123,745	1,520,383	13
	Songwe	2,948	17,134	6	30,614	115,107	4	150,412	1,885,963	13
	Mainland Tanzania	624,073	5,743,092	9	511,987	1,805,674	4	3,773,699	53,897,152	15
	Kaskazini Unguja	-	-	-	-	-	-	8,738	179,465	22
	Kusini Unguja	-	-	-	-	-	-	14,798	358,543	25
	Mjini Magharibi	-	-	-	-	-	-	10,986	1,541,596	140
	Kaskazini Pemba	-	-	-	-	-	-	22,491	411,647	19
	Kusini Pemba	-	-	-	-	-	-	17,623	307,165	18
	Zanzibar	-	-	-	-	-	-	74,636	2,798,416	38
	Tanzania	624,364	5,745,226	9	511,987	1,805,674	4	3,848,335	56,695,568	15
	Mainland Tanzania	202	17,037	84	56	2,439	46	343	664,700	1,972
Large Scale Farms	Zanzibar	3	69	23	-	-	-	32	96,743	3,023
	Tanzania	205	17,106	83	56	2,439	46	375	761,443	2,064
	Mainland Tanzania	624,275	5,760,129	9	512,043	1,808,113	4	3,774,042	54,561,852	15
All Holdings	Zanzibar	294	2,203	8	-	-	-	74,668	2,895,159	40
Holdings	Tanzania	624,569	5,762,332	9	512,043	1,808,113	4	3,848,710	57,457,012	15

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

The total and average number of animals refer to the stock of livestock at the beginning of October 2024

Cont... Table 6-1: Number of Agricultural Holdings Rearing Livestock, Total and Average Number of Livestock Raised, by Type and Region During Agricultural Year 2023/24

		Inc	digenous Chicl	ken	In	proved Chick	ken	Exoti	c Chicken (La	ayers)
Holding Category	Region	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*
	Dodoma	162,898	1,678,848	10	-	-	-	-	-	-
	Arusha	106,329	1,368,577	13	2,166	44,217	20	1,971	777,753	395
	Kilimanjaro	215,434	2,568,819	12	7,099	311,817	44	-	-	-
	Tanga	87,427	1,211,534	14	1,823	45,860	25	1,387	-	-
	Morogoro	193,019	3,315,537	17	2,686	113,704	48	-	-	-
	Pwani	144,879	2,669,425	19	5,266	299,822	69	-	-	-
	Dar es Salaam	42,955	811,490	19	3,847	283,101	82	2,413	454,678	188
	Lindi	95,550	1,412,960	15	-	-	-	-	-	-
	Mtwara	161,277	1,578,656	10	-	-	-	-	-	-
	Ruvuma	49,951	731,485	15	-	-	-	-	-	-
	Iringa	143,277	1,848,337	13	3,325	122,560	57	-	-	-
	Mbeya	123,189	1,555,082	13	2,787	173,002	62	-	-	-
	Singida	191,344	2,308,154	12	-	-	-	-	-	-
	Tabora	237,207	3,125,242	13	-	-	-	-	-	-
	Rukwa	132,405	1,180,653	10	-	-	-	-	-	-
	Kigoma	91,104	778,486	9	-	-	-	-	-	-
Agricultural	Shinyanga	187,735	1,915,996	11	-	-	-	-	-	-
Households	Kagera	240,349	1,914,488	8	-	-	-	-	-	-
	Mwanza	156,418	1,776,898	12	-	-	-	-	-	-
	Mara	178,805	2,301,362	14	-	-	-	-	-	-
	Manyara	113,882	1,300,645	11	3,218	266,900	83	1,330	14,337	11
	Njombe	131,240	1,768,751	14	2,279	-	-	-	-	-
	Katavi	88,814	1,073,745	13	-	-	-	-	-	-
	Simiyu	180,048	2,162,229	12	-	-	-	-	-	-
	Geita	121,545	1,254,474	11	1,861	260,723	140	-	-	-
	Songwe	149,891	1,874,482	13	-	-	-	-	-	-
	Mainland Tanzania	3,726,972	45,486,352	13	42,838	2,918,021	77	15,374	2,365,812	158
	Kaskazini Unguja	8,738	151,764	19	-	-	-	-	-	-
	Kusini Unguja	14,008	247,735	18	288	-	-	487	95,632	196
	Mjini Magharibi	9,001	166,161	18	476	24,946	52	1,619	341,473	211
	Kaskazini Pemba	22,388	267,377	12	-	-	-	-	-	-
	Kusini Pemba	17,544	286,371	16	-	-	-	-	-	-
	Zanzibar	71,678	1,119,409	16	1,128	44,480	52	2,492	595,258	249
	Tanzania	3,798,650	46,605,760	13	43,966	2,962,500	76	17,866	2,961,070	170
	Mainland Tanzania	254	17,154	69	46	66,043	1,468	49	364,771	7,444
Large Scale Farms	Zanzibar	11	1,743	158	5	2,360	590	20	67,460	3,551
	Tanzania	265	18,897	73	51	68,403	1,396	69	432,231	6,356
	Mainland Tanzania	3,727,226	45,503,504	13	42,884	2,984,064	78	15,423	2,730,583	181
All Holdings	Zanzibar	71,689	1,121,152	16	1,133	46,840	54	2,512	662,718	275
	Tanzania	3,798,915	46,624,656	13	44,017	3,030,903	78	17,935	3,393,301	194

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

The total and average number of animals refer to the stock of livestock at the beginning of October 2024

Cont... Table 6-1: Number of Agricultural Holdings Rearing Livestock, Total and Average Number of Livestock Raised, by Type and Region During Agricultural Year 2023/24

		Exoti	c Chicken (Br	oilers)		Ducks			Turkeys	
Holding Category	Region	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*
	Dodoma	-	-	-	17,219	188,692	11	-	-	-
	Arusha	1,031	321,283	311	2,290	15,241	7	-	-	-
	Kilimanjaro	2,490	343,962	203	14,123	104,766	7	-	-	-
	Tanga	-	-	-	11,229	114,707	10	-	-	-
	Morogoro	1,391	638,969	459	11,795	88,936	8	-	-	-
	Pwani	-	-	-	13,585	165,402	12	-	-	-
	Dar es Salaam	5,428	1,467,051	288	7,200	91,012	13	-	-	-
	Lindi	-	-	-	2,945	22,759	8	-	-	-
	Mtwara	-	-	-	2,739	10,214	4	-	-	-
	Ruvuma	-	-	-	-	-	-	-	-	-
	Iringa	1,739	-	-	12,756	83,520	7	-	-	-
	Mbeya	1,546	62,601	55	10,479	88,225	8	-	-	-
	Singida	-	-	-	10,953	103,278	10	-	-	-
	Tabora	-	-	-	14,097	102,420	7	-	-	-
	Rukwa	-	-	-	20,065	92,416	5	-	-	-
	Kigoma	-	-	-	12,011	92,487	8	-	-	-
Agricultural	Shinyanga	-	-	-	15,872	118,331	7	-	-	-
Households	Kagera	-	-	-	38,094	202,001	5	-	-	-
	Mwanza	-	-	-	26,100	174,388	7	-	-	-
	Mara	-	-	-	23,417	287,626	12	-	-	-
	Manyara	-	-	-	4,557	35,619	8	-	-	-
	Njombe	-	-	-	8,203	51,065	6	-	-	-
	Katavi	-	-	-	5,344	47,843	9	-	-	-
	Simiyu	-	-	-	12,379	88,401	7	-	-	-
	Geita	-	-	-	27,997	159,004	6	-	-	-
	Songwe	-	-	-	14,418	104,638	7	-	-	-
	Mainland Tanzania	21,964	3,126,970	226	339,868	2,632,991	8	4,449	33,035	7
	Kaskazini Unguja	-	-	-	1,468	17,537	14	-	-	-
	Kusini Unguja	339	-	-	1,080	17,145	16	239	1,249	5
	Mjini Magharibi	2,344	1,009,016	431	1,377	18,210	13	-	-	-
	Kaskazini Pemba	-	-	-	1,936	18,294	9	-	-	_
	Kusini Pemba	-	-	-	1,683	26,519	16	-	-	-
	Zanzibar	2,748	1,039,270	394	7,544	97,705	13	629	3,912	6
	Tanzania	24,713	4,166,239	253	347,412	2,730,696	8	5,078	36,947	7
	Mainland Tanzania	52	216,732	4,712	82	3,744	46	18	257	14
Large Scale Farms	Zanzibar	10	25,180	2,518	3	2,595	865	-	-	-
1 dillis	Tanzania	62	241,912	4,320	85	6,339	75	20	275	14
	Mainland Tanzania	22,016	3,343,702	241	339,950	2,636,735	8	4,467	33,292	7
All	Zanzibar	2,758	1,064,450	402	7,547	100,300	14	631	3,930	6
Holdings	Tanzania	24,775	4,408,152	267	347,497	2,737,035	8	5,098	37,222	7

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

The total and average number of animals refer to the stock of livestock at the beginning of October 2024

Cont... Table 6-1: Number of Agricultural Holdings Rearing Livestock, Total and Average Number of Livestock Raised, by Type and Region During Agricultural Year 2023/24

			Donkeys			Rabbits			Dogs	
Holding Category	Region	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*	Number of Holdings Raising Livestock	Total Number of Livestock Reared*	Average Number of Livestock per Holding*
	Dodoma	4,593	13,212	3	2,425	18,037	7	-	-	-
	Arusha	19,922	40,323	2	2,263	26,693	13	16,823	31,755	2
	Kilimanjaro	1,519	5,082	3	3,989	34,275	9	7,923	14,508	2
	Tanga	-	-	-	-	-	-	747	3,058	4
	Morogoro	1,508	6,031	4	1,135	5,984	5	5,164	20,828	4
	Pwani	-	-	-	-	-	-	-	-	-
	Dar es Salaam	-	-	-	-	-	-	-	-	-
	Lindi	-	-	-	-	-	-	-	-	-
	Mtwara	-	-	-	-	-	-	-	-	-
	Ruvuma	-	-	-	-	-	-	-	-	-
	Iringa	1,099	4,429	4	8,502	85,179	10	10,138	24,674	3
	Mbeya	1,100	2,289	2	2,647	10,678	4	5,314	10,670	2
	Singida	3,419	11,426	3	-	-	-	22,512	41,069	2
	Tabora	-	-	-	-	-	-	16,390	43,616	3
	Rukwa	3,306	9,276	3	3,035	21,964	7	-	-	-
	Kigoma	-	-	-	-	-	-	-	-	-
Agricultural	Shinyanga	-	-	-	-	-	-	33,857	77,902	2
Households	Kagera	-	-	-	9,641	50,750	5	12,984	22,123	2
	Mwanza	-	-	-	-	-	-	8,584	16,797	2
	Mara	3,917	9,491	2	-	-	-	49,690	109,956	2
	Manyara	8,174	27,900	4	-	-	-	14,784	32,775	2
	Njombe	-	-	-	5,912	86,204	17	2,201	6,549	3
	Katavi	-	-	-	-	-	-	3,002	6,496	2
	Simiyu	-	-	-	1,455	16,253	11	10,687	28,714	3
	Geita	1,627	5,122	3	-	-	-	9,312	20,816	2
	Songwe	1,060	1,271	1	1,993	10,503	5	1,699	7,131	4
	Mainland Tanzania	54,902	150,792	3	49,973	425,359	9	237,314	528,908	2
	Kaskazini Unguja	-	-	-	-	-	-	-	-	-
	Kusini Unguja	-	-	-	-	-	-	265	1,222	5
	Mjini Magharibi	-	-	-	-	-	-	-	-	-
	Kaskazini Pemba	-	-	-	-	-	-	-	-	-
	Kusini Pemba	-	-	-	-	-	-	-	-	-
	Zanzibar	-	-	-	-	-	-	1,109	3,190	3
	Tanzania	54,902	150,792	3	50,062	425,359	9	238,422	532,098	2
Large Scale	Mainland Tanzania	30	213	7	19	1,012	56	149	794	5
Farms	Zanzibar	-	-	-	-	-	-	6	80	13
	Tanzania	30	213	7	19	1,012	56	155	874	6
All	Mainland Tanzania	54,932	151,005	3	49,992	426,371	9	237,463	529,702	2
Holdings	Zanzibar	-	-	-	-	-	-	1,115	3,270	3
	Tanzania	54,932	151,005	3	50,081	426,371	9	238,577	532,972	2

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

The total and average number of animals refer to the stock of livestock at the beginning of October 2024

Table 6-2: Sales of Live Livestock and Stock Value, by Livestock Category During Agricultural Year 2023/24

Holding Category	State	Livestock Group	Number of Agricultural Holdings that Sold Livestock	Percentage of Holdings that Sold Livestock	Total Number of Livestock Sold	Average Unit Price Earned per Livestock Sold	Average Number of Livestock Sold per Agricultural Holding	Average Value of Animal Sales per Holding (TZS)	Average Value of Livestock Stock per Holding (TZS)	Total Value of Sales (million TZS)	Total Value of Livestock Stock (million TZS)
		Indigenous cattle	512,528	29	1,774,067	596,923	3	609,111	5,684,936	1,061,043	9,902,895
		Improved cattle	54,460	31	91,727	764,130	2	397,503	2,058,441	70,091	362,964
		Indigenous goats	594,459	36	2,720,053	83,237	5	135,527	632,297	226,671	1,057,529
		Improved goats	19,645	39	61,721	100,665	3	122,302	385,610	6,213	19,590
	Mainland Tanzania	Sheep	181,352	29	796,497	76,452	4	97,837	706,694	61,057	441,029
	Walinana Tanzama	Pigs	213,109	42	992,417	196,593	5	384,676	626,288	196,949	320,651
		Indigenous chicken	1,510,444	41	14,998,571	12,295	10	49,479	144,181	184,409	537,359
		Improved chicken	29,207	68	4,202,916	13,222	144	1,297,256	1,029,847	55,572	44,116
		Exotic chicken (layers)	5,950	39	501,051	4,983	84	162,411	1,294,584	2,497	19,903
		Exotic chicken (broilers)	16,482	75	6,657,078	6,858	404	2,079,300	987,385	45,671	21,687
		Indigenous cattle	10,562	34	24,482	735,050	2	571,254	2,529,549	18,008	79,743
		Improved cattle	658	35	1,755	1,276,712	3	1,180,329	2,628,645	2,241	4,990
		Indigenous goats	5,917	41	20,041	112,299	3	154,361	552,699	2,251	8,059
		Improved goats	-	-	-	-	-	-	-	-	-
Agricultural	Zanzibar	Sheep	-	-	-	-	-	-	-	-	-
Households		Indigenous chicken	29,451	41	341,143	15,102	12	71,878	234,961	5,152	16,842
		Improved chicken	947	84	257,025	18,693	271	4,260,288	687,661	4,805	776
		Exotic chicken (layers)	1,341	54	245,613	11,456	183	1,129,042	2,696,253	2,814	6,719
		Exotic chicken (broilers)	2,457	89	4,808,824	7,250	1,957	12,686,110	2,889,891	34,863	7,942
		Indigenous cattle	523,089	29	1,798,549	598,803	3	608,438	5,628,847	1,079,052	9,982,638
		Improved cattle	55,118	31	93,482	773,754	2	405,841	2,064,515	72,332	367,954
		Indigenous goats	600,376	36	2,740,094	83,450	5	135,689	631,609	228,921	1,065,587
		Improved goats	19,730	39	61,892	100,608	3	122,365	385,232	6,227	19,603
		Sheep	181,416	29	796,561	76,462	4	97,811	706,670	61,070	441,219
	Tanzania	Pigs	213,109	42	992,417	196,593	5	384,676	626,288	196,949	320,651
		Indigenous chicken	1,539,895	41	15,339,714	12,357	10	49,902	145,894	189,561	554,201
		Improved chicken	30,154	69	4,459,941	13,537	148	1,373,262	1,021,070	60,376	44,892
		Exotic chicken (layers)	7,291	41	746,665	7,112	102	297,247	1,490,104	5,311	26,622
		Exotic chicken (broilers)	18,939	77	11,465,901	7,023	605	3,258,819	1,198,951	80,534	29,629

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 6-2: Sales of Live Livestock and Stock Value, by Livestock Category During Agricultural Year 2023/24

Holding Category	State	Livestock Group	Number of Agricultural Holdings that Sold Livestock	Percentage of Holdings that Sold Livestock	Total Number of Livestock Sold	Average Unit Price Earned per Livestock Sold	Average Number of Livestock Sold per Agricultural Holding	Average Value of Animal Sales per Holding (TZS)	Average Value of Livestock Stock per Holding (TZS)	Total Value of Sales (million TZS)	Total Value of Livestock Stock (million TZS)
		Indigenous cattle	201	65	5,714	735,818	28	13,562,787	118,227,320	4,204	36,650
		Improved cattle	106	46	4,239	1,477,530	40	27,470,384	319,281,760	6,263	72,796
		Indigenous goats	131	43	2,897	97,881	22	923,651	6,459,381	284	1,983
		Improved goats	18	35	460	178,717	26	1,580,962	17,726,826	82	922
	Mainland Tanzania	Sheep	80	40	2,870	99,086	36	1,407,807	7,253,221	284	1,465
	Maiilialiu Talizallia	Pigs	37	66	1,590	197,060	43	5,595,107	9,338,590	313	523
		Indigenous chicken	117	46	8,587	16,054	73	542,754	969,242	138	246
		Improved chicken	28	61	74,966	5,658	2,677	9,220,662	8,140,492	424	374
		Exotic chicken (layers)	26	53	1,379,879	3,919	53,072	110,368,000	67,701,216	5,408	3,317
		Exotic chicken (broilers)	48	92	10,565,657	10,642	220,118	2,162,353,408	37,326,692	112,442	1,941
		Indigenous cattle	-	20	-	-	-	700,000	12,180,000	4	61
		Improved cattle	5	56	35	1,497,857	7	5,825,000	27,530,556	52	248
		Indigenous goats	4	57	112	156,250	28	2,500,000	10,422,857	18	73
I C1-		Improved goats	-	-	-	-	-	-	-	-	-
Large Scale Farms	Zanzibar	Sheep	-	0	-	-	-	0	1,610,000	0	5
rainis		Indigenous chicken	5	45	1,399	21,294	280	2,708,182	3,319,955	30	37
		Improved chicken	5	100	4,050	21,385	810	17,321,500	9,554,500	87	48
		Exotic chicken (layers)	13	65	20,560	11,836	1,582	12,167,500	39,938,500	243	799
		Exotic chicken (broilers)	10	100	158,012	7,639	15,801	120,710,000	20,160,000	1,207	202
		Indigenous cattle	202	64	5,719	735,787	28	13,358,616	116,544,032	4,208	36,711
		Improved cattle	111	47	4,274	1,477,696	39	26,648,408	308,202,592	6,316	73,044
		Indigenous goats	135	43	3,009	100,054	22	958,793	6,547,739	301	2,056
		Improved goats	18	34	460	178,717	26	1,551,132	17,405,944	82	923
	Tanzania	Sheep	80	39	2,870	99,086	36	1,387,205	7,170,637	284	1,470
	Tanzania	Pigs	37	66	1,590	197,060	43	5,595,107	9,338,590	313	523
		Indigenous chicken	122	46	9,986	16,788	82	632,640	1,066,819	168	283
		Improved chicken	33	65	79,016	6,464	2,394	10,014,862	8,279,120	511	422
		Exotic chicken (layers)	39	57	1,400,439	4,035	35,909	81,904,088	59,654,052	5,651	4,116
		Exotic chicken (broilers)	58	94	10,723,669	10,598	184,891	1,833,056,000	34,557,872	113,649	2,143

Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 6-2: Sales of Live Livestock and Stock Value, by Livestock Category During Agricultural Year 2023/24

Holding Category	State	Livestock Group	Number of Agricultural Holdings that Sold Livestock	Percentage of Holdings that Sold Livestock	Total Number of Livestock Sold	Average Unit Price Earned per Livestock Sold	Average Number of Livestock Sold per Agricultural Holding	Average Value of Animal Sales per Holding (TZS)	Average Value of Livestock Stock per Holding (TZS)	Total Value of Sales (million TZS)	Total Value of Livestock Stock (million TZS)
		Indigenous cattle	512,729	29	1,779,781	597,369	3	611,416	5,704,960	1,065,248	9,939,546
		Improved cattle	54,566	31	95,966	795,643	2	432,464	2,468,092	76,355	435,760
		Indigenous goats	594,590	36	2,722,950	83,253	5	135,671	633,367	226,954	1,059,512
		Improved goats	19,663	39	62,181	101,242	3	123,794	403,342	6,295	20,512
	Mainland Tanzania	Sheep	181,432	29	799,367	76,534	4	98,260	708,812	61,342	442,494
	Maiilialiu Talizallia	Pigs	213,146	42	994,007	196,593	5	385,246	627,241	197,263	321,174
		Indigenous chicken	1,510,561	41	15,007,158	12,297	10	49,513	144,237	184,546	537,605
		Improved chicken	29,235	68	4,277,882	13,090	146	1,305,755	1,037,475	55,996	44,491
		Exotic chicken (layers)	5,976	39	1,880,930	4,203	315	512,548	1,505,566	7,905	23,220
		Exotic chicken (broilers)	16,530	75	17,222,734	9,180	1,042	7,181,591	1,073,213	158,113	23,628
		Indigenous cattle	10,563	34	24,487	735,043	2	571,275	2,531,079	18,012	79,804
		Improved cattle	663	35	1,790	1,281,036	3	1,202,244	2,746,141	2,293	5,238
		Indigenous goats	5,921	41	20,153	112,543	3	155,486	557,435	2,268	8,131
		Improved goats	-	-	-	-	-	-	-	-	-
All Holdings	Zanzibar	Sheep	-	22	-	-	-	43,492	666,409	13	196
8		Indigenous chicken	29,456	41	342,542	15,128	12	72,282	235,434	5,182	16,878
		Improved chicken	952	84	261,075	18,735	274	4,317,939	726,799	4,891	823
		Exotic chicken (layers)	1,354	54	266,173	11,485	197	1,216,924	2,992,754	3,057	7,518
		Exotic chicken (broilers)	2,467	89	4,966,836	7,262	2,014	13,077,765	2,952,506	36,070	8,143
		Indigenous cattle	523,291	30	1,804,268	599,237	3	610,702	5,648,544	1,083,260	10,019,349
		Improved cattle	55,229	31	97,756	804,531	2	440,691	2,471,064	78,648	440,998
		Indigenous goats	600,511	36	2,743,103	83,468	5	135,843	632,710	229,222	1,067,643
		Improved goats	19,748	39	62,352	101,184	3	123,852	402,941	6,309	20,526
		Sheep	181,496	29	799,431	76,544	4	98,235	708,792	61,354	442,689
	Tanzania	Pigs	213,146	42	994,007	196,593	5	385,246	627,241	197,263	321,174
		Indigenous chicken	1,540,017	41	15,349,700	12,360	10	49,943	145,958	189,728	554,483
		Improved chicken	30,187	69	4,538,957	13,414	150	1,383,275	1,029,479	60,887	45,314
		Exotic chicken (layers)	7,330	41	2,147,104	5,105	293	611,210	1,713,875	10,962	30,738
		Exotic chicken (broilers)	18,997	77	22,189,570	8,751	1,168	7,838,008	1,282,434	194,183	31,772

Low number of observations (n<3)/lack of data/Not applicable

Table 6-3: Milk Production and Sales, by Livestock Category During Agricultural Year 2023/24

Holding Category	State	Livestock Group	Number of Holdings that Produce d Milk	Percentage of Holdings that Produced Milk	Total Quantity of Milk Produced (Million Litres)	Average Quantity of Milk Produced per Agricultur al Holding (Litres)	Total Quantit y of Milk Sold (Million Litres)	Share of Milk Sold (%)
		Indigenous cattle	863,747	50	550	637	57	10.4
		Improved cattle	105,639	60	194	1,834	139	71.7
	Mainland Tanzania	Indigenous goats	65,840	4	8	126	-	0.0
	Tanzama	Improved goats	10,303	20	2	181	-	0.0
		Total	997,322	38	754	756	196	26.0
		Indigenous cattle	15,859	50	10	647	7	70.2
A : 1, 1		Improved cattle	1,710	90	5	2,688	4	82.3
Agricultural Households	Zanzibar	Indigenous goats	290	2	0	77	-	0.0
		Improved goats	-	-	-	-	-	-
		Total	17,319	42	15	859	11	73.9
		Indigenous cattle	879,606	50	560	637	64	11.5
		Improved cattle	107,349	60	198	1,848	143	71.9
	Tanzania	Indigenous goats	66,130	4	8	126	-	0.0
		Improved goats	10,303	20	2	181	-	0.0
		Total	1,014,640	38	769	758	207	26.9
		Indigenous cattle	244	79	2	6,956	1	41.3
	M:1 1	Improved cattle	175	77	26	146,315	19	75.2
	Mainland Tanzania	Indigenous goats	-	1	-	-	-	-
		Improved goats	3	6	0	1,648	-	77.9
		Total	387	77	27	70,562	20	73.1
		Indigenous cattle	-	20	-	-	-	-
I C 1		Improved cattle	8	89	0	17,121	0	88.5
Large Scale Farms	Zanzibar	Indigenous goats	-	0	-	-	-	-
T WITTE		Improved goats	-	-	-	-	-	-
		Total	9	60	0	15,372	0	88.5
		Indigenous cattle	245	78	2	6,931	1	41.3
		Improved cattle	183	78	26	140,667	19	75.3
	Tanzania	Indigenous goats	-	1	-	-	-	-
		Improved goats	4	8	0	1,371	0	80.0
		Total	396	76	27	69,308	20	73.2
		Indigenous cattle	863,991	50	552	639	58	10.5
	M:1 1	Improved cattle	105,814	60	219	2,073	158	72.1
	Mainland Tanzania	Indigenous goats	65,842	4	8	126	-	0.0
		Improved goats	10,306	20	2	181	-	0.2
		Total	997,709	38	781	783	216	27.6
		Indigenous cattle	15,860	50	10	647	7	70.2
		Improved cattle	1,718	90	5	2,755	4	82.5
All Holdings	Zanzibar	Indigenous goats	290	2	0	77	-	0.0
-		Improved goats	_	-	-	-	-	-
		Total	17,328	42	15	866	11	74.0
		Indigenous cattle	879,851	50	562	639	65	11.5
		Improved cattle	107,532	60	224	2,084	162	72.3
	Tanzania	Indigenous goats	66,132	4	8	126		0.0
		Improved goats	10,307	20	2	181	0	0.2

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 6-3: Milk Production and Sales, by Livestock Category During Agricultural Year 2023/24

Holding Category	State	Livestock Group	Average Price of a Litre of Milk (TZS)	Average Values of Milk Sales per Holding (TZS)	Average Value of Milk Produced per Holding (TZS)	Total Value of Milk Sales (Million TZS)	Total Value of Milk Produced (Million TZS)
		Indigenous cattle	1,078	598,172	650,814	61,463	562,139
		Improved cattle	1,042	1,766,859	1,944,902	144,695	205,457
	Mainland Tanzania	Indigenous goats	-	-	-	-	-
		Improved goats	-	-	-	-	-
		Total	1,052	1,131,345	796,353	206,158	767,596
		Indigenous cattle	1,984	2,860,717	1,220,199	14,285	19,351
		Improved cattle	1,620	3,585,252	4,315,648	6,132	7,381
Agricultural Households	Zanzibar	Indigenous goats	-	-	-	-	-
		Improved goats	-	-	-	-	-
		Total	1,858	3,228,026	1,555,077	20,417	26,733
		Indigenous cattle	1,180	703,031	661,080	75,748	581,490
		Improved cattle	1,057	1,804,060	1,982,675	150,827	212,839
	Tanzania	Indigenous goats	-	-	-	-	-
		Improved goats	-	-	-	-	-
		Total	1,095	1,201,679	809,647	226,575	794,329
		Indigenous cattle	1,203	9,584,520	7,615,606	843	1,858
		Improved cattle	1,201	160,696,928	170,608,464	23,140	29,856
	Mainland Tanzania	Indigenous goats	-	-	-	-	-
		Improved goats	-	-	1,964,667	-	6
		Total	1,201	112,621,480	81,965,328	23,988	31,721
		Indigenous cattle	-	-	-	-	-
		Improved cattle	1,831	27,746,770	31,067,794	222	249
Large Scale Farms	Zanzibar	Indigenous goats	-	-	-	-	-
		Improved goats	-	-	-	-	-
		Total	1,835	24,963,396	27,937,816	225	251
		Indigenous cattle	1,203	9,485,889	7,588,636	844	1,859
		Improved cattle	1,205	153,699,552	164,508,320	23,362	30,105
	Tanzania	Indigenous goats	-	-	-	-	-
		Improved goats	1,474	2,156,667	1,946,000	6	8
		Total	1,205	109,067,776	80,737,432	24,213	31,972
		Indigenous cattle	1,080	605,861	652,781	62,306	563,997
		Improved cattle	1,061	2,045,827	2,223,846	167,835	235,314
	Mainland Tanzania	Indigenous goats	-	-	-	-	-
		Improved goats	-	-	1,964,667	-	6
		Total	1,066	1,261,513	828,929	230,146	799,317
		Indigenous cattle	1,984	2,860,306	1,220,185	14,286	19,352
		Improved cattle	1,627	3,697,738	4,440,194	6,354	7,630
All Holdings	Zanzibar	Indigenous goats	-	-	-	-	-
		Improved goats	-	-	-	-	-
		Total	1,858	3,258,910	1,568,882	20,642	26,984
		Indigenous cattle	1,180	710,280	663,009	76,592	583,349
		Improved cattle	1,075	2,079,719	2,259,263	174,189	242,944
	Tanzania	Indigenous goats	_	-	-	-	-
		Improved goats	1,474	2,156,667	1,946,000	6	8
		Total	1,105	1,328,533	841,896	250,788	826,301

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 6-3: Milk Production and Sales, by Livestock Category During Agricultural Year 2023/24

Holding Category	State	Livestock Group	Average Lactation Period in Dry Season	Average Number of Livestock Milked per Holding in Dry Season	Average Lactation Period in Wet Season	Average Number of Livestock Milked per Holding in Wet Season	Average Milk Produced per Head in Dry Season	Average Milk Produced per Head in Wet Season
		Indigenous cattle	54	2	76	3	66	173
		Improved cattle	84	1	104	1	496	855
	Mainland Tanzania	Indigenous goats	27	2	36	4	12	23
		Improved goats	47	2	61	2	28	53
		Total	-	-	-	-	-	-
		Indigenous cattle	47	1	68	2	280	153
		Improved cattle	100	2	106	2	809	782
Agricultural Households	Zanzibar	Indigenous goats	25	1	41	1	18	42
		Improved goats	-	-	-	-	-	-
		Total	-	-	-	-	-	-
		Indigenous cattle	54	2	76	3	69	173
		Improved cattle	84	1	104	1	502	854
	Tanzania	Indigenous goats	27	2	36	4	12	23
		Improved goats	47	2	61	2	28	53
		Total	-	-	-	-	-	-
		Indigenous cattle	58	17	81	21	129	228
		Improved cattle	86	16	99	18	8,664	2,474
	Mainland Tanzania	Indigenous goats	-	-	-	-	-	-
		Improved goats	-	-	-	-	-	-
		Total	-	-	-	-	-	-
		Indigenous cattle	-	-	-	-	-	-
		Improved cattle	-	-	-	-	-	-
Large Scale Farms	Zanzibar	Indigenous goats	-	-	-	-	-	-
		Improved goats	-	-	-	-	-	-
		Total	-	-	-	-	-	-
		Indigenous cattle	58	17	81	21	129	228
		Improved cattle	87	16	100	18	8,546	2,455
	Tanzania	Indigenous goats	-	-	-	-	-	-
		Improved goats	-	-	-	-	-	-
		Total	-	-	-	-	-	-
		Indigenous cattle	54	2	76	3	66	173
		Improved cattle	84	1	104	1	548	868
	Mainland Tanzania	Indigenous goats	27	2	36	4	12	23
		Improved goats	47	2	61	2	28	53
		Total	-	-	-	-	-	-
		Indigenous cattle	47	1	68	2	280	153
		Improved cattle	100	2	106	2	809	786
All Holdings	Zanzibar	Indigenous goats	25	1	41	1	18	42
		Improved goats	-	-	-	-	-	-
		Total	-	-	-	-	-	-
		Indigenous cattle	54	2	76	3	69	173
		Improved cattle	84	1	104	1	553	866
	Tanzania	Indigenous goats	27	2	36	4	12	23
		Improved goats	47	2	61	2	28	53
		Total	_	_	_	_	_	_

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 6-4: Egg Production and Sales During Agricultural Year 2023/24

Holding Category	State	Livestock Category	Number of Agricultural Holdings that Produced Eggs	Total Number of Chicken that Laid Eggs	Total Quantity of Eggs Produced (Million)	Average Quantity of Eggs Produced per Agricultural Holding	Total Quantity of Eggs Sold (Million)	Share of Eggs Sold	Average Price of One Egg (TZS)
		Indigenous chicken	2,952,462	12,022,712	350	121	30	36	368
	Mainland	Improved chicken	26,135	438,142	73	5,880	34	57	-
	Tanzania	Exotic chicken (layers)	11,677	1,351,491	209	23,720	39	19	-
		Total	2,970,754	13,812,344	632	216	104	29	368
		Indigenous chicken	67,354	324,750	9	138	1	93	537
Agricultural	7 1	Improved chicken	898	6,893	1	2,744	1	91	-
Households	Zanzibar	Exotic chicken (layers)	2,308	344,529	63	32,182	54	94	-
		Total	68,513	676,172	73	1,074	55	93	537
		Indigenous chicken	3,019,816	12,347,462	360	121	31	36	373
	<b>.</b>	Improved chicken	27,033	445,035	73	5,805	35	57	-
	Tanzania	Exotic chicken (layers)	13,985	1,696,020	272	25,263	92	35	-
		Total	3,039,267	14,488,517	705	236	159	38	373
		Indigenous chicken	212	4,307	0	809	0	44	389
	Mainland	Improved chicken	32	56,226	2	172,516	0	99	-
	Tanzania	Exotic chicken (layers)	47	394,206	69	1,527,634	5	133	-
		Total	262	454,739	71	277,950	5	129	389
		Indigenous chicken	11	211	0	792	-	_	-
Large Scale	7 1	Improved chicken	5	-	-	-	-	_	-
Farms	Zanzibar	Exotic chicken (layers)	20	53,770	13	632,033	2	35	-
		Total	27	54,421	13	471,415	2	36	-
		Indigenous chicken	223	4,518	0	808	0	43	393
	т :	Improved chicken	37	56,666	2	154,770	0	94	-
	Tanzania	Exotic chicken (layers)	67	447,976	81	1,252,064	6	74	-
		Total	289	509,160	84	296,408	7	74	393
		Indigenous chicken	2,952,674	12,027,019	351	121	31	36	368
	Mainland	Improved chicken	26,167	494,368	75	6,055	35	57	-
	Tanzania	Exotic chicken (layers)	11,724	1,745,697	278	31,360	43	20	-
		Total	2,971,016	14,267,083	703	241	109	30	368
		Indigenous chicken	67,365	324,960	9	138	1	93	537
		Improved chicken	903	7,333	1	2,986	1	90	-
All Holdings	Zanzibar	Exotic chicken (layers)	2,328	398,299	76	38,221	56	89	_
		Total	68,540	730,593	86	1,259	50 57	88	537
		Indigenous chicken	3,020,039	12,351,979	360	1,239	31	36	373
		Improved chicken	27,070	501,701	76	5,981	36	57	3/3
	Tanzania	•		,					-
		Exotic chicken (layers)	14,052	2,143,996	354	32,616	99	36	-
		Total	3,039,556	14,997,676	789	264	166	39	373

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 6-4: Egg Production and Sales During Agricultural Year 2023/24

Holding Category	State	Livestock Category	Average Unit Price of a Tray (30 eggs) (TZS)	Average Value of Eggs Sales per Holding	Average Value of Eggs Produced per Holding	Total Value of Eggs Sold (Million)	Total Value of Eggs Produced (Million)	Average Eggs Produced per Clutch per Bird	Average Number of Clutches per Bird
		Indigenous chicken	-	24,236	38,761	11,238	112,582	11	2
	Mainland	Improved chicken	10,454	1,215,448	2,104,087	12,002	25,984	-	-
	Tanzania	Exotic chicken (layers)	8,229	1,207,408	6,355,093	10,641	56,010	-	-
		Total	9,276	432	66,647	207	194,575	11	2
		Indigenous chicken	-	115,582	50,545	453	3,404	10	3
Agricultural	7 1	Improved chicken	10,700	893,662	975,064	270	294	-	-
Households	Zanzibar	Exotic chicken (layers)	9,239	9,525,375	9,851,131	16,531	19,373	-	-
		Total	9,259	18,893	337,429	111	23,071	10	3
		Indigenous chicken	-	25,002	39,028	11,691	115,986	11	2
	т :	Improved chicken	10,459	1,205,899	2,077,138	12,271	26,279	-	-
	Tanzania	Exotic chicken (layers)	8,815	2,575,887	6,992,864	27,173	75,382	-	-
		Total	9,269	654	72,843	318	217,647	11	2
		Indigenous chicken	-	247,741	361,948	4	76	12	3
	Mainland	Improved chicken	9,454	10,629,750	51,738,920	85	673	-	-
	Tanzania	Exotic chicken (layers)	7,505	54,601,808	361,790,464	1,147	16,281	-	-
		Total	7,613	216,182	66,518,844	10	17,029	12	3
		Indigenous chicken	-	-	411,364	-	5	12	3
Large Scale	7 1	Improved chicken	-	-	-	-	-	-	-
Farms	Zanzibar	Exotic chicken (layers)	8,976	56,241,280	184,071,248	562	3,681	-	-
		Total	8,958	388,373	137,435,328	4	3,711	12	3
		Indigenous chicken	-	237,311	364,419	4	80	12	3
	T	Improved chicken	9,258	10,242,840	46,494,000	102	697	-	-
	Tanzania	Exotic chicken (layers)	7,933	55,130,672	307,107,616	1,709	19,962	-	-
		Total	7,998	247,489	73,284,728	14	20,740	12	3
		Indigenous chicken	-	24,245	38,785	11,242	112,657	11	2
	Mainland	Improved chicken	10,446	1,223,070	2,156,282	12,087	26,657	-	-
	Tanzania	Exotic chicken (layers)	8,153	1,334,331	8,160,692	11,788	72,290	-	-
		Total	9,172	452	72,473	217	211,604	11	2
		Indigenous chicken	-	115,568	50,604	453	3,409	10	3
		Improved chicken	10,526	944,992	1,050,246	287	319	_	_
All Holdings	Zanzibar	Exotic chicken (layers)	9,230	9,793,011	11,605,139	17,094	23,054	_	_
		Total	9,249	19,524	391,545	114	26,782	10	3
		Indigenous chicken	-	25,011	39,053	11,695	116,066	11	2
		Improved chicken	10,448	1,214,771	2,129,738	12,374	26,976	-	
	Tanzania	Exotic chicken (layers)	8,758	2,729,878	8,791,638	28,882	95,344	-	-
i anzania		Total	9,204	682	8,791,638 <b>79,777</b>	332	238,386	- 11	2

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 7-1: Production and Sales of Aquatic Products During Agricultural Year 2023/24

Holding Category	Type of Aquatic Product	Number of Holdings that Produced Aquatic Product	Percentage of Holdings that Produced Aquatic Product	Total Quantity Collected (Kg)	Average Quantity Collected per Agricultural Holding (Kg)	Total Quantity Sold (Kg)	Share of Fish Sold (%)	Average Price of Aquatic Product in kg (TZS)	Average Values of Fish Sales per Holding (TZS)	Average Value of Aquatic Product Produced per Holding (TZS)	Total Value of Aquatic Product Sales (in milion TZS)	Total Value of Aquatic Produced (in milion TZS)
	Milk Fish	-	1	-	-	-	-	-	-	-	-	-
	Tilapia	9,908	48	191,489	19	139,731	73	10,127	803,181	373,752	1,415	1,890
	African Catfish	1,984	10	109,779	55	-	3	-	-	-	-	-
Agricultural Households	Crabs	721	3	0	0	-	-	-	-	-	-	-
Trousenoids	Seaweed	6,511	32	3,448,673	530	3,406,071	99	849	470,099	462,597	2,891	2,922
	Others	2,068	10	-	-	-	-	-	-	-	-	-
	Total	20,650	100	3,800,652	187	3,587,397	-	-	538,831	474,545	4,514	5,933
	Milk Fish	-	1	-	-	-	-	-	-	-	-	-
	Tilapia	136	91	1,384,386	10,179	710,950	51	7,817	65,379,932	113,697,368	5,557	10,915
	African Catfish	44	29	7,141	162	5,193	73	7,175	3,104,825	1,958,815	37	53
Large Scale Farms	Crabs	-	0	-	-	-	-	-	-	-	-	-
Turing	Seaweed	-	1	-	-	-	-	-	-	-	-	-
	Others	4	3	-	-	-	-	-	-	-	-	-
	Total	150	100	1,393,131	9,413	717,747	-	-	65,183,492	108,703,600	5,606	10,979
	Milk Fish	171	1	52,315	306	-	76	-	-	-	-	-
	Tilapia	10,044	48	1,575,875	157	850,682	54	8,196	3,775,417	2,485,559	6,972	12,804
	African Catfish	2,028	10	116,920	58	8,754	7	6,290	178,349	932,000	55	920
All Holdings	Crabs	721	3	0	0	-	-	-	-	-	-	-
	Seaweed	6,512	31	3,448,673	530	3,406,071	99	849	470,099	462,597	2,891	2,922
	Others	2,072	10	0	0	-	-	-	-	-	-	-
	Total	20,800	100	5,193,783	253	4,305,144	_	-	1,195,673	1,341,859	10,120	16,912

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 7-2: Main Source of Fingerlings by Type of Aquatic Products During Agricultural Year 2023/24

Holding Category	Product Type	Agricultural Holdings that Produced Aquatic Product		Main Sources (%)								
		Number	Own Source	Neighbor	Government Institution	Private Trade	Natural Water Sources					
Agricultural Households	Milkfish	-	-	-	-	-	-					
	Tilapia	9,908	34	8	33	16	6					
	African catfish	1,984	24	15	0	61	0					
	Milkfish	-	-	-	-	-	-					
Large Scale Farms	Tilapia	136	52	5	17	24	5					
Turing	African catfish	44	45	9	16	18	23					
	Milkfish	171	1	0	0	99	1					
All Holdings	Tilapia	10,044	34	8	33	16	6					
	African catfish	2,028	25	15	0	60	0					

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 8-1: Total Value (TZS) of Crop and Livestock Production during Agricultural Year 2023/24

Holding Category	Sex of Household member	Total Value of Crop Production (million TZS)	Total Value of Livestock Production (million TZS)	Total Value of Crop and Livestock Production (million TZS)
	Male-Headed	9,002,232	2,864,421	11,866,653
Agricultural Households	Female-Headed	1,627,823	371,844	1,999,667
	Total	10,630,055	3,236,265	13,866,319
Large Scale Farms	Total	274,673	185,267	459,940
All Holdings	Total	10,904,727	3,421,532	14,326,259

Table 8-2: Volume (TZS) of Crop and Livestock Production per Hectare During Agricultural Year 2023/24 (Proxy of SDG)

Holding Category	Sex of Household member	Average volume of production per hectare (TZS)	Total volume of production per hectare (TZS)
	Male-Headed	1,931,855	1,383,735
Agricultural Households	Female-Headed	1,448,873	1,143,277
	Total	1,815,953	1,342,815
Large Scale Farms	Total	21,493,170	1,157,457
All Holdings	Total	1,817,663	1,338,121

Table 9-1: Type of Machinery and Equipments Used by Agricultural Holdings by Sex of Household Head during Agricultural Year 2023/24

State	Equipment Category	Agricultural Households						Large Scale Farms	
		Female		Male		Total		Total	
State		Number of Holdings	Percentage of Holdings	Number of Holdings	Percentage of Holdings	Number of Holdings	Percentage of Holdings	Number of Holdings	Percentage of Holdings
Mainland Tanzania	Manually Operated	2,118,367	99.0	6,561,058	98.2	8,679,425	98.4	1,025	97.3
	Animal Powered	535,285	25.0	2,162,464	32.4	2,697,749	30.6	172	16.3
	Machine-Powered Equipment-Irrigation	2,834	0.1	31,435	0.5	34,269	0.4	238	22.6
	Machine-Powered Equipment-General Farm Use	-	0.0	1,150	0.0	2,058	0.0	236	22.4
	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	308,171	14.4	1,252,707	18.8	1,560,877	17.7	711	67.5
	Machine-Powered Equipment-Land Preparation and Planting Equipment	62,780	2.9	224,334	3.4	287,114	3.3	296	28.1
	Machine-Powered Equipment-Crop Maintenance	-	0.0	-	0.0	-	0.0	132	12.5
	Machine-Powered Equipment-Crop Harvesting	9,853	0.5	29,323	0.4	39,176	0.4	78	7.4
	Machine-Powered Equipment-Post-Harvest	165,061	7.7	533,617	8.0	698,678	7.9	80	7.6
	Machine-Powered Equipment-Livestock Production	8,578	0.4	30,979	0.5	39,557	0.4	120	11.4
	Sub Total	2,140,424	100.0	6,681,176	100.0	8,821,600	100.0	1,053	100.0
	Manually Operated	30,485	100.0	119,649	99.9	150,134	100.0	45	100.0
	Animal Powered	-	1.3	236	0.2	627	0.4	-	0.0
	Machine-Powered Equipment-Irrigation	344	1.1	1,824	1.5	2,168	1.4	24	53.3
	Machine-Powered Equipment-General Farm Use	-	0.0	618	0.5	618	0.4	3	6.7
	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	560	1.8	3,481	2.9	4,041	2.7	5	11.1
Zanzibar	Machine-Powered Equipment-Land Preparation and Planting Equipment	-	0.2	1,639	1.4	1,688	1.1	4	8.9
	Machine-Powered Equipment-Crop Maintenance	-	0.0	-	0.0	-	0.0	-	0.0
	Machine-Powered Equipment-Crop Harvesting	-	0.0	-	0.1	-	0.1	-	0.0
	Machine-Powered Equipment-Post-Harvest	979	3.2	2,949	2.5	3,928	2.6	-	4.4
	Machine-Powered Equipment-Livestock Production	-	0.0	258	0.2	258	0.2	4	8.9
	Sub Total	30,485	100.0	119,709	100.0	150,194	100.0	45	100.0
Tanzania	Manually Operated	2,148,852	99.0	6,680,707	98.2	8,829,559	98.4	1,070	97.4
	Animal Powered	535,675	24.7	2,162,700	31.8	2,698,376	30.1	172	15.7
	Machine-Powered Equipment-Irrigation	3,179	0.1	33,259	0.5	36,438	0.4	262	23.9
	Machine-Powered Equipment-General Farm Use	-	0.0	1,768	0.0	2,676	0.0	239	21.8
	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	308,731	14.2	1,256,187	18.5	1,564,918	17.4	716	65.2
	Machine-Powered Equipment-Land Preparation and Planting Equipment	62,830	2.9	225,973	3.3	288,803	3.2	300	27.3
	Machine-Powered Equipment-Crop Maintenance	-,	0.0		0.0		0.0	132	12.0
	Machine-Powered Equipment-Crop Harvesting	9,853	0.5	29,433	0.4	39,286	0.4	78	7.1

Sub Total		2,170,909	100.0	6,800,885	100	8,971,794	100.0	1,098	100.0
Machine-Powered I	Equipment-Livestock Production	8,578	0.4	31,237	0.5	39,814	0.4	124	11.3
Machine-Powered I	Equipment-Post-Harvest	166,040	7.6	536,567	7.9	702,606	7.8	82	7.5

- Low number of observations (n<3)/lack of data/Not applicable
The percentage may go beyond 100% (Holding may have more than one type of equipment)

Table 9-2: Number of Machinery and Equipment Used and Type of Ownership by Sex of the Household Head during Agricultural Year 2023/24

	Agricultural Households											
			Female						Male			
Equipment Category	Total	Percentage Owned Solely	Percentage Co- owned with another Household/Farm	Percentage Rented	Percent with other ownership	Average Number Used	Total	Percentage Owned Solely	Percentage Co- owned with another Household/Farm	Percentage Rented	Percent with other ownership	Average Number Used
Manually Operated	22,866,544	89.2	0.0	0.0	10.8	11	101,293,112	92.0	0.0	0.0	8.0	15
Animal Powered	752,687	34.7	16.9	0.0	48.4	1	3,423,553	48.2	17.1	0.0	34.7	2
Machine-Powered Equipment-Irrigation	7,914	86.2	13.8	0.0	0.0	3	100,242	95.9	0.8	0.0	3.3	3
Machine-Powered Equipment-General Farm Use	6,453	62.8	0.0	37.2	0.0	1	34,866	86.9	0.0	13.1	0.0	1
Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	374,850	9.5	6.4	82.7	1.3	1	1,637,614	21.2	5.0	73.1	0.7	1
Machine-Powered Equipment-Land Preparation and Planting Equipment	65,993	14.9	11.1	74.0	0.0	1	249,477	18.4	10.3	69.6	1.7	1
Machine-Powered Equipment-Crop Maintenance	-	-	-	-	-	-	-	-	-	-	-	-
Machine-Powered Equipment-Crop Harvesting	12,531	46.6	2.5	50.9	0.0	1	31,330	31.8	3.9	64.4	0.0	1
Machine-Powered Equipment-Post-Harvest	326,733	77.9	1.7	20.3	0.1	2	1,028,285	71.7	1.8	25.8	0.8	2
Machine-Powered Equipment-Livestock Production	47,592	95.0	5.0	0.0	0.0	3	193,935	99.0	0.7	0.1	0.2	4
Manually Operated	349,854	97.7	0.0	0.0	2.3	11	1,693,129	97.6	0.0	0.0	2.4	14
Animal Powered	-	-	-	-	-	-	452	86.7	13.3	0.0	0.0	2
Machine-Powered Equipment-Irrigation	33,285	100.0	0.0	0.0	0.0	97	24,592	99.4	0.6	0.0	0.0	13
Machine-Powered Equipment-General Farm Use	-	-	-	-	-	-	-	-	-	-	-	-
Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	639	48.0	0.0	52.0	0.0	1	3,481	72.0	9.8	18.2	0.0	1
Machine-Powered Equipment-Land Preparation and Planting Equipment	-	-	-	-	-	-	3,176	0.0	7.0	89.3	3.7	2
Machine-Powered Equipment-Crop Harvesting	-	-	-	-	-	-	-	-	-	-	-	-
Machine-Powered Equipment-Post-Harvest	2,195	96.4	0.0	3.6	0.0	2	5,153	82.7	7.0	6.0	4.3	2
Machine-Powered Equipment-Livestock Production	489	100.0	0.0	0.0	0.0	2	2,722	100.0	0.0	0.0	0.0	1
Manually Operated	23,216,398	89.3	0.0	0.0	10.7	11	102,986,240	92.1	0.0	0.0	7.9	15
Animal Powered	753,078	34.7	16.8	0.0	48.4	1	3,424,006	48.2	17.1	0.0	34.7	2
Machine-Powered Equipment-Irrigation	41,199	97.3	2.7	0.0	0.0	14	124,833	96.6	0.7	0.0	2.7	4
Machine-Powered Equipment-General Farm Use	6,453	62.8	0.0	37.2	0.0	1	35,100	87.0	0.0	13.0	0.0	1
Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	375,490	9.6	6.4	82.7	1.3	1	1,641,095	21.3	5.0	73.0	0.7	1
Machine-Powered Equipment-Land Preparation and Planting Equipment	66,043	14.9	11.1	74.1	0.0	1	252,652	18.1	10.3	69.8	1.8	1
Machine-Powered Equipment-Crop Maintenance	-	-	-	-	-	-	-	-	-	-	-	-
Machine-Powered Equipment-Crop Harvesting	12,531	46.6	2.5	50.9	0.0	1	31,440	32.0	3.9	64.1	0.0	1
Machine-Powered Equipment-Post-Harvest	328,929	78.0	1.6	20.2	0.1	2	1,033,438	71.7	1.8	25.7	0.8	2
Machine-Powered Equipment-Livestock Production	48,081	95.0	5.0	0.0	0.0	3	196,657	99.0	0.7	0.1	0.2	4

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Cont... Table 9-2: Number of Machinery and Equipment Used and Type of Ownership by Sex of the Household Head during Agricultural Year 2023/24

	Equipment Category			Agricultural	Households					Large Scale I	Farms		
	Equipment Category			To	tal					Total			
State		Total	Percentage Owned Solely	Percentage Co-owned with another Household/ Farm	Percentage Rented	Percent with other ownership	Average Number Used	Total	Percentage Owned Solely	Percentage Co-owned with another Household/ Farm	Percentage Rented	Percent with other ownership	Average Number Used
	Manually Operated	124,159,656	91.5	0.0	0.0	8.5	14	917,276	98.5	0.0	0.0	1.5	896
	Animal Powered	4,176,241	45.8	17.0	0.0	37.2	2	724	80.9	4.0	0.0	15.1	4
	Machine-Powered Equipment-Irrigation	108,156	95.2	1.7	0.0	3.1	3	1,027,281	100.0	0.0	0.0	0.0	4,298
	Machine-Powered Equipment-General Farm Use	41,319	83.1	0.0	16.9	0.0	1	2,320	99.7	0.1	0.1	0.0	9
Mainland	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	2,012,465	19.0	5.3	74.9	0.8	1	4,214	92.8	2.5	4.4	0.3	6
Tanzania	Machine-Powered Equipment-Land Preparation and Planting Equipment	315,469	17.6	10.5	70.5	1.4	1	1,119	95.9	2.1	1.3	0.6	4
	Machine-Powered Equipment-Crop Maintenance	-	-	-	-	-	-	465	98.3	0.9	0.2	0.6	4
	Machine-Powered Equipment-Crop Harvesting	43,861	36.0	3.5	60.5	0.0	1	247	96.4	2.0	0.8	0.8	3
	Machine-Powered Equipment-Post-Harvest	1,355,019	73.2	1.8	24.4	0.6	2	370	91.6	2.2	5.9	0.3	4
	Machine-Powered Equipment-Livestock Production	241,527	98.2	1.5	0.1	0.1	4	1,020	99.4	0.1	0.3	0.2	7
	Manually Operated	2,042,983	97.6	0.0	0.0	2.4	14	19,646	99.5	0.0	0.0	0.5	437
	Animal Powered	843	92.8	7.2	0.0	0.0	1	-	-	-	-	-	-
	Machine-Powered Equipment-Irrigation	57,876	99.8	0.2	0.0	0.0	27	1,658	98.9	0.1	0.0	1.0	69
	Machine-Powered Equipment-General Farm Use	-	-	-	-	-	-	11	100.0	0.0	0.0	0.0	4
Zanzibar	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	4,120	68.3	8.3	23.4	0.0	1	29	93.1	0.0	6.9	0.0	4
	Machine-Powered Equipment-Land Preparation and Planting Equipment	3,226	0.0	6.9	89.5	3.6	2	8	100.0	0.0	0.0	0.0	2
	Machine-Powered Equipment-Crop Harvesting	-	-	-	-	-	-	-	-	-	-	-	-
	Machine-Powered Equipment-Post-Harvest	7,348	86.8	4.9	5.3	3.0	2	-	-	-	-	-	-
	Machine-Powered Equipment-Livestock Production	3,211	100.0	0.0	0.0	0.0	2	18	100.0	0.0	0.0	0.0	5
	Manually Operated	126,202,640	91.6	0.0	0.0	8.4	14	936,922	98.5	0.0	0.0	1.5	876
	Animal Powered	4,177,083	45.8	17.0	0.0	37.2	2	726	81.0	4.0	0.0	15.0	4
	Machine-Powered Equipment-Irrigation	166,032	96.8	1.2	0.0	2.0	4	1,028,939	100.0	0.0	0.0	0.0	3,912
	Machine-Powered Equipment-General Farm Use	41,553	83.2	0.0	16.8	0.0	1	2,331	99.7	0.1	0.1	0.0	9
Tanzania	Machine-Powered Equipment-Tractors, Bulldozers and Other Vehicles	2,016,585	19.1	5.3	74.8	0.8	1	4,243	92.8	2.5	4.4	0.3	6
1 41124114	Machine-Powered Equipment-Land Preparation and Planting Equipment	318,695	17.5	10.5	70.7	1.4	1	1,127	95.9	2.1	1.3	0.6	4
	Machine-Powered Equipment-Crop Maintenance	-	-	-	-	-	-	465	98.3	0.9	0.2	0.6	4
	Machine-Powered Equipment-Crop Harvesting	43,971	36.2	3.5	60.4	0.0	1	247	96.4	2.0	0.8	0.8	3
	Machine-Powered Equipment-Post-Harvest	1,362,367	73.3	1.8	24.3	0.6	2	472	93.2	1.7	4.9	0.2	5
	Machine-Powered Equipment-Livestock Production	244,737	98.2	1.5	0.1	0.1	4	1,038	99.4	0.1	0.3	0.2	7

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

Table 9-3: Number and Percentages of Agricultural Holdings Using a Structure, by Structure Use and Sex of Household Head During Agricultural Year 2023/24

				Agricultural	Households			Large Sc	ale Farms
		Fen	nale	M	ale	Tot	tal	T	otal
State	Structure use	Number of Holdings	Percentage of Holdings*	Number of Holdings	of	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*
	Storing Crops	1,123,99	6 87.	1 3,908,38	6 87.8	5,032,382	2 87.7	65	70.9
	Processing of Crops	10,85	1 0.	3 59,44	9 1.3	70,301	1.2	10	3 11.2
	Storing Plant Protection Products	21,65	0 1.	7 77,87	1 1.7	99,522	2 1.7	6	7.5
	Storing Fertilizers	25,87	7 2.	117,49	8 2.6	143,374	1 2.5	18	8 20.4
	Storing Crop-Related Machinery and Equipment	43,03	4 3.	3 141,29	9 3.2	184,333	3.2	19	3 20.9
	Housing of Poultry	312,87	5 24.	3 1,232,33	7 27.7	1,545,212	2 26.9	16	55 17.9
	Housing of Livestock Other than Poultry	279,83	1 21.	7 1,274,39	7 28.6	1,554,228	3 27.1	29	9 32.4
	Milking	13,78	6 1.	65,85	1 1.5	79,637	7 1.4	7	6 8.2
	Production of Dairy Products	23	8 0.	1,62	3 0.0	1,861	0.0	2	2.4
Mainland Tanzania	Meat Production (Slaughtering and First Cuts)	42.	5 0.	1,26	8 0.0	1,693	3 0.0	2	3.0
Mamiand Tanzama	Meat Processing	(	0.	30	0.0	300	0.0	1	4 1.5
	Preparation of Hides and Skins		0 0.	)	0.0	(	0.0		7 0.8
	Storage for Livestock-Related Machinery and Equipment		0 0.	6,38	3 0.1	6,383	0.1	6	9 7.5
	Other Crop Uses	1,79	9 0.	1 36	0.0	2,158	3 0.0	2	3 2.5
	Other Livestock Uses	9,43	1 0.	7 39,47	0 0.9	48,902	2 0.9	17	18.5
	Storage of Aquaculture Products		0 0.	)	0.0	(	0.0	4	8 5.2
	Storage of Aquaculture-Related Machinery and Equipment		0 0.	)	0.0	(	0.0	2	3 2.5
	Tanks/Water Reservors	90:	2 0.	5,01	3 0.1	5,916	6 0.1	4	.9 5.3
	Fish Ponds/Tanks	17	7 0.	1,73	0.0			8	2 8.9
	Sub Total	1,286,59						92	

<sup>\*</sup> Households Can Have One or More Structure Uses

Cont... Table 9-3: Number and Percentages of Agricultural Holdings Using a Structure, by Structure Use and Sex of Household Head During Agricultural Year 2023/24

				Agricultura	al Households			Large So	cale Farms
		Fe	male	N	<b>Tale</b>	T	otal	Т	otal
State	Structure use	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*
	Storing Crops	13,291	88.4	44,052	71.6	57,343	74.9	14	45.2
	Processing of Crops	74	0.5	228	0.4	302	0.4	2	6.5
	Storing Plant Protection Products	0	0.0	77	0.1	77	0.1	1	3.2
	Storing Fertilizers	490	3.3	3,263	5.3	3,754	4.9	10	32.3
	Storing Crop-Related Machinery and Equipment	892	5.9	1,871	3.0	2,763	3.6	4	12.9
	Housing of Poultry	5,349	35.6	28,646	46.6	33,995	44.4	18	58.1
	Housing of Livestock Other than Poultry	1,208	8.0	9,309	15.1	10,517	13.7	14	45.2
	Milking	0	0.0	312	0.5	312	0.4	1	3.2
	Production of Dairy Products	0	0.0	138	0.2	138	0.2	2	6.5
Zanzibar	Meat Production (Slaughtering and First Cuts)	0	0.0	0	0.0	0	0.0	0	0.0
Zalizivai	Meat Processing	0	0.0	0	0.0	0	0.0	0	0.0
	Preparation of Hides and Skins	0	0.0	0	0.0	0	0.0	0	0.0
	Storage for Livestock-Related Machinery and Equipment	0	0.0	82	0.1	82	0.1	2	6.5
	Other Crop Uses	0	0.0	108	0.2	108	0.1	0	0.0
	Other Livestock Uses	0	0.0	78	0.1	78	0.1	4	12.9
	Storage of Aquaculture Products	0	0.0	0	0.0	0	0.0	1	3.2
	Storage of Aquaculture-Related Machinery and Equipment	0	0.0	0	0.0	0	0.0	0	0.0
	Tanks/Water Reservors	0	0.0	82	0.1	82	0.1	2	6.5
	Fish Ponds/Tanks	0	0.0	0	0.0	0	0.0	1	3.2
	Sub Total	15,029	100.0	61,523	100.0	76,553	100.0	31	100.0

<sup>\*</sup> Households Can Have One or More Structure Uses

Cont... Table 9-3: Number and Percentages of Agricultural Holdings Using a Structure, by Structure Use and Sex of Household Head During Agricultural Year 2023/24

				Agricultura	al Households			Large Scale Far	
		Fe	male	N	<b>Tale</b>	T	otal	T	otal
State	Structure use	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*
	Storing Crops	1,137,287	87.4	3,952,438	87.5	5,089,725	87.5	668	70.0
	Processing of Crops	10,925	0.8	59,677	1.3	70,602	1.2	105	11.0
	Storing Plant Protection Products	21,650	1.7	77,948	1.7	99,598	1.7	70	7.3
	Storing Fertilizers	26,367	2.0	120,761	2.7	147,128	2.5	198	20.8
	Storing Crop-Related Machinery and Equipment	43,926	3.4	143,170	3.2	187,096	3.2	197	20.6
	Housing of Poultry	318,224	24.4	1,260,983	27.9	1,579,207	27.1	183	19.2
	Housing of Livestock Other than Poultry	281,039	21.6	1,283,706	28.4	1,564,745	26.9	313	32.8
	Milking	13,786	1.1	66,163	1.5	79,949	1.4	77	8.1
	Production of Dairy Products	238	0.0	1,761	0.0	1,999	0.0	24	2.5
Tanzania	Meat Production (Slaughtering and First Cuts)	425	0.0	1,268	0.0	1,693	0.0	28	2.9
Tanzama	Meat Processing	0	0.0	300	0.0	300	0.0	14	1.5
	Preparation of Hides and Skins	0	0.0	0	0.0	0	0.0	7	0.7
	Storage for Livestock-Related Machinery and Equipment	0	0.0	6,465	0.1	6,465	0.1	71	7.4
	Other Crop Uses	1,799	0.1	467	0.0	2,266	0.0	23	2.4
	Other Livestock Uses	9,431	0.7	39,548	0.9	48,980	0.8	175	18.3
	Storage of Aquaculture Products	0	0.0	0	0.0	0	0.0	49	5.1
	Storage of Aquaculture-Related Machinery and Equipment	0	0.0	0	0.0	0	0.0	23	2.4
	Tanks/Water Reservors	902	0.1	5,095	0.1	5,998	0.1	51	5.3
	Fish Ponds/Tanks	177	0.0	1,730	0.0	1,907	0.0	83	8.7
	Sub Total	1,301,624	100.0	4,515,334	100.0	5,816,959	100.0	955	100.0

<sup>\*</sup> Households Can Have One or More Structure Use

Table 9-4: Average Storage Capacity by Type of Structure During Agricultural Year 2023/24

				Percentage of I ge Capacity of					Ownership		
Holding Category	State	Type of Structure	Number of Holdings	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
		Traditional Grain Silos	256,105	4.5	108	99.0	0.2	0.0	0.3	0.3	0.2
		Warehouse	232,036	4.0	265,768	49.6	34.0	6.7	3.4	6.1	0.3
		Store	4,551,139	79.3	452	97.3	1.6	0.2	0.3	0.2	0.5
		Cold Storage Rooms	39,478	0.7	67	100.0	0.0	0.0	0.0	0.0	0.0
		Greenhouses/Screenhouses	24,250	0.4	57	100.0	0.0	0.0	0.0	0.0	0.0
		Grain Cribs	76,749	1.3	55	100.0	0.0	0.0	0.0	0.0	0.0
		Machinery sheds	8,873	0.2	4,151	28.9	49.5	0.0	21.6	0.0	0.0
		Crop Drying Sheds	12,620	0.2	410	87.7	5.8	0.0	0.0	6.6	0.0
		Packhouses	23,641	0.4	1,708	90.1	5.3	0.0	0.0	4.6	0.0
		Composting Facilities	1,983	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Silage Pits/Bunkers	-	0.0	-	-	-	-	-	-	-
		Milking Parlors	8,203	0.1	-	100.0	0.0	0.0	0.0	0.0	0.0
		Livestock Barns	2,065,016	36.0	-	99.4	0.3	0.1	0.1	0.1	0.0
		Skin Drying Sheds	-	0.0	-	-	-	-	-	-	-
Agricultural	Mainland	Slaughterhouse	-	0.0	-	-	-	-	-	-	-
Households	Tanzania	Slaughter Slab	-	0.0	-	-	-	-	-	-	-
		Butchery	-	0.0	-	-	-	-	-	-	-
		Skin Storage Sheds	-	0.0	-	-	-	-	-	-	-
		Permanent Animal Crush	-	0.0	-	-	-	-	-	-	-
		Dam	23,517	0.4	-	26.2	0.0	41.0	32.8	0.0	0.0
		Water Trough	2,753	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Dipping Facility for Large Animals	39,258	0.7	-	22.5	0.0	58.1	18.4	1.0	0.0
		Dipping Facility for Small Animals	18,314	0.3	-	35.5	0.0	50.4	14.1	0.0	0.0
		Livestock Spray Race	1,070	0.0	-	79.1	20.9	0.0	0.0	0.0	0.0
		Hatchery	-	0.0	-	-	-	-	-	-	-
		Milk Collection Center	1,668	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Aquaculture Tanks or Ponds	1,907	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Fumigation Chambers	-	0.0	-	-	-	-	-	-	-
		Modern Grain Silos	2,721	0.0	153	100.0	0.0	0.0	0.0	0.0	0.0
		Sub Total	5,740,406	100.0	-	-	-	-	-	-	-

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

<sup>\*</sup> Households can have one or more structure uses

Cont... Table 9-4: Average Storage Capacity by Type of Structure During Agricultural Year 2023/24

				Percentage of I e Capacity of					Ownership		
Holding Category	State	Type of Structure	Number of Holdings	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
		Traditional Grain Silos	717	0.9	12	100.0	0.0	0.0	0.0	0.0	0.0
		Warehouse	498	0.7	-	100.0	0.0	0.0	0.0	0.0	0.0
		Store	58,206	76.0	29	99.9	0.1	0.0	0.0	0.0	0.0
		Cold Storage Rooms	-	0.0	-	-	-	-	-	-	-
		Greenhouses/Screenhouses	395	0.5	-	100.0	0.0	0.0	0.0	0.0	0.0
		Grain Cribs	-	0.0	-	-	-	-	-	-	-
		Machinery sheds	-	0.0	-	-	-	-	-	-	-
		Crop Drying Sheds	-	0.0	-	-	-	-	-	-	-
		Packhouses	-	0.0	-	-	-	-	-	-	-
		Composting Facilities	-	0.0	-	-	-	-	-	-	-
		Silage Pits/Bunkers	-	0.0	-	-	-	-	-	-	-
		Milking Parlors	-	0.0	-	-	-	-	-	-	-
		Livestock Barns	34,388	44.9	-	98.1	0.3	0.0	1.2	0.4	0.0
		Skin Drying Sheds	-	0.0	-	-	-	-	-	-	-
Agricultural	Zanzibar	Slaughterhouse	-	0.0	-	-	-	-	-	-	-
Households	Zalizibai	Slaughter Slab	-	0.0	-	-	-	-	-	-	-
		Butchery	-	0.0	-	-	-	-	-	-	-
		Skin Storage Sheds	-	0.0	-	-	-	-	-	-	-
		Permanent Animal Crush	-	0.0	-	-	-	-	-	-	-
		Dam	-	0.0	-	-	-	-	-	-	-
		Water Trough	-	0.0	-	-	-	-	-	-	-
		Dipping Facility for Large Animals	-	0.0	-	-	-	-	-	-	-
		Dipping Facility for Small Animals	-	0.0	-	-	-	-	-	-	-
		Livestock Spray Race	-	0.0	-	-	-	-	-	-	-
		Hatchery	-	0.0	-	-	-	-	-	-	-
		Milk Collection Center	-	0.0	-	-	-	-	-	-	-
		Aquaculture Tanks or Ponds	-	0.0	-	-	-	-	-	-	-
		Fumigation Chambers	-	0.0	-	-	-	-	-	-	-
		Modern Grain Silos	-	0.0	-	-	-	-	-	-	-
		Sub Total	76,553	100.0						=	

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

<sup>\*</sup> Households can have one or more structure uses

Cont... Table 9-4: Average Storage Capacity by Type of Structure During Agricultural Year 2023/24

				Percentage of lee Capacity of					Ownership		
Holding Category	State	Type of Structure	Number of Holdings	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
		Traditional Grain Silos	256,822	4.4	108	99.0	0.2	0.0	0.3	0.3	0.2
		Warehouse	232,534	4.0	265,584	49.7	33.9	6.7	3.4	6.0	0.3
		Store	4,609,345	79.2	447	97.3	1.6	0.2	0.3	0.2	0.5
		Cold Storage Rooms	39,478	0.7	67	100.0	0.0	0.0	0.0	0.0	0.0
		Greenhouses/Screenhouses	24,645	0.4	57	100.0	0.0	0.0	0.0	0.0	0.0
		Grain Cribs	76,749	1.3	55	100.0	0.0	0.0	0.0	0.0	0.0
		Machinery sheds	8,873	0.2	4,151	28.9	49.5	0.0	21.6	0.0	0.0
		Crop Drying Sheds	12,620	0.2	410	87.7	5.8	0.0	0.0	6.6	0.0
		Packhouses	23,641	0.4	1,708	90.1	5.3	0.0	0.0	4.6	0.0
		Composting Facilities	1,983	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Silage Pits/Bunkers	-	0.0	-	-	-	-	-	-	-
		Milking Parlors	8,203	0.1	-	100.0	0.0	0.0	0.0	0.0	0.0
		Livestock Barns	2,099,404	36.1	-	99.4	0.3	0.1	0.1	0.1	0.0
		Skin Drying Sheds	-	0.0	-	-	-	-	-	-	-
Agricultural	Tanzania	Slaughterhouse	-	0.0	-	-	-	-	-	-	-
Households	1 anzama	Slaughter Slab	-	0.0	-	-	-	-	-	-	-
		Butchery	-	0.0	-	-	-	-	-	-	-
		Skin Storage Sheds	-	0.0	-	-	-	-	-	-	-
		Permanent Animal Crush	-	0.0	-	-	-	-	-	-	-
		Dam	23,517	0.4	-	26.2	0.0	41.0	32.8	0.0	0.0
		Water Trough	2,753	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Dipping Facility for Large Animals	39,258	0.7	-	22.5	0.0	58.1	18.4	1.0	0.0
		Dipping Facility for Small Animals	18,314	0.3	-	35.5	0.0	50.4	14.1	0.0	0.0
		Livestock Spray Race	1,070	0.0	-	79.1	20.9	0.0	0.0	0.0	0.0
		Hatchery	-	0.0	-	-	-	-	_	-	-
		Milk Collection Center	1,668	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Aquaculture Tanks or Ponds	1,907	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0
		Fumigation Chambers	-	0.0	-	-	-	-	-	-	-
		Modern Grain Silos	2,721	0.0	153	100.0	0.0	0.0	0.0	0.0	0.0
		Sub Total	5,816,959	100.0	_	-	_	-	-	-	-

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

<sup>\*</sup> Households can have one or more structure uses

Cont... Table 9-4: Average Storage Capacity by Type of Structure During Agricultural Year 2023/24

				Percentage of Fige Capacity of S					Ownership		
Holding Category	State	Type of Structure	Number of Holdings	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
		Traditional Grain Silos	80	8.7	426	100.0	0.0	0.0	0.0	0.0	0.0
		Warehouse	279	30.2	72,447	80.3	5.7	8.2	0.7	4.3	0.7
		Store	614	66.5	18,500	90.1	2.9	4.9	0.0	2.0	0.2
		Cold Storage Rooms	43	4.7	3,384	81.4	11.6	4.7	0.0	2.3	0.0
		Greenhouses/Screenhouses	23	2.5	-	82.6	0.0	13.0	0.0	4.3	0.0
		Grain Cribs	25	2.7	1,214	92.0	0.0	4.0	0.0	4.0	0.0
		Machinery sheds	114	12.3	_	82.5	5.3	8.8	0.0	3.5	0.0
		Crop Drying Sheds	47	5.1	_	80.9	10.6	4.3	0.0	4.3	0.0
		Packhouses	47	5.1	7,687	63.8	17.0	10.6	0.0	8.5	0.0
		Composting Facilities	9	1.0	-	77.8	11.1	0.0	0.0	11.1	0.0
		Silage Pits/Bunkers	10	1.1	_	90.0	0.0	0.0	0.0	10.0	0.0
		Milking Parlors	58	6.3	_	77.6	1.7	12.1	0.0	6.9	1.7
		Livestock Barns	359	38.9	-	88.9	1.1	7.5	0.3	1.7	0.6
		Skin Drying Sheds	7	0.8	-	57.1	0.0	14.3	0.0	14.3	14.3
Large Scale	Mainland	Slaughterhouse	22	2.4	-	72.7	0.0	13.6	0.0	13.6	0.0
Farms	Tanzania	Slaughter Slab	25	2.7	-	80.0	0.0	16.0	0.0	4.0	0.0
		Butchery	13	1.4	-	69.2	0.0	23.1	0.0	7.7	0.0
		Skin Storage Sheds	4	0.4	-	75.0	0.0	0.0	0.0	25.0	0.0
		Permanent Animal Crush	36	3.9	_	75.0	0.0	19.4	0.0	2.8	2.8
		Dam	82	8.9	-	79.3	0.0	7.3	9.8	3.7	0.0
		Water Trough	53	5.7	_	75.5	0.0	20.8	0.0	1.9	1.9
		Dipping Facility for Large Animals	95	10.3	-	62.1	1.1	25.3	4.2	6.3	1.1
		Dipping Facility for Small Animals	21	2.3	-	61.9	0.0	19.0	14.3	4.8	0.0
		Livestock Spray Race	60	6.5	-	78.3	1.7	15.0	0.0	3.3	1.7
		Hatchery	19	2.1	_	73.7	5.3	5.3	5.3	10.5	0.0
		Milk Collection Center	18	1.9	-	61.1	0.0	16.7	0.0	16.7	5.6
		Aquaculture Tanks or Ponds	82	8.9	-	82.9	2.4	8.5	1.2	4.9	0.0
		Fumigation Chambers	9	1.0	-	77.8	0.0	0.0	0.0	11.1	11.1
		Modern Grain Silos	6	0.6	168,291	100.0	0.0	0.0	0.0	0.0	0.0
		Sub Total	924	100.0	_	-	-	-	-	-	-

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

<sup>\*</sup> Households can have one or more structure uses

Cont... Table 9-4: Average Storage Capacity by Type of Structure During Agricultural Year 2023/24

			Number/l Storag	Percentage of I ge Capacity of	Holdings and Structure				Ownership		
Holding Category	State	Type of Structure	Number of Holdings	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
		Traditional Grain Silos	-	0.0	-	-	-	-	-	-	-
		Warehouse	4	12.9	213	100.0	0.0	0.0	0.0	0.0	0.0
		Store	17	54.8	202	82.4	0.0	17.6	0.0	0.0	0.0
		Cold Storage Rooms	-	3.2	-	-	-	-	-	-	-
		Greenhouses/Screenhouses	-	6.5	-	-	-	-	-	-	-
		Grain Cribs	-	0.0	-	-	-	-	-	-	-
		Machinery sheds	-	3.2	-	-	-	-	-	-	-
		Crop Drying Sheds	-	0.0	-	-	-	-	-	-	-
		Packhouses	-	6.5	-	-	-	-	-	-	-
		Composting Facilities	_	6.5	-	-	-	-	-	-	-
		Silage Pits/Bunkers	-	3.2	-	-	-	-	-	-	-
		Milking Parlors	-	0.0	-	-	-	-	-	-	-
		Livestock Barns	24	77.4	-	91.7	0.0	4.2	0.0	4.2	0.0
		Skin Drying Sheds	-	0.0	-	-	-	-	-	-	-
Large Scale	7 "1	Slaughterhouse	-	0.0	-	-	-	-	-	-	-
Farms	Zanzibar	Slaughter Slab	-	0.0	-	-	-	-	-	-	-
		Butchery	-	0.0	-	-	-	-	-	-	-
		Skin Storage Sheds	-	0.0	-	-	-	-	-	-	-
		Permanent Animal Crush	-	0.0	-	-	-	-	-	-	-
		Dam	-	3.2	-	-	-	-	-	-	-
		Water Trough	-	6.5	-	-	-	-	-	-	-
		Dipping Facility for Large Animals	-	0.0	-	-	-	-	-	-	-
		Dipping Facility for Small Animals	_	0.0	-	-	-	-	-	-	-
		Livestock Spray Race	-	6.5	-	-	-	-	-	-	-
		Hatchery	-	3.2	-	-	-	-	-	-	-
		Milk Collection Center	-	3.2	-	-	-	-	-	-	-
		Aquaculture Tanks or Ponds	-	0.0	-	-	-	-	-	-	-
		Fumigation Chambers	-	0.0	-	-	-	-	-	-	-
		Modern Grain Silos	-	0.0	-	-	-	-	-	-	-
		Sub Total	31	100.0	-	-	-	-	-	-	-

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable

<sup>\*</sup> Households can have one or more structure uses

Cont... Table 9-4: Average Storage Capacity by Type of Structure During Agricultural Year 2023/24

				Percentage of I ge Capacity of					Ownership		
Holding Category	State	Type of Structure	Number of Holdings	Percentage of Holdings*	Average Storage Capacity (25 kg bag)	Owned	Rented	Owned by the Government	Owned by the Community	Cooperatives	Used under Other Arrangement
		Traditional Grain Silos	80	8.4	426	100.0	0.0	0.0	0.0	0.0	0.0
		Warehouse	283	29.6	71,573	80.6	5.7	8.1	0.7	4.2	0.7
		Store	631	66.1	17,947	89.9	2.9	5.2	0.0	1.9	0.2
		Cold Storage Rooms	44	4.6	3,209	81.8	11.4	4.5	0.0	2.3	0.0
		Greenhouses/Screenhouses	25	2.6	-	80.0	0.0	16.0	0.0	4.0	0.0
		Grain Cribs	25	2.6	1,214	92.0	0.0	4.0	0.0	4.0	0.0
		Machinery sheds	115	12.0	-	81.7	5.2	9.6	0.0	3.5	0.0
		Crop Drying Sheds	47	4.9	-	80.9	10.6	4.3	0.0	4.3	0.0
		Packhouses	49	5.1	7,285	65.3	16.3	10.2	0.0	8.2	0.0
		Composting Facilities	11	1.2	-	81.8	9.1	0.0	0.0	9.1	0.0
		Silage Pits/Bunkers	11	1.2	-	90.9	0.0	0.0	0.0	9.1	0.0
		Milking Parlors	58	6.1	-	77.6	1.7	12.1	0.0	6.9	1.7
		Livestock Barns	383	40.1	-	89.0	1.0	7.3	0.3	1.8	0.5
		Skin Drying Sheds	7	0.7	-	57.1	0.0	14.3	0.0	14.3	14.3
Large Scale	. ·	Slaughterhouse	22	2.3	-	72.7	0.0	13.6	0.0	13.6	0.0
Farms	Tanzania	Slaughter Slab	25	2.6	-	80.0	0.0	16.0	0.0	4.0	0.0
		Butchery	13	1.4	-	69.2	0.0	23.1	0.0	7.7	0.0
		Skin Storage Sheds	4	0.4	-	75.0	0.0	0.0	0.0	25.0	0.0
		Permanent Animal Crush	36	3.8	-	75.0	0.0	19.4	0.0	2.8	2.8
		Dam	83	8.7	-	78.3	0.0	7.2	9.6	4.8	0.0
		Water Trough	55	5.8	-	76.4	0.0	20.0	0.0	1.8	1.8
		Dipping Facility for Large Animals	95	9.9	-	62.1	1.1	25.3	4.2	6.3	1.1
		Dipping Facility for Small Animals	21	2.2	-	61.9	0.0	19.0	14.3	4.8	0.0
		Livestock Spray Race	62	6.5	-	77.4	1.6	14.5	0.0	4.8	1.6
		Hatchery	20	2.1	_	75.0	5.0	5.0	5.0	10.0	0.0
		Milk Collection Center	19	2.0	_	63.2	0.0	15.8	0.0	15.8	5.3
		Aquaculture Tanks or Ponds	82	8.6	_	82.9	2.4	8.5	1.2	4.9	0.0
		Fumigation Chambers	9	0.9	_	77.8	0.0	0.0	0.0	11.1	11.1
		Modern Grain Silos	6	0.6	168,291	100.0	0.0	0.0	0.0	0.0	0.0
		Sub Total	955	100.0	-	-	_	_	_	-	-

<sup>-</sup> Low number of observations (n<3)/lack of data/Not applicable
\* Households can have one or more structure uses

Table 9-5: Use of Different Storage Methods During Agricultural Year 2023/24

		Storage Method										
		P	ots	S	acks	Air Tight	Sacks (Pics Bags)	Oper	n Drum			
Holding Category	State	Number of Holdings	Percentage of Holdings*									
	Mainland Tanzania	51,983	1.0	4,443,911	88.3	389,938	7.7	24,390	0.5			
Agricultural Households	Zanzibar	306	0.5	45,871	80.0	0	0.0	3,716	6.5			
	Tanzania	52,289	1.0	4,489,782	88.2	389,938	7.7	28,106	0.6			
	Mainland Tanzania	3	0.5	525	81.1	31	4.8	9	1.4			
Large Scale Farms	Zanzibar	0	0.0	8	57.1	0	0.0	0	0.0			
	Tanzania	3	0.5	533	80.6	31	4.7	9	1.4			

<sup>\*</sup> Households can have one or more storage method

Table 9-5: Use of Different Storage Methods During Agricultural Year 2023/24

			Storage Method									
Holding Category		Air Ti	ght Drum	Heaped or	n the Ground	Other Method						
	State	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*	Number of Holdings	Percentage of Holdings*					
Agricultural Households	Mainland Tanzania	96,582	1.9	246,227	4.9	4,647	0.1					
	Zanzibar	260	0.5	12,979	22.6	145	0.2					
	Tanzania	96,841	1.9	259,206	5.1	4,792	0.1					
	Mainland Tanzania	12	1.9	125	19.3	12	1.3					
Large Scale Farms	Zanzibar	0	0.0	10	71.4	0	0.0					
	Tanzania	12	1.8	135	20.4	12	1.3					

<sup>\*</sup> Households can have one or more storage method

## Annex B: Survey Design and Methodology

## Sampling Design for the Annual Agricultural Sample Survey (AASS 2023/24) of Tanzania

**Domains**: 31 Regions, i.e. Dodoma, Arusha, Kilimanjaro, Tanga, Morogoro, Pwani, Dar Es Salaam, Lindi, Mtwara, Ruvuma, Iringa, Mbeya, Singida, Tabora, Rukwa, Kigoma, Shinyanga, Kagera, Mwanza, Mara, Manyara, Njombe, Katavi, Simiyu, Geita, Songwe, Kaskazini Unguja, Kusini Unguja, Mjini Magharibi, Kaskazini Pemba, Kusini Pemba.

**Frame**: List of 104,071 EAs (Mjini district in Zanzibar excluded as per decision of the country) created from the Population and Housing Census 2022 (PHC 2022) as per last version of March 2024. Available information for each EA: Region, District, Council, Constituency, Division, Ward, Village, EA, Hamlet, Rural/Urban type, number of households, number of agricultural households, number of households growing crops, number of households rearing livestock, number of households practicing aquaculture.

Sampling method: stratified two-stage design.

<u>Frame Limitations</u>: In the frame provided by NBS (National Bureau of Statistics of Tanzania) the EAs coincide with the Hamlets, hence some of them are highly populated (8% of EAs have more than 200 households, hitting the top of 5,257 households). Highly populated hamlets have a higher probability to be extracted in the sample, causing an intense listing operation.

Since the GIS experts of NBS mentioned that partitioning the large hamlets into smaller EAs by using cartographic material was too time-consuming considering the survey work plan and deadlines, first it was proposed an artificial partition of the larger hamlets before the selection of the sample – i.e. that the hamlets with more than 200/150 households could be split into smaller EAs, with the assumption that both the number of households and the number of agricultural households must be distributed equally among the EAs. If these EAs were extracted in the sample, they would have been demarcated from the main hamlet by using cartographic material, paying attention to split the agricultural households equally between EAs. Albeit sub-optimal, this procedure was considered helpful since the demarcation operation would be conducted just on the sampled high-populated hamlets, not on all the large hamlets. However, the procedure could have generated discrepancy between the number of households (and agricultural households) artificially allocated from the hamlet to each EA before the sample extraction and the number found in the field after the demarcation of the hamlet with cartographic material (causing a bias in the sampling weights). In addition, the demarcation based on cartographic material seemed to be difficult for the NBS cartographers.

Considering the drawbacks of this approach, NBS proposed to segment only the large EAs extracted in the sample and to associate to each of them the number of agricultural households as per PHC 2022. Then, only one segment was extracted from each large selected EA. For the AASS 2024, a new listing operation will be conducted simultaneously with the main data-collection. The number of agricultural households listed in the field was generally lower than that reported in the frame, particularly in the segment extracted from the large EAs.

Therefore, it is not advisable to use the same approach for the AASS 2025. For the next survey cycles it is fundamental that NBS develops a frame with EAs completely demarcated and usable for statistical operations (all the EAs must contain at most 200 households and must report the number of agricultural households). Splitting the large EAs in smaller pieces by using cartographic material and ground truth may seem a costly investment, but it is crucial to produce more reliable and precise results from the next surveys, including household and individual surveys. The institutions of Tanzania working on data production and data use can really benefit from it.

## **Sampling units:**

- 1. First stage: Enumeration Areas (Hamlets)
- 2. <u>Second stage: Agricultural households, i.e.</u> households growing crops and/or rearing livestock; aquaculture and bee-keeping activities are considered complementary to the first two primary activities. Households practicing just aquaculture or beekeeping are not considered to be part of the sampling units

(the reason leading to this decision is that no previous information is available to consider in the computation of the sample size precision requirements of the estimates of these two sectors). A household is considered agricultural only if it has at least 25 square meters of planted land and/or one cattle and/or 5 goats/sheep/pigs and/or 50 chickens/ducks/turkeys.

Strata: three strata of EAs in each domain created considering three variables: the number of households growing crops, the number of households rearing livestock and the number of households practicing aquaculture as reported in the frame obtained from the PHC2022. This multivariate stratification has been conducted by the k-means algorithm with the R function *kmeans*. The means of the stratifying variables computed in each stratum and domain are given in Table 1. In general, on average, stratum one is the most populated and contains EAs less involved in agriculture, stratum three is the least populated and its EAs include a lot of households involved in crop cultivation, livestock rearing and aquaculture. In some domains the sample size is low, hence just two strata have been identified.

First stage sampling selection: systematic selection with probability proportional to size (PPS). Within each stratum and domain, the EAs are ordered according to District's and Council's Codes which reflect the geographical proximity, then ordered according to Constituency's, Division's, Ward's, Village's codes. An implicit stratification is also performed, ordering by Urban/Rural type at Ward level. The EAs are selected with probability proportional to size where the measure of size is the number of agricultural households in the EA. If a large EA (more than 200 agricultural households) is selected, it undergoes GIS segmentation in smaller EAs and one EA is selected with SRS, in order to facilitate the listing operation.

**Second stage sampling selection:** <u>simple random sampling</u>. In hamlets with more than 200 households, twelve (12) agricultural households are drawn from the PHC 2022 list with a simple random sampling without replacement procedure in each sampled hamlet by using the Permanent Random Number (PRN) technique, directly in the field immediately after the listing operation.

Table 1: Means of the stratifying variables in each stratum and domain

	Mean HH crops (Stratum 1)	Mean HH livestock (Stratum 1)	Mean HH aquac (Stratum 1)	Mean HH crops (Stratum 2)	Mean HH livestock (Stratum 2)	Mean HH aquac (Stratum 2)	Mean HH crops (Stratum 3)	Mean HH livestock (Stratum 3)	Mean HH aquac (Stratum 3)
Dodoma	56.49	19.38	0.10	169.35	62.21	0.14	401.04	131.98	0.23
Arusha	43.01	24.36	0.14	170.65	147.53	0.49	456.73	311.36	0.42
Kilimanjaro	71.26	38.89	0.21	197.36	109.87	0.37	528.38	224.21	1.25
Tanga	40.50	13.93	0.17	143.12	45.94	0.35	426.29	124.86	0.59
Morogoro	48.43	10.85	0.19	207.34	41.16	0.58	527.14	109.88	1.66
Pwani	42.16	10.06	0.36	201.42	38.57	0.50	667.39	107.71	1.33
Dar es Salaam	5.80	2.42	0.11	20.91	5.99	0.16	51.51	8.73	0.21
Lindi	61.47	12.49	0.43	163.63	33.47	0.99	394.13	63.63	4.79
Mtwara	53.55	10.54	0.45	129.35	22.03	0.67	263.30	40.60	0.87
Ruvuma	58.89	23.38	0.24	143.54	55.75	0.58	419.70	124.50	1.78
Iringa	53.13	17.63	0.16	141.49	50.07	0.26	391.61	108.04	0.40
Mbeya	58.88	23.69	0.25	259.15	96.44	0.93	1274.83	505.61	3.22
Singida	65.66	36.34	0.21	165.90	86.24	0.29	423.01	184.41	0.69
Tabora	67.29	31.69	0.09	228.75	89.38	0.55	700.68	226.92	1.59
Rukwa	61.68	22.88	0.27	185.92	79.85	0.54	521.71	214.78	0.66
Kigoma	67.13	11.61	0.12	238.91	40.86	0.35	806.94	165.77	1.47
Shinyanga	42.63	20.17	0.08	117.01	52.89	0.10	294.82	89.67	0.31
Kagera	81.94	24.98	0.23	237.69	66.37	0.52	752.97	172.95	1.75
Mwanza	34.37	14.38	0.11	127.26	52.70	0.35	446.47	96.71	1.35
Mara	40.30	17.59	0.21	115.00	58.14	0.42	253.71	127.59	0.91
Manyara	84.94	57.58	0.19	196.20	132.20	0.32	437.14	275.33	0.34
Njombe	50.01	14.10	0.18	114.10	28.65	0.38	231.07	47.40	0.68
Katavi	66.92	17.41	0.14	236.09	79.19	0.64	628.14	204.86	0.48
Simiyu	51.12	28.55	0.07	106.96	54.33	0.21	201.85	92.75	0.63
Geita	93.32	36.19	0.18	403.49	90.60	0.99	1555.53	352.41	3.94
Songwe	63.95	26.31	0.36	200.51	84.77	0.57	567.70	182.13	0.57
Kaskazini Unguja	23.37	6.88	0.61	51.44	11.52	1.13	83.09	19.92	1.59
Kusini Unguja	36.03	18.01	1.96	69.91	28.16	5.17	113.26	46.47	5.52
Mjini Magharibi	9.68	2.94	0.16	26.98	5.48	0.35	56.05	10.60	0.66
Kaskazini Pemba	35.26	10.22	3.99	70.54	23.44	6.21	90.00	30.69	64.84
Kusini Pemba	20.04	8.84	0.37	47.13	14.63	1.27	71.26	23.92	1.86

**Sample size:** The total sample size is calculated considering precision requirements of the estimates within each domain. The reference variables used to calculate the sample size are the <u>planted area</u>, the <u>number of Tropical Livestock Units (TLUs)</u> and the planted area of the main crops in each Region as collected in the Annual Agricultural Sample Survey 2023<sup>2</sup> (AASS 2023).

Variables related to aquaculture and beekeeping have not been considered for the sample size calculation because very few sampling units of the AASS 2023 reported information on these sectors, with the consequence that for some domains they cannot be computed because the holdings sampled in them did not practice aquaculture or beekeeping; for other domains the CVs of these variables are too high, increasing too much  $cv_{ACd}^2$  in Formula (1) and, consequently, the sample size required for these domains. Therefore, the survey does not aim at producing reliable estimates for the aquaculture and beekeeping sectors. However, the questionnaire of AASS 2024 will contain a module on aquaculture and beekeeping to collect some information on these sectors.

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<sup>&</sup>lt;sup>2</sup> In the parameters' computation using AASS24 data the agricultural households that don't respect the minimum thresholds (0.00617763 for area planted or 1 for cattle or 5 for small ruminants or 50 for small animals) and those presenting outliers for the variables of interest have been excluded.

In each domain the required sample size is computed according to the following formula:

$$\tilde{n}_d = \frac{1}{g_d} n_{AASS23d} \frac{cv_{AASS23d}^2}{cv_d^{*2}}$$
, (1)

where  $g_d$  is the expected response rate in domain d (it varies from 0.8 to 0.9),  $n_{AASS23d}$  is the sample size used in domain d in AASS 2023,  $cv_{AASS23d}$  is usually the maximum between the CV of the total planted area ( $cv_{PAd}$ ), the CV of the total number of TLUs ( $cv_{TLUd}$ ), the CVs of the planted areas of the main crops in domain d as estimated using AASS 2023 data and  $cv_d^*$  is the maximum acceptable CV for agricultural estimates in domain d for the AASS23. The latter term is set equal to a maximum of 18% for the regions that contribute most to the agricultural sector in terms of planted area and TLUs. In some regions it is set equal to 18%, 20% or 25% according to the contribution of the domain to the agricultural sector. The value of  $cv_{AASS23d}$  in some regions can be equal to  $cv_{PAd}$  or  $cv_{TLUd}$  or also to their average, depending on the contribution of crop cultivation or livestock production to the agricultural sector within the domain. The sample sizes as obtained through this procedure are domain are shown in Table 2. In order to find the number of EAs to sample in each region, it is enough to take the upper integer part of the ratio between the domain sample size and the number of agricultural households that will be selected in each EA and that is set equal to 12. The total number of EAs is then calculated to be equal to 1,504. After a careful revision of these theoretical sample sizes which implied also consultations with NBS and OCGS, the total sample size was set to be 18,048 agricultural holdings in 1,504 EAs.

Table 2: Sample size computed by domain

Region	Total Area Planted (Ha)	Total TLU	Area Planted (%)	TLU (%)	Average contribution area&TLU	Crop 1	Crop 2	Crop 3	CV (%) Area Planted	CV(%)- TLU	CV (%) - Crop 1	CV (%) - Crop 2	CV (%) - Crop 3	Realized sample	max CV (%)	CV* (%)	Response rate	sample size (ag. households)	sample size (EA)	sample size (ag. households) - rounded
Dodoma	1,152,088	441,259	6.9%	6.9%	6.9%	Maize	Sunflower		15.1	17.8	16.1	17.2		756	17.8	18	0.9	822	69	828
Arusha	400,543	490,297	2.4%	7.7%	5.1%	Maize	Beans		14.4	14.8	14.0	19.2		972	14.8	16	0.9	927	77	924
Kilimanjaro	388,442	156,377	2.3%	2.5%	2.4%	Maize	Beans		15.6	17.7	17.4	20.0		576	20.0	20	0.9	638	53	636
Tanga	795,375	292,777	4.8%	4.6%	4.7%	Maize	Beans		13.8	17.8	14.2	26.1		960	17.0	18	0.9	952	79	948
Morogoro	1,082,917	286,499	6.5%	4.5%	5.5%	Paddy	Maize		15.5	21.3	19.1	19.8		792	18.4	18	0.85	971	81	972
Pwani	399,236	99,787	2.4%	1.6%	2.0%	Maize	Cassava		25.5	35.5	27.4	34.5		300	25.5	25	0.85	368	31	372
Dar Es Salaam	615,986	116,337	3.7%	1.8%	2.8%	Maize			34.6	39.7	36.2			240	34.6	28	0.7	525	44	528
Lindi	709,288	18,155	4.2%	0.3%	2.3%	Maize			25.9	31.2	24.5			240	25.9	25	0.9	286	24	288
Mtwara	1,140,117	41,460	6.8%	0.7%	3.7%	Maize	Cassava		22.3	27.3	23.7	31.8		300	22.3	20	0.9	415	35	420
Ruvuma	1,140,559	133,959	6.8%	2.1%	4.5%	Maize	Paddy		20.2	30.0	19.8	27.9		480	20.2	20	0.9	546	46	552
Iringa	307,039	118,242	1.8%	1.9%	1.8%	Maize	Beans		20.2	21.0	20.8	22.9		552	20.2	22	0.8	583	49	588
Mbeya	667,852	336,830	4.0%	5.3%	4.6%	Maize	Paddy		15.1	17.9	16.0	21.3		840	17.9	18	0.9	927	77	924
Singida	761,376	368,283	4.6%	5.8%	5.2%	Maize	Sunflower		23.8	23.9	28.0	28.2		300	23.9	18	0.9	590	49	588
Tabora	762,732	488,090	4.6%	7.7%	6.1%	Maize	Paddy		12.9	13.8	13.0	19.0		960	13.8	15	0.8	1,014	85	1,020
Rukwa	465,370	221,765	2.8%	3.5%	3.1%	Maize	Beans		25.3	33.4	24.7	33.3		240	25.3	25	0.85	290	24	288
Kigoma	347,217	50,803	2.1%	0.8%	1.4%	Maize	Beans	Cassava	21.1	27.1	23.0	23.1	24.7	300	21.1	20	0.9	373	31	372
Shinyanga	547,146	260,941	3.3%	4.1%	3.7%	Maize	Paddy		20.3	21.0	20.5	26.5		360	21.0	20	0.9	441	37	444
Kagera	907,426	272,251	5.4%	4.3%	4.9%	Maize	Beans		18.9	26.4	21.5	19.6		420	18.9	20	0.85	443	37	444
Mwanza	525,449	283,828	3.1%	4.5%	3.8%	Maize	Paddy	Cassava	11.9	13.2	12.1	14.0	14.6	1,080	13.2	15	0.85	990	83	996
Mara	515,442	393,347	3.1%	6.2%	4.6%	Maize	Cassava		17.4	17.4	18.7	20.8		540	17.4	18	0.85	594	50	600
Manyara	615,145	547,504	3.7%	8.6%	6.2%	Maize	Sunflower	Beans	13.3	15.4	14.0	20.2	17.2	960	15.4	16	0.9	993	83	996
Njombe	280,351	74,201	1.7%	1.2%	1.4%	Maize	Beans		24.5	28.1	25.0	35.5		240	24.5	23	0.9	303	25	300
Katavi	279,179	120,323	1.7%	1.9%	1.8%	Maize	Paddy		20.0	22.8	20.2	28.3		372	20.0	22	0.8	385	32	384
Simiyu	722,456	288,181	4.3%	4.5%	4.4%	Maize	Paddy		20.3	21.5	20.5	26.0		348	21.5	18	0.9	553	46	552
Gelta	579,145	221,178	3.5%	3.5%	3.5%	Maize	Paddy	Cassava	12.6	16.3	12.4	15.9	18.4	960	16.3	19	0.8	882	74	888
Songwe	482,558	170,544	2.9%	2.7%	2.8%	Maize			15.2	15.2	14.6			720	15.2	18	0.8	645	54	648
Kaskazini Unguja	24,395	13,278	0.1%	0.2%	0.2%	Cassava	Banana	Paddy	19.6	21.1	21.2	26.2	27.2	420	20.3	25	0.9	309	26	312
Kusini Unguja	25,606	16,099	0.2%	0.3%	0.2%	Cassava	Banana		27.7	28.4	31.3	33.5		204	28.0	25	0.9	285	24	288
Mjini Magharibi	21,901	6,093	0.1%	0.1%	0.1%	Cassava	Banana		38.1	28.9	42.9	35.7		192	28.9	25	0.9	286	24	288
Kaskazini Pemba	25,015	10,445	0.1%	0.2%	0.2%	Cassava	Paddy	Banana	18.2	18.4	19.3	23.8	22.4	444	22.4	25	0.9	398	33	396
Kusini Pemba	37,105	10,700	0.2%	0.2%	0.2%	Cassava	Banana	Paddy	30.5	29.5	31.9	30.3	32.2	156	30.5	25	0.9	259	22	264
Tanzania	16,724,455	6,349,834	100.0%	100.0%		Maize	Paddy		3.0	4.5	2.9	6.8		16,224				17,993	1,504	18,048
Zanzibar																		1,537	129	1,548
Mainland																		16,456	1,375	16,500

**Sample allocations to strata:** the EAs allocations to the strata are computed according to a multivariate criterion which follows the formula below:

$$m_{\rm hd} = m_d \frac{\frac{M_{\rm hd}}{M_d} V_{\rm hd}}{\sum_{g=1}^{H} \frac{M_{gd}}{M_d} V_{gd}},$$
 (2)

where  $m_{hd}$  is the sample size allocated to stratum h in domain d,  $m_d$  is the sample size in domain d as computed in the last column of Table 1,  $M_{hd}$  is the number of EAs in stratum h in domain d,  $M_d$  is the number of EAs in domain d, H is the total number of strata and  $V_{hd}$  is a convex combination of the single variables' variances in stratum h and domain d, i.e.  $V_{hd}^2 = \sum_{k=1}^K q_{kd} S_{hkd}^2$ , with  $S_{hkd}^2$ , with  $S_{hkd}^2$  and K indicating respectively the variance of variable k in stratum h and domain d, the coefficient of importance of the variable k and the total number of variables considered in the allocation procedure. In our case K is equal to three and the stratifying variables are the number of households growing crops (k=1), number of households rearing livestock (k=2) and number of households practicing aquaculture (k=3), whose coefficients qs are respectively 0.4, 0.4 and 0.2 in each domain and stratum. The final EAs allocations by domain are shown in Table 3.

Table 3. EAs allocations to sampling strata in each domain.

	Allocations - EAs							
Region	Stratum1	Stratum2	Stratum3	Total Sample Size				
Dodoma	32	26	11	69				
Arusha	32	35	10	77				
Kilimanjaro	27	21	5	53				
Tanga	44	27	8	79				
Morogoro	44	26	11	81				
Pwani	17	10	4	31				
Dar es Salaam	22	15	7	44				
Lindi	12	8	4	24				
Mtwara	15	12	8	35				
Ruvuma	25	17	4	46				
Iringa	25	18	6	49				
Mbeya	51	20	6	77				
Singida	22	19	8	49				
Tabora	54	23	8	85				
Rukwa	10	10	4	24				
Kigoma	18	9	4	31				
Shinyanga	20	13	4	37				
Kagera	20	13	4	37				
Mwanza	43	32	8	83				
Mara	20	21	9	50				
Manyara	38	31	14	83				
Njombe	10	9	6	25				
Katavi	17	8	7	32				
Simiyu	17	17	12	46				
Geita	52	17	5	74				
Songwe	27	20	7	54				
Kaskazini Unguja	9	11	6	26				
Kusini Unguja	8	10	6	24				
Mjini Magharibi	12	8	4	24				
Kaskazini Pemba	13	15	5	33				
Kusini Pemba	7	9	6	22				

Calculation of sampling weights. The sampling weight assigned to the agricultural households j in EA i in domain d and stratum h is calculated as follows:

$$w_{jhd}=1/\left[\left(m_{hd}\frac{F_{hd}}{F_{hd}}\right)*\left(\frac{n_{hd}}{N_{hd}}\right)\right], (3)$$

where  $m_{hd}$  is the number of EAs selected in stratum h in domain d,  $F_{hd}$  is the total number of agricultural households in the i-th EA and stratum h in domain d as listed in the sampling frame,  $F_{hd}$  is the total number of agricultural households in stratum h and domain d as listed in the sampling frame,  $n_{hd}$  and  $N_{hd}$  are respectively the number of agricultural households sampled and found after the listing operation in the i-th EA in stratum h and domain d.

**Estimation.** In order to estimate the total  $\hat{Y}$  of a variable Y, it's enough to apply the following formula:

$$\sum_{d=1}^{31} \sum_{h=1}^{H} \sum_{i=1}^{m_{hd}} \sum_{j=1}^{n_{hd}} w_{jhd} y_{jhd}, \quad (4)$$

Where  $y_{jhd}$  is the value of the variable Y for unit j in the i-th EA in stratum h and domain d and H is the total number of strata in domain d.

An approximation of the variance of the total  $\hat{Y}$  considering only the PSU component is given by:

$$V(\widehat{Y}) = \sum_{d=1}^{25} \sum_{h=1}^{H} \frac{M_{hd}^2}{m_{hd}(m_{hd}^2)} \sum_{i=1}^{m_{hd}} \left(\widehat{Y}_{hd} - \frac{1}{m_{hd}} \sum_{i=1}^{m_{hd}} \widehat{Y}_{ihd}\right)^2, \quad (5)$$

where  $M_{hd}$  is the total number of EAs found in stratum h and domain d and  $\hat{Y}_{hd}$  is the estimate of the total amount of Y in the i-th PSU in stratum h and domain d.

# Annex C: Questionnaire



The United Republic of Tanzania

# **ANNUAL AGRICULTURAL SAMPLE SURVEY 2023/24**

(This information is collected under the Statistics Act, [Cap 351 R.E 2019])
THIS INFORMATION IS STRICTLY CONFIDENTIAL AND IS TO BE USED FOR STATISTICAL PURPOSES ONLY





REGION:	
DISTRICT:	
COUNCIL:	
WARD/SHEHIA	
/ILLAGE/MTAA	
EA/ENUMERATION AREA:	
HEADNAME/FARMADMINISTRATOR :	
PHONE/SIMU	

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**END OF INTERVIEW** 

# **SECTION 0: SCREENING**

ENOW_ID_SCREEN	ENOW_ID_SCREEN. Enumerator enter his/her code.
SUP_ID_SCREEN	SUP_ID. Enumerator enter his/her team supervisor's code.
CONFIRM	CONFIRM. DO NOT READ OUT LOUD: Do you confirm that the household you are about to list is located in %REGION% region, %DISTRICT% district, %WARD% ward/shehia, %VILLAGE% village, and in the EA number %EA%?

ENLIM ID SCREEN Enumerator enter his/her code

If CONFIRM==1

**FNIIM ID SCREEN** 

**INSTRUCTION**: Go to the household now and attempt to start the interview. To start the interview, seek out a competent respondent. A competent respondent must be 15 years of age or older and must have knowledge of the household agricultural activities. The respondent is preferably the household head.

Should no competent respondent be available at the time of your visit, you can set a maximum of two additional appointments to identify and interview a competent respondent.

If CONFIRM==1

INTVW\_START INTVW\_START. Record the date and time the interview started.

If CONFIRM==1

INFORMED CONSENT:	
	. I am working with The Ministry of Agriculture and the National Bureau of Statistics are
	ture survey and I need to ask you a few questions to assess your agricultural activity. The data will be used to select farms for the survey.
This will take only 5 mi	nutes. If you have any questions related to this survey, please contact at the National Bureau of Statistics on Do you have any questions for me?
If IsAnswered(INTVW_STA	RT)
CONSENT	CONSENT. Can I start asking questions now?
	O No
	○ 1 Yes
If CONSENT==1	
SUB-SECTION - HOUSEHOL	D AGRICULTURAL ACTIVITY - Start
	ADDRESS. For was a state was a second and information that sould have been taken because held, at sect have a sure had
ADDRESS	ADDRESS. Enumerator record any information that could help locate the household: street, house number, identifiable characteristics, etc.
HEAD_NAME	HEAD_NAME. What is the name of the household head?
	* Record the three names of the household head
Q00	Q00. Is %HEAD_NAME% the respondent?
	○ 0 No
	() 1 Yes
W 000 0	
If Q00==0	DECENIANAE William in the annual and anti-many 2
If Q00==0 RESPNAME	RESPNAME. What is the respondent's name?
	RESPNAME. What is the respondent's name?  * Record the three names of the respondent

				$\bigcirc$	1	Wife/husband of the head
				$\bigcirc$	2	Son/daughter of the head
				$\bigcirc$	3	Father/mother of the head
				$\circ$	4	Grandson/granddaughter of the head
				$\circ$	5	
				$\circ$	6	Other
f (IsAnswered(Q01) &&						
	Q02. Did any member of %HEA during	D_NAME%'s household e	engage in ow	n account	crop	cultivation activity
Q02	the 2023/24 agricultural year?					
	* Do not consider crop cultivat	ion activities performed	as paid emp	ployees or	unp	aid workers
				$\circ$	0	No
				$\bigcirc$	1	Yes
Q03	Q03. What was the total area c year?	ultivated by %HEAD_NAM	ME%'s house	ehold durin	g th	e 2023/24 agricultural
	* Include plots cultivated unde	er temporary or permane	ent crops			
f IsAnswered(Q03)						
Q03_unit	Q03_unit. DO NOT READ OUT L	OUD: Unit mentioned by	the respond	dent.		
				$\bigcirc$	1	Hectares
				$\bigcirc$	2	Acres
				$\bigcirc$	3	Square meters
	Q04. Did any member of %HEA	D NAME%'s household e	engage in ow	n account	lives	stock or poultry raising
204	activity during the 2023/24 agr	<del></del>				, , ,
	* Do not include pets, racing h	orses, fighting chicken o	r cattle raise	ed for cattle	e jud	lging
	. ,	, 5		$\bigcirc$	0	No
				$\tilde{\bigcirc}$	1	Yes
f Q04==1					_	. 65
Q05	Q05. During the 2023/24 agricu household?	ultural year, what type of	animals we	re raised by	/ %H	EAD_NAME%'s
	* Select all that apply		1	Cattle		
			2	Goats		

		4	Pigs
		5	Poultry
		6	Rabbits
		7	Other animals not listed above
	_		
If Q05.ContainsAny(1,2,3,4,			ali anal an ilkani khank ana linak an khank
	<u>INSTRUCTION</u> : The following inventory questi particular household holding. If the number of number.		
If Q05.Contains(1)			
Q05_cattle	Q05_cattle. How many cattle did %HEAD_NA	ME%'s household reare	d during 2023/24 Agricultural year?
If Q05.Contains(2)			
Q05_goat	Q05_goat. How many goats did %HEAD_NAN	1E%'s household reared	during 2023/24 Agricultural year?
If Q05.Contains(3)			
Q05_sheep	Q05_sheep. How many sheep did %HEAD_NA	AME%'s household reare	ed during 2023/24 Agricultural year?
If Q05.Contains(4)			
Q05_pig	Q05_pig. How many pigs did %HEAD_NAME%	6's household reared du	ring 2023/24 Agricultural year?
If Q05.Contains(5)			
Q05_poultry	Q05_poultry. How many poultry did %HEAD_	NAME%'s household re	ared during 2023/24 Agricultural year?
	* Poultry includes chicken, ducks and turkey	S	
If Q05.Contains(6)			
	Q05_rabbit. How many rabbits did %HEAD_N	AME%'s household rea	red during 2023/24 Agricultural year?
Q06	Q06. Did any member of %HEAD_NAME%'s h the 2023/24 agricultural year?	ousehold engage in ow	n account bee-keeping activity during
	* Do not consider activities performed as pa	id employees or unpaid	workers
			O 0 No
			O 1 Yes
Q07	Q07. Did any member of %HEAD_NAME%'s h the 2023/24 agricultural year?	ousehold engage in ow	n account aquaculture activity during
	* Do not consider aquaculture activities perf	ormed as paid employe	ees or unpaid workers
			O 0 No
			O 1 Yes

3 Sheep

### *If Q02==1 || Q04==1 || Q07==1*

CONTACT\_2023\_1 CONTACT\_2023\_1. What is %HEAD\_NAME%'s phone number?

\* If no phone number, enter 0000000000

### If IsAnswered(CONTACT\_2023\_1) && CONTACT\_2023\_1! ="00000000000"

CONTACT\_2023\_2 CONTACT\_2023\_2. What is %HEAD\_NAME%'s second phone number?

\* If no second phone number, enter 0000000000

If CONTACT\_2023\_1 == "00000000000" || CONTACT\_2023\_2 == "00000000000"

CONTACT\_2023\_3. Please give me the phone number of a close relative or neighbour of %HEAD\_NAME%

whom I can call to get back in touch with you?

**Holding\_TYPE** CAPI-COMPUTED VARIABLE: 1 if this is a small-scale holding and 2 if large-scale holding.

Scope: Hidden

CAPI-COMPUTED VARIABLE: 1 if this is an agricultural household (Q02 or Q04 equal to 1) and 0 if it is a

**AGRI** non-agricultural household (Q02 AND Q04 = 0).

**ELIGIBLE\_SMALLSCALE**CAPI-COMPUTED VARIABLE: 1 if this is a small holding (at least 25m² cultivated OR 1 cattle OR

5 goats/pigs/sheep OR 50 chicken/ducks) and 99 otherwise.

**ELIGIBLE** CAPI-COMPUTED VARIABLE: 1 if ELIGIBLE\_SMALLSCALE == 1 and Holding TYPE == 1

INTVW\_END INTVW\_END. Record the date and time the interview ended.

#### SUB-SECTION 1 - HOUSEHOLD AGRICULTURAL ACTIVITY - End

If ELIGIBLE==1

**GPS** GPS. Please record the household GPS coordinates in front of the main dwelling.

\* Make sure you are outside, with a clear view of the sky.

**RESULT\_SCREEN** RESULT SCREEN. DO NOT READ OUT LOUD: Please select the screening result.

1 Complete

2 Incomplete - respondent termination

3 Refusal

4 Absent at 2nd appointment

COMMENT\_SCREEN

COMMENT\_SCREEN. Insert any general comments on this screening

If Q02==1 || Q04==1

SELECT\_SURVEY

SCOPE: Supervisor

O No

1 Yes

# If SELECT\_SURVEY==1 || SCREENING==0

# **SECTION 1: START INTERVIEW**

REGION_ID		
Scope: Hidden DISTRICT_ID		
Scope: Hidden COUNCIL_ID		
Scope: Hidden WARD_ID		
Scope: Hidden WARD TYPE		RURAL1 URBAN2 MIXED3
Scope: Hidden VILLAGE_ID		
Scope: Hidden EA_ID		
Scope: Hidden  ENUM_ID. Enumerator enter his/her code.		
SUP ID. Supervisor's code.		

INSTRUCTION: GO TO THE HOUSEHOLD/FARM NOW AND ATTEMPT TO START THE INTERVIEW. TO START THE INTERVIEW, SEEK OUT A COMPETENT RESPONDENT - I.E AN INDIVIDUAL OF 15 YEARS OR ABOVE WHO KNOWS THE HOUSEHOLD/FARM'S AGRICULTURAL ACTIVITIES. THE RESPONDENT FOR THIS HOUSEHOLD/FARM WILL PREFERABLY BE %HEADNAME%.

If Holding_TYPE==1					
If Q1==1    Holding_TYPE==2					
INTVW_STARTa. INTERVIEW START DATE AND TIME (1st attempt).					
	DATE	HH	MM		
If Q1==1    Holding_TYPE==2 2a. Is %HEADNAME% available for the interview?  YES1 NO0					
-					
If Q2a==0 3a. Is there any other competent respondent to answer questions on the agricultural a	ctivities of the household,  YES1 NO0	/farm? (eg., a	rea planted,	, production, input use, etc	c.)
If Q3a==0 INSTRUCTION: SET UP AN APPOINTMENT AND COME BACK LATER TO INTERVIEW A CO APPOINTMENT.	MPETENT RESPONDENT. \	YOU MAY CO	NTACT %HEA	ADNAME% AT %PHONE% 1	TO SET A 1ST
If Q3a==0 INTVW_STARTb. INTERVIEW START DATE AND TIME (2nd attempt).	DATE	НН	MM	ı	

If Q3a==0 2b. Is %HEADNAME% available for the interview?  YES1 NO0		S1 )0
If Q2b==0		
3b. Is there any other competent respondent to answer questions on the agricultural activities of the household/farm? (eg., area planted, production, input use, etc.)  - YES1 NO0  If Q3b==0  INSTRUCTION: SET UP AN APPOINTMENT AND COME BACK LATER TO INTERVIEW A COMPETENT RESPONDENT. YOU MAY CONTACT %HEADNAME% AT %PHONE% TO APPOINTMENT.	NO	ND
If Q3b==0 INTVW_STARTc. INTERVIEW START DATE AND TIME (3rd attempt).  DATE HH MM  If Q3b==0		
2c. Is %HEADNAME% available for the interview?  - YES1 NO0  3c. Is there any other competent respondent to answer questions on the agricultural activities of the household/farm? (eg., area planted, production, input use, etc.)  YES1 NO0	NO YE	ES1 )0
If (Q2a==1    Q3a==1  Q2b==1  Q3c== 1 )  4. Is %HEADNAME% the respondent?  YES1 NO0		SS1 )0

5. What is the name of the respondent? \* Record the three names of the respondent

**CAPI RESPNAME**: Stores the respondent name, %HEADNAME% if Q4==1 or %Q5% if Q4==0.

#### If (Q2a==1 || Q3a==1||Q2b==1||Q3b==1||Q2c==1||Q3c==1)

Hello, I am (name) from the National Bureau of Statistics (NBS)/Office of Chief Government Statistician (OCGS).

We are conducting an annual agricultural survey in Tanzania. Your household/farm has been randomly chosen to participate in this survey. Your cooperation and answers would be extremely

important since they reflect the status of many of our farmers who live in similar conditions. I would greatly appreciate if your household/farm participated in this survey, answering questions on

the agricultural activities it has undertaken. The information you provide will assist all levels of government and other organisations to better understand the agricultural sector. Please be aware

that all information collected in this survey will be kept strictly confidential. If you are not comfortable to respond to specific questions please inform me.

Please let me know if I can go ahead with

the interview.

CONSENT. Can I start asking questions now?

YES.	•	
NO	•	

#### If CONSENT==1

CONTACT\_2023\_1. What is %RESPNAME%'s phone number?

\* If no phone number, enter 000

## If IsAnswered(CONTACT\_2023\_1) && CONTACT\_2023\_1! ="000"

CONTACT 2023 2. What is %RESPNAME%'s second phone number?

\* If no phone number, enter 000

# If Holding\_TYPE==1 && (CONTACT\_2023\_1 == "000" || CONTACT\_2023\_2 == "000")

CONTACT\_2023\_3. Please give me the phone number of a close relative or neighbor of %RESPNAME% whom I can call to get back in touch with you?

\* If no phone number, enter 000

#### If CONSENT==1

**ENUMERATOR**: I am going to ask you questions about the past short-rains season, also known as VULI SEASON and the ongoing long-rains season, also called MASIKA. The VULI SEASON is the

one that normally starts in October and ends in January.

6. Did you or any member of your household/farm engage in own-account crop cultivation during the Vuli or Masika seasons in the past 2023/2024 agricultural year?  * Do not consider crop cultivation activities performed as paid employees or unpaid workers  YES1  NO0	YES1 NO0
7. Did you or any member of your household/farm engage in own-account livestock or poultry rearing from October 2023 to September 2024?  YES1  NO0  * Do not include pets, racing horses, fighting chicken or cattle raised for cattle judging	YES1
8. Did you or any member of your household/farm engage in own-account bee-keeping from October 2023 to September 2024?  YES1 NO0  9. Did you or any member of your household/farm engage in own-account aquaculture activity from October 2023 to September 2024?  * Do not consider aquaculture activities performed as paid employees or unpaid workers YES1 NO0	YES1 NO0 YES1
CAPI VARO: IS THE ANSWER 'YES' IN 6 AND/OR 7, or 'YES' IN 9 AND LARGE-SCALE HOLDING	

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#### IF VAR0==true && Holding\_TYPE==1

## SECTION 2: HOUSEHOLD MEMBERS AND HOLDER IDENTIFICATION

IN ORDER TO MAKE A COMPREHENSIVE LIST OF INDIVIDUALS CONNECTED TO THE HOUSEHOLD, USE THE FOLLOWING PROBE QUESTIONS:

First, give me the names of all the members of your immediate family who normally live and eat their meals together here.

WRITE DOWN NAMES, SEX, AND RELATIONSHIP TO HH HEAD. LIST HOUSEHOLD HEAD ON LINE 1.

Then, give me the names of any other persons related to you or other household members who normally live and eat their meals together here.

Then, give me the names of other persons who are not present now but normally live and eat their meals here. For example, household members studying elsewhere or travelling.

Finally, give me the names of any other persons not related to you or other household members, but who normally live and eat their meals together here, such as servants, lodgers, or other who are not relatives.

DO NOT LIST SERVANTS WHO HAVE A HOUSEHOLD ELSEWHERE, AND GUESTS WHO ARE VISITING TEMPORARILY AND HAVE A HOUSEHOLD ELSEWHERE.

If s2q04>=15

					If s2q04>=15
	1.	2.	3.	4.	6.
	NAME		In this household, what is	How old is	Does [NAME]
		What is	[NAME]'s relationship to the	[NAME]?	take
	MAKE A COMPLETE LIST OF	the sex of	head?		important
	ALL INDIVIDUALS WHO	[NAME]?		IF LESS THAN	economic
	NORMALLY LIVED AND ATE			1 YEAR OF	decisions or
	THEIR MEALS TOGETHER IN			AGE, TYPE	everyday
₽	THIS HOUSEHOLD IN THE			ZERO	routine
COD	PAST 6 MONTHS, STARTING	MALE1	HEAD OF HOUSEHOLD1 SPOUSE2 SON/DAUGHTER3		decisions
DE	WITH THE HEAD OF	FEMALEO	FATHER/MOTHER		concerning
	HOUSEHOLD.		OTHER RELATIVE 6 OTHER NOT RELATIVE		the farm?
	/CONFIDNATIVAT				
	(CONFIRM THAT				
	HOUSEHOLD HEAD HERE IS SAME AS HOUSEHOLD				YES1 NO0
	HEAD LISTED ON COVER.)				
	HEAD LISTED ON COVER.)				
	LIST	CODE	CODE	YEAR	CODE
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

## SECTION 2: HOUSEHOLD MEMBERS AND HOLDER DENTIFICATION

IF 18<=age<=64 and household selected for WEN survey

			if CAPI-VAR1==1	if CAPI-VAR1==1	if CAPI-VAR1==1		WEN survey
	1.	CAPI-VAR1	7.	8.	9.	9a.	11.
	NAME	PROGRAMMED	Has [NAME]	What is [NAME]'s highest	Has [NAME]	From which source	Will
	MAKE A COMPLETE	IN CAPI: Is	ever	completed educational	ever	has [NAME] received	[NAME] be
	LIST OF ALL	Q6==1?	attended	level?	received	an agricultural	present for
	INDIVIDUALS <u>WHO</u> NORMALLY LIVED	·	school?		any formal	training?	further
	AND ATE THEIR			NURSERY/PRESCHOOL0	or informal	Government Extension	interviews
	MEALS TOGETHER IN			PRIMARY EDUCATION INCOMPLETE1 PRIMARY EDUCATION COMPLETE2	training in	Service1	today or within the
	THIS HOUSEHOLD IN THE PAST 6 MONTHS,	YES1 NO0 ▶ NEXT LINE		SECONDARY/ADVANCED EDUCATION INCOMPLETE	agriculture?	NGO or Non-Governmental Extension Services2	next two
D	STARTING WITH THE	NOO P NEMI EINE		COMPLETE	agriculture:	Academic	days?
CO	HEAD OF HOUSEHOLD.			UNIVERSITY		Institutions	aays.
DE	(CONFIRM THAT		YES1 NO0 ▶ Q9			Farmer Group or	
	HOUSEHOLD HEAD					Association	
	HERE IS SAME AS HOUSEHOLD HEAD				YES1 NO0	Trader or market	
	LISTED ON COVER.)					stakeholder	
	,					( , , , , , , , , , , , , , , , , , , ,	YES1
							NO0
	LIST	CODE	CODE	CODE	CODE	CODE	CODE
1							
2							
3							
4							

## If Holding\_TYPE==1

- \* Read answers
- \* Select all that apply

#### Ask if VAR0==true

#### **SECTION 3. FIELD ROSTER**

List all the fields accessed or used by the farm in the past 2023/2024 agricultural year.

Include fields that were used partially or entirely for crop cultivation (including vegs and fruit trees and kitchen gardens), farm buildings, farmyards, temporary or permanent pastures, forests and other wooded land, aquaculture. Include also fields that were left temporarily fallow or unused.

A FIELD IS ANY PIECE OF LAND OF ONE LAND TENURE TYPE ENTIRELY SURROUNDED BY OTHER LAND, WATER, ROAD, FOREST OR OTHER FEATURES NOT FORMING PART OF THE farm, OR FORMING PART OF THE farm UNDER A DIFFERENT LAND TENURE TYPE.

			If Q2a==0	If Q2a==0		_	_
	1.	2a	2b	2c	s3q03	4A	5A
FIELD ID	FIELD	Is the [FIELD] field located in [DISTRICT] district?	In which region is [FIELD] field located?	In which district is [FIELD] field located?	What type of tenure rights does [FIELD] has?  1. Customary rights of occupancy 2. Granted rights of occupancy 3. Purchased 4. Rented/leased in 5. Sharecropped in 6. Borrowed for free 7. Moved in without permission 8. Communal land rights 9. Inherited 10. Other tenure rights	What is the area of this [FIELD] field?  INSTRUCTION: THE AREA IS <u>DECLARED</u> BY THE RESPONDENT. IF THE AREA IS REPORTED ON THE FIELD DOCUMENT, ASK TO SEE THE DOCUMENT  CODES FOR UNIT OF <u>MEASUREMENT:</u> HECTARE	How did the household/farm use this [FIELD] field during the past 2023/24 VULI SEASON?  SELECT ALL THAT APPLY  RESIDENTIAL
	TEXT	TEXT	CODE	CODE		NUMBER UNIT MEASUREMENT	CODE
1							
2							
3							

## Ask if VAR0==true

## **SECTION 3. FIELD ROSTER**

## if VAR 2 == 1 OR VAR3 == 1 OR Q5a.Contains(6) OR q5b.Contains(6)

	1.	5A_1	CAPI-VAR2	5B	5B_1	CAPI-VAR3	CAPI-VAR4
	FIELD	What was the size of the area	PROGRAMME	How did the	What was the size of the	PROGRAMME	PROGRAMME
	NAM	used for [CROP	D IN CAPI:	household/farm use this	area used for [CROP	D IN CAPI: Is	D IN CAPI:
	E	PRODUCTION/KITCHEN	Was [FIELD]	[FIELD] field during the past	PRODUCTION/KITCHEN	[FIELD] used	Was [FIELD]
		GARDEN/FARMYARD/TEMPORARI	used for	2023/24 MASIKA SEASON?	GARDEN/FARMYARD/TE	for growing	used for
		LY FALLOW] during the past	growing crops	SELECT ALL THAT APPLY	MPORARILY FALLOW]	crops in the	growing crops
		2023/24 VULI season?	in the past	RESIDENTIAL1 KITCHEN GARDEN/FARMYARD2	during the past 2023/24	2023/2024	either in VULI
П			2023/24 VULI	CROP PRODUCTION3 TEMPORARY GRAZING4	MASIKA AND DRY	MASIKA	or in MASIKA?
FIELD ID		CODES FOR UNIT OF MEASUREMENT: HECTARE	YES1	PERMANENT GRAZING. 5 TEMPORARILY FALLOW. 6 FARM BUILDINGS. 7 AQUACULTURE. 8 FOREST/WOODED LAND. 9 BUSINESS/COMMERCIAL. 10 UNUSED. 11 RENTED OUT/SHARECROPPED OUT FOR AGRICULTURE. 12 RENTED OUT FOR NON- AGRICULTURE. 13 GAVE OUT FOR FREE. 14 OTHER (SPECIFY). 99	CODES FOR UNIT OF MEASUREMENT: HECTARE	YES1	YES1 NO0
	TEXT			CODE			
1							
2							
3							

## If Any.Q05A.Contains(12) | | Any.Q05B.Contains(12)

6. What is the total amount earned from renting out /sharecropping out your land in the past 2023/2024 agricultural year?

<sup>\*</sup>If sharecropped out, estimate the cash value

<sup>\*</sup>TZS

## Ask if VAR2\_ALLFIELDS == true || FIELD.Any(x=>x. s3q05a contains (6))

## **SECTION 4. VULI PLOT ROSTER**

									If s4q02.InList(1,2)	If s4q02.InList(1,2)			
I am about to ask you			1.	2.	3.							4.	5a.
questions about the paragraph [FIELD] field in the paragraph 2023/2024 VULI SEAS Please list all plots curve with crops, used as king ardens/backyards or fallow during the pass 2023/2024 VULI SEAS A PLOT IS DEFINED AS CONTINUOUS PIECE ON WHICH A SPECIFIC OR A MIXTURE OF CR GROWN OR WHICH IS OR WAITING TO BE PIECE ON WAITING TO BE PIECE ON WAITING TO BE PIECE OR WAI	olots in st ON.  Itivated tchen left to ON.  G A DF LAND C CROP OPS IS	PLOT ID	PLOT NAME	During the past 2023/24 VULI SEASON, how was this [PLOT] plot used?  READ ANSWERS  A KITCHEN GARDEN/BACKYARD1 CULTIVATED WITH CROPS	What was the area of this [PLOT] plot?  INSTRUCTION: FARMER DECLARES PLOT AREA (NO MEASUREMENT)  CODES FOR UNIT: HECTARE					Was this [PLOT] plot in pure stand or mixed during the past 2023/24 VULI SEASON?  PURE STAND1 MIXED CROPPING2 INTERCROPPING3	Was there any irrigation infrastructure on this [PLOT] plot during the past 2023/24 VULI SEASON?  INSTRUCTION: INCLUDES FULLY CONTROLLED IRRIGATION AND PARTIALLY CONTROLLED IRRIGATION.  YES1 NO0		
		-	TEXT	CODE			NII	JMBE	R		UNIT	CODE	CODE
1		1	i EXT	CODE			110	10101			JIVII	CODE	CODE
1		2							•				
1		3											
1		4											
1		:											
2		1											
2		2											

## Ask if VAR2\_ALLFIELDS == true || IELD.Any(x=>x.s3q05a contains(6))

## **SECTION 4. VULI PLOT ROSTER**

If

				If s4q05a==1	If s4q05a==1	s4q02.InList(1,2)	If s4q07==1
FIELD ID	I am about to ask you questions about the plots in [FIELD] field in the past 2023/2024 VULI SEASON.  Please list all plots cultivated with crops, used as kitchen gardens/backyards or left fallow during the past 2023/2024 VULI SEASON.  A PLOT IS DEFINED AS A CONTINUOUS PIECE OF LAND ON WHICH A SPECIFIC CROP OR A MIXTURE OF CROPS IS GROWN OR WHICH IS FALLOW OR WAITING TO BE PLANTED.	PLOT ID	1. PLOT NAME	5b.  Approximately what percentage or proportion of [PLOT] plot was irrigated during the past 2023/24 VULI SEASON?	6.  What was the main method of irrigating plants/pouring water on the plants on this [PLOT] plot during the past 2023/24 VULI SEASON?  READ ANSWERS  MANUAL IRRIGATION	7. Did you apply any organic fertilizer on this [PLOT] plot during the past 2023/2024 VULI SEASON?  YES1 NO0	8.  Which organic fertilizers were applied on this [PLOT] plot during the past 2023/24 VULI SEASON?  SELECT ALL THAT APPLY  SOLID MANURE/FARM YARD MANURE
			TEXT	%	CODE	CODE	CODE
1		1					
1		2					
1		3					
1		4					
1		:					
2		1					
2		2					

## Ask if VAR2\_ALLFIELDS == true || FIELD.Any(x=>x.s3q05a contains(6))

## **SECTION 4. VULI PLOT ROSTER**

If s4q02.InList(1,2) If s4q09==1

If s4q02.InList(1,2) If s4q11==1

_				11 3440211112131(1)2)	11 3 7 9 0 3 1		3-140E1111E13t(1)E)	11 3 7 9 2 2 - 2
	I am about to ask you		1.	9.	10.	10a (New)	11.	12.
	questions about the plots in		PLOT	Did you apply any	Which inorganic (chemical) fertilizers	Approximately	Did you apply	Which pesticides were
	[FIELD] field in the past		NAME	inorganic fertilizer	were applied on this [PLOT] plot	what	any pesticide on	applied on this [PLOT] plot
	2023/2024 VULI SEASON.			on this [PLOT] plot	during the past 2023/24 VULI	percentage or	this [PLOT] plot	during the past 2023/2024
				during the past	SEASON?	proportion of	during the past	VULI SEASON?
	Please list all plots cultivated			2023/2024 VULI	SELECT ALL THAT APPLY	[PLOT] plot	2023/2024 VULI	
	with crops, used as kitchen			SEASON?	UREA8	was applied	SEASON?	SELECT ALL THAT APPLY
	gardens/backyards or left				DIAMMONIUM PHOSPHATE (DAP)9 CALCIUM AMMONIUM NITRATE	with inorganic		
≖	fallow during the past	₽		YES1	(CAN)	(chemical)		INSECTICIDES16
FIELD	2023/2024 VULI SEASON.	PLOT		NO0	NITROGEN, PHOSPHORUS, POTASSIUM	fertilizer past		HERBICIDE (SOLID)17 HERBICIDE (LIQUID)18
۱ĕ		₽.			(NPKs)12 MINJINGU NAFAKA PLUS13	2023/24 VULI		FUNGICIDE19
	A PLOT IS DEFINED AS A	_			NPS ZINC14	SEASON?		RODENTICIDE20 OTHER (SPECIFY)21
	CONTINUOUS PIECE OF				FOMI		YES1 NO0	OTHER (SPECIFI)21
	LAND ON WHICH A SPECIFIC				PANDAPLUS17		NO U	
	CROP OR A MIXTURE OF				MACROP			
	CROPS IS GROWN OR WHICH				TRIPLE SUPER PHOSPHATE (TSP) 20			
	IS FALLOW OR WAITING TO				MURIATE OF POTASH (MOP)21 OTHER(SPECIFY)99			
	BE PLANTED.				, , , , , , , , , , , , , , , , , , , ,			
			TEXT	CODE	CODE	PERCENTAGE	CODE	CODE
1		1						
1		2						
1		3						
1		4						
1		:	_					
2		1						
2		2						

## **SECTION 5. VULI CROP ROSTER**

					IF sect 4-Q4 ==2	IF CAPI-VAR5==1	IF CAPI-VAR5==1	IF CAPI-VAR5==1
		1		CAPI-VAR5	2	3.	TEMPORARY	CROPS
		1.		CAPI-VARS	2		4.	4a (new)
		I am about to ask you about crops on [FIELD] field, [PLOT].		PROGRAMMED IN CAPI: IS [CROP] TEMPORARY OR PERMANENT?	During the past 2023/24 VULI SEASON, approximately what percent of [PLOT] was planted with [CROP]?	When was [CROP] planted on [PLOT] during the past 2023/24 VULI SEASON?	Which [CROP] seeds did you use during the past 2023/24 VULI SEASON?	What was the total quantity of [CROP] seeds planted during the past VULI SEASON on this [PLOT]?
FIELD ID	PLOT ID	List all the temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 VULI SEASON.	CROP ID	TEMPORARY1 PERMANENT2		OCTOBER 202310 NOVEMBER 202311 DECEMBER 202312 JANUARY 202401 FEBRUARY 202402	SELECT ALL THAT APPLY  IF RESPONDENT DOES NOT KNOW, ASK TO SEE PACKAGING  IMPROVED1 TRADITIONAL2 IMROVED RECYCLED3	KILOGRAM1 SEEDLINGS2 CUTTINGS3 GRAMS4
		CROP NAME		CODE	PERCENTAGE	CODE	CODE	CODE
1	1		2					
1	1		3					
1	2		1					
1	2		2					
1	2		3					
1	3		1					
1	3		2					
2	1		1					
2	1		1					
2	1		1					
2	1		2					
2	1		3					

## **SECTION 5. VULI CROP ROSTER**

					IF sect 4-Q4 ==2 or 3		IF Q5==0
		1		CAPI-VAR5			
		1.		CAPI-VAR5	4b (new)	5.	6.
		I am about to ask you about crops on [FIELD] field, [PLOT].			[CROP] on this [PLOT] in pure	[CROP] on this [PLOT] during	Why did not you harvest [CROP] from [PLOT] during the past VULI SEASON of the 2023/2024 agricultural year? IF SEVERAL REASONS, REPORT THE MAIN ONE.
FIELD ID	PLOT ID	List all the temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 VULI SEASON.	CROP ID	PROGRAMMED IN CAPI: JE, [ZAO] NI LA MUDA AU LA KUDUMU?  TEMPORARY1 PERMANENT2	KILOGRAM1 SEEDLINGS2 CUTTINGS3 GRAMS4	YES1 NO0	TOO LITTLE RAIN/DROUGHT
1	1	CROP NAIVIL	1	CODE	QIVIT OIVIT	CODE	CODE
1	1		2				
1	1						
1	1		3				
1	2		1				
1	2		2				
1	2		3				
1	3		1				
1	3		2				
2	1		1				
2	2		2				

#### **SECTION 5. VULI CROP ROSTER**

IF Q9 < 100 IF O5==1

					IF CAPI-VAR5==1	IF Q8b>0	IF Q5==1			
		1.		CAPI-VAR5				•		
		1.		CAPI-VANS	7.	9.	10.			
		I am about to ask			When did you start harvesting	During the past 2023/24	Why not harvesting all the area planted with			
		you about crops		PROGRAMMED IN	[CROP] from this [PLOT] during the	VULI SEASON,	[CROP] on this [PLOT] plot?			
		on [FIELD] field,		CAPI: IS [CROP]	past 2023/24 VULI SEASON?	approximately what				
		[PLOT].		TEMPORARY OR	* For continuous harvest, indicate	percentage of [PLOT] area	SELECT THE MAIN TWO REAS	ONS.		
				PERMANENT?	the date when the harvest first	planted with [CROP] was	TOO LITTLE RAIN/DROUGHT	n 1		
		List all the			began.	harvested?	RAIN/FLOOD DAMAGE			
FIELD ID	PLOT ID	temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 VULI SEASON.	CROP ID	TEMPORARY1 PERMANENT2	OCTOBER 202310 NOVEMBER 202311 DECEMBER 202312 JANUARY 202401 FEBRUARY 202403 APRIL 202404 MAY 202405 JUNE 202406 JULY 202407 AUGUST 202408 SEPTEMBER 202409	PERCENT (%) OF PLANTED PLOT	RAIN CAME TOO EARLY OR TOO LATE3 WIND/FROST DAMAGE			
		CROP NAIVIE		CODE	CODE	AREA	1st Reason	2nd REASON		
1 1	1		1							
1	1		3							
1	2		1							
1	2		2							
1	2		3							
1	3		1			_				
1	3		2							
2	1		1							
2	2		1							
3	1		1							
3	1		2							
3	1		3							

#### **SECTION 5. VULI CROP ROSTER**

**Instruction:** To the extent possible, farmers should report production in the final state and condition (e.g., dry grains for maize). If farmers cannot express production in the final state and condition, they can use different states/conditions. Such states/conditions are not necessarily those in which they harvested; they are simply states/conditions they can confidently report production on. Farmers can use up to two units of measurement and two states/conditions picking from a predefined list.

					1 0						
					IF Q5==1	IF Q8c>0	IF Q8c>0				
		1.		CAPI-VAR5	8c.	8c_unit.	8c_state	8d	8e	8e_unit	8e_state
FIELD ID	PLOT ID	I am about to ask you about crops on [FIELD] field, [PLOT].  List all the temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 VULI SEASON.	CROP ID	PROGRAMMED IN CAPI: JE, [ZAO] NI LA MUDA AU LA KUDUMU?  TEMPORARY1 PERMANENT2	How much [CROP] did you harvest from [PLOT] plot during the 2023/24 VULI SEASON?	Harvest	Harvest state/condition	Beside the [QTY] [UNIT] of [CROP] you just reported, was there an additional quantity from this [PLOT] during the past 2023/24 VULI SEASON that you wish to express in a different unit or state/condition?  Yes1 No0	How much [CROP] would you like to express in a different unit of state/condition?	Harvest	Harvest state/condition
		CROP NAME		CODE	QUANTITY	CODE	CODE	CODE	NUMBER	CODE	CODE
1	1		1								
1	1		2								
1	1		3							L	
1	2		1							<b></b>	
1	2		2								
1	2		3								
1	3		1							<u> </u>	
1	3		2								
1	3		1							<u> </u>	
2	1		1								
2	1		1			1			1		1

#### **SECTION 5. VULI CROP ROSTER**

<u>JLC1</u>	1011 3	. VOLI CROF ROSTLI	<u>.</u>			IF CAPI-VAR5==2	IF CAPI-VAR5==2	IF CAPI-VAR5==2	VAR5==2
						II CAIT VARS2	PERMANENT CROI		VARS2
		1.		CAPI-VAR5	11.	12.	13.	14.	14a (new)
FIELD ID	PLOT ID	I am about to ask you about crops on [FIELD] field, [PLOT].  List all the temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 VULI SEASON.	CROP ID	PROGRAMMED IN CAPI: IS [CROP] TEMPORARY OR PERMANENT?  TEMPORARY1 PERMANENT2	Was the [CROP] on this [PLOT] plot cultivated in a compact or scattered planting?  COMPACT1 SCATTERED2	How many [CROP] plants/trees were on this [PLOT] plot during the past 2023/24 VULI SEASON?	How many [CROP] were in the production age during the past 2023/24 VULI SEASON?  *PRODUCTION AGE IS THE AGE AT WHICH THE TREE OR PLANT IS READY TO PRODUCE THE PRODUCT OF INTEREST  IF THE FARMER IS UNABLE TO QUANTIFY, RECORD -99	Have you planted any plants/trees of [CROP] during the 2023/24 VULI SEASON?  YES1 NO0	What was the total quantity of [CROP] seeds planted during the past VULI SEASON on this [PLOT]?  KILOGRAM1 SEEDLINGS2 CUTTINGS3 GRAMS4
		CROP NAME		CODE	CODE	CODE	NUMBER	NUMBER	14a QNTY 14b UNIT
1	1		1						
1	1		2						
1	1		3						
1	2		1						
1	2		2						
1	2		3						
1	3		1						
1	3		2						
2			1						
2	1		1						
3	1		1						
3	1		2						
3	1		3						

IF Q14==1 & IF CAPI-

# Ask if VAR3\_ALLFIELDS == true || FIELD.Any(x=>(x. s3q05b.Contains(6) || (x.s3q05b.Contains(0) && x.s3q05a.Contains(6))))

## **SECTION 6. MASIKA PLOT ROSTER**

22011	ON O. IVIASINA I LOT NOSTEN									If s7q02.InList(1,2)	If s7q02.InList(1,2)
	I am about to ask you questions about the		1.	2.	3					4.	5a.
	plots in [FIELD] field in the past 2023/2024		PLOT NAME								
	MASIKA AND DRY SEASON.			During the past	V	Vhat wa	as the	area	of	Was this	Was there any
	Please list all plots cultivated with crops,			2023/24 MASIKA AND	tł	his [PLC	T] plo	t?		[PLOT] plot in	irrigation
	used as kitchen gardens/backyards or left			DRY SEASON, how was						pure stand or	infrastructure on
	fallow during the past 2023/2024 MASIKA			this [PLOT] plot used?		NSTRUC				mixed during	this [PLOT] plot
	SEASON.			READ ANSWERS		DECLARE NO <b>M</b> obble				the past 2023/24	during the past 2023/24 MASIKA
				NEAD ANSWERS	(1		TARE.			MASIKA AND	AND DRY
۱ ـ	A PLOT IS DEFINED AS A CONTINUOUS PIECE OF LAND ON WHICH A SPECIFIC	_				ACRE2 SQUARE METERS3				DRY SEASON?	SEASON?
FIELD	CROP OR A MIXTURE OF CROPS IS GROWN	PLOT		A KITCHEN GARDEN/BACKYARD1		020.					
	OR WHICH IS FALLOW OR WAITING TO BE	T		CULTIVATED WITH CROPS2					ļ	PURE STAND1	INSTRUCTION:
	PLANTED.			TEMPORARILY LEFT						MIXED CROPPING2	
				FALLOW3						INTERCROPPING3	IRRIGATION AND
											PARTIALLY
									[		CONTROLLED
											IRRIGATION.
											YES1
											NO0
	FIELD NAME		TEXT	CODE		NUN	MBER		UNI	CODE	CODE
<u> </u>		_							Т		
1		1					•	-			
1		3					+	-			
1		4				+++	+	+-			
1		5						+-			
2		1						1-			
2		2						1_			

Ask if VAR3\_ALLFIELDS == true || FIELD.Any(x=>(x. s3q05b.Contains(6) || (x.s3q05b.Contains(0) && x.s3q05a.Contains(6))))

## **SECTION 6. MASIKA PLOT ROSTER**

If

				If s7q05a==1	If s7q05a==1	s7q02.InList(1,2)	If s7q07==1
	I am about to ask you		1.	5b.	6.	7.	8.
FIELD ID	questions about the plots in [FIELD] field in the past 2023/2024 MASIKA AND DRY SEASON.  Please list all plots cultivated with crops, used as kitchen gardens/backyards or left fallow during the past 2023/2024 MASIKA AND DRY SEASON.  A PLOT IS DEFINED AS A CONTINUOUS PIECE OF LAND ON WHICH A SPECIFIC CROP OR A MIXTURE OF CROPS IS GROWN OR WHICH IS FALLOW OR WAITING TO BE PLANTED.	PLOT ID	PLOT NAME	Approximately what percentage or proportion of [PLOT] plot was irrigated during the past 2023/24 MASIKA AND DRY SEASON?	What was the main method of irrigating plants/pouring water on the plants on this [PLOT] plot during the past 2023/24 MASIKA AND DRY SEASON?  READ ANSWERS  MANUAL IRRIGATION	Did you apply any organic fertilizer on this [PLOT] plot during the past 2023/2024 MASIKA AND DRY SEASON?	Which organic fertilizers were applied on this [PLOT] plot during the past 2023/24 MASIKA AND DRY SEASON?  SELECT ALL THAT APPLY  SOLID MANURE/FARM YARD MANURE
			TEXT	%	CODE	CODE	CODE
1		1					
1		2					
1		3					
1		4					
1		5					
2		1					
2		2					

## Ask if VAR3\_ALLFIELDS == true || FIELD.Any(x=>(x. s3q05b.Contains(6) || (x.s3q05b.Contains(0) && x.s3q05a.Contains(6))))

## **SECTION 6. MASIKA PLOT ROSTER**

If s7q02.InList(1,2) If s7q09==1 If s7q02.InList(1,2) If s7q11==1

FIELD ID	I am about to ask you questions about the plots in [FIELD] field in the past 2023/2024 MASIKA AND DRY SEASON.  Please list all plots cultivated with crops, used as kitchen gardens/backyards or left fallow during the past 2023/2024 MASIKA AND DRY SEASON.  A PLOT IS DEFINED AS A CONTINUOUS PIECE OF LAND ON WHICH A SPECIFIC CROP OR A MIXTURE OF CROPS IS GROWN OR WHICH	PLOT ID	1. PLOT NAME	9. Did you apply any inorganic fertilizer on this [PLOT] plot during the past 2023/2024 MASIKA AND DRY SEASON?  YES1 NO0	Which inorganic (chemical) fertilizers were applied on this [PLOT] plot during the past 2023/24 MASIKA AND DRY SEASON?  SELECT ALL THAT APPLY  UREA	10a (New) Approximately what percentage or proportion of [PLOT] plot was applied with inorganic (chemical) fertilizer past 2023/24 MASIKA AND DRY SEASON?	11. Did you apply any pesticide on this [PLOT] plot during the past 2023/2024 MASIKA AND DRY SEASON?  YES1 NO0	Which pesticides were applied on this [PLOT] plot during the past 2023/2024 MASIKA AND DRY SEASON?  SELECT ALL THAT APPLY INSECTICIDES
	CROPS IS GROWN OR WHICH IS FALLOW OR WAITING TO BE PLANTED.		TEXT	CODE	OTHER (SPECIFY)99  CODE	PERCENTAGE	CODE	CODE
1		1						
1		2						
1		3						
1		4						
1		5						
2		1						
2		2						

Ask IF VAR2\_ALLFIELDS == true

## **SECTION 7. MASIKA CROP ROSTER**

					IF sect 6-Q4 ==2 or 3	IF CAPI-VAR5_3==1	IF CAPI-VAR5_3==1	IF sect 6-Q4 ==2 or 3
		4		CARLVARE		3.	TEMPORARY	CROPS
		1.		CAPI-VAR5	2		4.	4a (new)
		I am about to ask you about crops on [FIELD] field, [PLOT].		PROGRAMMED IN CAPI: IS [CROP] TEMPORARY OR PERMANENT?	During the past 2023/24 MASIKA AND DRY SEASON, approximately what percent of [PLOT] was planted with [CROP]?	When was [CROP] planted on [PLOT] during the past 2023/24 MASIKA AND DRY SEASON?	Which [CROP] seeds did you use during the past 2023/24 MASIKA AND DRY SEASON?	What was the total quantity of [CROP] seeds planted during the past MASIKA AND DRY SEASON on this [PLOT]?
FIELD ID	PLOT ID	List all the temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 MASIKA AND DRY SEASON.	CROP ID	TEMPORARY1 PERMANENT2		OCTOBER 202310 NOVEMBER 202311 DECEMBER 202312 JANUARY 202401 FEBRUARY 202402	SELECT ALL THAT APPLY  IF RESPONDENT DOES NOT KNOW, ASK TO SEE PACKAGING  IMPROVED	KILOGRAM1 SEEDLINGS2 CUTTINGS3 GRAMS4
		CROP NAME		CODE	PERCENTAGE	CODE	CODE	CODE
1	1		1					
1	1		2					
1	1		3					
1	2		1					
1	2		2					
1	2		3					
1	3		1					
1	3		2					
2	1		1					
2	1		2					
2	1		3					

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## **SECTION 7. MASIKA CROP ROSTER**

-

					IF sect 6-Q4 ==2 or 3		IF Q5==0
		1.		CAPI-VAR5	4b (new)	5.	6.
		I am about to ask you about crops on [FIELD] field, [PLOT]. List all the temporary and			How much seeds would you have used if you had planted [CROP] on this [PLOT] in pure mode?	Did you harvest any of the	Why did not you harvest [CROP] from [PLOT] during the past MASIKA AND DRY SEASON of the 2023/2024 agricultural year?  IF SEVERAL REASONS, REPORT THE MAIN ONE.
FIELD ID	PLOT ID	permanent crops, including fruit trees on [PLOT] in the past 2023/24 MASIKA AND DRY SEASON.	CROP ID	PROGRAMMED IN CAPI: IS, [CROP] TEMPORARY OR PERMANENT?  TEMPORARY1 PERMANENT2	KILOGRAM1 SEEDLINGS2 CUTTINGS3 GRAMS4	YES1 NO0	TOO LITTLE RAIN/DROUGHT
		CROP NAME		CODE	QNTY UNIT	CODE	CODE
1	1		1				
1	1		2				
1	1		3				
1	2		1				
1	2		2				
1	2		3				
1	3		1				
1	3		2				
2	1		1				
2	2		2				

Ask IF VAR2\_ALLFIELDS == true

IF Q9 < 100 IF Q5==1

IF CAPI-VAR5==1

		1		CADLVADE				
		1.		CAPI-VAR5	7.	9.	10.	
FIELD ID	PLOT ID	I am about to ask you about crops on [FIELD] field, [PLOT].  List all the temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 MASIKA AND DRY SEASON.	CROPID	PROGRAMMED IN CAPI: IS [CROP] TEMPORARY OR PERMANENT? TEMPORARY1 PERMANENT2	When did you start harvesting [CROP] from this [PLOT] during the past 2023/24 MASIKA AND DRY SEASON?  * For continuous harvest, indicate the date when the harvest first began.  **OCTOBER 202310 **NOVEMBER 202311 **DECEMBER 202312 **JANUARY 202401 **FEBRUARY 202401 **FEBRUARY 202403 **APRIL 202404 **MAY 202405 **JUNE 202406 **JULY 202407 **AUGUST 202409	During the past 2023/24 MASIKA AND DRY SEASON, approximately what percentage of [PLOT] area planted with [CROP] was harvested?	Why not harvesting all the are [CROP] on this [PLOT] plot?  SELECT THE MAIN TWO REAS  TOO LITTLE RAIN/DROUGHT RAIN/FLOOD DAMAGERAIN CAME TOO EARLY OR WIND/FROST DAMAGEPLANT PEST/DISEASEFIRE DAMAGEROP THEFTNO AVAILABLE LABORANIMAL/BIRDS DAMAGE.OTHER (SPECIFY)	ONS.
		CROP NAME		CODE	CODE	PERCENT (%) OF PLANTED PLOT AREA	1st Reason	2nd REASON
1	1		1					
1	1		2					
1	1		3					
1	2		1					
1	2		2					
1	2		3					
1	3		1					
1	3		2					
2	1		1					
2	1		1					
3	1		2					
3	1		3					

#### **SECTION 5. MASIKA CROP ROSTER**

Instruction: To the extent possible, farmers should report production in the final state and condition (e.g., dry grains for maize). If farmers cannot express production in the final state and condition, they can use different states/conditions. Such states/conditions are not necessarily those in which they harvested; they are simply states/conditions they can confidently report production on. Farmers can use up to two units of measurement and two states/conditions picking from a predefined list.

					IF Q5==1	IF Q8c>0	IF Q8c>0				
		1.		CAPI-VAR5					·		·
		1.		CALITARS	8c.	8c_unit.	8c_state	8d	8e	8e_unit	8e_state
		I am about to ask you			How much	Harvest	Harvest	Beside the [QTY]	How much	Harvest	Harvest
		about crops on [FIELD]		PROGRAMMED IN	[CROP] did	unit	state/condition	[UNIT] of [CROP] you	[CROP] would	unit	state/condition
		field, [PLOT].		CAPI: IS [CROP]	you harvest			just reported, was	you like to		
		, , ,		TEMPORARY OR	from			there an additional	express in a		
		List all the temporary		PERMANENT?	[PLOT] plot			quantity from this	different unit of		
۱ ـ	_	and permanent crops,		I LIMVIAMENT:	during the			[PLOT] during the	state/condition?		
FIELD	PLOT	including fruit trees on	CROP		2023/24			past 2023/24 MASIKA			
D	)T ID	[PLOT] in the past	P		MASIKA			AND DRY SEASON			
₽	0	2023/24 MASIKA AND	Đ	TEMPORARY1	AND DRY			that you wish to			
		DRY SEASON.		PERMANENT2	SEASON?			express in a different			
								unit or state/condition?			
								State/condition?			
								Yes1			
								No0			
		CROP NAME		CODE	QUANTITY	CODE	CODE	CODE	NUMBER	CODE	CODE
1	1		1								
1	1		2								
1	1		ω								
1	2		1 2								
1	2		3								
1	2		- <del> </del>								
1	3		2								
1 1	3		1								
2	<u>5</u>		1								
2	1		1								
	l	<u> </u>		<u> </u>	J	1	<u>I</u>		I	l	l .

## **SECTION 5. MASIKA CROP ROSTER**

						IF CAPI-VAR5==2	IF CAPI-VAR5==2	IF CAPI-VAR5==2	VAR5==2
		1		CAPI-VAR5			PERMANENT CRO	PS	
		1.		CAPI-VAR5	11.	12.	13.	14.	14a (new)
FIELD ID	PLOT ID	I am about to ask you about crops on [FIELD] field, [PLOT].  List all the temporary and permanent crops, including fruit trees on [PLOT] in the past 2023/24 MASIKA AND DRY SEASON.	CROP ID	PROGRAMMED IN CAPI: IS [CROP] TEMPORARY OR PERMANENT?  TEMPORARY 1 PERMANENT 2	Was the [CROP] on this [PLOT] plot cultivated in a compact or scattered planting?  COMPACT1 SCATTERED2	How many [CROP] plants/trees were on this [PLOT] plot during the past 2023/24 MASIKA AND DRY SEASON?	How many [CROP] were in the production age during the past 2023/24 MASIKA AND DRY SEASON?  *PRODUCTION AGE IS THE AGE AT WHICH THE TREE OR PLANT IS READY TO PRODUCE THE PRODUCT OF INTEREST  IF THE FARMER IS UNABLE TO QUANTIFY, RECORD -99	Have you planted any plants/trees of [CROP] during the 2023/24 MASIKA AND DRY SEASON?  YES1 NO0	What was the total quantity of [CROP] seeds planted during the past MASIKA AND DRY SEASON on this [PLOT]?  KILOGRAM1 SEEDLINGS2 CUTTINGS3 GRAMS4
		CROP NAME		CODE	CODE	CODE	NUMBER	NUMBER	14a QNTY 14b UNIT
1	1		1 2						
1	1		2 3						
1	1		3 1						
1	2		1 2						
1	2		2 3						
1	2		3 1						
1	3		. 2						
1 2	3		1						
ω	1		. 1						
ω	1		2						
ω	<u> </u>		3						

IF Q14==1 & IF CAPI-

## **SECTION 8. PERMANENT CROP PRODUCTION**

_	-			IF Q1==0	IF Q1==1
FIELD ID	CROP ID	PROGRAMMED IN CAPI: PREFILL ALL FIELD-PLOT- CROP INFORMATION FROM THE CROP ROSTER	Did you harvest any of the [CROP] on this [FIELD] field during the past 2023/2024 agricultural year?  YES1 NO0	2.  Why did not you harvest [CROP] from this [FIELD] field during the past 2023/2024 agricultural year?  TOO LITTLE RAIN/DROUGHT	3.  Between October 2023 and December 2024 in which months did you harvest [CROP] from this [FIELD] field?  SELECT ALL THAT APPLY  OCTOBER 2023
		CODE	CODE	CODE	CODE
	1				

## Ask if s5q05==1 || s7q05==1||s8q01==1

## SECTION 9: CROP HARVEST USE

		_	_	-	IF Q2.Contains(1)	if Q3>0	IF Q2.Contains(2,8)
		1.	instorage	2.	3.	4.	5.
CROPID	PROGRAMMED IN CAPI: LIST ALL HARVESTED CROPS FROM SECTION 6 (ie., if sect 6 Q4==1) AND SECTION 9 9ie., if sect 9 Q4==1)	Do you have any of the [CROP] harvested in the past 2023/24 agricultural year in storage now?  YES1 NO0	PROGRAMMED IN CAPI: Takes a blank string value if s1q01==0 and takes the string value ", including the quantity in storage?" if s7q01==1	Did your household/farm use, or intended to use the [CROP] produce [instorage] for any of the following purposes?  *READ ANSWERS  *SELECT ALL THAT APPLY  FOR SALE UNPROCESSED. 1 FOR SELF- CONSUMPTION	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was sold, or intended to be sold in unprocessed form [instorage]?	What was the total value of all unprocessed [CROP] sales or intended sales [instorage]?  ESTIMATE THE VALUE OF IN-KIND PAYMENTS.  ESTIMATE THE VALUE OF SALES NOT YET DONE	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was consumed or intended to be consumed by household members/farm either in processed or unprocessed form [instorage]?  IF PROCESSED FOR CONSUMPTION, INCLUDE IT HERE AS PART OF THE RAW PRODUCT
	CROP NAME	CODE		CODE	%	TZS	%
1							
2							
ω							
4							
5							
6							
7							
8							
9							

## Ask if s5q05==1 || s7q05==1||s8q01==1

## **SECTION 9: CROP HARVEST**

USE

		IF		IF	If CAPI-VAR5==1 &&	IF	IF
		Q2.Contains(3)	IF Q2.Contains(4)	Q2.Contains(5)	Q2.Contains(6)	Q2.Contains(7)	Q2.Contains(99)
		6.	7.	8.	9.	10.	11.
CROP ID	PROGRAMMED IN CAPI: LIST ALL HARVESTED CROPS FROM SECTION 6 (ie., if sect 6 Q4==1) AND SECTION 9 9ie., if sect 9 Q4==1)	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was given out as gift or intended to be given out as gift to other households [instorage]?  IF PROCESSED BEFORE GIVING OUT AS GIFT, INCLUDE IT HERE AS PART OF THE RAW PRODUCT	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was used or intended to be used to pay for land, labour or inputs [instorage]?  IF PROCESSED BEFORE GIVING OUT AS REIMBURSEMENT, INCLUDE IT HERE AS PART OF THE RAW PRODUCT	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was used or intended to be used for animal feed [instorage]?  EXCLUDE THE QUANTITY OF CROP USED AS ANIMAL FEED DUE TO PEST DAMAGE.	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was used or intended to be used for seeds in the following season [instorage]?	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was processed or intended to be processed for sale [instorage]?	What percentage or proportion of the [CROP] harvested in the past 2023/24 agricultural year was used or intended to be used for any other purposes not mentioned before [instorage]?
	CROP NAME	%	%	%	%	%	%
Ъ							
2							
ω							
4							
5							
6							
7							
∞							
9							

## Ask if (s4q05==1 || s4q07==1 || s4q09==1) || (s6q05==1 || s6q07==1 || s6q09==1)

## SECTION 11. INPUT USE AND ACQUISITION (FERTILIZERS AND PESTICIDES)

INPUT CODE	PROGRAMMED IN CAPI: LIST ALL FERTILIZERS AND PESTICIDES THAT HAVE BEEN USED IN THE PAST 2023/24 AGRICULTURAL YEAR (see sect 4 Q10 and sect 6, Q8)	1a What was the of [INPUT TY your farm used the VULI sead 2023/24 agreer?  REPORT NOT QTY	re quantity (PE] that sed during son of the icultural	What was the quantity of [INPUT TYPE] that your farm used during the past MASIKA AND DRY season of the 2023/24 agricultural year?  REPORT NOT DILUTED QTY  CODES FOR UNIT: GRAM1 KILOGRAM2 MILLILITER3 LITER4 OTHER (SPEC) . 99		
Œ	INPUT TYPE	CODES FOR GRAM KILOGRAM. MILLILITE LITER OTHER (SPE	1 2 R3 4			
1	SOLID MANURE / FARMYARD MANURE	Q I I	Oitil	Q I I	31411	
2	LIQUID MANURE / SLURRY					
3	GREEN MANURE (CROP RESIDUES)					
4	COMPOST					
5	STABILIZED SEWAGE SLUDGE					
6	BIOFERTILIZERS					
7	OTHER ORGANIC FERTILIZER					
8	UREA					
9	DIAMMONIUM PHOSPHATE (DAP)					
10	CALCIUM AMMONIUM NITRATE (CAN)					
11	AMMONIUM SULPHATE (SA)					
12	NITROGEN, PHOSPHORUS, POTASSIUM (NPK)					
13	MINJINGU NAFAKA PLUS					
14	NPS Zinc					
22	FOMI					
23	KENOPLUS					
24	PANDAPLUS					
25	MACROP					
26	AMIDAS					
27	TRIPLE SUPER PHOSPHATE (TSP)					
28 15	MURIATE OF POTASH (MOP)  OTHER INORGANIC FERTILIZER					
16	INSECTICIDES					
17	HERBICIDES (SOLID)					
18	HERBICIDES (SOCIO)					
19	FUNGICIDES					
20	RODENTICIDES					
21	OTHER (SPECIFY)					
	- ::\*:=*:::/	l				

#### Ask if s1q07==1

#### **SECTION 12. LIVESTOCK IN STOCK AND CHANGE IN STOCK**

ENUMERATOR READ: Now, I will ask you about the livestock that the household/farm reared between October 2023 and September 2024. Please be assured that all the information you provide will be kept strictly confidential and will not be shared with any individual or entity outside the National Bureau of Statistics (NBS) office. This confidentiality is guaranteed under the Statistical Act of NBS. Furthermore, please note that these statistics are not going to be used for taxation purposes. Your honest and accurate responses are crucial for NBS statistical analysis and will greatly contribute to the quality and reliability of livestock data. Therefore, NBS is kindly requesting you to provide an accurate count of the cattle, goats, sheep, and other livestock you rear.

1a. From October 2023 to **September** 2024, did the household/farm rear any of the following livestock or poultry, irrespective of who the owner is?

\*READ
ANSWERS
\*SELECT ALL THAT
APPLY

INDIGENOUS CATTLE		1
IMPROVED CATTLE		2
INDIGENOUS GOATS		3
IMPROVED GOATS		4
SHEEP		5
PIGS		6
INDIGENOUS CHICKEN		7
IMPROVED CHICKEN		
EXOTIC CHICKEN (LAYERS)	.1	4
EXOTIC CHICKEN (BROILERS		
DUCKS		9
TURKEYS	.1	0
DONKEYS	.1	1
RABBITS	.1	2
DOGS		
NONE OF THE ABOVE		Λ

## SECTION 12. LIVESTOCK IN STOCK AND CHANGE IN STOCK

						BORN	PURCH	ASES
				1b.	1c.	3	4	5
CODE LS GROUP	LIVESTOCK GROUP  CODE IS NAME  LIVESTOCK/PG TYPE		LIVESTOCK/POULTRY TYPE	How many [LIVESTOCK NAME] did this household/farm rear as of 1st October 2024?  ENUMERATOR READ  -INCLUDE ANIMALS THAT DO NOT BELONG TO THE HOUSEHOLD/FARI-INCLUDE ANIMALS THAT ARE TEMPORARILY AWAY FOR PASTUR - EXCLUDE ANIMALS THAT ARE OV BY THE HOUSEHOLD/FARM BUT AI REARED BY OTHER HOUSEHOLDS/I	2023? ES VNED RE	How many [LIVESTOCK NAME] were born in the agricultural year from October 2023 to September 2024?	How many [LIVESTOCK NAME] did this farm buy alive from October 2023 to September 2024?	What was the average unit price of the [LIVESTOCK NAME] purchased from October 2023 to September 2024?
			La dia ana ana antala	number	number	number	number	TZS
1	Large ruminants	1	Indigenous cattle					
	rummants	2	Improved cattle					
2	Small	3 4	Indigenous goats Improved goats					
2	ruminants	5	Sheep					
3	Pigs	6	Pigs					
	1 163	7	Indigenous chicken					
		8	Improved chicken					
		14	Exotic chicken (layers)					
4	Poultry	15	Exotic chicken (broilers)					
		9	Ducks					
	10 Turkeys							
5	Donkeys	11	Donkeys					
6	Rabbits	12	Rabbits					
7	Dogs	13	Dogs					

## Ask if s1q07==1

## SECTION 12. LIVESTOCK IN STOCK AND CHANGE IN STOCK

			STOCK AND CHANGE IN STOCK	OTHER ENTRIES (GIFTS - RECEIVED, ETC.)	SALES OF LIV	/E ANIMALS	DEATHS	LOST
CODE LS GROUP	LIVESTOCK GROUP	CODE LS NAME	LIVESTOCK/POULTRY TYPE	How many [LIVESTOCK NAME] were received for free or as a gift or dowry or to rear for someone else from October 2023 to September 2024?	7 How many [LIVESTOCK NAME] has this farm sold alive from October 2023 to September 2024?	8c What was the average unit price of one [LIVESTOCK NAME] sold from October 2023 to September 2024?	9 How many [LIVESTOCK NAME] died (diseases, natural events, etc) from October 2023 to September 2024?	How many [LIVESTOCK NAME] were lost (stolen, missing etc.) from October 2023 to September 2024?
1	Large	1	Indigenous cattle					
	ruminants	2	Improved cattle					
	6 11	3	Indigenous goats					
2	Small ruminants	4	Improved goats					
	Tarrinarits	5	Sheep					
3	Pigs	6	Pigs					
		7	Indigenous chicken					
		8	Improved chicken					
4	Poultry	14	Exotic chicken (layers)					
-	1 Guitty	15	Exotic chicken (broilers)					
		9	Ducks					
		10	Turkeys					
5	Donkeys	11	Donkeys					
6	Rabbits	12	Rabbits					
7	Dogs 13 Dogs							

Ask if s1q07==1

SECTION 12. LIVESTOCK IN STOCK AND CHANGE IN STOCK

<u>OLO</u>	11014 12: EIVEGT	OOKI	N STOCK AND CHANGE IN STOCK				ANIMALS SLAUG	GHTERED			OTHER EXITS (DONATIONS, GIVEN AWAY ETC.)
				11	12		13	14 Did the farm sell	15	15b	16
CODE LS GROUP	LIVESTOCK GROUP	CODE LS NAME	LIVESTOCK/POULTRY TYPE	How many [LIVESTOCK NAME] has this farm slaughtered from October 2023 to September 2024?  If 0 record "0"and > Q16	What was the weight of the [LIVESTOCK after they we slaughtered?	e K NAME] ere	Approximately, what proportion of [LIVESTOCK NAME] meat was consumed by the farm from October 2023 to September 2024?	any slaughtered [LIVESTOCK NAME] or their meat from October 2023 to September 2024?  YES1 NO0 ►16	Approximately, what proportion of slaughtered [LIVESTOCK NAME] was sold by the farm from October 2023 to September 2024?	What was the price per kg of [LIVESTOCK NAME] meat sold from October 2023 to September 2024?	How many [LIVESTOCK NAME] were given away for example as dowry and gifts and to be reared for by someone else from October 2023 to September 2024?
	Large	1	Indigenous cattle	number	QTY	UNIT	%	CODE	%	TZS/kg	number
1	Large ruminants	2	Improved cattle								
		3	Indigenous goats								
2	Small	4	Improved goats								
	ruminants	5	Sheep								
3	Pigs	6	Pigs								
	-	7	Indigenous chicken								
		8	Improved chicken								
,	Davilla	14	Exotic chicken (layers)								
4	Poultry	15	Exotic chicken (broilers)								
		9	Ducks								
		10	Turkeys								
5	Donkeys	11	Donkeys								
6	Rabbits	12	Rabbits								
7	Dogs	13	Dogs								

CODE LS GROUP	LIVESTOCK GROUP	CODE LS NAME	LIVESTOCK NAME	Did the household/farm milk any [LIVESTOCK NAME] from October 2023 to September 2024?	IF q1==1  2  Between October 2023 and September 2024, how many [LIVESTOCK NAME] were milked?	IF Q1==1 && Holding_TYPE==2  2a (new)  Did the farm keep record of the quantity of milk milked [LIVESTOCK NAME] from October 2023 to September 2024?	IF Q02==1  3  What was the quantity of milk milked from the [LIVESTOCK NAME] from October 2023 to September 2024?	IF (Q01==1 && Holding_TYPE==1)    Q02a==0  4a  During the wet season between October 2023 and September 2024, how many [LIVESTOCK NAME] were milked?	IF (Q01==1 && Holding_TYPE==1)    Q02a==0  4b  During the dry season between October 2023 and September 2024, how many [LIVESTOCK NAME] were milked?	IF IsAnswered(Q04a)  5a From October 2023 to September 2024, during the wet season, on average how many days was one [LIVESTOCK NAME] milked?
		1	Indigenous	1 = Yes 0 = No	Number	1 = Yes 0 = NO	Litres	number	number	number
1	Large ruminants	2	cattle Improved cattle							
2	Small	3	Indigenous Goats							
	ruminants	4	Improved Goats							

# Ask if s12q01a.ContainsAny(1,2,4) SECTION 14: MILK PRODUCTION

				IF	IF	IF	IF Q1==1 &&			
				IsAnswered(Q04b)	IsAnswered(5a)	IsAnswered(5b)	Holding_TYPE==1	IF Q1==1	IF Q8==1	IF Q9b==2
		•		5b	6a	6b	7	8	9a	9d
CODE LS GROUP	LIVESTOCK GROUP	CODE LS NAME	LIVESTOCK NAME	From October 2023 to September 2024, during the dry season, for average on how many days was one [LIVESTOCK NAME] milked?	On these days during the wet season in which [LIVESTOCK NAME] were milked, what was the average milk production per head and per day?	On these days during the dry season in which [LIVESTOCK NAME] were milked, what was the average milk production per head and per day?	From October 2023 to September 2024, what percentage or proportion of the [LIVESTOCK NAME] milk collected did this farm consume?	From October 2023 to September 2024, did this household/farm sell the milk of [LIVESTOCK NAME]?	From October 2023 to September 2024, what percentage or proportion of the [LIVESTOCK NAME] milk collected did the household/farm sell?	What was the average unit price per litre of the [LIVESTOCK NAME] milk sold from October 2023 to September 2024?  REPORT THE PRICE PER LITRE
	Large	1	Indigenous cattle							
1	ruminants	2	Improved cattle							
2	Small	3	Indigenous Goats							
2	ruminants	4	Improved Goats							

#### **SECTION 15: EGG PRODUCTION**

=	-

s15q00. From October 2023 to September 2024, did the household/farm produced any eggs?

YES...1 NO....0 ► NEXT SECTION

- -

s15q01a - From which type of chicken did you produce eggs from October 2023 to September 2024?

\*READ ANSWERS

\*SELECT ALL THAT APPLY

INDIGENOUS CHICKEN......7
IMPROVED CHICKEN......8
EXOTIC CHICKEN (LAYERS)...14

if farm belongs to NON-HOUSEHOLD SECTOR (large enterprise)

				1b	2
CODE LIVESTOCK GROUP	LIVESTOCK GROUP	LIVESTOCK CODE	LIVESTOCK NAME  IF FARM PRODUCED EGGS FROM [LIVESTOCK NAME] ASK QUESTION 1B	How many [LIVESTOCK NAME] laid eggs from October 2023 to September 2024?	Did the farm keep record of the quantity of eggs laid by [LIVESTOCK NAME] from October 2023 to September 2024?
		7	Indigenous chicken		
4	Poultry 8 Improved chicken  14 Exotic chicken (layers)		Improved chicken		

## Ask if s12q01a.ContainsAny (7,8,14)

## **SECTION 15: EGG PRODUCTION**

				if s15q02==1 & @rowcode==7	if s15q02==1 & (@rowcode==8    @rowcode==14)		if (s15q02==0    farm belongs to HH sector ) & (@rowcode==8    @rowcode==14)	if (s15q02==0 & @rowcode==7) OR farm belongs to the HH sector	if (s15q02==0 & @rowcode==7) OR farm belongs to the HH sector
				3	4	4a (new)	5	6	7
CODE LIVESTOCK GROUP	LIVESTOCK GROUP	LIVESTOCK CODE	LIVESTOCK NAME IF FARM PRODUCED EGGS FROM [LIVESTOCK NAME] ASK QUESTION 1B	How many eggs did the entire flock of [LIVESTOCK NAME] produce from October 2023 to September 2024?	How many tray of the [LIVESTOCK NAME] were collected/produced in a day? Note: A tray of 30 eggs	On average how many months did [LIVESTOCK NAME] lay eggs from October 2023 to September 2024?	How many trays did the entire flock of [LIVESTOCK NAME] laid eggs on average per month from October 2023 to September 2024? Note: A tray of 30 eggs	How many clutching periods did one [LIVESTOCK NAME] have on average from October 2023 to September 2024?	How many eggs per clutching period did <u>one</u> [LIVESTOCK NAME] lay on average?
				NUMBER	NUMBER		NUMBER	NUMBER	NUMBER
		7	Indigenous chicken						
4	Poultry	8	Improved chicken						
		14	Exotic chicken (layers)						

## **SECTION 15: EGG PRODUCTION**

							if s15q10==1 & @rowcode==7	if s15q10==1 & (@rowcode== 8    @rowcode==1 4)	if s15q10==1 & @rowcode==7	if s15q10==1 & (@rowcode== 8    @rowcode==1 4)
				9a	9b	10	11	12	13	14
CODE LIVESTOCK GROUP	LIVESTOC K GROUP	LIVESTOCK CODE	LIVESTOCK NAME  IF FARM PRODUCED EGGS FROM [LIVESTOCK NAME] ASK QUESTION 1B	How many eggs were consumed by the household/far m on average per clutching period from October 2023 to September 2024?	How many eggs were consumed by the household/far m on average per month from October 2023 to September 2024?	Did the household/far m sell any [LIVESTOCK NAME] eggs from October 2023 to September 2024?	How many eggs from [LIVESTOCK NAME] did the household/farm sell on average per clutching period October 2023 to September 2024?	How many trays (30 eggs) from [LIVESTOCK NAME] did the household/far m sell on average per month from October 2023 to September 2024?	What was the average unit price of one [LIVESTOCK NAME] egg sold from October 2023 to September 2024?	What was the average unit price of one [LIVESTOCK NAME] tray (30 eggs) sold from October 2023 to September 2024?
				NUMBER	NUMBER	CODE	NUMBER	NUMBER	TZS	TZS
		7	Indigenous chicken							
	Daviltoni	0	Improved							
4	Poultry	8		-						
		14	Exotic chicken (layers)							

## Ask if s1q07==1 | | s1q08==1

## SECTION 16: OTHER LIVESTOCK

**PRODUCTS** 

Q1. Did this household/farm produce any of the following livestock product types from October 2023 to September 2024?

IF

@rowcode.InList(1,2

	-	)	IF @rowcode.InLis	t(1,2)			IF Q4==1	Q06a==2	Q04==1
	[SPECIFIC ITEMS TO BE	2a.	2b.	3.	•	4	5.	6d	6e
PRODUCT CODE	ENABLED BASED ON THE ANIMALS RAISED ON THE FARM]  PRODUCT TYPE	ANIMALS RAISED ON THE hives did this household/farm have from October how many improved/moder n bee hives did this		What is the quof [PRODUCT produced from October 2023 September 20 unit Kg2 Litre3	TYPE] n to	Did this household/farm sell any [PRODUCT TYPE] from October 2023 to September 2024?  YES1 NO0 NEXT PRODUCT	What is the quantity of [PRODUCT TYPE] sold from October 2023 to September 2024?  *ASK IN %s16q03_unit %	What was the average price of the [ITEM] per %s16q03_unit % sold from October 2023 to September 2024?	What is the total value of the sales of manure obtained in the 2023/24 agricultura I year
		NUMBER	NUMBER	QUANTITY	CODE	CODE	QUANTITY	TZS per %s16q03_unit %	TZS
1	Sting bee honey								
2	Stingless bee honey								
5	Animal dung								

## Ask if s1q09==1

## **SECTION 17. AQUACULTURE PRODUCTION**

ENUMERATOR READ: In the next sections, I will ask you about your aquaculture activity during 2023/24 agricultural year.

1a. Which type of aquaculture did your household/farm engaged in from October 2023 to September 2024?

\*READ ANSWERS

- \*SELECT ALL THAT APPLY

\_

-

MILKFISH	1
	_
TILAPIA	2
RAINBOW TROUT	3
LUNGFISH	4
AFRICAN CATFISH	5
PRAWNS	6
CRABS	
SEAWEED	8
SEA CUCUMBER	9
OTHER (SPECIFY)9	9

- IF @rowcode.Inlist(1,2,3,4,5)			IF Q1b_1==1			IF Q04==1	IF Q06a==2	
	1b	1b_1	1c (new question)	2	3	4	5	6c
	What was the source/s of	Did your	Between October 2023 and	What is the total	From October	From October	From October	What was the

AQUACULTURE TYPE	What was the source/s of fingerlings/seeweed for the [AQUACULTURE TYPE] from October 2023 to September 2024? [MENTION MAXIMUM OF 2 IN ORDER OF IMPORTANCE]  OWN SOURCE	Did your household/farm harvest any quantity of [AQUACULTUR E TYPE] from October 2023 to September 2024?	Between October 2023 and December 2024, in which months did you harvest [AQUACULTURE TYPE]? TICK ALL THAT APPLY  OCTOBER 2023 13 NOVEMBER 2023 14 DECEMBER 2023 15 JANUARY 2024 01 FEBRUARY 2024 02 MARCH 2024 03 APRIL 2024 04 MAY 2024 05 JUNE 2024 06 JULY 2024 07 AUGUST 2024 08 SEPTEMBER 2024 09	What is the total quantity of [AQUACULTUR E TYPE] during [MONTH]?  *ASK IN KG	From October 2023 to September 2024, what percentage or proportion of the [AQUACULTU RE TYPE] harvested was consumed by this household/far m?	From October 2023 to September 2024, did the household/far m sell any of the [AQUACULTU RE TYPE] harvested?	From October 2023 to September 2024, what percentage or proportion of [AQUACULTU RE TYPE] did the household/far m sell?	What was the average price of the [AQUACULTU RE TYPE] per kg sold from October 2023 to September 2024?
4 5 4111 61 1			CODE	QUANTITY	%		%	TZS per kg
1. Milkfish								
2. Tilapia								
3. Rainbow trout								
4. Lungfish								
5. African catfish								
6. Prawns					<u> </u>			
7. Crabs								
8. Seaweed								
9. Sea cucumber								
99. Other								

#### SECTION 20. BUILDINGS OR STRUCTURES FOR AGRICULTURE

1. In the agricultural year 2023/24, did your household/ farm use any building or structure for storing crops, seeds or livestock or to perform agriculture related activities? (e.g., storing fertilizers, milking animals, etc.)
Please consider also the household dwelling, if this is used for agriculture. Please include also community structures.

YES..1 NO...0 ▶ QUESTION 8

				if Q3	3==1						
1a.		3				4					
Which of the following [BUILDINGS OR STRUCTURES] did your household/farm use during the past agricultural year 2023/24 for storing crops, seeds or livestock or to perform agriculture related activities (e.g., storing fertilizers, milking animals, etc.)?  Please include in the list the household dwelling, if this is used for agriculture		What did you use this [BUILDING OR STRUCTURE] for?  TICK ALL THAT APPLY  Production of dairy products			Pots						
S/N	BUILDINGS OR STRUCTURES	CODE			CODE						
1	Traditional grain silos										
2	Warehouse (grain. Fertilizers, animal feeds)										
3	Store										
4	Cold storage rooms										
5	Greenhouses/screen houses										
6	Grain cribs										
7	Machinery sheds										
8	Crop drying sheds										
9	Packhouses										
11	Composting facilities										
12	Silage pits/bunkers										
13	Milking parlors										
14	Livestock barns (Cattle, goats, sheep, pigs, poultry)										
15	Skin drying sheds										

### SECTION 20. BUILDINGS OR STRUCTURES FOR AGRICULTURE (continue)

YES...1

NO....0 ▶ QUESTION 8

1. In the agricultural year 2023/24, did your household/ farm use any building or structure for storing crops, seeds or livestock or to perform agriculture related activities? (e.g., storing fertilisers, milking animals, etc.)

Please consider also the household dwelling, if this is used for agriculture. Please include also community structures.

			if Q3==1 & (Q6=0	Q2==1)	-	if Q8==1
1a.		5	7		8	9
Which of the following [BUILDINGS OR STRUCTURES] did your household/farm use during the past agricultural year 2023/24 for storing crops, seeds or livestock or to perform agriculture related activities (e.g., storing fertilisers, milking animals, etc.)?  Please include in the list the household dwelling, if this is used for agriculture		What is the tenure of this [BUILDING OR STRUCTURE]?  OWNED	How many bags of n store in this [BUILDII STRUCTURE], regard you actually stored?  25 KG BAGS 50 KG BAGS 100 KG BAGS 120 KG BA	NG OR Illess of what 31 32 iS2	Did you own any other [BUILDING OR STRUCTURE] for agricultural activities that you did not use in the past agricultural year 2023/24?  YES1 NO0 NEXT SECTION	How many were they ?
S/N	BUILDINGS OR STRUCTURES	CODE	7a QUANTITY	7b UNIT	CODE	NUMBER
1	Traditional grain silos		-			
2	Warehouse (grain. Fertilizers, animal feeds)					
3	Store					
4	Cold storage rooms					
5	Greenhouses/screen houses					
6	Grain cribs					
7	Machinery sheds					
8	Crop drying sheds					
9	Packhouses					
11	Composting facilities					
12	Silage pits/bunkers					
13	Milking parlors					
14	Livestock barns (Cattle, goats, sheep, pigs, poultry)					
15	Skin drying sheds					

#### SECTION 20. BUILDINGS OR STRUCTURES FOR AGRICULTURE (continue)

1. In the agricultural year 2023/24, did your household/ farm use any building or structure for storing crops, seeds or livestock or to perform agriculture related activities?

(e.g., storing fertilisers, milking animals, etc.)

Please consider also the household dwelling, if this is used for agriculture. Please include also community structures.

if Q3==1

Which of the following [BUILDINGS OR STRUCTURES] did your What did you use this [BUILDING OR STRUCTURE] for? What method of storage did you use in this household/farm use during the past agricultural year 2023/24 for [BUILDING OR STRUCTURE] for storing Production of dairy products .....11 storing crops, seeds or livestock or to perform agriculture related TICK ALL THAT APPLY crops? Meat production activities (e.g., storing fertilisers, milking animals, etc.)? (slaughtering and first cuts) ......12 Meat processing ......13 TICK THAT APPLY Storing crops......1 Preparation of hides and skins ....14 Please include in the list the household dwelling, if this is used for Processing of crops.....4 Storage for livestock-related Storing plant protection products ....5 agriculture Pots......1 machinery and equipment .......15 Storing fertilizers ......6 Storing crop-related machinery Other crop uses......16 Air tight sacks (pics bags) ......3 Other livestock uses......17 and equipment ......7 Open drum.....4 Housing of poultry.....8 Storage of aquaculture Air tight drum.....5 Housing of livestock other than products......18 Heaped on the ground......6 Storage of aquaculture-related poultry ......9 machinery and equipment......19 Milking ......10 Tanks/Water reservors......20 Fish ponds/tanks.....21 S/N **BUILDINGS OR STRUCTURES** CODE CODE 16 Slaughterhouse 17 Slaughter slab 18 Butchery 19 Skin storage sheds 20 Permanent animal crush 21 Dam 22 Water trough 23 Dipping facility for large animals (Cattle, Horses, Donkeys)

Livestock spray race

Milk collection center

Livestock auction barns

Fumigation chambers

Aquaculture tanks or ponds

Hatchery

Dipping facility for small animals (Goats, Sheep, Dogs)

24

25

26

27

28

29

30

31	Modern grain silos				1	
51	Wiodein grain snos					

### SECTION 20. BUILDINGS OR STRUCTURES FOR AGRICULTURE (continue)

YES...1

1. In the agricultural year 2023/24, did your household/ farm use any building or structure for storing crops, seeds or livestock or to perform agriculture related activities? (e.g., storing fertilisers, milking animals, etc.)

NO....0 ▶ QUESTION 8

Please consider also the household dwelling, if this is used for agriculture. Please include also community structures.

	G, G	,	if Q3==1 & (Q6=0	Q2==1)	-	if Q8==1
4-		Te	1 -		T 0	
1a.		5	7		8	9
Which of the following [BUILDINGS OR STRUCTURES] did your household/farm use during the past agricultural year 2023/24 for storing crops, seeds or livestock or to perform agriculture related activities (e.g., storing fertilisers, milking animals, etc.)?  Please include in the list the household dwelling, if this is used for agriculture		What is the tenure of this [BUILDING OR STRUCTURE]?  OWNED	store in this [BUILDING OR STRUCTURE], regardless of what you actually stored?  25 KG BAGS1 50 KG BAGS2 100 KG BAGS2 120 KG BAGS4  YES1 NO0		agricultural year 2023/24?	How many were they ?
S/N	BUILDINGS OR STRUCTURES	CODE	7a QUANTITY	7b UNIT	CODE	NUMBER
16	Slaughterhouse					
17	Slaughter slab					
18	Butchery					
19	Skin storage sheds					
20	Permanent animal crush					
21	Dam					
22	Water trough					
23	Dipping facility for large animals (Cattle, Horses, Donkeys)					
24	Dipping facility for small animals (Goats, Sheep, Dogs)					

25	Livestock spray race			
26	Hatchery			
27	Milk collection center			
28	Aquaculture tanks or ponds			
29	Livestock auction barns			
30	Fumigation chambers			
31	Modern grain silos	_		

## SECTION 21: MACHINERY AND EQUIPMENT USED FOR AGRICULTURE

				Q2>0 If Q1==1	Q3= <q2; Q3&gt;=0 If Q1==1</q2; 	Q4>0  If Q1==1 & Q3>0. Please note that we blocked the question for all the animal powered equipments	Q5= <q2; q5="">=0 If Q1==1</q2;>
N	ACHINERY AND	INPUT TYPE	1	2	3	4	5
	EQUIPMENT		Did you use [INPUT TYPE] during the past 2023/24 agricultural year? YES1 NO0 ▶ Q12	How many [INPUT TYPE] were used in the past agricultural year 2023/24?	For the [INPUT TYPE] you used, how many did you own solely?	What is the average age of the [INPUT TYPE] you owned?  IN YEARS. IF LESS THAN A YEAR, WRITE 0.	For the [INPUT TYPE] you used, how many did you co-own with another household/farm?
			Code	Number	Number	Number	Number
1	Manually	Seed/fertilizer drills					
	operated equipment	Transplanters					
	equipment	Threshers					
		Winnowers					
		Sprayers					
		Hand pumps or other hand irrigation devices Sheller					
		Rake					
		Shovel					
		Sickle					
		JICKIE					

Ī		Panga			
Ì		Slather			
		Wheelbarrow			
		Watering can			
		Ropes			
		Bags			
		Hapa nets			
		Weigh scale			
		Feeders and Drinkers			
		Electric meat cutter			
		Debeaker			
		Flying knife			
		Scoop net			
		Fishing net			
		Boat/Dow			
		Hook			
		Other manually operated equipment (specify)			
2	Animal-powered	Ox- ploughs			
	equipment	Cultivators			
		Seed/fertilizer drills			
		Levellers			
		Animal carts			
		Animal ridger			
		Animal Drawn Ripper (Cultivator)			
		Other animal powered equipment (specify)			
3	Machine-powered	Water pumps			
	equipment: Irrigation*Report all	Drip irrigation equipment			
	irrigation	Sprinkler irrigation equipment			
	equipment,	Pivot Irrigation			
	regardless of	Other irrigation equipment (specify)			
	ownership.*Report				
	all irrigation equipment present				
	on the household				
	during the				
	reference period,				

	regardless of whether it was used during the reference period.				
4	Machine-	Stand-alone combustion engines			
	powered	Computers, laptops, tablets or smart phones used for farm management			
	equipment :	Solar Power Equipments			
	General farm use	Drones			
		Other machine powered equipment for general farm use (specify)			
5	Machine-	Four-wheel drive tractors/Two-wheel drive tractors			
	powered	Trailers			
	equipment :	Motorbicycle			
	Tractors,	Other vehicles (specify)			
	Bulldozers and				
	other vehicles				
6	Machine-	Ploughs			
	powered equipment : Land	Power tillers			
	preparation and	Rotary tillers			
	Planting equipment	Cultivators			
		Seed/fertilizer drills			
		Planters			
	*Report all land	Transplanters			
	preparation and	Other machine powered land preparation and planting equipment (specify			
	seeding				
	equipment used,				
	regardless of				
	ownership.				
7	Machine-	Sprayers			
	powered	Other machine powered crop maintenance equipment (specify			
	equipment : Crop maintenance"				
8	Machine-	Hay rakes			
ľ	powered	Hay balers			+
	equipment : Crop	Forage harvesters Chopper			
	harvesting	Combine harvesters			
		Sugarcane harvesters			
l		Sugarcane narvesters			1

		Other machine powered crop harvesting equipment (specify			
9	Machine-	Threshers			
	powered	Grain cleaners			
	equipment: Post- harvest	Winnowers			
		Sheller			
		Other post-harvest equipment (specify)			
10	Machine-	Milking machines			
	powered	Milk coolers			
	equipment: livestock	Cream separators			
	production	Other dairy equipment (packing, etc.)			
		Incubators			
		Beekeeping equipment (honey extractors, etc.)			
		Silage Cutter			
		Chopping forage machine (Chopper)			
		Milling feed machine			
		Processing machine			
		Aerator machine			
		Other livestock equipment (specify)		 	

## **SECTION 21: MACHINERY AND EQUIPMENT USED FOR AGRICULTURE (continue)**

			q6>0	Q7= <q2; Q7&gt;=0</q2; 	Q8>0		Q10>0
			If Q1==1 & Q5>0	If Q1==1	If Q1==1 & Q7>0	-	if Q9==1
IV	ACHINERY AND EQUIPMENT	INPUT TYPE	6	7	8	9	10
			What is the average age of the co-owned [INPUT TYPE]?	For the [INPUT TYPE] you used in the past agricultural year 2023/24, how many did you rent?	What was the total rent cost of all [INPUT TYPE] you rented during the past agricultural year 2023/24?	Did your household own and not use [INPUT TYPE] in working condition during the past agricultural year 2023/24?	If yes, how many were they?
1	Manually	Seed/fertilizer drills					
	operated	Transplanters					
	equipment	Threshers					
		Winnowers					
		Sprayers					
		Hand pumps or other hand irrigation devices					
		Sheller					
		Hand hoe					
		Rake					
		Shovel					
		Sickle					
		Panga					
		Slather					
		Wheelbarrow					
		Watering can					

1		Ropes	ĺ		
		Bags			
		Hapa nets			
		Weigh scale			
		Feeders and Drinkers			
		Electric meat cutter			
		Debeaker			
		Flying knife			
		Scoop net			
		Fishing net			
		Boat/Dow			
		Hook			
		Other manually operated equipment (specify)			
2	Animal-powered	Ox- ploughs			
	equipment	Cultivators			
		Seed/fertilizer drills			
		Levellers			
		Animal carts			
		Animal ridger			
		Animal Drawn Ripper (Cultivator)			
		Other animal powered equipment (specify)			
3	Machine-powered	Water pumps			
	equipment:	Drip irrigation equipment			
	Irrigation *Report all	Sprinkler irrigation equipment			
	irrigation	Pivot Irrigation			
	equipment,	Other irrigation equipment (specify)			
	regardless of				
	ownership. *Report all				
	irrigation				
	equipment present				
1	on the household				
	during the				
	reference period, regardless of				
	whether it was used				
	wnether it was used				

	during the reference period.			
4	Machine-	Stand-alone combustion engines		
	powered	Computers, laptops, tablets or smart phones used for farm management		
	equipment :	Solar Power Equipments		
	General farm use	Drones		
		Other machine powered equipment for general farm use (specify)		
5	Machine-	Four-wheel drive tractors/Two-wheel drive tractors		
	powered	Trailers		
	equipment:	Motorbicycle		
	Tractors,	Other vehicles (specify)		
	Bulldozers and			
	other vehicles			
6	Machine-	Ploughs		
	powered equipment: Land	Power tillers		
	preparation and	Rotary tillers		
	Planting equipment	Cultivators		
		Seed/fertilizer drills		
		Planters		
	*Report all land	Transplanters		
	preparation and	Other machine powered land preparation and planting equipment (specify		
	seeding			
	equipment used,			
	regardless of			
	ownership.			
7	Machine-	Sprayers		
	powered equipment : Crop	Other machine powered crop maintenance equipment (specify		
	maintenance"			
8	Machine-	Hay rakes		
	powered	Hay balers		
	equipment : Crop	Forage harvesters Chopper		
	harvesting	Combine harvesters		
		Sugarcane harvesters		
L		Other machine powered crop harvesting equipment (specify		
9		Threshers		

	Machine-	Grain cleaners			
	powered	Winnowers			
	equipment: Post-	Sheller			
	harvest	Other post-harvest equipment (specify)			
10	Machine-	Milking machines			
	powered	Milk coolers			
	equipment: livestock	Cream separators			
	production	Other dairy equipment (packing, etc.)			
		Incubators			
		Beekeeping equipment (honey extractors, etc.)			
		Silage Cutter			
		Chopping forage machine (Chopper)			
		Milling feed machine			
		Processing machine			
		Aerator machine			
		Other livestock equipment (specify)			

## SECTION 22: WOMEN'S EMPOWERMENT AND NUTRITION (DIETARY DIVERSITY)

### **TABLE OF CONTENT:**

**MODULE A: Contact and Consent** 

**MODULE D: Paid and Unpaid Activities** 

MODULE E: Participation and leadership in community

MODULE F: Life transitions and awareness of rights

MODULE G: Financial services and credit

MODULE H: Property ownership

MODULE I: Decision-making and control over income

MODULE J: Information communication technologies (ICT)

**MODULE L: Sexual harassment** 

MODULE M: Food and Drinks Consumed in Last 24 Hours

MODULE N: Information on respondent

MODULE O: Result of interview

### **MODULE A: Contact and Consent**

A01 Time stamp				DD	MM	YYYY	нн:	MM:	SS	
A02 Is [ <i>NAME</i> ] found?	 _	YES1 NO2 ► GO TO END C INTERVIEW SECTION	)F		_			_		_

#### If (A02==1 & SUBAMPLE-M)

Hello, my name is [ENUMERATOR NAME] from National Bureau of Statistics and Office of the Chief Government Statistician (Zanzibar). We are conducting a national agricultural survey, and your household has been chosen to participate in this survey. The survey includes a questionnaire on the capacity of men and women to pursue their own goals, to influence decisions in the household and in the broader community, the use of technology, property rights, etc.

You have been randomly selected to respond to this questionnaire. The interview will last approximately 20 minutes. The collected information will be used by the government and other organizations for planning purposes. The household will not receive any benefit because of this interview. The information will be kept strictly confidential, and you may skip the questions that make you feel uncomfortable.

### If (A02==1 & SUBAMPLE-W)

Hello, my name is [ENUMERATOR NAME] from National Bureau of Statistics and Office of the Chief Government Statistician (Zanzibar). We are conducting a national agricultural survey, and your household has been chosen to participate in this survey. The survey includes a questionnaire on the capacity of men and women to pursue their own goals, to influence decisions in the household and in the broader community, the use of technology, property rights, etc. Further, we ask about women's diet.

You have been randomly selected to respond to this questionnaire. The interview will last approximately 30 minutes. The collected information will be used by the government and other organizations for planning purposes. The household will not receive any benefit because of this interview. The information will be kept strictly confidential, and you may skip the questions that make you feel uncomfortable.

YES..1 ► GO TO Module D
NO...2 ► GO TO Module 0, question 004a

A03 CONSENT. Please let me know if I can go ahead with the interview.

# Module D: Paid and unpaid activities

D\_START: Start of module D date and time stamp

	DD	MM	YYYY	HH:	MM:	SS		ı
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## If [CAPI: IF D01A/B/C/D/E/F==1/Yes]

			DOTA/D/C/D/L/F1/Tesj
		D01	D02
	Now I am going to ask you about the activities you did over the past 7 days and how much influence you had over the time you spent on these activities.	During the last 7 days, did you spend any time on [ACTIVITY], even if for one hour?  YES1  NO2 ►  GO TO  NEXT ROW	During the last 7 days, how much influence did you have in deciding the amount of time you spent on [ACTIVITY]?  NO INFLUENCE
	ACTIVTIES	CODE	CODE
A	Household duties, such as cooking, cleaning, washing clothes, or collecting water or cooking fuel		
В	Caring for household members, such as children or older family members		
С	Going to the market to purchase essential items		
D	Non-agricultural work activities, including: working for pay, in cash or in kind, for someone else; running or doing any kind of business or other activity to earn income; and helping in a family business		
E	Commercial agricultural production, including: working on the household farm to produce crop, livestock or fish products, mainly for sale		
F	Agricultural production for household consumption, including: producing crop, livestock or fish products.		

D\_END:End of module D date and time stamp

	DD	MM	YYYY	HH:	MM:	SS	
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# Module E: Participation and leadership in community

|--|

E\_START: Start of module E date and time stamp

If [CAPI: IF E01A/B/C/D/E==1/Yes]

		E01	E02
	Now, I will ask you about your participation in different types of organizations during the last 12 months.	In the last 12 months, have you participated in [ORGANIZATION]?	In the last 12 months, have you acted in a leadership position in [ORGANIZATION]?
		No because the Organisation is Not present in the community3	ES
	ORGANIZATION	CODE	CODE
Α	Government councils or agencies		
В	Groups that provide local services, such as resource user groups, community health and education service groups, or mutual aid groups		
С	Formal or informal savings or credit groups, such as microfinance groups, village savings and loan associations (for example Upaiu), or merry-go-round savings schemes		
D	Groups related to livelihood activities, such as agricultural groups, cooperatives, and craft or trade associations		
E	Other groups, such as religious groups, women or men's groups, or sports groups, etc.		

# Module E: Participation and leadership in community (continue)

# INTERVIEWER: The question below is asked only if the randomly selected individual is a female

	Please listen to the following statements and indicate how often this happens in your	E03	
	community	NEVER.       0         SOMETIMES.       1         OFTEN.       2         ALWAYS.       3         (DO NOT READ: Don't know).97       97         (DO NOT READ: Refused)98	
	STATEMENT	CODE	
А	Women can really understand what is going in their community		
В	Women have the ability to participate effectively in community activities		
С	Women have the ability to participate effectively in decision-making		
D	It is important to women in this community that women actively participate in local women's issues		
E	Most community leaders listen to women		

# INTERVIEWER: The question below is asked only if the randomly selected individual is a male

	Please listen to the following statements and indicate how often this happens in your community	E04  NEVER
	STATEMENT	CODE
A	Men can really understand what is going on with your community	
В	Men have the ability to participate effectively in community activities	
С	Men have the ability to participate effectively in decision-making	
D	It is important to men in this community that men actively participate in local men's issues	
E	Most community leaders listen to men	

	DD	MM	YYYY	HH:	MM:	SS	
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Module F: Life	e transitions and	l awareness	of rights
IVIUUUIE F. LIII	z u ansnuvns anu	ı awaı EllESS	UI HEHLS

INTERVIEWER: Module F is asked only if the randomly selected individual for both male and female

F\_START: Start of module F date and time stamp

	DD	MM	YYYY	HH:	MM:	SS	
--	----	----	------	-----	-----	----	--

INTERVIEWER, READ ALOUD: Please listen to the following statements and indicate your level of agreement with each statement.
READ RESPONSE OPTIONS

	STATEMENT	CODE
А	Every woman should be free to choose whether to complete secondary school (Beyond form 4).	
В	Every woman should be free to choose whether to work for pay.	
С	Every woman should be free to choose to prioritize her work for pay over domestic duties.	
D	Every woman should be free to choose what to do with any money that she earns.	
E	Every woman should be free to choose to purchase land, a house, or other valuable goods.	
F	Every woman should be free to choose when to get married.	
G	Every woman should be free to choose to divorce or end her marriage or relationship.	
Н	Every woman should be free to choose whether and when to have children.	
1	Every woman should be free to choose not to have any more children.	

	DD	MM	YYYY	HH:	MM:	SS	
ı							

F\_END:End of module F date and time stamp

GSTART: Start of module G date and time stamp    DD   MM   VYYY   HH;   MM:   SS	Module G: Financial services and credit		
G.01  INTERVIEWER, READ ALOUD: Now, I am going to ask about your use of different financial services. In the past 21 months, have you ever:  256.  256.  (DO NOT READ! Refused)		DD MM VVVV HH- MM- SS	
INTERVIEWER, READ ALOUD: Now, I am going to ask about your use of different financial services.  In the past 12 months, have you ever.  285	G START: Start of module G date and time stamp	DD IVIIVI TTTT IIII. IVIIVI. 33	
INTERVIEWER, READ ALOUD: Now, I am going to ask about your use of different financial services. In the past 12 months, have you ever:    STATEMENT	G_START. Start of module G date and time stamp		
INTERVIEWER, READ ALOUD: Now, I am going to ask about your use of different financial services. In the past 12 months, have you ever:    STATEMENT	_	004	
In the past 12 months, have you ever:  VES			
STATEMENT  CODE  A Used any mobile money account, either yours or anyone else's, to make a payment, buy something, or send money to someone?  B Deposited or received money into or withdrawn money from any bank account, either yours or anyone else's?  C Used any bank card, or debit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  D Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  G02  INTERVIEWER, READ ALOUD:: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES			
A Used any mobile money account, either yours or anyone else's, to make a payment, buy something, or send money to someone?  B Deposited or received money into or withdrawn money from any bank account, either yours or anyone else's?  C Used any bank card, or debit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  D Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  GO2  INTERVIEWER, READ ALOUD: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES		YES1	
A Used any mobile money account, either yours or anyone else's, to make a payment, buy something, or send money to someone?  B Deposited or received money into or withdrawn money from any bank account, either yours or anyone else's?  C Used any bank card, or debit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  D Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  G02  INTERVIEWER, READ ALOUD: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES		(DO NOT READ: Refused)98	
A Used any mobile money account, either yours or anyone else's, to make a payment, buy something, or send money to someone?  B Deposited or received money into or withdrawn money from any bank account, either yours or anyone else's?  C Used any bank card, or debit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  D Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  G02  INTERVIEWER, READ ALOUD: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES			
B Deposited or received money into or withdrawn money from any bank account, either yours or anyone else's?  C Used any bank card, or debit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  D Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  G02  INTERVIEWER, READ ALOUD: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES		STATEMENT	CODE
C Used any bank card, or debit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  G02  INTERVIEWER, READ ALOUD: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES	А	Used any mobile money account, either yours or anyone else's, to make a payment, buy something, or send money to someone?	
Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?  G02 INTERVIEWER, READ ALOUD: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES	В	Deposited or received money into or withdrawn money from any bank account, either yours or anyone else's?	
G02  INTERVIEWER, READ ALOUD:: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES	С	Used any bank card, or debit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?	
INTERVIEWER, READ ALOUD:: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES	D	Used any credit card, either yours or anyone else's, to make a purchase or pay a bill such as a utility bill?	
INTERVIEWER, READ ALOUD:: Now, I am going to ask you about loans from different types of lenders.  If you need it, could you take a loan from any of the following  YES			
If you need it, could you take a loan from any of the following  YES			
STATEMENT CODE  A Formal financial institution (e.g. Banks)  B Saving and Credit Cooperative Societies (SACCOS)  C Group based micro-finance / micro-credit (e.g. Tigo Kibubu, M-KOBA, online apps)  D Informal credit / savings groups, such as private moneylenders, a village savings and loan group (for example Upatu), merry-go-rounds, or funeral societies  E Other NGO program			
STATEMENT CODE  A Formal financial institution (e.g. Banks)  B Saving and Credit Cooperative Societies (SACCOS)  C Group based micro-finance / micro-credit (e.g. Tigo Kibubu, M-KOBA, online apps)  D Informal credit / savings groups, such as private moneylenders, a village savings and loan group (for example Upatu), merry-go-rounds, or funeral societies  E Other NGO program		If you need it, could you take a loan from any of the following	
STATEMENT CODE  A Formal financial institution (e.g. Banks)  B Saving and Credit Cooperative Societies (SACCOS)  C Group based micro-finance / micro-credit (e.g. Tigo Kibubu, M-KOBA, online apps)  D Informal credit / savings groups, such as private moneylenders, a village savings and loan group (for example Upatu), merry-go-rounds, or funeral societies  E Other NGO program		YES1	
A Formal financial institution (e.g. Banks)  B Saving and Credit Cooperative Societies (SACCOS)  C Group based micro-finance / micro-credit (e.g. Tigo Kibubu, M-KOBA, online apps)  D Informal credit / savings groups, such as private moneylenders, a village savings and loan group (for example Upatu), merry-go-rounds, or funeral societies  E Other NGO program		(DO NOT READ: Refused)98	
A Formal financial institution (e.g. Banks)  B Saving and Credit Cooperative Societies (SACCOS)  C Group based micro-finance / micro-credit (e.g. Tigo Kibubu, M-KOBA, online apps)  D Informal credit / savings groups, such as private moneylenders, a village savings and loan group (for example Upatu), merry-go-rounds, or funeral societies  E Other NGO program			
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B Saving and Credit Cooperative Societies (SACCOS) C Group based micro-finance / micro-credit (e.g. Tigo Kibubu, M-KOBA, online apps) D Informal credit / savings groups, such as private moneylenders, a village savings and loan group (for example Upatu), merry-go-rounds, or funeral societies E Other NGO program			CODE
C Group based micro-finance / micro-credit (e.g. Tigo Kibubu, M-KOBA, online apps)  D Informal credit / savings groups, such as private moneylenders, a village savings and loan group (for example Upatu), merry-go-rounds, or funeral societies  E Other NGO program			
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E Other NGO program			
G_END:End of module G date and time stamp	E	Other NGO program	
G_END:End of module G date and time stamp			
	G_END:End of module G date and time stamp	DD MM YYYY HH: MM: SS	
	·		

Modi	Module H: Property ownership							
11100								
H_STA	RT: Start of module H date and time stamp							
_ INTERV	TEWER, READ ALOUD: Now I am going to ask you about your rights over agricultural land and your dwelling							
	OWNERSHIP	OPTIONS						
H01	Do you own or have the right to use any agricultural parcels of land, either alone or jointly with someone else? This refers to all the parcels that you can have rights to, either alone or together with others.  (agricultural land includes also backyard gardens)	YES, ALONE						
H02	Do you have the right, either alone or jointly with someone else, to sell any agricultural parcels of land?	YES, ALONE						
H03	Do you have the right, either alone or jointly with someone else, to give any agricultural parcels of land, by oral or written will, to other persons after your death?	YES, ALONE						
H04	Do you own or have the right to use any agricultural parcels of land, either alone or jointly with someone else? This refers to all the parcels that you can have rights to, either alone or together with others. 7:18(agricultural land includes also backyard gardens)	YES						
Н05	Is your name listed on any of these documents as an owner or rights holder, either alone or jointly with someone else?	YES, ALONE						

H06 a	How likely are you to involuntarily lose ownership to any land you own in the next 5 years?	NOT ALL LIKELY
H06 b	How likely are you to involuntarily lose use rights to any land you have the right to use in the next 5 years?	SLIGHLTY LIKELY
H07	Do you own or have the right to use the <b>dwelling</b> in which you live, either alone or jointly with someone else?	YES, ALONE
Н08	Do you have the right, either alone or jointly with someone else, to sell the dwelling in which you live?	YES, ALONE
Н09	Do you have the right, either alone or jointly with someone else, to give your dwelling, by oral or written will, to other persons after your death?	YES, ALONE
H10	Is there a document for the dwelling in which you live, that is issued by or registered at a government agency, such as a purchase certificate, a site plan, a building permit or a lease/rental contract?	YES
H11	Is your name listed on any of these documents as an owner or rights holder, either alone or jointly with someone else?	YES, ALONE
H12 a	How likely are you to involuntarily lose ownership to the dwelling in which you live, in the next 5 years?	NOT ALL LIKELY. 1 SLIGHLTY LIKELY. 2 MODERATELY LIKELY. 3 VERY LIKELY. 4 EXTREMELY LIKELY. 5 (DO NOT READ: Don't know. 97) (DO NOT READ: Refused. 98)

H12 b	How likely are you to involuntarily lose use rights to the dwelling in which you live, in the next 5 years?	NOT ALL LIKELY.  SLIGHLTY LIKELY.  MODERATELY LIKELY.  VERY LIKELY.  EXTREMELY LIKELY.  (DO NOT READ: Don't know. 97  (DO NOT READ: Refused. 98
H_EN	D:End of module H date and time stamp	

Module I: Decision-making and control over income									
I_START: Start of module I d	I_START: Start of module I date and time stamp								
-			DD	MM	YYYY	HH:	MM:	SS	
									_
	<b>INTERVIEWER, READ ALOUD:</b> Now I am going to ask you about h decisions and control over income.	now	muc	h influ	ence you	have ii	n		
	STATEMENT					OPTI	ONS		
101	How much influence do you have regarding the use of money earned or received by yourself or other household members?				NO INFLUENCE				
						OPTI	ONS		
102	Now, please tell me how much influence you have on			S( A (1 D(	O INFLU OME INF LOT OF DO NOT on't kn DO NOT efused.	LUENCI INFLU READ: OW READ:	E UENCE.		2
	STATEMENT					CO	DE		
А	Making large household purchases, such as cars, motorbikes, furnelectric appliances	nitu	ıre,						
В	Your own healthcare (such as specialistic visits, hospital bills or su	urge	eries)	)					

I\_END:End of module I date and time stamp

DD MM YYYY HH: MM: SS

Module J: Inf	formation communication technologies (ICT)	
J_START: Start o	DD MM YYYY HH: of module J date and time stamp	MM: SS
	J01. INTERVIEWER, READ ALOUD: Next, I am going to ask you how often you use different types of technological designs and the second sec	pgv. Please indicate how often you use:
	DAILY	-, , , , , , , , , , , , , , , , , , ,
	STATEMENT	CODE
А	Mobile phone	
В	Internet (including WhatsApp, Telegram, Facebook, Tik-Tok and other social media)	
J_END:End of m	DD MM YYYY HH:	MM: SS

Module L: Sexual harassment		
INTERVIEWER: The module L is asked only if the randomly selected individual is a female		
L_START: Start of module L date and time stamp	DD MM YYYY HH: MM: SS	
_ L00. INTERVIEWER <u>DO NOT READ ALOUD</u> : PLEASE MAKE SURE THERE IS NO PERSON 5 YEARS AND OVER WHO COULD OVERHEAR THE INTERVIEW		
	L01. INTERVIEWER READ ALOUD: Now, I will ask you some questions about experiences women in your community may have. In your opinion, how acceptable is it that:	
	NEVER ACCETTABLE	
	STATEMENT	COD E
A	A man treats a woman as "lesser" because she is a woman, for example, speaks badly, interrupts, or ignores her?	
В	A man prevents a woman from doing certain kinds of work, even if she wants to?	
С	A man spreads unwelcome rumors about a woman's sex life?	
D	A man tries to have a romantic or sexual relationship with a woman when she doesn't want it?	
E	A man offers work-related benefits to a woman with the expectation of receiving sexual favors?	
L_END:End of module L date and time stamp	DD MM YYYY HH: MM: SS	

Module L: Sexual harassment								
INTERVIEWER: The module L is asked only if the randoml	y selected individual is a female							
L_START: Start of module L date and time stamp	DD MM YYYY HH: MM: SS							
-								
LOO. INTERVIEWE	R DO NOT READ ALOUD: PLEASE MAKE SURE THERE IS NO PERSON 5 YEARS AND OVER WHO COULD OVER							
	HEAR THE INTERVIEW	inian						
	LO1. INTERVIEWER READ ALOUD: Now, I will ask you some questions about experiences women in your community may have. In your op how acceptable is it that:	mion,						
	NEVER ACCETTABLE1							
	SOMETIMES ACCETTABLE2							
	USUALLY ACCETTABLE	ļ						
	(DO NOT READ: Refused98)							
		T						
	STATEMENT	CODE						
Α	A man treats a woman as "lesser" because she is a woman, for example, speaks badly, interrupts, or ignores her?							
В	A man prevents a woman from doing certain kinds of work, even if she wants to?							
С	A man spreads unwelcome rumors about a woman's sex life?							
D	A man tries to have a romantic or sexual relationship with a woman when she doesn't want it?							
Е	A man offers work-related benefits to a woman with the expectation of receiving sexual favors?							
	DD MM YYYY HH: MM: SS							
L_END:End of module L date and time stamp								

Modula	M·	Food	and	Drinke	Consumed	in	lact	24	Houre
woaule	IVI:	Food	and	Drinks	Consumed	ın	Last	24	Hours

INTERVIEWER: The module M is asked only if the randomly selected individual is a female

	DD	MM	YYYY	HH:	MM:	SS	
--	----	----	------	-----	-----	----	--

Not (I like to ask about your current pregnancy and breastfeeding status.  Mol 12. Are you currently pregnant? YES	M_START: Start of module M date and time sta _	amp	
Note: Include any food you alte and drinks you consumed in the past 24 hours, whether at home or outside the household. Please listen to the foods and drinks from the prepared list. If there is a food or drink you consumed in the past 24 hours, please answer "YES," and if you did not consume, answer "NO." These foods and drinks may have been eaten or drunk on their own or mixed with other items.  M01: In the past 24 hours, did you eat or drink [FOOD/DRINK]?"  YES		M01a: Are you currently pregnant?         YES	
FOOD ITEM  ANSWE R  A1a. Ugali made from refined maize flour, rice, bread, chapati, rice bUgali made from refined maize flour, dehulled maize, rice, bread, chapati, rice bun, or pasta/macaroni?  Ugali made from whole meal flour, yellow maize ugali, roasted or boiled maize in cobs, popcom/dry fried maize grains, ugali made from sUgali made from whole meal flour, yellow maize ugali, roasted or boiled maize in cobs, popcorn/dry fried maize grains, ugali made from sorghum, dehulled maize or porridge made from millet?  A2 Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (local starchy roots)?		Note: Include any food you ate and drinks you consumed in the past 24 hours, whether at home or outside the household.  Please listen to the foods and drinks from the prepared list. If there is a food or drink you consumed in the past 24 hours, please answer 'YES,' and if you did not consume, answer 'NO.' These foods and may have been eaten or drunk on their own or mixed with other items.	d drinks
A1a. Ugali made from refined maize flour, rice, bread, chapati, rice bUgali made from refined maize flour, dehulled maize, rice, bread, chapati, rice bun, or pasta/macaroni?  Ugali made from whole meal flour, yellow maize ugali, roasted or boiled maize in cobs, popcorn/dry fried maize grains, ugali made from sugali made from whole meal flour, yellow maize ugali, roasted or boiled maize in cobs, popcorn/dry fried maize grains, ugali made from sorghum, dehulled maize or porridge made from millet?  A2 Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (local starchy roots)?			
Ugali made from whole meal flour, yellow maize ugali, roasted or boiled maize in cobs, popcorn/dry fried maize grains, ugali made from sUgali made from whole meal flour, yellow maize ugali, roasted or boiled maize in cobs, popcorn/dry fried maize grains, ugali made from sorghum, dehulled maize or porridge made from millet?  Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (local starchy roots)?		FOOD ITEM	
roasted or boiled maize in cobs, popcorn/dry fried maize grains, ugali made from sorghum, porridge made from sorghum, dehulled maize or porridge made from millet?  Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (Cassava, cooking bananas, Irish potatoes, ugali made from cassava, bread fruit, sweet potatoes, yams, or Ming'oko (local starchy roots)?	A1a.	Ugali made from refined maize flour, rice, bread, chapati, rice bUgali made from refined maize flour, dehulled maize, rice, bread, chapati, rice bun, or pasta/macaroni?	
sweet potatoes, yams, or Ming'oko (local starchy roots)?	A1b.		
B Dry beans, peas, cowpeas, green gram, dhal, Bambara nuts, soya beans, dry chickpeas, or soya milk?	A2		
	В	Dry beans, peas, cowpeas, green gram, dhal, Bambara nuts, soya beans, dry chickpeas, or soya milk?	

С	Groundnuts, peanut butter, coconut, coconut milk, almonds, cashew nuts, pumpkin seeds, sunflower seeds or sesame?	
D	Fresh milk, powdered milk, tea with milk or porridge with milk?	
E	Yoghurt, sour milk, cheese or loshoroo (local dish with plenty of milk)?	
F Beef, goat meet, sheep meet, minced meet, pock, rabbit or game meet?		
G	Liver, kidneys, intestines, heart, gizzard, spleen, tongue or lungs?	
Н	Sausage, ham, bacon, salami or tinned meet?	
I	Chicken, duck, pigeon pea or dove?	
J	Sardines, sea fish, lake fish, prawns, Ngisi, octopus, crab or kombe?	
K	Eggs?	
L	Amaranth, collard greens, spinach, cowpea leaves, pumpkin leaves, or cassava leaves?	
M1	Sweet potato leaves, black nightshade, spider plant, African nightshade, bitter leaves, or chaya?	
M2	Carrots, pumpkins, or yellow sweet potatoes?	
N	Mangoes, papaya, passion fruits, or plums?	
0	Cabbage, tomatoes, bitter tomatoes, sweet peppers, eggplant, cucumber, okra, cauliflower, broccoli, fresh peas, fresh beans, fresh pigeon peas, or seaweed?	
Р	Oranges, tangerines, ripe bananas, pineapple, pears, apples, watermelon, baobab fruit, or avocado?	
Q1	Guava, jackfruit, grapes, passion fruit, coconut fruit, tamarind, soursop, star fruit, or dates?	
Q2	Cassava crisps, potato crisps, banana crisps, or others like Lays, Pringles?	
R	Doughnuts, fried meat, bhajias, chips, fried cassava, fried sweet potatoes, kachori, samosas, doughnuts, or half cake?	
Indomie noodles clndomie noodles chicken, meat, or chicken and onion flavor; Mimi noodles chicken, meat, or vegetable flavor; Simba Mbili noodles chicken, meat, or vegetable flavor; or Jin Ran chicken, meat, or vegetable flavor? (Instant noodles – a type of noodles prepared quickly and easily, packaged with various flavorings such as meat, chicken, vegetables, and other seasonings for taste appeal to different age groups).		
Т	Shawarma, fried chicken, fries, pie, artificial fruit juice, artificial milk drink with syrup, burgers, or pizza? (Foods purchased from modern restaurants like Pizza Hut, KFC, Subway, Mary Brown, Mr. Burger).	
U	Cakes, sugar biscuits, candy, chocolate, ice cream, halwa, kashata or visheti?	
Tea with sugar, coffee with Tea with sugar, coffee with sugar, Milo, cocoa with sugar, fruit juice with added sugar, sweet drinks with artificial fruit flavors, drinks like Coca-Cola, Pepsi, Fanta or Mirinda?		
W1	Infusions/drinks made from lemongrass, ginger, hibiscus, cinnamon, cloves, cardamom, or other spices with added sugar?	
W2	Grasshoppers, winged termites or other edible insects?	
X	Palm oil?	
Y	Sunflower oil, cottonseed oil, peanut oil, coconut oil, or olive oil?	

M\_END:End of module M date and time stamp

	DD	MM	YYYY	HH:	MM:	SS	
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Modul	Module N: Information on respondent			
N01	INTERVIEWER: What is [NAME]'s sex? [Validation Rule: if sex is different from the HH roster put the following warning: "Sex is different from what has been said before in the ROSTER. Do you confirm the sex?]	MALE		
N02	What is your age? (Age should be in complete years) [Validation rule: if age is different from the one in the HH roster, put the following warning: "the age is different from what has been said before. Do you confirm this age?"]			
N03	Can you read and write in any language?	Yes1 No2		
N04	Have you ever attended school?	Yes1 No2		
N05	What is the highest educational level you completed?	NURSERY/PRESCHOOL		

Modu	Module O: Result of interview		
		Yes1▶ 003	
O01	<b>INTERVIEWER</b> : Was the respondent interviewed alone?	No, one person attended the interview2	
		No, more than one person attended the interview3	
	INTERVIEWER: Who attended the interview?	Children1	
O02	TICK ALL THAT APPLY.	Adult males2	
		Adult females3	
O03	INTERVIEWER: Interview status	Interview completed1	
003	INTERVIEWER. IIILEIVIEW STATUS	Interview partially completed2	
		Respondent had to leave1	
O04	INTERVIEWER: Reason for incomplete interview	Respondent was busy2	
		Other (spec)9	

O04a	(if A03 ==0)  INTERVIEWER: Reason for refusing the interview	1 – No time to participate to the interview 2 – Respondent does not want to be interviewed 3 – Household head did not allow him/her to participate to the interview 4 – Person is sick or physically / mentally impaired 9 – Other (specify)
	END OF INTERVIEW DATE/TIME STAMP	D MM YYYY HH: MM: SS
1. STATU	JS OF THE INTERVIEW	
2. (IF Q1:	) 1 completed ) 2 partially completed ) 3 not interviewed  ==2) REASON FOR NOT COMPLETING THE INTERVIEW	RESPONDENT HAD TO LEAVE1 RESPONDENT WAS BUSY WITH OTHER ACTIVITIES
3. END T	IME OF INTERVIEW	DATE HH MM
4. Intervie	ew location	DWELLING
5. GPS c	pordinates of the interview location	5a. latitude

CROP CODES				
TEMPORARY CROPS	<u>.</u>	PERMANENT CROPS	_	
11Maize	872Bitter tomato	18Black Pepper	81Plums	
12Paddy	88Spinach	34Pigeon pea	82Apples	
13Sorghum	89Carrot	38Malay apple	83Pears	
14Bulrush Millet	90Chilies	39Ambarella	84Peaches	
15Finger Millet	901Sweet/bell pepper	44Palm Tree	97Durian	
16Wheat	902Sweet potato leaves	45Coconut	98Bilimbi	
17Barley	903Mnavu/Mnafu	46Cashew nut	99Rambutan	
21Cassava	904Figiri, sukuma wiki	53Sisal	110Olive	
22Sweet potatoes	905Brocol	54Coffee	200Custard apple	
23Irish potatoes	906Pumpkin leaves	55Tea	201God fruit	
24Yams	907Majani ya kunde	56Cocoa	202Mitobo	
25Cocoyams	91Amaranths	57Rubber	203Black plum	
26Onion	92Pumpkins	58Wattle	205Pomegranate	
27Ginger	921Squash	59Kapok	210Dates	
28Garlic	93Cucumber	60Sugar cane	211Tungamaa	
31Beans	94Egg Plant	61Cardamom	212Vanilla	
311Upupu	95Water mellon	63Tamarind	213Strawberry	
312Green beans	96Cauliflower	64Cinnamon	214Roselle	
32Cowpeas	100Okra	65Nutmeg	215Soursop	
33Green gram	101Fiwi	66Clove	300Green Tomato	
35Chick peas	102Coriander	67Bread fruit	301Monkeybread	
36Bambaranuts		68Pomelo	302Bamboo	
37Field peas		69Jack fruit	304Timber	
41Sunflower		70Passion Fruit	305Medicinal plant	
42Sesame		71Banana	306Fence tree	
43Groundnut		72Avocado	307Lemon grass	
47Soyabeans		73Mango	851Lime	
48Caster seed		74Pawpaw	852Lemon	
50Cotton		75Pineapple	998Other(Specify)	
51Tobacco		76Orange		
52Pyrethrum		77Grapefruit		
62Jute		78Grapes		
19Seaweed		79Mandarin		
86Cabbage		80Guava		
871 Tomatoes				
	ment crop, moved to temporary on MoA request, 10/10/2023.			

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Shaban Aadam Mafuru

Shaban Ahmad Fadhili

Shangwe Mary Raphael

Shem Lyden Mwanjota

Shomari Rajabu Mkenge

Specioza Kinyaiya

Spensa Lishela

Stella Venelabils NyamkijuJige

Tabitha Boniface Mwanyangala

Tamla Moammed zuberi

Teddy Nyamle Nyamle

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Abdillah Wadi Nahoda

Ahmada Zahran

Asha Saleh Mbarouk

Asya Salum Rashid

Idris Abdulwakil Idris

Khatibu Mohamed

Maimuna Himid Omar

Mkubwa Kombo Ali

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