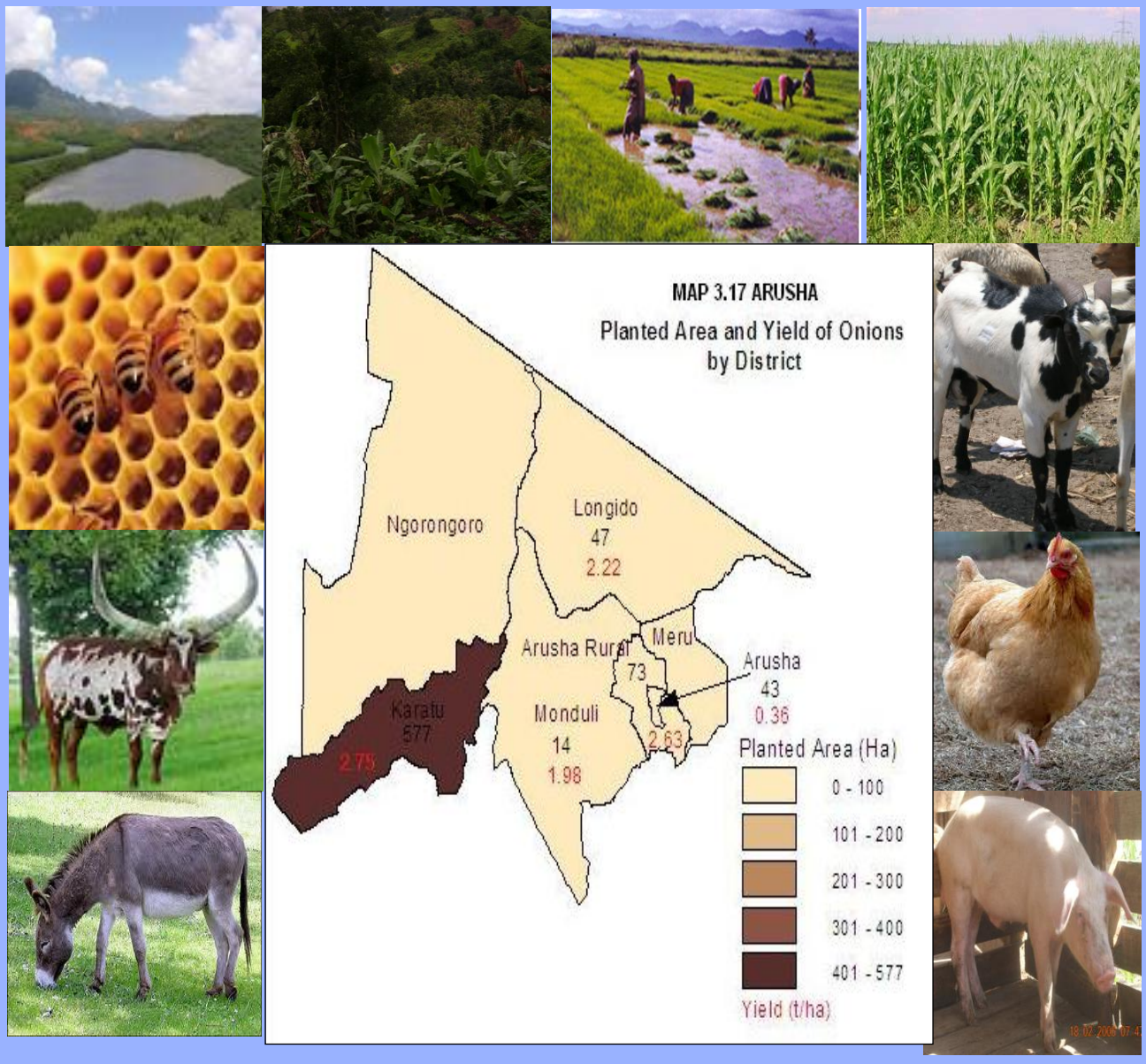
The United Republic of Tanzania

NATIONAL SAMPLE CENSUS OF AGRICULTURE 2007/2008

VOLUME Vb: Region Report: ARUSHA REGION



Ministry of Agriculture, Food Security and Cooperatives, Ministry of Livestock Development and Fisheries, Ministry of Water and Irrigation, Ministry of Agriculture, Livestock and Environment, Zanzibar, Prime Minister's Office, Regional Administration and Local Governments, Ministry of Industries, Trade and Marketing, The National Bureau of Statistics and the Office of the Chief Government Statistician, Zanzibar

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ACRONYMS

ASDP	Agricultural Sector Development Project
CSPro	Census and Survey Processing Program
DFID	Department For International Development
DIAS	District Integrated Agricultural Survey
DS	District Supervisor
EAS	Expanded Agricultural Survey
EAs	Enumeration Areas
EU	European Union
FE	Field Enumerator
GDP	Gross Domestic Product
ha	Hectares
IAS	Integrated Agricultural Survey
ICR	Intelligent Character Recognition
IEC	Information, Education and Communication
JICA	Japanese International Cooperation Agency
LRS	Long Rainy Season,
MAFC	Ministry of Agriculture and Food Security and Cooperatives
MCM	Ministry of Co-operatives and Marketing
MWLD	Ministry of Water and Livestock Development
NBS	National Bureau of Statistics
NGO	Non Governmental Organization
NMS	National Master Sample
NSCA	National Sample Census of Agriculture
NSGRP	National Strategy for Growth and Reduction of Poverty
PORALG	President's Office, Regional Administration and Local Government
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit
RAAS	Rapid Appraisal Agricultural Survey
RS	Regional Supervisor
RSM	Regional Statistical Manager
SAC	Scotts Agriculture Consultancy Ltd
SPSS	Statistical Package for Social Science

SRS	Short Rainy Season
TOT	Training of Trainers
ULG	Ultek Laurence Gould
UNDP	United Nations Development Programme
UNFAO	United Nations Food and Agriculture Organization
VPO	Vice President Office

PREFACE

At the end of the 2007/08 Agriculture Year, the National Bureau of Statistics (NBS) in collaboration with the Ministries of Agriculture, Food Security and Cooperatives, Livestock and Fisheries Development; Water; Industry and Trade; the Prime Minister's Office, Regional Administration and Local Government (PORALG) and the Office of the Chief Government Statistician, (OCGS), Ministries of Agriculture and Natural Resources; Livestock and Fisheries conducted the Agriculture Sample Census. This is the fourth Agriculture Census to be carried out in Tanzania, the first one was conducted in 1971/72, the second in 1993/94 and 1994/95 (during 1993/94 data on household characteristics and livestock count were collected and data on crop area and production in 1994/95), and the third was conducted in 2002/03.

It is considered that this census is one of the largest to be carried out in Africa and indeed in many other countries of the world. The census collected detailed data on crop production, crop marketing, crop storage, livestock production, fish farming, and poverty indicators. In addition to this, the census was large in its coverage as it provides data that can be disaggregated at district level and thus allow comparisons with the 2002/03 National Sample Census of Agriculture. The census covered smallholders in rural areas only and large scale farms. This report presents Arusha data disaggregated to district levels. It was very difficult to discuss all variables collected in a single report hence the analysis was based on the most important smallholder variables. The rest of the variables are found in the attached annex of table of results. The analysis in the report includes trend analysis using data from the previous censuses and surveys, particularly the 2002/03. The extensive nature of the census in relation to its scope and coverage is a result of the increasing demand for more detailed information to assist in the proper planning of the agricultural sector and in the administrative decentralization of planning to district level. It is hoped that this report will provide new insights for planners, policy makers, researchers and others involved in the agricultural sector in order to improve the prevailing conditions faced by agricultural households in the country.
On behalf of the Government of Tanzania, I wish to express my appreciation for the financial support provided by the development partners, in particular, the Department for International Development (DFID) the European Union as well as DFID, UNDP, the Japanese Government through the Japan International Cooperation Agency (JICAand others who contributed through the pool fund mechanism.

Finally, my appreciation goes to all those who in one-way or the other contributed to the success of the survey. In particular, I would also like to mention the enormous effort made by the Planning Group composed of professionals from the Agriculture Statistics Department of the National Bureau of Statistics (NBS), the Office of the Chief Government Statistician in Zanzibar (OCGS) and the Statistics Unit of the Ministry of Agriculture and Food Security (MAFS) with technical assistance provided by Ultec Lawrence Gould (ULG), the Food and Agriculture Organisation of the United Nations (FAO), and the Census and Surveys Technical Working Group (CSTWG).

Additionally, I would like to extend my appreciation to all professional staff of the National Bureau of Statistics, the sector Ministries of Agriculture and PORALG, the Consultants as well as Regional and District Supervisors and field enumerators for their commendable work. Certainly without their dedication, the census would not have been such a success.

Dr Albina A. Chuwa
The Director General
National Bureau of Statistics

EXECUTIVE SUMMARY

The executive summary highlights the main survey results obtained during the National Sample Census of Agriculture 2007/08. This report covers small-scale agriculture households in rural areas of Arusha region who were selected using statistical sampling techniques. The results presented in this report do not cover urban areas and large-scale farmers. Highlighted are important findings regarding agricultural production, productivity, husbandry, access to resources, levels of involvement in agricultural and related activities and poverty in Arusha region, the aim being to present an overview of the rural agricultural households and their levels of involvement in agricultural activities at regional level.

i) Household Characteristics

The number of agricultural households in Arusha region was 205547 out of which 37,985 (19%) were involved in growing crops only, 31,097 (15%) in rearing livestock only, and 135,687 (66%) were involved in crop production as well as livestock keeping. Agricultural households who were pastoralists were not recorded in Arusha in the census year. Most of the agricultural households ranked annual crop/seaweed farming as an activity that provided most of their cash income followed by livestock keeping/herding, followed by fishing hunting

Arusha region had a total literacy rate of 74.4 percent, the highest literacy rate was found in Arumeru district (86.6%) followed by Arusha (81.7%), Arusha Rural (80%) and Monduli (61.3%). The lowest literacy rates were recorded in Longido and Ngorongoro districts at 48.9 and 54.4 percent respectively. The number of heads of agricultural households with formal education (University and other Higher institutions) in Arusha region was 6188 (79.0%). Out of this, those with University and other tertiary education were 6302 (42%) and those with only adult education were 57 (57.6%).

ii) Crop Production

Land Area

The total area of land available to smallholders was 198,309 ha. The regional average land area utilised for crop production per crop growing household was only 1 ha. This figure was below the national average of 2.0 hectares.

Planted Area

The area planted with annual crops and vegetables was 200,958 hectares out of which 166,061 hectares (83%) were planted during long rainy season and 33,997 hectares (17%) were planted during short rainy season. Cereals are the main crops grown in Arusha region. The area planted with cereals was 322,762 ha (66% of the total planted area), followed by pulses with 86,809 ha (30%), fruits and vegetables 5.911 ha (2%), oil seeds and oil nuts 76411 ha (1%), root and tubers 125, 98 ha (1%), and Annual cash crops that are mainly constituted of cotton and tobacco had got the least planted area of about 1004 ha (0.0%).

The area of land under temporary mixed crops was 103721.2 hectares (38.2 % of the total land available to smallholders in Arusha), followed by temporary mono crops 72092.0 ha, 26.5%), pasture (23515.6 ha, 8.7%), permanent mixed crops (20224.8 ha, 7.4%), permanent mono crops (14386.6ha, 5.3%), fallow (11083.0ha, 4.1%), uncultivated land (7238.2ha, 2.7%), permanent/ annual mix (7105.7ha, 2.6%), unusable (6485.2ha, 2.4%), rented to others (2306.6ha, 0.8%), planted trees (2016.8 ha 0.7%), and area under natural bush (1456.4ha, 0.5%).

Maize

Maize was the dominant annual crop grown in Arusha region. The total production of maize was 209,678 tonnes from a planted area of 123,901 ha followed by beans which had the second largest planted area. The areas planted with maize constitute 63 percent of the total area planted with annual crops in the region, and that planted with beans constitute 26 percent. Other crops in order of their importance (based on the area planted) include wheat, Green gram, Cowpeas, chick peas, sunflower, sorghum, Irish potatoes and tomatoes. Other crops were less important and were planted in less than a thousand hectares and these were tomatoes, paddy, onions, finger millet, sweet potatoes, and cabbage.

Beans

Beans dominate the production of pulse crops in the region. The number of households growing beans in Arusha region was 116,844. The total production of beans in the region was 51,661 tonnes from a planted area of 50,726 hectares resulting in a yield of 1.0 t/ha.

Irish Potatoes

The number of households growing Irish potatoes in Arusha region was 3,229. This represents 1.6 percent of the total crop growing households in the region. The total production of Irish potatoes during the census year was 3,996 tonnes from a planted area of 1,380 hectares resulting in a yield of 0.3t/ha. The area planted with Irish potatoes accounted for 0.4 percent of the total area planted with annual crops and vegetables in the census year.

Sunflower

Sunflower was the leading among Oil seeds and Oils Nuts crops. The number of households growing Sunflower was 7,925 households. The total production of sunflower in the region was 1,187 tonnes from a planted area of 2,217 hectares resulting in a yield of 0.5t/ha., other crops in this category were simsim and soya beans.

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Fruit and Vegetables

The total production of fruits and vegetables was 30,549 tonnes. The most cultivated fruit and vegetable crop was tomatoes with a production of 18,866 tonnes (61.8% of the total fruit and vegetables produced), followed by cabbage (3,649t, 15.2%), onions (1,925 t, 6.3 %), Cucumber (1,464t, 4.8 %), carrot (993t 3.3%), bitteer Aubergine (751t, 2.5%), Spinach (566t, 1.9%), Egg Plant (519t, 1.7%), amaranthus (309t, 1%), and chilies (276t, 0.9%). The production of the other fruits and vegetables was relatively small with less than 1 percent of the total fruit and vegetables produced

Permanent Crops

The area smallholders planted with permanent crops was 22802.1hectares (13 % of the area planted with annual and permanent crops in the region). The most important permanent crop in Arusha region was banana which had a planted area of 540 ha, (57.1% of the planted area of all permanent crops) followed by pigeon pea (150 ha, 16%), avocado (53.9ha, 6%), and Mango (42ha, 4%). The remaining permanent crops collectively had a planted area of 104 ha (11%).

Improved Seeds

The planted area using improved seeds was estimated at 61,765 ha which represents 31 percent of the total planted with the annual crops and vegetables area. The percentage use of improved seed in

the short rainy season was 38 percent, while use of improved seeds in the long rainy season was 29 percent.

Use of Fertilizers

The use of fertilisers on annual crops is relatively small with a planted area of only 42,565 ha (21.2% of the total planted area in the region). Of the planted area with fertiliser application, there was an equal distribution of the area planted organic fertilizer and that planted with inorganic fertilizer at 50 percent of the total planted area with fertiliser application in the region for each type of fertilizer. Organic fertiliser was applied to 21,202 ha and inorganic fertilizer was applied to 21,363 hectares.

Irrigation

In Arusha region, the area of annual crops under irrigation was 23793 ha representing 5.4 percent of the total area planted with annual crops and vegetables. The district with the largest planted area under irrigation with annual crops was Arumeru (10,896 ha, 46% of the total irrigated planted area with annual crops in the region). The lowest planted area under irrigation was recorded in Arusha (2, 92 ha, 1.2%).

Crop Storage

There were only 34,466 crop growing households (25% of the total crop growing households) that stored various agricultural products in the region. Most crop growing households in the region store their produce in sacks and/or open drums (137,061 households, 47% of households that stored crops in the region). This was followed by locally made traditional structures used by 70,566 crop storing households (25%), improved locally made structures used by 16,208 households (6%), and air tight drums 12,615 (4%). Sixteen percent of the households were reported not using any method of storing crops in the region.

Crop Marketing

The number of households that reported selling crops was 112,111which represents 57.6 percent of the total number of crop growing households. The percent of crop growing households selling crops was highest in Arumeru (70.7%), followed by Ngorongoro (65%), Arusha (63%), Karatu (61%), Monduli (58%), Longido (46%), and Arusha Rural (42.7%). Among the marketing problems, low market price was leading reported by 29.2% of crop growing households. Other problems reported

include lack of transport (4, 3%), longer distances to the markets (3.8%), high transport costs (2.6%), lack of market information (2.1%), and cooperative problems (1. %).

Crop Extension Services

The number of Agricultural households that received crop extension was 138,984 (80.0 % of the total crop growing households in the region). Some districts have more access to extension services than others, with Arusha Rural district having the highest proportion of households (86.4 %) that received crop extension messages and Ngorongoro having the lowest percentage of households recorded to be receiving extension advice. The Government was the main source of extension advice reported by 84 percent of households, followed by neighbor at 5 percent.

Soil Erosion and Water Harvesting Facilities

The number of agricultural households that had soil erosion and water harvesting facilities on their farms was 30,841 which represent 15 percent of the total number of agricultural households in the region. The proportion of households with soil erosion control and water harvesting facilities was highest in Arusha district (26.2%) followed by Arusha (23.3%), Monduli (19.8%) Arumeru (15.1%), Arusha Rural (12.6%), Longido (7.2%), and Ngorongoro (2.5%). Terraces accounted for 37 percent of the total number of structures, followed by Erosion control bunds (28%), gabions/sandbags (12.7%), drainage ditches (6.3%), water harvesting bunds (6.2%), vetiver grass (5.1%), tree belts (3.6%), and others (1.1%).

iii) Livestock and Poultry Production

Cattle

The total number of cattle in the region was 1,813,637. Cattle are the second dominant livestock type in the region after goats and sheep coming third followed by pigs. The region had 8.5 percent of the total cattle population on Tanzania Mainland. The number of indigenous cattle in Arusha region was 1,716,514 (94.6 % of the total number of cattle in the region), 78,637 cattle (4.3%) were dairy breeds and 18,486 cattle (1.0%) were beef breeds.

Goats

The number of goat-rearing-households in Arusha region was 125787 (68% of all livestock rearing households in the region) with a total of 1,818,450 goats giving an average of 14 head of goats per goat-rearing-household. Ngorongoro had the largest number of goats (655,087 goats, 36% of all

goats in the region), followed by Monduli (428,714 goats, 23.6%), Longido (232,293 goats, 12.8%), Ngorongoro (466,011 goats, 28%), Karatu (174,582 goats, 9.6%), and Arumeru (162,516 goats, 8.9%). Arusha district had the lowest number of goats (24,080 goats, 1.3%).

Sheep.

The number of sheep-rearing households was 98,550 (48% of all agricultural households in Arusha region) rearing 1402236 sheep, giving an average of 14 heads of sheep per sheep-rearing household. The region ranked 1st out of 21 Mainland regions and had 6.1 percent of all sheep on Tanzania Mainland. The district with the largest number of sheep was Ngorongoro (599,099 sheep, 42.7%), and the district with the lowest sheep was Arusha District with15, 002 sheep accounting for 1.1 percent only.

Pigs

Piggery is the least important livestock keeping activity in the region after cattle, goats and sheep. The region ranks 13th out of 21 Mainland regions and accounts for 1.7 percent of the Mainland total pigs. The number of pig-rearing agricultural households in Arusha region was 6478 (4% of the total agricultural households in the region) rearing 27,475pigs.

Chicken

The poultry sector in Arusha region was dominated by chicken production. The region contributed 2.4 percent to the total chicken population on Tanzania Mainland, ranking 20th in the Tanzania. The District with largest number of chickens was Arumeru (388,478 chickens, 40.6 percent of the total number of chickens in the region, and the region while the lowest was Arusha district and Longido

Use of Draft Power

Use of draft animals to cultivate land in Arusha region is widely used with 168,925 households (82% of the total households in the region) using them (Chart 3.144). The number of households that used draft animals in Monduli district was 42293 representing 25 percent of the households using draft animals in the region followed by Arusha Rural 39056 (23.1%), Arumeru 31600 (Karatu 27805 (16.5%). Draft animals were of minor important in other districts used by less than 10 percent of agricultural households in each district. These districts with their order of importance include Ngorongoro (8%), Longido (7%), and Arusha (2%).

iv) Poverty Indicators

Availability of Toilets

A large number of rural agricultural households use traditional pit latrines (119,222 households, 58% of all rural agricultural households), 20,148 households (7%) use improved pit latrine and 4,569 households (2%) use flush toilets. The remaining 1,886 households (1%) use other toilets facilities. However, 64,360 households (31%) in the region had no toilet facilities.

Household Assets

Most rural agricultural households (134,779hh, 65.6%) in Arusha region owned Radios/Systems, followed by those who owned Mobile phones (50.6%). Bicycle was third most important asset owned by (31.6%), followed Pressing Iron (31%), wheelbarrow (17.8%), vehicle 7.6, television/video (6.2%). Those owning refrigerator and television (both account for 3.3 per cent), and Motor Cycle (.2'7%)

Source of Lighting Energy

Wick lamp was the most common source of lighting energy in the region, with 49 percent of the total rural households using this source of energy. This is followed by hurricane lamp (32%), firewood (7%), mains electricity (4.7%), pressure lamp (3.5%), solar (2.0%), candle (0.7%), and gas or biogas (0.2%).

Energy for Cooking

The most important source of energy for cooking was firewood, which was used by 94.9 percent of all rural agricultural households in Arusha region. This is followed by charcoal (2.0%). The rest of energy sources accounted for 2.9 percent. These sources in their order of importance were bottled gas (1.0%), mains electricity and crop residues (0.5% for each source), livestock dung (0.4%), paraffin/kerosene (0.3%), solar (0.2%), and gas/biogas (0.1%).

Roofing Materials

The most used roofing material (for the main dwelling) was iron sheet and was used by 93% of the rural agricultural households. It was followed by grass/leaves (5%), grass / mud (0.7%), tiles (0.6%), asbestos (0.2%) and Concrete and Other each 0.1 percent.

Number of Meals per Day

The majority (56%) of households in Arusha region normally have 3 meals per day. This is followed by those getting 2 meals per day (42 percent) and lastly 1 meal per day (2 percent). There were no households having more than 3 meals per day.

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1. BACKGROUND INFORMATION

1.1 Introduction

This part of the report presents a brief description of the regional profile by providing information on geographical location, land area, climate, administrative set up, population and socio-economic indicators. The information will provide the user with a general understanding of the region and its resources.

1.2 Geographical Location and Boundaries

Arusha region is situated at the Northern part of Tanzania. It lies below the equator between latitudes 2° and 6°. Longitudinally the region is situated between 35° and 38° east of Greenwich. Arusha shares borders with Kenya to the North, Mara region to the north west, Shinyanga to the West, Manyara and Dodoma regions to the south and Kilimanjaro region to the east. The region comprises seven districts namely Monduli, Arusha, Karatu, Arusha Rural, Ngorongoro, Longido and Arumeru. The region headquarters is located in Arusha District.

1.3 Land Area

The region has an area of 86,999 square kilometers, of which 83,418 square kilometers are arable land.

1.4 Climate

1.4.1 Temperature

The dominant climate is cool and wet especially in the highland of the Arusha region. The coolest month is June with minimum temperature of 21 degree Celcius especially in the highlands. The hottest month is December with maximum temperature of 26^oC especially in the lowlands.

1.4.2 Rainfall

The region has two rainy seasons, the short and the long rainy seasons. The short rainy season (Vuli) is from October to November and the Long rainy season (Masika) from April to May. In Arusha region, most areas get rainfall of at least 250mm per year. The amount of rainfall is about 250mm to 1,200mm.

1.5 Population

According to the projections that are based on the 2002 population census, the population of Arusha region by the year 2008 was 1,570,394 people. It is among the moderately populated regions with 4.0 percent of the Tanzania Mainland population.

1.6 Socio - Economic Indicators

The region is famous for producing both food and cash crops. The main food crops produced in Arusha region include: maize, paddy, beans and sorghum. The main cash crops include coffee and sugarcane. Livestock keeping is also an important economic activity in the region.

2.0. INTRODUCTION

This section provides technical and operational description of the National Sample Census of Agriculture (NSCA), carried out in the rural areas of Tanzania Mainland and Tanzania Zanzibar during the 2007/08 agricultural year. It details the background and the rationale for carrying out the NSCA in 2002/03 agricultural year. It also explains the sampling procedures, designing and implementation of the data processing system.

This report (Volume Vb) is among the 21 regional reports for the Mainland. Other Census reports include the Technical Report (Volume I), Crop Sector Report at National level (Volume II), Livestock Report at National level (Volume III), Large Scale Farms Report (Volume IV), Regional Reports (Volume V series), Zanzibar Livestock Report (Volume VI) and Zanzibar Crop Sector Report (Volume VII). Unlike the 2002/03 Agricultural Sample Census, the 2007/08 Sample Census does not have a separate report for Smallholder Household Characteristics and Access to Natural Resources Report. Other thematic reports will be produced depending on the demand and availability of funds.

This report is divided into five main sections; Background Information, Introduction, Census Results, District Profiles and Appendices. The definitions relating to all aspects of this report can be found in the questionnaire.

2.1 The Rationale for Conducting the National Sample Census of Agriculture

The Government of Tanzania has embarked on various plans geared to eradicate poverty by the year 2025 and Tanzania Zanzibar by the year 2020. In order to facilitate intervention and monitoring activities of the Poverty Monitoring Master Plan, the government has planned a series of censuses and surveys to assist in policy formulation, planning and to track changes in the wellbeing of the population of Tanzania. In this Master Plan, a series of Agricultural Censuses have been planned, the first one was undertaken in 2002/03 agricultural year and the second in 2007/08.

Demands for reliable and timely agricultural data have become significantly increasing for monitoring outcomes and progress of the poverty monitoring tools like the Agricultural Sector Development Programme (ASDP) and performance of the respective MDAs (ASLMs).

Following the decentralization of the Government's administration and planning functions, there has been a pressing need for agricultural and rural development data disaggregated at regional and

district level. The provision of district level estimates will provide essential baseline information on the state of agriculture that supports decision making by the Local Government Authorities and in the design of District Agricultural Development and Investment Projects (DADIPS). The increase in investment is an essential element in the national strategy for growth and reduction of poverty.

2.2 Census Objectives

The 2007/08 Agricultural Sample Census was designed to meet the data needs of a wide range of users down to the district level including policy makers at local, regional and national levels, rural development agencies, funding institutions, researchers, NGOs, farmers organizations, and the like. The dataset is both extensive in its sample and detailed in its scope and coverage to meet the user demand.

The census was carried out in order to:

- Identify structural changes, in the size of farm household holdings, crop and livestock production, farm inputs and implement use. It also seeks to determine if there are any improvements in the rural infrastructures and the level of agricultural household living conditions.
- Provide benchmark data on productivity, production and agricultural practices in relation to policies and interventions promoted by the Ministry of Agriculture and Food Security and other stakeholders.
- Establish baseline data for the measurement of the impact of high level objectives of the Agricultural Sector Development Programme (ASDP), National Strategy for Growth and Reduction of Poverty and other rural development programmes and projects.

2.2.1 Census Scope and Coverage.

The 2007/08 Agricultural Sample Census was conducted for both large and small scale farms. The data was collected from a sample of 52,635 small scale agricultural households of which 48,880 were from the Mainland and 4,755 from Zanzibar. To meet National estimates, data was also collected from 1,006 Large Scale Farms (968 on the Mainland and 38 in Zanzibar) on a complete enumeration basis.

Three different questionnaires were used to collect data on agriculture and related aspects. These were:

- Small scale farms questionnaire;

- Community questionnaire; and
- Large scale farm questionnaire.

The small scale farm questionnaire was the main census instrument which included questions related to crop and livestock production and practices; population demographics; access to services; resources and infrastructure; issues on poverty and gender. Main subjects covered during the study include:-

- Household demographics and activities of the household members;
- Land access/ownership/tenure and use;
- Crop and livestock production and productivity;
- Access to inputs and farming implements;
- Access and use of credits;
- Crop marketing, storage;
- Fish farming;
- Investment activities: Irrigation structures, water harvesting, erosion control;
- Off farm income;
- Household living conditions (housing, sanitary facilities, etc);
- Livelihood constraints; and
- Poverty Indicators.

The community level questionnaire was designed to collect village data such as access and use of common resources, community tree plantation and seasonal farm gate prices.

Large Scale Farm questionnaire was administered to all the large scale farms either privately or corporately managed. However, the analysis of Large Scale Farms is presented in a separate report (Volume IV).

2.3 Census Methodology

The main focus at all stages of the census execution was on data quality and this has been emphasized all the time. The main activities undertaken include:

- Census organization;
- Tabulation plan preparation;

- Sample design;
- Design of census questionnaire and other instruments;
- Pilot test;
- Training of trainers, supervisors and enumerators;
- Information Education and Communication (IEC) campaign;
- Data collection;
- Field supervision and consistency checks;
- Data processing:
    - Scanning,
    - Structure formatting application,
    - Batch validation application,
    - Manual data entry application,
    - Tabulation preparation using SPSS;
- Table formatting and charts using Excel, maps generation using Arc GIS and Excel, Report preparation using Ms Word and Excel.

2.3.1 Census Organization

The census was conducted by the National Bureau of Statistics (NBS) in collaboration with Ministries of Agriculture, Food Security and Cooperatives, Livestock and Fisheries Development; Water; Industry and Trade; and the Prime Minister's Office, Regional Administration and Local Government in Tanzania Mainland. The Office of the Chief Government Statistician, (OCGS), Ministries of Agriculture and Natural Resources, Livestock and Fisheries in Tanzania Zanzibar.

At the national level, the Census was headed by the Director General of the National Bureau of Statistics, Tanzania Mainland in collaboration with the Chief Government Statistician, Tanzania Zanzibar. The planning Group formed by the Director General of NBS and the Chief Government Statistician consisted of staff from the Department of Agriculture Statistics of NBS, Department of Economic Statistics of OCGS, Department of Policy and Planning of the Ministry of Agriculture, Food Security and Cooperatives, Department of Policy and Planning of the Ministry of Livestock and Fisheries Development in the Mainland. Ministry of Livestock and Fisheries and the Ministry of Agriculture and Natural Resources in Zanzibar.

The Planning Group was responsible for all the census operations. Implementation of the census activities at the regional level was overseen by the Regional Statistical Managers of NBS and the Regional Agricultural Supervisors from the Prime Minister's Office, Regional Administration and Local Government. At the district level, the census activities were managed by two supervisors from the Prime Minister's Office, Regional Administration and Local Government (PMO-RALG). The supervisors managed the enumerators who also came from PMO-RALG. As for Zanzibar, implementation of the census activities at the regional level was overseen by the Regional Statistical Officers and Regional Agricultural Officers. At District level, implementation of the census activities was managed by District Agricultural Development Officers (DADOs). In addition, there was a national mobile team to supervise the census operations.

The Censuses and Surveys Technical Working Group (CSTWG) under MKUKUTA provided support in sourcing financing, approving budget allocation and monitoring progress of the census. A Technical committee for the census was established with members from key stakeholder organizations and its main function was to approve the proposed instruments and procedures developed by the Planning Group. It also approved the tabulation and analytical reports prepared from the census data.

2.3.2 Tabulation Plan Preparation

The tabulation plan was developed considering the tabulations from previous censuses and surveys to allow trend analysis and comparisons as well as the needs of end users.

2.3.3 Sample Design

The Mainland sample consisted of 3,192 villages. These villages were drawn from the National Master Sample (NMS) developed by the National Bureau of Statistics (NBS) to serve as national framework for the conduct of household based surveys in the country. The National Master Sample was developed from the 2002 Population and Housing Census. The total Mainland sample was 47,880 agricultural households. In Zanzibar, a total of 317 Enumeration Areas (EAs) were selected and 4,755 agricultural households were covered. National wide, all regions and districts were sampled except four urban districts (three from Mainland and one from Zanzibar).

In both Mainland and Zanzibar, a two stage sample was used. The number of villages/Enumeration Areas (EAs) was selected for the first stage with a probability proportional to the number of

villages/EAs in each district. In the second stage, 15 households were selected from a list of households in each village/EA using systematic random sampling. Table 1.1 gives the sample size of households, villages and districts for the Mainland and Zanzibar.

Table 2.1: Census Sample

Description	Mainland	Zanzibar	Total
Households	47,880	4,755	52,635
Villages/EAs	3,192	317	3,509
Districts	133	9	142
Regions	21	5	26

2.3.4 Questionnaire Design and Other Census Instruments

The questionnaire was designed following users meetings to ensure that the questions asked were in line with the users data needs. Several features were incorporated into the design of the questionnaire to increase the accuracy of the data as follows:

- Where feasible, all variables were extensively coded to reduce post enumeration coding errors;

- The definitions for each section were printed on the opposite page so that the enumerator could easily refer to the instructions whilst interviewing the respondent;

- The responses to all the questions were placed in boxes printed on the questionnaire, with one box per character. This feature made it possible to use scanning and Intelligent Character Recognition (ICR) technologies for data capture;

- Skip patterns were used to reduce unnecessary and incorrect coding of sections which do not apply to the respondent; and

- Each section was clearly numbered, which facilitated the use of skip patterns and provide a reference for data type coding for the programming of CSPro and SPSS.

Three other instruments were used:

- Village Listing Forms were used for the listing of households in the village/EA and from this list, a systematic sample of 15 agricultural households were selected;

- A training manual which was used by the trainer for the cascade/pyramid training of supervisors and enumerators; and

- Enumerator's Instructions Manual was used as reference material.

2.3.5 Field Pilot-Testing of the Census Instruments

The questionnaire was pilot-tested in four locations (Arusha, Dodoma, Unguja and Pemba). This was done to check the wording, flow and relevance of the questions and to finalize crop lists, questionnaire coding and manuals. In addition, several data collection methodologies had to be finalized, namely; livestock numbers in pastoral communities, mixed cropping, use of percentages in the questionnaire and finalizing skip patterns and documenting consistency checks.

2.3.6 Training of Trainers, Supervisors and Enumerators

During the training, a cascade/pyramid training techniques were employed to maintain statistical standards. The top level of training was provided to 78 national and regional supervisors (65 from Mainland and 13 from Zanzibar). The trainers were members of the Planning Group from the National Bureau of Statistics, the sector Ministries of Agriculture and Office of the Chief Government Statistician, Zanzibar. In each region, three training sessions were conducted for the district supervisors and enumerators. The training concentrated on questionnaires, listing forms, field level census methodology and definitions. Emphasis was placed on consistency checking in the field. Tests were given to the enumerators and supervisors and the best 50 percent of the trainees were selected for the actual field work. The remaining 50% were assigned the work of listing the households in the villages they belong and they were later terminated. The best trained enumerators were assigned to list the remaining villages. Each enumerator was assigned to enumerate two villages.

2.3.7 Information, Education and Communication (IEC) Campaign

Radios, televisions, newspapers, leaflets, t-shirts and caps were used to create awareness of the Agricultural Sample Census to the public. This strategy helped in sensitizing the public for the field level activities in order to increase the response rate. The t-shirts and caps were given to the field staff and the village chairpersons. The village chairpersons assisted to locate the selected households.

2.3.8 Data Collection

Data collection activities for the 2007/08 Agricultural Sample Census lasted for three months from June to August 2009. The direct interview method was used to collect data during the enumeration.

Data collection was monitored by a hierarchical system of supervisors which included the Mobile Response Team, Regional and District Supervisors. The Mobile Response Team headed by the Manager of Agriculture Statistics Department, provided the overall direction to the field operations and responded to queries arising outside the scope of the training exercise. Decisions made on the definitions and procedures were then communicated back to all the enumerators via the Regional and District Supervisors. On the Mainland, each region had 2 Regional Supervisors (total of 42) and 2 district supervisors per district, (Total 266).

District supervision and enumeration were performed by staff from the Prime Minister's Office, Regional Administration and Local Government and the sector Ministry of Agriculture (PMO-RALG). Regional and national supervision was provided by senior staff from the NBS and sector Ministries of Agriculture. In Zanzibar, the enumeration was conducted by staff from the Ministry of Agriculture and Natural Resources and Ministry of Livestock and Fisheries. Supervision was provided by senior officers of the same Ministries and the Office of the Chief Government Statistician.

During the household listing exercise, some 3,192 extension staff participated on the Mainland. A total of 177 enumerators participated during the listing exercise and enumeration using the small holder questionnaire in Zanzibar. A total of 1,596 enumerators were involved in data collection using the small holder questionnaire on the Mainland. Additional five percent of the enumerators were held as reserves in case of drop outs during the enumeration exercise.

2.3.9 Field Supervision and Consistency Checks

Enumerators were trained to probe the respondents until they were satisfied with the responses before they recorded them in the questionnaire. The first check on the questionnaire was carried out by the enumerators in the field during enumeration, followed by District, Regional and National supervisors. Supervisory visits at all levels of supervision focused on checking the completeness of the questionnaires and consistency. Inconsistencies encountered were corrected, and where necessary, a call back to the respondent was made by the enumerator to obtain the correct information. Further quality control checks were made by the district supervisors.

2.3.10 Data Processing

Data processing involved the following process:

- Data entry;
- Data structure formatting;
- Batch validation; and
- Tabulation.

Data Entry

Scanning and ICR data capture technology was used. This did not only increase the speed of data entry but also increased the accuracy due to reduction of keystroke errors. Interactive validation routines were incorporated into the ICR software to trap errors during the verification process.

Prior to scanning, all the questionnaires underwent a manual cleaning exercise by checking that the questionnaire had a full set of pages, correct identification and good hand-writing. A score was given to each questionnaire based on the legibility and the completeness of enumeration. This score was used to assess the quality of enumeration and supervision.

CSPro was used for data entry of the questionnaires that were rejected by the ICR extraction application.

Batch Validation

A batch validation program was developed in CSPro in order to identify inconsistencies within a questionnaire. This was in addition to the interactive validation during the ICR extraction process. The procedures varied from simple range checking within each variable to more complexes checking between variables. After data cleaning, the tables were prepared based on a pre-designed tabulation plan.

Tabulation

Statistical Package for Social Sciences (SPSS) was used to produce the census tables and Microsoft Excel was used to organize the tables and compute the additional indicators. Excel was also used to produce charts while Arc GIs was used for generating the maps.

Report Writing

The report writing was outsourced to Sokoine University of Agriculture. It focused on the regional comparisons, time series and national estimates. Microsoft Excel was used to produce charts; Arc

GIS and Excel were used to generate maps, whereas Microsoft Word was used in compiling and report writing.

Data Quality Control

A great deal of emphasis was placed on data quality throughout the whole exercise, from planning; questionnaire design, training, supervision, data entry, validation and cleaning/editing. As a result of this, it is believed that the census is highly accurate and representative of what was experienced at the field level during the census year. With very few exceptions, the variables in the questionnaire are within the norms for Tanzania and they follow the expected time series trends when compared to historical data.

2.4 Funding Arrangements

The 2007/08 Agricultural Sample Census was supported mainly by the Department for International Development (DFID) and the Japan International Cooperation Agency (JICA) which together, financed most of the operational activities. Other funds for the census activities were from the Government of Tanzania. In addition, technical assistance was provided by the Food and Agriculture Organisation (FAO).

3.0 CENSUS RESULTS

This part of the report presents the census results for Arusha region, based on the statistical data tables presented in Appendix A2. The results are presented in various forms including brief summaries, charts, condensed tables, graphs and maps to facilitate understanding of information among the users.

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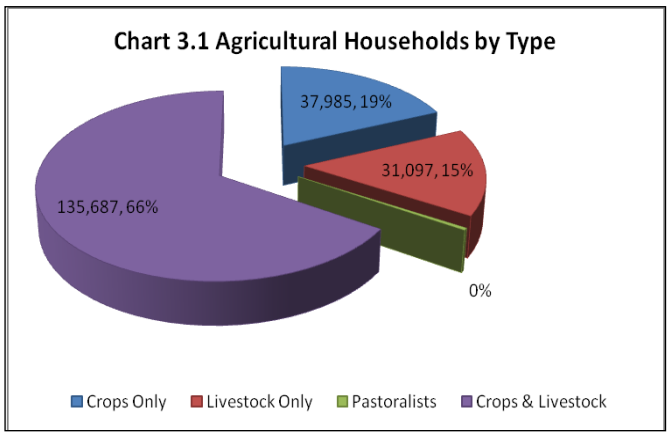
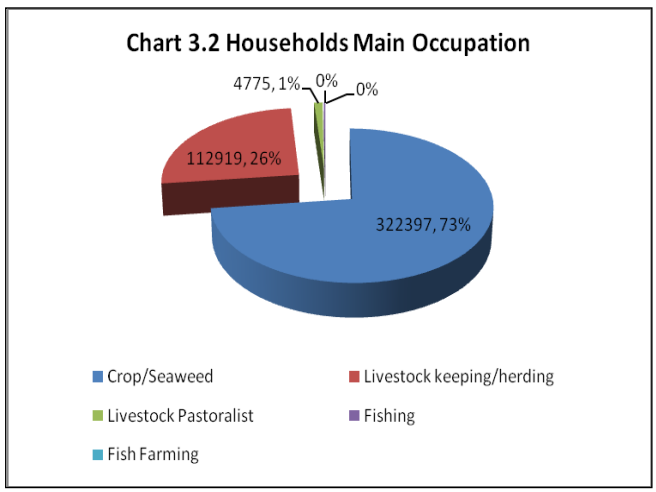
Comparisons are made between related variables and between districts. Comparisons are also made between the current and the 2003 surveys results. The results are divided into four main sections which include household characteristics, crop results, livestock results and poverty indicators. In comparison, as for the 2003 censuses, in the current survey more effort has been expended in analyzing the results in order to formulate solid conclusions.

3.1 Household Characteristics

3.1.1 Type of Household

The number of agricultural households in Arusha region was 205547 out of which 37,985 (19%) were involved in growing crops only, 31,097 (15%) in rearing livestock only, and 135,687 (66%) were involved in crop production as well as livestock. The largest number of agriculture households was in Arumeru (49,292) followed by Arusha Rural (48.253), Karatu (36,093), Monduli (28,933), Ngorongoro (28, 776), Longido (11,644) and Arusha (2,557) (Map 3.1). The highest density of households was found in Ngorongoro (1306hh/km2) (Map 3.2). Most households (135,687, 66%), were involved in crop production as well as livestock keeping, 37,985 (18.5%) were involved in growing crops only, and 31,097 (15.1%) rearing livestock only, 778 (0.4%) pastoralists, (Chart 3.1) (Map 3.3, 3.4, 3.5 and 3.6).



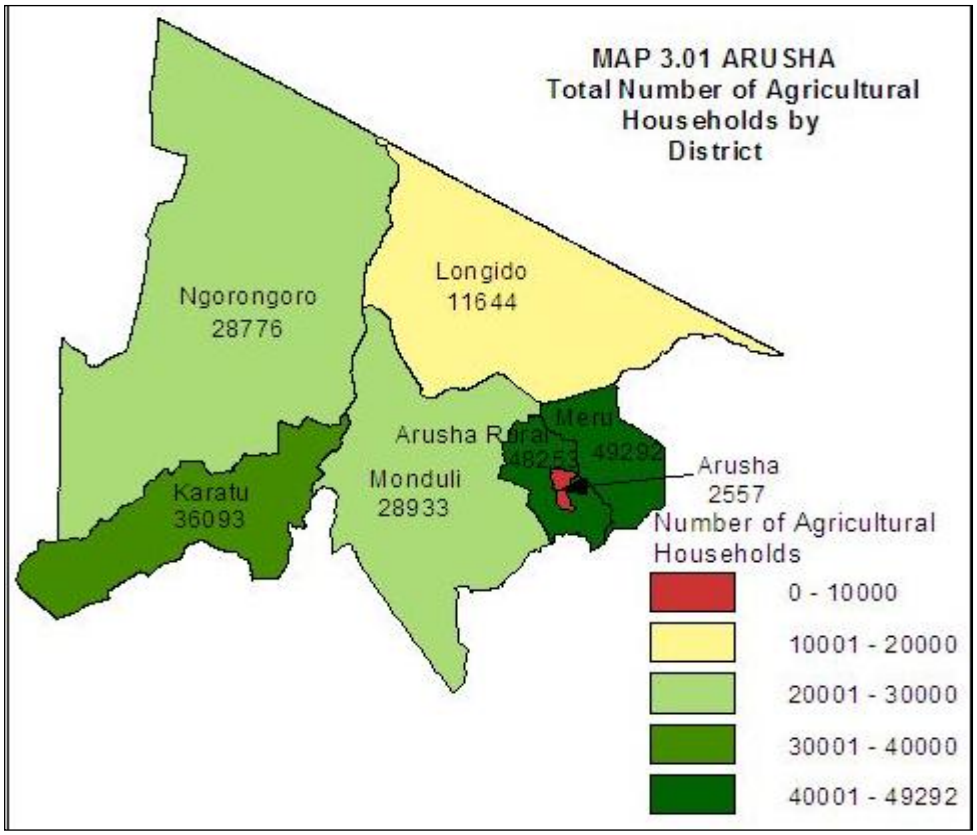


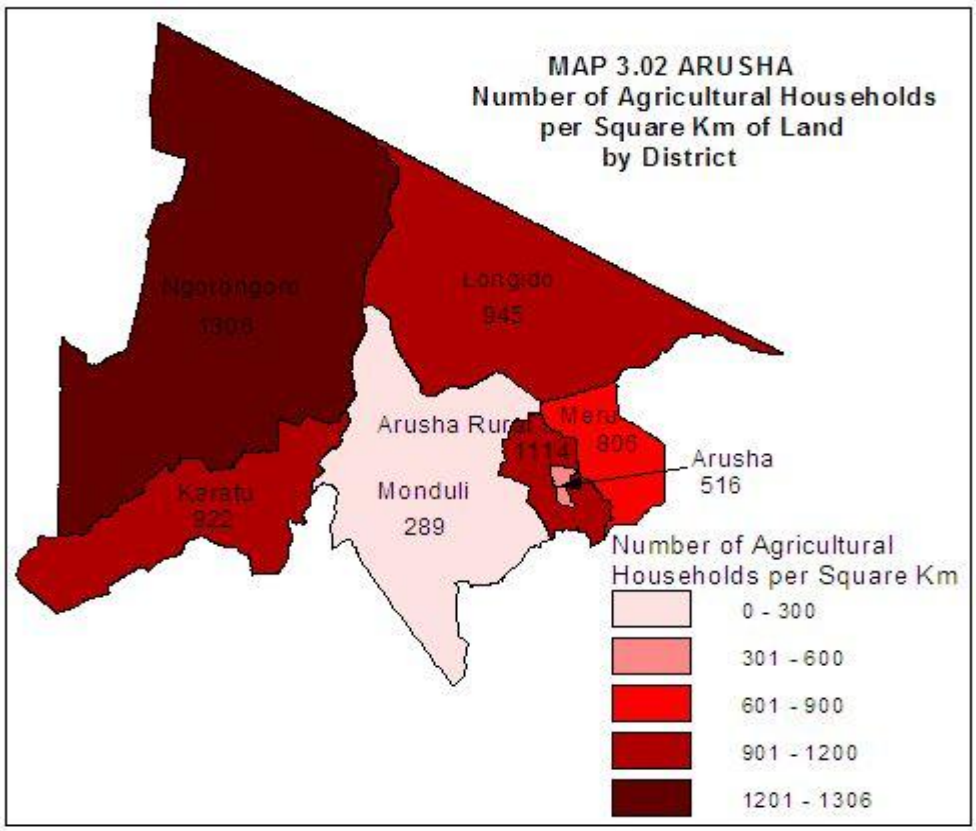
3.1.2 Livelihood Activities

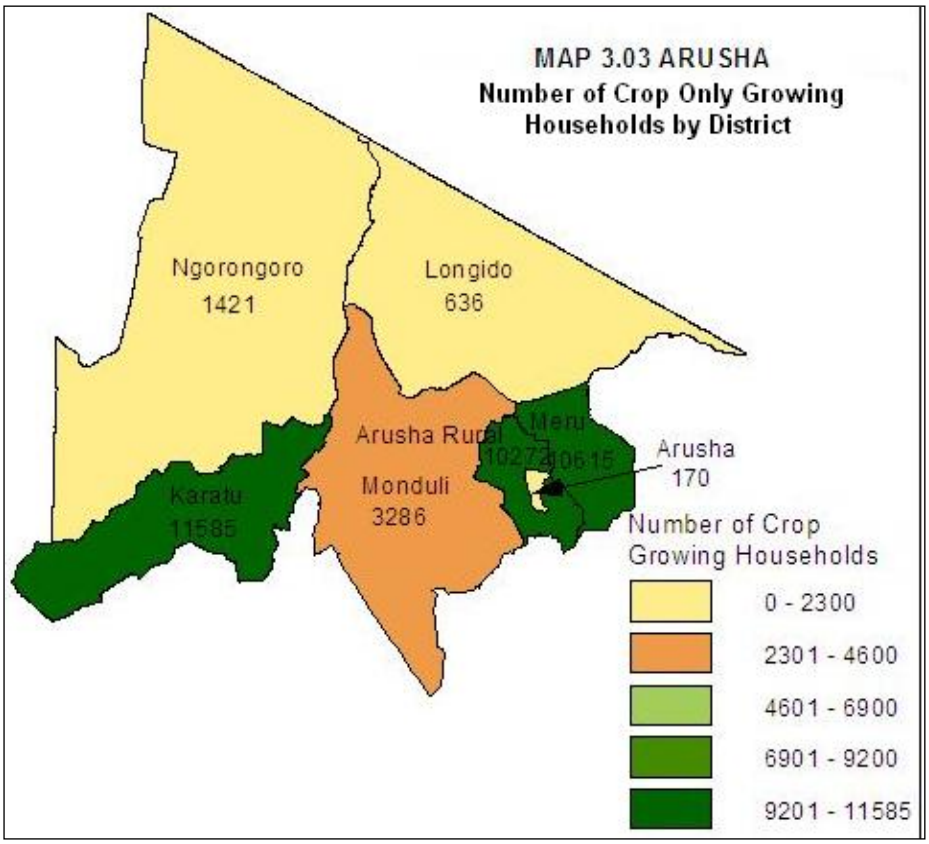
The census results for Arusha region indicates that most of the agricultural households (73%) ranked annual crop/seaweed farming as an activity that provides most of their cash income followed by livestock keeping/herding, (26%), and Livestock pastoralist (1%). Fishing was insignificant in terms of contribution to source of income. Similarly, fish farming was not reported in Arusha region. (Chart 3.2, Table 3.1). Livestock keeping/herding was reported as least important in Karatu, Arumeru and Arusha Rural.

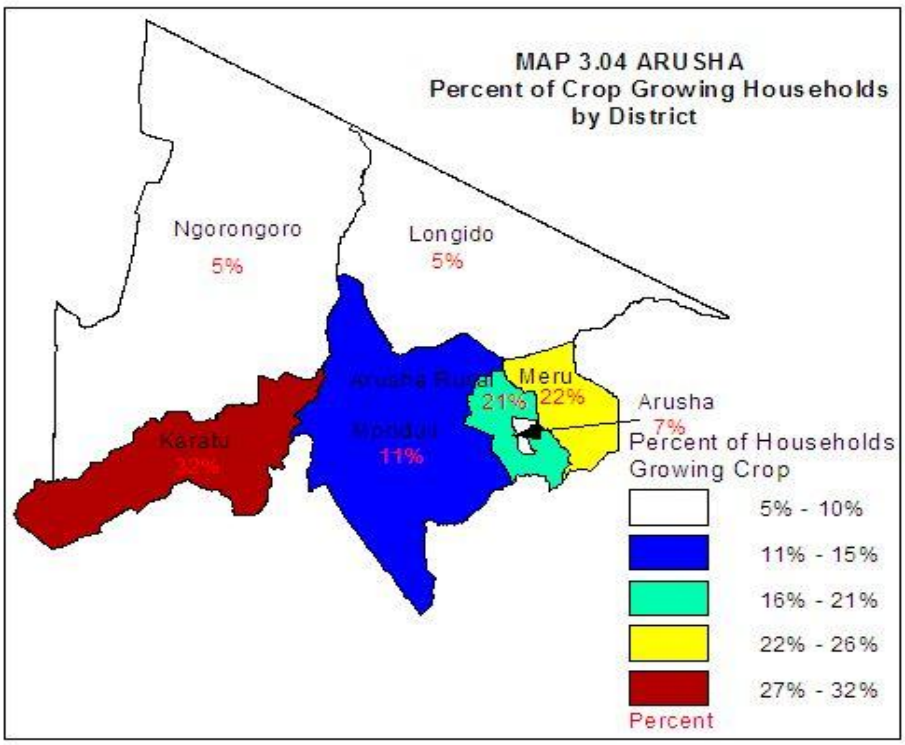
Table 3.1 Households main occupation

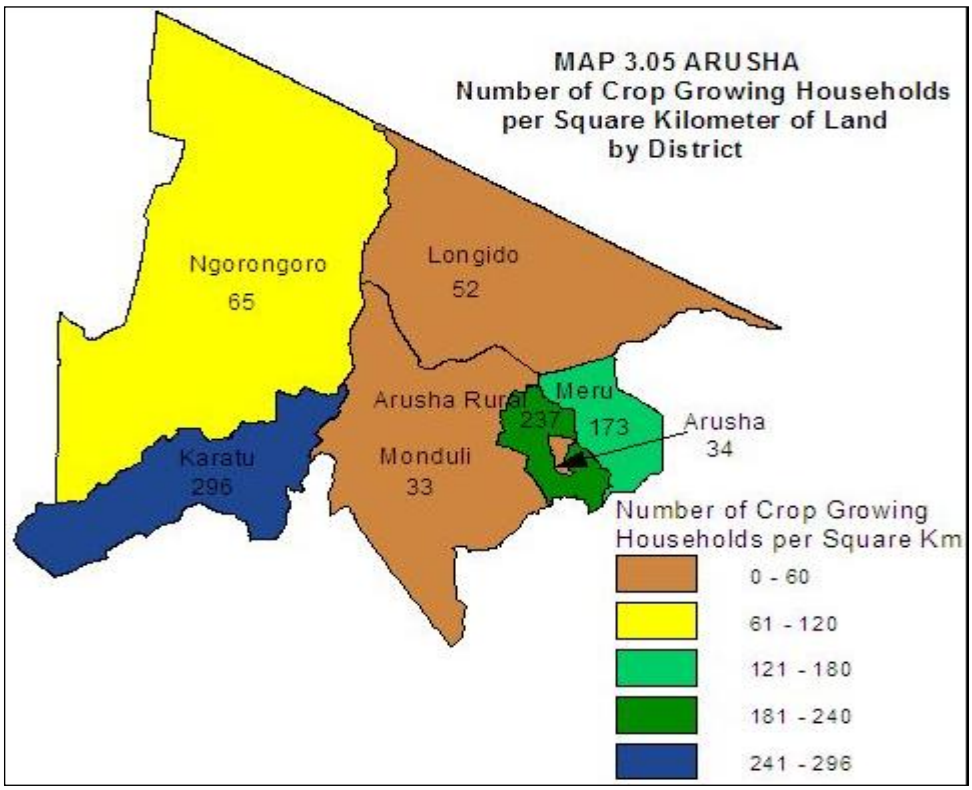
District	Crop/Seaweed Farming		Livestock Keeping / Herding		Livestock Pastoralist		Fishing		Fish Farming	
	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	37,078	30.2	23,004	18.8	3,286	3	143	0.1	0	0
Arusha	5,029	30.9	1,534	9.4	85	1	0	0.0	0	0
Karatu	87,068	49.6	5,704	3.3	0	0	267	0.2	0	0
Ngorongoro	15,063	12.5	52,933	43.9	497	0	71	0.1	0	0
Longido	7,194	15.6	16,555	35.8	665	1	58	0.1	0	0
Arusha Rural	77,994	35.7	10,749	4.9	119	0	0	0.0	0	0
Meru	92,971	42.4	2,440	1.1	122	0	366	0.2	0	0
Total	322,397	35.1	112,919	12.3	4,775	1	905	0.1	0	0

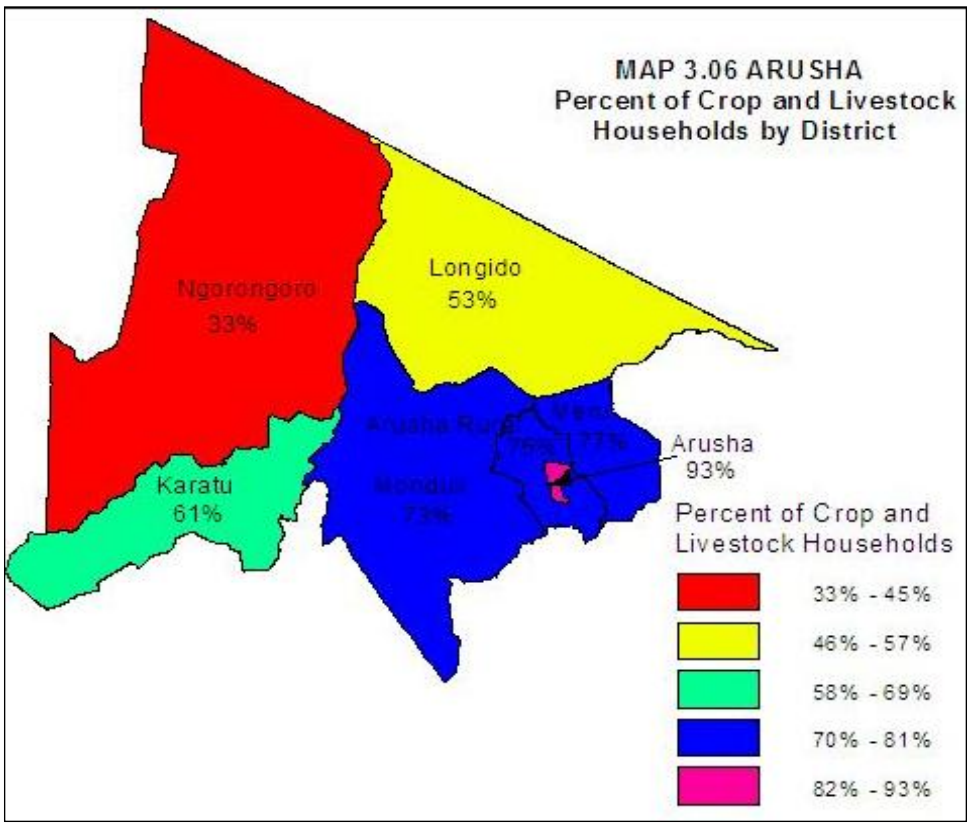

MAP 3.01 ARUSHA
Total Number of Agricultural Households by District
Ngorongoro
28776
Longido
11644
Arusha Rural
48253
Meru
49292
Arusha
2557
Monduli
28933
Karatu
36093
Number of Agricultural Households
0 - 10000
10001 - 20000
20001 - 30000
30001 - 40000
40001 - 49292


MAP 3.02 ARUSHA
Number of Agricultural Households per Square Km of Land by District
Ngorongoro
1306
Longido
945
Arusha Rural
1114
Meru
806
Arusha
516
Monduli
289
Karatu
922
Number of Agricultural Households per Square Km
0 - 300
301 - 600
601 - 900
901 - 1200
1201 - 1306

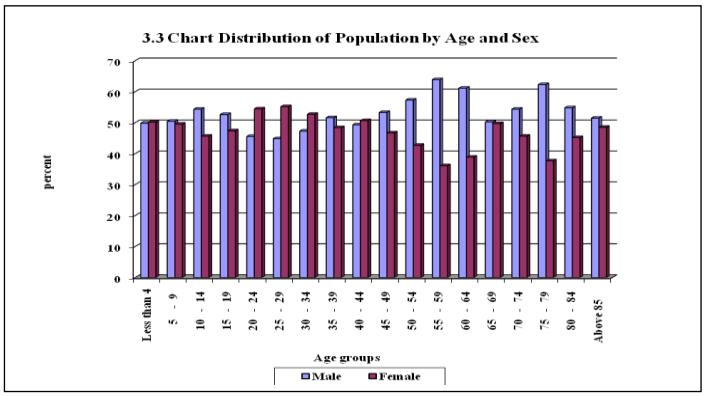

MAP 3.03 ARUSHA
Number of Crop Only Growing Households by District
Ngorongoro
1421
Longido
636
Arusha Rural
Monduli
3286
Meru
Arusha
170
Karatu
11585
Number of Crop Growing Households
0 - 2300
2301 - 4600
4601 - 6900
6901 - 9200
9201 - 11585


MAP 3.04 ARUSHA
Percent of Crop Growing Households by District
Ngorongoro
5%
Longido
5%
Meru
21%
22%
Arusha
7%
Karatu
Monduli
11%
Percent of Households Growing Crop
5% - 10%
11% - 15%
16% - 21%
22% - 26%
27% - 32%
Percent


MAP 3.05 ARUSHA
Number of Crop Growing Households per Square Kilometer of Land by District
Ngorongoro
65
Longido
52
Arusha Rural
237
Meru
173
Arusha
34
Karatu
296
Monduli
33
Number of Crop Growing Households per Square Km
0 - 60
61 - 120
121 - 180
181 - 240
241 - 296


MAP 3.06 ARUSHA
Percent of Crop and Livestock Households by District
Ngorongoro
33%
Longido
53%
Arusha
93%
Karatu
61%
Percent of Crop and Livestock Households
33% - 45%
46% - 57%
58% - 69%
70% - 81%
82% - 93%

3.1.3 Number and Age of Household Members



Arusha region had a total rural agricultural population of 1,050,842 of which 535,956 (51%) were males and 514,886 (49%) were females. Whereas age group 0-4 constituted 50 percent of the total rural agricultural population, age group 15–64 (active population) was only 50 percent. The percentage trend shows that there are slight variations between male and female agricultural household members across all the age groups. On the whole, male agricultural household members are more concentrated in the ages of 40 years and above whilst female agricultural household members are more concentrated in the age of 45 years and below (Chart 3.3).

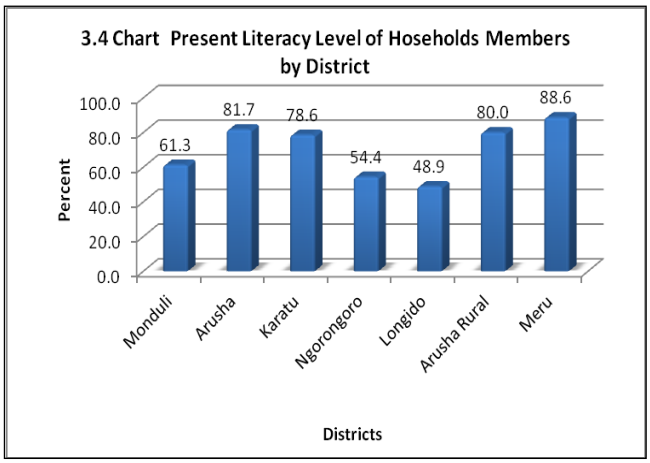
3.1.4 Level of Education

In order to obtain information on the level of education, information on literacy and education attainment were obtained for all persons aged five years and above in all households.

Literacy

The information on literacy level for family members aged five years and above was obtained by asking individual private households if their respective family members could read and write in Kiswahili only, English only, both English and Swahili or in any other language. Literacy is based on the ability to read and write Swahili, English or both.

Literacy Level for Household Members

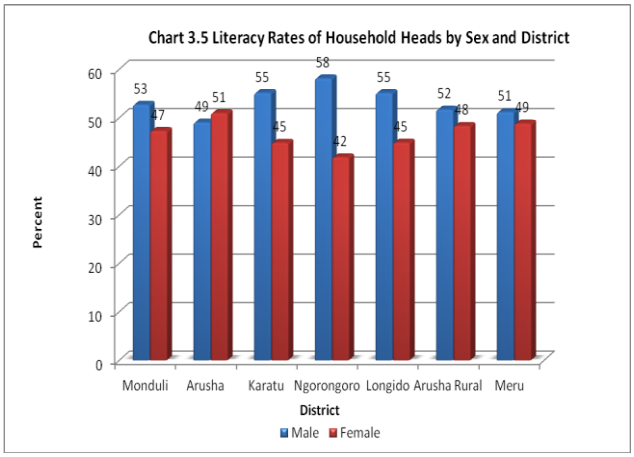


Arusha region had a total literacy rate of 74.4 percent. The highest literacy rate was found in Arumeru district (88.6%) followed by Arusha district (81.7%), Arusha Rural (80%), Karatu (78.6%), and Monduli (61.3%). Longido and Ngorongoro districts had the lowest literacy rates of 48.9 and 54.4 percent respectively (Chart 3.4).

Arusha region had a total literacy rate of 74.4 percent, the highest literacy rate was found in Arumeru district (86.6%) followed by Arusha (81.7%0 Arusha Rural (80%) and Monduli (61.3%). The lowest literacy rates were recorded in Longido and Ngorongoro districts at 48.9 and 54.4 percent respectively. The number of heads of agricultural households with formal education (University and other higher institutions) in Arusha region was 218,445 (100%). Out of this, those without formal education were 3,3,89 (50%) and those with only adult education were 3,420 (40% percent), and those to whom neither of the two categories were applicable were1, 843 (21%).

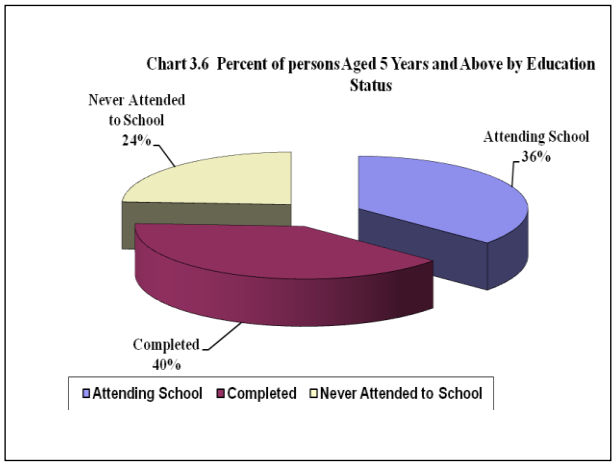
Literacy Rates for Heads of Households

The literacy rate for the heads of households in the region was 100 percent. The literacy rates among the male and female heads of households were 53 and 47 percent respectively. Male head of household literacy rate was higher than that of females in all districts, except Arusha. The district with the highest literacy rate amongst male heads of households was Ngorongoro (58%) followed by Karatu and Longido at 55 percent for each, Monduli (53%), and Arusha Rural (52%), Arumeru (51%) and Arusha (49%). Literacy rate for female household heads was highest in Arusha (51%), Arumeru (49%), Arusha Rural (48%), and Monduli (47%). Literacy rate among female households heads was lowest in Ngorongoro (42%), followed by Longido and Karatu at 45 percent for each (Chart 3.5).

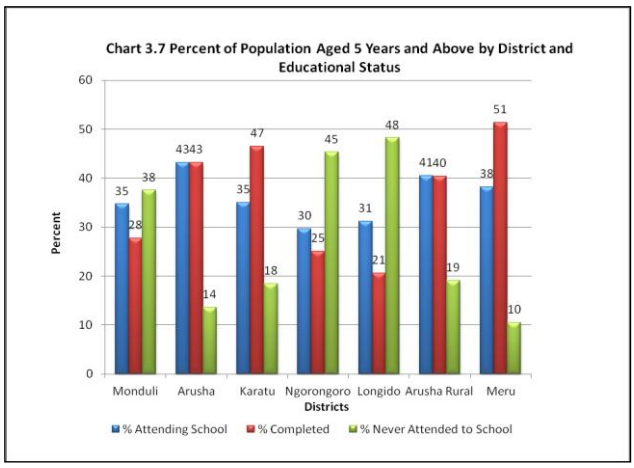


Educational Status

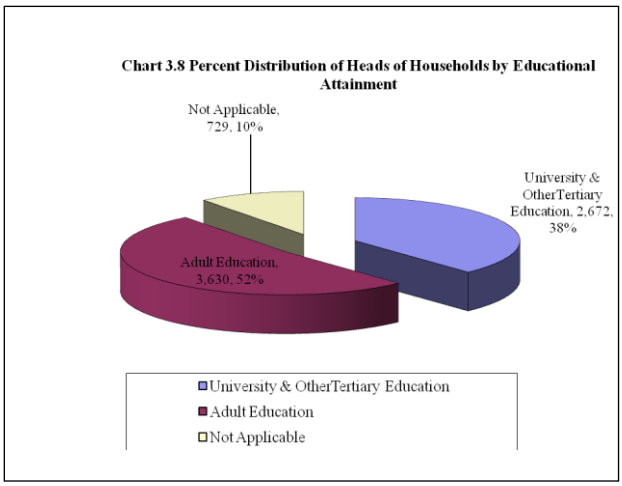
Information on educational status was collected from individual agricultural households. The results show that 40 percent of the population aged 5 years and above in agricultural households in the region had completed different levels of education and 36 percent were still attending school. Those who have never attended school were 24 percent (Chart 3.6).



Agricultural households in Arumeru district had the highest percentage (51%) of population aged 5 years and above who had completed different levels of education. This was followed by Karatu and Arusha districts with 47 43 percents respectively. Longido Ngorongoro and Monduli districts had the lowest percentages of 21, 25 and 28 respectively of the population aged 5 and above who completed different levels of education. Conversely Longido, Ngorongoro and Monduli had the highest number of the population with 48, 45, and 38 percents of those who had never attended any school.



The number of heads of agricultural households with formal education in Arusha region was 363,230 (100.0%), those with University and other tertiary education were 2,572 (38%) and those with only adult education were 57 (52%). And for those whom neither of these categories was applicable were 729 household's heads representing 10 percent (Chart 3.8).



With regard to the heads of agricultural households with University and other tertiary education in Arusha region, Meru had the highest percentage (46%). This was followed by Arusha (21%), Arusha Rural (13%), and Karatu (10%). Longido reported the lowest percentage of agricultural household heads with University and other tertiary education of 2 percent followed by Monduli (8%). Heads of agricultural households with university and other tertiary education were not recorded in Ngorongoro District.

The highest percentage of heads of households with adult education only was recorded in Arusha Rural District at 30 percent, followed by Karatu District (29 %). Monduli had the third highest percentage of heads of agricultural households with adult education only with 14 percent. Arusha had the lowest percentage of heads of agricultural households in this education category at only 6

percent, followed by Ngorongoro District at 8 percent (Chart 3.8 and Table 3.2). Heads of agricultural households with Adult education only were not recorded in Longido District.

Table 3.2 Percent Distribution of Heads of Households by Educational Attainment

	Education Level							
	University & Other Tertiary Education		Adult Education		Not applicable		Total	
District	Number	%	Number	%	Number	%	Number	%
Monduli	214	8	500	14	71	10	34,077	100
Arusha	554	21	213	6	0	0	7,032	100
Karatu	267	10	1,069	29	267	37	81,632	100
Ngorongoro	0	0	284	8	0	0	30,197	100
Longido	58	2	0	0	29	4	9,534	100
Arusha Rural	358	13	1,075	30	239	33	88,265	100
Meru	1,220	46	488	13	122	17	112,493	100
Total	2,672	100	3,630	100	729	100	363,230	100

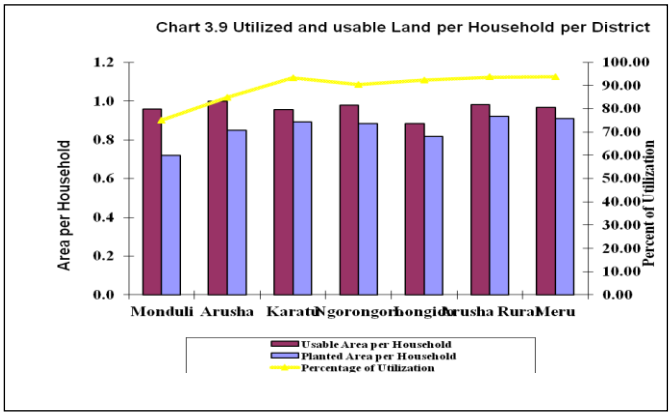
3.2 Land Use

Land area and planted area are two different types of area measurements. Land area refers to the physical area of land and is the same regardless of the number of crops planted on the land in one year. Planted area is the total area of crops planted in a year and the area is summed if there were more than one crop on the same land per year. A number of terms are used in this section which requires defining for clarification as follows: Land available refers to the area of land that has been allocated to smallholders through customary law, official title or other forms of ownership. Land available does NOT mean the total area of land that is designated as agriculture land in the country; however it is the land that is available to smallholders given the location of villages and lack of access to more remote parcels of unused agriculture designated land. Usable land refers to the available land minus the land that cannot be used such as bare rock, shallow soils, steep slopes, swamp areas and the like. It does however include un-cleared bush; utilised land refers to the land that was used during the year.

3.2.1 Area of Land Utilised

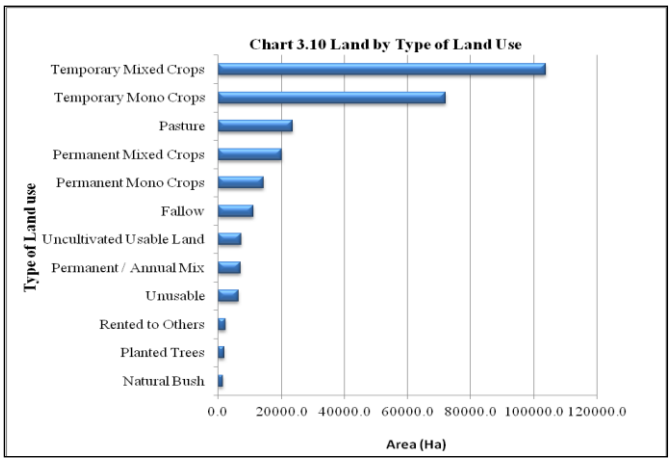
The total area of land available to smallholders was 198,309 ha. The regional average land area utilised for agriculture per household was only 1 ha. This figure is below the national average which is estimated at 2.0 hectares. Ninety point four percent of the total land available to smallholders was utilised. Only 9.6 percent of usable land available to smallholders was not used

There are almost no variations in land area utilised per household across districts with all the districts having 1 ha per household. The smallest land area utilised per household is found in Longido (0.9 ha/hh). (Chart 3.9 and Map 3.7).



3.2.2 Types of Land Use

The area of land under temporary mixed crops was 103721.2 hectares (38.2 % of the total land available to smallholders in Arusha), followed by temporary mono crops 72092.0 ha, 26.5%), pasture (23515.6 ha, 8.7%), permanent mixed crops (20224.8 ha, 7.4%), permanent mono crops (14386.6ha, 5.3%), fallow (11083.0ha, 4.1%), uncultivated land (7238.2ha, 2.7%), permanent/ annual mix (7105.7ha, 2.6%), unusable (6485.2ha, 2.4%), rented to others (2306.6ha, 0.8%), planted trees (2016.8 ha 0.7%), and area under natural bush (1456.4ha, 0.5%) (Chart 3.10).

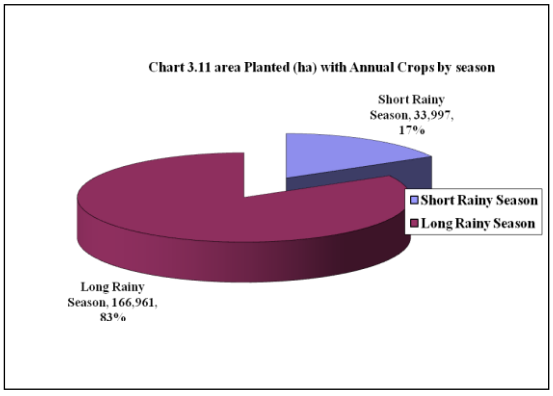


3.3 Annual Crop and Vegetable Production

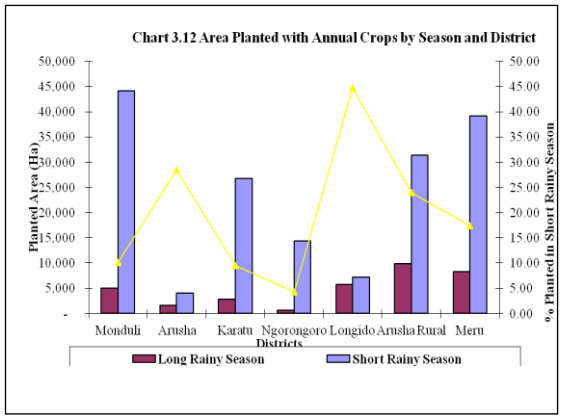
Arusha region has two rainy seasons, namely the short rainy season (October to November) and the long rainy season (April to May). The quantity of crops produced in both seasons will be used as a base for comparison with the past surveys and censuses.

3.3.1 Area Planted

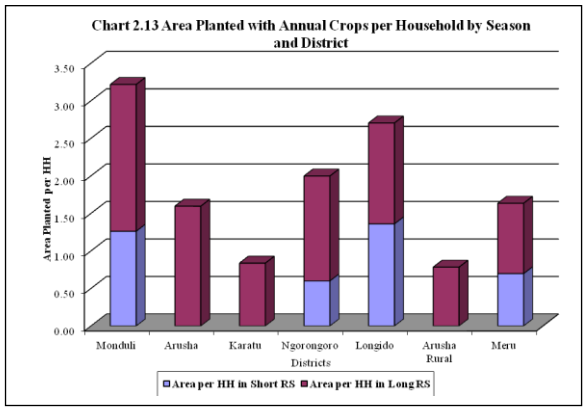
The area planted with annual crops and vegetables was 200,958 hectares out of which 33,997 hectares (17%) were planted during short rainy season and 166,061 hectares (83%) during long rainy season. The average areas planted per household during the short and long rainy seasons was 0.7ha and 0.9 ha respectively (Chart 3.11). The districts with the largest area planted per



household (the average of the two seasons) were Monduli (3.2 ha) followed by Longido and Ngorongoro with 2.7ha and 2 ha per household respectively. The district with the smallest average area planted was Arusha Rural and Karatu with 0.8ha per household each. In all districts the average area planted during the long rainy season is higher than that of the short rainy season (Chart 3.12, Map 3.8).



The average area planted per household during the long rainy season in Arusha region was 0.9 hectares. However, there were large district variations with Monduli having the largest planted area per household (1.9.0 ha) followed by Arusha (1.6 ha), Ngorongoro (1.4 ha), Longido (1.3ha), Arumeru (0.9 ha). The smallest planted area per household were Karatu and Arusha Rural districts with 0.8 ha each. The area planted per household in the short rainy season was not reported in Arusha, Karatu, and Arusha Rural. (Chart 3.13 and Map 3.9).



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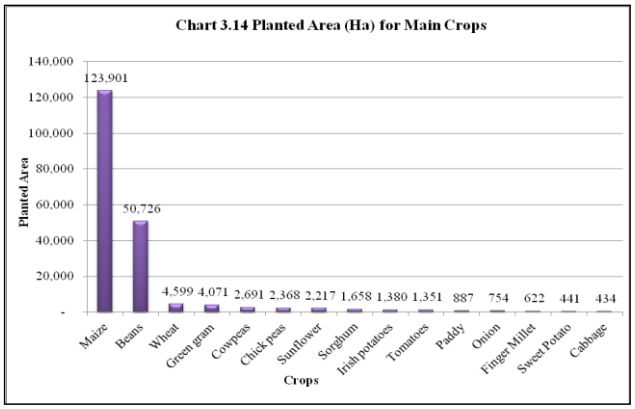
Analysis of the Most Important Crops

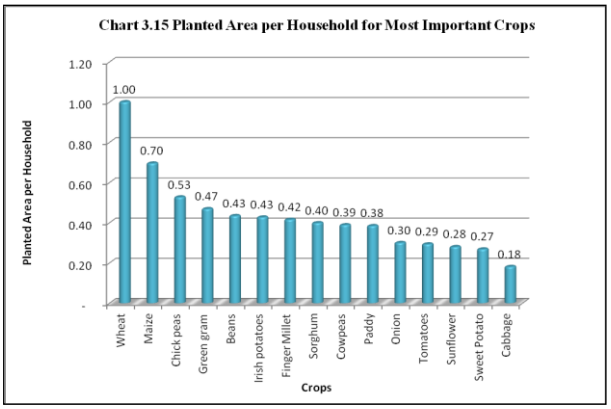
Results on crop production are presented in two different sections. The first section compares the importance of each crop regardless of whether they are annual or permanent. The second section contains a more detailed analysis on production based on crop types.

3.3.2 Crop Importance

Maize is the dominant annual crop grown in Arusha region and had a planted area of 123,901 hectares followed by beans, which had the second largest planted area of 50,738 hectares. The area planted with maize constitutes 63 percent of the total area planted with annual crops in the region, and that planted with beans constitute 26 percent. Other crops in order of their importance (based on the area planted) include wheat, Green gram, Cowpeas, chick peas, sunflower, sorghum, Irish potatoes and tomatoes. Other crops were less important and were planted in less than a thousand hectares and these were tomatoes, paddy, onions, finger millet, sweet potatoes and cabbage. (Chart

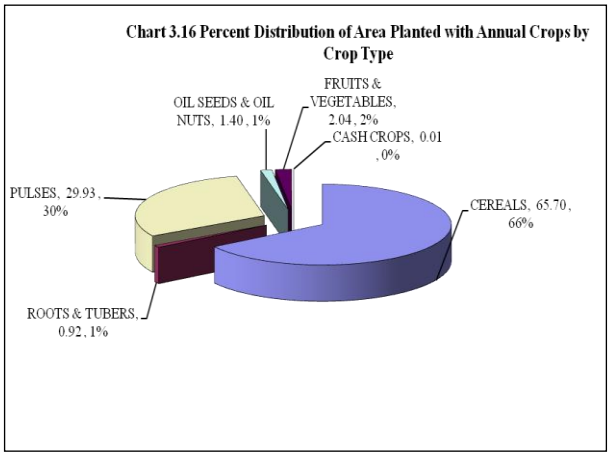
3.14). Large planted areas per households were for those agricultural households that grow (in their order of importance) wheat, maize, chick peas, green gram, beans and Irish potatoes (Chart 3.15).



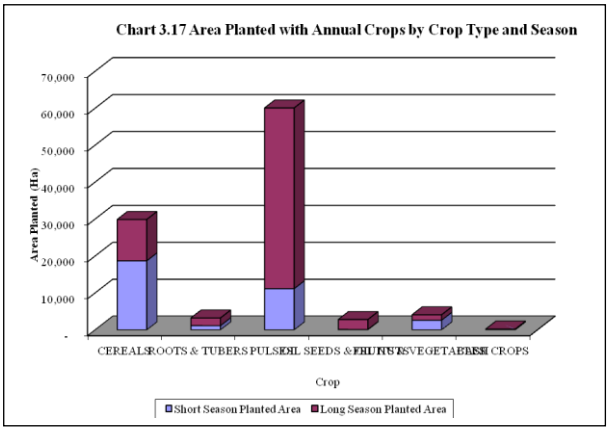


3.3.3 Crop Types

Cereals are the main crops grown in Arusha region. The area planted with cereals was 322,762 ha (66% of the total planted area), followed by pulses with 86,809 ha (30%), fruits and vegetables 5.911 ha (2%), oil seeds and oil nuts 76411 ha (1%), root and tubers 125, 98 ha (1%), and Annual cash crops that are mainly constituted of cotton and tobacco had got the least planted area of about 1004 ha (0.0%) (Chart 3.16).



Cereals and pulses are the dominant crops in both seasons and other crop types are of minor importance in comparison. There is little difference in the proportions of the different crop types grown between seasons and because short rainy season production was very small compared to long rainy season it is inappropriate to make detailed comparisons between the two seasons (Chart 3.17).



3.3.4 Cereal Crop Production

The total production of cereals was 448,762 tonnes that is 74 percent of all annual crop production. Maize was the dominant cereal crop at 209,678 tonnes which was 95 percent of total cereal crops produced, followed by wheat (2.5%), paddy (3.7%) sorghum (0.8%) finger millet (0.3%). Arumeru district had the largest planted area of Cereals in the region (33,216 6ha) followed by Monduli, (31,156ha), Arusha Rural (26,392ha), Karatu (22,594 ha), Ngorongoro (11,510 ha), Longido (7,396 ha), and Arusha (2, 7000 ha) (Map 3.10).

The total area planted with cereals during the short and long rainy seasons was 127,151ha out of which 18,702 ha (15%) were planted in short rainy season and 108,449 ha (85%) were planted during the long rainy season. The area planted with maize during the short rainy season was 95.8 percent of the total area planted with cereals in that season followed by Paddy (3.6%) and Sorghum (0.4%) (Table 3.3). The area planted with maize was dominant and it represented 94 percent of the total area planted with cereal crops, followed by wheat (3.5%), Sorghum.

(1.3%), Paddy (0.7%), finger millet (0.5%), and Barley (0.2%). Paddy had the highest yields of tones per hectare (92.6t/ha), followed by maize (1.7t/ha). Wheat and barley were third highest yielding crops with 1.2t/ha each, followed sorghum (1t/ha). Finger millet had the lowest crop in terms of yield per hectare with only 0.8tonnes per hectare (Chart 3.18, Table 3.3).

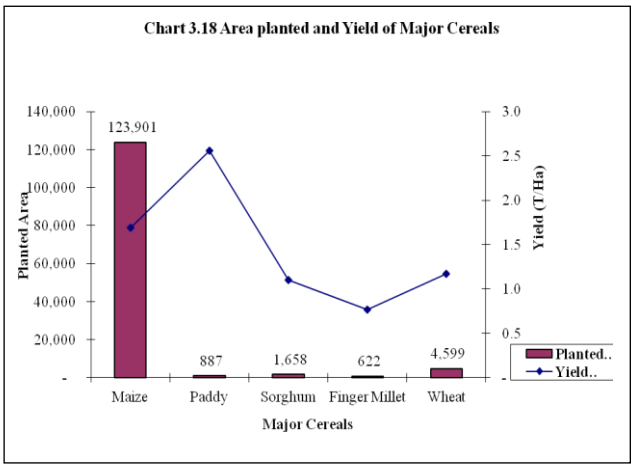
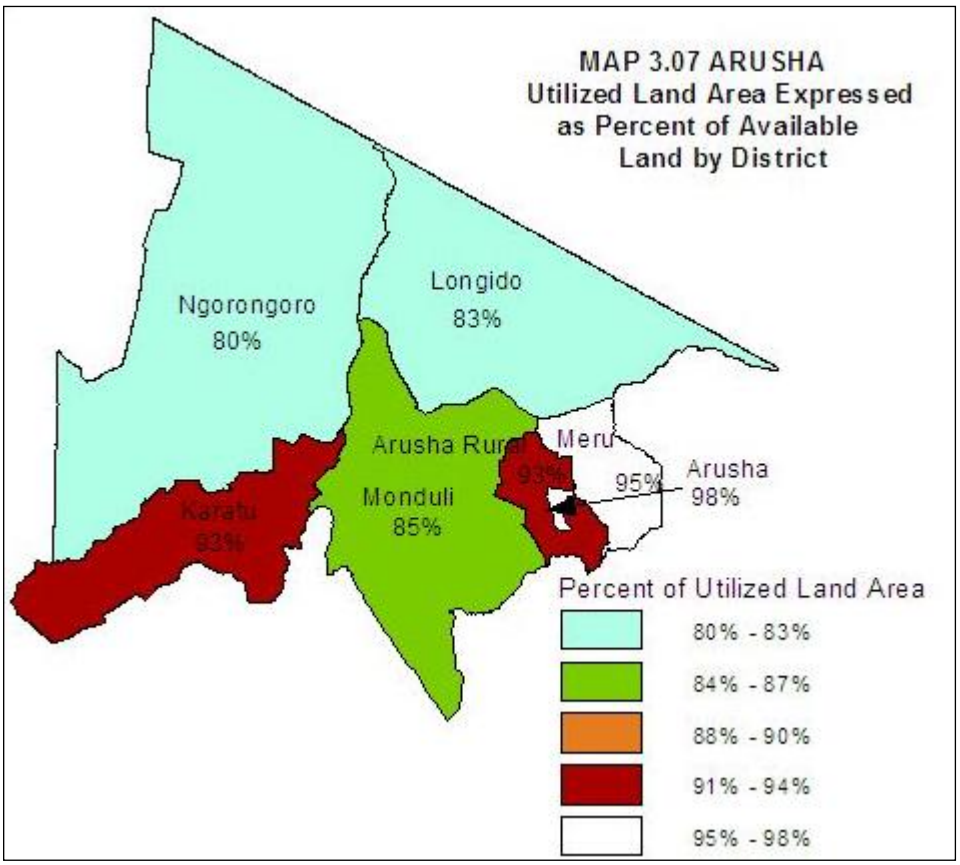
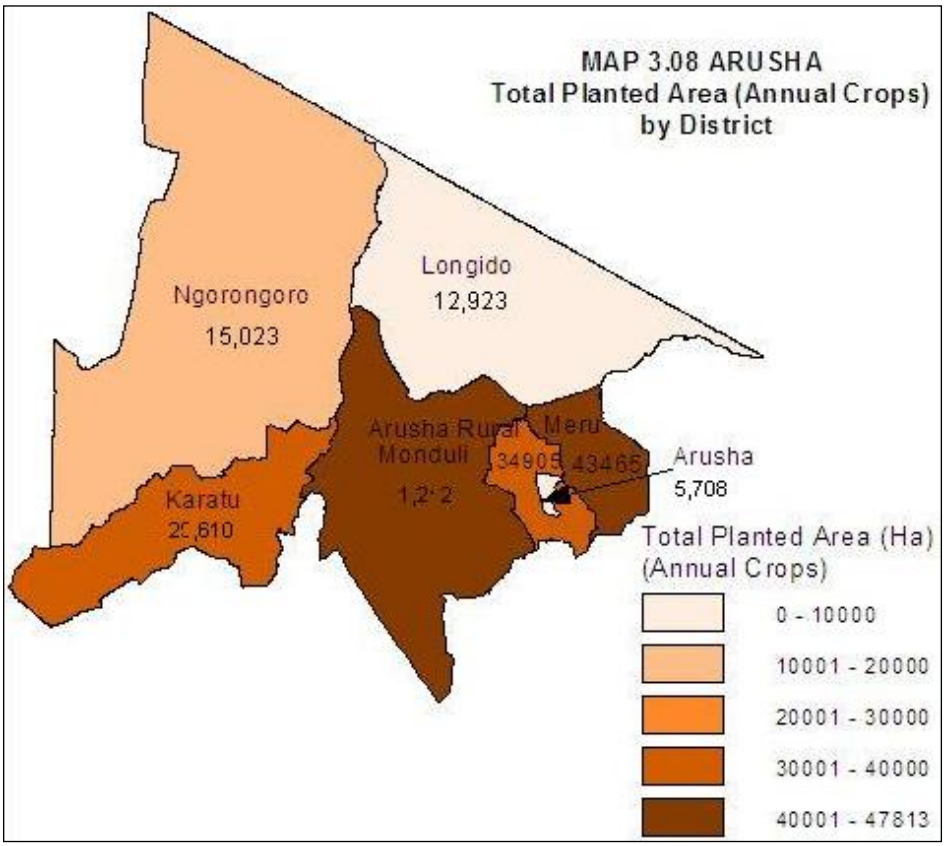
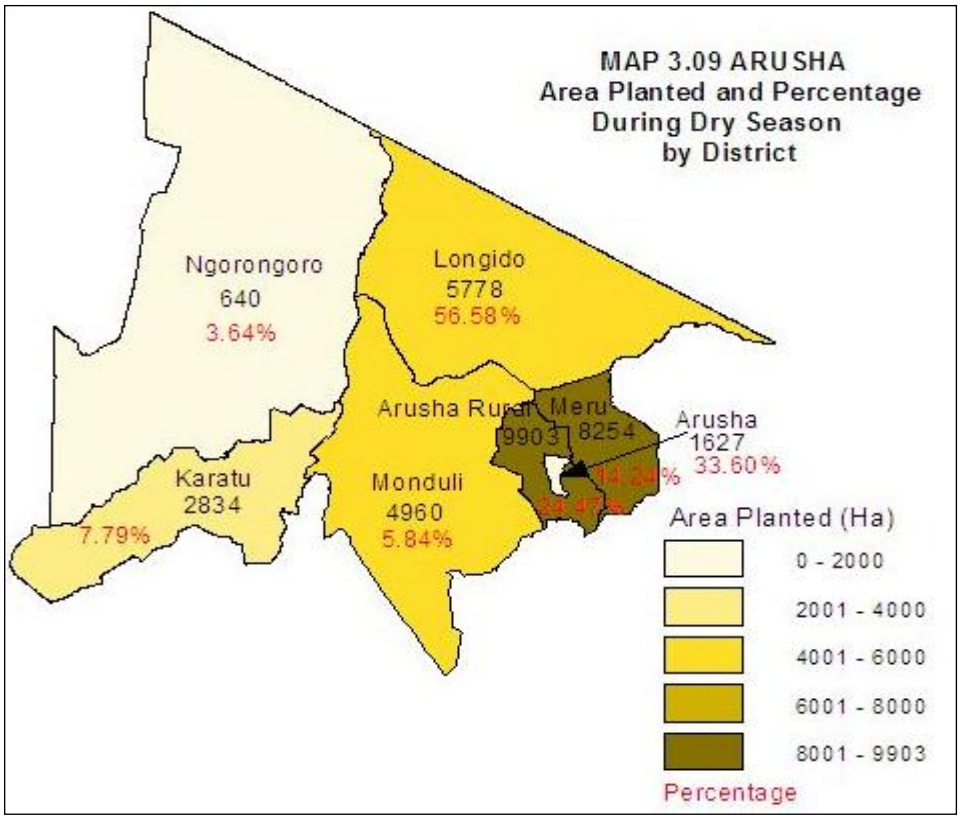


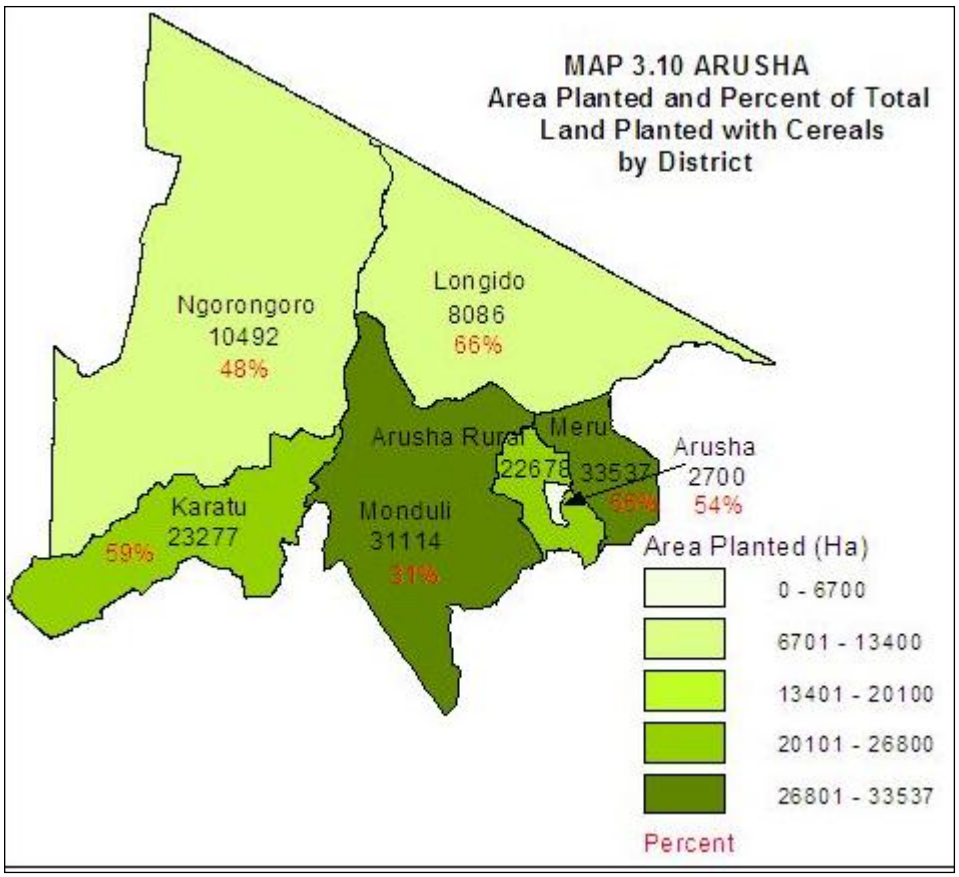
Table 3.3 Area, Production and Yield of Cereal Crops by Season

Crop	Short Rainy Season			Long Rainy Season			Short & Long Rainy Season			
	Area Planted (Ha)	Amount Harvested (T)	Yield (T/Ha)	Area Planted (Ha)	Amount Harvested (T)	Yield (T/Ha)	Area Planted (Ha)	Amount Harvested (T)		Yield (T/Ha)
Maize	17,689	29,656	1.7	106,212	180,022	1.7	123,901	209,678	95.4	1.7
Paddy	308	572	1.9	579	1,699	2.9	887	2,271	1	2.6
Sorghum	.	.	.	1,658	1,825	1.1	1,658	1,825	0.8	1.1
Finger Millet	73	72	1	550	407	0.7	622	478	0.2	0.8
Wheat	597	6	0	4,002	5,386	1.3	4,599	5,392	2.5	1.2
Barley	36	13	0.4	180	246	1.4	216	259	0.1	1.2
TOTAL	**18,702**	**30,319**	**1.6**	**113,182**	**189,585**	**1.7**	**131,883**	**219,903**	100	2


MAP 3.07 ARUSHA
Utilized Land Area Expressed as Percent of Available Land by District
Ngorongoro
80%
Longido
83%
Arusha Rural
93%
Meru
95%
Arusha
98%
Monduli
85%
Karatu
83%
Percent of Utilized Land Area
80% - 83%
84% - 87%
88% - 90%
91% - 94%
95% - 98%

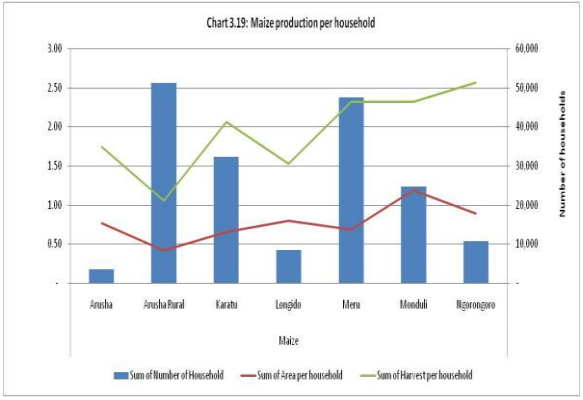

MAP 3.08 ARUSHA
Total Planted Area (Annual Crops) by District
Ngorongoro
15,023
Longido
12,923
Arusha Rural
34905
Meru
43465
Arusha
5,708
Monduli
1,2'2
Karatu
20,610
Total Planted Area (Ha) (Annual Crops)
0 - 10000
10001 - 20000
20001 - 30000
30001 - 40000
40001 - 47813

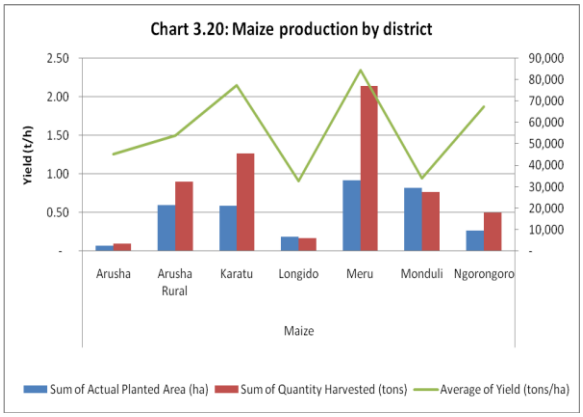

MAP 3.09 ARUSHA
Area Planted and Percentage
During Dry Season
by District
Ngorongoro
640
3.64%
Longido
5778
56.58%
Arusha Rural
9903
Meru
8254
Arusha
1627
33.60%
Karatu
2834
7.79%
Monduli
4960
5.84%
Area Planted (Ha)
0 - 2000
2001 - 4000
4001 - 6000
6001 - 8000
8001 - 9903
Percentage


MAP 3.10 ARUSHA
Area Planted and Percent of Total
Land Planted with Cereals
by District
Ngorongoro
10492
48%
Longido
8086
66%
Arusha Rural
22678
Meru
33537
Arusha
2700
54%
Karatu
23277
59%
Monduli
31114
31%
Area Planted (Ha)
0 - 6700
6701 - 13400
13401 - 20100
20101 - 26800
26801 - 33537
Percent

3.3.4.1 Maize

The number of households growing maize in Arusha region was 178,107 (96% of the total crop growing households in the region). The average area planted with maize per household was 0.78. However it ranged from 0.4 hectares in Arusha Rural district to 1.2 hectares in Monduli district. The average harvest per household was 1.16t/hh; having its maximum in Ngorongoro (1.67t/hh) and minimum in Arusha rural district (0.63t/hh) (Chart 3.19, Map 3.11).



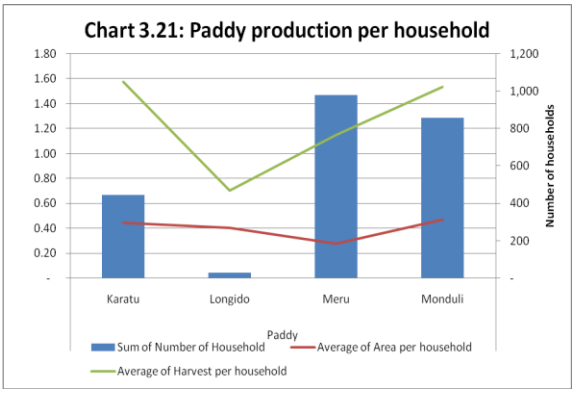


Maize dominates the production of cereal crops in the region. The total production of maize was 209,678 tonnes from a planted area of 123,901 hectares resulting in a yield of 1.7 t/ha. Meru district had the largest area of maize (32,830ha or 26% of all area under maize in Arusha region) followed by Monduli (29,335ha, 24%), Arusha Rural (21,587 ha, 17.4%), Karatu (21,162 ha, 17.4%), Ngorongoro (9,498 ha, 8%) and Longido (6,788 ha, 5%). Arusha had the lowest planted area of 2,700ha or 2% (Map 3.12).

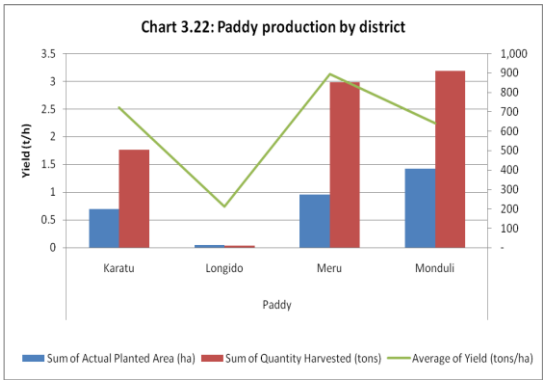
The production of maize increased from 92,118 tonnes in 2002/03 to 209,678 tonnes in 2007/08 resulting in an increase in yields from 0.9t/ha in 2002/03 to 1.7t/ha in 2007/08 census year.

3.3.4.2 Paddy

Paddy is the second most important cereal crop in the region. The number of households that grew paddy in Arusha region during the long rainy season was 2,308. There are significant variations in the average area planted per crop growing household among the districts ranging from 0.47 ha in Monduli to 0.45 ha in Karatu and 0.4 ha in Longido. The average harvest per household was 0.84t/hh with the highest in Karatu (1.13t/hh and lowest in Longido (0.3t/hh) (Chart 3.21).



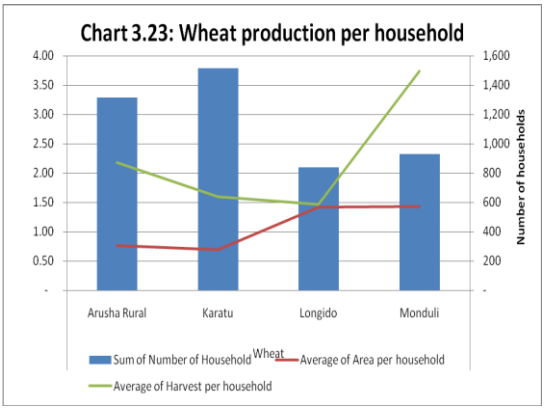
The total production of paddy was 2,271 tonnes from a planted area of 887 hectares resulting in a yield of 2.6 t/ha. The district with the largest area planted with Paddy was Monduli (405ha) followed by Arumeru (272 ha), Karatu (198 ha) and Longido (12 ha). The highest yield was reported in Karatu (2.53t/ha) and the lowest was in Longido (0.74t/ha) (Chart 3.22).



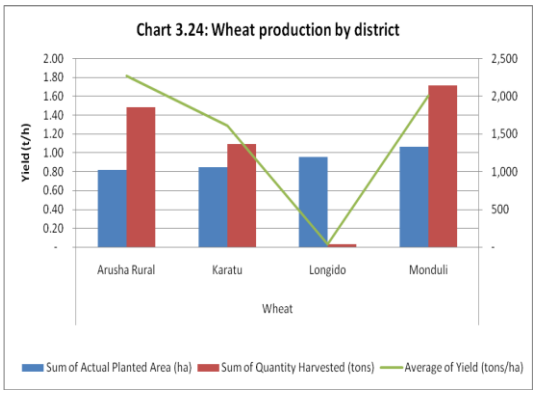
The production of paddy decreased from 3,809 tonnes in 2002/03 to 2,271 tonnes in 2007/08. However the yields of paddy in the census years remained constant at 2.6 tonnes per hectare. The area planted with paddy decreased from 1,444 hectares in 2002/03 to 887 in 2007/08.

3.3.4.3 Wheat

Wheat is the third most important cereal crop in the region. A total of 4,595 agricultural households planted wheat on an average area of 1.08h/hh and harvested an average of 1.16t/h. There are significant variations in the average area planted per crop growing household among the districts ranging from 1.43 ha in Monduli to 0.77 ha in Arusha rural and 0.7 ha in Karatu (Chart 3.23).

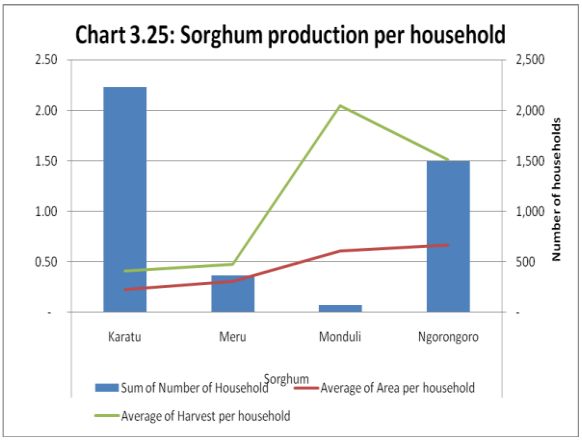


The total production of Wheat was 5,392 tonnes from a planted area of 4,599 hectares resulting in a yield of 1.17 t/ha. The district with the largest area planted with Wheat was Monduli (1,330ha) followed by Longido (1,193 ha), Karatu (1,057 ha) and Arusha rural (1,018 ha). The highest yield was reported in Arusha rural (1.82t/ha) and the lowest was in Longido (0.03t/ha) (Chart 3.24).

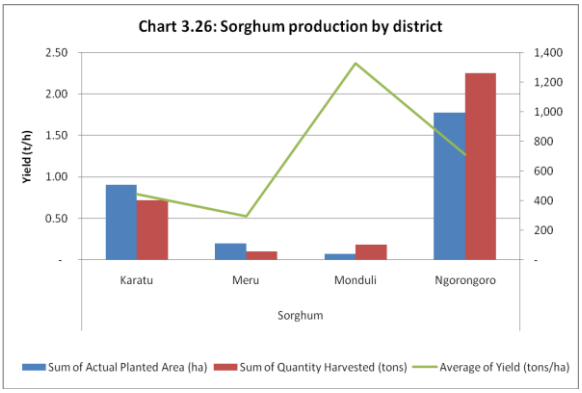


3.3.4.4 Sorghum

Sorghum is the fourth most important cereal crop in the region. The number of households that grew Sorghum in Arusha region was 4,157 each having an average of 0.45h/hh and harvest of 0.66t/hh. There are significant variations in the average area planted per crop growing household among the districts ranging from 0.67 ha in Ngorongoro to 0.23 ha in Karatu. The highest average harvest per household was 1.44t/hh in Monduli and lowest in Meru (0.16t/hh) (Chart 3.25).



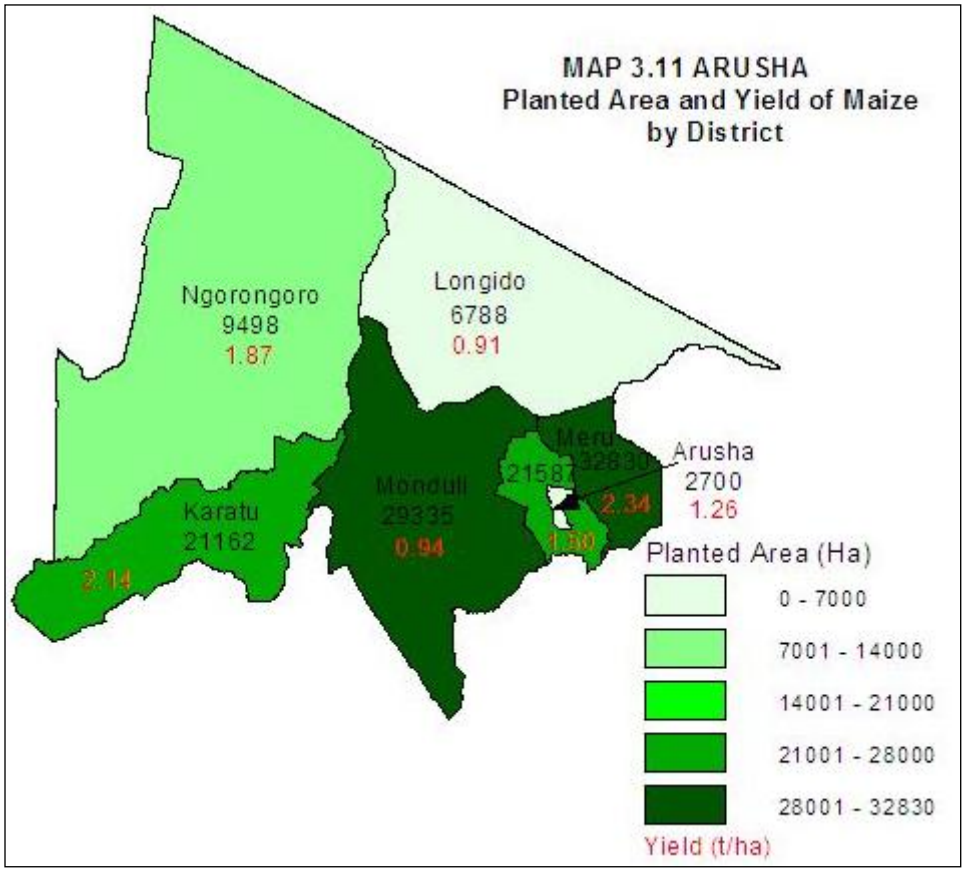
The total production of Sorghum was 1,825 tonnes from a planted area of 1,658 hectares resulting in a yield of 1.1 t/ha. The district with the largest area planted with Sorghum was Ngorongoro (994ha) followed by Karatu (507 ha), Meru (114 ha) and Monduli (43 ha). The highest yield was reported in Monduli (2.37t/ha) and the lowest was in Meru (0.53t/ha) (Chart 3.26).

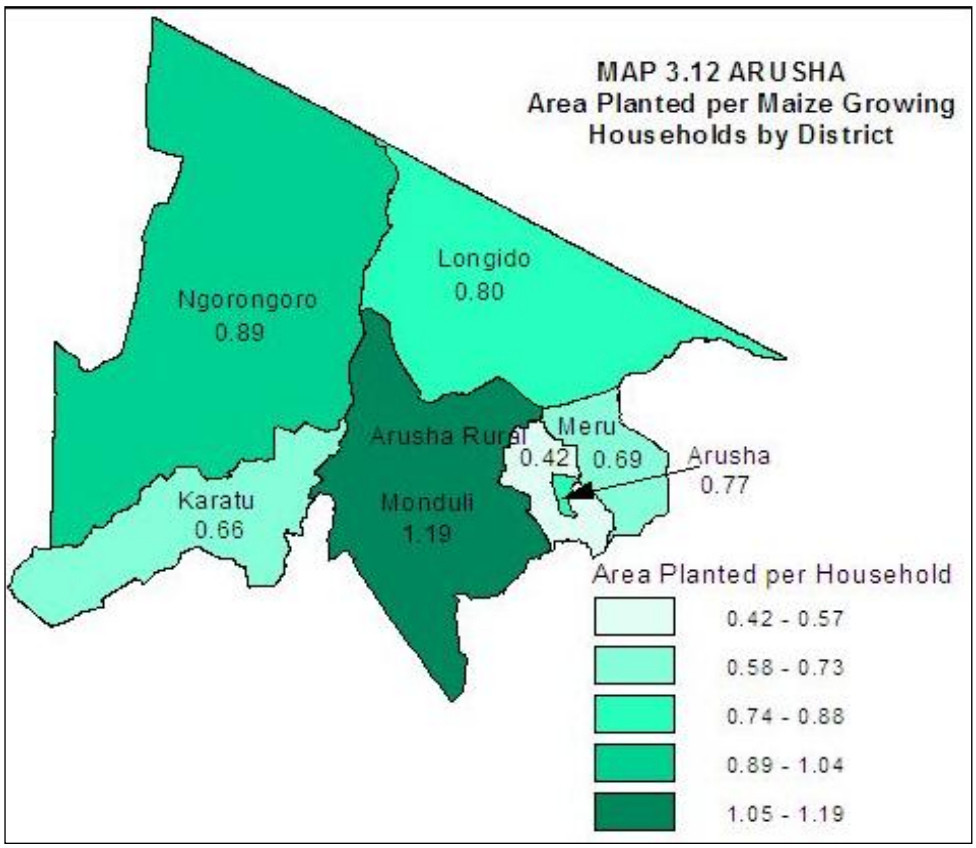


As compared to the 2002/03 census, the production of Sorghum increased by 14% from 1,595 tonnes. The area under sorghum increased by 5% from 1,585ha. The yield increased by 9% from 1.01t/h.

3.3.4.5 Finger millet

This cereal produced in small quantities. It is produced by 1,498 households on an average of 0.5h/hh and harvest of the largest quantity of other serials is produced in Karatu (1,916 ha), Monduli (1,374), Longido (1,287), Arusha 0.5t/hh. A total of 622 tonnes were produced on a total area of 478ha with an average yield of 0.99t/ha.


MAP 3.11 ARUSHA
Planted Area and Yield of Maize
by District
Ngorongoro
9498
1.87
Longido
6788
0.91
Meru
Arusha
2700
1.26
Monduli
29335
0.94
Karatu
21162
2.14
Planted Area (Ha)
0 - 7000
7001 - 14000
14001 - 21000
21001 - 28000
28001 - 32830
Yield (t/ha)

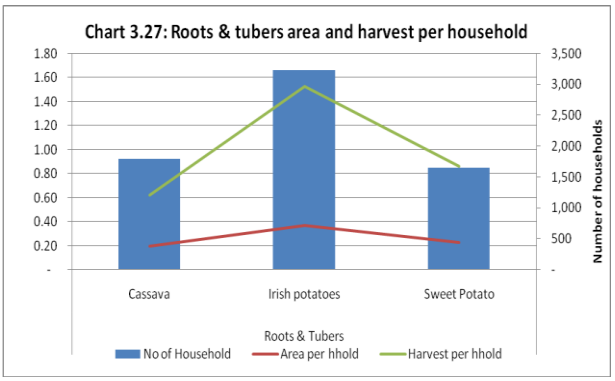

MAP 3.12 ARUSHA
Area Planted per Maize Growing
Households by District
Longido
0.80
Ngorongoro
0.89
Arusha Rural
Meru
0.42
0.69
Arusha
0.77
Karatu
0.66
Monduli
1.19
Area Planted per Household
0.42 - 0.57
0.58 - 0.73
0.74 - 0.88
0.89 - 1.04
1.05 - 1.19

3.3.5 Roots and Tuber Crops Production

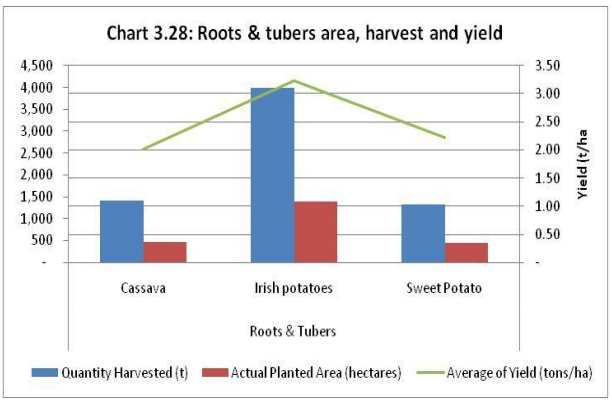
Roots and tubers were produced by a total of 6,663 agricultural households on an average area of 0.34ha/hha and harvest of 1.01t/hh (Table 3.4 and Chart 3.27). Irish potatoes featured the crop that was produced by the biggest number of households (3,229) followed by Cassava (1,404t) and Sweet potatoes (1,328t).

Table 3.4: Roots and tubers area/quantity harvested and number of households

Crop name	Quantity Harvested (tons)	Actual Planted Area (ha)	Average of Yield (tons/ha)	Number of Households	Area per households	Harvest per household
Cassava	1,404	454	3.09	1,788	0.25	0.79
Irish potatoes	3,996	1,380	2.90	3,229	0.43	1.24
Sweet Potato	1,328	441	3.01	1,645	0.27	0.81
Total/Average	**6,728**	**2,275**	**2.96**	**6,663**	**0.34**	**1.01**

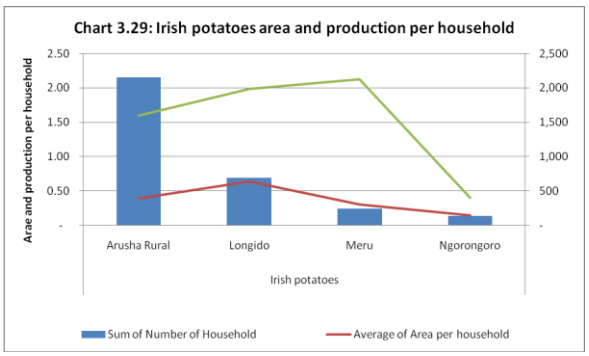


The total production of roots and tubers was 6,663 tonnes on an area of 2,275ha and average yield of 2.96t/ha. Irish potatoes production was the highest among root and tuber crops in the region with a total production of 3,996 tonnes representing 59 percent of the total root and tuber crops production. This was followed by Cassava with 1,404 tonnes (21%) and sweet potatoes (1,328t or 20%). (Chart 3.28).



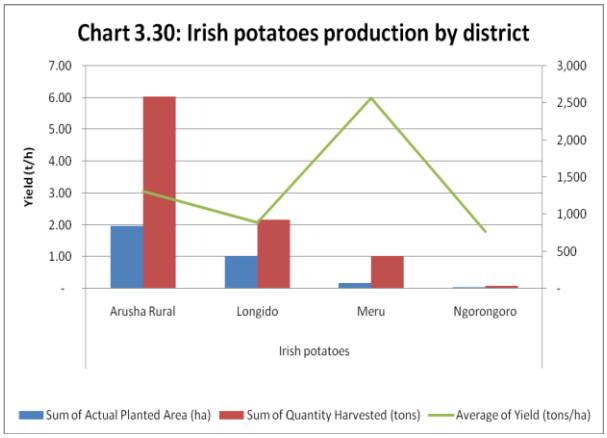
Irish potatoes whose estimated production was of 3,996 tonnes was the most important root and tuber crop, with a yield of 2.9 tonnes per hectare. However, it is Sweet potatoes which had higher yields of 3 tonnes per hectare, though it accounts only 25 percent of the total production of roots and tubers in the region. The estimated yield for cassava was 0.25t/ha.

3.3.5.1 Irish Potatoes



The number of households growing Irish potatoes in Arusha region was 3,229. This represents 1.6 percent of the total crop growing households in the region. The average Irish potatoes planted area per Irish potatoes growing household was 0.4 hectares per household. However, there were small district variations. The area planted per Irish potatoes

growing household was greatest in Longido (0.6 ha/hh), followed by Arusha Rural (0.4 ha/hh), Arumeru (0.3 ha/hh), and Ngorongoro (0.1 ha/hh) (Chart 3.29). The average harvest per household was 1.15t/hh with the highest reported in Meru (1.82t/hh) and lowest in Ngorongoro (0.26t/hh)

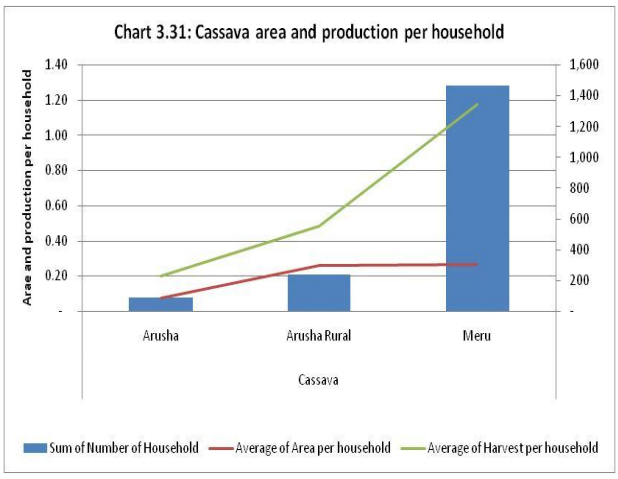


The total production of Irish potatoes during the census year was 3,996 tonnes from a planted area of 1,380 hectares resulting in a yield of 2.9t/ha. The area planted with Irish potatoes accounted for 0.4 percent of the total area planted with annual crops and vegetables in the census year. Arusha Rural district had the largest planted area of Irish potatoes (841 ha, 60.7% of the Irish potatoes planted area in the region), followed by Longido (4445 ha, 32, 1%) Arumeru (74 ha (5.3%) and Ngorongoro (20 ha, 1.5 %). Production of Irish potatoes was not reported in Monduli, Arusha, and Karatu (Chart 3.30). However, the highest proportion of land planted with Irish potatoes, expressed as a percent of the total land area was in Longido district (4.7%). This was followed by Arusha Rural (1.9%), Arumeru (1.2%), and Ngorongoro (0.1%) (Chart 3.30).

As compared to the census of 2002/3, there has been a 13% in terms of area under Irish potatoes from 1,590, 9% 9% increase in quantity harvested from 3,676tonnes and 8% increase in yield from 2.68t/ha.

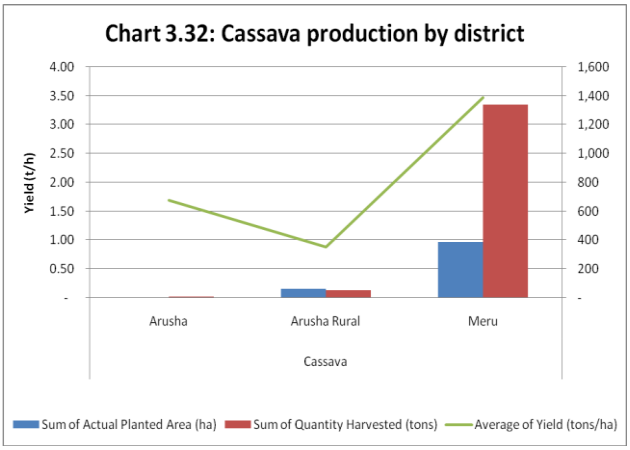
3.3.5.2 Cassava

The number of households growing Cassava in Arusha region was 1,788. The average Cassava planted area per Cassava growing household was 0.2 hectares per household and harvest per household of 0.4t/hh. However, there were small district variations (Chart 3.31). The number was highest in Meru (1,464) followed by Arusha rural (239) and Arusha (85). The area per household



was highest in Arusha and Arumeru (0.26ha/hh) and lowest in Arusha (0.07). The harvest per household was highest in Meru (0.91t/hh) followed by Arusha rural (0.23t/hh) and Arusha (0.13t/hh).

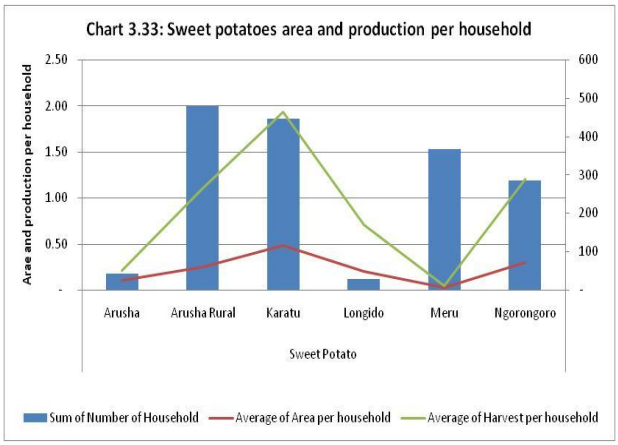
The total production of Cassava during the census year was 1,404 tonnes from a planted area of 454 hectares resulting in a yield of 3t/ha. Meru district had the largest planted area of Cassava (387 ha, 85% of the Cassava planted area in the region), followed by Arusha rural (61 ha, 14%) and Arusha (6ha, 1%). Production of Cassava was highest in Meru (1,339 tons or 95% of cassava production in Arusha region) followed by Arusha rural (54t, 4%) and Arusha (11t, 1%) (Chart 3.32). Yield was highest in Meru (3.46t/ha) followed by Arusha (1.69t/ha) and Arusha rural (0.88t/ha).



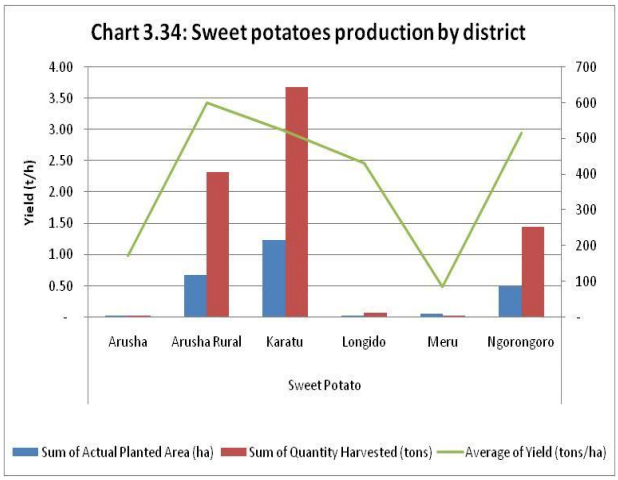
As compared to the census of 2002/3, there has been a 14% in terms of number of cassava growing households from 1,568. The area under Cassava increased by 155% from 178ha. The quantity harvested increased by 108% from 675tonnes. Yield decreased by 47% increase in yield from 3.8t/ha.

3.3.5.3 Sweet Potatoes

The number of Sweet Potatoes growing households in the region was 1,645 with an average of area and harvest per household of 0.23ha/hh and 0.63t/hh respectively. This number of households was 4 percent of the total roots and tubers growing households in the region. The average Sweet potatoes planted area per Sweet potatoes growing household was 0.3 hectares per household. However, there were small district variations. The area planted per Sweet potatoes growing household was greatest in Karatu (0.5ha/hh), followed by Ngorongoro (0.3 ha/hh), Arusha Rural (0.25 ha/hh), Longido (0.2 ha/hh), and Arusha (0.1ha/hh) (Chart 3.33).



The total production of Sweet Potatoes during the census year was 1,328 tonnes from a planted area of 441 hectares resulting in a yield of 3.0t/ha. The highest proportion of land planted with Sweet potatoes, expressed as a percent of the total land area was in Karatu district (0.7%). This was followed by Ngorongoro and Arusha Rural at 0.3 percent each, Arusha (0.2%), and Longido (0.1%) Karatu District has the largest planted area for Sweet potatoes (216ha, 48.8%), followed by Arusha Rural (118, 26.5%), Ngorongoro (86, 19.4%), Arumeru (9 ha, 2.2%), Longido (5 ha, 1.3% and Arusha (4.3 ha, 1.0%). Sweet Potatoes was not grown in Monduli District (Chart 3.34).Other root and tuber crops are of minor important in terms of area planted compared to cassava and Irish potatoes.



3.3.6 Pulse Crops Production

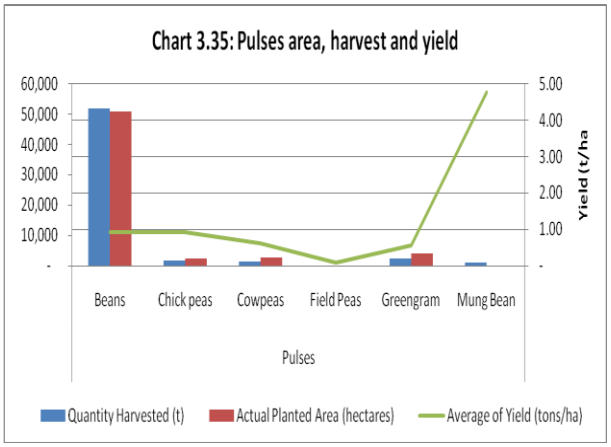
Pulses were grown by a total of 137,407 households on an average area and harvest per household of 0.44ha/hh and 0.42t/hh. Beans was planted by 116,844 or 85% of all households. (Table 3.5 and chart 3.35).

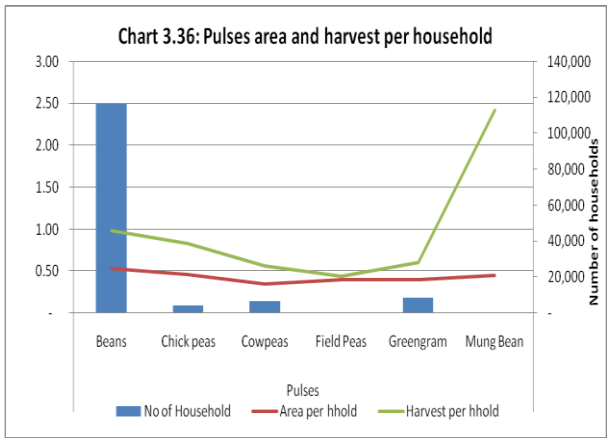
Table 3.5: Type of crop, Area Planted and Qunatity Harvested

Crop name	Quantity Harvested (tons)	Actual Planted Area (ha)	Average of Yield (tons/ha)	Number of Household	Area per household	Harvest per household
Beans	51,661	50,726	0.93	116,844	0.43	0.44
Chick peas	1,712	2,368	0.93	4,493	0.53	0.38
Cowpeas	1,248	2,691	0.64	6,924	0.39	0.18
Field Peas	5	48	0.10	119	0.40	0.04
Greengram	2,289	4,071	0.56	8,686	0.47	0.26
Mung Bean	945	178	4.75	342	0.52	2.77
Total	**57,860**	**60,082**	**1.33**	**137,407**	**0.44**	**0.42**

The total area planted with pulses was 60,082 hectares out of which 50,726 ha were planted with beans (84.4 percent of the total area planted with pulses), followed by green gram (4,071ha, 6.8%), cow peas (2669 ha, 4.5%), chick peas (2,368 ha, 3.9%), mung beans (178 ha, 0.3%), and field peas (47 ha, 0.1%).

Beans was the most dominant crop in the census year with a total production of 51,660.9 tonnes. This accounted for 86 percent of the total pulse production. This was followed by Green gram (2289 tonnes, 3.8%), chick peas (1712t, 2.8%), Cow peas (1248t, 2.1%), Mung beans (945 tonnes, 1.6%). Field peas had the lowest production (4.tonnes, 0.0%). In terms of yields, mug bean has the highest yields per hectare of 5.3t/ha, followed by beans (1.0t/ha). The yields per hectare was the lowest in the remaining areas (Table 3.4 and Chart 3.34).

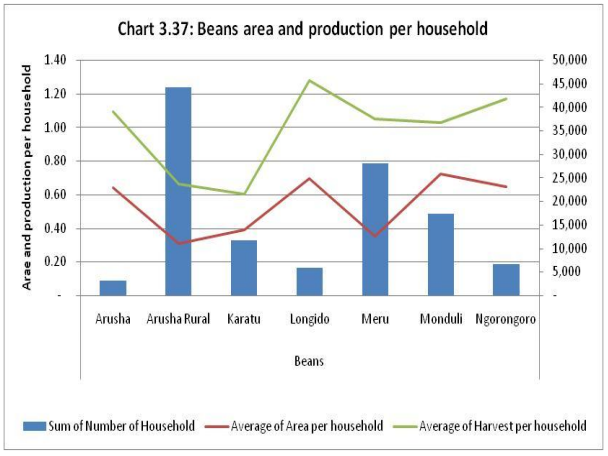




As compared to the census of 2002/3, the area planted with pulses increased by 10% from 54,794. Production increased by 146% from 23,477. Yield increased by 211% from 0.43t/ha.

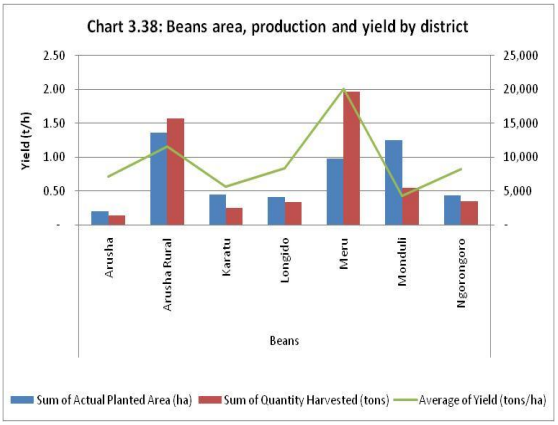
3.3.6.1 Beans

Beans dominate the production of pulse crops in the region. The number of households growing beans in Arusha region was 116,844 on average area and harvest of 0.53ha/hh and 0.45t/hh respectively. However, the largest areas planted with beans per household were Monduli and Longido districts each having 0.7 ha/hh, followed by Arusha and Ngorongoro each with 0.6 ha/hh (Chart 3.37).



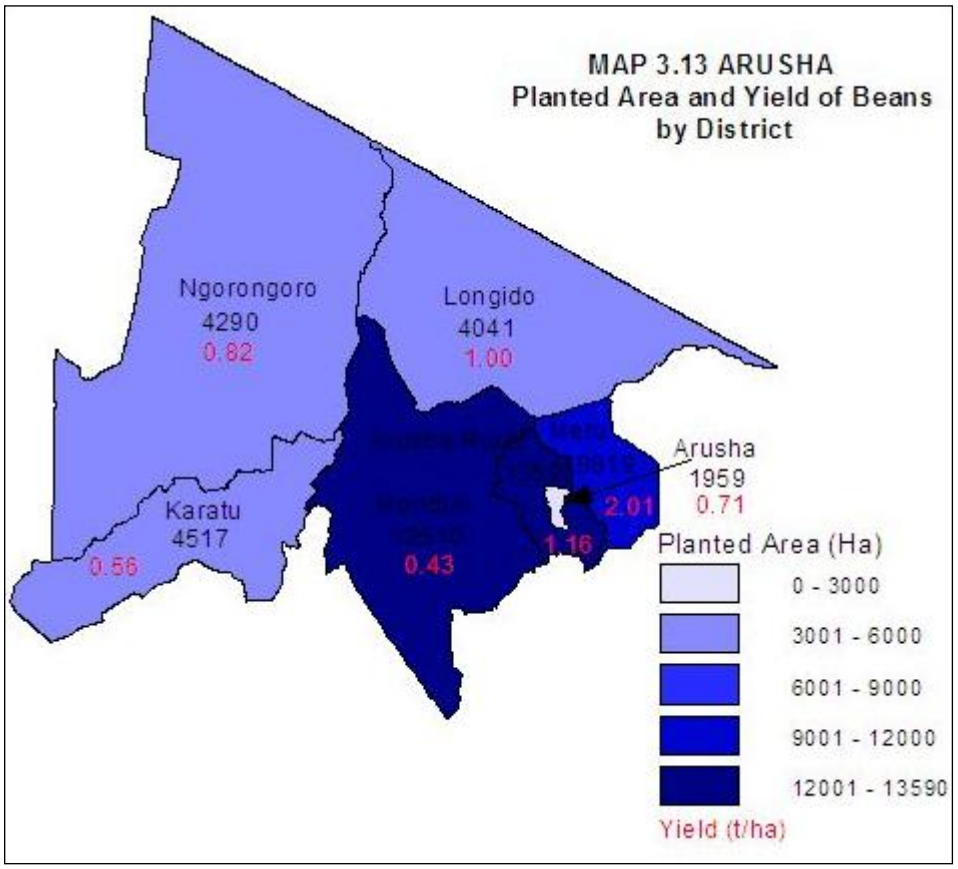
The total production of beans in the region was 51,661 tonnes from a planted area of 50,726 hectares resulting in a yield of 1.0 t/ha. The largest area planted with beans in the region was in Arusha Rural (13, 5698 ha, 26.8% of the total land area planted with pulses). This is followed by

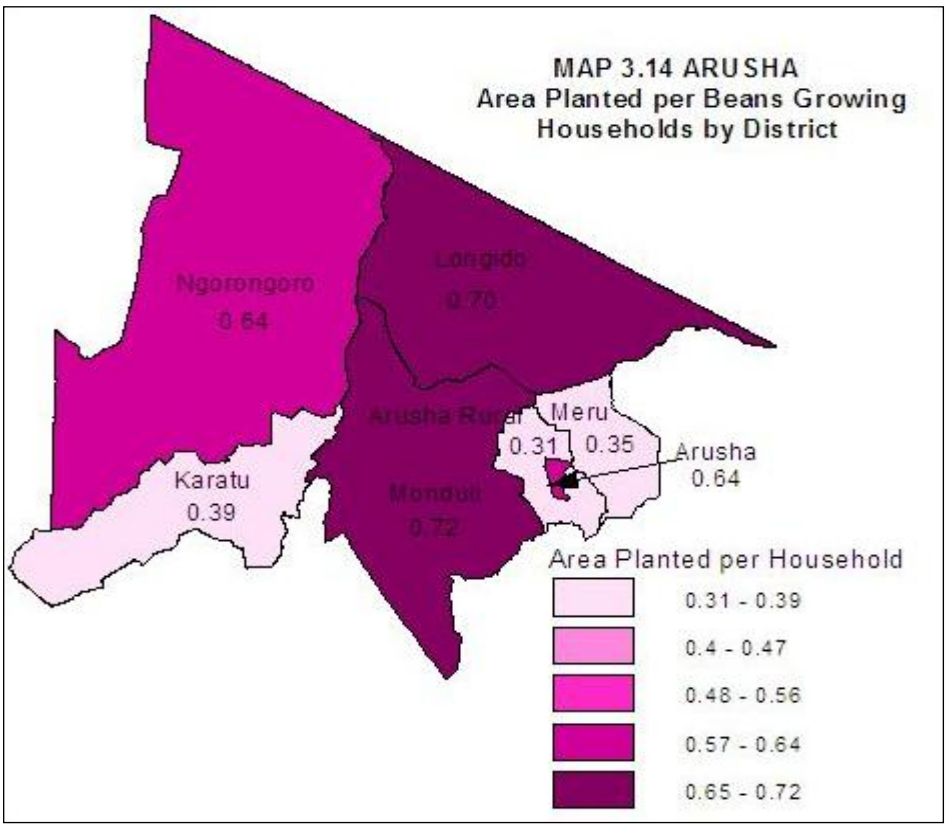
Monduli and Meru with 12,510 ha, 24.7 percent and 9,819 ha, 19.4 percents respectively (Chart 3.38 and Map 3.13).



With exception of Monduli, Arusha Rural and Arumeru districts, the variations in yield of beans for the rest of the districts were small ranging from 0.43t/ha in Monduli to 2.5t/ha in Meru (Map 3.14).

In Arusha region, bean production has increased steadily over the five year period from 22,200 tonnes in 2002/03 51,661 tonnes in 2007/8. Whilst the area planted with beans decreased from 51,451 hectares in 2002/03 to 50,726, the yield of beans increased over the five year period from 0.43t/ha in 2002/03 to 1t/h in 2007/08 (Chart 3.27).


MAP 3.13 ARUSHA
Planted Area and Yield of Beans
by District
Ngorongoro
4290
0.82
Longido
4041
1.00
Arusha
1959
0.71
2.01
Karatu
4517
0.56
0.43
1.16
Planted Area (Ha)
0 - 3000
3001 - 6000
6001 - 9000
9001 - 12000
12001 - 13590
Yield (t/ha)


MAP 3.14 ARUSHA
Area Planted per Beans Growing
Households by District
Ngorongoro
0.64
Longido
0.70
Meru
0.31
0.35
Arusha
0.64
Karatu
0.39
Area Planted per Household
0.31 - 0.39
0.4 - 0.47
0.48 - 0.56
0.57 - 0.64
0.65 - 0.72

3.3.7 Oil Seed Production

Oil seeds were produced by a total of 9,265 agricultural households in Arusha region on an average area and harvest of 0.3ha and 0.18ha per household respectively. Table 3.6 and chart 3.39 shows that sunflower was leading by being produced by 7,925 or 86% of all households growing oil seeds followed by soybeans (1,075hh, 12%), simsim (143hh, 2%) and groundnuts (122hh, 1%). Simsim was leading in the area and harvest per household (2.63ha/hh and 2.1t/hh) followed by sunflower (0.28ha/hh and 0.15t/hh).

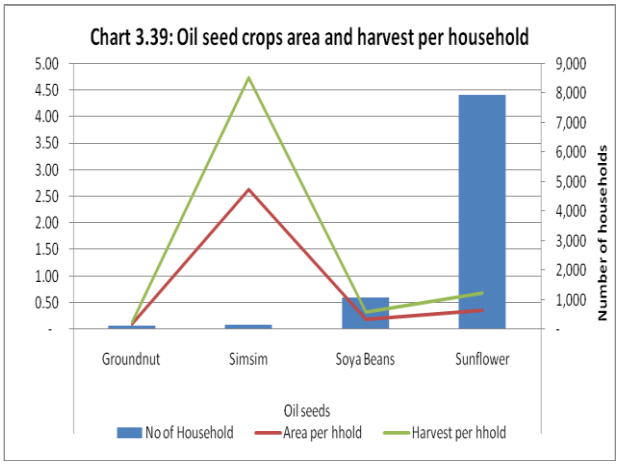
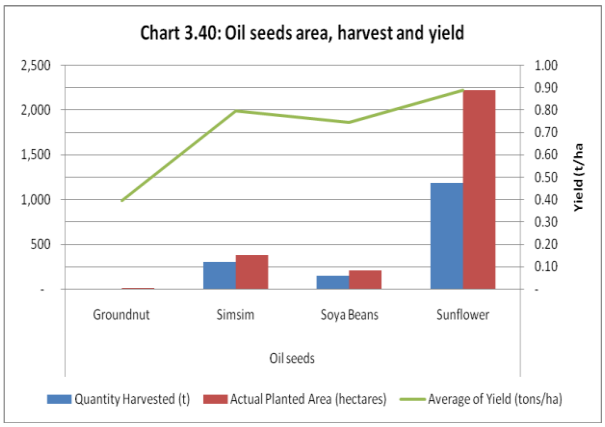


Table 3.6: Oil seed area, harvest and number of households

Crop name	Quantity Harvested (tons)	Actual Planted Area (ha)	Yield (tons/ha)	Number of Household	Area per household	Harvest per household
Groundnut	5	12	0.40	122	0.10	0.04
Simsim	300	376	0.80	143	2.63	2.10
Soya Beans	153	206	0.75	1,075	0.19	0.14
Sunflower	1,187	2,217	0.89	7,925	0.28	0.15
Total/Average	1,645	2,811	0.80	9,265	0.30	0.18

The total production of oilseed crops was 1,645 tonnes planted on an area of 2,811 hectares. Among oilseed crop Sunflower was the only important crop with 1,098 hectares representing 78.9 percent of the total area planted with oil seeds. This is followed by simsim (376 ha, 13.4%). The remaining oilseeds crops were less important in terms of planted area and accounted to less than ten percent each of the total area planted with oilseeds crops (Chart 3.40). In terms of production, sunflower was 1.187 tonnes in the census year and accounted for 72.1 percent of the total production of oil seeds. Simsim was the second highest produced oilseed crop with a production of 300 tonnes accounting for 18.2 percent of the total production of oil seeds, followed by soya beans with a production of 206 tonnes accounting or 7.3 percent of the total production of oil seeds. There was very little production of Groundnuts in the census year accounting for less than 1 percent of the total

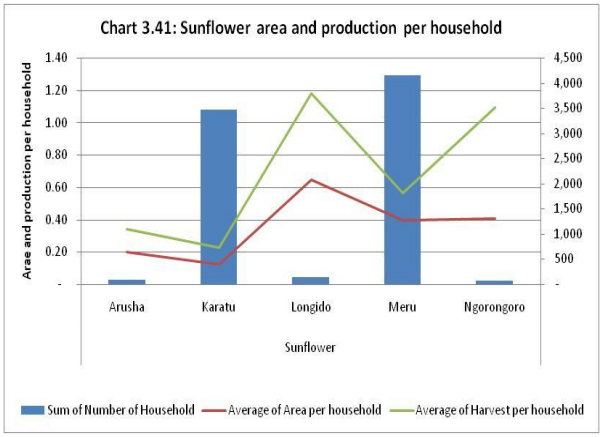


production of oil seeds. In terms of yields it was simsim, which was leading with 0.8t/ha, followed by soya beans (0.7t/ha). The yield of sunflower was moderate (0.5t/ha).

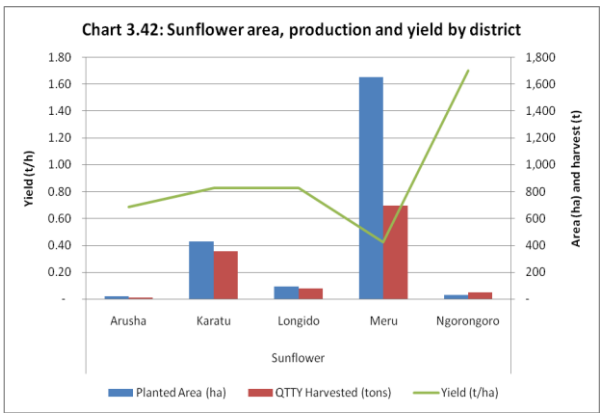
When compared to the 2002/3 census, there was a 273% increase in production from 441t, 141% increase in area under oil seeds from 1,166ha and 111% increase in yield from 0.38t/ha.

3.3.7.1 Sunflower

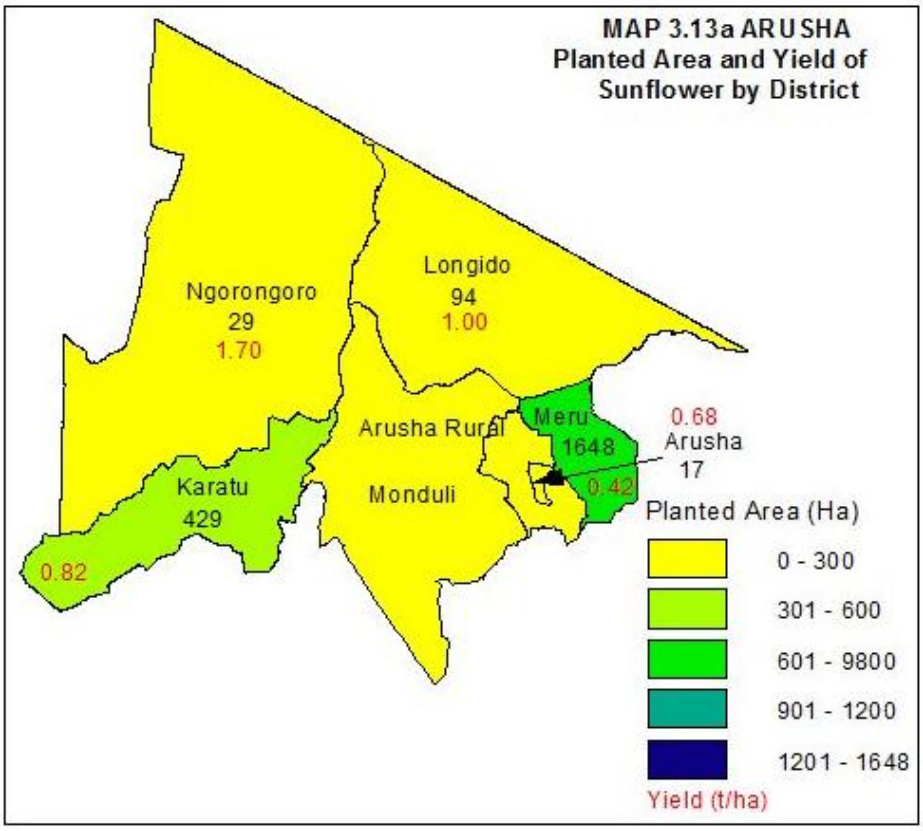
The number of households growing sunflower in Arusha region was 7,925 on an average area and harvest per household of 0.36ha/hh and 0.33t/hh respectively. The largest area planted per sunflower growing household was found in Longido District (0.6 ha) and the lowest was in Karatu (0.1). The range between the district with the highest and the lowest area planted per household depicts big variations in area planted among the districts. The biggest average harvest per household was found in Ngorongoro (0.69t/hh) followed by Longido (0.53t/hh). Others harvested between 0.10 – 0.17t/hh) (Chart 3.41).

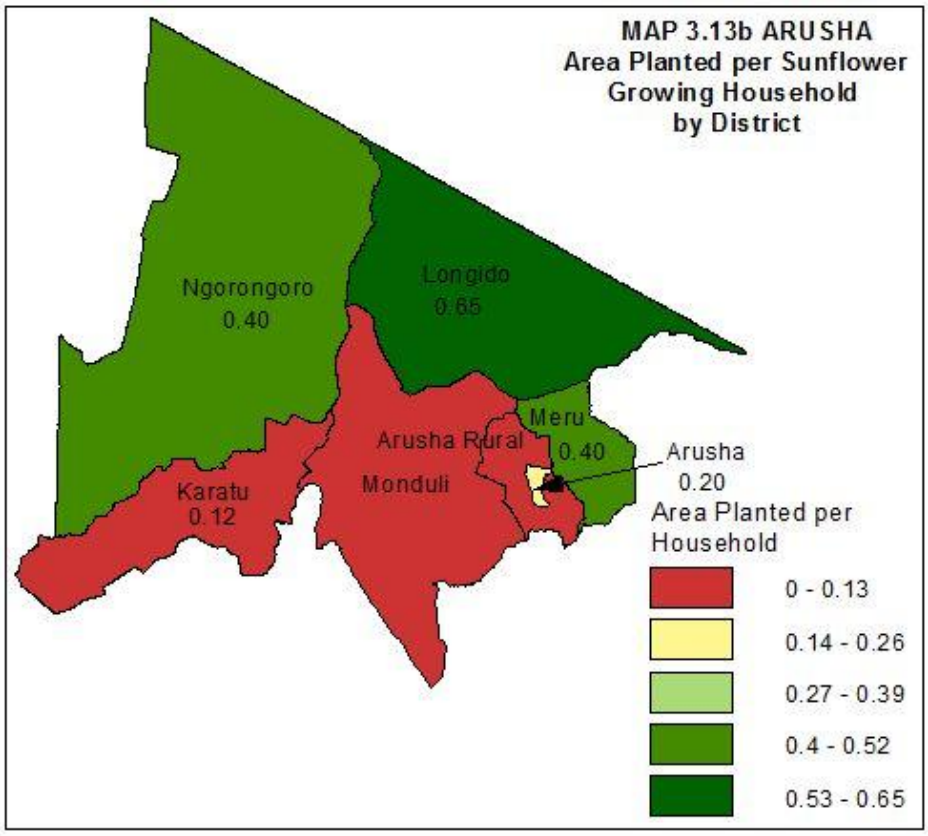


The highest proportion of land with sunflower was found in Arumeru (3.7%), (Chart 3.42 and Map 3.13a). The total production of sunflower in the region was 1,187 tonnes from a planted area of 2,217 hectares resulting in a yield of 0.5t/ha. Seventy four percent of the area planted with sunflower was located in Arumeru District (1,648 ha), followed by Karatu (429 ha, 19%), and Longido (94ha, 4%). Sunflower was least grown in Arusha and Ngorongoro with 1 percent each. The crop was not grown in Monduli and Arusha Rural districts (Map 3.13b).

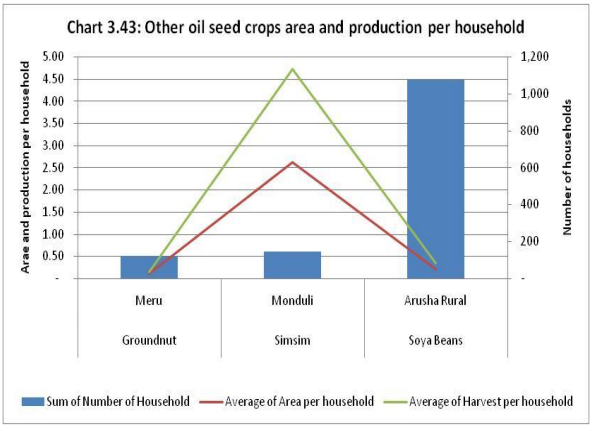


As compared to the 2002/3 census, there has been a 102% increase in area under sunflower from 1,098ha, 169% increase in harvest from 441t and 64% decrease in yield from 2.49.

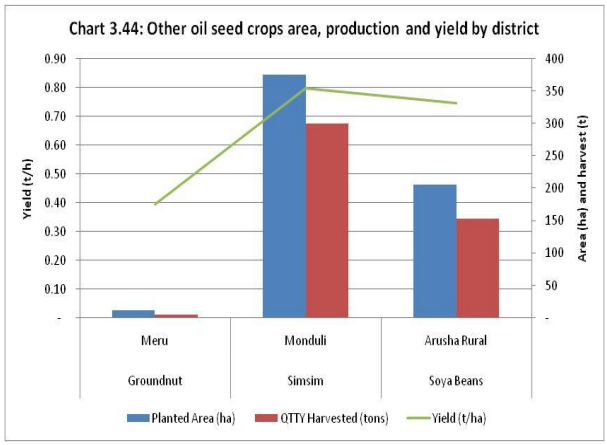

MAP 3.13a ARUSHA
Planted Area and Yield of
Sunflower by District
Ngorongoro
29
1.70
Longido
94
1.00
Arusha Rural
Monduli
Meru
1648
0.68
Arusha
17
0.42
Karatu
429
0.82
Planted Area (Ha)
0 - 300
301 - 600
601 - 9800
901 - 1200
1201 - 1648
Yield (t/ha)


MAP 3.13b ARUSHA
Area Planted per Sunflower
Growing Household
by District
Ngorongoro
0.40
Longido
0.65
Arusha Rural
Monduli
Meru
0.40
Arusha
0.20
Karatu
0.12
Area Planted per
Household
0 - 0.13
0.14 - 0.26
0.27 - 0.39
0.4 - 0.52
0.53 - 0.65

3.3.7.2 Other oil seed crops

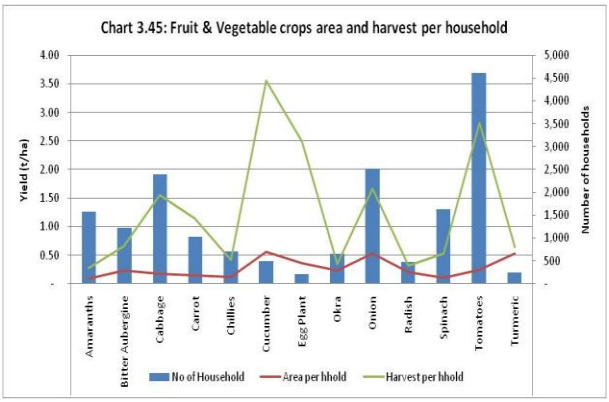


Other oil seed crops produced in Arusha region include groundnuts that is produced in Meru, simsim (Monduli) and soya beans (Arusha rural). They are produced by a total of 1,340 households on an average area and harvest per household of 0.97ha/hh and 0.76t/hh respectively. chart 3.42 shows that soybeans leads in being produced by 1,075 or 80% of other oil seed crop producing households followed by simsim (143hh, 11%) and groundnuts (122hh, 9%) (Chart 3.43).



A total of 458 tons of other oil seed crops were produced on a total area of 594ha and an average yield of 0.65t/ha. Simsim was leading in the extent of area under production (376ha, 63% of total area under other oil seed crops. This was followed by soya beans (206ha, 35%) and groundnuts (12ha, 2%). The production pattern followed the same trend by having simsim with the largest harvest (300tons, 65%) followed by soya beans (153t, 33%) and groundnuts (5t, 1%) (Chart 3.44)

3.3.8 Fruit and Vegetables

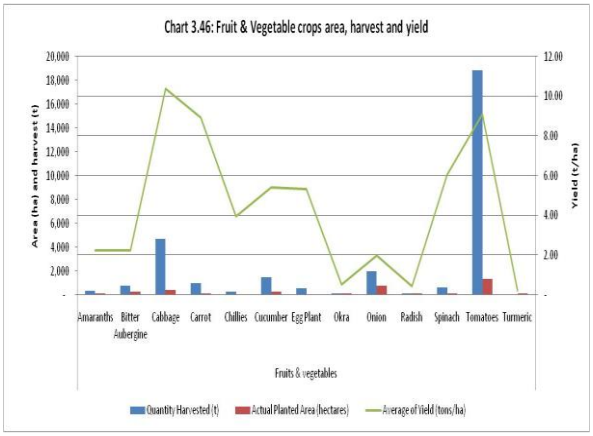


The collection of fruit and vegetables production data was difficult due to the small quantities produced per household. Most of the data presented here gives the production of smallholders who grew these crops as cash crops and not merely for household consumption.

Fruits and vegetables were produced by a total of 17,737 households with average area and harvest per household of 0.24ha/hh and 1t/hh respectively. Tomatoes was grown by the largest number of households (26%) followed by onions and cabbage (14% each), spinach & amaranthus (9%), bitter aubergine (7%). The other fruits & vegetables were produced by households ranging between 1% and 6% (Table 3.7 and Chart 3.45).

Table 3.7: Fruits & Vegetables area, production, yield and number of households

Crop name	Quantity Harvested (tons)	Actual Planted Area (ha)	Yield (tons/ha)	Number of Household	Area per household	Harvest per household
Amaranths	309	120	2.26	1,580	0.09	0.18
Bitter Aubergine	751	263	2.25	1,218	0.22	0.43
Cabbage	4,649	434	10.36	2,396	0.17	1.38
Carrot	993	176	8.91	1,029	0.15	1.00
Chillies	276	69	3.94	701	0.12	0.29
Cucumber	1,464	272	5.39	488	0.56	3.00
Egg Plant	519	75	5.31	207	0.35	2.14
Okra	94	150	0.51	648	0.23	0.12
Onion	1,925	754	1.99	2,513	0.52	1.14
Radish	110	122	0.44	472	0.20	0.12
Spinach	566	173	6.05	1,636	0.10	0.43
Tomatoes	18,866	1,351	9.07	4,606	0.25	2.57
Turmeric	27	127	0.23	241	0.53	0.11
Total/Average	**30,549**	**4,087**	**5.08**	**17,737**	**0.24**	**1.00**

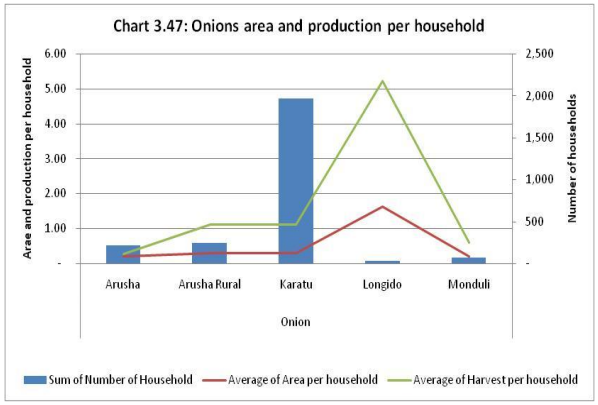


The total production of fruits and vegetables was 30,549 tonnes on an area of 4,087ha and average yield of 5.08t/ha. The most cultivated fruit and vegetable crop was tomatoes with a production of 18,866 tonnes (61.8% of the total fruit and vegetables produced), followed by cabbage (4,649t, 15%), onions (1,925 t, 6.3 %), Cucumber (1,464t, 4.8 %), carrot (993t 3.3%), bitter Aubergine (751t, 2.5%), Spinach (566t, 1.9%), Egg Plant (519t, 1.7%), amaranthus (309t, 1%), and chilies (276t, 0.9%). The production of the other fruits and vegetables was relatively small with less than 1 percent of the total fruit and vegetables produced (Table 3.4). The yield of tomatoes was 14t/ha, cabbage (10.7t/ha), Egg Plant (6.9t/ha), carrot (5.7t/ha), cucumber (5.4t/ha), and chilies (4t/ha). Other fruits and vegetables had relatively small yields of less than 4 tonnes per hectare; this also includes the yields of onions which was among relatively widely produced vegetables (Chart 3.46).

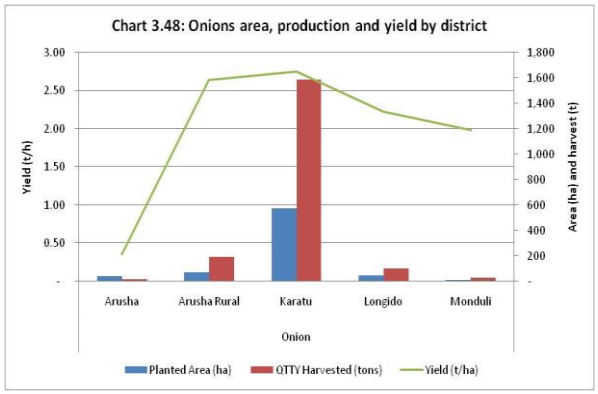
3.3.8.1 Onions

The number of onions growing households in the region during the census year was 2,513 on an average area and harvest of 0.52ha/hh and 1.14t/hh respectively. This number represented 14.2 percent of the total fruits and vegetables growing households in the region in the census year.

Karatu had the largest number of onion growing households (1,961) followed by Arusha rural (239), Arusha (213), Monduli (71) and Longido (29) (Chart 3.47).

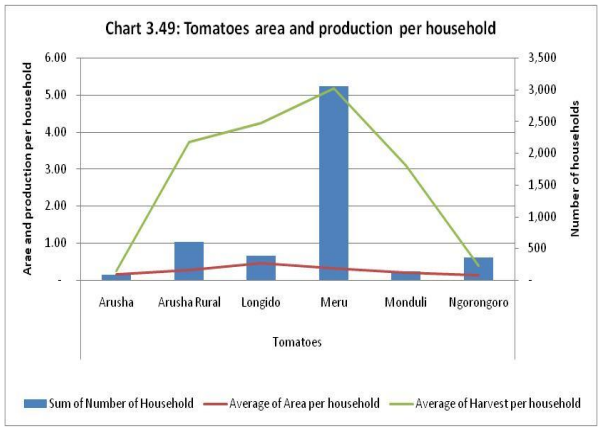


Karatu district had the largest planted area of onions (577 ha, 76.5% of the total area planted with onions in the region), followed by Arusha Rural (73ha, 9.6%), Longido (47ha, 6.2%), Arusha (43ha, 5.7%), and Monduli (14ha, 2%). The total area planted with onions accounted for 18.4 percent of the total area planted with fruits and vegetables during the census year. Ngorongoro and Arumeru districts do not produce onions (Chart 3.46 and Map 3.15 and 3.16). Karatu had the highest harvest (1,586t) followed by Arusha rural (191t), Longido (104t), Monduli (29t) and Arusha (15t).

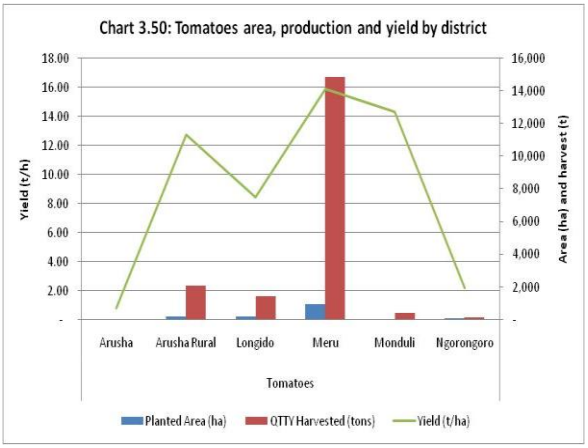


3.3.8.2 Tomatoes

The number of households growing Tomatoes in the region during the census year was 4,606. This represented 26 percent of the total fruits and vegetable growing households in the region. Meru district had the highest number of tomatoes growing households and the highest percentage of tomatoes production (3,050 or 66 percent of tomatoes grown in the region), followed by Arusha Rural (597 or 13%), Longido (376 or 7.6%), Ngorongoro (355 or 8%), Monduli (143 or 3%) and Arusha (85 or 2%). There was no production of tomatoes in Karatu district (Chart 3.49, Map 3.17).



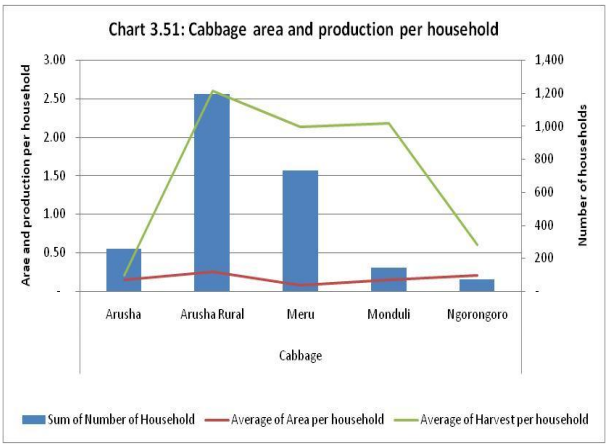
A total of 18,866 tonnes of tomatoes were produced on an area of 1,351ha and yield of 14t/ha. The highest percentage of land with tomatoes was found in Arumeru district (935 ha, 69.2 percent of the



total land used for tomato production in the region), followed by Longido and Arusha (170 ha, 12.6 and 162ha 12 percents respectively). There was a relatively low percentage of land used for tomato production in Ngorongoro, Monduli, and Arusha districts. The largest area planted per tomatoes growing household was found in Longido district (0.5 ha) followed by Arumeru and Arusha Rural with 0.3ha each, and Monduli (0.2 ha). Arusha and Ngorongoro had relatively lowest area planted per tomatoes growing households of 0.1 ha each (Chart 3.50 and Map 3.18). The total area planted with onions accounted for 33.1 percent of the total area planted with fruits and vegetables during the census year.

As compared to the 2002/3 census, the area planted decreased by 10% from 1,504ha. The quantity harvested increased by 157% from 7,340t. The yield increased by 187% from 5t/ha.

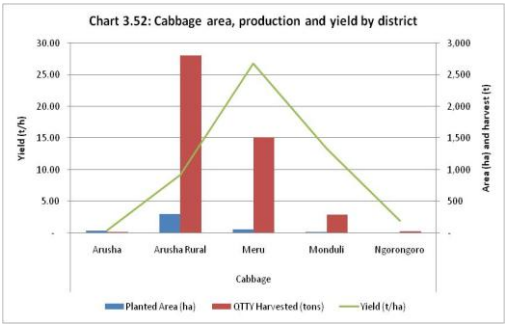
3.3.8.3 Cabbage



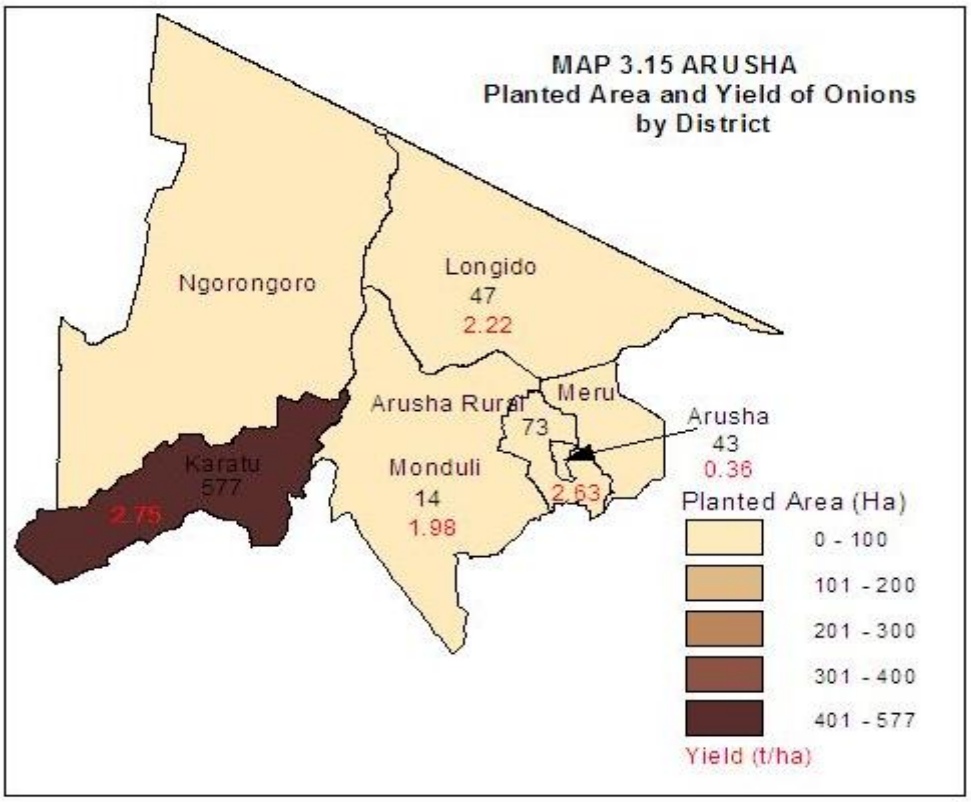
Cabbage was the second largest grown among fruits and vegetable crops in the region. Cabbage was grown by a total of 2,396 households on an average area and harvest of 0.17ha/hh and 1.38t/hh respectively. This number of households represents 13.5 percent of the total fruits and vegetable growing households in the region. Arusha rural had the largest number of cabbage growing households (1,194) followed by Meru (732), Arusha (256), Monduli (143) and Ngorongoro (71) (Chart 3.51).

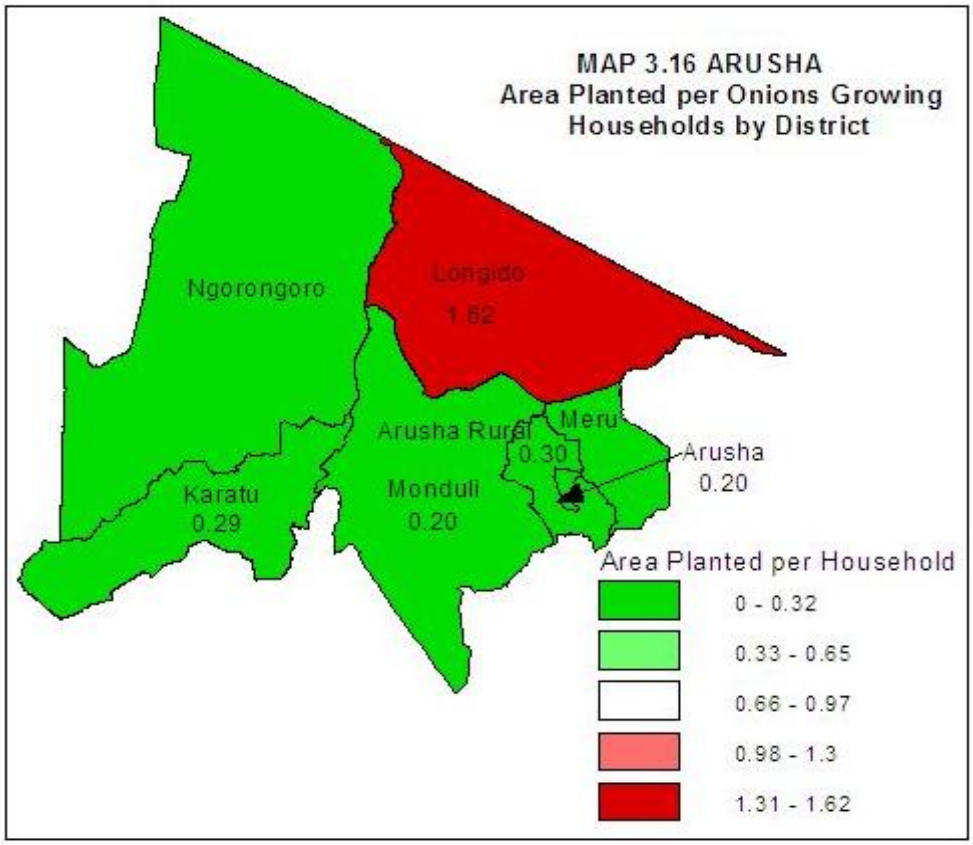
Arusha region had a total production of 4,649t of Cabbage that was planted on 434ha and yielding 10.72t/ha. Arusha Rural District had the largest planted area of cabbage (304 ha, 70% of the total area planted with cabbage in the region), followed by Arumeru district (56ha, 15%), Arusha (38ha, 8.7%), Monduli (22ha, 5%) Ngorongoro (14 ha, 3.3%). Longido and Karatu did not produce any cabbage in the census year. The largest proportion of the area planted with cabbage was found in

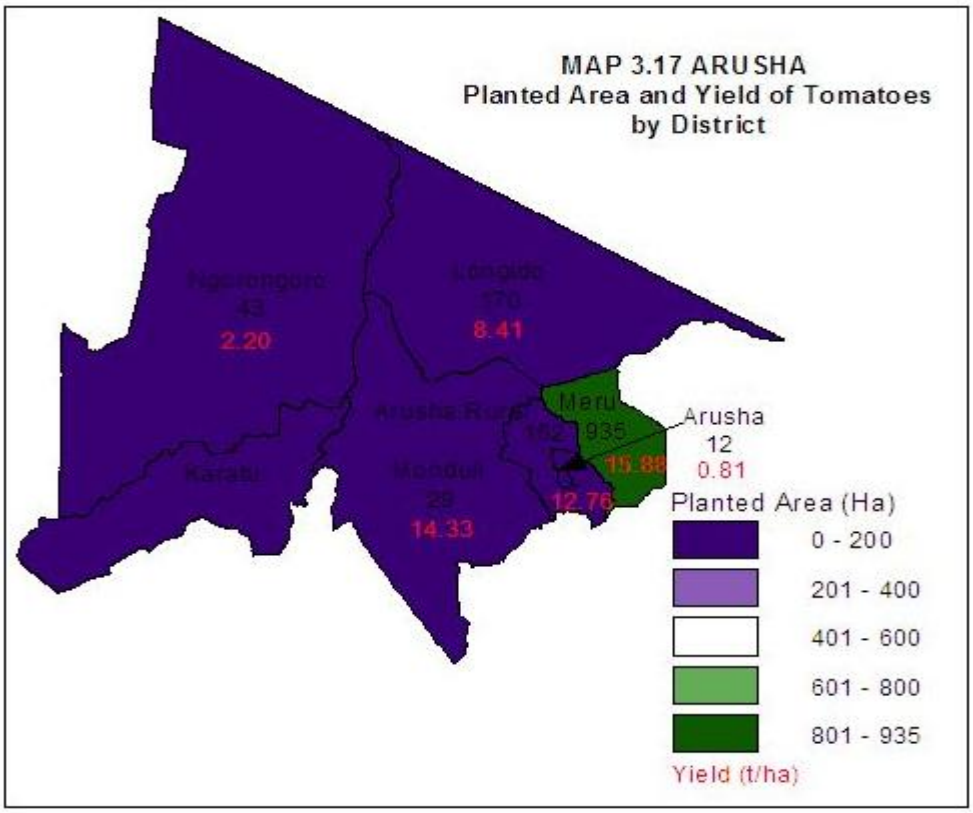
Arusha district (1.7%), and Arusha Rural (0.7%) (Chart 3.52). The total area planted with cabbage accounted for 10.6 percent of the total area planted with fruits and vegetable crops during the census year.

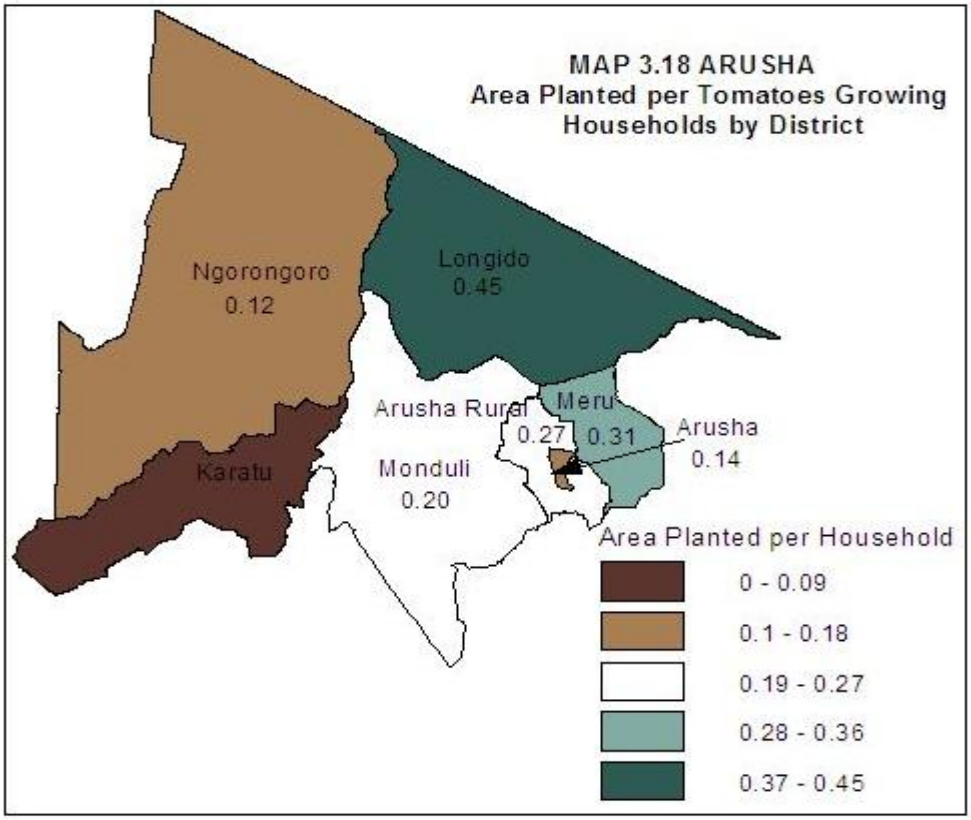


As compared to the 2002/3 census, the area planted decreased by 39% from 710ha. The quantity harvested increased by 65% from 2,813t. The yield increased by 170% from 3.97t/ha.


MAP 3.15 ARUSHA
Planted Area and Yield of Onions
by District
Ngorongoro
Longido
47
2.22
Arusha Rural
73
Meru
Arusha
43
0.36
Karatu
577
2.75
Monduli
14
1.98
2.53
Planted Area (Ha)
0 - 100
101 - 200
201 - 300
301 - 400
401 - 577
Yield (t/ha)

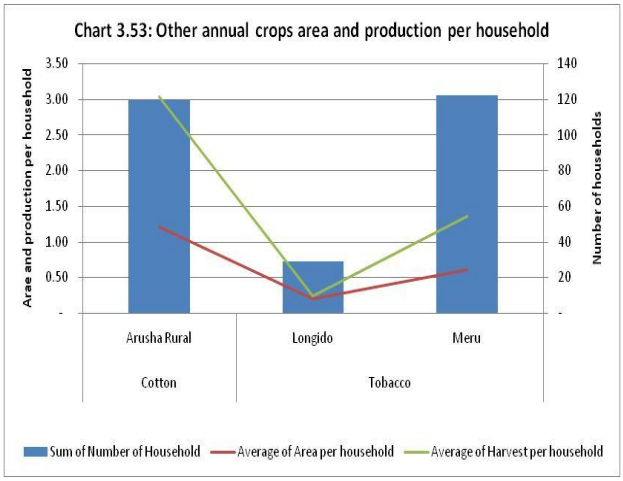

MAP 3.16 ARUSHA
Area Planted per Onions Growing
Households by District
Ngorongoro
Longido
1.62
Arusha Rural
0.30
Meru
Arusha
0.20
Karatu
0.29
Monduli
0.20
Area Planted per Household
0 - 0.32
0.33 - 0.65
0.66 - 0.97
0.98 - 1.3
1.31 - 1.62


MAP 3.17 ARUSHA
Planted Area and Yield of Tomatoes
by District
Ngorongoro
43
2.20
Longido
170
8.41
Arusha Rural
162
Meru
935
15.88
Arusha
12
0.81
Karatu
Monduli
29
14.33
12.76
Planted Area (Ha)
0 - 200
201 - 400
401 - 600
601 - 800
801 - 935
Yield (t/ha)


MAP 3.18 ARUSHA
Area Planted per Tomatoes Growing
Households by District
Ngorongoro
0.12
Longido
0.45
Arusha Rural
0.27
Meru
0.31
Arusha
0.14
Karatu
Monduli
0.20
Area Planted per Household
0 - 0.09
0.1 - 0.18
0.19 - 0.27
0.28 - 0.36
0.37 - 0.45

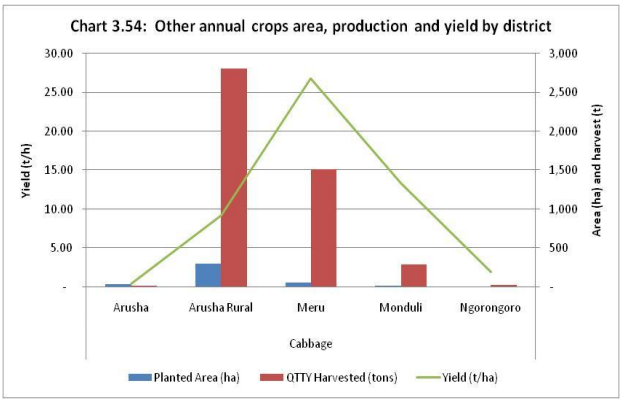
3.3.9 Other Annual Crop Production

The other annual crops grown in Arusha region were cotton and tobacco. These were cultivated by a total of 270 households with average area and harvest per household of 0.67ha/hh and 0.87t/hh. Cotton was cultivated by 119 farmers in Arusha rural district on an average area and harvest per household of 1.21ha/hh and 1.82t/hh respectively (Chart 3.53). Tobacco was grown in Longido and Meru by 151 farmers on an average area and harvest per household of 0.45ha/hh and 0.4t/hh respectively.



An area of 225 ha was planted with other annual crops. Tobacco and cotton were the only cash crops grown in Arusha in both seasons. This accounted for 0.05 percent of the total area planted with annual crops and vegetables in the region.

The area planted with cotton in was 145 ha which represents 64 percent of the total area planted with other annual cash crops in the census year. Tobacco was grown on a total area 81ha, harvest was 63t and yield was 1.15t/ha. (Chart 3.54)



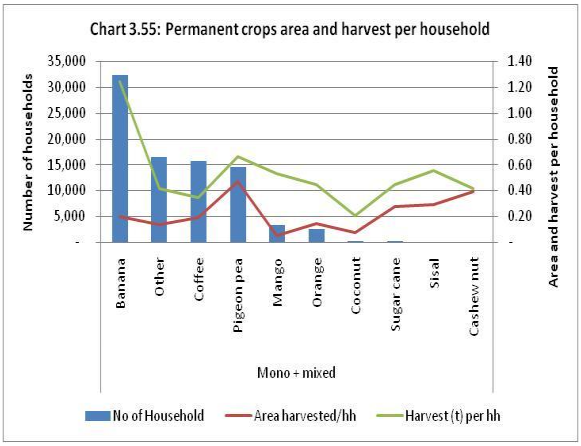
3.4 Permanent Crops

Permanent crops (sometimes referred as perennial crops) are crops that normally take over a year to mature and once mature can be harvest for a number of years. For most crops, it is easy to determine if they are annual or permanent. However, for crops like cassava and bananas the distinction is not so clear. Cassava has varieties that mature within a year and produces only one harvest, whilst other varieties survive for more than one year and produce several harvests. In this census, cassava was treated as an annual crop. Conversely, bananas normally take less than a year to mature, survive for more than one year and are thus treated as a permanent crop. In this report the agriculture census results are presented for the most important permanent crops in terms of area planted, production and yield.

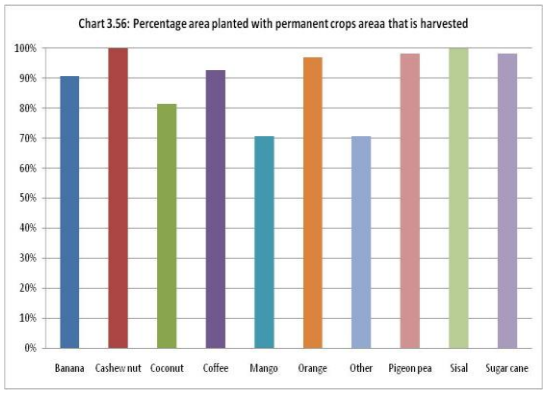
Table 3.8: Number of households, area and production of permanent crops

Crop	#Household	Area planted (ha)	Area Harvested (ha)	Quantity harvested (tons)	Area planted per hh	Area harvested per hh	harvest per hh	Yield (t/ha)
Banana	32,231	8,939	8,109	59,651	0.28	0.25	1.85	7.36
Coffee	15,736	5,447	5,044	7,598	0.35	0.32	0.48	1.51
Other	16,504	2,322	1,643	7,051	0.14	0.10	0.43	4.29
Pigeon pea	14,455	5,438	5,335	3,462	0.38	0.37	0.24	0.65
Orange	2,504	211	204	1,296	0.08	0.08	0.52	6.34
Mango	3,247	281	198	1,067	0.09	0.06	0.33	5.38
Coconut	315	44	36	61	0.14	0.11	0.19	1.68
Sugar cane	279	69	67	43	0.25	0.24	0.16	0.65
Sisal	119	35	35	31	0.30	0.30	0.26	0.88
Cashew nut	43	17	17	1	0.39	0.39	0.02	0.06
Total/average	**85,435**	**22,802**	**20,689**	**80,262**	**0.27**	**0.24**	**0.94**	**3.88**

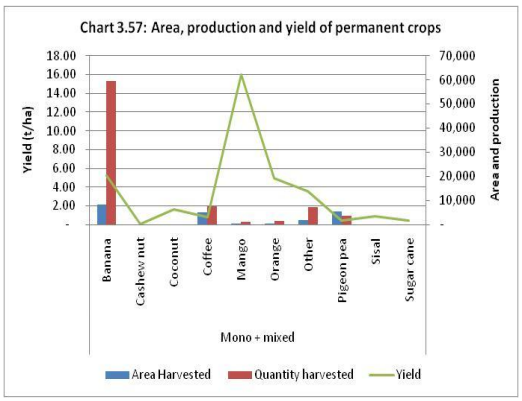
Arusha region had a total of 85,435 households that grew permanent crops on an average area and harvest per household of 0.21ha/hh and 0.39t/hh respectively (Table 3.8). Banana was the most important permanent crop and was grown by 37.73% of all permanent crops growing households followed by other permanent crops (19.32%), coffee (18.42%), pigeon peas (16.92%), mango (3.8%), oranges (2.93%), coconut (0.37%) sugar cane (0.33%), sisal (0.14%) and cashew nut (0.05%) (Chart 3.55). Pigeon peas had the biggest area per household (0.47ha/hh) followed by cashew nut 0.39ha/hh) and sisal (0.3ha/hh). Others ha smaller areas ranging from 0.05 – 0.28ha/hh. Banana had the largest harvest per household (1.04t/hh) followed by Mango (0.48t/hh) and oranges (0.3t/hh). Others had harvests ranging between 0.02 – 0.28t/hh. Ngorongoro district that had the largest area per permanent crop growing household of 0.6, followed by Monduli and Arumeru districts with an estimated of 5ha per household each. Arusha, Arusha Rural, and Karatu districts had an estimated of 0.4ha per households each (Chart 3.55).



The total area planted with permanent crops was 22,802 hectares and the total area harvested was 20,689ha; which is 91% of the planted area. In terms of the ratio between the area planted and the area harvested by crop, sisal and cashew nut were leading by having 100% of the planted area harvested (Chart 3.56). This was followed by pigeon peas and sugarcane (98% each), oranges (97%), coffee (93%), banana (91%), coconut (82%) and mango & others (71% each).

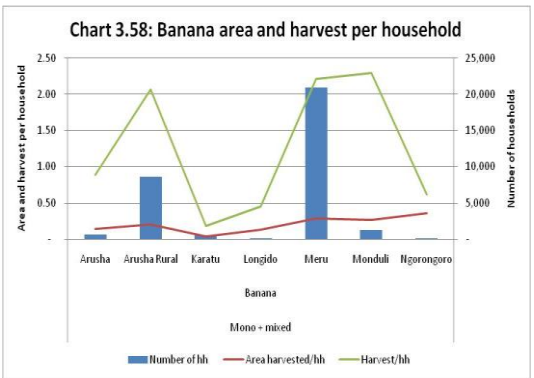


The total harvested quantity of permanent crops was 80,262tonnes from a total area of 20,689ha giving an average yield of 3.88t/ha. Banana was planted 39.2% of all the area under permanent crops followed by pigeon peas (25.8%) and coffee (24.4%). Other permanent crops were planted on areas not exceeding 8%. Banana was harvested on 74.3% of the total harvest of permanent crops followed by coffee (9.5%) and others (8.8%). Other crops harvest did not exceed 4.5% (Chart 3.57). Meru district had the largest area under smallholder permanent crops (14,031 ha, 61.5%), followed by Arusha Rural (3,754, 16.5%) and Karatu (3,526 ha, 15.5%). Other districts with their area under smallholder permanent crops in their order of importance include Monduli (889 ha, 3.9%), Arusha (477ha, 2.1%), Ngorongoro (84ha, 0.4%), and Longido (41ha, 0.2%).

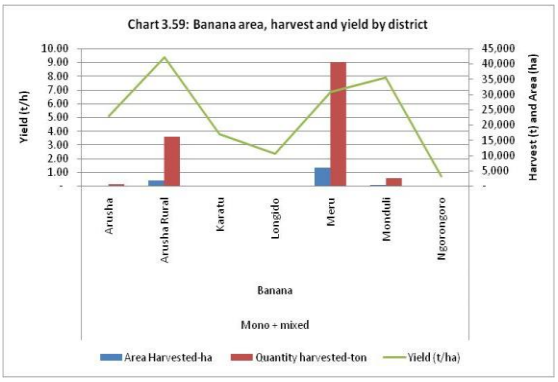


3.4.1 Banana

Banana was grown by 32,231 agricultural households on an average area and harvest per household of 0.2ha/hh and 1.04t/hh respectively. The average area planted with banana per banana growing household was highest in Ngorongoro (0.35ha/hh) followed by Meru (0.28ha/hh), Monduli (0.26ha/hh) and Arusha Rural (0.2ha/hh). Other districts had areas per household ranging between 0.04 – 0.14ha/hh. (Chart 3.58 and Map 3.27). The average harvest per household



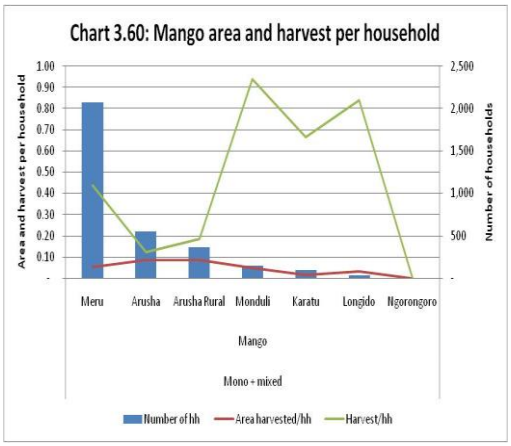
was higher in Monduli (2.03t/hh) followed by (1.93t/hh), Arusha rural (1.86t/hh) and Arusha (0.74t/hh). Other districts had harvests ranging between 0.14 – 0.31 t/hh (Chart 3.58, Map 3.21).



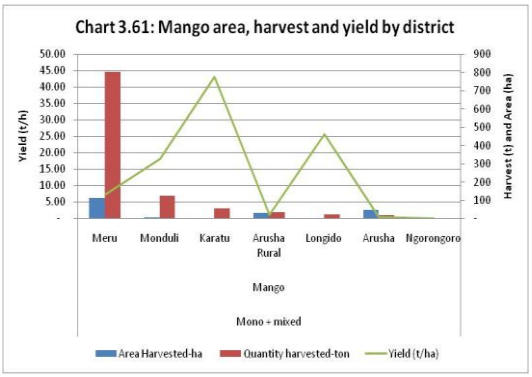
A total of 59,651 tonnes of banana was produced by small holders on a total area of 8,109ha and yield of 7.36t/ha. The biggest area with harvested banana was found in Meru district (5,906ha or 72.8% of the total area under banana) followed by Arusha rural (1,712ha or 21.1%) and Monduli (313ha or 1.1%). The rest of districts had areas not exceeding 0.6% each. (Chart 3.59 and Map 3.22). Meru district had the largest quantity of harvested banana (40,520t or 68% of total harvested quantity) followed by Arusha rural (16,037t or 27%) and Monduli (2,470t or 4.1%). The rest had harvests not exceeding 0.8% each.

3.4.2 Mango

Mango was grown by a total of 3,247 households on an average area and harvest per household of 0.05ha/hh and 0.48t/hh respectively. Meru district had the largest number of mango growing households (2,074 or 64% of the total mango growing households) followed by Arusha (554 or 17%) and Arusha rural (358 or 11%). The rest of districts had households not exceeding 4% each. The harvest per household was highest in Monduli (0.89t/hh) followed by Longido (0.81t/hh), Karatu (0.65t/hh), Meru (0.39t/hh), Arusha rural (0.1t/hh) and Arusha (0.04t/hh). (Chart 3.60 and Map 3.17a).

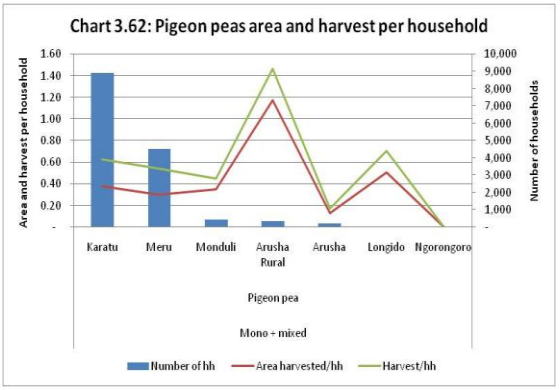


The total production of mango by smallholders was 1,067 tonnes harvested from a total area of 198ha with a yield of 5.38t/ha. Meru district had the largest area with mangoes (111ha or 56% of the total area under mangoes) followed by Arusha (47ha, 24%), Arusha rural (30ha or 15%) and Monduli (7ha or 3.5%). The rest of districts had areas not exceeding 0.7% each. (Chart 3.61 and Map 3.22). Meru district had the largest harvest (801t or 75% of the total mango harvest) followed by

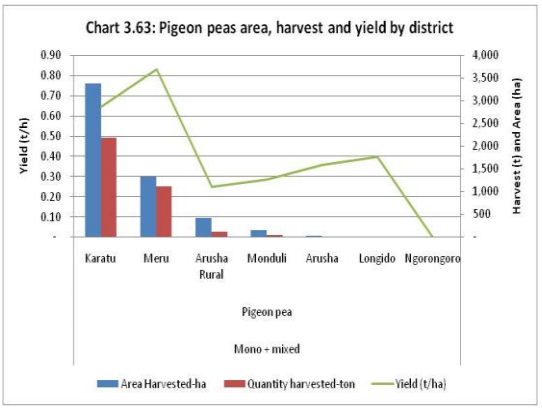


Monduli (127t or 12%), Karatu (1t or 5%). The rest of districts had harvests not exceeding 3% of the total harvested quantity (Map 3.17b). As compared to the census report of 2002/3, the area harvested increased by 466% from 35ha. The quantity harvested decreased by 17% from 1,284t. The yield decreased by 57% from 36.74t/ha

3.4.3 Pigeon Peas



Pigeon peas were grown by 14,445 households (7.1% of the total crop growing households) on an average area and harvest of 0.47ha/hh and 0.19t/hh respectively. the number of pigeon peas growing households was highest in Karatu (8,912 or 62% of all pigeon pea growing households in Arusha region) followed by Meru (4,514 or 31%), Monduli (429 or 3%). Other districts had up to 2% regional share. The average area planted with pigeon peas per pigeon peas planting household was highest in Arusha Rural Karatu (1.17 ha/hh) followed by Longido (0.51ha/hh) and Karatu (0.4 ha) (Chart 3.62 and Map 3.19a).

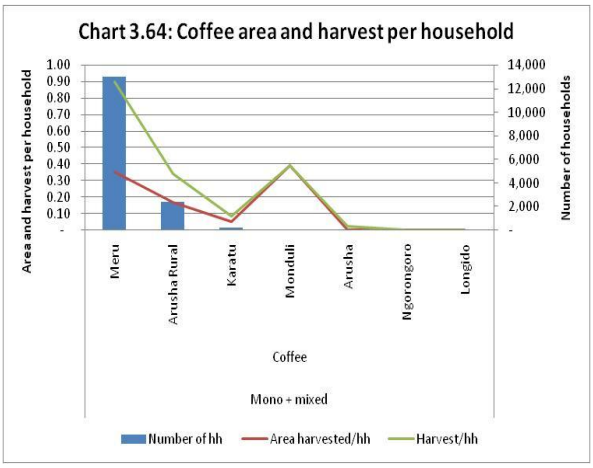


The total production of pigeon peas by smallholders was 5,335 tonnes grown on a total area of 3,462ha with an average yield of 065t/ha. In terms of area harvested, pigeon peas were the second most important permanent crop grown by smallholders in the region. Karatu had the largest area of pigeon peas in the region (3,383ha, 63%) followed by Meru (1,339ha, 32%) and Arusha Rural (421 ha, 3%) (Chart 3.63 and Map 3.20a).

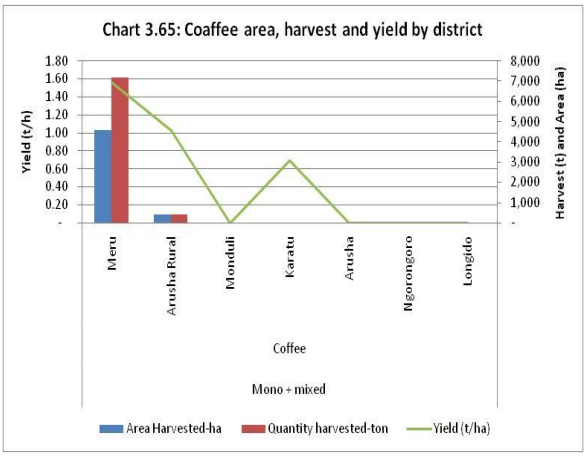
As compared to the census report of 2002/3, the number of pigeon peas growing households increased by 92% from 7,514. The area per household decreased by 38% from 0.76ha/hh. The area harvested increased by 98% from 2,697ha. The quantity harvested increased by 59% from 2,182t. The yield increased by 20% from 0.385t/ha.

3.4.4 Coffee

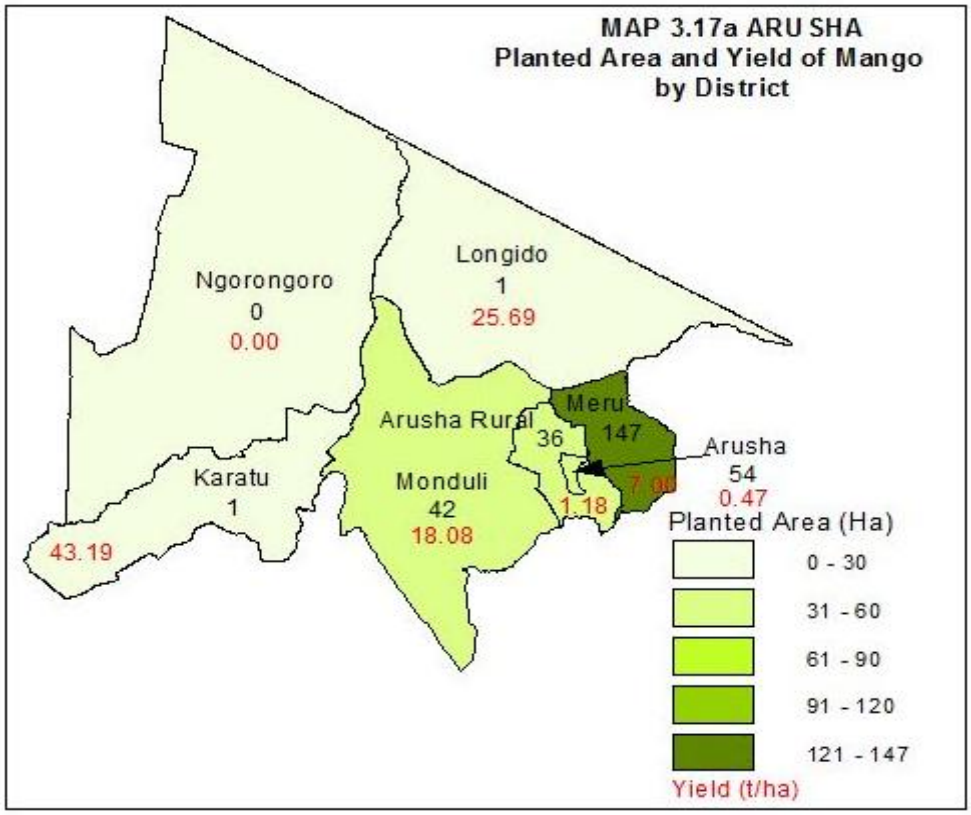
Coffee were grown by 15,736 households on an average area and harvest of 0.19ha/hh and 0.16t/hh respectively. The number of coffee growing households was highest in Meru (13,055 or 83% of all coffee growing households in Arusha region) followed by Arusha rural (2,389 or 15%) and Monduli (178 or 1%). Other districts had up to 0.3% regional share. The average area planted with coffee per coffee planting household was highest in Monduli (0.39 ha/hh) followed by Meru (0.35ha/hh), Arusha rural (0.17 ha/hh) and Karatu (0.05ha/hh) (Chart 3.64).

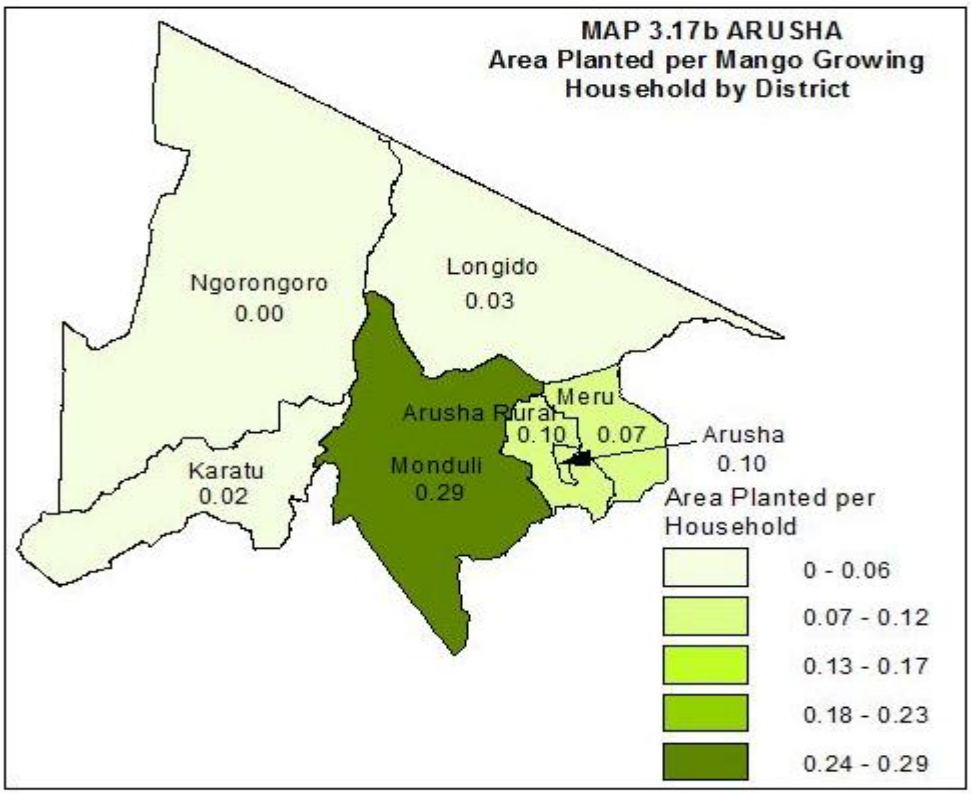


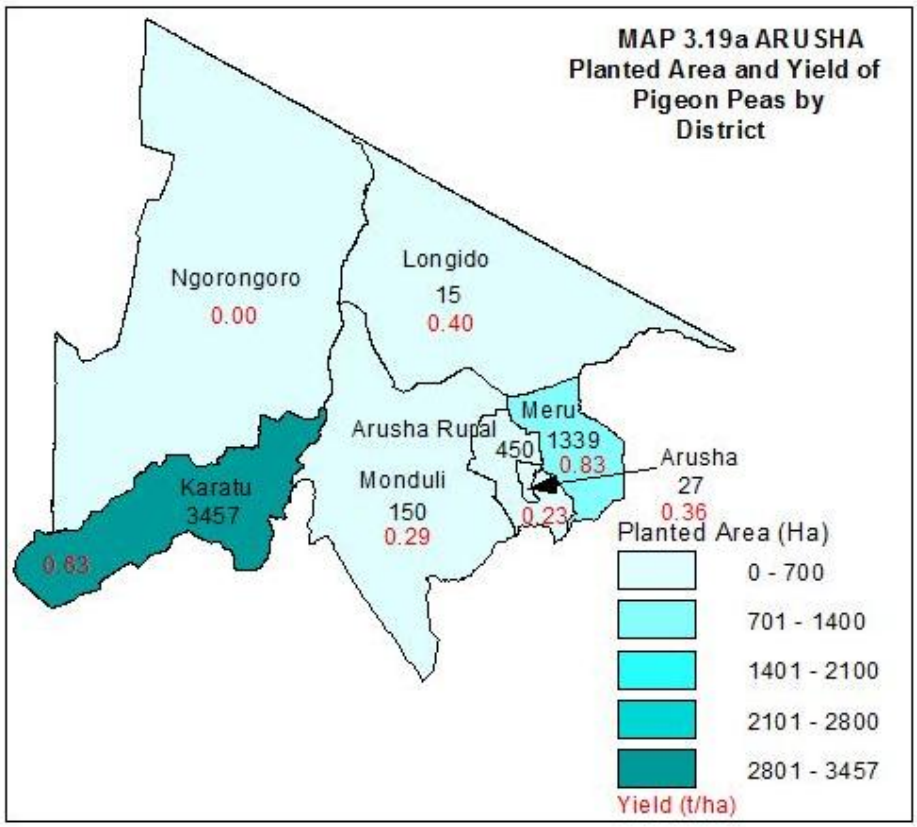
The total production of coffee by smallholders was 5,044 tonnes grown on a total area of 7,598ha with an average yield of 1.51t/ha. In terms of area harvested coffee were the third most important permanent crop grown by smallholders in the region. Meru had the largest area of coffee in the region (4,601ha, 91%) followed by Arusha rural (406ha, 8%). Other districts had negligible areas totaling to 1%. Meru had the biggest amount of harvested coffee (7,175t or 94% of all harvested coffee in the region) followed by Arusha rural (415t or 5.5%). Other districts had negligible harvests totaling to 0.5% (Chart 3.65).

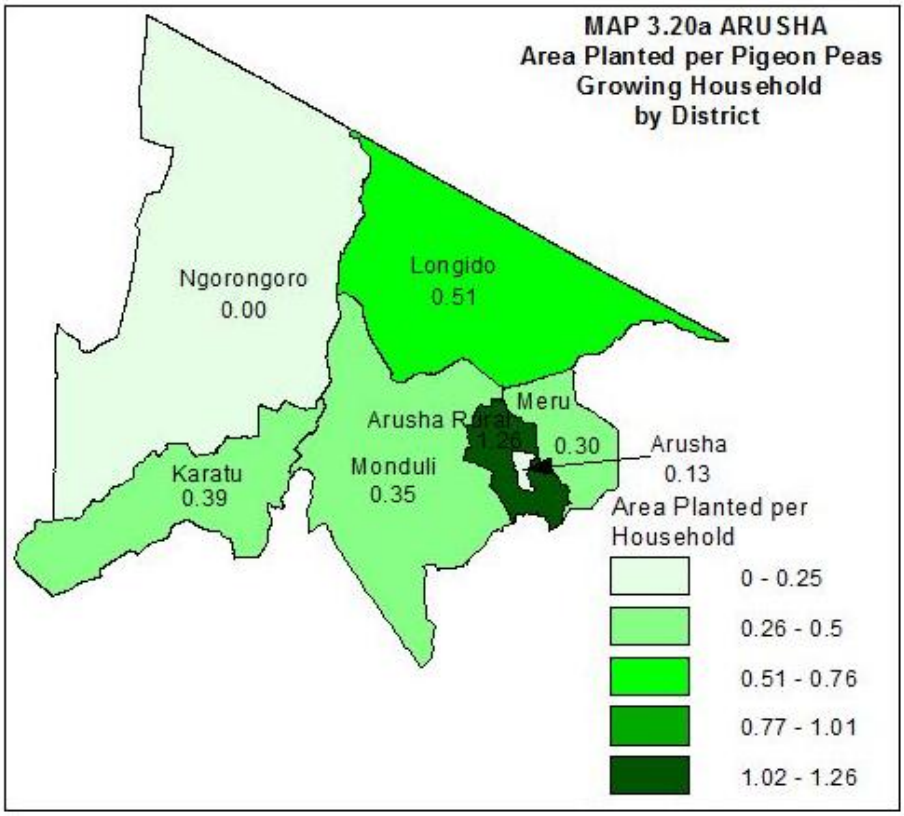


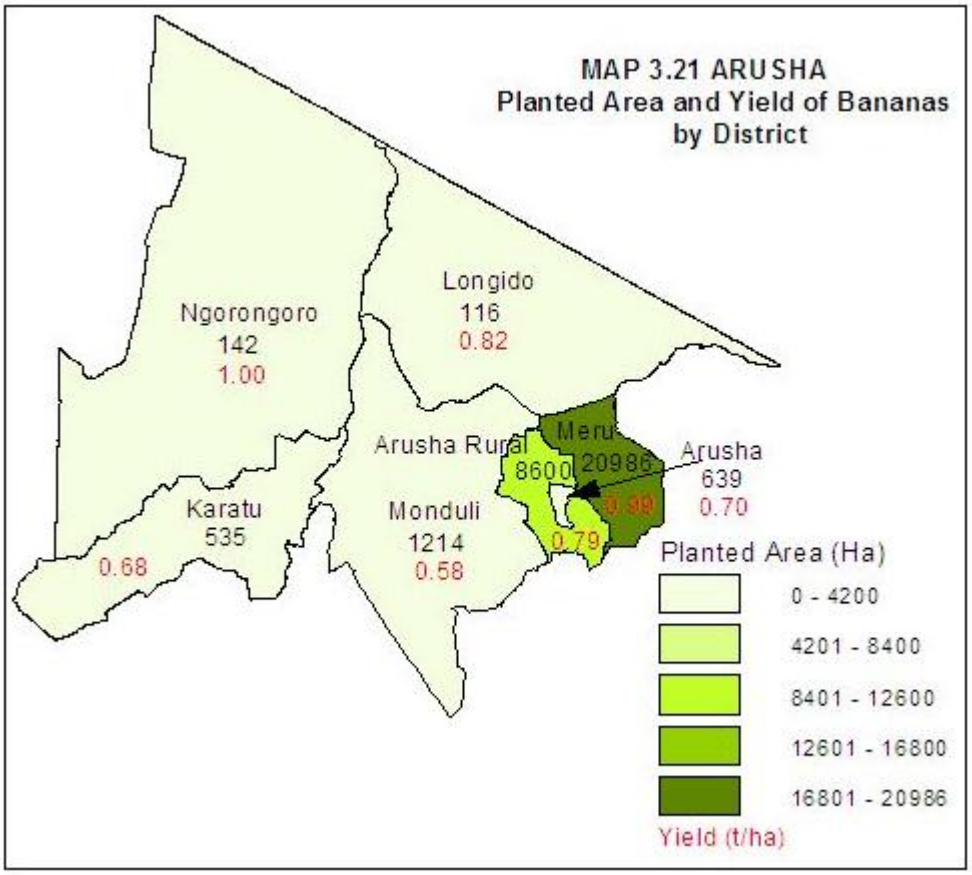
As compared to the census report of 2002/3, the number of coffee growing households increased by 1% from 15,552. The area per household decreased by 48% from 0.37ha/hh. The area harvested increased by 0.4% from 5024ha. The quantity harvested increased by 146% from 3,089t. The yield increased by 53% from 0.536t/ha.

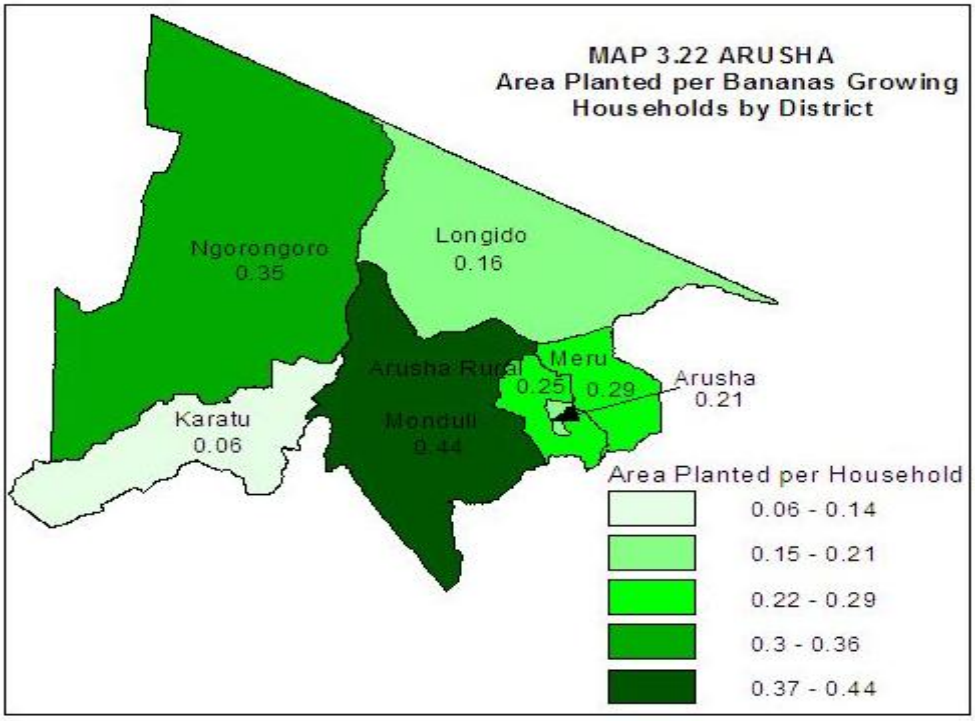

MAP 3.17a ARUSHA
Planted Area and Yield of Mango
by District
Ngorongoro
0
0.00
Longido
1
25.69
Arusha Rural
36
Meru
147
Arusha
54
0.47
Karatu
1
43.19
Monduli
42
18.08
1.18
Planted Area (Ha)
0 - 30
31 - 60
61 - 90
91 - 120
121 - 147
Yield (t/ha)


MAP 3.17b ARUSHA
Area Planted per Mango Growing
Household by District
Ngorongoro
0.00
Longido
0.03
Arusha Rural
0.10
Meru
0.07
Arusha
0.10
Karatu
0.02
Monduli
0.29
Area Planted per
Household
0 - 0.06
0.07 - 0.12
0.13 - 0.17
0.18 - 0.23
0.24 - 0.29


MAP 3.19a ARUSHA
Planted Area and Yield of Pigeon Peas by District
Ngorongoro
0.00
Longido
15
0.40
Meru
1339
0.83
Arusha Rural
450
Monduli
150
0.29
Arusha
27
0.36
0.23
Karatu
3457
0.83
Planted Area (Ha)
0 - 700
701 - 1400
1401 - 2100
2101 - 2800
2801 - 3457
Yield (t/ha)


MAP 3.20a ARUSHA
Area Planted per Pigeon Peas Growing Household by District
Ngorongoro
0.00
Longido
0.51
Meru
0.30
Arusha Rural
1.26
Arusha
0.13
Monduli
0.35
Karatu
0.39
Area Planted per Household
0 - 0.25
0.26 - 0.5
0.51 - 0.76
0.77 - 1.01
1.02 - 1.26


MAP 3.21 ARUSHA
Planted Area and Yield of Bananas
by District
Ngorongoro
142
1.00
Longido
116
0.82
Arusha Rural
8600
Meru
20986
Arusha
639
0.70
0.99
Karatu
535
0.68
Monduli
1214
0.58
0.79
Planted Area (Ha)
0 - 4200
4201 - 8400
8401 - 12600
12601 - 16800
16801 - 20986
Yield (t/ha)


MAP 3.22 ARUSHA
Area Planted per Bananas Growing
Households by District
Ngorongoro
0.35
Longido
0.16
Arusha Rural
0.25
Meru
0.29
Arusha
0.21
Karatu
0.06
Monduli
0.44
Area Planted per Household
0.06 - 0.14
0.15 - 0.21
0.22 - 0.29
0.3 - 0.36
0.37 - 0.44

3.5 Input/Implement Use

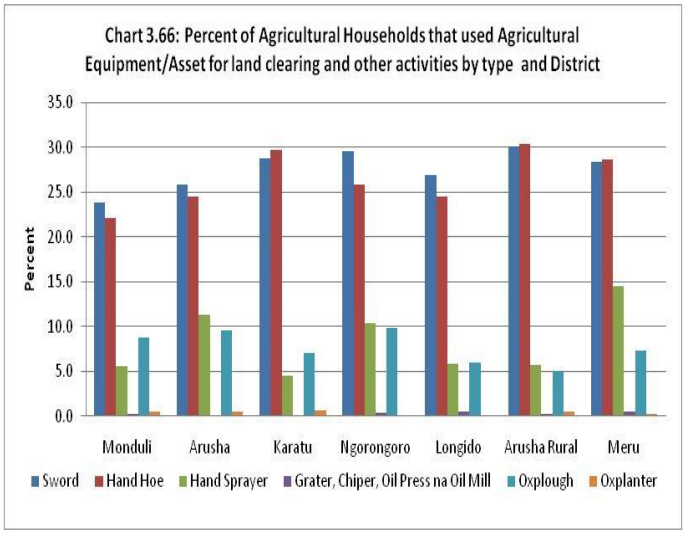
3.5.1 Methods of Land Clearing and other Agricultural Activities

Land clearing is a common pre-tillage operation practiced by most farmers in the region. Land clearing is divided into two categories: bush clearing, which by definition implies either expansion into virgin areas or into areas which have been left fallow for a long period while the other category, which includes burning, hand slashing or tractor slashing, is normally an annual clearing exercise to remove vegetation growth from the previous season.

Table 3.9 Number of Agriculture Households that used Agricultural Equipment/Asset by type and District

District	Sword		Hand Hoe		Hand Sprayer		Grater, Chiper, Oil Press and Oil Mill		Ox plough		Ox planter		Total number of Agricultural Households
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	28,076	24.0	25,933	22.1	6,644	5.7	357	0.3	10,287	8.8	500	0.4	28,933
Arusha	2,515	25.9	2,387	24.6	1,108	11.4	0	0.0	938	9.6	43	0.4	2,557
Karatu	32,261	28.9	33,330	29.8	5,080	4.5	178	0.2	7,932	7.1	624	0.6	36,093
Ngorongoro	18,757	29.7	16,342	25.9	6,608	10.5	213	0.3	6,252	9.9	0	0.0	28,776
Longido	9,477	27.0	8,639	24.6	2,080	5.9	202	0.6	2,109	6.0	29	0.1	11,644
Arusha Rural	47,178	30.1	47,656	30.4	9,077	5.8	478	0.3	8,002	5.1	717	0.5	48,253
Meru	48,438	28.5	48,926	28.7	24,890	14.6	854	0.5	12,445	7.3	366	0.2	49,292
Total	**186,701**	**28.1**	**183,212**	**27.6**	**55,487**	**8.4**	**2,283**	**0.3**	**47,966**	**7.2**	**2,278**	**0.3**	**205,547**

Sword and Hand hoe are the most widely used method used for land clearing, applied by 28.1 and 27.6 percents respectively of agricultural households doing land clearing in Arusha. Other agricultural equipment used in order of importance include hand sprayer used by 8.4 percent of agricultural households, ox plough (7.2%), Grater, Chipper, Oil Press and Oil Mill (0.3%), and ox planter (0.3%)



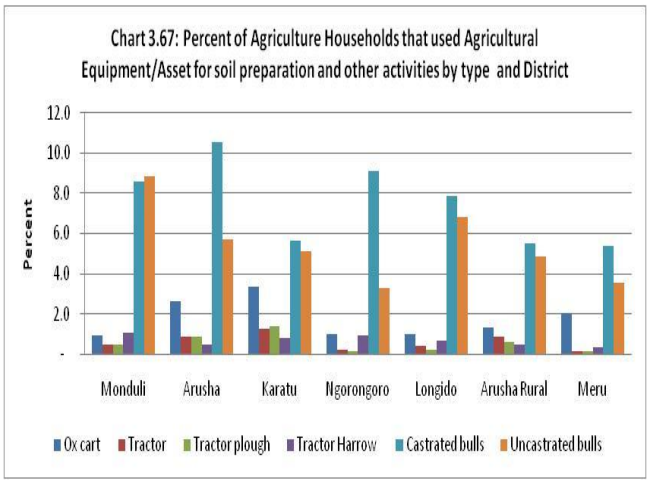
Arusha Rural had the highest percentage of agricultural households using Sword and Hand hoe in land clearing (30 percent of agricultural households using both Sword and Hand hoe for land clearing). Ngorongoro had the second highest percentage of agricultural households using Sword

(29.7%) and Karatu had the second highest percentage of agricultural households using hand hoe (29.8%) and third for using Sword (28.9%), followed by Arumeru district with 28.5 and 28.7 percents of agricultural households using sword and hand hoe respectively for land clearing. (Table 3.9, Chart 3.66).

Table 3.10 Number of Households that Used Agricultural Equipment for soil preparation and other activities by Type and District

	Ox cart		Tractor		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls		Total #Agricultural HH
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	1,072	9.3	572	14.6	500	14.6	1,214	28.4	10,073	23	10,359	29.9	28,933
Arusha	256	2.2	85	2.2	85	2.5	43	1	1,023	2.3	554	1.6	2,557
Karatu	3,743	32.5	1,426	36.3	1,515	44.2	891	20.8	6,327	14.5	5,704	16.4	36,093
Ngorongoro	639	5.6	142	3.6	71	2.1	568	13.3	5,755	13.2	2,060	5.9	28,776
Longido	347	3	144	3.7	58	1.7	231	5.4	2,774	6.3	2,398	6.9	11,644
Arusha Rural	2,030	17.7	1,314	33.5	956	27.9	717	16.8	8,600	19.7	7,644	22	48,253
Meru	3,416	29.7	244	6.2	244	7.1	610	14.3	9,151	20.9	5,978	17.2	49,292
Total	**11,503**	**100**	**3,927**	**100**	**3,429**	**100**	**4,275**	**100**	**43,702**	**100**	**34,698**	**100**	**205,547**

3.5.2 Methods of Soil Preparation



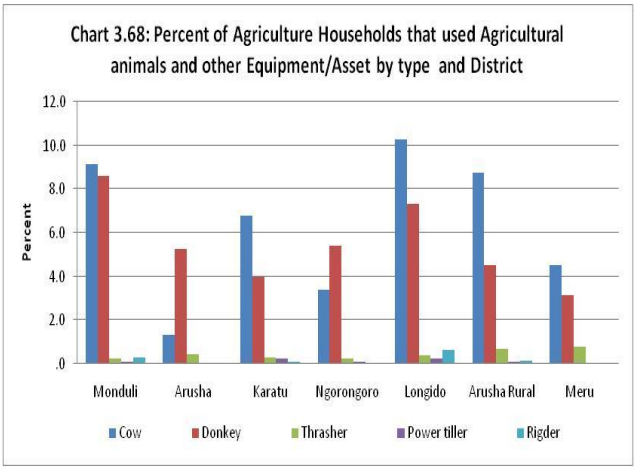
Castrated bulls is the most used method for soil preparation and was used by 43702 agricultural households representing 6.6 percent of the total agricultural households using equipment for soil preparation, followed by uncastrated bulls (34,697hh, 5.2%), and oxen (11,503hh, 2%). Other methods were not very important, utilised by less than 1 percent of agricultural households for each. These methods with their percentages in brackets in their order of importance include tractor and tractor harrow with 0.6 percent for each, followed by tractor ploughing (0.5%).

For most important methods of soil preparation, Monduli, Arusha Rural and Arumeru had the highest number of agricultural households (10,3593hh, 30%, 7,644hh, 22%), and 5,978hh, 17.2% respectively) using uncastrated bulls to prepare soil. Castratd bulls are widely used Monduli, Arumeru and Arusha Rural (3,646hh, 9%), followed by Moshi Rural (10,073hh, 23%, 9,151hh, 21%, and 8,600hh, 20%). Ox Cart were widely used in Karatu (32%), Arumeru (30%), Arusha Rural (18%). In the remaining districts ox cart is used by less than ten percent. Tractor is common

in Karatu (36.3%), followed by Arusha Rural (33.5%), Monduli (23.5%), and both with 17 percent. Donkey were common in Monduli (30.1%), Arusha Rural (21.1%), and Arumeru (16.1%) (Table 3.10, Chart 3.67)

Table 3.11 Number of Households that Used Agricultural Animal/ Equipment by Type and District

District	Cow		Donkey		Thrasher		Power tiller		Ox Ridge		Total number of Agricultural Households
	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	10,716	23.5	10,073	30.1	286	8.4	143	17.7	357	34.4	28,933
Arusha	128	.3	511	1.5	43	1.3	0	.0	0	.0	2,557
Karatu	7,575	16.6	4,456	13.3	356	10.5	267	33.0	89	8.6	36,093
Ngorongoro	2,132	4.7	3,410	10.2	142	4.2	71	8.8	0	.0	28,776
Longido	3,612	7.9	2,571	7.7	144	4.3	87	10.7	231	22.3	11,644
Arusha Rural	13,735	30.1	7,047	21.1	1,075	31.7	119	14.8	239	23.0	48,253
Meru	7,687	16.9	5,368	16.1	1,342	39.6	122	15.1	122	11.8	49,292
Total	**45,584**	100.0	**33,438**	100.0	**3,388**	100.0	**809**	100.0	**1,038**	100.0	**205,547**



For most important methods of soil preparation using agriculture animals/equipment, Arusha Rural, Monduli, and Arumeru had the highest percentages of agricultural households (30.1%, 23.5%, and 17.2% respectively) using cow to prepare soil. Donkeys are widely used in Monduli, (30.1%), Arusha Rural (21.1%), and Arumeru (17%). Thrasher is common in Arumeru (40%), followed by Arusha Rural (32%). Thrasher is least used in Arusha Ngorongoro and Longido (1.3%, 4.2%, and 4.3% respectively). Power tiller is common in Karatu (33%), least common in Ngorongoro (8.8%), and not used in Arusha. Ox ridger is widely used in Monduli (34.4%), least used in Karatu (8.6%), and not used in Arusha and Ngorongoro (Table 3.11, Chart 3.68).

3.5.3 Seed Use

A total of 30,915 agricultural households were using local seeds on a total area of 19,227ha during the short rain season. This was equivalent to 25% of the number of households using during the long rain season and 17% of the area under local seeds (Table 3.12).

A total of 23,263 agricultural households used improved seeds on a total area of 13,195ha. This was equivalent to 35% of the households that used improved seeds and 27% of the area under improved seeds in the long rain season.

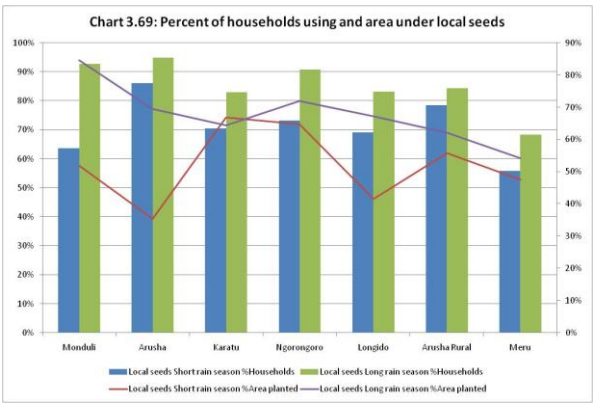
Table 3.12: Number of households using and area under local and improved seeds

District	Local seeds				Improved seeds			
	Short rain season		Long rain season		Short rain season		Long rain season	
	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)
Monduli	2,500	2,856	20,289	37,321	1,786	1,802	5,287	6,136
Arusha	1,065	641	2,387	2,837	1,065	874	1,151	1,009
Karatu	3,208	2,103	26,468	17,235	1,604	686	12,120	7,874
Ngorongoro	782	460	9,166	10,347	284	180	3,979	3,841
Longido	2,918	2,671	4,420	4,795	2,138	2,956	1,791	2,273
Arusha Rural	13,974	6,136	32,846	19,480	9,675	3,044	18,513	10,146
Meru	6,466	4,359	27,086	21,183	6,711	3,653	22,938	17,291
Total	30,915	19,227	122,662	113,199	23,263	13,195	65,778	48,570

The number of households using and area under improved seeds in the short rain season was 75% and 69% of local seeds respectively. The number of households using and area under improved seeds in the long rain season was 54% and 43% of local seeds respectively.

3.5.3.1 Local Seed Use

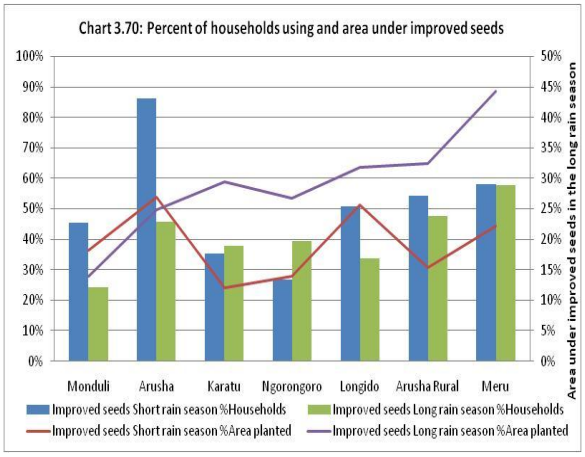
A total of 30,915 and 122,662 agricultural households or 70% and 93% of all agricultural households used local seeds in the short and long rain seasons respectively. The area under local seeds was 19,227ha and 113,199ha or 57% and 82% of the total area in the short and long rain seasons respectively.



Arusha district was having the biggest percent of households using local seeds in the short rain season (86%) followed by Arusha rural (79%), Ngorongoro (73%), Karatu (71%), Monduli (64%) and Meru (56%) (Chart 3.69).

3.5.3.2 Improved Seed Use

The planted area using improved seeds was estimated at 62,765 ha which represents 31 percent of the total planted with the annual crops and vegetables area. The percentage use of improved seed in the short rainy season was 38 percent, while use of improved seeds in the long rainy season was 29 percent (Chart 3.70).



The use of improved during short rainy season was highest in Arusha 53.7 percent of the total area planted with improved seeds in the region in a planted area of 874 hectares. This is followed by Longido (51.2 percent in 2,956ha), and Arumeru (44.3 percent in 3,653 ha). The lowest percentage in this category was Karatu by 24.2 percent in a planted area of 686 hectares. In long rainy season, the use of improved seeds was the highest in Arumeru by 44.2 percent of the total area planted with improved seeds in the region in a planted area of 17291 hectares. This is followed by Arusha Rural and Longido with an estimated of 32.4 percent for each in an area of 10,146 hectares and 2,273 hectares respectively. Monduli had the lowest percentage of the use of improved seeds at 14 percent in a planted area of 6,136 hectares. The other districts had moderate percentages of the use of improved seeds during the long rainy season.

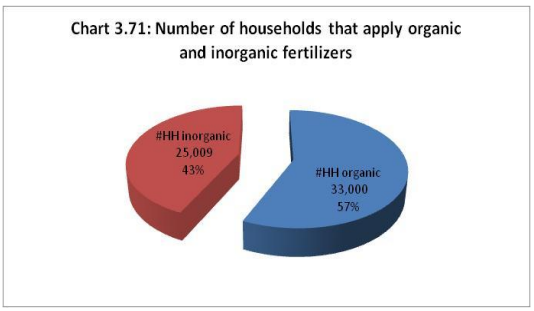
3.5.4 Fertilizer Use

A total of 58,008 agricultural households (30% of all agricultural households in Arusha region us inorganic and organic fertilisers on annual crops during short and long rain seasons in relatively small planted area of 47,591ha or 24% of the total planted area in the region (Table 3.13, Map 3.23).

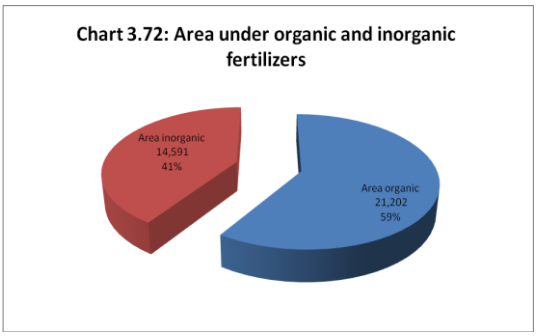
Table 3.13: Number of households using and area under fertilizers during long and short rain seasons

District	Short rain season						Long rain season					
	#HH organic	Area organic	#HH inorganic	Area inorganic	Total HH	Total area	#HH organic	Area organic	#HH inorganic	Area inorganic	Total HH	Total area
Monduli	714	390	714	329	3,929	4,960	1,429	2,268	643	221	21,861	44,128
Arusha	895	998	85	41	1,236	1,627	597	785	0	.	2,515	4,080
Karatu	267	126	535	189	4,545	2,834	4,367	1,883	1,248	584	31,904	26,776
Ngorongoro	71	29	71	14	1,066	640	71	29	0	.	10,089	14,393
Longido	231	216	722	1,516	4,218	5,778	87	406	347	722	5,316	7,144
Arusha Rural	5,972	2,532	1,911	1,262	17,796	9,903	11,466	6,911	2,628	1,454	38,937	31,339
Meru	1,098	704	4,514	1,806	11,591	8,254	5,734	3,923	11,591	6,453	39,653	39,101
Total	**9,249**	**4,996**	**8,553**	**5,158**	**44,381**	**33,997**	**23,751**	**16,205**	**16,456**	**9,433**	**150,275**	**166,961**

Of the planted area with fertiliser application, the number of households applying organic and inorganic fertilizers was 33,000 (57%) and 25,009 (43%) respectively (Chart 3.71).



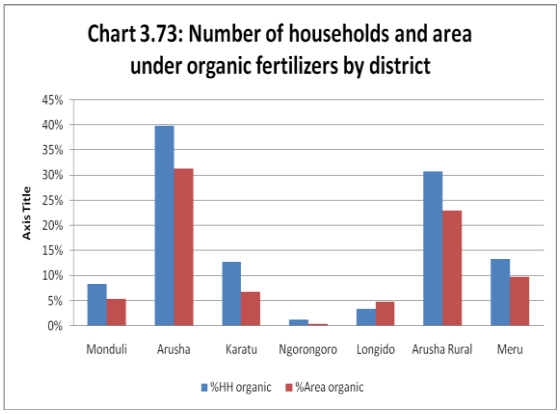
The area planted with organic and inorganic fertilizer was 14,591ha (41%) and 21,202 (59%) respectively (Chart 3.72).



The highest percentage of the area planted with fertilizer (all types) during short rainy season was in Arusha Rural (44%), followed by Meru district (32%), Monduli (8%), and Arusha (6%). Ngorongoro had the lowest percentage of area planted with both types of fertiliser in short rainy season at 1 percent. The highest percentage of planted area with fertilizer (both types) in long rainy season was Meru (43%), followed by Arusha Rural (35%) and Karatu (14%). Monduli had fourth highest percentage of area planted with fertilizer with an estimated of 5 percent, followed by Longido and Arusha (1% each).

3.5.4.1 Organic Fertiliser Use

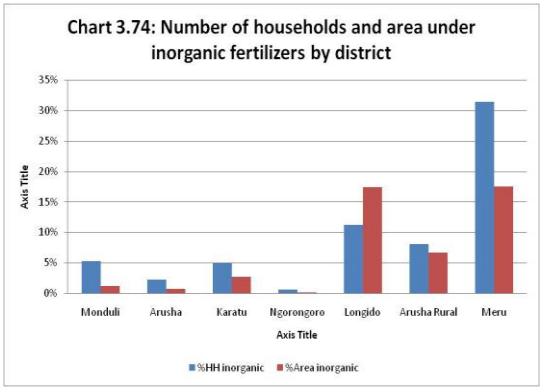
organic fertilizers were applied by 33,000 households or 17% of all agricultural households in Arusha region. They were applied on a total area of 21,202ha or 11% of all the cultivated area in Arusha region. Chart 3.73 shows that organic fertilizer was mostly used in Arusha (31% of the total planted area in the district), followed by Arusha rural (23%) and Meru (10%). Ngorongoro had the lowest percent of area planted with organic fertilizer at 0.4 percent.



As compared to the 2002/3 census, the area under organic fertilizers decreased from 60,974ha to 21,202ha.

3.5.4.2 Inorganic Fertiliser Use

Inorganic fertilizers were applied by a total of 25,009 households or 13% of all agricultural households in Arusha region. It was applied on a total area of 14,591ha or 7% of all the cultivated area in Arusha region. Chart 3.74 shows that the largest area applied with inorganic fertilizers was found in Meru and Longido districts which had 17% each. This was followed by Arusha rural (7%), Karatu (3%) and Arusha & Monduli (1%).



As compared to the 2002/3 census, the area under inorganic fertilizers decreased by 6% from 15,492ha.

3.5.5 Pesticide Use

Pesticides are chemicals used for controlling insects, diseases and weeds. This section analyses the use of these chemicals by smallholders on both annual and permanent crops in the region.

Pesticides were applied by 51,255 or 12% of all agricultural households to a planted area of 38,282 ha or 9% of the total area planted with annual crops and vegetables. Insecticides were the most common pesticide used in the region applied by 24,560 or 48% of all households applying pesticides. This was followed by herbicides (13,658 or 27%) and fungicides (13,036 or 25%).

Insecticides were the most common pesticides applied to 19,131ha or 50% of the area applied with pesticides. This was followed by herbicides (11,907ha, 31%) and fungicides (7,245ha or 19%). The use of pesticides was more during the long than the short rains seasons (Chart 3.75, Table 3.14).

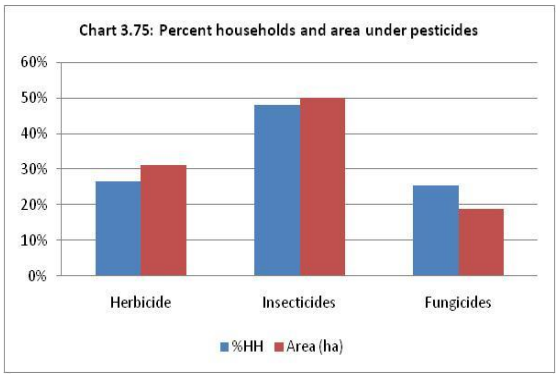
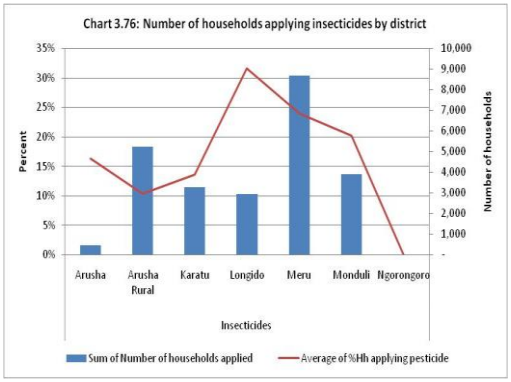


Table 3.14: Pesticide use by number of households and area

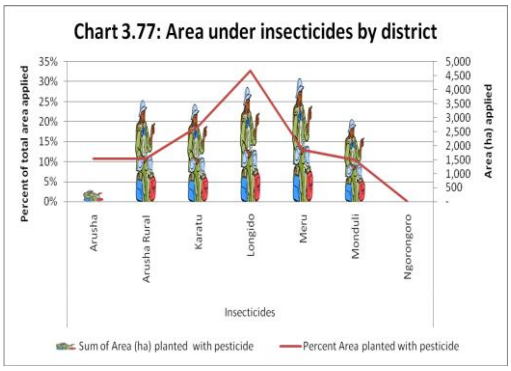
Season	Pesticide type	Number of households applied	Area (ha) planted with pesticide	%Hh applying pesticide	%Area planted with pesticide
Long rain season	Fungicide	6,488	3,813	5%	3%
	Herbicide	9,028	8,386	7%	7%
	Insecticides	14,037	12,114	10%	8%
Long rain season Total		29,552	24,313	7%	6%
Short rain season	Fungicide	6,549	3,432	14%	9%
	Herbicide	4,631	3,521	12%	9%
	Insecticides	10,523	7,016	23%	19%
Short rain season Total		21,702	13,969	16%	12%
Grand Total		51,255	38,282	12%	9%

3.5.5.1 Insecticide Use

Insecticides were applied by a total of 24,560 or 17% of the total number of agricultural households. The biggest number of households applying insecticides was found in Meru district which was having 35% of all households applying insecticides in the region. This was followed by Arusha rural (21%), Monduli (16%), Karatu (13%), Longido (12%) and Arusha (2%) (Chart 3.76).



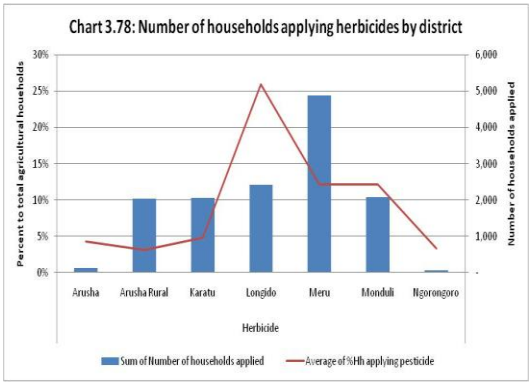
The planted area applied with insecticides was estimated at 19,131 ha which represented 14 percent of the total planted area for annual crops and vegetables. Meru had the highest percent of planted area with insecticides (23% of the total planted area with insecticides in the region). This was followed by Longido (22%), Arusha rural (19%), Karatu (18%), and Monduli (16%) and Arusha (2%). Ngorongoro had no application of insecticides (Chart 3.77).



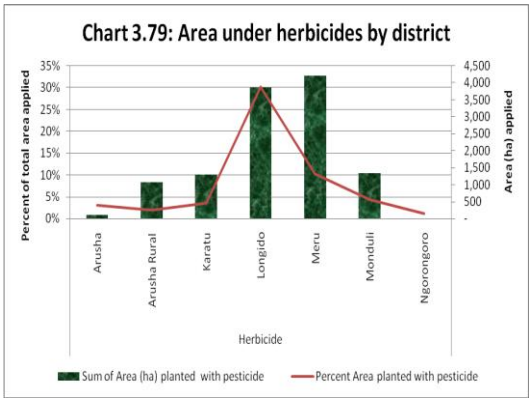
As compared to the 2002/3 census, there has been a decrease of 28% of the area under insecticides from 26,502ha.

3.5.5.2 Herbicide Use

herbicides were applied by a total of 13,658 households which is 9% of the agricultural households in Arusha region. The biggest proportion of households was found in Longido district which had 26% of all households applying herbicides. This was followed by Meru & Monduli (12% each), Karatu (5%), Arusha (4%), Arusha rural and Ngorongoro (3% each) (Chart 3.78).



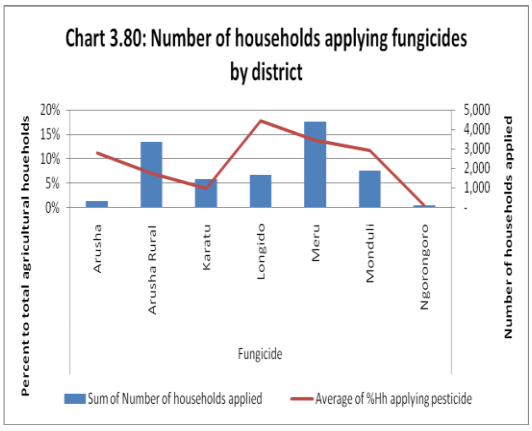
The planted area applied with herbicides was 11,907 ha which represented 8 percent of the total planted area. Longido had the highest percent of planted area with herbicides (30% of the total planted area). This was followed by Meru (10%), Monduli & Karatu (4% each), Arusha (3%), Arusha Rural (2%) and Ngorongoro. (Chart 3.79).



As compared to the 2002/3 census, there has been an increase of 174% of area under herbicide use from 4,352ha.

3.5.5.3 Fungicide Use

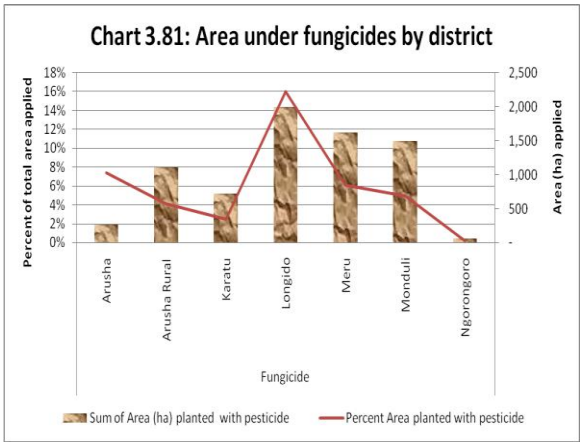
Fungicides were applied by a total of 13,036 or 9% of all agricultural households in Arusha region. The biggest number of households applying fungicides was found in Meru which had 4,392 or 34% of all fungicides using households in the region. This was followed by Arusha rural 3,344 or 26%), Monduli (1,857 or 14%), Longido (13%), Karatu (11%), Arusha (2%) and Ngorongoro (1%) (Chart 3.80).



The planted area applied with fungicides was 7,245 ha which represented 16 percent of the total area planted with pesticides in the region. The highest percentage use of Fungicides was recorded in Longido (1,991ha or 27% of the total area planted with pesticides in the region), followed by

Meru (22%). Monduli (21%), Arusha rural (15%), Karatu (10%), Arusha (4%) and Ngorongoro (1%). (Chart 3.81).

As compared to the 2002/3 census, there has been a 30% decrease in the area under fungicides application from 10,316ha.



3.6 Irrigation

Water is the limiting factor to crop production in the majority of areas in Tanzania and without water most other cultural practices applied to crops do not result in significant increases in yields. This section deals with the area under irrigation by different crops and the means by which water was extracted from the source and applied to the field.

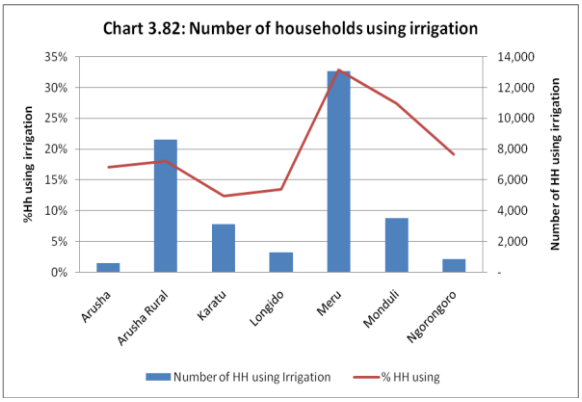
3.6.1 Area Planted with Annual Crops and Under Irrigation

In Arusha region, the area of annual crops under irrigation was 23,797 ha representing 5.4 percent of the total area planted with annual crops and vegetables (Table 3.15).

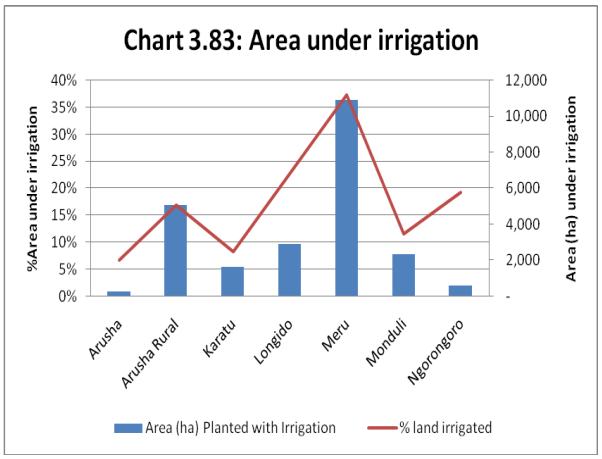
Table 3.15: Number of households and area under irrigation

District	Long rain		Short rain		Short & Long rain seasons		
	Number of Households using Irrigation	Planted Area with Irrigation	Number of Households using Irrigation	Planted Area with Irrigation	Total Number of HH using Irrigation	Total Planted Area with Irrigation	%HH using in the district
Arusha	341	126	256	166	597	292	17%
Arusha Rural	3,941	2,586	4,658	2,519	8,600	5,106	18%
Karatu	2,317	1,312	802	325	3,119	1,637	12%
Longido	751	1,512	549	1,415	1,300	2,927	14%
Meru	7,687	6,015	5,368	4,881	13,055	10,896	33%
Monduli	1,643	1,350	1,857	994	3,501	2,344	27%
Ngorongoro	497	365	355	230	853	595	19%
Grand Total	**17,178**	**13,266**	**13,846**	**10,531**	**31,024**	**23,797**	**20%**

Irrigated agriculture is practiced by a total of 31,024 households in Arusha region; of which (55%) do it in the short rain season. The district with the biggest percent of households using irrigation was Meru (33%) followed by Monduli (27%) and Ngorongoro (19%) (Chart 3.82).

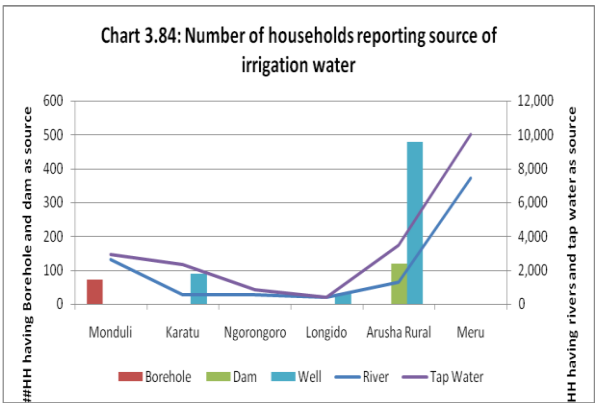


The district with the largest planted area under irrigation with annual crops was Arumeru (10,896 ha, 46% of the total irrigated planted area with annual crops in the region). This is followed by Arusha Rural with 5,106 hectares (21.5%), Longido with 2,927 hectares (12.3%), Monduli (2,344ha, 9.8%), and Karatu with 1,637 hectares (6.9%). The lowest planted area under irrigation was recorded in Arusha (2, 92 ha, 1.2%), followed by Ngorongoro (595 ha, 2.5%) (Chart 3.83, Map 3.24). As compared to the census of 2002/3, the area under irrigation decreased by 5% from 25,034ha.



3.6.2 Sources of Water Used for Irrigation

A total of 21,014 households reported to have different sources of irrigation water in Meru (48% of all households reporting in Arusha region), Arusha rural (19%), Monduli (14%), Karatu (11%), Ngorongoro (4%) and Longido (2%). The main source of water used for irrigation was from rivers (61% of households with irrigation). This was followed by Tap water (35%), well (3&), and dam (1%). The remaining sources were less important and accounted for less than 1 percent each. Thus, most households using irrigation in Arumeru and Karatu get their irrigation water from rivers and tap water (61% and 35% respectively) (Chart 3.84).



3.6.3 Methods of Obtaining Water for Irrigation

A total of 21,014 households reported to use different methods of irrigation. The method that was used by 99.4% of the households was gravity followed by hand bucket (0.4%) and motor pump (0.1%).

Gravity was used by most households with irrigation in Arumeru (48%), followed by Arusha Rural (19.4 %), Monduli (14.4%), Karatu (11.1%), Ngorongoro (4.1%), and Longido (2%). Hand bucket and Motor Pump used for irrigation in Karatu and Longido districts only by 89 and 29 households respectively (Table 3.16 and Chart 3.85)

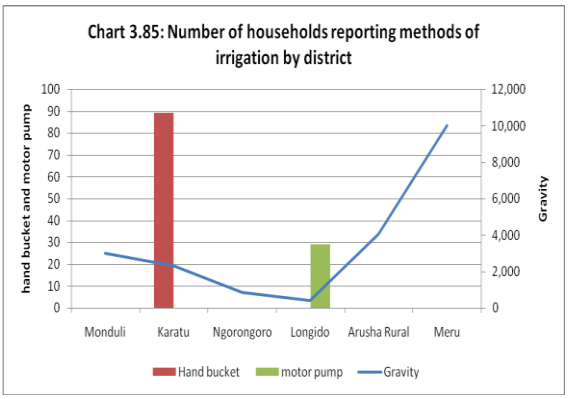
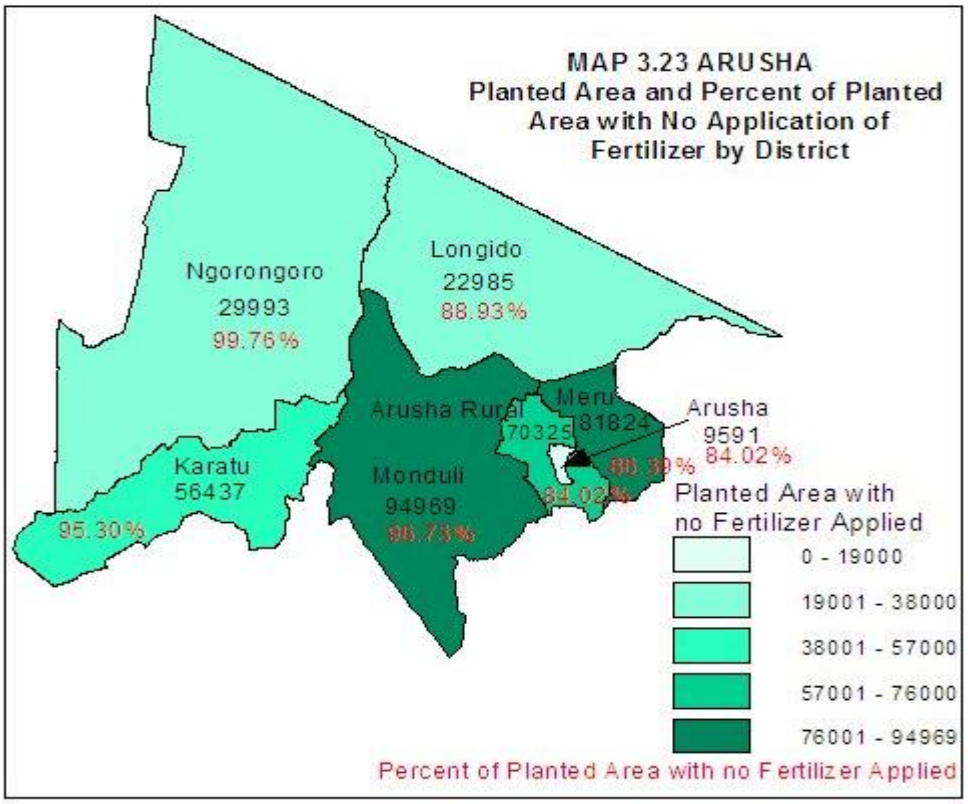
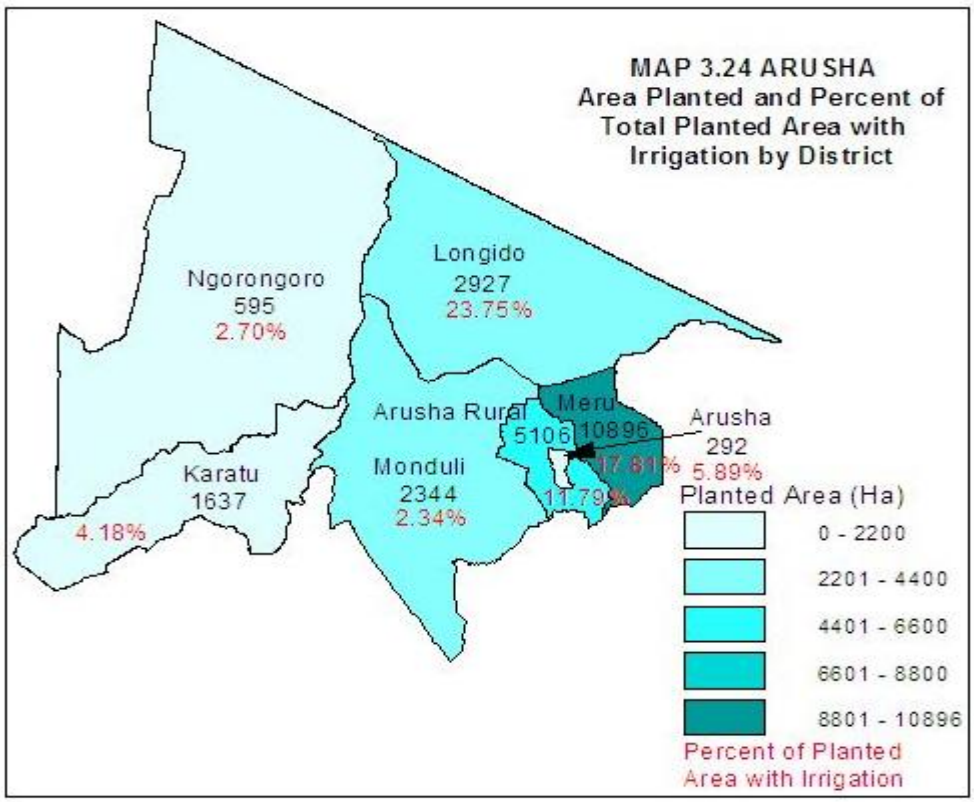


Table 3.16 Number of Households with Irrigation by Method of Obtaining Water							
District	**Gravity**	**%**	**Hand bucket**	**Hand pump**	**motor pump**	**Other**	**Total**
Monduli	3,000	14.4	0	0	0	0	3,000
Arusha	0	0.0	0	0	0	0	0
Karatu	2,317	11.1	89	0	0	0	2,406
Ngorongoro	853	4.1	0	0	0	0	853
Longido	404	1.9	0	0	29	0	433
Arusha Rural	4,061	19.4	0	0	0	0	4,061
Meru	10,005	47.9	0	0	0	0	10,005
Total	**20,896**	**100.0**	**89**	**0**	**29**	**0**	**21,014**


MAP 3.23 ARUSHA
Planted Area and Percent of Planted Area with No Application of Fertilizer by District
Ngorongoro
29993
99.76%
Longido
22985
88.93%
Arusha Rural
70325
Meru
81824
Arusha
9591
84.02%
Karatu
56437
95.30%
Monduli
94969
Planted Area with no Fertilizer Applied
0 - 19000
19001 - 38000
38001 - 57000
57001 - 76000
76001 - 94969
Percent of Planted Area with no Fertilizer Applied


MAP 3.24 ARUSHA
Area Planted and Percent of Total Planted Area with Irrigation by District
Ngorongoro
595
2.70%
Longido
2927
23.75%
Arusha Rural
5106
Meru
10896
Arusha
292
5.89%
Karatu
1637
4.18%
Monduli
2344
2.34%
Planted Area (Ha)
0 - 2200
2201 - 4400
4401 - 6600
6601 - 8800
8801 - 10896
Percent of Planted Area with Irrigation

3.7 Crop Storage, Processing and Marketing

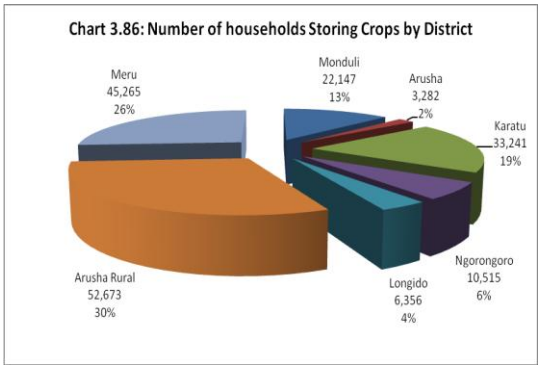
3.7.1 Crop Storage

Crop storage means keeping a crop for a certain period of time as food for the household, in order to sell at higher prices and as seed for planting in the following season. The results for Arusha region show that there were a total of 194,657 crop growing households that stored various agricultural products in the region. 89% of these stored their crops in the long rain season.

Table 3.17: Crop storage methods by number of households and district

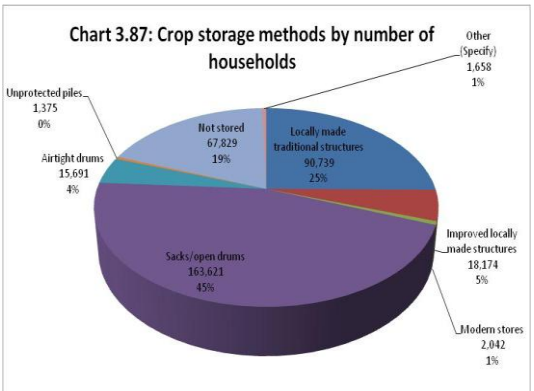
Storage method	Arusha	Arusha rural	Karatu	Longido	Meru	Monduli	Ngorongoro	Grand Total
Locally made traditional structures	554	37,862	22,725	2,282	14,153	3,215	9,947	90,739
Improved locally made structures	43	5,016	2,317	144	2,440	7,858	355	18,174
Modern stores	-	239	267	-	1,464	71	-	2,042
Sacks/open drums	4,646	47,537	22,369	6,385	45,509	29,005	8,171	163,621
Airtight drums	1,065	4,419	-	433	9,273	500	-	15,691
Unprotected piles	85	119	446	144	366	143	71	1,375
Not stored	3,282	17,438	8,555	7,310	18,179	11,502	1,563	67,829
Other (Specify)	-	-	178	-	122	1,357	-	1,658

Arusha Rural had the highest number of households storing crops in the region (52,673 hh, 30% of households reported storing crops in the region). This is followed by Meru (45,265hh or 26%), Karatu (33,241 or 19%), Monduli (22,147 or 13%), Ngorongoro (10,515 or 6%), Longido (6,356 or 4%) and Arusha (3,282 or 2%) (Chart 3.86).

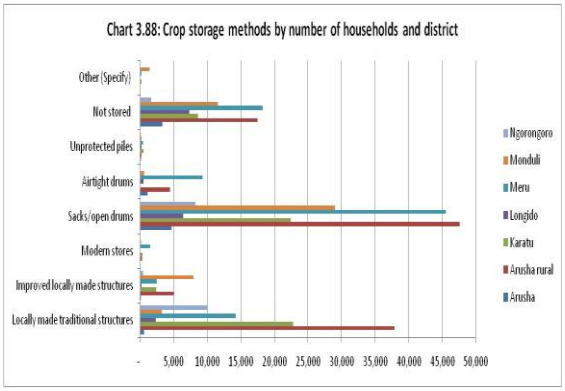


3.7.1.1 Methods of Storage

Most crop growing households in the region store their produce in sacks and/or open drums (163,621 households, 45% of households that stored crops in the region). This was followed by locally made traditional structures used by 90,739 crop storing households (25%), improved locally made structures used by 18,174 households (5%), and air tight drums 15,691 (4%). 90,739 or 19% of the households were reported not using any method of storing crops in the region (Table 3.17 and Chart 3.87).

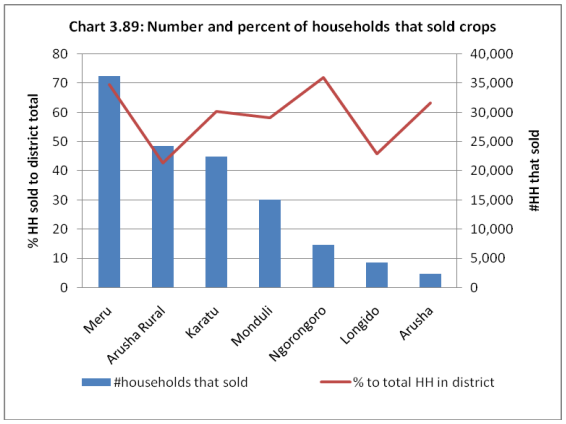


Sacks/open drums were the dominant storage method in all districts, with the highest percent of households (26.8% of the total number of households storing crop products) using this method in Arumeru. This is closely followed by Arusha Rural (26.4%), Monduli (19.4%), Karatu (15.8%), Ngorongoro (5.8%) and Longido (2.6%). The highest percent of households using locally made traditional structure was in Monduli (44.1%), Arusha Rural (23.6%), Arumeru (15.1%), Karatu (14.3%) and Ngorongoro (2.2%). Arusha and Longido had the lowest application of this method by less than 1 percent of the households storing crops (Chart 3.88).



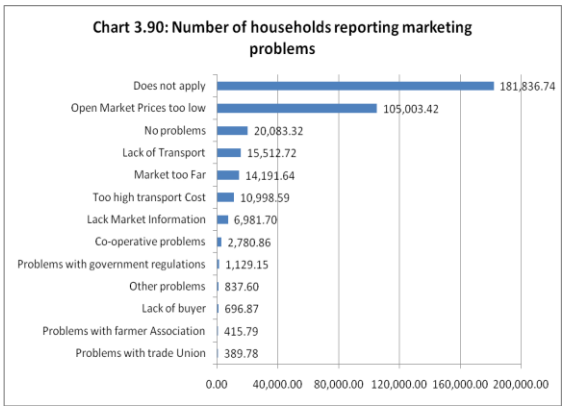
3.7.2 Crop Marketing

The number of households that reported selling crops was 112,111which represent 57.6 percent of the total number of crop growing households. The percent of crop growing households selling crops was highest in Ngorongoro (72%), followed by Meru (70%), Arusha (63%), Karatu (60%), Monduli (58%), Longido (46%), and Arusha Rural (43%) (Chart 3.89 and Map 3.25).



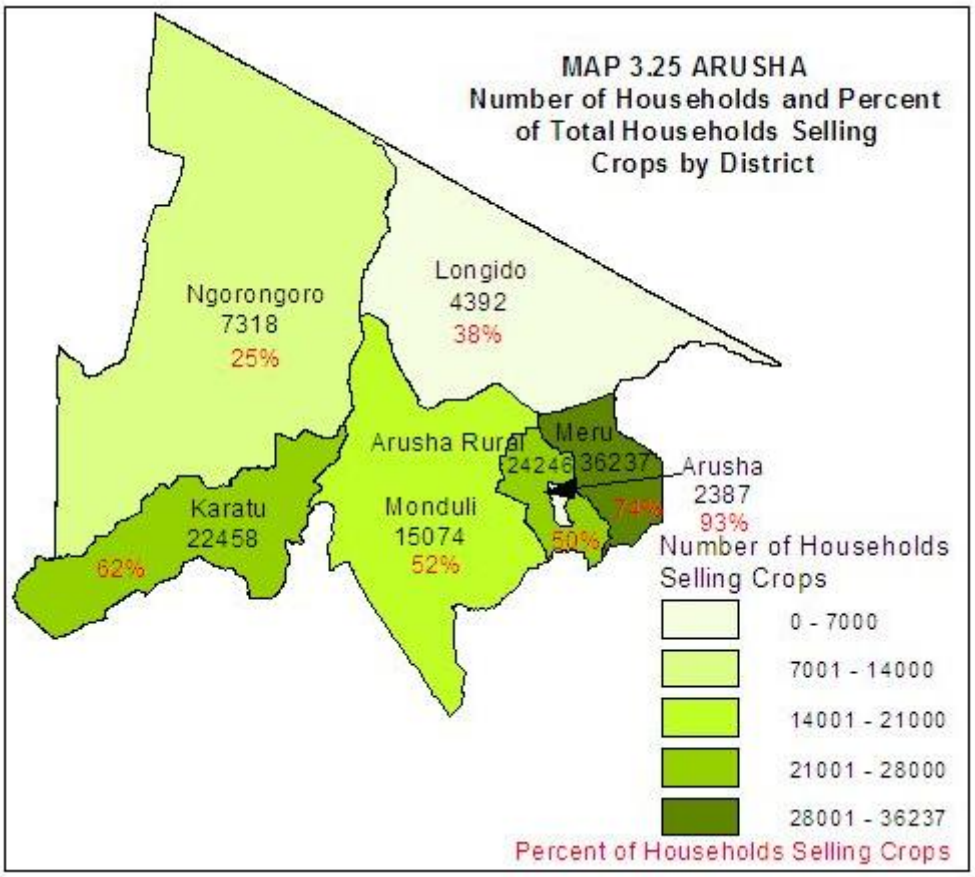
3.7.2.1 Main Marketing Problems

Low price for agricultural produce was the main marketing problem reported by households (29.2% of crop growing households. Other problems were Lack of transport (4.3%), long distances to the markets (3.8%), high transport costs (2.6%), lack of market information (2.1%), and cooperative problems (1%). Other marketing problems are minor and represented less than 1 percent of the total reported problems. 5.6 percent of the households were recorded as not experiencing any marketing problem (Chart 3.90).



3.7.2.2 Reasons for Not Selling Crops

The main reason for not selling crops was reported as “insufficient production to sell”, representing 84 percent of the smallholders. The remaining reasons for not selling are in such low numbers that it is not appropriate to rank them according to their order of importance. This general trend applies to all districts except for Monduli and Ngorongoro where the proportion of households reporting other reasons for not marketing their agricultural products is relatively high (31% and 10% respectively).


MAP 3.25 ARUSHA
Number of Households and Percent of Total Households Selling Crops by District
Ngorongoro
7318
25%
Longido
4392
38%
Arusha Rural
Monduli
15074
52%
Meru
24246 36237
Arusha
2387
93%
74%
50%
Karatu
22458
62%
Number of Households Selling Crops
0 - 7000
7001 - 14000
14001 - 21000
21001 - 28000
28001 - 36237
Percent of Households Selling Crops

3.8 Access to Crop Production Services

3.8.1 Access to Agricultural Credit

The census result shows that in Arusha region very few agricultural households (3,734, 1.8%) accessed credit. Arusha district had the biggest percent of its households borrowing money for agriculture (11.7%) followed by Meru and Monduli (2.5%), Ngorongoro (2.2%) and Karatu (2%). Other districts had percentages less 1% each.

In Arusha Rural district only male headed households got agricultural credit whereas in Longido District female households accessed credit. In Arumeru and Monduli both male and female headed households had equal access to agricultural credit, there was unequal access to credit in Arusha (more males than female had access), Karatu (more males than females had access), and Ngorongoro (More males than females had access) (Table 3.18, Chart 3.91).

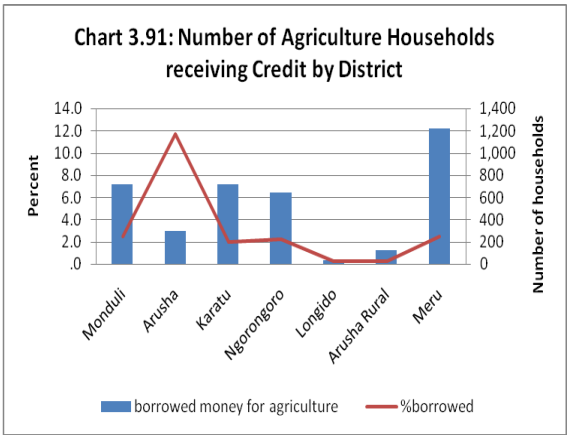
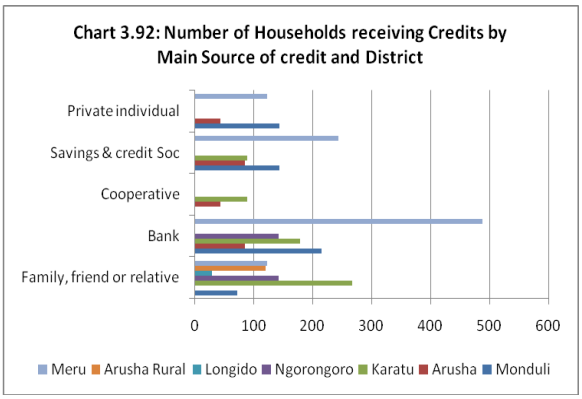


Table 3.18 Number of Credits by sex of the household Member receiving credit and District

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Monduli	357	50	357	50	714	100
Arusha	85	28.6	213	71.4	298	100
Karatu	535	75	178	25	713	100
Ngorongoro	568	88.9	71	11.1	639	100
Longido	0	0	29	100	29	100
Arusha Rural	119	100	0	0	119	100
Meru	610	50	610	50	1,220	100
Total	**2,275**	**60.9**	**1,459**	**39.1**	**3,734**	**100**

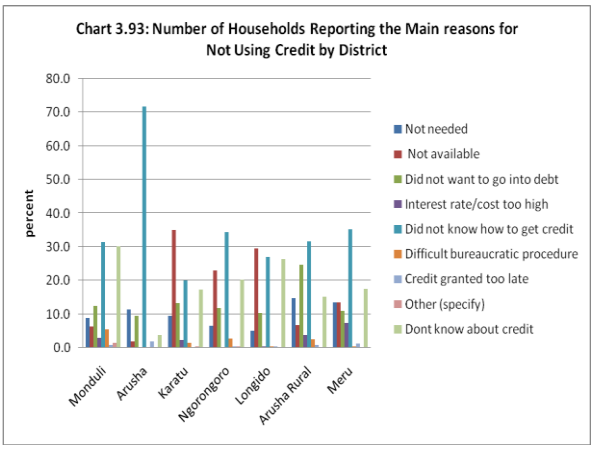
3.8.1.1 Source of Agricultural Credit

The major agricultural credit provider in Arusha region was the bank, which provided credit to 1,108 agricultural households (39% of the total number of households that accessed credit), followed by family, friends and relatives (26%), savings and credit societies (20%), private individual (11%) and cooperatives (4%). Other sources were not minors and accounted for lee than 1 percent (Chart 3.92).



Family friends and relatives were the sole source of credit in Arusha and Longido districts. Family and friends is not a credit provider in Arusha. The bank is a credit in all the districts except Longido and Arusha rural. Cooperatives as a source of credit provider operate in Arusha and Karatu districts only; whilst savings and credit society is not a credit provider in Ngorongoro, Longido, and Arusha Rural. Private individual is a source of credit in Monduli, Arusha and Arumeru only. Trader and trade store was not a source of credit in any of the district in Arusha region.

3.8.1.2 Reasons for Not Using Agricultural Credit



The main reason for not using agricultural credit as a source of finance was little credit awareness (i.e., "did not know how to get credit" and "don't know about credit") accounting to 50.4 percent of the agricultural households. This was followed by unavailability of credit accounting for 16.7 percent, followed by "not wanting to go into debt" (14%), credit not needed (11%), and high interest rates accounting for 3.5 percent. The rest of the reasons were minor and collectively accounted for less than 5 percent of the households (Chart 3.93).

3.8.2 Crop Extension

The number of Agricultural households that received crop extension was 138,984 (80.0 % of the total crop growing households in the region) (Table 3.19). There were little variations across districts with some districts having slightly more access to extension services than others. Accordingly, Arusha Rural district had the highest proportion of households (86.4 %) that received crop extension messages in the region closely followed by Arusha (85%). Arumeru and Karatu had third highest percentage of households receiving extension advice at an estimated 80 percent of households, followed by Monduli (77.1%) and Longido (75.1%). Ngorongoro had the lowest percentage of households recorded to be receiving extension advice (Chart 3.65 and Map 4.26).

Table 3.19: Source of extension servcies

District	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/Television /NewsPaper	Neighbour	Other (Specify)	Total Households that received advices
Monduli	18,146	3,072	0	214	1,572	4,787	71	18,789
Arusha	1,534	85	43	1,065	298	1,023	256	2,174
Karatu	25,131	2,050	1,337	2,050	2,406	4,010	267	26,290
Ngorongoro	6,892	497	0	213	284	782	0	7,176
Longido	4,449	404	29	289	491	2,051	144	5,143
Arusha Rural	38,459	11,586	1,075	1,433	4,061	5,733	478	40,370
Meru	38,311	13,177	244	1,098	9,883	8,053	732	39,043
Total	**132,923**	**30,871**	**2,727**	**6,363**	**18,995**	**26,438**	**1,949**	**138,984**

3.8.2.1 Sources of Crop Extension Messages

Of the households receiving extension advice the Government provided the greatest proportion (84%, 766,081households,). NGOs provided 6 percent, followed by neighbour at 5 percent, Radio/Television/Newspaper (3%), and large scale farmer 1 percent. The remaining providers were minor sources and accounted for less than 0.5 percent (Chart 3.94). However, district differences exist with the proportion of the households receiving advice from government services ranging from between 94 percent and 100 percent in Arumeru and Arusha respectively.

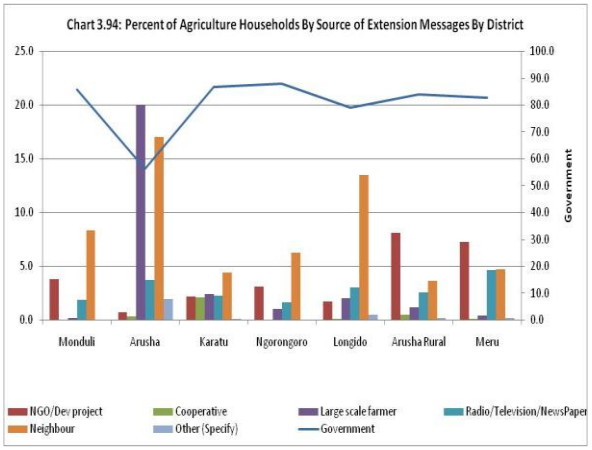
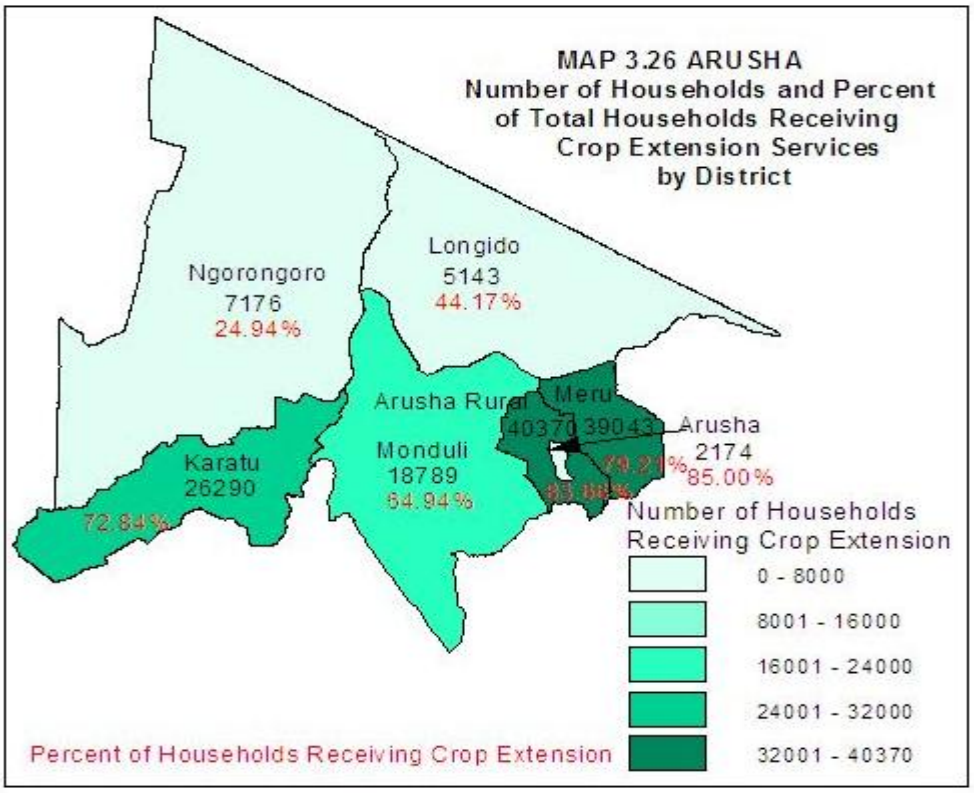
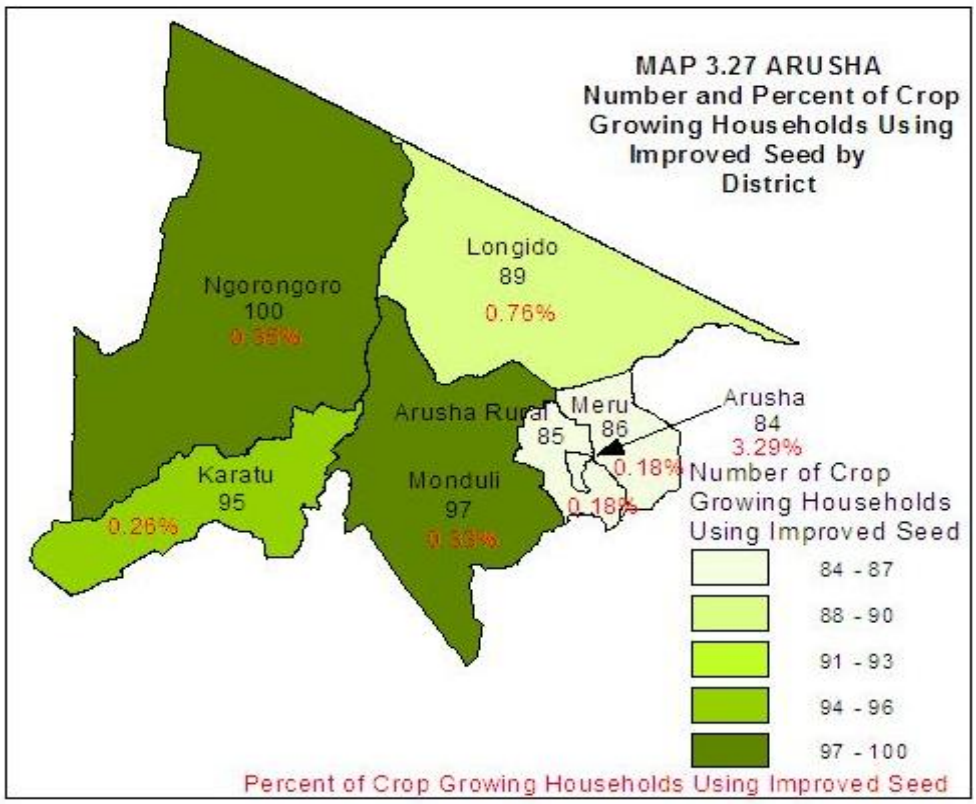


Table 3.20: Number of households receiving extension advice by type and source

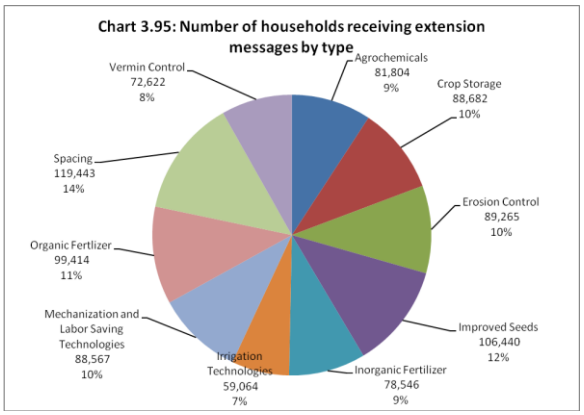
Message	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/Television /NewsPaper	Neighbour	Other (Specify)
Agrochemicals	73,710	2,972	509	1,043	891	2,381	299
Crop Storage	74,276	4,273	804	1,396	3,325	4,608	-
Erosion Control	76,686	7,575	446	619	1,349	2,548	43
Improved Seeds	92,014	4,342	565	1,163	3,900	4,282	174
Inorganic Fertilizer	65,074	4,040	209	1,018	3,709	4,498	-
Mechanization and Labor Saving Technologies	74,220	4,082	565	1,479	2,806	5,250	165
Organic Fertlizer	78,408	8,304	428	1,606	3,176	7,449	43
Spacing	107,932	3,534	687	986	1,742	4,308	254
Vermin Control	58,172	2,555	267	933	2,929	7,555	211
Irrigation Technologies	46,896	6,313	387	942	2,013	2,484	29


MAP 3.26 ARUSHA
Number of Households and Percent of Total Households Receiving Crop Extension Services by District
Ngorongoro
7176
24.94%
Longido
5143
44.17%
Arusha Rural
Monduli
18789
64.94%
Meru
40370 39043
Arusha
2174
85.00%
Karatu
26290
72.84%
Number of Households Receiving Crop Extension
0 - 8000
8001 - 16000
16001 - 24000
24001 - 32000
32001 - 40370
Percent of Households Receiving Crop Extension


MAP 3.27 ARUSHA
Number and Percent of Crop Growing Households Using Improved Seed by District
Ngorongoro
100
Longido
89
0.76%
Arusha Rural
Monduli
97
Meru
85
86
0.18%
Arusha
84
3.29%
Karatu
95
0.26%
Number of Crop Growing Households Using Improved Seed
84 - 87
88 - 90
91 - 93
94 - 96
97 - 100
Percent of Crop Growing Households Using Improved Seed

3.8.2.2 Extension Messages

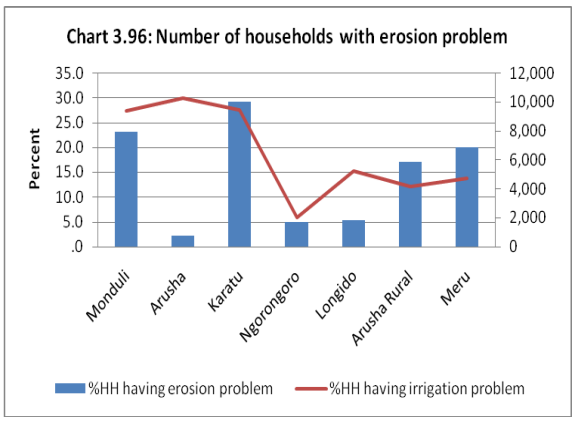
A total of 883,847 received extension messages on proper use of agrochemicals (9%), crop storage (10%), erosion control (10%), improved seeds (12%), inorganic fertilizers (9%), mechanization and labor saving technologies (10%), organic fertilizers (11%), spacing (14%), vermin control (8%) and irrigation technologies (7%) (Table 3.20, Chart 3.95).



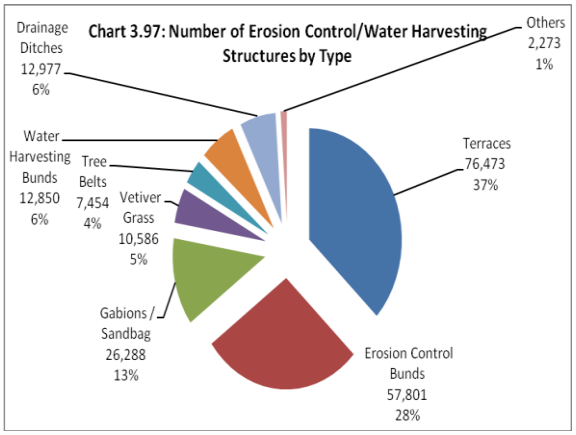
3.11 Irrigation and Erosion Control Facilities

Erosion control and water harvesting facilities are grouped together as they normally have dual purposes of reducing erosion and increasing the amount of water available for crop production.

A total of 34,860 or 16.9% of all agricultural households in Arusha region reported having soil erosion problems on their land. This is equivalent to 19% increase as compared to the 2002/3 census which reported 29,371 households having erosion problem. Arusha district was leading by having 30% of its households reporting irrigation problem followed by Karatu (27.7%), Monduli (27.4%), Longido (15.4%), Meru (13.9%), Arusha rural (12.1%) and Ngorongoro (5.9%) (Chart 3.96).



A total of 30,841 which represents 15 percent of the total number of agricultural households in the region had soil erosion and water harvesting facilities on their farms. The proportion of households with soil erosion control and water harvesting facilities was highest in Karatu district (26.2%) followed by Arusha (23.3%), Monduli (19.8%) Arumeru (15.1%), Arusha Rural (12.6%), Longido (7.2%), and Ngorongoro (2.5%).

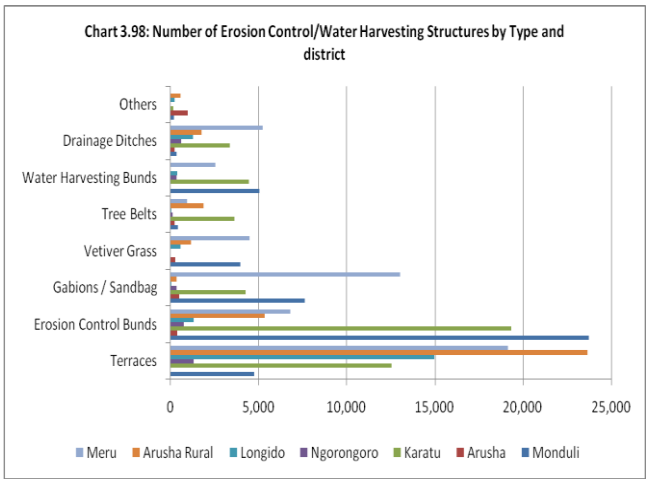


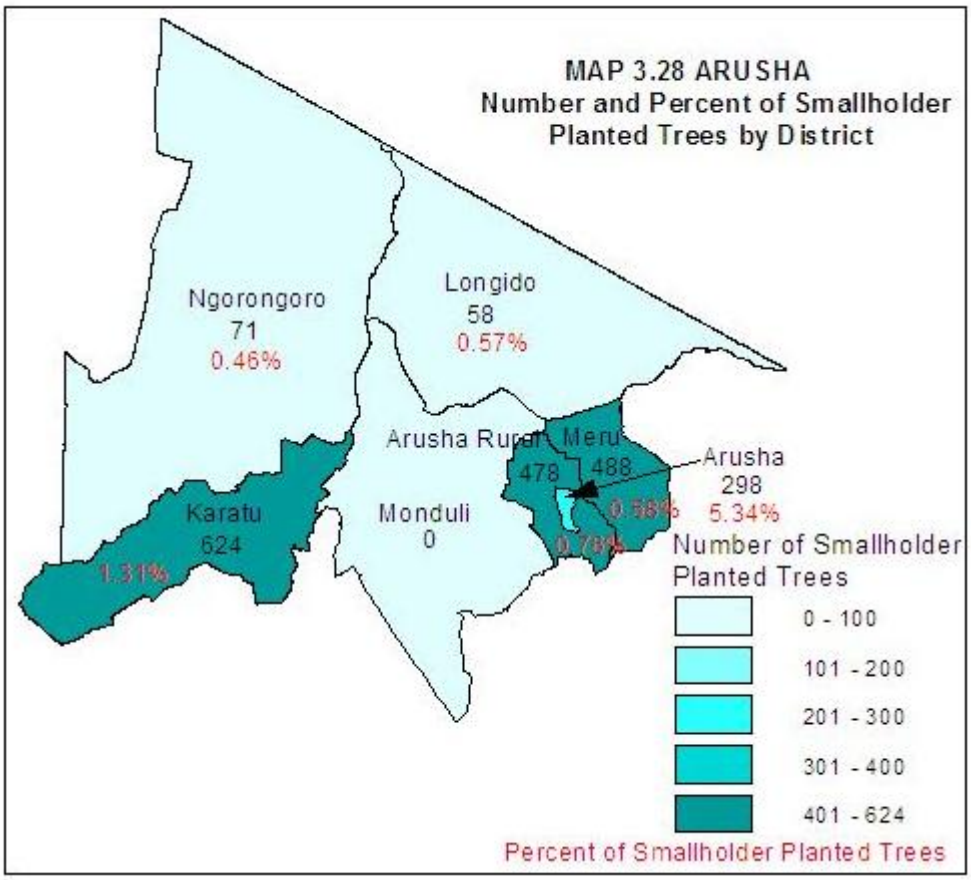
Terraces accounted for 37 percent of the total number of structures, followed by Erosion control bunds (28%), gabions/sandbags (12.7%), drainage ditches (6.3%), water harvesting bunds (6.2%), vetiver grass (5.1%), tree belts (3.6%), and others (1.1%). (Chart 3.97, Table 3.21).

Table 3.21: Number of Erosion Control/Water Harvesting Structures by Type and District as of 2007/08agriculture year

District	Terraces	Erosion Control Bunds	Gabions /Sandbag	Vetiver Grass	Tree Belts	Water Harvesting Bunds	Drainage Ditches	Others
Monduli	4,787	23,718	7,644	4,001	429	5,072	357	214
Arusha	0	426	511	298	256	0	256	1,023
Karatu	12,566	19,339	4,278	0	3,654	4,456	3,386	178
Ngorongoro	1,350	782	355	0	142	355	639	0
Longido	14,966	1,329	87	578	87	404	1,300	260
Arusha Rural	23,649	5,375	358	1,194	1,911	0	1,792	597
Meru	19,155	6,833	13,055	4,514	976	2,562	5,246	0
Total	**76,473**	**57,801**	**26,288**	**10,586**	**7,454**	**12,850**	**12,977**	**2,273**

Terraces, erosion control by Erosion control bunds, and gabions/sandbags together had a total of 160,562 structures, representing 77.7 percent of the total structures in the region. The remaining 22.3 percentages were shared among the rest of the erosion control methods mentioned above. Vertiver grass was not recorded in Karatu and Ngorongoro while water harvesting bunds were not recorded in Arusha and Arusha Rural (chart 3.98).

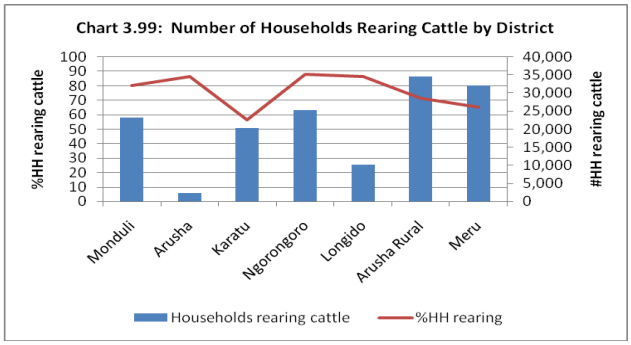



MAP 3.28 ARUSHA
Number and Percent of Smallholder
Planted Trees by District
Ngorongoro
71
0.46%
Longido
58
0.57%
Arusha Rural
478
Meru
488
Arusha
298
5.34%
Karatu
624
1.31%
Monduli
0
Number of Smallholder
Planted Trees
0 - 100
101 - 200
201 - 300
301 - 400
401 - 624
Percent of Smallholder Planted Trees

3.12 Livestock Results

3.12.1.1 Cattle rearing households

A total of 148,049 households kept cattle of different breeds and types. The highest proportion of cattle keeping households was found in Ngorongoro district whereby 88% of its households kept cattle. This was followed by Arusha & Longido (87% each), Monduli (80%), Arusha rural (72%), Meru (65%) and Karatu (56%) (Chart 3.99).



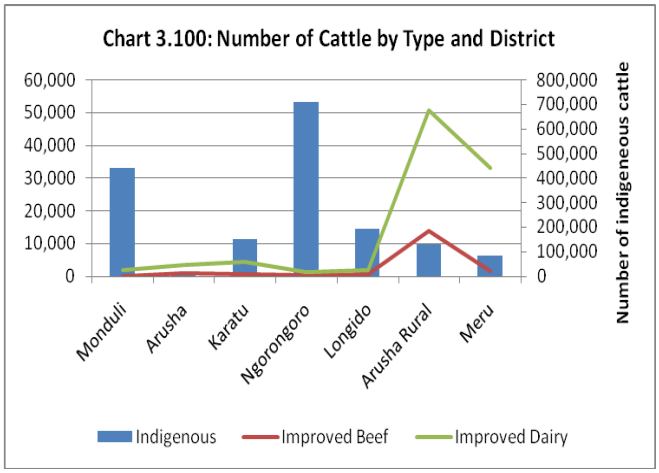
As compared to the 2002/3 census, there has been a 19% increase in the number of cattle keeping households from 124,344.

Table 3.22: Number of Cattle by Type and District

District	Indigenous			Improved Beef			Improved Dairy			Total		
	#HH	#cattle	%	#HH	#cattle	%	#HH	#cattle	%	#HH	#cattle	%
Monduli	23,075	438,073	99.5	71	71	0.0	572	2,000	0.5	23,718	440,145	100
Arusha	1,705	18,710	83.6	298	1,023	4.6	895	2,642	11.8	2,898	22,375	100
Karatu	19,784	148,738	97.0	89	713	0.5	1,426	3,832	2.5	21,299	153,283	100
Ngorongoro	25,365	707,309	99.8	213	426	0.1	284	924	0.1	25,862	708,659	100
Longido	10,054	191,959	99.0	116	809	0.4	404	1,098	0.6	10,575	193,866	100
Arusha Rural	24,007	128,636	71.8	2,747	13,735	7.7	13,497	36,907	20.6	40,251	179,278	100
Meru	20,986	83,088	71.6	1,098	1,708	1.5	14,763	31,234	26.9	36,847	116,031	100
Total	**124,977**	**1,716,514**	**94.6**	**4,633**	**18,486**	**1.0**	**31,841**	**78,637**	**4.3**	**161,450**	**1,813,637**	**100**

3.12.1.2 Cattle Population dynamics

The total number of cattle in the region was 1,813,637; of which 94.6% are indigenous. Cattle are the second dominant livestock type in the region after goats and sheep coming third followed by pigs. The region had 8.5 percent of the total cattle population on Tanzania Mainland.

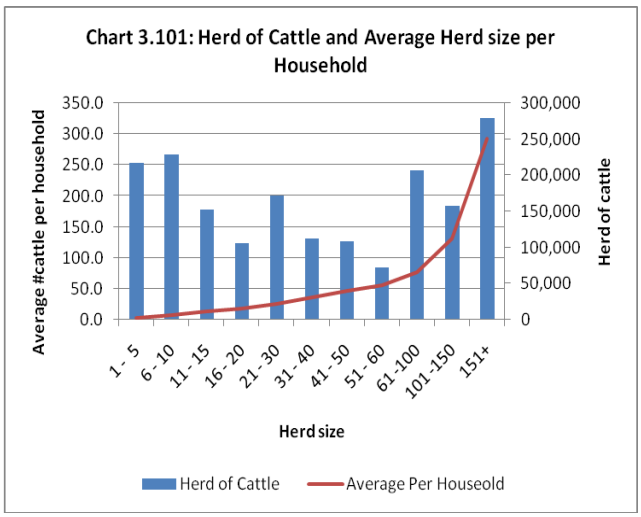


The district with the largest number of cattle was Ngorongoro which had about 708,659 cattle (39.1% of the total cattle in the region). This was followed by Monduli 440,145cattle (24.3%), Longido (193,866 cattle, 10.7%), Arusha Rural (179,278 cattle, 9.9%) Karatu (153,283 cattle, 8.5%). Arumeru (116,031 cattle, 6.4%), Arusha district had the lowest number of cattle (22,375 cattle, 1.2%) (Table 3.22, Chart 3.100 and Map 3.29).

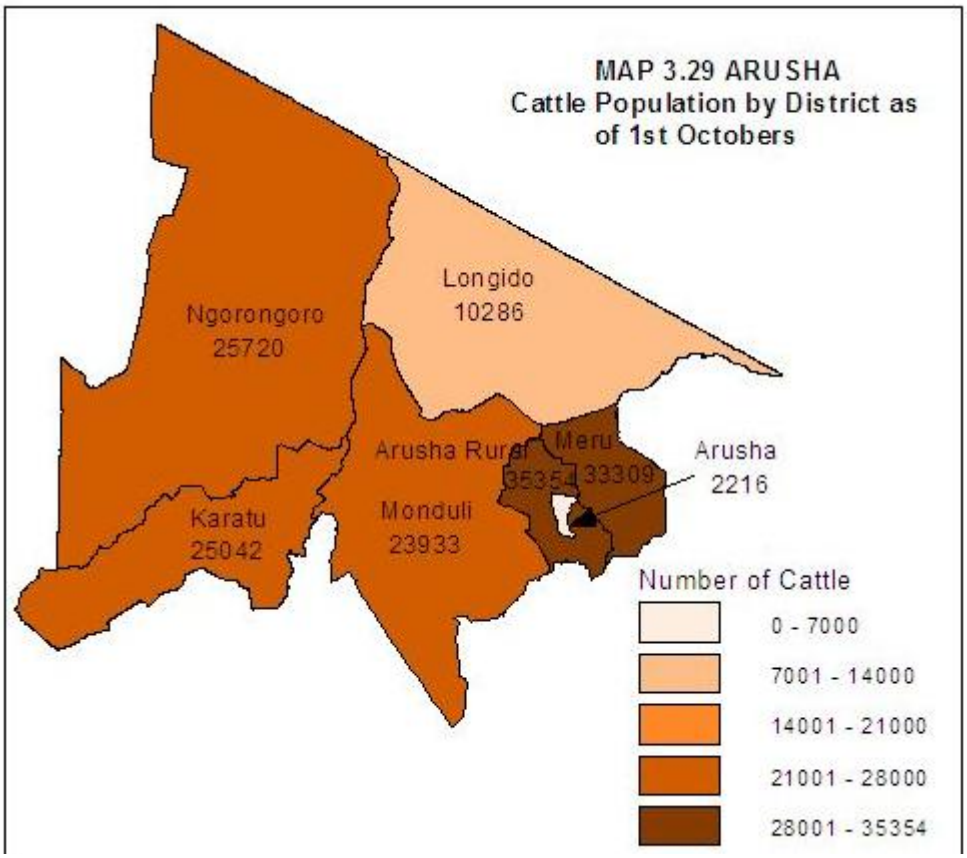
The number of indigenous cattle in Arusha region was 1,716,514 (94.6 % of the total number of cattle in the region), 78,637 cattle (4.3%) were dairy breeds and 18,486 cattle (1.0%) were beef breeds. Ngorongoro District had the largest number of indigenous cattle in the region accounting for 99.8 of all cattle in the district. Therefore, the district had the lowest number of dairy as well as beef cattle in the region. Arumeru district had the largest number of dairy cattle in the region (26.9%) followed by Arusha Rural (20.6%). In general, the number of beef cattle in the region was insignificant. However Ngorongoro and Longido districts had the highest density (1168 cattle per km2) (Map 3.30).

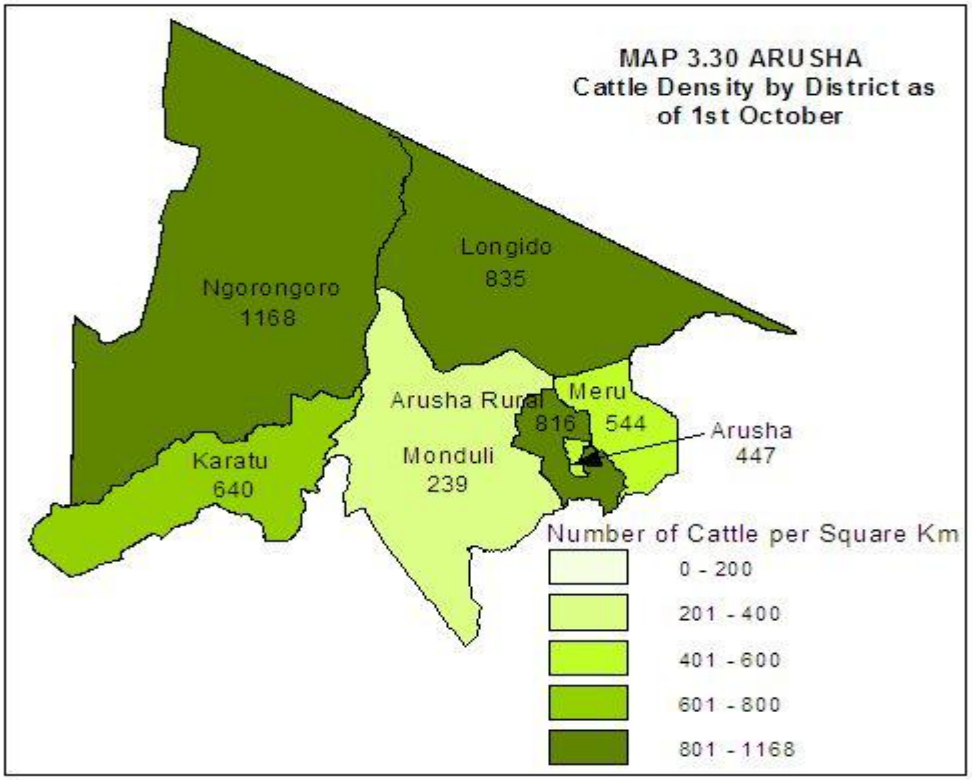
3.12.1.2 Herd Size

About 92 percent of the total cattle rearing households had herd sizes of 1-30 cattle and owns 48 percent of the total cattle in the region, resulting in an average of 2 cattle per cattle rearing household. Fifty five percent of the cattle-rearing households had herd sizes of 1-5 cattle with an average of 3 cattle per household (Chart 3.101).



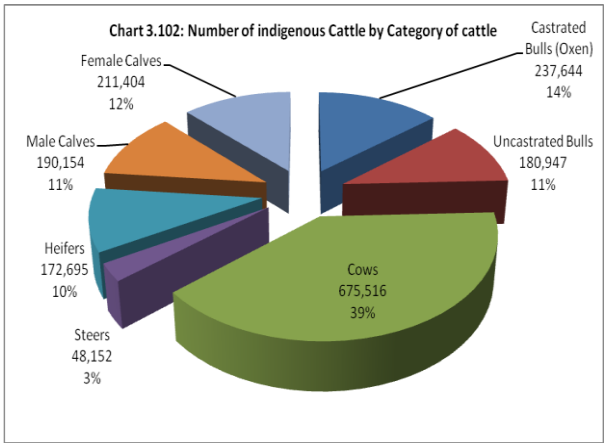
Herd sizes of 6-30 accounted for about 45 percent of all cattle in the region. Only 4.6 percent of the cattle rearing households had herd sizes of 21- 30 cattle. There were about 955 households with a herd size of more than 151 cattle each (278,742 cattle in total) resulting in an average of 289 cattle per household. Cattle population in Arusha increased during the period of five years from 1,503,633 in 2002/03 to 1,813,637 cattle in 2008. This trend depicts an overall annual positive growth rate of 2.6 percent.


MAP 3.29 ARUSHA
Cattle Population by District as of 1st Octobers
Longido
10286
Ngorongoro
25720
Arusha Rural
Meru
35354
33309
Arusha
2216
Karatu
25042
Monduli
23933
Number of Cattle
0 - 7000
7001 - 14000
14001 - 21000
21001 - 28000
28001 - 35354

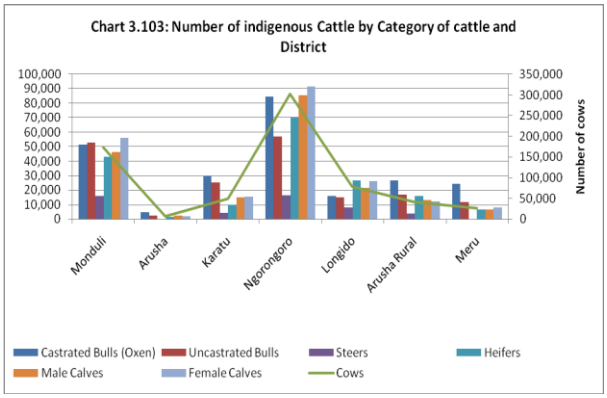

MAP 3.30 ARUSHA
Cattle Density by District as of 1st October
Longido
835
Ngorongoro
1168
Arusha Rural
Meru
816
544
Arusha
447
Karatu
640
Monduli
239
Number of Cattle per Square Km
0 - 200
201 - 400
401 - 600
601 - 800
801 - 1168

3.12.1.3 Indigenous Cattle Types

Arusha region had a total of number of 1,716,514 indigenous our cattle. The largest proportion (39%) were cows followed by oxen (14%), female calves (12%), bulls and male calves (11% each), heifer (10%) and steers (3%) (Chart 3.101).

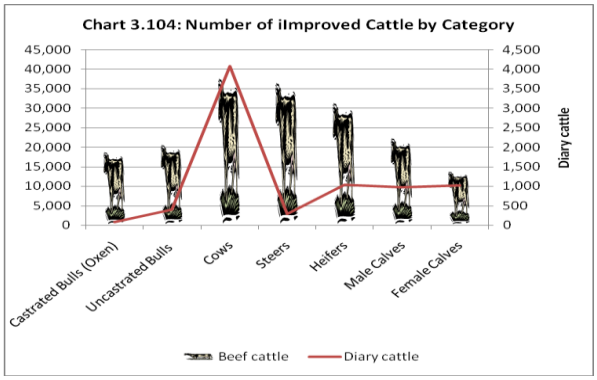


Ngorongoro district was leading by having 41% of all cattle kept in Arusha region followed by Monduli (26%), Longido (11%), Karatu (9%), Arusha rural (7%), Meru (5%) and Arusha (1%) (Chart 3.103).

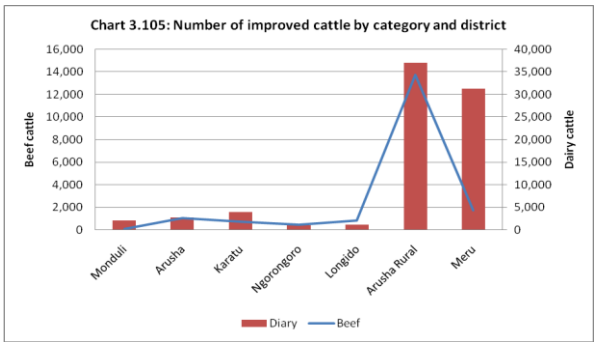


3.12.1.4 Improved Cattle types

The total number of improved cattle in Arusha region was 97,123 (78,637 dairy and 18,486 improved beef). The dairy cattle constituted 4.3 percent of the total cattle and 81 percent of improved cattle in the region. The number of beef cattle in the region was insignificant constituting only 19 percent of the total number of improved cattle and 1.0 percent of the total cattle. The highest proportion of beef cattle (97%) was found in Monduli followed by Meru (95%), Karatu (84%), Arusha rural (73%), Arusha (72%), Ngorongoro (68%) and Longido (58%) (Table 3.23 and Chart 3.104).



In terms of geographical distribution of improved cattle, the biggest percent was found in Arusha rural (52%), Meru (34%), Karatu (5%), Arusha (4%), Monduli & Longido (2% each) and Ngorongoro (1%) (Chart 3.105).



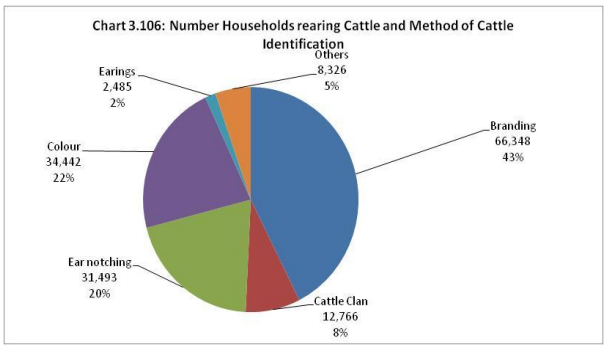
The number of improved cattle increased from 58,677 in 2002/3 to 97,123 in 2007/08, which is a staggering growth rate of 10.6 percent.

Table 3.23: Number of improved cattle by category and district

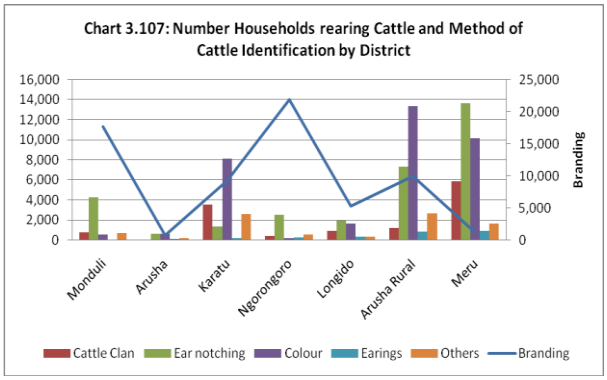
District	Castrated Bulls (Oxen)		Uncastrated Bulls		Cows		Steers		Heifers		Male Calves		Female Calves		Totals		Grand	%Diary
	Beef	Diary	Beef	Diary	Beef	Diary	Beef	Diary	Beef	Diary	Beef	Diary	Beef	Diary	Beef	Diary	Total	
Monduli	.	.	.	357	71	643	.	214	.	143	.	286	.	357	71	2,000	2,072	97%
Arusha	85	.	298	43	170	1,492	.	170	128	170	128	384	213	384	1,023	2,642	3,665	72%
Karatu	356	356	178	356	178	1,604	.	267	.	535	.	535	.	178	713	3,832	4,545	84%
Ngorongoro	.	.	71	.	142	213	.	213	213	.	.	284	.	213	426	924	1,350	68%
Longido	29	116	116	58	173	491	29	116	347	173	116	.	.	144	809	1,098	1,907	58%
Arusha Rural	956	119	1,194	956	3,105	21,021	3,703	.	1,911	4,539	1,792	4,658	1,075	5,614	13,735	36,907	50,642	73%
Meru	488	244	244	2,196	.	15,251	.	1,952	610	4,758	244	3,538	122	3,294	1,708	31,234	32,943	95%
TOTAL	1,914	835	2,102	3,966	3,841	40,715	3,731	2,933	3,209	10,318	2,279	9,685	1,410	10,185	18,486	78,637	97,123	81%

3.12.1.5 Methods of cattle identification

A total of 155,859 cattle rearing households reported to identify their cattle using the method of branding (43%), color (22%), ear notching (20%), cattle clan (8%), other methods (5%) and earings (2%) (Chart 3.106).



The biggest proportion of households identifying their cattle was found in Arusha rural (23%) followed by Meru (21%), Ngorongoro (17%), Karatu (16%), Monduli (15%), Longido (7%) and Arusha (1%) Chart (3.107).



3.12.2 Goat Production

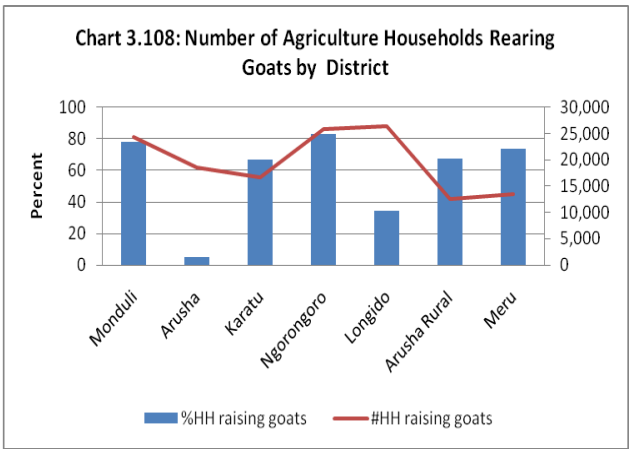
Goat rearing was the most important livestock keeping activity in the region followed by cattle, sheep and pig rearing. In terms of total number of goats on the Mainland, Arusha region ranked 2nd after Shinyanga out of the 21 regions contributing 12 percent of the total goats on the Mainland.

3.12.2.1 Goat Population

The number of goat-rearing-households in Arusha region was 125,787 (68% of all livestock rearing households in the region). The biggest proportion of goat rearing households was found in Longido (88%) followed by Ngorongoro (86%), Monduli (81%), Arusha (62%), Karatu (56%), Meru (45%) and Arusha rural (42%) (Table 3.24 and Chart 3.108)

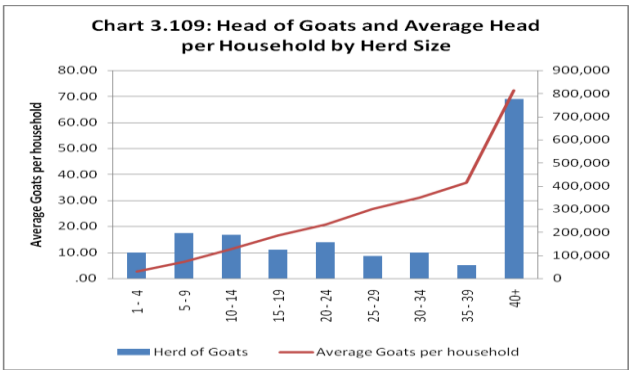
Table 3.24: Number of Goats by Type and District

District	Indigenous			Improved for Meat			Improved Dairy			Total	
	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats
Monduli	23,504	427,142	99.6	-	-	-	286	1,572	0.4	23,790	428,714
Arusha	1,577	24,080	100.0	-	-	-	-	-	-	1,577	24,080
Karatu	20,052	173,602	99.4	-	-	-	178	980	0.6	20,230	174,582
Ngorongoro	24,868	654,519	99.9	-	-	-	355	568	0.1	25,223	655,087
Longido	10,257	228,652	98.4	29	520	0.2	347	3,120	1.3	10,632	232,293
Arusha Rural	19,349	128,038	90.7	-	-	-	1,194	13,138	9.3	20,543	141,177
Meru	20,742	128,476	79.1	122	244	0.2	2,928	33,797	20.8	23,792	162,516
Total	120,348	1,764,510	97.0	151	764	0	5,289	53,176	3	125,787	1,818,450



Arusha region has a total population of 1,818,450 goats giving an average of 14 head of goats per goat-rearing-household. Ngorongoro had the largest number of goats (655,087 goats, 36% of all goats in the region), followed by Monduli (428,714 goats, 23.6%), Longido (232,293 goats, 12.8%), Ngorongoro (466,011 goats, 28%), Karatu (174,582 goats, 9.6%), and Arumeru (162,516 goats, 8.9%). Arusha district had the lowest number of goats (24,080 goats, 1.3%) (Chart 3.108 and Map 3.31). However, Ngorongoro district had the highest density (1,306 goats per km^2) (Map 3.32).

3.12.2.2 Goat Herd Size



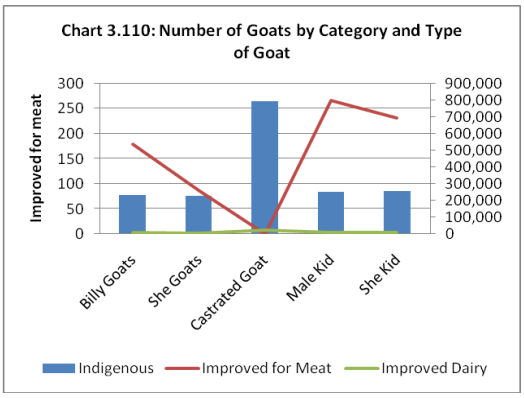
33.26% of the goat-rearing households had herd size of 1-4 goats with an average of 2.72 goats per goat rearing household. 72% of total goat-rearing households had herd size of 1-14 goats and owned 27.3% percent of the total goats in

the region resulting in an average of 14 goats per goat-rearing households (Chart 3.109).

As compared to the 2002/3 census, the 1-4 herd size has decreased by 9.29% from 3 goats per household.

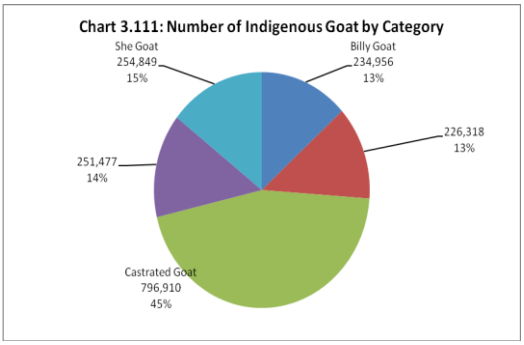
3.12.2.3 Goat Breeds

Both indigenous and improved goat breeds were reported in Arusha region. Both were categorized as billy goats, she goats, castrated goats, male kid and she kid. Goat husbandry in the region was dominated by the indigenous breeds that constituted 97 percent of the total goats in Arusha region. Improved goats for meat and dairy goats constituted 0.04 and 2.9 percents respectively of the total goats (Chart 3.110).

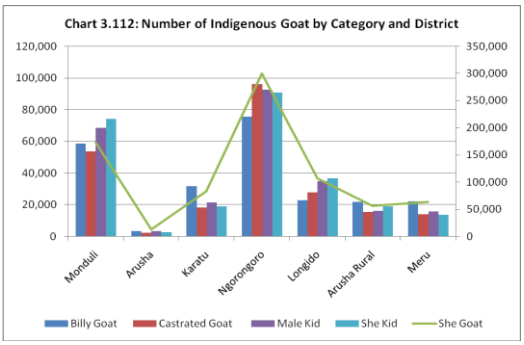


3.12.2.3 Indigenous Goat Breed types

Arusha region had a total of 1,764,510 indigenous goats of which 45% were castrated, she goats (15%), male kids (14%), and she kids & billy goats (13% each) (Chart 3.111).

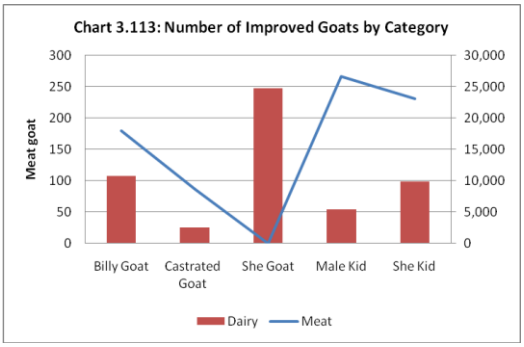


The biggest regional share of indigenous goats was found in Ngorongoro district (37%) followed by Monduli (24%), Longido (13%), Karatu (10%), Arusha rural & meru (7% each) and Arusha (1%) (Chart 3.112).

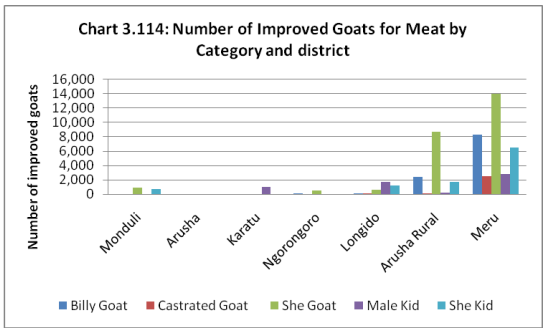


3.12.2.4 Improved Goat Breeds

Arusha region had a total of 53,940 improved goats; of which 53,176 (99%) were for dairy purposes and 764 (1%) were for meat. The biggest percent of improved goats (46%) were she goats followed by billy goats (20%), she kids (19%), male kids (11%) and castrated ones (5%) (Chart 3.113).

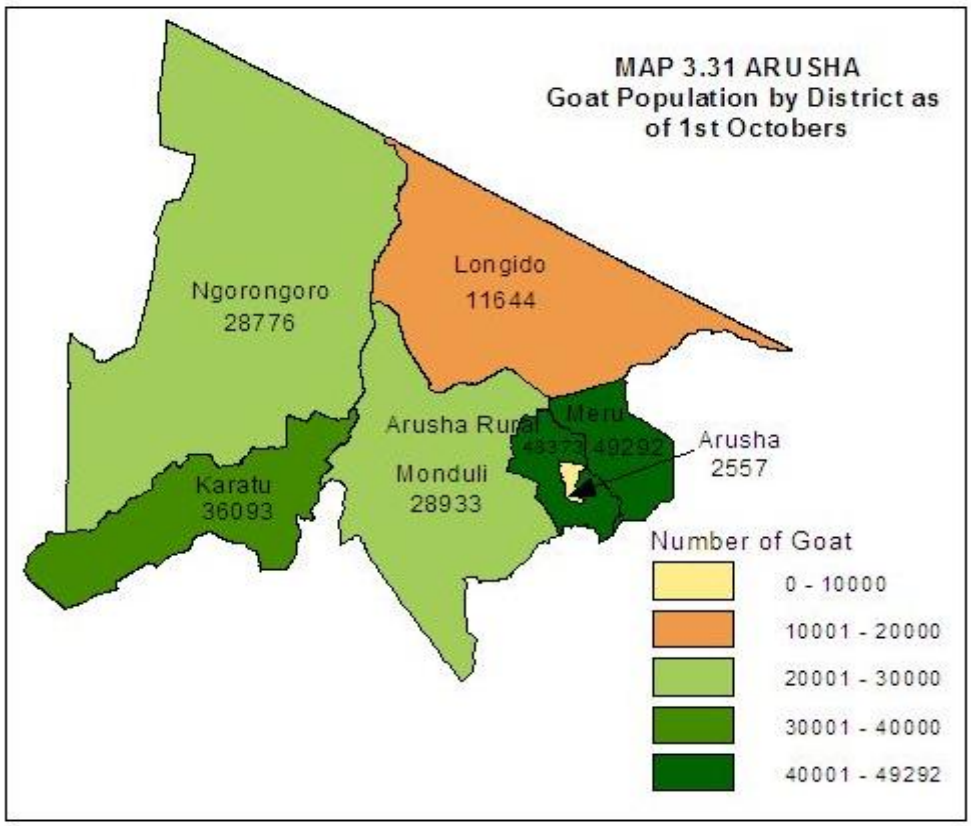


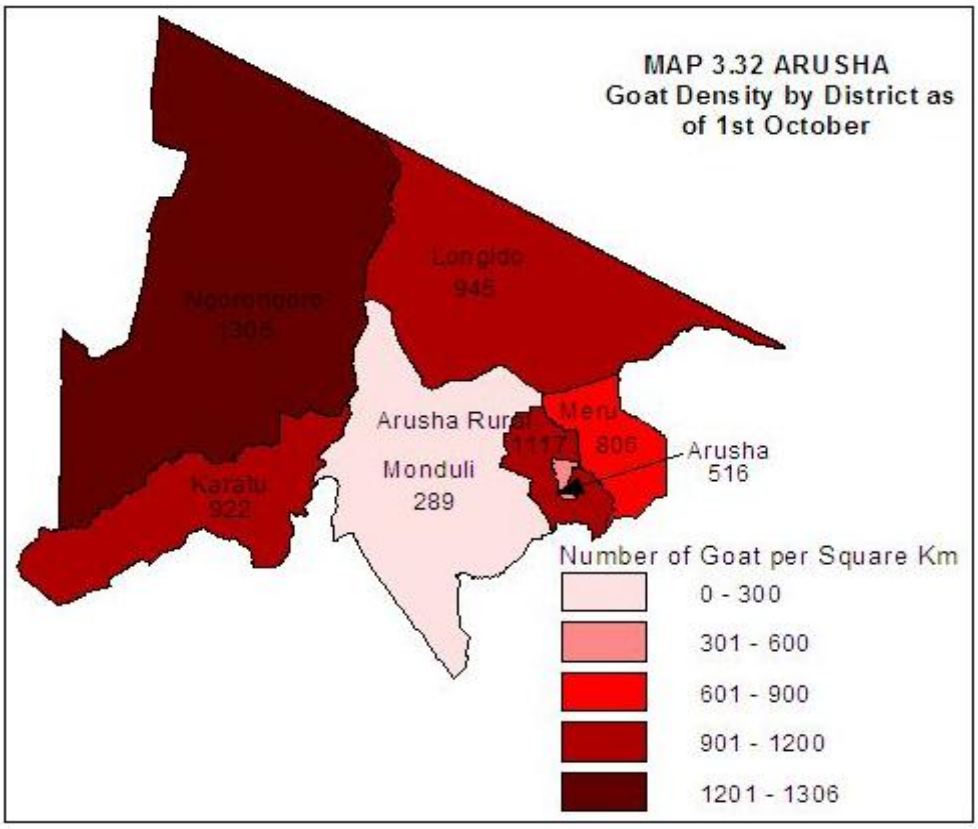
Meru had the biggest proportion of improved goats (63.1%) followed by Arusha rural (24.4%), Longido (6.7%), Monduli (2.9%), Karatu (1.8%) and Ngorongoro (1.1%). Arusha did not report having improved goats (Chart 3.114).



3.12.2.4 Goat Population Trend

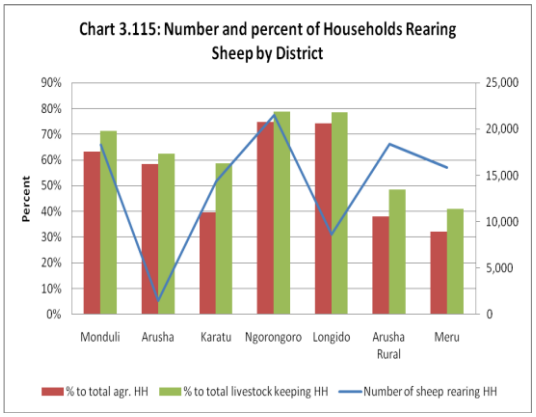
The overall annual growth rate of goat population from 2002/3 to 2007/8 was 2 percent. This positive trend implies five years of population increase from 1,650,445 in 2002/3 to 1,818,450 in 2007/8.


MAP 3.31 ARUSHA
Goat Population by District as of 1st Octobers
Ngorongoro
28776
Longido
11644
Arusha Rural
Monduli
28933
Meru
49292
Arusha
2557
Karatu
36093
Number of Goat
0 - 10000
10001 - 20000
20001 - 30000
30001 - 40000
40001 - 49292

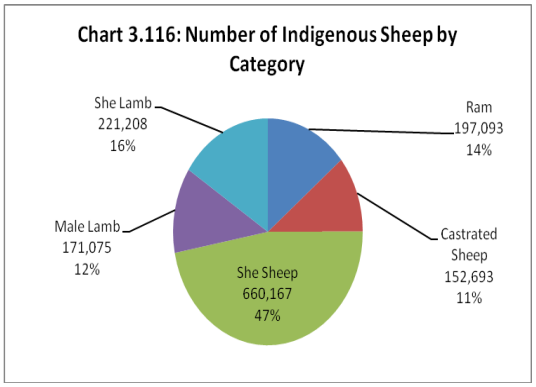

MAP 3.32 ARUSHA
Goat Density by District as of 1st October
Longido
945
Ngorongoro
1306
Arusha Rural
Monduli
289
Meru
806
Arusha
516
Karatu
922
Number of Goat per Square Km
0 - 300
301 - 600
601 - 900
901 - 1200
1201 - 1306

3.12.3 Sheep Production

Sheep rearing was the third important livestock keeping activity in Arusha region after goats and cattle. The region ranked 1 out of 21 Mainland regions and had 22 percent of all sheep on Tanzania Mainland.

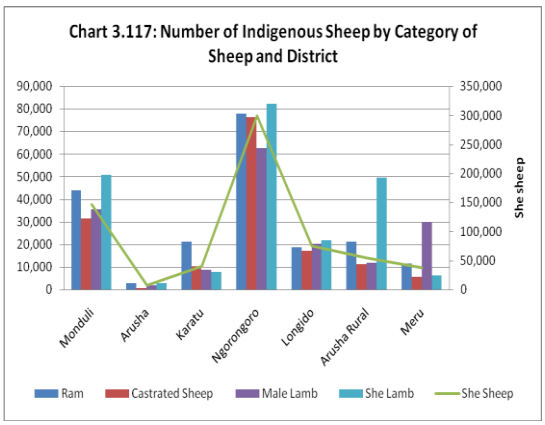


Arusha region residents practice indigenous sheep rearing only. A total of 98,550 or 48% of all agricultural households and 59% of livestock keeping households in Arusha region practiced sheep rearing. Chart 3.115 shows that Ngorongoro district had the highest proportion of sheep rearing households (75% of all agricultural households in Arusha region). This was followed by Longido (74%), Monduli (63%), Arusha (58%), Karatu (40%), Arusha rural (38%) and Meru (32%).



As related to livestock keeping households Ngorongoro had the highest proportion (79%) followed by Longido (78%), Monduli (71%), Arusha (63%), Karatu (59%), Arusha rural (48%) and Meru (41%).

The types of indigenous sheep types reported in this census totaled to 1,402,236 heads; of which 47% were she sheep. Other types were she lamb (16%), ram (14%), male lamb (12%) and castrated sheep (11%).

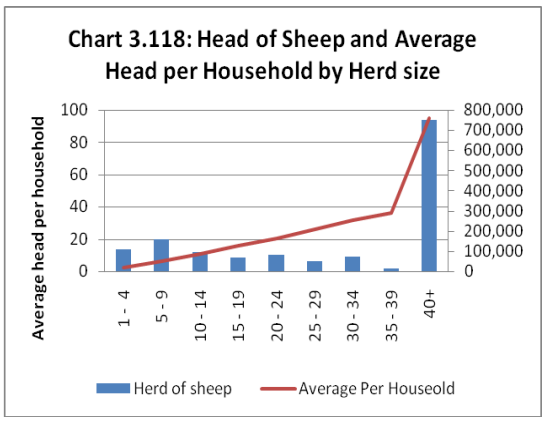


3.12.3.1 Sheep Population

Arusha region reported a total of 1,402,236 sheep, giving an average of 14 heads of sheep per sheep-rearing household. All sheep reported were indigenous. The region ranked 1st out of 21 Mainland regions and had 6.1 percent of all sheep on Tanzania Mainland, The district with the largest number of sheep was Ngorongoro (599,099 sheep, 42.7%) followed by Monduli with 308,837 sheep (22.0 %of total sheep in Arusha region), Longido closely followed by Arusha Rural

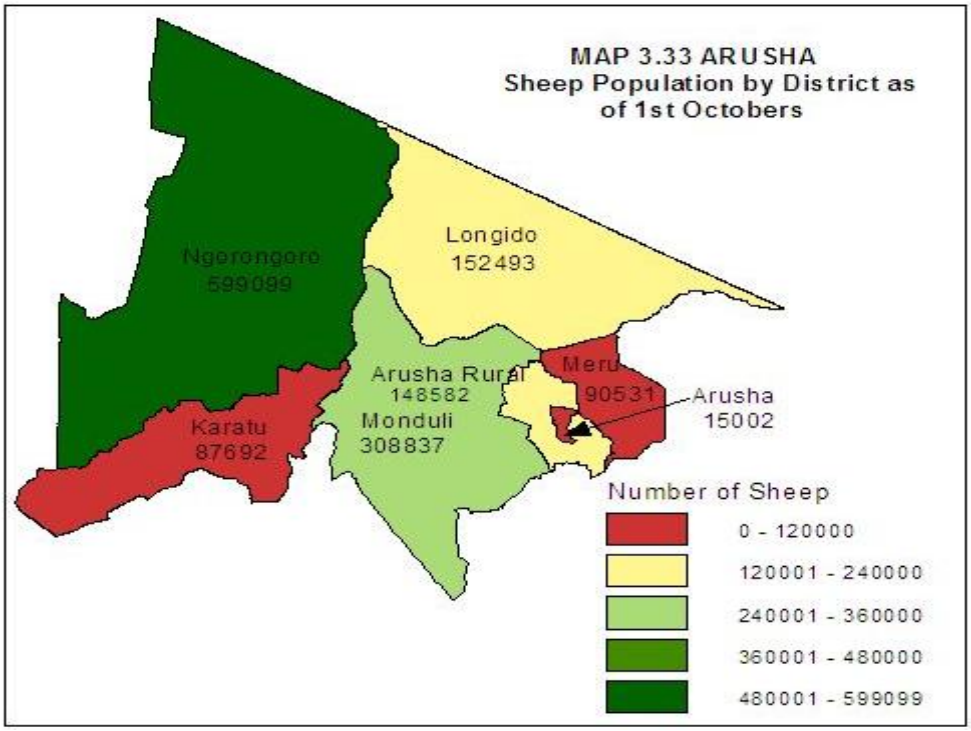
Arumeru (152,493 sheep, 10.6%, and 148,582 sheep, 10.6% respectively). and Karatu (47,365 sheep, 5%). Arusha District had the lowest number of sheep (15,002 sheep) accounting for 1.1 percent only. (Chart 3.118 and Map 3.33). Arumeru district also had the highest density (27,198 sheep per km^2) (Map 3.34).

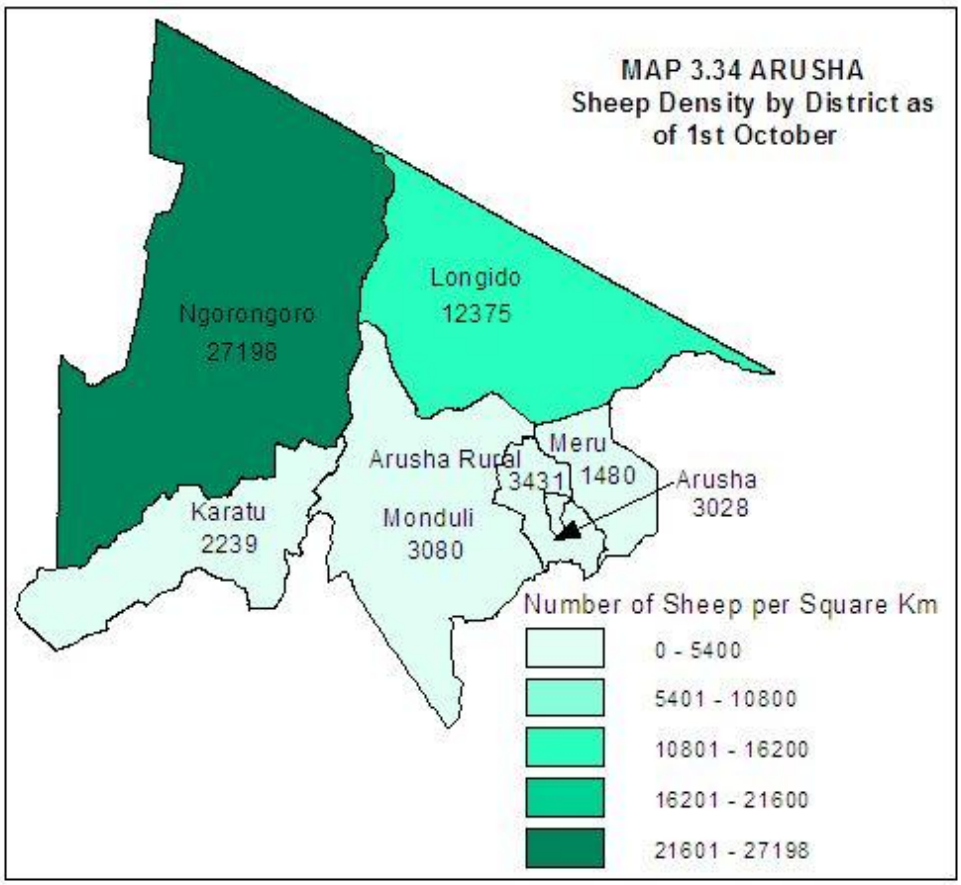
46% all sheep rearing households had a herd size of 1-4 and average head per household of 2. 25% of all households had a herd size of 5-9 with an average head per household of 6. 21% of all sheep rearing households had a herd size of 10-39 with an average head per household of between 11-36. 8% of all sheep rearing households had a herd size of at least 40 with an average head per household of 95% (Chart 3.118).



3.12.3.2 Sheep Population Trend

The overall annual growth rate of the sheep population for the five year period from 2003 to 2008 is estimated at 6.5 percent. The population increased from 1,024,149 to 1402236 in 2008.

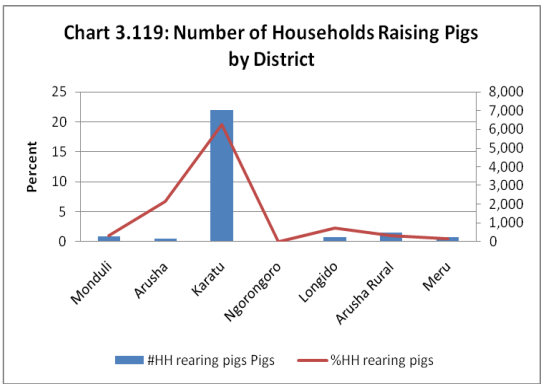

MAP 3.33 ARUSHA
Sheep Population by District as of 1st Octobers
Ngorongoro
599099
Longido
152493
Arusha Rural
148582
Monduli
308837
Meru
90531
Arusha
15002
Karatu
87692
Number of Sheep
0 - 120000
120001 - 240000
240001 - 360000
360001 - 480000
480001 - 599099


MAP 3.34 ARUSHA
Sheep Density by District as of 1st October
Ngorongoro
27198
Longido
12375
Arusha Rural
3431
Meru
1480
Arusha
3028
Karatu
2239
Monduli
3080
Number of Sheep per Square Km
0 - 5400
5401 - 10800
10801 - 16200
16201 - 21600
21601 - 27198

3.12.4 Pig Production

Piggery is the least important livestock keeping activity in the region after cattle, goats and sheep. The region ranks 13th out of 21 Mainland regions and accounts for 1.7 percent of the Mainland total pigs.

The number of pig-rearing agricultural households in Arusha region was 8,478 (4% of the total agricultural households in the region) rearing 27,475pigs. This gives an average of 4 pigs per pig-rearing household. The district with the largest proportion of pigs rearing households was Karatu (20%) followed by Arusha (7%) and Longido (2%). Monduli and Arusha had 1% each and no pig production was reported in Ngorongoro and Meru (Chart 3.119). As compared to the 2002/3 census, there has been a 169% increase in the number of pig rearing households from 3,154. In terms of number of pigs, there has been a 245% increase from 7,958.



Of the 27,475 pigs kept in Arusha region, the most dominant type of indigenous sheep are sow/gilt (39% of all pigs kept) followed by she piglet (21%), boar (17%), male piglets (13%) and castrated male (10%). (Table 3.25 and Chart 3.120).

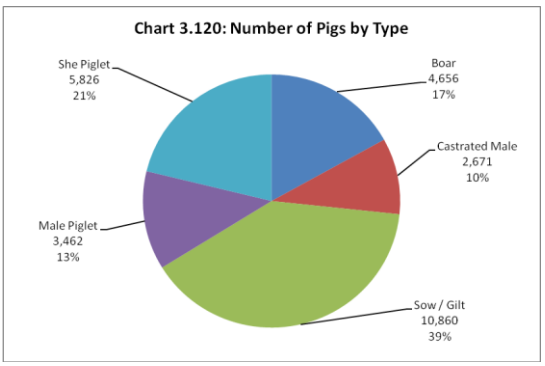
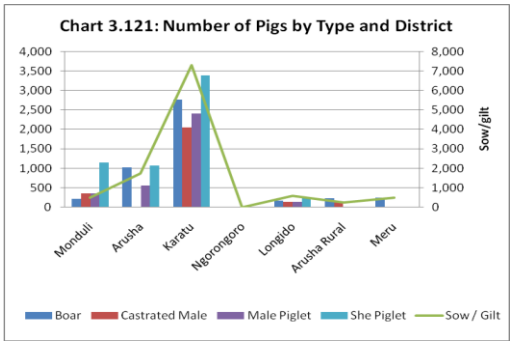


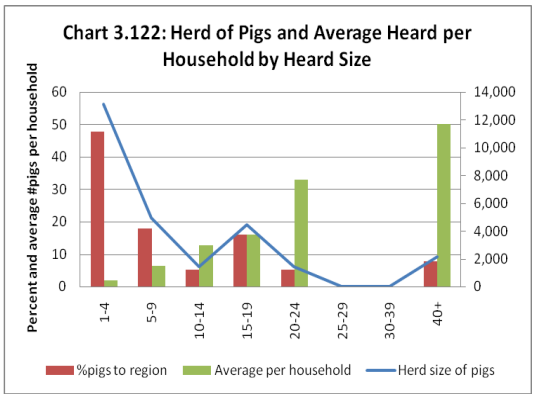
Table 3.25: Number of Pigs by Type of Pigs and District

District	Pig Type					
	Boar	Castrated Male	Sow / Gilt	Male Piglet	She Piglet	Total
Monduli	214	357	500	357	1,143	2,572
Arusha	1,023	-	1,747	554	1,065	4,390
Karatu	2,763	2,050	7,308	2,406	3,386	17,913
Ngorongoro	-	-	-	-	-	-
Longido	173	144	578	144	231	1,271
Arusha Rural	239	119	239	-	-	597
Meru	244	-	488	-	-	732
Total	**4,656**	**2,671**	**10,860**	**3,462**	**5,826**	**27,475**

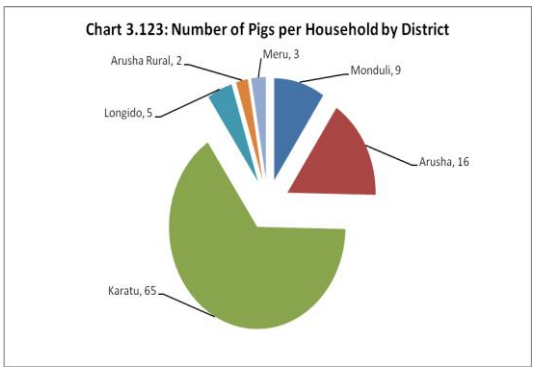
The district with the largest number of pigs was Karatu with 17,913pigs (65.2% of the total pig population in the region) followed by Arusha (4,390 pigs, 16%), Monduli (2,572 pigs, 9.4%) and Longido (1,271 pigs, 4.6%). Meru kept only boars and sow/gilt types and had the lowest number of pigs (732 pigs, 2.7%), followed by Arusha Rural (597 pigs, 2.2%). Pigs are not reared in Ngorongoro district (Chart 3.121 and Map 3.35). However, Ngorongoro district had the highest density (29852 pigs per km2) (Map 3.36).

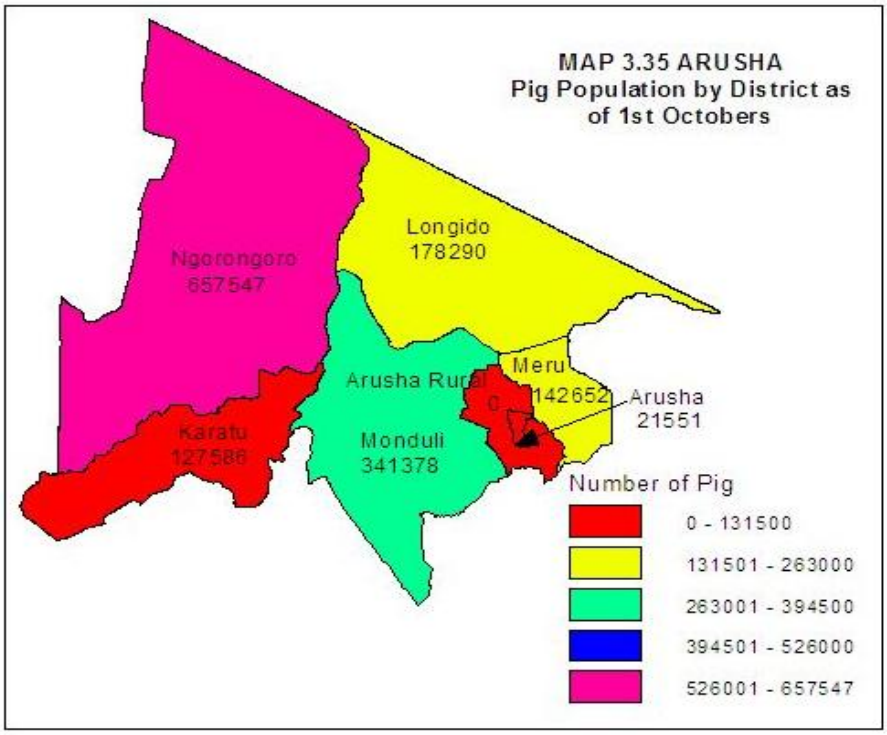


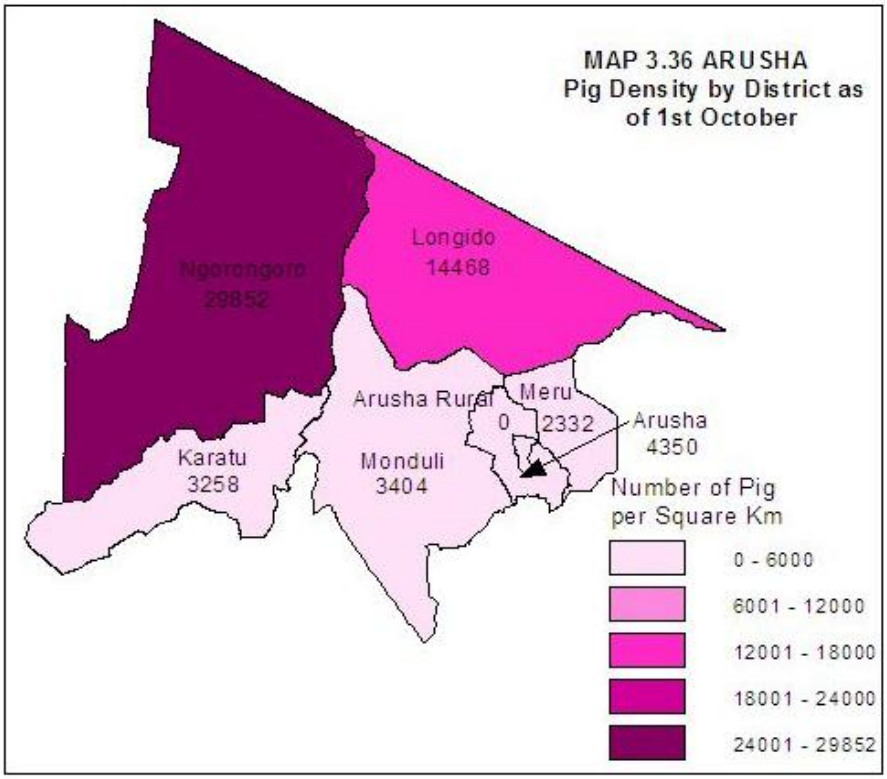
Majority (85%) of pig rearing households had a herd size of 1-4 with an average of 2 pigs per household. 9% of households have a herd size of 5-9 with average of 6 pigs per household. 5% of households have herd size of 10-24 with average pigs per household of 13 to 33. 1% of households had herd size of at least 40 with average pigs per household of 50 (Chart 3.122).



In terms of average number of pigs per household by district, Karatu had 65 pigs per household followed by Arusha (16), Monduli (9), Longido (5), Meru (3) and Arusha rural (2) (Chart 3.123).




MAP 3.35 ARUSHA
Pig Population by District as of 1st Octobers
Longido
178290
Ngorongoro
657547
Arusha Rural
0
Meru
142652
Arusha
21551
Karatu
127586
Monduli
341378
Number of Pig
0 - 131500
131501 - 263000
263001 - 394500
394501 - 526000
526001 - 657547


MAP 3.36 ARUSHA
Pig Density by District as of 1st October
Longido
14468
Ngorongoro
29852
Arusha Rural
0
Meru
2332
Arusha
4350
Karatu
3258
Monduli
3404
Number of Pig per Square Km
0 - 6000
6001 - 12000
12001 - 18000
18001 - 24000
24001 - 29852

3.12.5 Chicken Production

The poultry sector in Arusha region was dominated by chicken production. The region contributed 2.4 percent to the total chicken population on Tanzania Mainland.

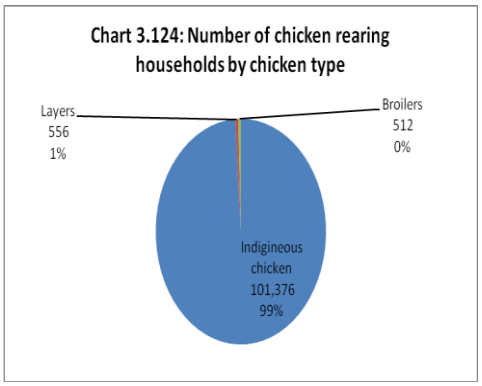
Table 3.26: Number of CHICKEN by Type and District as of 1st October 2008

District	Indigineous chicken		Layers		Broilers		Total	
	#HH	#chicken	#HH	#chicken	#HH	#chicken	#HH	#chicken
Monduli	12,574	129,450	286	1,072	143	1,143	12,931	131,665
Arusha	1,875	18,284	-	-	-	-	1,875	18,284
Karatu	20,943	154,442	-	-	178	535	21,121	154,976
Ngorongoro	4,121	42,346	-	-	71	71	4,121	42,417
Longido	1,271	20,513	29	289	-	-	1,271	20,802
Arusha Rural	24,843	196,835	119	2,389	119	119	24,843	199,343
Meru	35,749	387,746	122	732	-	-	35,749	388,478
Total	**101,376**	**949,616**	**556**	**4,481**	**512**	**1,868**	**101,911**	**955,966**

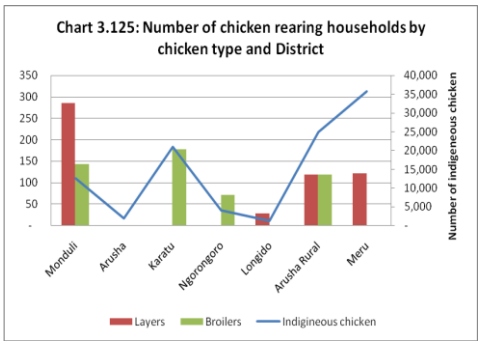
3.12.5.1 Chicken rearing households

Arusha region was ranked 20th out of the 21 Mainland regions in chicken production.

The number of households keeping chicken was 101,376 raising about 955,966 chickens. This gives an average of 9 chickens per chicken-rearing household. Indigenous chicken were reared by 99% of households followed by layers (1%). Broilers were kept by negligible number of households (Table 3.26, Chart 3.124).

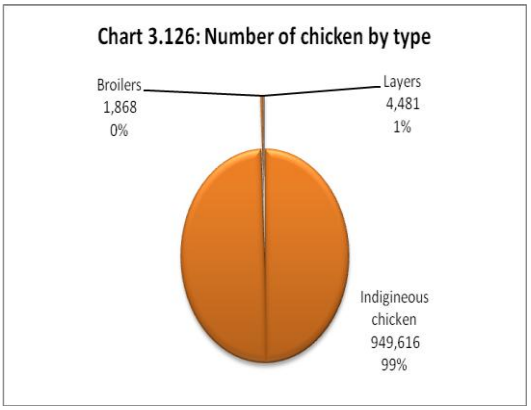


The district with the largest number of chicken rearing households was Meru (35%) followed by Arusha rural (24%), Karatu (21%), Monduli (13%), Ngorongoro (4%), Arusha (2%) and Longido (1%) (Chart 3.125).

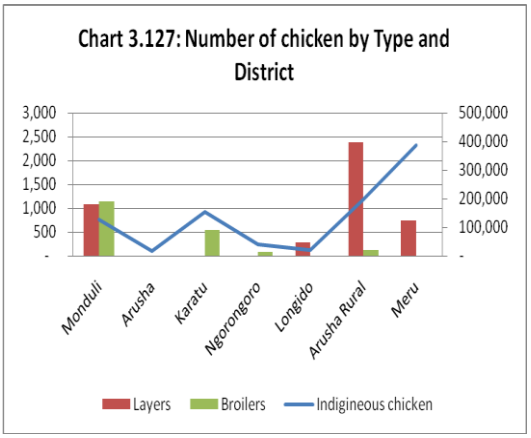


Arusha region kept a total of 955,966 chicken of which 99% were indigenous and the rest were improved (Chart 3.126). The District with largest number of chicken was Meru (388,478 chicken, 40.6 percent of the total number of chickens in the region) followed by Arusha Rural (199,343 chicken, 21%), Karatu (154,976 chicken, 16.2%), Monduli (131,665 chicken, 13.8%) and Ngorongoro (42,417chickens, 4.4%). Arusha district and Longido had the smallest number of chicken accounting to an estimated 2 percent each to the total chicken population in the region

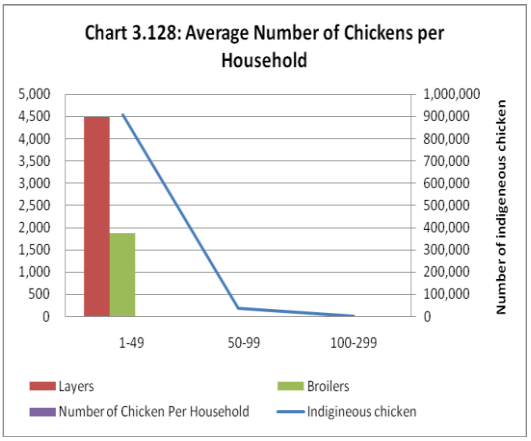
(Table 3.126, Chart 3.127, Map 3.37). However Meru district had the highest density (6349 chicken per km^2, Map 3.38).



The total number of improved chicken in Arusha region was 6,350 (4,481 layers and 1,868 broilers). Layers constituted 0.5 percent of the total chicken and 70 percent of improved chicken in the region. The number of Broilers in the region was smaller constituting only 30 percent of the total number of improved chicken and 0.2 percent of the total chicken. Improved chicken were most common in Arusha Rural and Monduli districts. Improved is not reared in Arusha district. The number of improved chicken in the five-year period from 2003 to 2008 decreased from 58,677 to only 6250 at a growth rate of -36 percent.



Broiler chicken population in Arusha Region decreased at an annual rate of -43 percent for the period of five years from 31,793 in 2003 to 1,868 in 2008. Broilers were most important in Monduli District followed by Karatu District (Chart 3.77). The overall annual chicken population growth rate during the five-year period from 2003 to 2008 was very small of only 0.5 percent, from 93, 1178 to 955,966 respectively. Ninety five point seven percent of all chicken in Arusha region were of indigenous breed. The dominance of indigenous breed makes the population trend for the indigenous chicken more-or-less the same as that of the total chickens in the region.



3.12.5.3 Chicken Flock Size

The results indicate that about 95.7 percent of all chicken-rearing households were keeping 1-49 chickens with an average of 9 chickens per household. About 4 percent of chicken rearing households were reported to be keeping the flock size of 50 to 99 chickens with an average of 62 chickens per household. Only 0.3 percent

of chicken-rearing households kept the flock sizes of more than 100 chicken and above at an average of 100 chickens per chicken-rearing household (Chart 3.128).

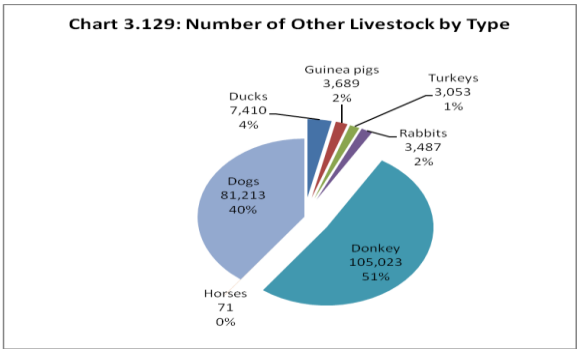
3.12.6 Other Livestock

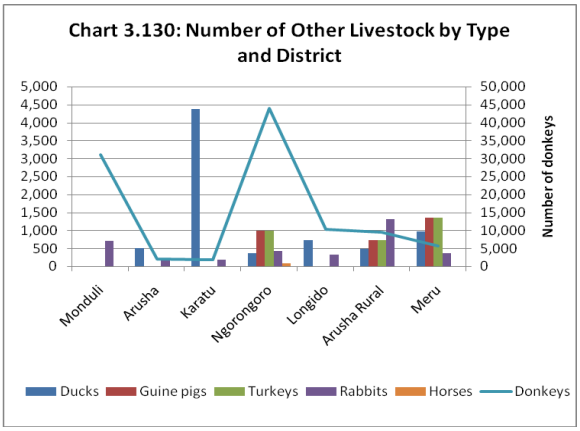
Other livestock in the region include ducks (7,510), guinea pigs (3,689), turkeys (3,053), rabbits (3,487), donkeys (105,023), horses (71) and dogs (81,213) raised by rural agricultural households in Arusha region (Table 3.27).

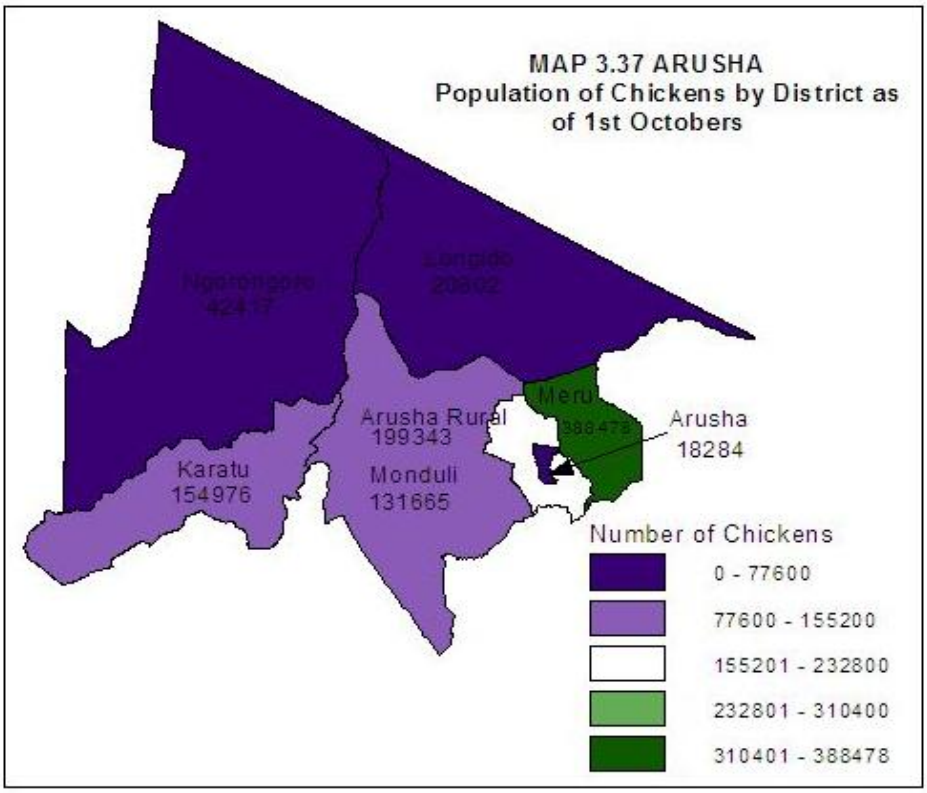
Table 3.27: Number of Other Livestock by Type of Livestock and District as of 1st October 2008

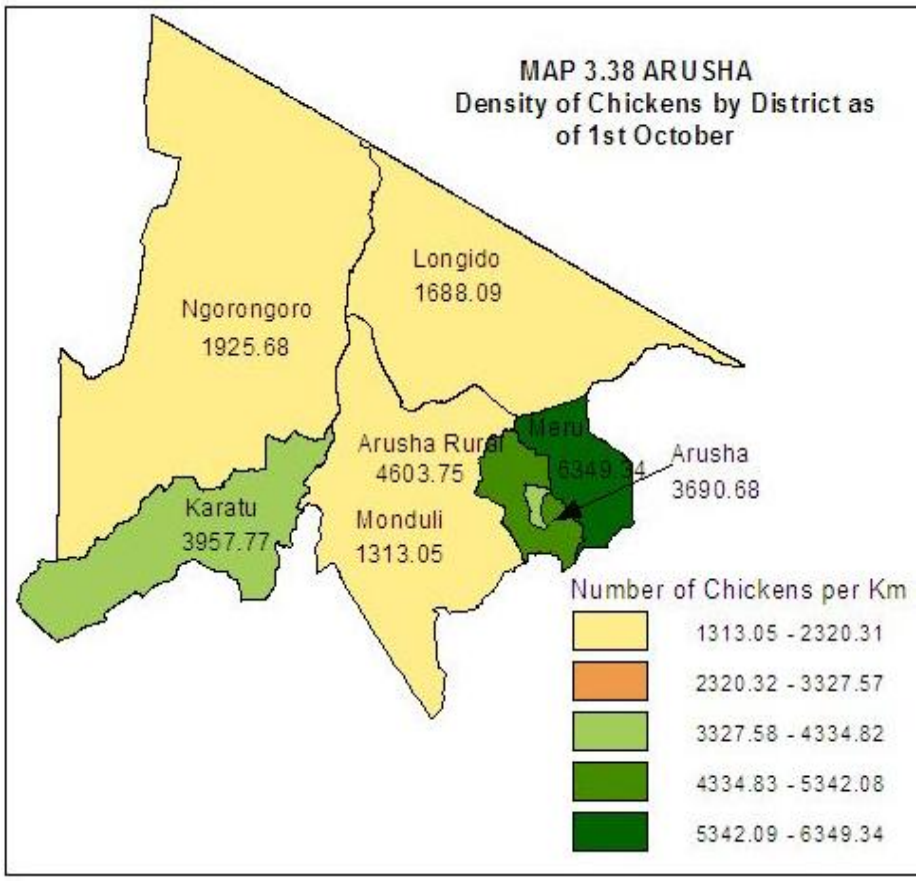
District	Ducks	Guinea Pigs	Turkeys	Rabbits	Donkey	Horses	Dogs
Monduli	0	0	0	714	31,077	0	20,003
Arusha	511	0	0	170	2,131	0	2,898
Karatu	4,367	0	0	178	1,961	0	3,743
Ngorongoro	355	0	995	426	43,980	71	23,376
Longido	722	202	0	318	10,343	0	4,652
Arusha Rural	478	2,389	717	1,314	9,675	0	13,974
Meru	976	1,098	1,342	366	5,856	0	12,567
Total	**7,410**	**3,689**	**3,053**	**3,487**	**105,023**	**71**	**81,213**

The biggest number of ducks in the region was found in Karatu District (59% of all ducks in the region), followed by Arumeru (13.2%), Longido (9.7%), Arusha (6.9%), Arusha Rural (6.4%), and Ngorongoro (4.8%). There were no ducks production in Monduli. Turkeys were reported in Arumeru only. Guinea pigs were reported in Longido, Arusha Rural, and Arumeru districts only. Turkeys were reported in Ngorongoro, Arusha Rural, and Arumeru districts. There was good production of donkeys, rabbits, and dogs in all the districts. The production of horses was reported in Ngorongoro only (Chart 3.129 and Chart 3.130).

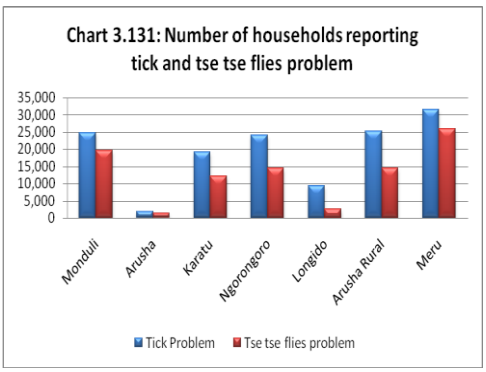





MAP 3.37 ARUSHA
Population of Chickens by District as of 1st Octobers
Ngorongoro
Longido
Arusha Rural
199343
Meru
Arusha
18284
Karatu
154976
Monduli
131665
Number of Chickens
0 - 77600
77600 - 155200
155201 - 232800
232801 - 310400
310401 - 388478

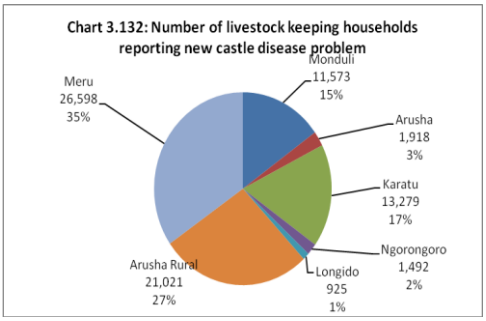

MAP 3.38 ARUSHA
Density of Chickens by District as of 1st October
Longido
1688.09
Ngorongoro
1925.68
Arusha Rural
4603.75
Meru
Arusha
3690.68
Karatu
3957.77
Monduli
1313.05
Number of Chickens per Km
1313.05 - 2320.31
2320.32 - 3327.57
3327.58 - 4334.82
4334.83 - 5342.08
5342.09 - 6349.34

3.12.7 Pest and Parasite Incidence and Control



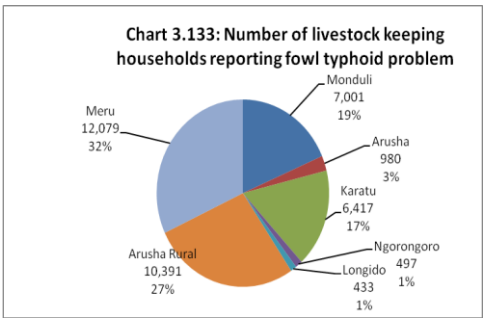
The results indicate that 75 percent and 49 percent of the total livestock-keeping households reported to have encountered ticks and tsetse fly problems respectively. Chart 3.131 shows that there is a predominance of tick related diseases over tsetse related diseases. Incidences of both problems were highest in Arumeru district but lowest in Arusha district (Map 3.39).

3.12.7. 1 Newcastle Disease



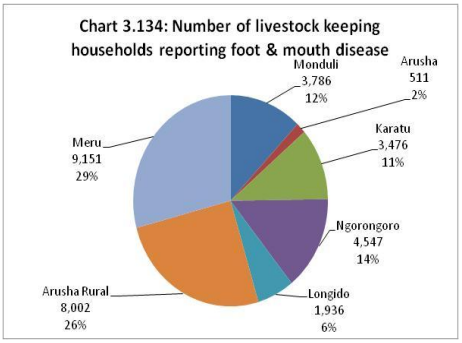
New castle disease was reported by 76,806 livestock keeping households or 41% of all agricultural households in Arusha region. Meru had the highest incidence of Newcastle Problem (35% of households in the district), followed by Arusha rural (27%) Karatu (17%), Monduli (15%), Arusha (3%), Ngorongoro (2%) and Longido (1%). (5 and 8 percents respectively) (Chart 3.132).

3.12.7. 2 Fowl Typhoid Disease



Fowl typhoid was a notorious problem in Arusha Rural affecting 40 percent of livestock keeping households. This is followed by three districts with slight variations amongst them namely with their order of important Arumeru, Monduli, Arusha Rural and Karatu affecting 27, 26, 24, and 21 percents respectively of livestock keeping households (Chart 3.133).

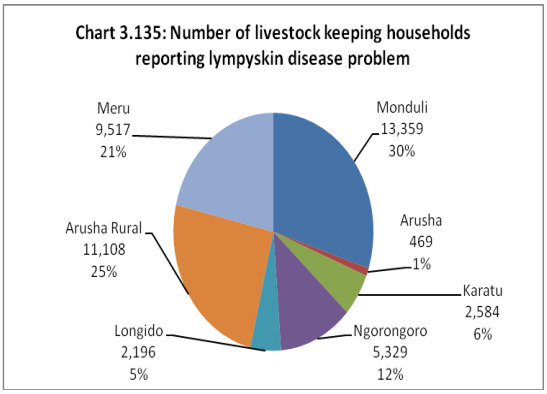
3.12.7. 3 Foot and Mouth Disease



Foot and Mouth Problem in the Region affected 31,410 livestock keeping households in all districts with slight variations across the districts. The prevalence of the problem was highly reported in Meru (26% of all livestock keeping households reporting F&MD in the region), closely followed by Arusha rural (26%), Ngorongoro (14%), Monduli (12%), Karatu (11%), Longido (6%) and Arusha (2%). (Chart 3.134).

3.12.7.4 Lympyskin Disease

Lympy skin disease problem was reported by 44,562 or 24% of all agricultural households in Arusha region. It was most prevalent in Arusha in Monduli (30% of livestock keeping household in the region), followed by Arusha Rural district (25%), Meru (21%), Karatu (6%), Longido (5%) and Arusha (1%). (Chart 3.135)



3.12.7.5 Methods of livestock disease control

The main methods used in ticks and tse tse flies control are dipping, spraying, trapping (tse tse flies) and smearing. The most practiced method of tick controlling was spraying, which is used by 65 percent of all livestock rearing households in the region. Other methods used by order of importance include dipping (7.7%), smearing (3.9%), and other traditional methods like hand picking (0.5%). However, 22 percent of livestock-keeping households did not use any method. This was a high percentage given the high prevalence of the problem in the region (Table 3.28 and Chart 3.136).

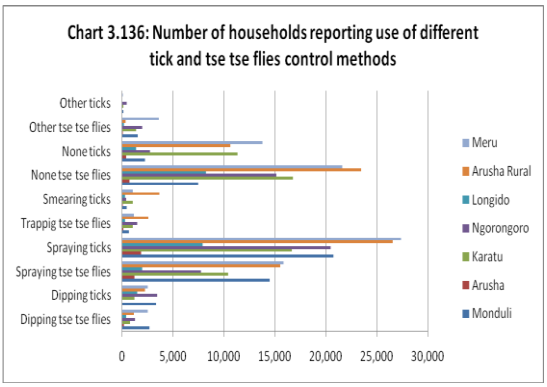
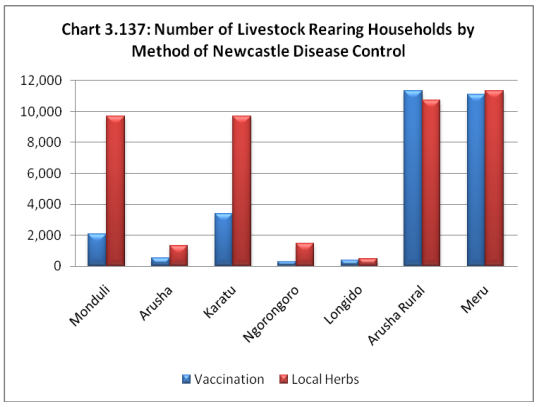


Table 3.28: Number of livestock keeping households reporitng methods of ticks and tse tse flies control

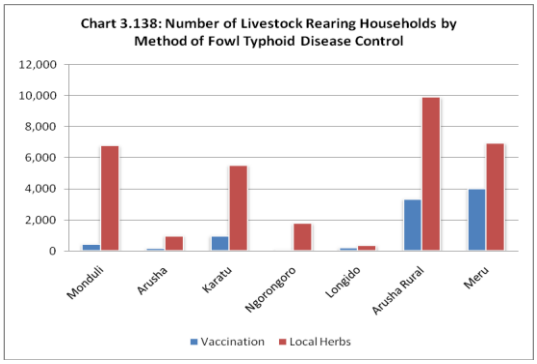
District	Dipping tse tse flies	Dipping ticks	Spraying tse tse flies	Spraying ticks	Trappig tse tse flies	Smearing ticks	None tse tse flies	None ticks	Other tse tse flies	Other ticks	Total HH
Monduli	2,715	3,358	14,502	20,718	714	500	7,501	2,286	1,572	143	27,004
Arusha	213	43	1,236	1,875	170	128	767	426	85	-	2,472
Karatu	802	1,248	10,427	16,665	1,069	1,069	16,754	11,318	1,426	178	30,478
Ngorongoro	1,279	3,481	7,745	20,463	1,492	426	15,134	2,771	1,989	497	27,639
Longido	433	1,502	1,994	7,916	347	318	8,234	1,416	202	58	11,210
Arusha Rural	1,194	2,269	15,527	26,515	2,628	3,703	23,410	10,630	358	-	43,117
Meru	2,562	2,562	15,861	27,330	1,220	1,098	21,596	13,787	3,660	122	44,899
Total	**9,199**	**14,463**	**67,292**	**121,483**	**7,641**	**7,242**	**93,396**	**42,634**	**9,293**	**998**	**186,821**

The most common method used to control tsetse flies in Arusha region was spraying which was practiced by 36 percent of livestock-rearing households. This was followed by dipping (5%) and trapping (4%). However, 50 percent of the livestock rearing households did not use any of the three aforementioned methods. This was a very high percentage given the high prevalence of the problem in the region.

Newcastle disease was most commonly controlled using local herbs (reported by 24%), and vaccination (16%). However, most (60 %) of livestock keeping households in the region reported to be not to be using any control methods against Newcastle disease (Chart 3.137). This is an alarming figure especially given the high incidence of disease in the region, whereby in some districts (i.e. Arusha) the prevalence of the disease was reported by as high as 79 percent of livestock keeping households.



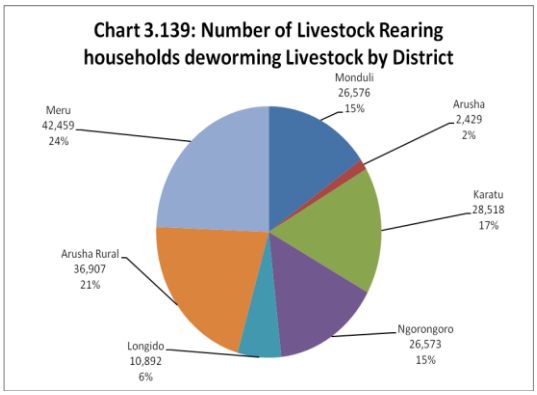
Local herbs was the most common problem in controlling Fowl Typhoid (reported by 17 % of livestock keeping households, and vaccination which was reported by 5 percent of livestock keeping households (Chart 3.138).



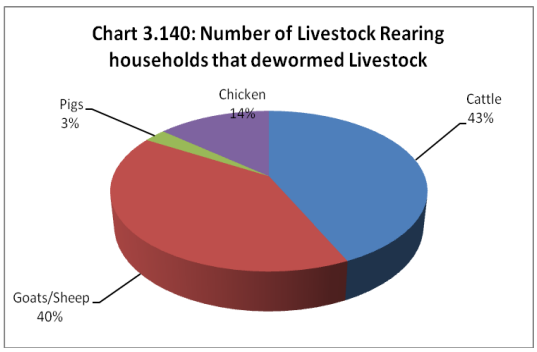
However, seventy eight percent in Arusha of livestock keeping households in Arusha did not use any control method against Lymp skin.

3.12.8 Deworming

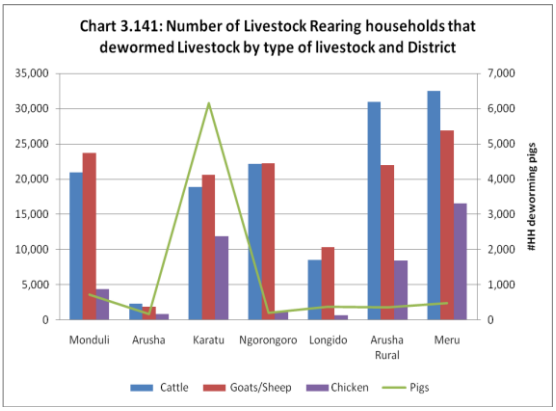
Livestock rearing households that dewormed their animals were 174,354 (93% of the total livestock rearing households in the region). Meru district was leading by having 24% of all households in the region deworming livestock. This was followed by Arusha rural (22%), Karatu (17%), Monduli & Ngorongoro (15%), Longido (6%) and Arusha (2%) (Chart 3.139).

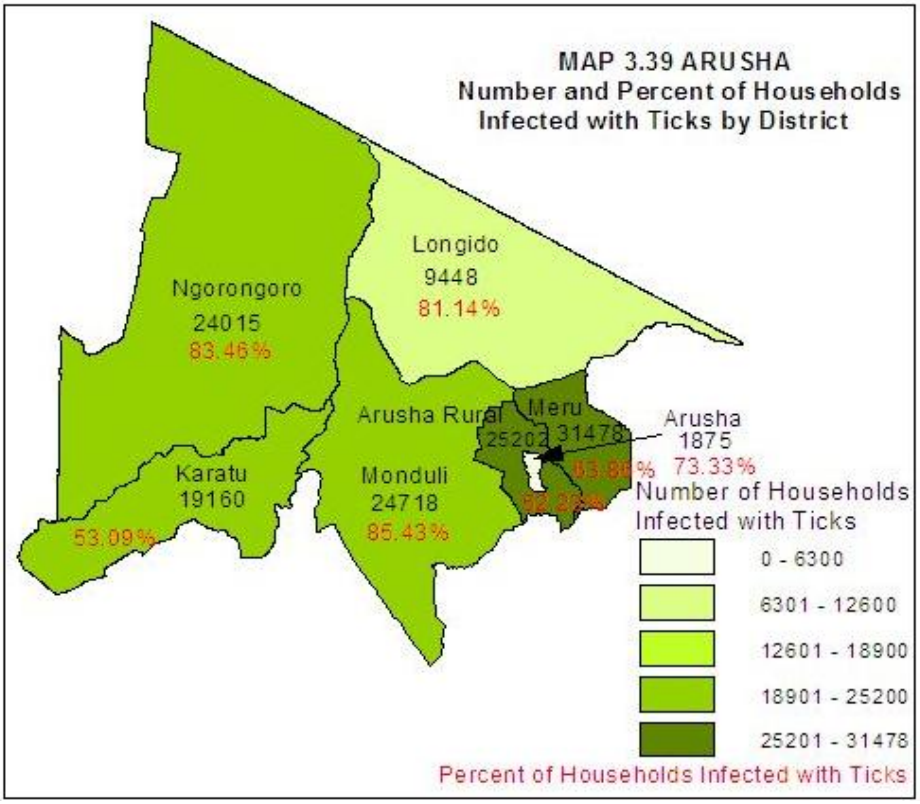


The percentage of the households that dewormed cattle was 43 percent, sheep & goats (40%), chicken (14%) and pigs (3%) (Chart 3.140).



Arusha district had the highest percentage (89.7%) of agricultural households in the district deworming cattle closely followed by Arusha Rural (83.3%), Ngorongoro (82.9%). The lowest percentage of households deworming cattle is found in Arumeru (76.2%). Longido had the highest percentage (93.2%) of households in the district deworming goats closely followed by Monduli (89.2%) and Ngorongoro (83.4%). Arusha Rural had the lowest percentage of households deworming goats (59.2%). Arumeru was leading in deworming chicken (38.7%), followed by Arusha district (33.3%). Chicken were least dewormed in Ngorongoro district (3.7%) (Chart 3.141).




MAP 3.39 ARUSHA
Number and Percent of Households
Infected with Ticks by District
Longido
9448
81.14%
Ngorongoro
24015
83.46%
Arusha Rural
25202
Meru
31478
Arusha
1875
73.33%
Karatu
19160
53.09%
Monduli
24718
85.43%
Number of Households
Infected with Ticks
0 - 6300
6301 - 12600
12601 - 18900
18901 - 25200
25201 - 31478
Percent of Households Infected with Ticks

3.12.9 Fish Farming

The number of households involved in fish farming in Arusha region was insignificant (122hh, representing 0.03 percent of the total agricultural households in the region. The little practice of fish farming in the region was reported in Meru district only and none was reported in the rest of the districts.

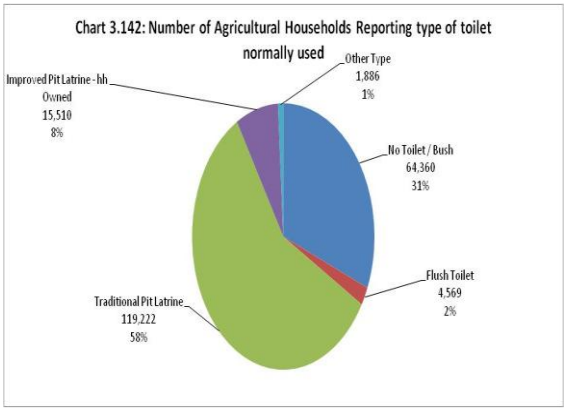
The common type of fish being stocked in Meru district is Tilapia. The main source of fingerings was the nongovernmental organizations and/or projects. All fish farming households in the region used the dug-out-pond system. There were 300 stocked fish and all were tilapia. All the fish farming households in Arusha did not sell the fish they harvested.

3.13 Poverty Indicators

The agricultural census collected data on poverty for the purpose of providing a base for tracking progress in poverty reduction strategies undertaken by the government. The poverty indicators used in this part are access to infrastructure, toilet facilities, household assets, source of lighting & cooking energy, roofing material, access to drinking water, food consumption pattern, meat & fish consumption frequency, food security and main source of cash income.

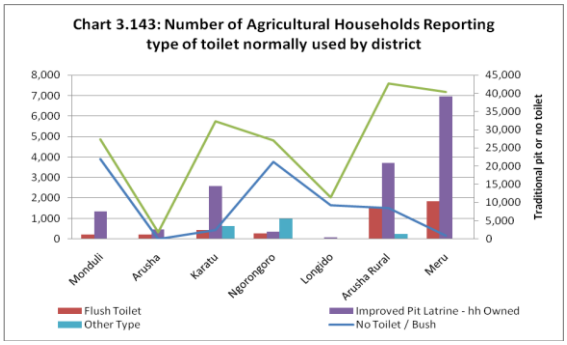
3.13.1 Type of Toilets

A large number of rural agricultural households use traditional pit latrines (119,222 households, 58% of all rural agricultural households), 15,510 households (8%) use improved pit latrine and 4,569 households (2%) use flush toilets. The remaining 1,886 households (1%) use other toilets facilities. However, 64,360 households (31%) in the region had no toilet facilities (Chart 3.142).



Arusha region had a total of 141,187 households with toilets in which Meru district had 34% of all households having toilets in the region. This was followed by Arusha rural (28%), Karatu (24%), Ngorongoro (5.4%), Monduli (5%), Arusha (1.8%) and Longido (1.7%). The distribution of the households without toilets within the region indicates that 34.1 percent of these households were found in Monduli District, followed by Ngorongoro by 32.9 percent, Longido (14%), Arusha Rural

(13%), Karatu (4%) and Meru (2%). Arusha reported no household lacking toilet (Chart 3.143 and Map 3.40).



3.13.2 Household's Assets

Most rural agricultural households (134,779hh, 65.6%) in Arusha region owned Radios/Systems, followed by those who owned Mobile phones (50.6%). Bicycle was third most important asset owned by (31.6%), followed Pressing Iron (31%), wheelbarrow (17.8%), vehicle 7.6, television/video (6.2%). Those owning refrigerator and television (both account for 3.3 per cent), and Motor Cycle (.2'7%) (Chart 3.144, Table 3.29).

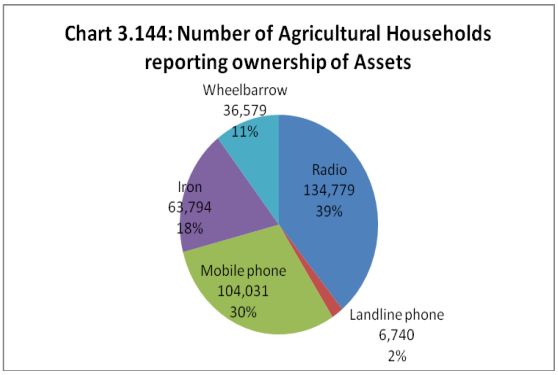
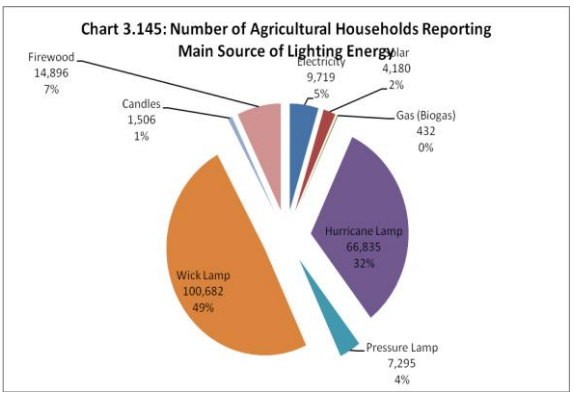


Table 3.29: Number of Agricultural Households reporting Ownership of Assets by District.

District	System	Tele(Land)	Mobile	P/Iron	Wheel barrow	Bicycle	Vehicle	Tele vision	Refriger ator	M/Cyc le
Monduli	15,860	786	12,002	3,501	1,357	6,144	2,286	357	143	429
Arusha	2,216	43	1,790	1,236	639	1,492	256	341	213	170
Karatu	22,101	1,337	18,091	9,803	3,386	16,041	3,832	267	178	802
Ngorongoro	12,576	497	12,008	2,771	1,350	2,203	568	0	213	71
Longido	5,316	116	3,814	780	722	1,762	318	202	58	376
Arusha Rural	35,593	2,986	24,604	19,349	13,019	16,721	5,016	4,658	3,225	2,508
Meru	41,117	976	31,722	26,354	16,105	20,498	3,294	6,955	2,806	1,220
Total	134,779	6,740	104,031	63,794	36,579	64,861	15,571	12,780	6,836	5,576
Total	**134,779**	**63,794**	**15,571**	**5,576**	**36,579**	**140,687**	**15,571**	**12,780**	**13,672**	**11,152**

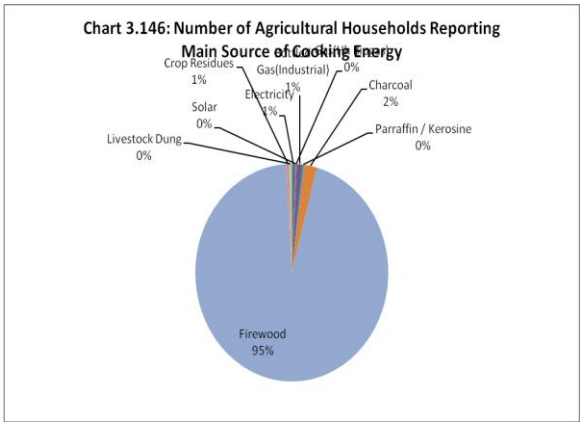
3.13.3 Sources of Lighting Energy

Wick lamp was the most common source of lighting energy in the region, with 49 percent of the total rural households using this source of energy. This is followed by hurricane lamp (32%), firewood (7%), mains electricity (4.7%), pressure lamp (3.5%), solar (2.0%), candle (0.7%), and gas or biogas (0.2%) (Chart 3.145).



3.13.4 Sources of Energy for Cooking

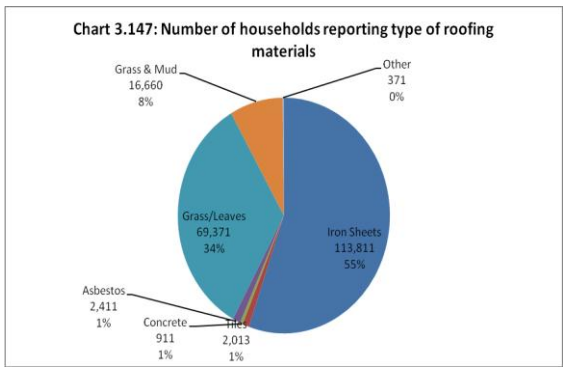
The most important source of energy for cooking was firewood, which was used by 94.9 percent of all rural agricultural households in Arusha region. This is followed by charcoal (2.0%). The rest of energy sources accounted for 2.9 percent. These sources in their order of importance were bottled gas (1.0%), mains electricity and crop residues (0.5% for each source), livestock dung (0.4%), paraffin/kerosene (0.3%), solar (0.2%), and gas/biogas (0.1%) (Chart 3.146).



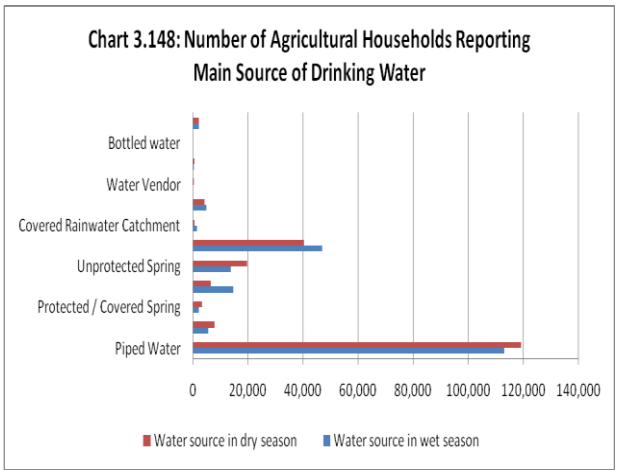
The most prevalent source of energy for cooking was firewood, which was used by 96 percent of all rural agricultural households. The second most common source of energy for cooking was charcoal (2 percent), Mains Electricity (1.11%, and crop residue (0.8%). The rest of energy sources accounted for less than 1 percent each. These were solar energy (0.1%), Gas (Biogas) (0.2%), bottled gas (0.3%) paraffin/kerosene (0.2%), biogas (0.1%)

3.13.5 Roofing Materials

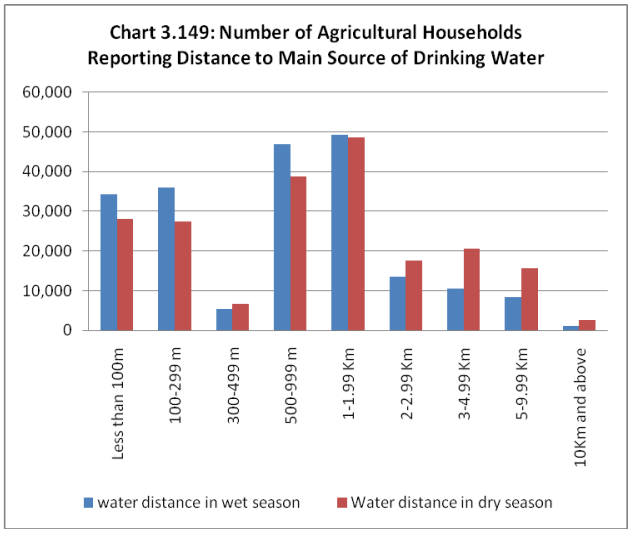
The most common material used for roofing of the main dwelling was iron sheet and it was used by 55.4 percent of the rural agricultural households. Grass/Leaves was second most roofing material used by 33.7 percent, followed by grass/mud (8.1%), asbestos (1.2%), tiles (1%), concrete (0.4%) and others (0.1%) (Chart 3.87). Arusha district had the highest percentage of households with iron sheet roofing material (96.7%), closely followed by Arumeru (93.3%) Arusha Rural (72.5), Karatu (53.8%), Monduli (22.0%), Longido (14.1%), and Ngorongoro district (10.1%) (Chart 3.147 and Map 3.41).



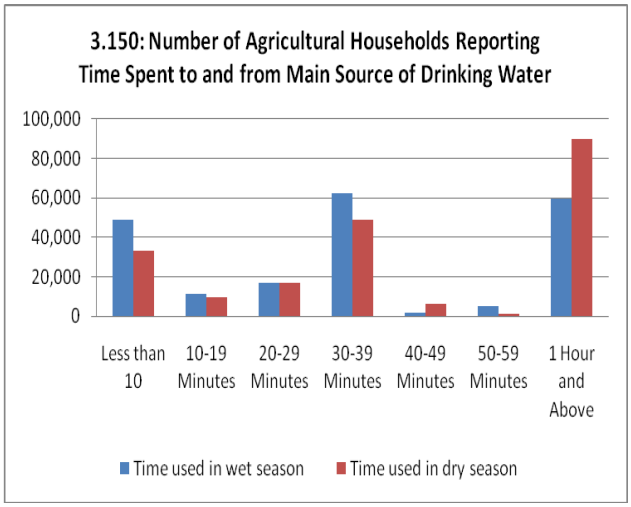
3.13.6 Access to Drinking Water



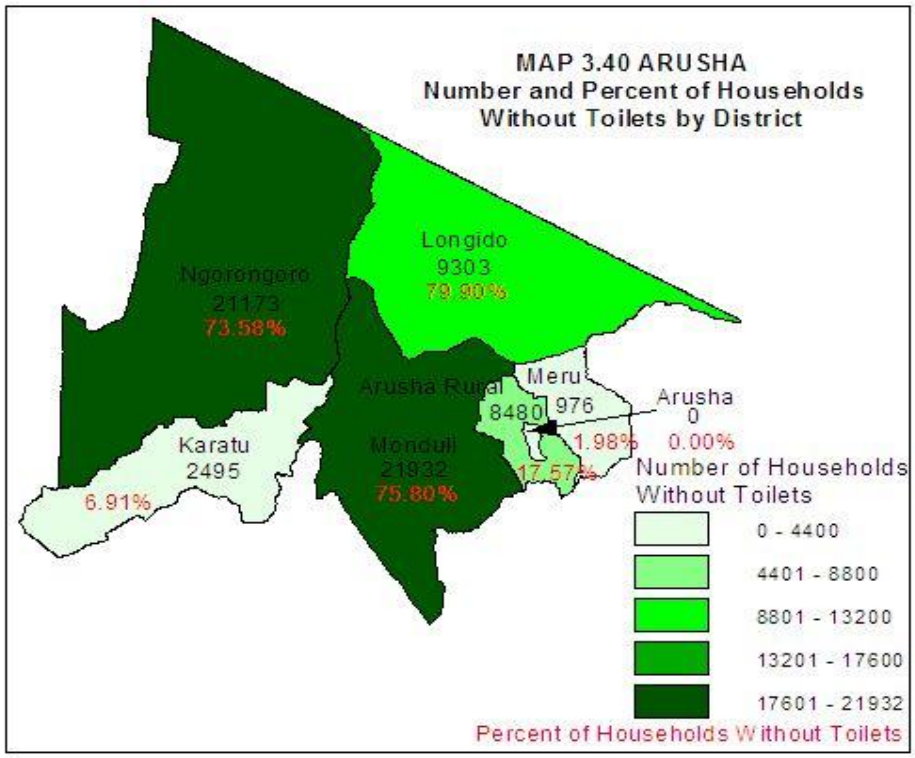
The main source of drinking water for rural agricultural households in Arusha region was piped water (58 percent of households). This is followed by surface water (19.6%), unprotected spring (9.6% of households), protected well (3.9%), unprotected well (3.2%), uncovered rainwater catchment (2.1%), protected covered spring (1.71). Other sources were of minor importance and accounted for less than 1 percent of the households using each source (Chart 3.148)

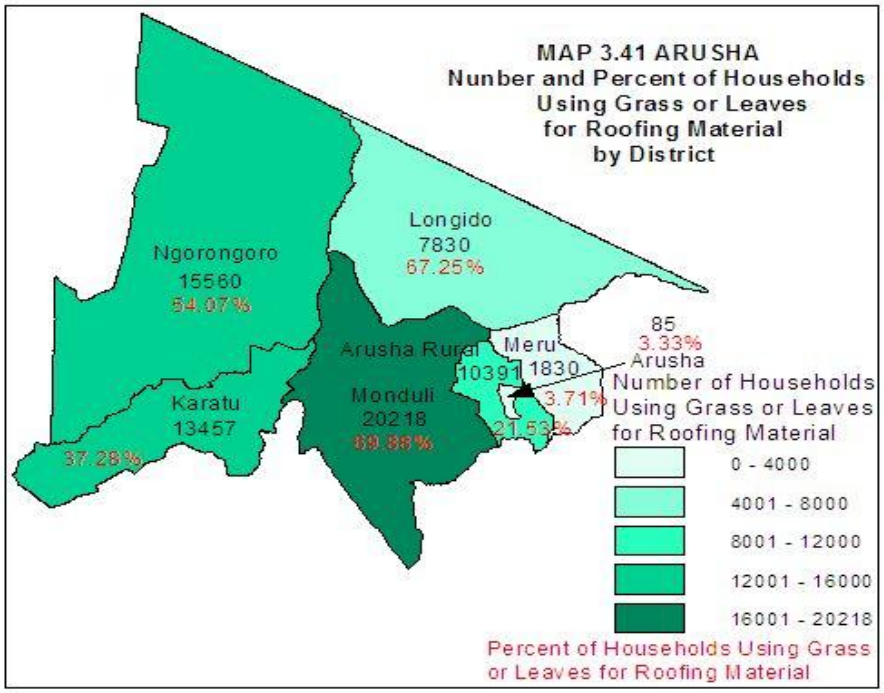


About 83.8 percent of the rural agricultural households in Arusha region obtained drinking water within a distance of less than 1 kilometer during wet season compared to 72.7 percent of the households during the dry season. However, 16.3 percent of the agricultural households obtained drinking water from a distance of one or more kilometers during wet compared to 27.3 percent of households in the dry season. The most common distance from the source of drinking water was between 1 and 2 km. followed by half a kilometer to 1 kilometer (Chart 3.149).



29% and 44% of agricultural households reporting spending one hour and above to and from the main source of drinking water in wet and dry seasons respectively. 24% and 16% of agricultural households reporting spending less than 10 minutes to and from the main source of drinking water in wet and dry seasons respectively (Chart 3.150).


MAP 3.40 ARUSHA
Number and Percent of Households
Without Toilets by District
Longido
9303
79.90%
Ngorongoro
21173
73.58%
Arusha Rural
8480
1.98%
Meru
976
17.57%
Arusha
0
0.00%
Karatu
2495
6.91%
Monduli
21932
75.80%
Number of Households
Without Toilets
0 - 4400
4401 - 8800
8801 - 13200
13201 - 17600
17601 - 21932
Percent of Households Without Toilets


MAP 3.41 ARUSHA
Nunber and Percent of Households
Using Grass or Leaves
for Roofing Material
by District
Longido
7830
67.25%
Ngorongoro
15560
54.07%
Arusha Rural
10391
3.71%
Meru
1830
21.53%
Arusha
85
3.33%
Karatu
13457
37.28%
Monduli
20218
69.86%
Number of Households
Using Grass or Leaves
for Roofing Material
0 - 4000
4001 - 8000
8001 - 12000
12001 - 16000
16001 - 20218
Percent of Households Using Grass
or Leaves for Roofing Material

3.13.7 Food Consumption Pattern

3.13.7.1 Number of Meals per Day

The majority (56%) of households in Arusha region normally have 3 meals per day. This is followed by those getting 2 meals per day (42 percent) and lastly 1 meal per day (2 percent). There were no households having more than 3 meals per day (Chart 3.151). Arusha Rural District had the largest percent of households eating one meal per day (47.3%) whilst Arumeru district had the highest percent of households eating 3 meals per day (Table 3.30 and Map 3.42).

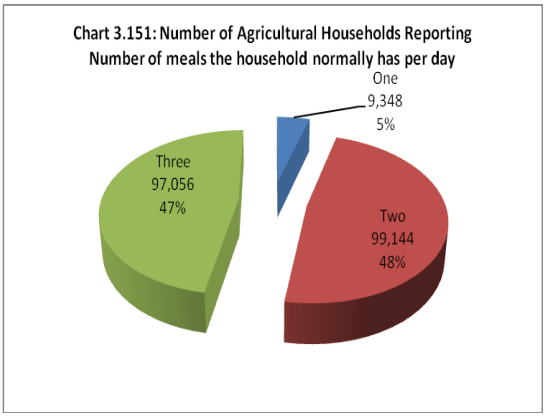
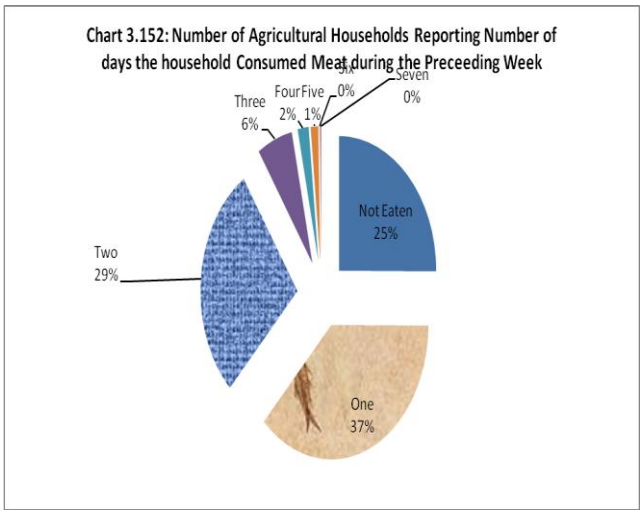


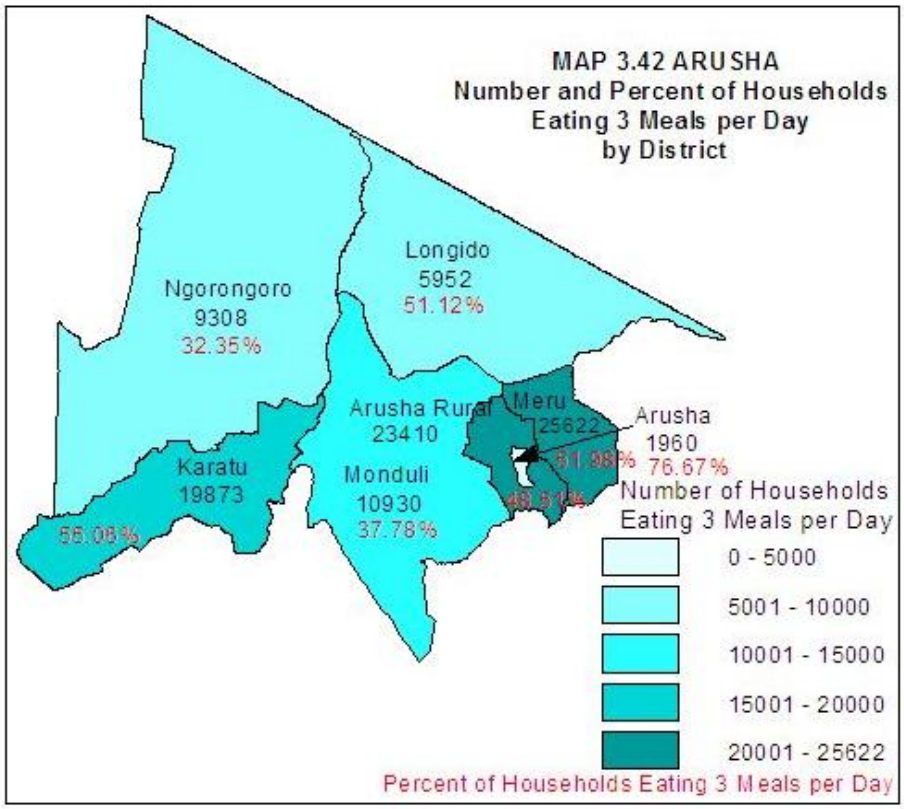
Table 3:30: Number and Percentage of Agricultural Households Reporting Number of meals the household normally has per day by District.

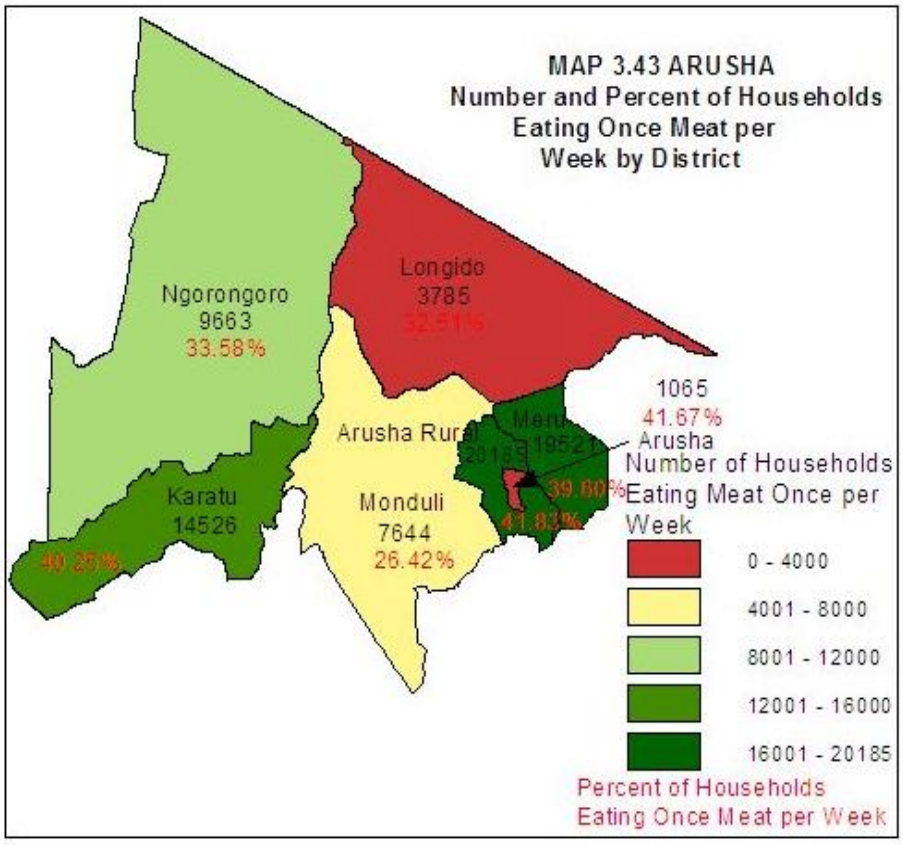
District	One	%	Two	%	Three	%	Total
Monduli	1,572	16.8	16,431	16.6	10,930	11.3	28,933
Arusha	213	2.3	384	0.4	1,960	2.0	2,557
Karatu	446	4.8	15,774	15.9	19,873	20.5	36,093
Ngorongoro	213	2.3	19,255	19.4	9,308	9.6	28,776
Longido	1,387	14.8	4,305	4.3	5,952	6.1	11,644
Arusha Rural	4,419	47.3	20,424	20.6	23,410	24.1	48,253
Meru	1,098	11.7	22,572	22.8	25,622	26.4	49,292
Total	**9,348**	100	**99,144**	100.0	**97,056**	100.0	**205,547**
%	**4.5**		**48.2**		**47.2**		**100.0**

3.13.7.2 Meat Consumption Frequency

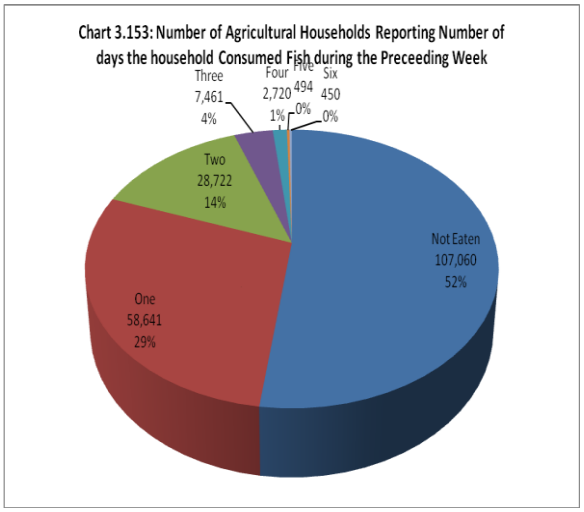
The number of agricultural households that consumed meat during the week preceding the census was 153,997 (74.9% of the agricultural households in Arusha region) with 76,390 households (37.2 % of those who consumed meat) consuming meat only once during the respective week. This was followed by those who had meat twice during the week (28.4%). Very few households had meat three or more times during the respective week. About 25.1 percent of the agricultural households in Arusha region did not eat meat during the week preceding the census (Chart 3.152 and Map 3.43).




MAP 3.42 ARUSHA
Number and Percent of Households
Eating 3 Meals per Day
by District
Ngorongoro
9308
32.35%
Longido
5952
51.12%
Arusha Rural
23410
Meru
25622
Arusha
1960
76.67%
Karatu
19873
Monduli
10930
37.78%
Number of Households
Eating 3 Meals per Day
0 - 5000
5001 - 10000
10001 - 15000
15001 - 20000
20001 - 25622
Percent of Households Eating 3 Meals per Day

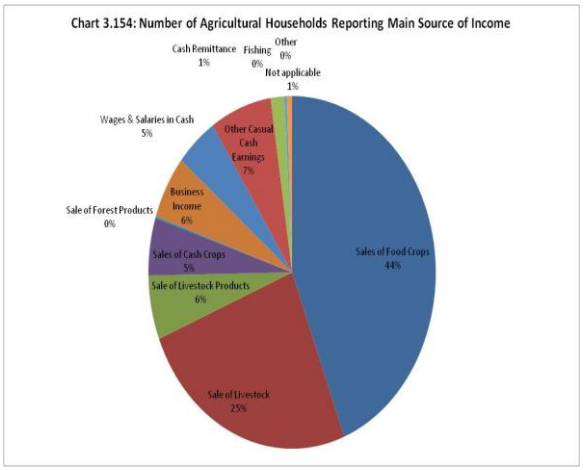

MAP 3.43 ARUSHA
Number and Percent of Households
Eating Once Meat per
Week by District
Ngorongoro
9663
33.58%
Longido
3785
1065
41.67%
Arusha Rural
Arusha
Karatu
14526
Monduli
7644
26.42%
Number of Households
Eating Meat Once per
Week
0 - 4000
4001 - 8000
8001 - 12000
12001 - 16000
16001 - 20185
Percent of Households
Eating Once Meat per Week

3.13.7.3 Fish Consumption Frequencies



The number of agricultural households that consumed fish during the week preceding the census was 98,488 (47.9% of the total agricultural households in Arusha region) with 58,641 households (28.5 % of those who consumed fish) consuming fish once during the respective week. This was followed by those who had fish twice (14.0%). In general, the percentage of households that consumed fish twice or more during the week in Arusha region was 11,125 (11.3% of the agricultural households that ate fish in the region during the respective period). About 52.1 percent of the agricultural households in Arusha region did not eat fish during the week preceding the census (Chart 3.153 and Map 3.44).

3.13.8 Main Sources of Cash Income



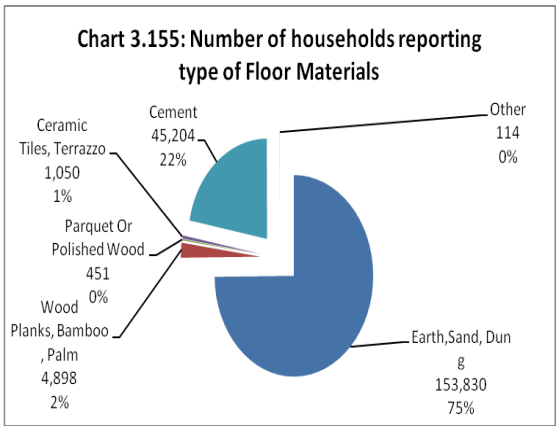
The main cash income of the households in Arusha region was reported for on farm activities which included crop/seaweed farming, livestock keeping, livestock pastoralist, fishing and fish farming. The results indicate that crop and seaweed was the main income earner for 32, 2397 (75 percent of smallholder households), followed by engagement in livestock with 112919 (26 percent of households), livestock pastoralist 4,775 (1%0. Fishing was insignificant as a main occupation having only 905 (1%) household members, and no household member was recorded under fishing farming activity in the region (Chart 3.154 and Table 3.31).

Table 3.31 Number of Households by Main on farm Income Activities and by District

District	Crop/Seaweed Farming		Livestock Keeping / Herding		Livestock Pastoralist		Fishing		Fish Farming	
	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	37,078	30.2	23,004	18.8	3,286	3	143	0.1	0	0
Arusha	5,029	30.9	1,534	9.4	85	1	0	0.0	0	0
Karatu	87,068	49.6	5,704	3.3	0	0	267	0.2	0	0
Ngorongoro	15,063	12.5	52,933	43.9	497	0	71	0.1	0	0
Longido	7,194	15.6	16,555	35.8	665	1	58	0.1	0	0
Arusha Rural	77,994	35.7	10,749	4.9	119	0	0	0.0	0	0
Meru	92,971	42.4	2,440	1.1	122	0	366	0.2	0	0
Total	**322,397**	**35.1**	**112,919**	**12.3**	**4,775**	**1**	**905**	**0.1**	**0**	**0**

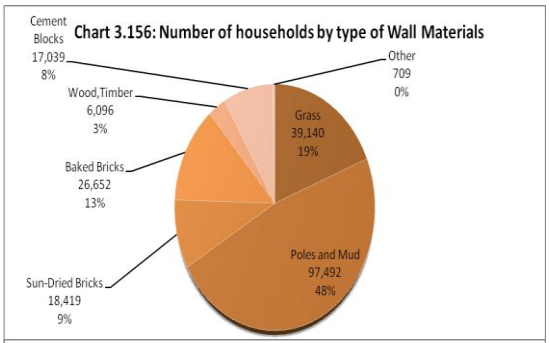
3.13.9 Type of floor

A total of 205,547 agricultural households in Arusha region reported to have used different types of floor materials. The most common floor material was earth, sand and dung and it was used by 153,830 or 75% of all households that reported various types of floor material. This was followed by cement (22%), wood, planks, bamboo and palm (2%). Other floor materials like ceramic, tiles, terrazzo, perquent/polished wood were least common and were collectively used by 1% of the agricultural households (Chart 3.155)



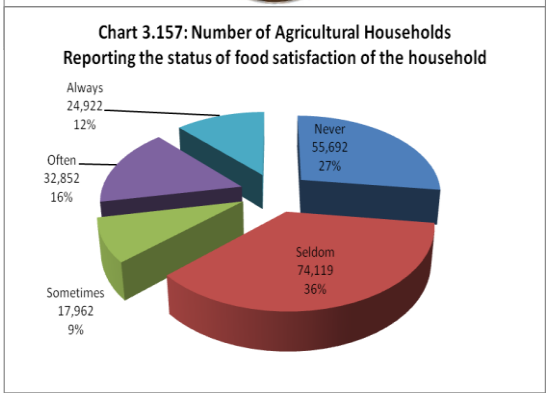
3.13.10 Type of wall material

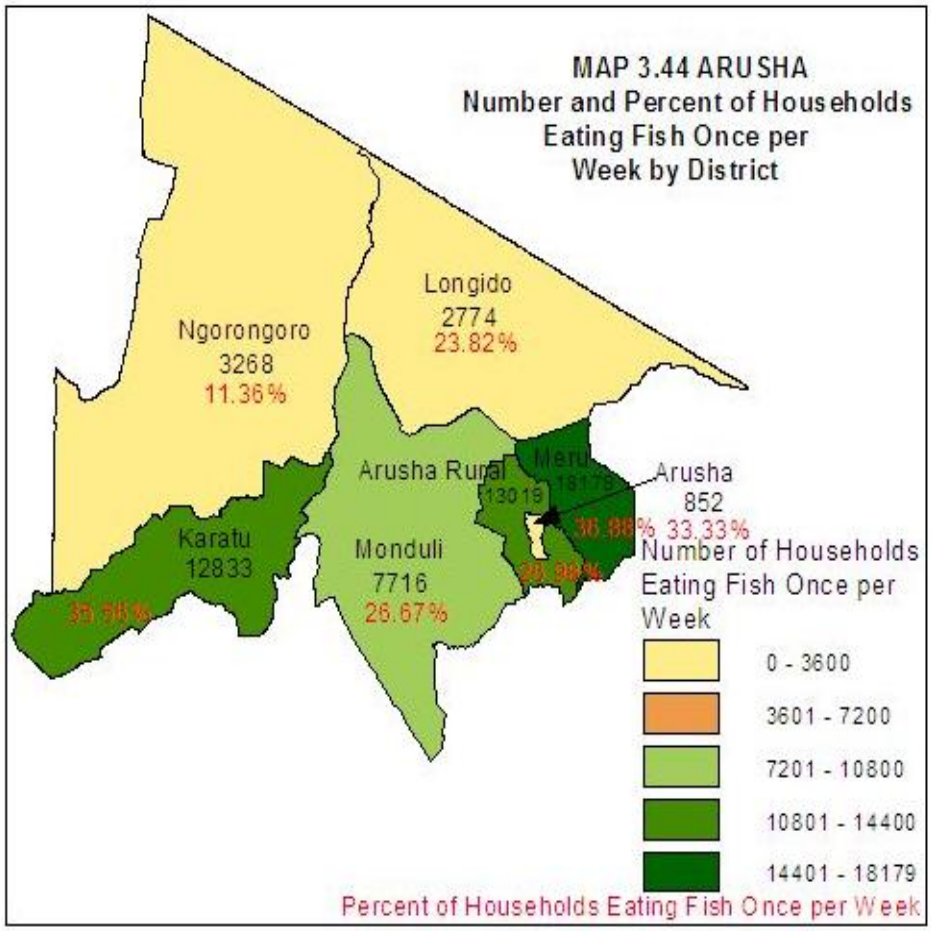
A total of 205,547 agricultural households reported the use of different types of wall materials. The most common material was poles & mud that was used by 48% of all respondents. Other types were grass (19%), baked bricks (13%), sun dried bricks (9%), cement blocks (8%) and wood/timber (3%). Other materials were negligible. No stones were reported in the region (Chart 3.156).



3.13.11 Status of food satisfaction

A total of 205,547 agricultural households reported different levels of food satisfaction. 36% reported to have seldom been satisfied. Others said they were never satisfied (27%), always satisfied (12%), sometimes satisfied (9%) and other levels (16%) (Chart 3.157)




MAP 3.44 ARUSHA
Number and Percent of Households Eating Fish Once per Week by District
Ngorongoro
3268
11.36%
Longido
2774
23.82%
Arusha Rural
13019
Meru
18179
Arusha
852
33.33%
Karatu
12833
Monduli
7716
26.67%
Number of Households Eating Fish Once per Week
0 - 3600
3601 - 7200
7201 - 10800
10801 - 14400
14401 - 18179
Percent of Households Eating Fish Once per Week

4 ARUSHA PROFILES

This section presents the status of crops and livestock production, access to natural resources and services, demography and poverty for both the region as a whole and for each district.

4.1 Region Profile

The region profile describes the status of the Agriculture sector in the region and compares it with other regions in the country.

4.2 District Profiles

The following district profiles highlights the characteristics of each district and compares them in relation to Population, Main crops and livestock, production and productivity, access to services and resources and levels of poverty.

4.2.1 Monduli

Monduli district has the second largest number of households in the region after Arusha Rural, and it has moderate percent of households involved in smallholder agriculture in the region. Most smallholders are involved in crop/seaweed farming only, livestock production. It has a small number of livestock pastoralist only households and no fish farmers were found in the district. The most important livelihood activity for smallholder households in Monduli district is Annual Crop Farming, followed livestock keeping or herding. Monduli has a moderate literacy rate among smallholder households and this is reflected by the concomitant relatively high level of school attendance in the region. The literacy rate for the heads of household is also moderate in the region.

The utilized land area per household in Monduli is more or less the same with those in other areas, as there was almost no variations in land area utilised per household across districts. The allocated area is fully utilised indicating a high level of land pressure. Monduli has the largest total planted area (average of two seasons among districts in the region due to the presence of good wet and dry seasons, however it also has the largest planted area per household (1.4ha) attributed to the high number of smallholders in the district.

The district is the second important for maize production in the region with a planted area of over 29,335 ha; however it has the highest planted area per household in the region. Monduli is also

leading in paddy production with a planted area of 887 hectares; however it has the lowest paddy planted area per household.

The district is the second largest producer of other serials especially sorghum and wheat. The production of roots and tubers notably cassava, Irish potatoes and sweet potatoes, which were produced in other districts was not found in Monduli. The production of beans in Monduli is the third highest in the region with a planted area of 20,789 hectares. Oil seed crops are not important in Monduli and only groundnuts were grown in the district. Vegetable production is not important in the district. Only cabbage is produced in significant amounts (22ha) accounting to only 4 percent of total area of production; and negligible amounts of tomatoes and onions are produced in the district.

Compared to other districts in the region, Monduli has a moderate planted area with permanent crops, which is dominated by Mango 11.9 percent of planted area and banana 6 percent of planted area and Pigeon peas 2.7 percent of the total planted area with permanent crops. Other permanent crops are either not grown or are grown in very small quantities. As with other districts in the region, most land clearing and preparation is done by sword and hand hole, however there were some other equipment in agricultural operations generally such as ox plough, Grater, Chipper, Oil Press and Oil Mill, and ox planter.

Monduli has the fourth largest planted area with improved seed in Arusha region and this is due to the higher planted area of vegetables. The district has the third largest planted area with fertilizers (both organic and inorganic); however most of this is organic fertilizer. Compared to other districts in the region, Monduli district has the third highest in the use of insecticides. The use of fungicides, although small, was moderate to high compared to other districts. Virtually small amount of herbicide was used. It has moderate area with irrigation compared to other districts with 9.8 percent of irrigated land, with gravity as the main source of irrigation water from rivers.

The most common method of crop storage is in locally made traditional structures; however the proportion of households storing crops in the district is the third biggest in the region. The district has the third largest number of households selling crops, however for those who did not sell, the main reason for not selling is insufficient production. Monduli had the second biggest number of households receiving agricultural credit. Monduli is one of the two districts where both male and

female headed households had equal access to agricultural credit. The main source for agricultural credits in the districts was family and friends. Comparatively, there were little variations across districts with regards to access to crop extension services, with some districts having slightly more access to extension services than others. Accordingly, Monduli had the third highest number of households receiving extension services and most of this is from the government.

Monduli had a moderate proportion of households with erosion control and water harvesting structures at 19.8 percent of agricultural households with erosion control and water harvesting structures; and these are mostly erosion control bands gabions/sandbags and terraces. It has the highest number of water harvesting bunds and the second with the highest number of gabions/sandbags, but second slowest number of terraces. The district has the second largest number of cattle in the region and they are almost all indigenous. It also has the second largest number of goats and sheep in the region. However, it has moderate number of pigs in the region and has a third highest number of chicken.

The district had the highest number of broilers and second highest number of layers in the region. Moderate number of rabbits and second highest number of donkeys are found in the district. Monduli had the second largest number of households reporting Tick and Tsetse problems and it had the second largest number of households de-worming livestock. The district had the highest number of households reporting the use of draft animals land cultivation in the region, it is one of the districts where no fish farming is practiced. Monduli district has the highest percent of households with no toilet facilities and it has the third highest percent of households owning bicycles, fourth mobile phones, vehicles, and TV/video. It has the third highest number of households using mains electricity in the region. The most common source of energy for lighting is the wick lamp and practically all households use firewood for cooking. The district has the third lowest percent of households with iron roofs by percent of households with iron roofs.

The most common source of drinking water is from piped water. It has moderate percentage of households having two or three meal per day. The district is second lowest of agricultural households reporting eating meat once per day, and had moderate number of households that did had fish once per week during the week prior to enumeration, however most households seldom had problems with food satisfaction.

4.2.2 Arumeru

Arumeru district has the largest number of households in the region and it has the second highest percentages of households involved in smallholder agriculture in the region. Most smallholders are involved in crop / sea weed farming, followed by livestock keeping/herding. It has a very small number of livestock pastoralists; fishing and fish farming were not practiced in the district. The most important livelihood activity for smallholder households in Arumeru district is crop / sea weed farming followed by livestock keeping/herding.

Arumeru has the highest literacy rate among smallholder households and this is reflected by the district having high level of school attendance in the region. However, the literacy rate for the heads of household is moderate among the districts in the region. The utilized land area per household in Arumeru is more or less the same with those in other areas, as there was almost no variations in land area utilised per household across districts. The district has the first largest planted area in the region, and the second largest planted area per household (0.9ha).

The district is very important for maize production in the region with a planted area of over 32,830 ha; however, the planted area per household is the second lowest for the region. The district has the largest planted area of paddy in the region with 272 hectares. However, it has the lowest area (435ha) planted with other serials (sorghum and wheat). As for the production of roots and tubers, the district is third in Irish potatoes (74ha), and fourth in sweet potatoes by 2.2 percent of the total land planted with sweet potatoes in the region.

The production of beans in Arumeru is such that the district has third highest in terms of area planted (19.4%) and second highest in terms of area planted per agricultural households. Sunflower production is widely practiced in Arumeru 74.3 percentage of the total area grown oil seeds and nuts crops in the region. There is moderate production of groundnuts in Arumeru district. Vegetable production is important in the district. It has the largest planted area with tomatoes accounting to 79 percent of tomatoes grown in the region, and cabbage (13 percent of the cabbage planted area), there is no onion production reported in the district. Arumeru is one of the two districts where traditional cash crops (e.g. tobacco) are grown in high quantities, and having the largest tobacco planted area in the district (92.7%).

Compared to other districts in the region, Arumeru has the largest planted area with permanent crops which is dominated by Banana (67% of planted area with permanent crops), banana (57.8%), and pigeon peas (24.6%). Other permanent crops are either not grown or are grown in very small quantities. As with other districts in the region, most land clearing and preparation is done by sword followed by hand hole. However, there were some other equipment in agricultural operations generally such as ox plough, Grater, Chipper, Oil Press and Oil Mill, and ox planter

The use of inputs in the region is very small, however district differences exist. Arumeru has the largest planted area with improved seed in the region as well as the highest proportion of households using improved seeds (42.2 % of the total area planted with improved seeds I the region. The district has the highest planted area with fertilizers (both organic and inorganic fertilizer); however most of this is organic.

Compared to other districts in the region, Arumeru district has the second highest level of insecticide use. The district was third lowest in the application of herbicide and the lowest in the application of fungicides. The most common source of water for irrigation is from rivers using gravity. Other common means of irrigation water application are insignificant. The most common method of crop storage in Arumeru district is in sacks/open drum; however the district has the second highest number of agricultural households reporting storing crops in the region.

Arumeru district is one of the districts with a large number of households selling crops, however for those who did not sell, the main reason for not selling is insufficient production. Although very small, access to credit in the district is equal to men and women and the main source is “family, friend, relative and the commercial banks”. Others are private individuals, notably non religious organisations/NGO projects, saving and credit society.

A comparatively small number of households receive crop extension services in Arumeru district and most of it is from the government. The district had the second highest proportion of households with erosion control and water harvesting structures, which are mostly gabions, terraces and erosion control bunds. The district has moderate number of cattle in the region and they are almost all indigenous. Goat production is moderate compared to other districts; it also has moderate population of sheep in the region. It has the lowest number of pigs in the region and the highest number of chicken. Some ducks, Guinea Pigs, Turkeys, rabbits and donkeys are also found in the

district. The number of households reporting tsetse and tick problems is highest in Arumeru district and it had third largest number of households de-worming livestock. The district has moderate number of households using draft animals in the region.

Fishing was not reported in the district, it is the only district with agricultural households reporting fish farming practice in the region. The percentages of households without toilet facility in Arumeru district is 15.3 percent and it is among the districts with the highest percent of households owning each type of type of assets namely radio, wheel barrows, vehicles, bicycles, TV/video and mobile phones. It has the largest number of households using mains electricity in the region. The most common source of energy for lighting is the hurricane lamp and practically all households use firewood for cooking. The roofing materials for most of the households in the district is iron sheets (93.3%). The most common source of drinking water is from tape water. It is one of the districts with the highest percent of households having three meals per day. The district had the highest percent of households that had meat once during the week prior to enumeration and among the lowest percent of those who had not eaten fish during the week prior to enumeration, however most households never had problems with food satisfaction.

4.2.3 Arusha

Arusha district reported the smallest number of agricultural households in the region. The district had the smallest percent of households involved in smallholder agriculture in the region. Most smallholders in the district were involved in crops production, followed by those involved in Livestock keeping. Pastoralists were insignificant and fishing and fish farming were not reported in the district.

Annual crop farming was ranked as the most important activity that provides most of livelihood/cash income to the agricultural households in the district followed by livestock keeping/herding. Arusha had the highest literacy rate among smallholder household members and among the female heads of household in the region, at 81.6 and 51 percent respectively. However, The district had the second lowest literacy rate among the male household heads in the region at 49 Percent.

As for land utilization, the district had the lowest utilized land area per household as well as planted area per household. The district had the highest percentage of land utilization which is higher than that recorded in the previous census, a trend which signifies an increase in land pressure.

Arusha district had the smallest production of cereal crops notably maize which had a planted area 2, 7000 hectares. Other cereals produced in the district were either insignificant or not recorded. Also, the district was lowest producer of roots and tubers mainly which account for 1 percent of the total production of the crop in the region. However, the district had the second highest yields of the crop. Sweet potatoes was another crop under roots and tubers grown in the district though was the second lowest producer of the crop with the production of only 4.3t/hectare.

As for pulses production, the district had the smallest area planted with beans in the region accounting for 3.9 percent of the total area planted with beans in the region, but had the third highest area per beans growing households. The most important oilseed crop in the district was groundnut whose area planted was the smallest and production and acreage were the second lowest in the region.

The district also performed poorly in the production of all types of vegetables except onions, which had a planted area of only 43 hectares representing 5.7 percent of the total area planted. This was followed by cabbage which represented 8.7 percent of the total planted area with the crop**.**

The district recorded a negligible production of Coffee, and the production of other annual crops such as cotton or tobacco was not reported in Arusha. Arusha had the third lowest planted are with perennial crop of only 2.09 hectares, but was the third lowest with planted area of perennial crop per perennial crop growing house hold.

Mangoes dominated the production of permanent crops in the district with a planted area of 105 ha, accounting for 18.9% of the total area planted with mangoes in the region. The production of other permanent crops was insignificant in the district.

Hand hole and sword were the most important equipment in land clearing and preparation, even though the district was the smallest user of the equipment in the region. Tractor plough, castrated bulls, tractor and ox cart in that order were common tools for soil preparation in the district.

The district had moderate percentage of planted area with local and improved seeds in the long rainy season in the region but the largest area planted with improved seeds during short rainy season. The use of fertilizers was moderate for organic and lowest for inorganic fertilizers. In terms of pesticide use, the district had the lowest percentage use of insecticides; application of herbicides and fungicides was negligible.

Planted area with irrigation in Arusha district was negligible. Arusha had the smallest number of households reported to have been storing crops with sacks and open drums as the most common method of crop storage. The number of households selling crops was however the third biggest in Arusha district (63%) and those who did not sell crops attributed this to low price for agricultural produce, high transport costs, long distances to the markets, lack of transport, cooperative problems, and lack of buyers.

Arusha had the third largest number of households receiving agricultural credit in the region, and the biggest proportion of household members receiving agricultural credit in the district were females 71.4. Commercial banks, family, friends and relatives, and savings and credit societies in that order were the main sources of agricultural credit in the district. Those who did not use agricultural credit attributed this to little credit awareness.

The district had the second largest number of households receiving extension services in the region accounting for 85 percent of the crop growing households, after Arusha Rural district. The Government provided the greatest proportion of extension services, followed by large scale farms and neighbor. Other sources were not very important. The district had the second highest proportion of households with soil erosion control and water harvesting facilities accounting for 23.3 percent of the total number of those using the facilities in the region. Of these erosion control and water harvesting facilities, gabion sandbags were dominant in the district followed by erosion control, vertiver grass, tree belts, and drainage ditches.

The district kept a smallest number of cattle, most of which indigenous, however it was the second highest with the proportion percentage of improved beef and the third highest with improved dairy cattle. Goat production was not recorded in the district, but recorded a moderate number of sheep, smallest number of pigs, and second smallest number of chicken. Almost all sheep and chicken reared in the district comprised indigenous breeds.

The district also kept donkeys, a moderate proportion of dogs, donkeys, and rabbits in that order; however all these animals were in very small proportion compared to other districts. Other types of animals were not recorded in the district.

The district reported moderate incidences of both tick and tsetse problems, second lowest incidences of Newcastle Diseases, and Fowl Typhoid Disease and lowest incidences of Foot and Mouth Disease and Lympskin disease. Spraying and dipping were the most common tick and tsetse control methods while vaccination and local herbs were common in controlling the remaining types of livestock diseases

The district reported to have accessed the lowest livestock extension services, most of which being provided by the government, large scale farmers and neighbours in that order. Deworming of livestock was least practiced in the district this could probably because of the small proportion of livestock found in the district..

Arusha district had the third highest percentage of those using improved pit latrines. Households without toilet facilities were not recorded in Arusha district.

As is the case with other districts, asset ownership in the district indicates that radios and music system were owned by most rural agricultural households in the district, followed by mobile phones bicycles, pressing iron, wheelbarrows, television/video, vehicles, motor cycles and refrigerators in that order.

The main source of energy for cooking in the district was firewood, followed by charcoal, crop residuals and solar power, while the main source of lighting energy was wick lamp, followed by hurricane lamp, pressure lamp, solar, firewood and main electricity as the least source of lighting energy. Corrugated iron sheets were used by most agricultural households in Arusha district as roofing material (96.7%).

Piped water was the source of much of the water used in the district. The district had the smallest number of households having three, two and even one meal(s) per day. The district is leading in terms of number of households consuming meat during the week prior to enumeration, in the frequencies of one to five times a week. There are also small percentages of those having fish once,

twice or three times during the week prior to enumeration. Food satisfaction status was moderate in Arusha with the highest percentage seldom experiencing food problems, followed by those who never had any food shortage and those who occasionally experienced food shortages.

4.2.4 Karatu

Karatu district had the third largest number of households in the region; it had also the third largest number of households in the region involved in crops and livestock farming, the largest number of households involved in crops only, and the fourth largest number of households involved in livestock farming only. However it had the second largest number of agricultural households as pastoralists in the region.

The most important livelihood activity for smallholder households in Karatu district was annual crop farming; the district ranked highly in this activity followed by livestock keeping/herding and fishing. Fish farming and livestock pastoralist were not recorded in the district.

The literacy rate among smallholder households in Karatu was either way the fourth highest and lowest. Compared to other districts in the region, the district had the second highest literacy rate for the male heads of households (55%), and the second lowest literacy rate for female heads of households (45%).

It had among the largest utilized land area per household (1.0 ha), and had the third highest percentage of the allocated area being utilized 93.28%). The district had the third largest total planted area in the regions well as the average area planted per household (0.89 ha) in the region**.**

The district had the moderate planted area with cereal, but was the second highest in the yields of cereal. Maize production with a planted area of 21,162 ha was the fourth largest; however the planted area per household was the second smallest in the region. Paddy production with a planted area of 198 hectares was third important in terms of planted area in the region. However, the district had the largest planted area of other cereal crops amounting to 1,916 hectares, however the planted with other cereals per agricultural household was the smallest. It had the largest planted area of sweet potatoes accounting for 49.06 percent and the third largest planted area for sweet potatoes (3,585 ha). Other roots and tuber crops were not reported in the district. Pigeon peas and beans dominated the production of pulse crops in the district accounting for 63.6 and 8.9 percents respectively of the planted area with the crops in the region. Oilseed crops especially groundnuts were of moderate importance in Karatu. Vegetable production was not important in the district,

except for onions which had the highest percentage of planted area accounting for 76.54 percent in the region. Karatu district did not record the production of cotton or tobacco.

Compared to other districts in the region, Karatu had the second largest area planted with permanent crops (15.46%) which were dominated by mangoes and banana although both of these were produced in very small quantities.

Sword and hand hole were the common tools for land clearing, while ox cart, tractor and tractor plough were most important tools for soil preparation. Karatu moderate proportion of area planted with local seeds and second lowest proportion of area planted with improved seed in Arusha region. The district had a moderate application organic fertilizer, but lowest application of inorganic fertiliser compared to other districts in the region. Compared to other districts in the region, Karatu district had moderate application of insecticides and herbicides, but the lowest application of fungicides. It had the second smallest area planted area under irrigation of 1,637 accounting for only 6.9 percent. The main source of irrigated water is wells; and the main methods of drawing water for irrigation being gravity and hand bucket.

Karatu ranked third in having the largest number, accounting for 19 percent, of agricultural households reported storing crops. The most common method of crop storage in Karatu district was in sacks/open drums, followed by traditional structures. The district had the third highest proportion of households selling crops (60%). However, for those who did not sell, the main marketing problem was low price of agricultural produce. The district had moderate **access to** agricultural credit in the region, with males having the higher proportion by 75 percent of those receiving agricultural credit than females who accounted for only 25 percent. Those who did not receive agricultural credit attributed this to little awareness of the credit.

The district had the third highest proportion of households receiving extension services in the region and mostly of which was from the NGO's. the other sources had equal proportion in terms of importance.

The district had the second highest number of households, which accounted for 27.7% of the total number of households in the region reporting irrigation problem. The proportion of households with soil erosion control and water harvesting facilities was the highest in Karatu district, most of

which were erosion control bunds, terraces, water harvesting bunds, gabions/sandbags, and drainage ditches in that order.

The district ranked fourth with the largest number of cattle (9%), the third lowest in the proportion percentage of goat rearing (56%), the second lowest in the proportion percentage of sheep production (5%), the highest in the proportion percentage of pigs production (20%), and the third lowest in the proportion percentage of chicken production (16.2%). As is the case in with livestock in other districts indigenous breeds dominated production of all types of livestock in the district. Ducks, dogs, donkeys and rabbits in that order dominated the production other livestock in Karatu district. Guinea pigs, turkeys, and horses were not recorded in the district**.** The district reported moderate incidences of both tick and tsetse problem, but It had the third highest proportion of households reporting, Newcastle Disease, Fowl Typhoid Disease, and Foot and mouth Disease at 17% in each case. It had the third lowest proportion of households reporting Lympskin Disease in the region. Spraying and dipping were common control methods for ticks and tsetse flies, while local herbs and vaccination were most popular control methods for other livestock diseases in the district. diseases the district had moderate proportion of the percentage of households de-worming livestock compared to other districts.

Karatu district had the second lowest percentage of households with no toilet facilities (4%), and was the third highest percentage of households with improved pit latrines. As for property ownership, music system, mobile phones, bicycles, pressing iron, vehicle, wheelbarrow, and landlines in that order were the most important assets in the district.

As is the case with many other districts, wick lamp, pressure lamps, and mains electricity were the main source of energy for lighting, while, firewood, charcoal and, to a small extent mains electricity, were the main sources for energy for cooking**.**

The district had the fourth smallest percent of households with iron sheets for roofing material. The main sources of drinking water were piped water, surface water (lakes, dams/rivers) unprotected springs, protected and unprotected wells in that order. It had the third highest percentage of households having three meals per day 20.5%), and third lowest percentage of household having two meals per day. The district had the second highest percentage of households that consumed

meat and or fish once during the week prior to enumeration, by 40.2 and 35.6 percents respectively. The district had the highest proportion of households that seldom face food problems.

4.2.5 Ngorongoro

Ngorongoro district had the third smallest number of agricultural households in the region; also it had moderate percentage of households involved in smallholder agriculture in the region. Unlike in other districts except Monduli district, most smallholders were involved in livestock faming only, followed by crop and livestock keeping/herding, crop farming, and pastoralist. No households were reported to be involved in fishing and fish farming activities.

Ngorongoro is the only district where livestock keeping/herding was the leading livelihood activity for smallholder households in the region, this means the district is predominantly comprised of livestock herders. The second activity in importance was crop farming, followed by livestock pastoralists. The district had the second lowest literacy rate among smallholder households (54.4%), but had the highest literacy rate among male heads of households and the lowest literacy rate among female heads of households at 58 and 42 percents respectively.

The district had the third smallest usable area available, and the second lowest percentage of utilization of the usable area, but a moderate usable area per household (1.0 ha/hh) and moderate planted area with an estimated 0.9 hectares per household. The area planted with annual crops during long rainy season was second smallest to Arusha district, but third highest in the region during short rainy season.

Maize production dominates the production of cereal crops in the district, though the district ranked third lowest in the region in terms of planted area (9,498ha), but ranked second highest in terms of planted area per household. Ngorongoro is among the three districts where paddy production was not recorded; other districts were Arusha district and Arusha rural. The production of other cereal was not significant in the district, and had a planted are of only 994 hectares, which was second lowest in the region after Arumeru.

The district was among the only three districts producing sunflower under oilseed crops and ranked third after Kiteto and Babati districts. However Ngorongoro district had the smallest planted area

of the crop in the region representing 0.79 percent of the total planted area and 0.10 planted area per sunflower growing household in the region.

Beans dominated the production of pulse crops in the district though it had the third lowest percentage of land planted with the crop representing only 8.4.6% of the total land planted with the crop, but had the third highest planted area per household. Other pulse crops were not recorded in the district.

Sweet potatoes was the major roots and tuber crop in Ngorongoro district, and had the third largest planted area in the region (19.56% of the total planted area with the crop in the region). Other roots and tubers crops were either insignificant or not produced in the district.

Production of fruits and vegetables was not important in Ngorongoro district. Tomatoes and cabbage were produced in very small quantities, and Ngorongoro is among the two districts in the region where onions were not produced; Arumeru is another district with similar characteristics.

As with other districts except Longido and Arumeru, cotton and tobacco under annual crops were not produced in Ngorongoro. And except Arumeru and Arusha Rural districts, Ngorongoro was among the districts where coffee production was not reported. The production of permanent crops was insignificant in Ngorongoro district, the characteristics shared by Longido district. The production of fruits such as mangoes, bananas, or oranges was not reported in the district.
Hand hole and sword were moderately used in most land clearing in the district. Tractor castrated bulls and ox cart were common methods for soil preparation in Ngorongoro district. Other methods were least important in the districts

Ngorongoro had the smallest area planted with improved seed during the census year in Arusha region, though the proportional percentage of planted area with improved seeds was second lowest during both short and long rainy seasons representing 28.1 and 26.7 percent respectively. The use of fertilizer in Ngorongoro district, both organic and inorganic fertilizers, was the lowest compared to other districts. Not surprising, because agricultural smallholders in Ngorongoro district were more involved in livestock keeping than in crop farming. For the same reason, the district had the lowest planted area with fungicides and herbicides; however the district had the highest proportion

percentage application of both pesticides in the region at 44.74 percent for fungicides and 55.76 percent for herbicides. The use of insecticides was not recorded in the district.

Area of land under irrigation was the second lowest in the district with 2.5 percent of the total area under irrigation during the long rainy season. Rivers and tap water were the main source of irrigation water; other sources were not recorded. Gravity was the only method of drawing water for irrigation in the district.

The district had the smallest number (2%) of the households reported storing crops, with locally made traditional structures and sacks and open drums as the most common method of crop storage in Ngorongoro district. Other structures were least important. The district had the second highest percentage of households reported to be selling crops at 65.6 percent. As with other districts, those who did not sell crops attributed this problem to low market prices, long distance to the market and lack of market information. Ngorongoro was the second leading district with male household members receiving more agricultural credits than is the case for female household members in the region, by 88.9 percent and 11.1 percent respectively, in other words the district had the smallest percentage of female household members receiving agricultural credit. Commercial banks and family and friends were the main providers of agricultural credit in the district. Those who did not use agricultural credits attributed this problem to inadequate knowledge about credits, unavailability of the credits and fear for getting into debt**.**

Districts variation with respect to receiving crop extension services show that Ngorongoro had the lowest access to the services accounting for 66 percent of the household receiving the services in the region. As with other districts, the main providers of crop extension services were the government, neighbours, NGO/Development agencies, and large scale farmers. Application of erosion control and water harvesting facilities in the district was the lowest accounting for only 2.5 percent of household using the facilities. Terraces, erosion control bunds, drainage ditches, and water harvesting bunds and gabions/sandbags were the main available facilities in the district.

As for livestock, the district had the largest number of cattle, 99.8 percent of which were indigenous, and improved breeds sharing 0.1 percent for both beef and dairy cattle. The district had the largest number of goats, 99.9 of which were indigenous and 0.1 percent were dairy goat. It had the largest number of sheep, all of which were indigenous. Pigs were not reported in the district. It

had the third lowest number of chicken, mostly indigenous. Other livestock found in the district include donkeys, dogs, turkeys, ducks and rabbits, in that order.

Incidences of tick and tsetse problems were the third highest in the region accounting for 12.9 and 7.8 percents of reported cases of ticks and tsetse diseases respectively. However incidences of Newcastle disease and Fowl Typhoid disease were the lowest in the region and that of Foot and Mouth disease was the third lowest with 16 percent of the households experiencing the problem. Lympskin disease was the second lowest and accounted for 19% of the households reporting the problem.

Deworming of livestock was common for cattle, goats/sheep at 82.9 and 83.4 percents of the livestock keeping households reporting deworming the animals; and less common with chicken with only 3.2 percent of the chicken rearing households reporting deworming the chicken.
Ngorongoro district had the second highest percentage of households with no toilet facilities at 32.9 percent, and had the third smallest number of households reporting using traditional as well as improved pit latrines. As for property ownership, music system, mobile phones, pressing iron, bicycles, wheelbarrows, vehicles, landlines, and refrigerators, in that order were the most important assets in the district.

It had a moderate percentage of households using wick and pressure lamps, the highest percentage of those using firewood and the second lowest percentage of those using mains electricity as a source of lighting. Firewood and livestock dung were the main sources of energy for cooking. Other sources were insignificant. The district had moderate percentage of households using grass and leaves, highest percentage of those using grass mud and the smallest percentage of those using iron sheets as roofing material in the region.

Piped water (ranking third lowest), surface water (dams/rivers) (ranking second highest), unprotected spring (ranking first), uncovered rainwater catchment, and unprotected wells (ranking first) were the main source of drinking water in the district with their ranking in the region in brackets. The largest number of people in the district stay between 1 and 2 kilometres away from the main source of drinking water. The largest number of people in the district could afford two meals per day, followed those who could afford three meals per day. The district had the second largest number of households who did not eat meat and fish, followed by the number of households

who ate meat and fish once, twice, and three times in that order, during the week prior to enumeration. The district had the highest proportion of households that seldom face food shortages.

4.2.6 Longido

Longido district had the second smallest number of agricultural households in the region. As is the case with other districts in the region, most smallholders were involved in crop and livestock production, followed by livestock keeping/herding and crop farming. Livestock pastoralists, fishing and fish farming were negligible in Longido accounting for less than 1 percent of the total agricultural households' involved in the activity in the region.

Longido is one of the two districts where livestock keeping/herding was the most important livelihood activity for smallholder households followed by annual crop farming and livestock pastoralist. Fishing was negligible and fish farming was not recorded in the district. Compared with other districts in the region, Longido had the lowest percentage of literacy rate among the household members at 48.9%. The literacy rate for the heads of household was the second highest among males and the second lowest among females at 55 and 45b percent respectively.

Longido had the second smallest usable area available to smallholder agricultural households. The land utilization per household in Longido was the lowest in the region at 0.9 hectares, but had a moderate percentage utilization of usable land. It had the second lowest planted area per household (0.82ha) attributed to the high number of smallholders in the district.

Area planted with annual crops was the third largest in the region. Maize dominated the production of cereal crops in the district with a planted area of over 6,788 ha, which was the second lowest in the region. However, the district had the planted area per household of 0.80 ha/hh which was the second highest in the region. Paddy was grown in very small quantities in the region. Other cereals were grown in very small quantities. The major oilseeds in the district were groundnuts, but the crop was however produced in small quantities and had the second largest planted area accounting for 7.97 percent**.**

The district had the second smallest planted area with beans accounting for 7.97 percent, but had the second highest percentage of planted area with beans per beans growing households of 0.7 hectares. Pigeon peas had the smallest planted area, though had the second largest planted area per

households of 0.51 ha/hh. Sweet potatoes was produced in small quantities and had the second smallest planted area accounting for only 1.33 percent of the total planted area with the crop. Irish potatoes were grown at moderate quantities with a planted area of 444 hectares, which is the second largest in the region.

Tomatoes and onions were the only reported fruits and vegetables produced in the district though in small quantities with planted area accounting for 12.56 and 6.20 percent respectively. Small quantities of tobacco was also produced in Longido. Annual and permanent crops were not common in Longido district, thus very small quantities of the crops were produced.

As with other districts in the region, most land clearing and preparation was done by hand hoe and sword, with tractor, uncastrated bulls and ox-cart being the most popular methods in soil preparation in the district. The use of inputs in the region was moderate; however there were small variations across districts with Longido having the third largest area planted with improved seeds in Arusha region**.**

Application of fertilizers was very small making the district rank third with the smallest area planted with fertiliser in the region. Organic fertilizer was more frequently used than inorganic fertilizers in the district. Longido district had the proportion of land applied with all the tree types of pesticides that is, insecticides, herbicides, and fungicides in that order. The district had the second largest irrigated area only second to Arusha rural accounting for 12.3 percent of the total planted area in the region. Rivers and wells were the most common source of water for irrigation, with gravity and motor pump as the common methods of drawing irrigation water from the source.

Longido had the fourth largest number of households that stored crops, with sacks, open drum locally made traditional structures, and air tight drums in that order as the commonly used storage methods. The district had the second smallest percentage (46.1%) of the households selling crops, and those who did not sell, attributed this problem low market prices, long distance from the market and inadequate market information as the main reasons. Longido had the smallest number of agricultural households accessing credits, and only female agricultural households accessed agricultural credit by 100%. In Longido, family, friends or relatives were the main credit providers to agricultural smallholders**.** Most of those who did not use credits attributed this trend to unavailability of the credits and inadequate knowledge of accessing credit.

Comparatively Longido had the second lowest percentage distribution of those receiving extension services in the region representing 75.1 percent, with 79.2 percent of the services coming from the government, and 13.5 percent coming from neighbours. Other sources were less important accounting for less than 2 percent.

Longido ranked third lowest in terms households with erosion control and water harvesting structures, and these were mainly in the form of terraces, erosion control bunds, drainage ditches, vetiver grass, water harvesting bunds, in that order.

Longido had the second largest number of cattle in the region, second to Ngorongoro. It had the third largest number of goats, second smallest number of sheep, pigs, and chicken all of which were indigenous type. Other livestock in the district included donkeys, dogs, ducks and rabbits, in that order. The district reported second lowest incidences of ticks and tse tse flies. Incidences of Newcastle disease, and Fowl Typhoid diseases were second lowest, but foot and mouth disease was fourth highest, and Lypmskin disease was third highest. Spraying dipping and smearing were common control methods for tick problem, while spraying dipping and trapping were common control methods for tick problem. Local herbs and vaccination were commonly control methods for other reported problems.

Longido district had the third largest number of households with no toilet facilities, the lowest number of households with flush toilets and improved pit latrines. The district had a sizeable number of households owning radios, mobile phones, bicycles, pressing iron, wheel barrow, vehicles, and televisions, in that order. Wick lamp, firewood, and hurricane lamp were the main sources of lighting energy. As for cooking energy, firewood accounted for 99 of the source for cooking on the district, the use of mains electricity was not reported and other sources were insignificant. Grass leaves and grass and mud were the most dependable roofing material in the district accounting for 67 and 18 percent respectively. This was followed by iron sheets, though the district had the second smallest number of households using iron sheets for roofing in the region. Many households had access to drinking water within the distance of between 1 to 2 kilometres, with piped water, unprotected spring, protected spring and unprotected wells as the main source of drinking water.

Most households reported having three meals per day, followed by those who reported having two meals per day, and then one meal per day. Many households reported having eaten meat once, followed by those who had not eaten meat, and then those who had eaten meat twice during the week prior to enumeration. The district had many households who reported not have eaten fish, followed by who reported to have eaten fish once, and then those who reported to have eaten fish twice during the week prior to enumeration; however it had moderate percentages of households who never or seldom experience food insufficiency problems.

4.2.7 Arusha Rural

Arusha rural district had the second largest number of households in the region. As is the case with other districts, most smallholders in Arusha rural were involved in crop farming and livestock keeping/herding, followed by crop farming only, and livestock keeping/herding only. Livestock pastoralists were insignificant in the district.

The most important livelihood activity for smallholder households in Arusha rural district was annual crop farming, followed by livestock keeping/herding accounting for 35.7 and 4.9 percents respectively of agricultural smallholders involved in the two activities in the district. Arusha rural has a comparatively the lowest literacy rate for agricultural household members accounting for only 62 percent. Livestock pastoralists and fishing were less important, and fish farming was nonexistent. The literacy rate for the members of agricultural households was the third highest in the region. The literacy rate for heads of households was moderate, with literacy rate of male household heads exceeding that of female household heads by 52 to 48 percents respectively. also the lowest for both male and female heads, but slightly higher for the male and was for the female heads; this was the common trend across all the districts in the region except Arusha district where literacy rate for female household heads was higher than that of male household heads.

Land use variation across the district indicate Arusha rural as having the second largest usable land available to smallholder agricultural households, with the second highest percentage of land utilization of the usable land of 93.7%, and the highest planted land area per household at an estimated of 0.92a/hh indicating a high level of land pressure in the district.

Arusha had the largest planted area during long rainy season and the third largest during short rainy season. It had the largest area planted with cereal crops during short rainy season and the third

largest planted area with cereal during long rainy season. Maize dominated cereal production in the district with a planted area of over 21,587 ha, thus, ranking third in the region, though had the lowest planted area of 0.42 hectares per household. Arusha rural district was among the three districts which did not grow paddy. It had the third largest area planted with other cereals and a third largest planted area per household of 0.76 hectares. The production of oilseeds was not reported in Arusha rural district.

The district was leading in the production of beans in the region representing 26.79 percent of the total planted area, but had the lowest area planted with beans per beans growing household of 0.31 ha/hh, this could be a reflection of high land pressure in the district. Irish potatoes dominated the production of roots and tubers in the district, with the largest planted area in the region 841 hectares, but had the second largest planted area per Irish growing household of 0.39 ha/hh. Sweet potatoes was the second most important roots and tuber crop in the district and accounted 26.85 percent of the total sweet potatoes growing households, thus ranking second in the region. Cassava production was not recorded in the district.

Cabbage was the most important vegetable in the district, accounting for 70.20 percent of the total proportion percentage of planted area in the region. This was followed by tomatoes, which accounted for 11.99 percent and ranked third highest in the region, and onions which accounted for 9.62 percent and ranked second highest in the region. Traditional cash crops, particularly tobacco and cotton were not grown in the district.

Compared to other districts in the region, Arusha rural had the second largest area planted with permanent crops which were dominated by bananas (24.38 % of the total planted area), mangoes (12.85% of the total planted area) and pigeon peas (8.28% of the total planted area). There was small production of coffee accounting for 8.87 % of the total planted area with the crop in the region. The leading producer of coffee in the region is Arumeru district. Other permanent crops were either not grown or are grown in very small quantities.

As with other districts in the region, most land clearing was done by hand hoe and sword, and the district was second highest in the use of the these tools. However slightly more land clearing was done by tractors and uncastrated bulls. Cows and donkeys were the most common methods for soil preparation in Arusha rural.

The use of inputs in was rather modest in the region; however the existing variation indicate Arusha rural as having the second largest area planted with improved seeds in Arusha region. The district had the largest area planted with organic fertilizers, in both short and long rainy seasons. The application of pesticides in the district varied depending on the type, thus it had the second largest proportion of planted area with insecticides, the second largest in the application of herbicides, and the fourth largest proportion of planted area with fungicides. It had the second largest irrigated area in the region accounting for 21.46% of the total irrigated land in the region. The most common source of water for irrigation was tape water and rivers, using gravity as the means of drawing the water from the source.

Arusha rural had the largest number of households reporting storing crops, thus the proportion of households not storing crops was the smallest in the region. As is the case with other districts, the most common method of crop storage was the sacks and open drums followed by locally made traditional structures. The district had the smallest proportional percentage of households selling crops at 42.7%; and those who did not sell crops attributed this trend to low market prices, long distances to the market, lack of market information and transport as the main reasons.

Access to credit in the district was very small and this was to male household members only. Family, friends or relatives were the main if not the only agricultural credit providers in the district. Most of those who did not use agricultural credits attributed this trend to lack of information about credits, credit unavailability, and fear of getting into debt as the main reasons**.** The biggest proportion of households received crop extension services in Arusha rural and much of which came from the government, NGOs/ Development Agents, Cooperatives, and neighbours. Other providers were less important. Arusha rural had the third lowest proportion of households with soil erosion control and water harvesting facilities, which were mainly in the form of terraces, erosion control bunds, tree belts, drainage ditches, and vetiver grass in that order.

The district had the third largest number of cattle in the region and most of which were indigenous accounting for 71.8 percent; it had the second percent of improved diary (20.6%) and the highest percentage of improved beef (7.7%). It had the third smallest population of goats (90.7% indigenous and 9.3% improved diary), the second largest population of sheep (all indigenous type), the second lowest population of pigs and the second largest population of chicken (99% indigenous and negligible percent for both layers and broilers). Other types of livestock were dogs, donkeys,

guinea pigs, and rabbits and ducks; other types of livestock were negligible, and horses were nonexistent.

The district reported the predominance of tick related diseases over tsetse related diseases. The district had largest number of households deworming livestock particularly cattle, and moderate number of households deworming goats and sheep, and the smallest number deworming chicken. The number of those deworming pigs was negligible. Spraying, smearing and dipping were common methods for tick control, while spraying, trapping and dipping were common methods for tsetse control. The district reported third highest incidences of Newcastle Disease, Fowl Typhoid Disease, and Foot and Mouth disease, Foot and Mouth disease, accounting for 48.8%, 24%, and 19% respectively. It had the second highest incidences of Lympskin disease at 26% of the total reported cases in the region.

Arusha rural district had the third lowest percentage of households with no toilet facilities (13.2 %). The district had a sizeable number of households owning radios, mobile phones, bicycles, pressing iron, wheel barrow, vehicles, and televisions, in that order. Although many households used hurricane lamps and wick lamps, the district had the highest proportional percentage of households using mains electricity as the source of lighting in the region. About 93 percent of the households on the district used firewood, and about 5 percent used charcoal as the most common source of energy for cooking. Other sources were less important accounting for 1 percent and less.

The district had the highest percentage of households suing iron sheets and only a small percentage of households using grass leaves for roofing. As is the case with other districts, The most common distance from the source of drinking water was between 1 and 2 km, with piped water, surface water (dams/rivers) and unprotected spring as the main sources of drinking water. It had the largest number of households having three meals per day, followed by those having two meals per day. It had the largest number of those who consumed meat two times and once during the week prior to enumeration; and it had the second largest number of those who consumed fish two times and once during the week prior to enumeration. Most households seldom experience problems with food satisfaction.

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APENDIX II:TABLES

TYPE OF AGRICULTURE HOUSEHOLD

2.1.1 TYPE OF AGRICULTURE HOUSEHOLD: Number of Households by type of Household and Region during 2007/08 Agriculture year

Region	Rural Households involved in Agriculture	% of Total Rural Households	Rural households NOT involved in Agriculture	% of Total Rural Households	Total Rural Households	% of Total Households	Number of Urban Households	% of Total Households	Total Number of Households
Monduli	28,933	91.4	2,726	8.6	31,659	90.8	3,220	9.23	34,880
Arusha	2,557	30.4	5,844	69.6	8,401	9.6	79,273	90.42	87,674
Karatu	36,093	96.5	1,308	3.5	37,401	90.9	3,728	9.06	41,129
Ngorongoro	28,776	95.5	1,352	4.5	30,128	97.9	661	2.15	30,788
Longido	11,644	81.9	2,578	18.1	14,222	101.3	-185	(1.32)	14,037
Arusha Rural	48,253	87.6	6,823	12.4	55,076	81.1	12,857	18.93	67,933
Meru	49,292	94.6	2,834	5.4	52,126	75.1	17,269	24.89	69,395
Total	**205,547**	**89.8**	**23,465**	**10.2**	**229,012**	66.2	116,823	33.78	**345,836**

2.1.2 TYPE OF AGRICULTURE HH: Number of Agriculture Households by type of Holding by District during 2007/08 Agriculture year

District	Crops Only		Livestock Only		Pastoralist		Crops & Livestock		Total Number of Households	Total Number of Households Growing Crops	Total Number of Households Rearing Livestock
	Number of households	%	Number of households	%	Number of households	%	Number of households	%			
Monduli	3,286	11.4	4,144	14.3	429	1.5	21,075	72.8	28,933	24,361	25,647
Arusha	170	6.7	0	0.0	0	0.0	2,387	93.3	2,557	2,557	2,387
Karatu	11,585	32.1	2,139	5.9	178	0.5	22,190	61.5	36,093	33,776	24,507
Ngorongoro	1,421	4.9	17,763	61.7	142	0.5	9,450	32.8	28,776	10,871	27,355
Longido	636	5.5	4,767	40.9	29	0.2	6,212	53.3	11,644	6,847	11,008
Arusha Rural	10,272	21.3	1,553	3.2	0	0.0	36,429	75.5	48,253	46,701	37,982
Meru	10,615	21.5	732	1.5	0	0.0	37,945	77.0	49,292	48,560	38,677
Total	**37,985**	**18.5**	**31,097**	**15.1**	**778**	**0.4**	**135,687**	**66.0**	**205,547**	**173,673**	**167,562**

2.1.3 TYPE OF AGRICULTURE HOUSEHOLD: Number of Agriculture Households By Type and Size of Holding, 2007/08 Agricultural Year - ARUSHA REGION

Size of Holding (ha)	Type of Agriculture Household									
	Crops only		Livestock only		Pastoralist		Crops and Livestock		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0.01 - 0.50	19,138	23.3	27,667	33.7	474	0.6	34,838	42.4	82,117	100
0.51 - 1.00	8,621	21.1	818	2.0	89	0.2	31,386	76.7	40,913	100
1.01 - 1.50	4,789	17.6	640	2.4	0	0.0	21,776	80.0	27,205	100
1.51 - 2.00	2,079	13.0	216	1.4	0	0.0	13,692	85.6	15,987	100
2.01 - 2.50	2,121	13.7	342	2.2	0	0.0	13,051	84.1	15,513	100
2.51 - 3.00	250	6.0	0	0.0	0	0.0	3,909	94.0	4,159	100
3.01 - 3.50	351	10.2	201	5.8	0	0.0	2,886	84.0	3,438	100
3.51 - 4.00	29	1.8	0	0.0	0	0.0	1,621	98.2	1,650	100
4.01 -4.50	71	1.7	285	6.8	0	0.0	3,845	91.5	4,201	100
4.51 -5.00	71	3.9	0	0.0	71	3.9	1,710	92.3	1,853	100
Above 5	466	5.5	929	10.9	143	1.7	6,974	81.9	8,512	100
Total	**37,985**	**18.5**	**31,097**	**15.1**	**778**	**0.4**	**135,687**	**66.0**	**205,547**	**100**

2.1.4 TYPE OF AGRICULTURE HOUSEHOLD: Number of Agriculture Households By Type and Size of Holding, 2007/08 Agricultural Year - ARUSHA REGION

Size of Holding (ha)	Type of Agriculture Household									
	Crops only		Livestock only		Pastoralist		Crops and Livestock		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0.01 - 0.50	19,138	50.4	27,667	89.0	474	61.0	34,838	25.7	82,117	40.0
0.51 - 1.00	8,621	22.7	818	2.6	89	11.5	31,386	23.1	40,913	19.9
1.01 - 1.50	4,789	12.6	640	2.1	0	0.0	21,776	16.0	27,205	13.2
1.51 - 2.00	2,079	5.5	216	0.7	0	0.0	13,692	10.1	15,987	7.8
2.01 - 2.50	2,121	5.6	342	1.1	0	0.0	13,051	9.6	15,513	7.5
2.51 - 3.00	250	0.7	0	0.0	0	0.0	3,909	2.9	4,159	2.0
3.01 - 3.50	351	0.9	201	0.6	0	0.0	2,886	2.1	3,438	1.7
3.51 - 4.00	29	0.1	0	0.0	0	0.0	1,621	1.2	1,650	0.8
4.01 -4.50	71	0.2	285	0.9	0	0.0	3,845	2.8	4,201	2.0
4.51 -5.00	71	0.2	0	0.0	71	9.2	1,710	1.3	1,853	0.9
Above 5	466	1.2	929	3.0	143	18.4	6,974	5.1	8,512	4.1
Total	**37,985**	**100.0**	**31,097**	**100.0**	**778**	**100.0**	**135,687**	**100.0**	**205,547**	**100**

HOUSEHOLD DEMOGRAPH

3.1 Number of Heads of Agricultural Households by sex of head and District, 2007/08 Agricultural Year

	Male		Female		
District	Number	Percent	Number	Percent	Total
Monduli	20,075	69	8,859	31	28,933
Arusha	2,259	88	298	12	2,557
Karatu	30,033	83	6,060	17	36,093
Ngorongoro	22,381	78	6,395	22	28,776
Longido	7,165	62	4,478	38	11,644
Arusha Rural	38,698	80	9,555	20	48,253
Meru	42,947	87	6,344	13	49,292
Total	**163,558**	**80**	**41,989**	**20**	**205,547**

Table 3 .2: Number of Household Members classified by District and Sex

	Male		Female		
District	Number	Percent	Number	Percent	Total
Monduli	71,226	49	75,298	51	146,524
Arusha	8,567	47	9,632	53	18,198
Karatu	108,457	55	89,296	45	197,753
Ngorongoro	75,172	52	69,843	48	145,014
Longido	27,216	49	27,823	51	55,040
Arusha Rural	120,991	50	121,350	50	242,341
Meru	124,328	51	121,643	49	245,971
Total	**535,956**	**51**	**514,886**	**49**	**1,050,842**

3.3 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Sex and Age Group, 2007/08 Agricultural Year, Arusha

	Sex					
	Male		**Female**		**Total**	
Age Group	**Number**	**%**	**Number**	**%**	**Number**	**%**
Less than 4	65,993	50	66,357	50	132,350	100
5 - 9	76,896	50	75,524	50	152,420	100
10 - 14	80,872	54	67,941	46	148,813	100
15 - 19	64,170	53	57,738	47	121,908	100
20 - 24	42,015	46	50,231	54	92,246	100
25 - 29	37,771	45	46,508	55	84,279	100
30 - 34	31,880	47	35,544	53	67,424	100
35 - 39	30,853	52	28,924	48	59,777	100
40 - 44	22,829	49	23,451	51	46,280	100
45 - 49	22,201	53	19,439	47	41,639	100
50 - 54	16,189	57	12,063	43	28,252	100
55 - 59	13,965	64	7,892	36	21,857	100
60 - 64	10,213	61	6,490	39	16,703	100
65 - 69	5,412	50	5,355	50	10,767	100
70 - 74	5,563	54	4,671	46	10,234	100
75 - 79	4,544	62	2,748	38	7,292	100
80 - 84	2,659	55	2,190	45	4,849	100
Above 85	1,931	51	1,820	49	3,751	100
Total	**535,956**	**51**	**514,886**	**49**	**1,050,842**	**100**

3.6 Number of Heads of Agricultural Households by Marital Status, sex of head and District, 2007/08 Agricultural Year

District	Married						Not Married					
	Male		Female		Total		Male		Female		Total	
Monduli	19,289	72	7,644	28	26,933	100	500	88	71	13	572	100
Arusha	2,088	89	256	11	2,344	100	85	100	0	0	85	100
Karatu	26,557	92	2,228	8	28,785	100	1,248	88	178	13	1,426	100
Ngorongoro	21,386	82	4,760	18	26,147	100	497	70	213	30	711	100
Longido	6,905	66	3,525	34	10,430	100	116	36	202	64	318	100
Arusha Rural	35,473	87	5,375	13	40,848	100	1,075	90	119	10	1,194	100
Meru	39,775	96	1,830	4	41,605	100	1,098	60	732	40	1,830	100
Total	**151,474**	**86**	**25,618**	**14**	**177,092**	**100**	**4,619**	**75**	**1,517**	**25**	**6,136**	**100**

Cont. 3.6 Number of Heads of Agricultural Households by Marital Status, sex of head and District, 2007/08 Agricultural Year

District	Living together						Separated					
	Male		Female		Total		Male		Female		Total	
Monduli	71	50	71	50	143	100	143	22	500	78	643	100
Arusha	43	100	0	0	43	100	0	0	0	0	0	0
Karatu	0	0	89	100	89	100	1,248	50	1,248	50	2,495	100
Ngorongoro	355	71	142	29	497	100	142	33	284	67	426	100
Longido	0	0	0	0	0	0	29	25	87	75	116	100
Arusha Rural	1,433	92	119	8	1,553	100	239	25	717	75	956	100
Meru	1,586	100	0	0	1,586	100	366	33	732	67	1,098	100
Total	**3,489**	**89**	**422**	**11**	**3,911**	**100**	**2,166**	**38**	**3,567**	**62**	**5,734**	**100**

Cont. 3.6 Number of Heads of Agricultural Households by Marital Status, sex of head and District, 2007/08 Agricultural Year

District	Widowed						Total					
	Male		Female		Total		Male		Female		Total	
Monduli	71	11	572	89	643	100	20,075	69	8,859	31	28,933	100
Arusha	43	50	43	50	85	100	2,259	88	298	12	2,557	100
Karatu	980	30	2,317	70	3,297	100	30,033	83	6,060	17	36,093	100
Ngorongoro	0	0	995	100	995	100	22,381	78	6,395	22	28,776	100
Longido	116	15	665	85	780	100	7,165	62	4,478	38	11,644	100
Arusha Rural	478	13	3,225	87	3,703	100	38,698	80	9,555	20	48,253	100
Meru	122	4	3,050	96	3,172	100	42,947	87	6,344	13	49,292	100
Total	**1,810**	**14**	**10,866**	**86**	**12,675**	**100**	**163,558**	**80**	**41,989**	**20**	**205,547**	**100**

3.7 Number of Heads of Agricultural Households by Survival of Female Parent, sex of head and District, 2007/08 Agricultural Year

District	Yes						No					
	Male		Female		Total		Male		Female		Total	
Monduli	9,859	64	5,501	36	15,360	100	10,145	75	3,358	25	13,502	100
Arusha	938	92	85	8	1,023	100	1,321	86	213	14	1,534	100
Karatu	14,081	89	1,782	11	15,863	100	15,863	79	4,278	21	20,141	100
Ngorongoro	10,444	76	3,339	24	13,784	100	11,937	80	3,055	20	14,992	100
Longido	3,496	59	2,398	41	5,894	100	3,669	64	2,080	36	5,750	100
Arusha Rural	18,035	86	2,986	14	21,021	100	20,424	76	6,569	24	26,993	100
Meru	19,766	93	1,464	7	21,230	100	22,694	83	4,758	17	27,452	100
Total	**76,618**	**81**	**17,556**	**19**	**94,174**	**100**	**86,052**	**78**	**24,311**	**22**	**110,364**	**100**

Cont. 3.7 Number of Heads of Agricultural Households by Survival of Female Parent, sex of head and District, 2007/08 Agricultural Year

District	Don't know						Total					
	Male		Female		Total		Male		Female		Total	
Monduli	71	100	0	0	71	100	20,075	69	8,859	31	28,933	100
Arusha	0	0	0	0	0	0	2,259	88	298	12	2,557	100
Karatu	89	100	0	0	89	100	30,033	83	6,060	17	36,093	100
Ngorongoro	0	0	0	0	0	0	22,381	78	6,395	22	28,776	100
Longido	0	0	0	0	0	0	7,165	62	4,478	38	11,644	100
Arusha Rural	239	100	0	0	239	100	38,698	80	9,555	20	48,253	100
Meru	488	80	122	20	610	100	42,947	87	6,344	13	49,292	100
Total	**887**	**88**	**122**	**12**	**1,009**	**100**	**163,558**	**80**	**41,989**	**20**	**205,547**	**100**

3.8 Number of Heads of Agricultural Households by Survival of Male Parent, sex of head and District, 2007/08 Agricultural Year

District	Yes						No					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Monduli	15,217	68	7,215	32	22,432	100	4,787	74	1,643	26	6,430	100
Arusha	1,279	94	85	6	1,364	100	980	82	213	18	1,193	100
Karatu	18,893	90	2,050	10	20,943	100	11,051	73	4,010	27	15,061	100
Ngorongoro	17,621	78	4,974	22	22,594	100	4,760	77	1,421	23	6,181	100
Longido	5,027	61	3,265	39	8,292	100	2,138	64	1,213	36	3,351	100
Arusha Rural	24,604	85	4,419	15	29,024	100	14,094	73	5,136	27	19,230	100
Meru	27,940	93	1,952	7	29,892	100	15,007	78	4,270	22	19,277	100
Total	**110,581**	**82**	**23,960**	**18**	**134,541**	**100**	**52,817**	**75**	**17,907**	**25**	**70,724**	**100**

Cont... 3.8 Number of Heads of Agricultural Households by Survival of Male Parent, sex of head and District, 2007/08 Agricultural Year

District	Don't know						Total					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Monduli	71	100	0	0	71	100	20,075	69	8,859	31	28,933	100
Arusha	0	0	0	0	0	0	2,259	88	298	12	2,557	100
Karatu	89	100	0	0	89	100	30,033	83	6,060	17	36,093	100
Ngorongoro	0	0	0	0	0	0	22,381	78	6,395	22	28,776	100
Longido	0	0	0	0	0	0	7,165	62	4,478	38	11,644	100
Arusha Rural	0	0	0	0	0	0	38,698	80	9,555	20	48,253	100
Meru	0	0	122	100	122	100	42,947	87	6,344	13	49,292	100
Total	**161**	**57**	**122**	**43**	**283**	**100**	**163,558**	**80**	**41,989**	**20**	**205,547**	**100**

3 .9 HOUSEHOLD DEMOGRAPHS: Number of Household Members Who Can Read and Write languages by type of language and District

District	Swahili		Swahili & English		Any Other Language		Don't Read / Write		Total
	Number	%	Number	%	Number	%	Number	%	
Monduli	66,940	54.6	8,287	5.0	0	0.0	47,436	38.7	122,663
Arusha	10,825	66.5	2,472	12.8	0	0.0	2,983	18.3	16,281
Karatu	121,379	69.2	16,041	6.7	446	0.3	37,519	21.4	175,384
Ngorongoro	60,464	50.2	4,831	3.7	213	0.2	54,993	45.6	120,502
Longido	20,253	43.8	2,282	3.7	58	0.1	23,605	51.1	46,199
Arusha Rural	148,462	68.0	25,918	10.3	358	0.2	43,595	20.0	218,334
Meru	153,854	70.2	40,263	14.5	122	0.1	24,890	11.4	219,129
Total	**582,178**	**63.4**	**100,096**	**8.7**	**1,197**	**0.1**	**235,022**	**25.6**	**918,492**

3.10 Number of Heads of Agricultural Households By Status of writing and reading Languages, sex of head and District, 2007/08 Agricultural Year

	Swahili						Swahili & English					
District	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Monduli	10,859	77	3,286	23	14,145	100	929	76	286	24	1,214	100
Arusha	1,364	89	170	11	1,534	100	597	100	0	0	597	100
Karatu	20,675	89	2,584	11	23,260	100	1,961	76	624	24	2,584	100
Ngorongoro	10,373	90	1,137	10	11,510	100	711	100	0	0	711	100
Longido	2,658	74	925	26	3,583	100	202	58	144	42	347	100
Arusha Rural	25,679	88	3,583	12	29,263	100	4,061	92	358	8	4,419	100
Meru	30,990	92	2,562	8	33,553	100	8,297	96	366	4	8,663	100
Total	**102,599**	**88**	**14,248**	**12**	**116,847**	**100**	**16,756**	**90**	**1,778**	**10**	**18,535**	**100**

Cont. 3.10 Number of Heads of Agricultural Households By Status of writing and reading Languages, sex of head and District, 2007/08 Agricultural Year

	Any Other Language						Don't Read / Write					
District	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Monduli	0	0	0	0	0	0	8,287	61	5,287	39	13,574	100
Arusha	0	0	0	0	0	0	298	70	128	30	426	100
Karatu	0	0	0	0	0	0	7,397	72	2,852	28	10,249	100
Ngorongoro	0	0	0	0	0	0	11,297	68	5,258	32	16,555	100
Longido	0	0	0	0	0	0	4,305	56	3,409	44	7,714	100
Arusha Rural	119	100	0	0	119	100	8,838	61	5,614	39	14,452	100
Meru	0	0	0	0	0	0	3,660	52	3,416	48	7,077	100
Total	**119**	**100**	**0**	**0**	**119**	**100**	**44,083**	**63**	**25,963**	**37**	**70,046**	**100**

Cont. 3.10 Number of Heads of Agricultural Households By Status of writing and reading Languages, sex of head and District, 2007/08 Agricultural Year

District	Total					
	Male	%	Female	%	Total	%
Monduli	20,075	69	8,859	31	28,933	100
Arusha	2,259	88	298	12	2,557	100
Karatu	30,033	83	6,060	17	36,093	100
Ngorongoro	22,381	78	6,395	22	28,776	100
Longido	7,165	62	4,478	38	11,644	100
Arusha Rural	38,698	80	9,555	20	48,253	100
Meru	42,947	87	6,344	13	49,292	100
Total	**163,558**	**80**	**41,989**	**20**	**205,547**	**100**

3.11 Number of Agricultural Household Members Five Years and Above reporting Literacy levels by Sex of Member and District, 2007/08 Agricultural Year

	Male						Female						Total					
	Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	39,649	66	20,146	34	59,796	100	35,577	57	27,290	43	62,868	100	75,227	61	47,436	39	122,663	100
Arusha	6,521	85	1,108	15	7,629	100	6,776	78	1,875	22	8,652	100	13,297	82	2,983	18	16,281	100
Karatu	76,018	79	20,319	21	96,337	100	61,848	78	17,200	22	79,048	100	137,866	79	37,519	21	175,384	100
Ngorongoro	38,083	60	25,081	40	63,164	100	27,426	48	29,912	52	57,338	100	65,509	54	54,993	46	120,502	100
Longido	12,453	54	10,517	46	22,969	100	10,141	44	13,088	56	23,229	100	22,594	49	23,605	51	46,199	100
Arusha Rural	90,296	83	19,110	17	109,406	100	84,443	78	24,485	22	108,928	100	174,739	80	43,595	20	218,334	100
Meru	99,438	90	11,225	10	110,663	100	94,801	87	13,665	13	108,466	100	194,239	89	24,890	11	219,129	100
Total	**362,457**	**77**	**107,506**	**23**	**469,963**	**100**	**321,013**	**72**	**127,516**	**28**	**448,529**	**100**	**683,470**	**74**	**235,022**	**26**	**918,492**	**100**

3.12 Number of heads of Agricultural households reporting Literacy levels by Sex of Member and District, 2007/08 Agricultural Year

	Male						Female						Total					
	Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total		Can Read and Write		Can not Read and Write		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	11,788	59	8,287	41	20,075	100	3,572	40	5,287	60	8,859	100	15,360	53	13,574	47	28,933	100
Arusha	1,960	87	298	13	2,259	100	170	57	128	43	298	100	2,131	83	426	17	2,557	100
Karatu	22,636	75	7,397	25	30,033	100	3,208	53	2,852	47	6,060	100	25,844	72	10,249	28	36,093	100
Ngorongoro	11,084	50	11,297	50	22,381	100	1,137	18	5,258	82	6,395	100	12,221	42	16,555	58	28,776	100
Longido	2,860	40	4,305	60	7,165	100	1,069	24	3,409	76	4,478	100	3,929	34	7,714	66	11,644	100
Arusha Rural	29,860	77	8,838	23	38,698	100	3,941	41	5,614	59	9,555	100	33,801	70	14,452	30	48,253	100
Meru	39,287	91	3,660	9	42,947	100	2,928	46	3,416	54	6,344	100	42,215	86	7,077	14	49,292	100
Total	**119,475**	**73**	**44,083**	**27**	**163,558**	**100**	**16,026**	**38**	**25,963**	**62**	**41,989**	**100**	**135,501**	**66**	**70,046**	**34**	**205,547**	**100**

3 .13 HOUSEHOLD DEMOGRAPHS: Number of Household Members Five Years and Above by Education Status and District

District	Attending School	%	Completed	%	Never Attended to School	%	Total
Monduli	42,579	13	34,077	9	46,008	21	122,663
Arusha	7,032	2	7,032	2	2,216	1	16,281
Karatu	61,402	18	81,632	22	32,350	15	175,384
Ngorongoro	35,738	11	30,197	8	54,567	25	120,502
Longido	14,388	4	9,534	3	22,276	10	46,199
Arusha Rural	88,504	27	88,265	24	41,565	19	218,334
Meru	83,698	25	112,493	31	22,938	10	219,129
Total	**333,342**	**100**	**363,230**	**100**	**221,919**	**100**	**918,492**

3.14 Number of Heads of Agricultural Households by Education Status, sex of head and District, 2007/08 Agricultural Year

	Attending School						Completed					
	Male		Female		Total		Male		Female		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	286	67	143	33	429	100	11,359	77	3,358	23	14,717	100
Arusha	43	50	43	50	85	100	1,918	94	128	6	2,046	100
Karatu	267	100	0	0	267	100	22,369	88	3,119	12	25,488	100
Ngorongoro	213	100	0	0	213	100	10,658	90	1,137	10	11,794	100
Longido	0	0	58	100	58	100	2,716	73	982	27	3,698	100
Arusha Rural	358	50	358	50	717	100	29,621	91	3,105	9	32,726	100
Meru	488	100	0	0	488	100	38,677	93	2,806	7	41,483	100
Total	**1,655**	**73**	**602**	**27**	**2,257**	**100**	**117,317**	**89**	**14,635**	**11**	**131,952**	**100**

Cont.. 3.14 Number of Heads of Agricultural Households by Education Status, sex of head and District, 2007/08 Agricultural Year

	Never Attended to School						Total					
	Male		Female		Total		Male		Female		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	8,430	61	5,358	39	13,788	100	20,075	69	8,859	31	28,933	100
Arusha	298	70	128	30	426	100	2,259	88	298	12	2,557	100
Karatu	7,397	72	2,941	28	10,338	100	30,033	83	6,060	17	36,093	100
Ngorongoro	11,510	69	5,258	31	16,768	100	22,381	78	6,395	22	28,776	100
Longido	4,449	56	3,438	44	7,888	100	7,165	62	4,478	38	11,644	100
Arusha Rural	8,719	59	6,091	41	14,810	100	38,698	80	9,555	20	48,253	100
Meru	3,782	52	3,538	48	7,321	100	42,947	87	6,344	13	49,292	100
Total	**44,586**	**62**	**26,752**	**38**	**71,338**	**100**	**163,558**	**80**	**41,989**	**20**	**205,547**	**100**

3.15 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2007/08 Agricultural Year

	Education Level											
	Under Standard One		Standard One		Standard Two		Standard Three		Standard Four		Standard Five	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	71	0.2	286	0.8	286	0.8	929	2.7	2,572	7.5	1,143	3.4
Arusha	0	0.0	0	0.0	0	0.0	170	2.4	554	7.9	128	1.8
Karatu	178	0.2	713	0.9	1,159	1.4	1,159	1.4	4,901	6.0	1,515	1.9
Ngorongoro	0	0.0	0	0.0	497	1.6	426	1.4	2,416	8.0	497	1.6
Longido	0	0.0	0	0.0	29	0.3	116	1.2	260	2.7	87	0.9
Arusha Rural	0	0.0	1,433	1.6	1,433	1.6	1,194	1.4	2,747	3.1	358	0.4
Meru	122	0.1	0	0.0	610	0.5	1,220	1.1	7,565	6.7	2,562	2.3
Total	**372**	**0.1**	**2,432**	**0.7**	**4,014**	**1.1**	**5,214**	**1.4**	**21,015**	**5.8**	**6,290**	**1.7**

cont 3.15 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Level of Formal Education Completion and Region, 2007/08 Agricultural Year

	Education Level											
	Standard Six		Standard Seven		Standard Eight		Training After Primary Education		Pre Form One		Form One	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	786	2.3	25,504	74.8	71	0.2	214	0.6	71	0.2	143	0.4
Arusha	256	3.6	4,305	61.2	43	0.6	128	1.8	0	0.0	0	0.0
Karatu	802	1.0	65,324	80.0	446	0.5	178	0.2	0	0.0	178	0.2
Ngorongoro	284	0.9	24,228	80.2	0	0.0	213	0.7	0	0.0	71	0.2
Longido	173	1.8	8,119	85.2	87	0.9	29	0.3	0	0.0	0	0.0
Arusha Rural	1,314	1.5	67,363	76.3	717	0.8	717	0.8	119	0.1	239	0.3
Meru	854	0.8	81,624	72.6	1,220	1.1	610	0.5	244	0.2	244	0.2
Total	**4,469**	**1.2**	**276,467**	**76.1**	**2,583**	**0.7**	**2,089**	**0.6**	**435**	**0.1**	**875**	**0.2**

cont 3.15 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Level of Formal Education Completion and Region, 2007/08 Agricultural Year

	Education Level											
	Form Two		Form Three		Form Four		Form Five		Form Six		Training After Secondary Education	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	500	1.5	143	0.4	500	1.5	71	0.2	0	0.0	0	0.0
Arusha	128	1.8	43	0.6	426	6.1	0	0.0	43	0.6	43	0.6
Karatu	267	0.3	356	0.4	2,406	2.9	0	0.0	89	0.1	356	0.4
Ngorongoro	142	0.5	142	0.5	639	2.1	0	0.0	142	0.5	213	0.7
Longido	202	2.1	0	0.0	289	3.0	0	0.0	0	0.0	58	0.6
Arusha Rural	1,194	1.4	478	0.5	5,733	6.5	0	0.0	836	0.9	717	0.8
Meru	3,660	3.3	854	0.8	8,053	7.2	0	0.0	244	0.2	976	0.9
Total	**6,094**	**1.7**	**2,016**	**0.6**	**18,047**	**5.0**	**71**	**0.0**	**1,354**	**0.4**	**2,363**	**0.7**

cont 3.15 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Level of Formal Education Completion and Region, 2007/08 Agricultural Year

	Education Level							
	University & Other Tertiary Education		Adult Education		Not applicable		Total	
District	Number	%	Number	%	Number	%	Number	%
Monduli	214	0.6	500	1.5	71	0.2	34,077	100
Arusha	554	7.9	213	3.0	0	0.0	7,032	100
Karatu	267	0.3	1,069	1.3	267	0.3	81,632	100
Ngorongoro	0	0.0	284	0.9	0	0.0	30,197	100
Longido	58	0.6	0	0.0	29	0.3	9,534	100
Arusha Rural	358	0.4	1,075	1.2	239	0.3	88,265	100
Meru	1,220	1.1	488	0.4	122	0.1	112,493	100
Total	**2,672**	**0.7**	**3,630**	**1.0**	**729**	**0.2**	**363,230**	**100**

3.16 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Level of involvement in Farming Activivty and District, 2007/08 Agricultural Year

	Involvement in Farming									
	Works Full-time on Farm		Works Part-time on Farm		Rarely Works on Farm		Never Works on Farm		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	42,150	34	15,931	13	27,362	22	37,220	30	122,663	100
Arusha	5,157	32	554	3	2,856	18	7,714	47	16,281	100
Karatu	82,612	47	6,327	4	36,449	21	49,995	29	175,384	100
Ngorongoro	60,748	50	9,734	8	4,689	4	45,330	38	120,502	100
Longido	10,661	23	10,401	23	9,188	20	15,948	35	46,199	100
Arusha Rural	76,680	35	16,960	8	49,328	23	75,366	35	218,334	100
Meru	90,287	41	21,108	10	36,603	17	71,131	32	219,129	100
Total	**368,295**	**40**	**81,016**	**9**	**166,475**	**18**	**302,706**	**33**	**918,492**	**100**

3.17 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Main Activity and District, 2007/08 Agricultural Year

	Main Activity									
	Crop/Seaweed Farming		Livestock Keeping / Herding		Livestock Pastoralist		Fishing		Fish Farming	
District	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	37,078	30.2	23,004	18.8	3,286	3	143	0.1	0	0
Arusha	5,029	30.9	1,534	9.4	85	1	0	0.0	0	0
Karatu	87,068	49.6	5,704	3.3	0	0	267	0.2	0	0
Ngorongoro	15,063	12.5	52,933	43.9	497	0	71	0.1	0	0
Longido	7,194	15.6	16,555	35.8	665	1	58	0.1	0	0
Arusha Rural	77,994	35.7	10,749	4.9	119	0	0	0.0	0	0
Meru	92,971	42.4	2,440	1.1	122	0	366	0.2	0	0
Total	**322,397**	**35.1**	**112,919**	**12.3**	**4,775**	**1**	**905**	**0.1**	**0**	**0**

Cont 3.17 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Main Activity and District , 2007/08 Agricultural Year

	Main Activity									
	Government / Parastatal		Private - NGO / Mission / etc		Self Employed (Non Farmimg) with Employees		Self Employed (Non Farmimg) without Employees		Unpaid Family Helper (Non Agriculture)	
District	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	357	0.3	1,000	0.8	572	0.5	286	0.2	429	0.3
Arusha	341	2.1	682	4.2	426	2.6	128	0.8	0	0.0
Karatu	1,159	0.7	3,476	2.0	713	0.4	178	0.1	2,050	1.2
Ngorongoro	213	0.2	639	0.5	142	0.1	213	0.2	213	0.2
Longido	202	0.4	318	0.7	29	0.1	202	0.4	116	0.3
Arusha Rural	3,105	1.4	5,972	2.7	6,091	2.8	2,986	1.4	2,269	1.0
Meru	3,782	1.7	7,565	3.5	5,490	2.5	4,270	1.9	1,220	0.6
Total	**9,160**	**1.0**	**19,651**	**2.1**	**13,463**	**1.5**	**8,264**	**0.9**	**6,297**	**0.7**

Cont 3.17 HOUSEHOLDS DEMOGRAPHS: Number of Agricultural Household Members By Main Activity and District, 2007/08 Agricultural Year

	Main Activity													
	Not Working & Available		Not Working & Unavailable		Housemaker / Housewife		Student		Unable to Work / Too Old / Retired / Sick / Disabled		Other		Total	
Region	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	357	0.3	143	0.1	1,357	1.1	40,007	32.6	14,574	12	71	0.1	122,663	100
Arusha	170	1.0	43	0.3	256	1.6	6,904	42.4	639	4	43	0.3	16,281	100
Karatu	1,069	0.6	356	0.2	802	0.5	59,442	33.9	13,100	7	0	0.0	175,384	100
Ngorongoro	213	0.2	0	0.0	1,421	1.2	35,667	29.6	13,215	11	0	0.0	120,502	100
Longido	202	0.4	58	0.1	1,647	3.6	13,810	29.9	5,085	11	58	0.1	46,199	100
Arusha Rural	1,194	0.5	597	0.3	4,778	2.2	88,265	40.4	14,094	6	119	0.1	218,334	100
Meru	976	0.4	1,220	0.6	4,758	2.2	80,038	36.5	13,909	6	0	0.0	219,129	100
Total	**4,183**	**0.5**	**2,417**	**0.3**	**15,019**	**1.6**	**324,134**	**35.3**	**74,617**	**8**	**291**	**0**	**918,492**	**100**

LAND OWNERSHIP AND LAND USE

4.1 LAND ACCESS/OWNERSHIP: Number of Farming households by type of land Ownership/Tenure and District for the 2007/08 agriculture year

District	Land ownership/tenure														
	Leased / Certificate of Ownership		Owned under Customary Law		Bought		Rented		Borrowed		Households with area Share - cropped		Households with area under Other forms of Tenure		Total number of households
	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	
Monduli	857	3.0	22,361	77.3	2,286	7.9	929	3.2	1,000	3.5	357	1.2	2,072	7.2	28,933
Arusha	85	3.3	2,088	81.7	725	28.3	170	6.7	85	3.3	128	5.0	0	0.0	2,557
Karatu	5,704	15.8	19,784	54.8	8,644	24.0	4,812	13.3	4,545	12.6	624	1.7	267	0.7	36,093
Ngorongoro	284	1.0	10,729	37.3	426	1.5	213	0.7	355	1.2	71	0.2	284	1.0	28,776
Longido	867	7.4	6,703	57.6	433	3.7	607	5.2	144	1.2	462	4.0	491	4.2	11,644
Arusha Rural	1,672	3.5	40,131	83.2	6,569	13.6	1,792	3.7	1,792	3.7	717	1.5	119	0.2	48,253
Meru	1,342	2.7	41,727	84.7	9,273	18.8	5,734	11.6	2,928	5.9	366	0.7	488	1.0	49,292
Total	**10,811**	**5.3**	**143,524**	**69.8**	**28,357**	**13.8**	**14,257**	**6.9**	**10,850**	**5.3**	**2,725**	**1.3**	**3,722**	**1.8**	**205,547**

4.2 LAND ACCESS/OWNERSHIP: Area of land (ha) by Ownership/Tenure and District for the 2007/08 agriculture year

District	Land Ownership/Tenure							
	Area leased / Certificate of Ownership	Area owned under Customary Law	Area Bought	Area rented	Area Borrowed	Area Share - cropped	Area under Other forms of Tenure	Total area
Monduli	1,692	85,775	6,119	1,070	904	1,533	3,182	100,274
Arusha	173	3,348	893	278	39	224	.	4,954
Karatu	4,330	25,220	4,266	2,719	1,982	289	352	39,157
Ngorongoro	367	20,740	302	122	187	7	302	22,027
Longido	1,649	8,524	339	792	129	509	380	12,323
Arusha Rural	2,055	34,221	4,605	931	1,114	326	48	43,300
Meru	1,025	42,673	9,003	5,928	1,939	370	247	61,184
Total	**11,290**	**220,500**	**25,527**	**11,840**	**6,293**	**3,259**	**4,511**	**283,220**

4.3 LAND SUFFICIENCY: Number of Agriculture Households by Whether All Land Available to the Household Was Used during 2007/08 agriculture year and District

District	Was all Land Available to the Hh Used During 2007/08?				
	Yes	%	No	%	Total
Monduli	20,218	70	8,716	30	28,933
Arusha	2,472	97	85	3	2,557
Karatu	29,231	81	6,862	19	36,093
Ngorongoro	7,389	26	21,386	74	28,776
Longido	5,778	50	5,865	50	11,644
Arusha Rural	42,640	88	5,614	12	48,253
Meru	42,947	87	6,344	13	49,292
Total	**150,675**	**73**	**54,873**	**27**	**205,547**

4.4 LAND SUFFICIENCY: Number of Agriculture Households by Whether they Consider Having Sufficient Land for the Household and District during 2007/08 agriculture year

District	Do you Consider that you have sufficient land for the Hh?				
	Yes	%	No	%	Total
Monduli	5,429	19	23,504	81	28,933
Arusha	469	18	2,088	82	2,557
Karatu	10,872	30	25,220	70	36,093
Ngorongoro	2,274	8	26,502	92	28,776
Longido	1,676	14	9,968	86	11,644
Arusha Rural	4,061	8	44,192	92	48,253
Meru	6,222	13	43,069	87	49,292
Total	**31,003**	**15**	**174,544**	**85**	**205,547**

4.5 LAND ACCESS/OWNERSHIP/TENURE: Number of Agriculture Households By Whether Female Members of the Household Own or Have Cusomary Right to Land By District during 2007/08 Agriculture year

District	Do any Female Members of the Hh own or have customary right to Land				
	Yes	%	No	%	Total
Monduli	5,572	19	23,361	81	28,933
Arusha	1,406	55	1,151	45	2,557
Karatu	8,288	23	27,805	77	36,093
Ngorongoro	2,984	10	25,791	90	28,776
Longido	1,560	13	10,083	87	11,644
Arusha Rural	11,824	25	36,429	75	48,253
Meru	12,445	25	36,847	75	49,292
Total	**44,080**	**21**	**161,467**	**79**	**205,547**

4.6 LAND USE: Number of Agriculture Households by Type of Land Use and District for the 2007/08 agriculture year

District	Type of land use													
	Households under Temporary Mono Crops	%	Households under Temporary Mixed Crops	%	Households under Permanent Mono Crops	%	Households under Permanent Mixed Crops	%	Households under Permanent / Annual Mix	%	Households under Pasture	%	Households under Fallow	%
Monduli	8,001	28	17,574	61	857	3	357	1	214	1	7,644	26	4,001	14
Arusha	895	35	2,174	85	384	15	597	23	170	7	597	23	85	3
Karatu	18,626	52	16,843	47	89	0	535	1	535	1	5,347	15	713	2
Ngorongoro	7,460	26	3,624	13	71	0	142	0	71	0	355	1	2,345	8
Longido	5,403	46	1,762	15	0	0	116	1	87	1	491	4	549	5
Arusha Rural	12,063	25	33,682	70	3,225	7	3,105	6	3,344	7	3,225	7	1,194	2
Meru	19,644	40	28,062	57	9,761	20	15,373	31	2,684	5	5,856	12	2,196	4
Total	**72,092**	**35**	**103,721**	**50**	**14,387**	**7**	**20,225**	**10**	**7,106**	**3**	**23,516**	**11**	**11,083**	**5**

Cont..4.6 LAND USE: Number of Agriculture Households by Type of Land Use and District for the 2007/08 agriculture year

District	Type of land use										
	Households under Natural Bush	%	Households under Planted Trees	%	Households Rented to Others	%	Households Unusable	%	Households of Uncultivated Usable Land	%	Total number of households
Monduli	71	0	0	0	214	1	2,858	10	1,214	4	28,933
Arusha	128	5	298	12	85	3	170	7	0	0	2,557
Karatu	535	1	624	2	980	3	1,069	3	1,604	4	36,093
Ngorongoro	213	1	71	0	213	1	142	0	639	2	28,776
Longido	29	0	58	0	87	1	202	2	1,358	12	11,644
Arusha Rural	358	1	478	1	239	0	1,433	3	836	2	48,253
Meru	122	0	488	1	488	1	610	1	1,586	3	49,292
Total	**1,456**	**1**	**2,017**	**1**	**2,307**	**1**	**6,485**	**3**	**7,238**	**4**	**205,547**

4.7 LAND USE: Area of Land (ha) by land use and District for the 2007/08 agriculture year

District	Land use area												
	Area under Temporary Mono Crops	Area under Temporary Mixed Crops	Area under Permanent Mono Crops	Area under Permanent Mixed Crops	Area under Permanent / Annual Mix	Area under Pasture	Area under Fallow	Area under Natural Bush	Area under Planted Trees	Area Rented to Others	Area Unusable	Area of Uncultivated Usable Land	Total area (ha)
Monduli	13,977	33,836	325	268	108	36,270	10,550	1	.	217	1,829	2,892	100,274
Arusha	1,128	3,033	95	209	15	207	69	22	35	121	22	.	4,954
Karatu	13,845	17,827	14	244	265	3,191	866	253	280	704	496	1,173	39,157
Ngorongoro	11,772	3,682	29	65	14	1,769	3,085	288	86	187	86	964	22,027
Longido	7,053	2,480	.	99	18	497	620	35	35	29	99	1,357	12,323
Arusha Rural	7,870	27,034	708	882	1,397	2,430	1,076	115	42	109	1,083	554	43,300
Meru	15,958	27,508	3,975	6,193	1,183	2,336	1,536	12	482	346	383	1,272	61,184
Total	**71,604**	**115,400**	**5,147**	**7,959**	**3,001**	**46,701**	**17,802**	**725**	**959**	**1,712**	**3,999**	**8,211**	**283,220**

NUMBER OF HOUSEHOLDS MEMBERS OWNING MOST OF THE CROP BY SEX

5.1 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - Regional Total

	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
Crop	Number	Row N %	Number	Row N %	Number	Row N %	Number	Row N %	Number	Row N %	Number	Row N %
Maize	23,668	69	10,391	31	34,059	100	107,613	75	36,435	25	144,048	100
Paddy	336	50	336	50	673	100	999	61	637	39	1,635	100
Sorghum	-	-	-	-	-	-	3,606	87	552	13	4,157	100
Finger Millet	119	100	-	-	119	100	1,378	100	-	-	1,378	100
Wheat	318	73	116	27	433	100	3,539	85	623	15	4,162	100
Barley	89	100	-	-	89	100	267	75	89	25	356	100
REALS	**24,530**	**69**	**10,843**	**31**	**35,373**	**100**	**117,402**	**75**	**38,336**	**25**	**155,738**	**100**
Cassava	-	-	-	-	-	-	-	-	122	100	122	100
Sweet Potato	487	60	320	40	807	100	838	100	-	-	838	100
Irish potatoes	1,399	86	235	14	1,634	100	1,338	84	258	16	1,595	100
ROOTS & TUBERS	**1,886**	**77**	**555**	**23**	**2,441**	**100**	**2,176**	**85**	**380**	**15**	**2,555**	**100**
Mung Bean	162	74	58	26	220	100	-	-	122	100	122	100
Beans	16,659	68	7,854	32	24,513	100	63,690	69	28,640	31	92,331	100
owpeas	247	67	119	33	367	100	3,754	57	2,803	43	6,557	100
Green gram	606	84	119	16	725	100	5,019	63	2,942	37	7,961	100
Chick peas	250	63	148	37	398	100	3,070	75	1,025	25	4,094	100
Field Peas	-	-	-	-	-	-	119	100	-	-	119	100
ULSES	**17,924**	**68**	**8,299**	**32**	**26,223**	**100**	**75,652**	**68**	**35,532**	**32**	**111,185**	**100**
unflower	43	60	29	40	72	100	6,397	81	1,456	19	7,853	100
Simsim	-	-	-	-	-	-	71	50	71	50	143	100
roundnut	-	-	-	-	-	-	-	-	122	100	122	100
Soya Beans	358	75	119	25	478	100	358	60	239	40	597	100
OIL SEEDS & OIL NUTS	**401**	**73**	**148**	**27**	**549**	**100**	**6,827**	**78**	**1,888**	**22**	**8,715**	**100**

Cont. Table 5.1 Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season - Regional Total

	SHORT RAINY						LONG RAINY					
	Male		Female		Total		Male		Female		Total	
Crop	Number	Row N %	Number	Row N %	Number	Row N %	Number	Row N %	Number	Row N %	Number	Row N %
Okra	287	100	-	-	287	100	361	100	-	-	361	100
Radish	239	100	-	-	239	100	119	51	114	49	233	100
Turmeric	119	100	-	-	119	100	122	100	-	-	122	100
Bitteer Aubergine	693	94	43	6	735	100	483	100	-	-	483	100
Onion	1,481	81	356	19	1,838	100	675	100	-	-	675	100
Cabbage	1,560	85	284	15	1,844	100	480	87	71	13	552	100
Tomatoes	2,977	90	331	10	3,307	100	1,026	79	273	21	1,299	100
Spinach	912	89	114	11	1,025	100	290	47	321	53	611	100
Carrot	793	95	43	5	836	100	122	63	71	37	193	100
Chillies	573	93	43	7	616	100	85	100	-	-	85	100
Amaranths	534	69	241	31	775	100	563	70	241	30	804	100
Cucumber	122	50	122	50	244	100	244	100	-	-	244	100
Egg Plant	165	100	-	-	165	100	43	100	-	-	43	100
FRUITS & VEGETABLES	**10,455**	**87**	**1,576**	**13**	**12,031**	**100**	**4,614**	**81**	**1,092**	**19**	**5,706**	**100**
Cotton	-	-	119	100	119	100	-	-	-	-	-	-
Tobacco	122	81	29	19	151	100	-	-	-	-	-	-
CASH CROPS	**122**	**45**	**148**	**55**	**270**	**100**	**-**	**-**	**-**	**-**	**-**	**-**
Malay	-	-	-	-	-	-	71	100	-	-	71	100
Total	**55,318**	**72**	**21,570**	**28**	**76,888**	**100**	**206,742**	**73**	**77,228**	**27**	**283,970**	**100**

5.2 Planted Area by District, season and Sex of Household members owning most of the crop for the agriculture year 2007/08

	SHORT RAINY SEASON						LONG RAINY SEASON					
	Male		Female		Total		Male		Female		Total	
District	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%
Monduli	3,905	76	1,056	24	4,960	100	32,223	66	11,905	34	44,128	100
Arusha	1,541	90	86	10	1,627	100	3,762	87	318	13	4,080	100
Karatu	2,527	80	307	20	2,834	100	22,789	81	3,987	19	26,776	100
Ngorongoro	597	80	43	20	640	100	11,840	72	2,553	28	14,393	100
Longido	3,939	61	1,839	39	5,778	100	5,138	63	2,006	38	7,144	100
Arusha Rural	6,615	64	3,288	36	9,903	100	22,234	64	9,105	36	31,339	100
Meru	7,175	75	1,079	25	8,254	100	33,235	76	5,866	24	39,101	100
Total	**26,299**	**70**	**7,698**	**30**	**33,997**	**100**	**131,221**	**72**	**35,740**	**28**	**166,961**	**100**

5.3 Number of Household members owning most of the crop by Sex of the Main Owner, Season and District for the agriculture year 2007/08

	SHORT RAINY SEASON						LONG RAINY SEASON					
	Male		Female		Total		Male		Female		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	3,000	76	929	24	3,929	100	14,788	66	7,787	34	22,575	100
Arusha	1,108	90	128	10	1,236	100	2,216	87	341	13	2,557	100
Karatu	3,654	80	891	20	4,545	100	25,755	81	6,238	19	31,993	100
Ngorongoro	853	80	213	20	1,066	100	7,460	72	2,842	28	10,302	100
Longido	2,571	61	1,676	39	4,247	100	3,323	63	1,994	38	5,316	100
Arusha Rural	11,466	64	6,569	36	18,035	100	25,799	64	14,213	36	40,012	100
Meru	8,907	75	2,928	25	11,835	100	31,844	76	9,883	24	41,727	100
Total	**31,559**	**70**	**13,334**	**30**	**44,893**	**100**	**111,186**	**72**	**43,298**	**28**	**154,483**	**100**

CROP PRODUCTION BY DISTRICT

5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short & Long Rainy SEASON Agricultural Year 2007/08

District	Maize				Paddy				Sorghum				Finger Millet			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	24,647	29,335	27,652	0.94	857	405	909	2.24	71	43	103	2.37	0	.	.	.
Arusha	3,495	2,700	3,397	1.26	0	.	.	.	0	.	.	.	0	.	.	.
Karatu	32,261	21,162	45,368	2.14	446	198	502	2.53	2,228	507	401	0.79	624	135	150	1
Ngorongoro	10,658	9,498	17,797	1.87	0	.	.	.	1,492	994	1,261	1.27	0	.	.	.
Longido	8,465	6,788	6,162	0.91	29	12	9	0.74	0	.	.	.	144	94	141	1.51
Arusha Rural	51,120	21,587	32,373	1.50	0	.	.	.	0	.	.	.	119	73	72	0.99
Meru	47,462	32,830	76,930	2.34	976	272	851	3.13	366	114	60	0.53	610	321	116	0.36
Total	**178,107**	**123,901**	**209,678**	**1.69**	**2,308**	**887**	**2,271**	**2.56**	**4,157**	**1,658**	**1,825**	**1.10**	**1,498**	**622**	**478**	**0.77**

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Wheat				Barley				Cassava				Sweet Potato			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	929	1,330	2,141	2	0	.	.	.	0	.	.	.	0	.	.	.
Arusha	0	.	.	.	0	.	.	.	0	.	.	.	43	4	4	0.99
Karatu	1,515	1,057	1,365	1.29	446	216	259	1	0	.	.	.	446	216	643	2.97
Ngorongoro	0	.	.	.	0	.	.	.	0	.	.	.	284	86	254	2.95
Longido	838	1,193	35	0	0	.	.	.	0	.	.	.	29	5	14	2.47
Arusha Rural	1,314	1,018	1,851	2	0	.	.	.	0	.	.	.	478	118	407	3.43
Meru	0	.	.	.	0	.	.	.	122	20	0	0.00	366	10	5	0.48
Total	**4,595**	**4,599**	**5,392**	**1.17**	**446**	**216**	**259**	**1**	**122**	**20**	**0**	**0.00**	**1,645**	**441**	**1,328**	**3.01**

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Wheat				Barley				Cassava				Sweet Potato			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	929	1,330	2,141	2	0	.	.	.	0	.	.	.	0	.	.	.
Arusha	0	.	.	.	0	.	.	.	0	.	.	.	43	4	4	0.99
Karatu	1,515	1,057	1,365	1.29	446	216	259	1	0	.	.	.	446	216	643	2.97
Ngorongoro	0	.	.	.	0	.	.	.	0	.	.	.	284	86	254	2.95
Longido	838	1,193	35	0	0	.	.	.	0	.	.	.	29	5	14	2.47
Arusha Rural	1,314	1,018	1,851	2	0	.	.	.	0	.	.	.	478	118	407	3.43
Meru	0	.	.	.	0	.	.	.	122	20	0	0.00	366	10	5	0.48
Total	**4,595**	**4,599**	**5,392**	**1.17**	**446**	**216**	**259**	**1**	**122**	**20**	**0**	**0.00**	**1,645**	**441**	**1,328**	**3.01**

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Green gram				Chick peas				Bambaranuts				Field Peas			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	4,001	2,461	1,080	0.44	2,143	1,162	727	1	0	0	0	0	0	.	.	.
Arusha	256	52	40	0.77	554	532	317	0.60	0	0	0	0	0	.	.	.
Karatu	0	.	.	.	89	36	27	0.74	0	0	0	0	0	.	.	.
Ngorongoro	0	.	.	.	0	.	.	.	0	0	0	0	0	.	.	.
Longido	0	.	.	.	29	5	9	1	0	0	0	0	0	.	.	.
Arusha Rural	3,941	1,336	1,123	0.84	1,433	571	562	1	0	0	0	0	119	48	5	0.10
Meru	488	222	45	0.20	244	62	71	1.15	0	0	0	0	0	.	.	.
Total	**8,685**	**4,071**	**2,289**	**0.56**	**4,493**	**2,368**	**1,712**	**1**	**0**	**0**	**0**	**0**	**119**	**48**	**5**	**0.10**

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Sunflower				Simsim				Groundnut				Soya Beans			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	0	.	.	.	143	376	300	0.80	0	.	.	.				
Arusha	85	17	12	0.68	0	.	.	.	0	.	.	.				
Karatu	3,476	429	354	0.82	0	.	.	.	0	.	.	.				
Ngorongoro	71	29	49	1.70	0	.	.	.	0	.	.	.				
Longido	144	94	77	0.82	0	.	.	.	0	.	.	.	0	.	.	.
Arusha Rural	0	.	.	.	0	.	.	.	0	.	.	.	1,075	206	153	1
Meru	4,148	1,648	695	0	0	.	.	.	122	12	5	0.40	0	.	.	.
Total	**7,925**	**2,217**	**1,187**	**0.54**	**143**	**376**	**300**	**0.80**	**122**	**12**	**5**	**0.40**	**1,075**	**206**	**153**	**0.75**

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Bitter Aubergine				Okra				Radish				Turmeric			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	0	.	.	.	0	.	.	.	71	7	1	0.10	0	.	.	.
Arusha	128	22	14	0.67	43	9	2	0.25	43	9	2	0.20	0	.	.	.
Karatu	0	.	.	.	0	.	.	.	0	.	.	.	0	.	.	.
Ngorongoro	0	.	.	.	0	.	.	.	0	.	.	.	0	.	.	.
Longido	0	.	.	.	0	.	.	.	0	.	.	.	0	.	.	.
Arusha Rural	358	121	119	1	239	68	33	0.49	358	106	107	1.01	119	77	12	0.15
Meru	732	121	617	5	366	74	59	0.79	0	.	.	.	122	49	15	0
Total	**1,218**	**263**	**751**	**2.85**	**648**	**150**	**94**	**0.63**	**472**	**122**	**110**	**0.90**	**241**	**127**	**27**	**0**

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Onion				Cabbage				Tomatoes				Cucumber			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	71	14	29	1.98	143	22	290	13.35	143	29	414	14.33				
Arusha	213	43	15	0.36	256	38	16	0.42	85	12	10	0.81				
Karatu	1,961	577	1,586	2.75	0	.	.	.	0	.	.	.				
Ngorongoro	0	.	.	.	71	14	28	1.98	355	43	95	2.20				
Longido	29	47	104	2.22	0	.	.	.	376	170	1,427	8.41	0	.	.	.
Arusha Rural	239	73	191	2.63	1,194	304	2,805	9	597	162	2,066	12.76	0	.	.	.
Meru	0	.	.	.	732	56	1,511	27	3,050	935	14,853	15.48	488	272	1,464	5.39
Total	2,513	754	1,925	2.55	2,396	434	4,649	10.72	4,606	1,351	18,866	13.97	488	272	1,464	5

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Spinach				Carrot				Chillies				Amaranths			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli	143	10	162	16.99	143	12	329	27.05	0	.	.	.				
Arusha	426	78	12	0.16	43	4	1	0.30	213	34	9	0.25	256	26	6	0.23
Karatu	178	6	7	1.24	0	.	.	.	0	.	.	.				
Ngorongoro	284	29	44	1.54	0	.	.	.	0	.	.	.				
Longido	0	.	.	.	0	.	.	.	0	.	.	.				
Arusha Rural	239	40	215	5	478	60	248	4	0	.	.	.	836	35	119	3.42
Meru	366	11	125	11.00	366	99	415	4	488	35	267	8	488	59	184	3.13
Total	1,636	173	565	3.26	1,029	176	993	5.65	701	69	276	3.99	1,580	120	309	2.57

Cont. Table 5.4 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Agriculture Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short Rainy SEASON Agricultural Year 2007/08

District	Egg Plant				Cotton				Tobacco			
	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Number of Household	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Monduli												
Arusha												
Karatu												
Ngorongoro												
Longido	85	25	6	0.25	0	.	.	.	29	5	1	0
Arusha Rural	0	.	.	.	119	145	217	1.50	0	.	.	.
Meru	122	49	512	10.37	0	.	.	.	122	74	92	1.24
Total	207	75	519	6.89	119	145	217	1.50	151	80	93	1.16

TOTAL ANNUAL CROP AND VEGETABLE PRODUCTION:

5.5 : Number of Crop Growing Households and Area Planted (ha) by Season and District

District	Short Rainy Season		Long Rainy Season		Total area planted (hectare)	% Area planted in short rainy season
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)		
Monduli	3,929	4,960	21,861	44,128	49,088	10.10
Arusha	1,236	1,627	2,515	4,080	5,708	28.51
Karatu	4,545	2,834	31,904	26,776	29,610	9.57
Ngorongoro	1,066	640	10,089	14,393	15,033	4.26
Longido	4,218	5,778	5,316	7,144	12,923	44.72
Arusha Rural	17,796	9,903	38,937	31,339	41,242	24.01
Meru	11,591	8,254	39,653	39,101	47,355	17.43
Total	44,381	33,997	150,275	166,961	200,958	16.92

5.6 : Number of crop growing Households Planting Crops by Season and District

District	Short Rainy Season		Long Rainy Season		Total Number of Crop Growing households
	Number of households Growing Crops	Number of households NOT Growing Crops	Number of households Growing Crops	Number of households NOT Growing Crops	
Monduli	3,929	25,004	21,861	7,073	24,361
Arusha	1,236	1,321	2,515	43	2,557
Karatu	4,545	31,548	31,904	4,189	33,776
Ngorongoro	1,066	27,710	10,089	18,686	10,871
Longido	4,218	7,425	5,316	6,327	6,847
Arusha Rural	17,796	30,576	38,937	9,436	46,701
Meru	11,591	37,701	39,653	9,639	48,560
Total	44,381	161,285	150,275	55,392	173,673

5.7 : Number of Agriculture Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Monduli

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	3,143	2,856	21,504	6,479	24,647	29,335
Paddy	429	246	429	159	857	405
Sorghum	-	.	71	43	71	43
Finger Millet	-	.	-	.	-	.
Wheat	-	.	929	1,330	929	1,330
Barley	-	.	-	.	-	.
CEREALS	3,572	3,102	22,932	28,012	26,504	31,114
Cassava	-	.	-	.	-	.
Sweet Potato	-	.	-	.	-	.
Irish potatoes	-	.	-	.	-	.
ROOTS & TUBERS	-	.	-	.	-	.
Mung Bean	-	.	-	.	-	.
Beans	1,929	1,815	15,431	10,695	17,360	12,510
Cowpeas	-	.	2,715	1,342	2,715	1,342
Green gram	-	.	4,001	2,461	4,001	2,461
Chick peas	-	.	2,143	1,162	2,143	1,162
Field Peas	-	.	-	.	-	.
PULSES	1,929	1,815	24,290	15,661	26,219	17,476
Sunflower	-	.	-	.	-	.
Simsim	-	.	143	376	143	376
Groundnut	-	.	-	.	-	.
Soya Beans	-	.	-	.	-	.
OIL SEEDS & OIL NUTS	-	.	143	376	143	376
Okra	-	.	-	.	-	.
Radish	-	.	71	7	71	7
Turmeric	-	.	-	.	-	.
Bitteer Aubergine	-	.	-	.	-	.
Onion	-	.	**71**	**14**	**71**	**14**
Cabbage	71	7	71	14	143	22
Tomatoes	143	29	-	.	143	29
Spinach	-	.	143	10	143	10
Carrot	71	7	71	5	143	12
Chillies	-	.	-	.	-	.
Amaranths	-	.	-	.	-	.
Cucumber	-	.	-	.	-	.
Egg Plant	-	.	-	.	-	.
FRUITS & VEGETABLES	**286**	**43**	**429**	**51**	**714**	**94**
Cotton	-	.	-	.	-	.
Tobacco	-	.	-	.	-	.
CASH CROPS	-	.	-	.	-	.
Malay	-	.	71	29	71	29
Total	**5,787**	**4,960**	**47,865**	**44,128**	**53,652**	**49,088**

5.8 : Number of Agriculture Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Arusha

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	1,023	720	2,472	1,979	3,495	2,700
Paddy	-	.	-	.	-	.
Sorghum	-	.	-	.	-	.
Finger Millet	-	.	-	.	-	.
Wheat	-	.	-	.	-	.
Barley	-	.	-	.	-	.
CEREALS	1,023	720	2,472	1,979	3,495	2,700
CASSAVA	**-**	**.**	**-**	**.**	**-**	**.**
Sweet Potato	-	.	43	4	43	4
Irish potatoes	-	.	-	.	-	.
ROOTS & TUBERS	-	.	43	4	43	4
Mung Bean	43	9	-	.	43	9
Beans	895	574	2,174	1,386	3,069	1,959
Cowpeas	**128**	**30**	**213**	**104**	**341**	**135**
Green gram	128	30	128	22	256	52
Chick peas	128	47	426	485	554	532
Field Peas	-	.	-	.	-	.
PULSES	1,321	690	2,941	1,996	4,262	2,686
Sunflower	43	9	43	9	85	17
Simsim	-	.	-	.	-	.
Groundnut	-	.	-	.	-	.
Soya Beans	**-**	**.**	**-**	**.**	**-**	**.**
OIL SEEDS & OIL NUTS	43	9	43	9	85	17
Okra	43	9	-	.	43	9
Radish	-	.	43	9	43	9
Turmeric	-	.	-	.	-	.
Bitteer Aubergine	128	22	-	.	128	22
Onion	**85**	**15**	**128**	**28**	**213**	**43**
Cabbage	256	38	-	.	256	38
Tomatoes	85	12	-	.	85	12
Spinach	256	57	170	21	426	78
Carrot	43	4	-	.	43	4
Chillies	128	23	85	11	213	34
Amaranths	170	20	85	6	256	26
Cucumber	-	.	-	.	-	.
Egg Plant	43	9	43	17	85	26
FRUITS & VEGETABLES	**1,236**	**208**	**554**	**92**	**1,790**	**300**
Cotton	-	.	-	.	-	.
Tobacco	-	.	-	.	-	.
CASH CROPS	**-**	**.**	**-**	**.**	**-**	**.**
Malay	-	.	-	.	-	.
Total	**3,623**	**1,627**	**6,052**	**4,080**	**9,675**	**5,708**

5.9 : Number of Agriculture Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Karatu

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	1,337	945	30,924	20,218	32,261	21,162
Paddy	-	.	446	198	446	198
Sorghum	-	.	2,228	507	2,228	507
Finger Millet	-	.	624	135	624	135
Wheat	-	.	1,515	1,057	1,515	1,057
Barley	89	36	356	180	446	216
CEREALS	1,426	981	36,093	22,296	37,519	23,277
Cassava	-	.	-	.	-	.
Sweet Potato	446	216	-	.	446	216
Irish potatoes	-	.	-	.	-	.
ROOTS & TUBERS	446	216	-	.	446	216
Mung Bean	-	.	-	.	-	.
Beans	1,604	1,186	10,070	3,331	11,674	4,517
Cowpeas	-	.	1,515	551	1,515	551
Green gram	-	.	-	.	-	.
Chick peas	-	.	89	36	89	36
Field Peas	-	.	-	.	-	.
PULSES	1,604	1,186	11,674	3,918	13,279	5,104
Sunflower	-	.	3,476	429	3,476	429
Simsim	-	.	-	.	-	.
Groundnut	-	.	-	.	-	.
Soya Beans	-	.	-	.	-	.
OIL SEEDS & OIL NUTS	-	.	3,476	429	3,476	429
Okra	-	.	-	.	-	.
Radish	-	.	-	.	-	.
Turmeric	-	.	-	.	-	.
Bitteer Aubergine	-	.	-	.	-	.
Onion	1,604	451	356	126	1,961	577
Cabbage	-	.	-	.	-	.
Tomatoes	-	.	-	.	-	.
Spinach	-	.	178	6	178	6
Carrot	-	.	-	.	-	.
Chillies	-	.	-	.	-	.
Amaranths	-	.	-	.	-	.
Cucumber	-	.	-	.	-	.
Egg Plant	-	.	-	.	-	.
FRUITS & VEGETABLES	1,604	451	535	132	2,139	583
Cotton	-	.	-	.	-	.
Tobacco	-	.	-	.	-	.
CASH CROPS	-	.	-	.	-	.
Malay	-	.	-	.	-	.
Total	5,080	2,834	51,778	26,776	56,857	29,610

5.10 : Number of Agriculture Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Ngorongoro

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	568	449	10,089	9,049	10,658	9,498
Paddy	-	.	-	.	-	.
Sorghum	-	.	1,492	994	1,492	994
Finger Millet	-	.	-	.	-	.
Wheat	-	.	-	.	-	.
Barley	-	.	-	.	-	.
CEREALS	568	449	11,581	10,043	12,150	10,492
Cassava	-	.	-	.	-	.
Sweet Potato	213	72	71	14	284	86
Irish potatoes	-	.	142	20	142	20
ROOTS & TUBERS	213	72	213	35	426	106
Mung Bean	-	.	-	.	-	.
Beans	142	33	6,537	4,258	6,679	4,290
Cowpeas	-	.	**71**	**29**	**71**	**29**
Green gram	-	.	-	.	-	.
Chick peas	-	.	-	.	-	.
Field Peas	-	.	-	.	-	.
PULSES	142	33	6,608	4,287	6,750	4,319
Sunflower	-	.	71	29	71	29
Simsim	-	.	-	.	-	.
Groundnut	-	.	-	.	-	.
Soya Beans	-	.	-	.	-	.
OIL SEEDS & OIL NUTS	-	.	71	29	71	29
Okra	-	.	-	.	-	.
Radish	-	.	-	.	-	.
Turmeric	-	.	-	.	-	.
Bitteer Aubergine	-	.	-	.	-	.
Onion	-	.	-	.	-	.
Cabbage	71	14	-	.	71	14
Tomatoes	355	43	-	.	355	43
Spinach	284	29	-	.	284	29
Carrot	-	.	-	.	-	.
Chillies	-	.	-	.	-	.
Amaranths	-	.	-	.	-	.
Cucumber	-	.	-	.	-	.
Egg Plant	-	.	-	.	-	.
FRUITS & VEGETABLES	**711**	**86**	**-**	**.**	**711**	**86**
Cotton	-	.	-	.	-	.
Tobacco	-	.	-	.	-	.
CASH CROPS	-	.	-	.	-	.
Malay	-	.	-	.	-	.
Total	**1,634**	**640**	**18,473**	**14,393**	**20,107**	**15,033**

5.11 : Number of Agriculture Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Longido

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	3,554	2,969	4,912	3,819	8,465	6,788
Paddy	-	.	29	12	29	12
Sorghum	-	.	-	.	-	.
Finger Millet	-	.	144	94	144	94
Wheat	433	597	404	597	838	1,193
Barley	-	.	-	.	-	.
CEREALS	3,987	3,565	5,490	4,521	9,477	8,086
Cassava	-	.	-	.	-	.
Sweet Potato	29	6	-	.	29	6
Irish potatoes	318	228	376	216	693	444
ROOTS & TUBERS	347	234	376	216	722	450
Mung Bean	58	23	-	.	58	23
Beans	2,514	1,760	3,294	2,281	5,807	4,041
Cowpeas	-	.	-	.	-	.
Green gram	-	.	-	.	-	.
Chick peas	29	6	-	.	29	6
Field Peas	-	.	-	.	-	.
PULSES	2,600	1,789	3,294	2,281	5,894	4,070
Sunflower	29	18	116	76	144	94
Simsim	-	.	-	.	-	.
Groundnut	-	.	-	.	-	.
Soya Beans	-	.	-	.	-	.
OIL SEEDS & OIL NUTS	**29**	**18**	**116**	**76**	**144**	**94**
Okra	-	.	-	.	-	.
Radish	-	.	-	.	-	.
Turmeric	-	.	-	.	-	.
Bitteer Aubergine	-	.	-	.	-	.
Onion	**29**	**47**	-	.	**29**	**47**
Cabbage	-	.	-	.	-	.
Tomatoes	289	120	87	50	376	170
Spinach	-	.	-	.	-	.
Carrot	-	.	-	.	-	.
Chillies	-	.	-	.	-	.
Amaranths	-	.	-	.	-	.
Cucumber	-	.	-	.	-	.
Egg Plant	-	.	-	.	-	.
FRUITS & VEGETABLES	318	167	87	50	404	216
Cotton	-	.	-	.	-	.
Tobacco	29	6	-	.	29	6
CASH CROPS	**29**	**6**	-	.	**29**	**6**
Malay	-	.	-	.	-	.
Total	**7,310**	**5,778**	**9,361**	**7,144**	**16,671**	**12,923**

5.12 : Number of Agriculture Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Arusha Rural

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	15,527	5,042	35,593	16,545	51,120	21,587
Paddy	-	.	-	.	-	.
Sorghum	-	.	-	.	-	.
Finger Millet	119	73	-	.	119	73
Wheat	-	.	1,314	1,018	1,314	1,018
Barley	-	.	-	.	-	.
CEREALS	**15,646**	**5,115**	**36,907**	**17,563**	**52,553**	**22,678**
Cassava	-	.	-	.	-	.
Sweet Potato	119	24	358	94	478	118
Irish potatoes	1,194	556	956	285	2,150	841
ROOTS & TUBERS	**1,314**	**580**	**1,314**	**379**	**2,628**	**959**
Mung Bean	119	97	-	.	119	97
Beans	12,183	3,032	32,010	10,558	44,192	13,590
Cowpeas	**239**	**53**	**1,433**	**515**	**1,672**	**568**
Green gram	597	157	3,344	1,179	3,941	1,336
Chick peas	119	19	1,314	551	1,433	571
Field Peas	-	.	119	48	119	48
PULSES	**13,258**	**3,357**	**38,220**	**12,851**	**51,478**	**16,208**
Sunflower	-	.	-	.	-	.
Simsim	-	.	-	.	-	.
Groundnut	-	.	-	.	-	.
Soya Beans	**478**	**97**	**597**	**109**	**1,075**	**206**
OIL SEEDS & OIL NUTS	**478**	**97**	**597**	**109**	**1,075**	**206**
Okra	-	.	239	68	239	68
Radish	239	94	119	12	358	106
Turmeric	119	77	-	.	119	77
Bitteer Aubergine	119	48	239	73	358	121
Onion	**119**	**24**	**119**	**48**	**239**	**73**
Cabbage	836	195	358	109	1,194	304
Tomatoes	239	75	358	87	597	162
Spinach	119	16	119	24	239	40
Carrot	478	60	-	.	478	60
Chillies	-	.	-	.	-	.
Amaranths	239	18	597	16	836	35
Cucumber	-	.	-	.	-	.
Egg Plant	-	.	-	.	-	.
FRUITS & VEGETABLES	**2,508**	**609**	**2,150**	**437**	**4,658**	**1,046**
Cotton	119	145	-	.	119	145
Tobacco	-	.	-	.	-	.
CASH CROPS	**119**	**145**	**-**	**.**	**119**	**145**
Malay	-	.	-	.	-	.
Total	**33,323**	**9,903**	**79,188**	**31,339**	**112,511**	**41,242**

5.13 : Number of Agriculture Households by Area Planted (ha) and crop for the agriculture year 2007/08 Short and Long Season - Meru

Crop	SHORT RAINY		LONG RAINY		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	8,907	4,707	38,555	28,123	47,462	32,830
Paddy	244	62	732	210	976	272
Sorghum	-	.	366	114	366	114
Finger Millet	-	.	610	321	610	321
Wheat	-	.	-	.	-	.
Barley	-	.	-	.	-	.
CEREALS	9,151	4,769	40,263	28,768	49,414	33,537
Cassava	-	.	**122**	**20**	**122**	**20**
Sweet Potato	-	.	366	10	366	10
Irish potatoes	122	49	122	25	244	74
ROOTS & TUBERS	122	49	610	54	732	104
Mung Bean	-	.	122	49	122	49
Beans	5,246	2,245	22,816	7,573	28,062	9,819
Cowpeas	-	.	**610**	**67**	**610**	**67**
Green gram	-	.	488	222	488	222
Chick peas	122	49	122	12	244	62
Field Peas	-	.	-	.	-	.
PULSES	5,368	2,294	24,158	7,924	29,526	10,219
Sunflower	-	.	4,148	1,648	4,148	1,648
Simsim	-	.	-	.	-	.
Groundnut	-	.	122	12	122	12
Soya Beans	-	.	-	.	-	.
OIL SEEDS & OIL NUTS	-	.	4,270	1,661	4,270	1,661
Okra	244	62	122	12	366	74
Radish	-	.	-	.	-	.
Turmeric	-	.	122	49	122	49
Bitteer Aubergine	488	86	244	35	732	121
Onion	-	.	-	.	-	.
Cabbage	610	32	122	25	732	56
Tomatoes	2,196	658	854	277	3,050	935
Spinach	366	11	-	.	366	11
Carrot	244	49	122	49	366	99
Chillies	488	35	-	.	488	35
Amaranths	366	9	122	49	488	59
Cucumber	244	74	244	198	488	272
Egg Plant	122	49	-	.	122	49
FRUITS & VEGETABLES	**5,368**	**1,067**	**1,952**	**694**	**7,321**	**1,761**
Cotton	-	.	-	.	-	.
Tobacco	122	74	-	.	122	74
CASH CROPS	**122**	**74**	**-**	**.**	**122**	**74**
Malay	-	.	-	.	-	.
Total	**20,132**	**8,254**	**71,253**	**39,101**	**91,385**	**47,355**

5.14 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Monduli

Crop	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	2,856	4,859	1.7	26,479	22,793	0.9	29,335	27,652	0.9
Paddy	246	398	1.6	159	511	3.2	405	909	2.2
Sorghum	.	.	.	43	103	2.4	43	103	2.4
Finger Millet	.	.	.	.	.	.	.	.	.
Wheat	.	.	.	1,330	2,141	1.6	1,330	2,141	1.6
Barley	.	.	.	.	.	.	.	.	.
CEREALS	**3,102**	**5,257**	**1.7**	**28,012**	**25,547**	**0.9**	**31,114**	**30,805**	**1.0**
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	.	.	.	.	.	.
Irish potatoes	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	1,815	1,102	0.6	10,695	4,296	0.4	12,510	5,397	0.4
Cowpeas	.	.	.	1,342	542	0.4	1,342	542	0.4
Green gram	.	.	.	2,461	1,080	0.4	2,461	1,080	0.4
Chick peas	.	.	.	1,162	727	0.6	1,162	727	0.6
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	**1,815**	**1,102**	**0.6**	**15,661**	**6,645**	**0.4**	**17,476**	**7,747**	**0.4**
Sunflower	.	.	.	.	.	.	.	.	.
Simsim	.	.	.	376	300	0.8	376	300	0.8
Groundnut	.	.	.	.	.	.	.	.	.
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	**.**	**.**	**.**	**376**	**300**	**0.8**	**376**	**300**	**0.8**
Okra	.	.	.	.	.	.	.	.	.
Radish	.	.	.	7	1	0.1	7	1	0.1
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer Aubergine	.	.	.	.	.	.	.	.	.
Onion	.	.	.	14	29	2.0	14	29	2.0
Cabbage	7	145	20.1	14	145	10.0	22	290	13.4
Tomatoes	29	414	14.3	.	.	.	29	414	14.3
Spinach	.	.	.	10	162	17.0	10	162	17.0
Carrot	7	181	25.0	5	147	30.0	12	329	27.0
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Cucumber	.	.	.	.	.	.	.	.	.
Egg Plant	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	**43**	**740**	**17.1**	**51**	**484**	**9.6**	**94**	**1,224**	**13.0**
Cotton	.	.	.	.	.	.	.	.	.
Tobacco	.	.	.	.	.	.	.	.	.
CASH CROPS	.	.	.	.	.	.	.	.	.
Malay	**.**	**.**	**.**	**29**	**11**	**0.4**	**29**	**11**	**0.4**
Total	**4,960**	**7,099**	**1.4**	**44,128**	**32,988**	**0.7**	**49,088**	**40,087**	**0.8**

5.15 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Arusha

Crop	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	720	667	0.9	1,979	2,730	1.4	2,700	3,397	1.3
Paddy	.	.	.	.	.	.	.	.	.
Sorghum	.	.	.	.	.	.	.	.	.
Finger Millet	.	.	.	.	.	.	.	.	.
Wheat	.	.	.	.	.	.	.	.	.
Barley	.	.	.	.	.	.	.	.	.
CEREALS	**720**	**667**	**0.9**	**1,979**	**2,730**	**1.4**	**2,700**	**3,397**	**1.3**
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	4	4.26	0.99	4	4	0.99
Irish potatoes	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	**.**	**.**	**.**	**4**	**4**	**1.0**	**4**	**4**	**1.0**
Mung Bean	9	4	0.5	.	.	.	9	4	0.5
Beans	574	361	0.6	1,386	1,030	0.7	1,959	1,391	0.7
Cowpeas	30	9	0.3	104	57	0.5	135	65	0.5
Green gram	30	5	0.2	22	35	1.6	52	40	0.8
Chick peas	47	34	0.7	485	283	0.6	532	317	0.6
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	**690**	**413**	**0.6**	**1,996**	**1,404**	**0.7**	**2,686**	**1,818**	**0.7**
Sunflower	9	8	0.9	9	4	0.4	17	12	0.7
Simsim	.	.	.	.	.	.	.	.	.
Groundnut	.	.	.	.	.	.	.	.	.
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	**9**	**8**	**0.9**	**9**	**4**	**0.4**	**17**	**12**	**0.7**
Okra	9	2	0.2	.	.	.	9	2	0.2
Radish	.	.	.	9	2	0.2	9	2	0.2
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer Aubergine	22	14	0.7	.	.	.	22	14	0.7
Onion	15	9	0.6	28	6	0.2	43	15	0.4
Cabbage	38	16	0.4	.	.	.	38	16	0.4
Tomatoes	12	10	0.8	.	.	.	12	10	0.8
Spinach	57	8	0.1	21	4	0.2	78	12	0.2
Carrot	4	1	0.3	.	.	.	4	1	0.3
Chillies	23	6	0.3	11	3	0.2	34	9	0.2
Amaranths	20	4	0.2	6	2	0.3	26	6	0.2
Cucumber	.	.	.	.	.	.	.	.	.
Egg Plant	9	4	0.5	17	2	0.1	26	6	0.2
FRUITS & VEGETABLES	**208**	**76**	**0.4**	**92**	**18**	**0.2**	**300**	**94**	**0.3**
Cotton	.	.	.	.	.	.	.	.	.
Tobacco	.	.	.	.	.	.	.	.	.
CASH CROPS	.	.	.	.	.	.	.	.	.
Malay	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Total	1,627	1,164	0.7	4,080	4,160	1.0	5,708	5,324	0.9

5.16 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Karatu

Crop	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	945	2,280	2.4	20,218	43,088	2.1	21,162	45,368	2.1
Paddy	.	.	.	198	502	2.5	198	502	2.5
Sorghum	.	.	.	507	401	0.8	507	401	0.8
Finger Millet	.	.	.	135	150	1.1	135	150	1.1
Wheat	.	.	.	1,057	1,365	1.3	1,057	1,365	1.3
Barley	36	13	0.4	180	246	1.4	216	259	1.2
CEREALS	**981**	**2,293**	**2.3**	**22,296**	**45,752**	**2.1**	**23,277**	**48,045**	**2.1**
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	216	643	2.97	.	.	.	216	643	2.97
Irish potatoes	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	**216**	**643**	**3.0**	**.**	**.**	**.**	**216**	**643**	**3.0**
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	1,186	228	0.2	3,331	2,309	0.7	4,517	2,537	0.6
Cowpeas	.	.	.	551	370	0.7	551	370	0.7
Green gram	.	.	.	.	.	.	.	.	.
Chick peas	.	.	.	36	27	0.7	36	27	0.7
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	**1,186**	**228**	**0.2**	**3,918**	**2,706**	**0.7**	**5,104**	**2,934**	**0.6**
Sunflower	.	.	.	429	354	0.8	429	354	0.8
Simsim	.	.	.	.	.	.	.	.	.
Groundnut	.	.	.	.	.	.	.	.	.
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	**.**	**.**	**.**	**429**	**354**	**0.8**	**429**	**354**	**0.8**
Okra	.	.	.	.	.	.	.	.	.
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer Aubergine	.	.	.	.	.	.	.	.	.
Onion	451	926	2.1	126	660	5.2	577	1,586	2.7
Cabbage	.	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	.	.	.	.	.	.
Spinach	.	.	.	6	7	1.2	6	7	1.2
Carrot	.	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Cucumber	.	.	.	.	.	.	.	.	.
Egg Plant	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	**451**	**926**	**2.1**	**132**	**667**	**5.1**	**583**	**1,594**	**2.7**
Cotton	.	.	.	.	.	.	.	.	.
Tobacco	.	.	.	.	.	.	.	.	.
CASH CROPS	.	.	.	.	.	.	.	.	.
Malay	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Total	2,834	4,091	1.4	26,776	49,479	1.8	29,610	53,570	1.8

5.17 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Ngorongoro

Crop	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	449	522	1.2	9,049	17,275	1.9	9,498	17,797	1.9
Paddy	.	.	.	.	.	.	.	.	.
Sorghum	.	.	.	994	1,261	1.3	994	1,261	1.3
Finger Millet	.	.	.	.	.	.	.	.	.
Wheat	.	.	.	.	.	.	.	.	.
Barley	.	.	.	.	.	.	.	.	.
CEREALS	**449**	**522**	**1.2**	**10,043**	**18,536**	**1.8**	**10,492**	**19,058**	**1.8**
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	72	233	3.24	14	21.32	1.48	86	254	2.95
Irish potatoes	.	.	.	20	36	1.8	20	36	1.8
ROOTS & TUBERS	**72**	**233**	**3.2**	**35**	**58**	**1.7**	**106**	**290**	**2.7**
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	33	50	1.5	4,258	3,469	0.8	4,290	3,519	0.8
Cowpeas	.	.	.	29	30	1.0	29	30	1.0
Green gram	.	.	.	.	.	.	.	.	.
Chick peas	.	.	.	.	.	.	.	.	.
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	**33**	**50**	**1.5**	**4,287**	**3,499**	**0.8**	**4,319**	**3,549**	**0.8**
Sunflower	.	.	.	29	49	1.7	29	49	1.7
Simsim	.	.	.	.	.	.	.	.	.
Groundnut	.	.	.	.	.	.	.	.	.
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	**.**	**.**	**.**	**29**	**49**	**1.7**	**29**	**49**	**1.7**
Okra	.	.	.	.	.	.	.	.	.
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer Aubergine	.	.	.	.	.	.	.	.	.
Onion	.	.	.	.	.	.	.	.	.
Cabbage	14	28	2.0	.	.	.	14	28	2.0
Tomatoes	43	95	2.2	.	.	.	43	95	2.2
Spinach	29	44	1.5	.	.	.	29	44	1.5
Carrot	.	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Cucumber	.	.	.	.	.	.	.	.	.
Egg Plant	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	**86**	**168**	**1.9**	**.**	**.**	**.**	**86**	**168**	**1.9**
Cotton	.	.	.	.	.	.	.	.	.
Tobacco	.	.	.	.	.	.	.	.	.
CASH CROPS	.	.	.	.	.	.	.	.	.
Malay	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Total	**640**	**973**	**1.5**	**14,393**	**22,141**	**1.5**	**15,033**	**23,114**	**1.5**

5.18 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Longido

Crop	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	2,969	1,997	0.7	3,819	4,165	1.1	6,788	6,162	0.9
Paddy	.	.	.	12	9	0.7	12	9	0.7
Sorghum	.	.	.	.	.	.	.	.	.
Finger Millet	.	.	.	94	141	1.5	94	141	1.5
Wheat	597	6	0.0	597	29	0.0	1,193	35	0.0
Barley	.	.	.	.	.	.	.	.	.
CEREALS	**3,565**	**2,003**	**0.6**	**4,521**	**4,344**	**1.0**	**8,086**	**6,347**	**0.8**
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	6	14	2.47	.	.	.	6	14	2.47
Irish potatoes	228	719	3.2	216	211	1.0	444	931	2.1
ROOTS & TUBERS	**234**	**734**	**3.1**	**216**	**211**	**1.0**	**450**	**945**	**2.1**
Mung Bean	23	3	0.1	.	.	.	23	3	0.1
Beans	1,760	1,415	0.8	2,281	1,973	0.9	4,041	3,389	0.8
Cowpeas	.	.	.	.	.	.	.	.	.
Green gram	.	.	.	.	.	.	.	.	.
Chick peas	6	9	1.5	.	.	.	6	9	1.5
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	**1,789**	**1,427**	**0.8**	**2,281**	**1,973**	**0.9**	**4,070**	**3,400**	**0.8**
Sunflower	18	19	1.1	76	58	0.8	94	77	0.8
Simsim	.	.	.	.	.	.	.	.	.
Groundnut	.	.	.	.	.	.	.	.	.
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	**18**	**19**	**1.1**	**76**	**58**	**0.8**	**94**	**77**	**0.8**
Okra	.	.	.	.	.	.	.	.	.
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer Aubergine	.	.	.	.	.	.	.	.	.
Onion	47	104	2.2	.	.	.	47	104	2.2
Cabbage	.	.	.	.	.	.	.	.	.
Tomatoes	120	1,398	11.7	50	29	0.6	170	1,427	8.4
Spinach	.	.	.	.	.	.	.	.	.
Carrot	.	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Cucumber	.	.	.	.	.	.	.	.	.
Egg Plant	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	**167**	**1,502**	**9.0**	**50**	**29**	**0.6**	**216**	**1,531**	**7.1**
Cotton	.	.	.	.	.	.	.	.	.
Tobacco	6	1	0.2	.	.	.	6	1	0.2
CASH CROPS	**6**	**1**	**0.2**	**.**	**.**	**.**	**6**	**1**	**0.2**
Malay	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Total	**5,778**	**5,686**	**1.0**	**7,144**	**6,616**	**0.9**	**12,923**	**12,302**	**1.0**

5.19 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Arusha Rural

Crop	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	5,042	9,469	1.9	16,545	22,904	1.4	21,587	32,373	1.5
Paddy	.	.	.	.	.	.	.	.	.
Sorghum	.	.	.	.	.	.	.	.	.
Finger Millet	73	72	1.0	.	.	.	73	72	1.0
Wheat	.	.	.	1,018	1,851	1.8	1,018	1,851	1.8
Barley	.	.	.	.	.	.	.	.	.
CEREALS	**5,115**	**9,540**	**1.9**	**17,563**	**24,756**	**1.4**	**22,678**	**34,296**	**1.5**
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	24	24	0.99	94	382.80	4.06	118	407	3.43
Irish potatoes	556	1,199	2.2	285	1,386	4.9	841	2,585	3.1
ROOTS & TUBERS	**580**	**1,223**	**2.1**	**379**	**1,769**	**4.7**	**959**	**2,992**	**3.1**
Mung Bean	97	60	0.6	.	.	.	97	60	0.6
Beans	3,032	5,535	1.8	10,558	10,163	1.0	13,590	15,698	1.2
Cowpeas	53	18	0.3	515	162	0.3	568	180	0.3
Green gram	157	430	2.7	1,179	694	0.6	1,336	1,123	0.8
Chick peas	19	6	0.3	551	556	1.0	571	562	1.0
Field Peas	.	.	.	48	5	0.1	48	5	0.1
PULSES	**3,357**	**6,048**	**1.8**	**12,851**	**11,580**	**0.9**	**16,208**	**17,628**	**1.1**
Sunflower	.	.	.	.	.	.	.	.	.
Simsim	.	.	.	.	.	.	.	.	.
Groundnut	.	.	.	.	.	.	.	.	.
Soya Beans	97	98	1.0	109	56	0.5	206	153	0.7
OIL SEEDS & OIL NUTS	**97**	**98**	**1.0**	**109**	**56**	**0.5**	**206**	**153**	**0.7**
Okra	.	.	.	68	33	0.5	68	33	0.5
Radish	94	84	0.9	12	24	2.0	106	107	1.0
Turmeric	77	12	0.2	.	.	.	77	12	0.2
Bitteer Aubergine	48	36	0.7	73	84	1.2	121	119	1.0
Onion	24	155	6.4	48	36	0.7	73	191	2.6
Cabbage	195	1,756	9.0	109	1,049	9.6	304	2,805	9.2
Tomatoes	75	788	10.5	87	1,278	14.7	162	2,066	12.8
Spinach	16	48	3.0	24	167	6.9	40	215	5.4
Carrot	60	248	4.1	.	.	.	60	248	4.1
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	18	36	2.0	16	83	5.1	35	119	3.4
Cucumber	.	.	.	.	.	.	.	.	.
Egg Plant	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	**609**	**3,163**	**5.2**	**437**	**2,754**	**6.3**	**1,046**	**5,917**	**5.7**
Cotton	145	217	1.5	.	.	.	145	217	1.5
Tobacco	.	.	.	.	.	.	.	.	.
CASH CROPS	145	217	1.5	.	.	.	145	217	1.5
Malay	.	.	.	.	.	.	.	.	.
Total	9,903	20,290	2.0	31,339	40,913	1.3	41,242	61,203	1.5

5.20 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Meru

Crop	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	4,707	9,862	2.1	28,123	67,068	2.4	32,830	76,930	2.3
Paddy	62	174	2.8	210	677	3.2	272	851	3.1
Sorghum	.	.	.	114	60	0.5	114	60	0.5
Finger Millet	.	.	.	321	116	0.4	321	116	0.4
Wheat	.	.	.	.	.	.	.	.	.
Barley	.	.	.	.	.	.	.	.	.
CEREALS	**4,769**	**10,036**	**2.1**	**28,768**	**67,920**	**2.4**	**33,537**	**77,957**	**2.3**
Cassava	.	.	.	20	-	-	20	-	-
Sweet Potato	.	.	.	10	4.76	0.48	10	5	0.48
Irish potatoes	49	420	8.5	25	24	1.0	74	444	6.0
ROOTS & TUBERS	**49**	**420**	**8.5**	**54**	**29**	**0.5**	**104**	**449**	**4.3**
Mung Bean	.	.	.	49	878	17.8	49	878	17.8
Beans	2,245	3,901	1.7	7,573	15,829	2.1	9,819	19,730	2.0
Cowpeas	.	.	.	67	60	0.9	67	60	0.9
Green gram	.	.	.	222	45	0.2	222	45	0.2
Chick peas	49	61	1.2	12	10	0.8	62	71	1.1
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	**2,294**	**3,962**	**1.7**	**7,924**	**16,823**	**2.1**	**10,219**	**20,784**	**2.0**
Sunflower	.	.	.	1,648	695	0.4	1,648	695	0.4
Simsim	.	.	.	.	.	.	.	.	.
Groundnut	.	.	.	12	5	0.4	12	5	0.4
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	**.**	**.**	**.**	**1,661**	**700**	**0.4**	**1,661**	**700**	**0.4**
Okra	62	49	0.8	12	10	0.8	74	59	0.8
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	49	15	0.3	49	15	0.3
Bitteer Aubergine	86	434	5.0	35	183	5.3	121	617	5.1
Onion	.	.	.	.	.	.	.	.	.
Cabbage	32	535	16.9	25	976	39.5	56	1,511	26.8
Tomatoes	658	9,640	14.6	277	5,214	18.8	935	14,853	15.9
Spinach	11	125	11.0	.	.	.	11	125	11.0
Carrot	49	98	2.0	49	317	6.4	99	415	4.2
Chillies	35	267	7.6	.	.	.	35	267	7.6
Amaranths	9	111	11.8	49	73	1.5	59	184	3.1
Cucumber	74	390	5.3	198	1,074	5.4	272	1,46	5.4
Egg Plant	49	512	10.4	.	.	.	49	512	10.4
FRUITS & VEGETABLES	**1,067**	**12,161**	**11.4**	**694**	**7,861**	**11.3**	**1,761**	**20,022**	**11.4**
Cotton	.	.	.	.	.	.	.	.	.
Tobacco	74	92	1.2	.	.	.	74	92	1.2
CASH CROPS	74	92	1.2	.	.	.	74	92	1.2
Malay	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Total	**8,254**	**26,670**	**3.2**	**39,101**	**93,333**	**2.4**	**47,355**	**120,004**	**2.5**

5.21 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 agriculture year - Arusha Region

	SHORT RAINY			LONG RAINY			SHORT & LONG RAINY SEASON		
Crop	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Maize	17,689	29,656	1.7	106,212	180,022	1.7	123,901	209,678	1.7
Paddy	308	572	1.9	579	1,699	2.9	887	2,271	2.6
Sorghum	.	.	.	1,658	1,825	1.1	1,658	1,825	1.1
Finger Millet	73	72	1.0	550	407	0.7	622	478	0.8
Wheat	597	6	0.0	4,002	5,386	1.3	4,599	5,392	1.2
Barley	36	13	0.4	180	246	1.4	216	259	1.2
CEREALS	**18,702**	**30,319**	**1.6**	**113,182**	**189,585**	**1.7**	**131,883**	**219,903**	**1.7**
Cassava	.	.	.	20	-	-	20	-	-
Sweet Potato	318	915	2.87	123	413.14	3.36	441	1,328	3.01
Irish potatoes	834	2,338	2.8	546	1,658	3.0	1,380	3,996	2.9
ROOTS & TUBERS	**,152**	**3,253**	**2.8**	**689**	**2,071**	**3.0**	**1,841**	**5,324**	**2.9**
Mung Bean	129	67	0.5	49	878	17.8	178	945	5.3
Beans	10,644	12,592	1.2	40,082	39,069	1.0	50,726	51,661	1.0
Cowpeas	83	27	0.3	2,608	1,221	0.5	2,691	1,248	0.5
Green gram	187	435	2.3	3,884	1,854	0.5	4,071	2,289	0.6
Chick peas	122	110	0.9	2,246	1,602	0.7	2,368	1,712	0.7
Field Peas	.	.	.	48	5	0.1	48	5	0.1
PULSES	**11,164**	**13,230**	**1.2**	**48,918**	**44,630**	**0.9**	**60,082**	**57,860**	**1.0**
Sunflower	26	27	1.0	2,191	1,160	0.5	2,217	1,187	0.5
Simsim	.	.	.	376	300	0.8	376	300	0.8
Groundnut	.	.	.	12	5	0.4	12	5	0.4
Soya Beans	97	98	1.0	109	56	0.5	206	153	0.7
OIL SEEDS & OIL NUTS	**123**	**125**	**1.0**	**2,688**	**1,520**	**0.6**	**2,811**	**1,645**	**0.6**
Okra	70	51	0.7	80	43	0.5	150	94	0.6
Radish	94	84	0.9	28	26	0.9	122	110	0.9
Turmeric	77	12	0.2	49	15	0.3	127	27	0.2
Bitteer Aubergine	156	485	3.1	107	267	2.5	263	751	2.9
Onion	537	1,195	2.2	218	730	3.4	754	1,925	2.6
Cabbage	286	2,480	8.7	148	2,169	14.7	434	4,649	10.7
Tomatoes	937	12,345	13.2	413	6,520	15.8	1,351	18,866	14.0
Spinach	113	226	2.0	60	340	5.7	173	566	3.3
Carrot	121	528	4.4	54	465	8.6	176	993	5.7
Chillies	58	273	4.7	11	3	0.2	69	276	4.0
Amaranths	48	151	3.2	72	158	2.2	120	309	2.6
Cucumber	74	390	5.3	198	1,074	5.4	272	1,464	5.4
Egg Plant	58	517	8.9	17	2	0.1	75	519	6.9
FRUITS & VEGETABLES	**2,631**	**18,737**	**7.1**	**1,456**	**11,812**	**8.1**	**4,087**	**30,549**	**7.5**
Cotton	145	217	1.5	.	.	.	145	217	1.5
Tobacco	80	93	1.2	.	.	.	80	93	1.2
Malay	.	.	.	9	11	0.4	29	11	0.4
CASH CROPS	**225**	**310**	**1.4**	**.**	**.**	**.**	**225**	**310**	**1.4**
Total	**33,997**	**65,973**	**2**	**166,961**	**249,630.10**	**1**	**200,958**	**315,603**	**1.57**

5.22 : Number of households Storing Crops by Season and District

District	SHORT RAINY SEASON					LONG RAINY SEASON					SHORT & LONG SEASON				
	Number of households storing crops	%	Number of households not storing crops	%	Total	Number of households storing crops	%	Number of households not storing crops	%	Total	Number of households storing crops	%	Number of households not storing crops	%	Total
Monduli	2,786	71	1,143	29	3,929	19,360	89	2,500	11	21,861	22,147	86	3,643	14	25,790
Arusha	938	76	298	24	1,236	2,344	93	170	7	2,515	3,282	88	469	13	3,751
Karatu	2,317	51	2,228	49	4,545	30,924	97	980	3	31,904	33,241	91	3,208	9	36,449
Ngorongoro	639	60	426	40	1,066	9,876	98	213	2	10,089	10,515	94	639	6	11,155
Longido	2,745	65	1,473	35	4,218	3,612	68	1,705	32	5,316	6,356	67	3,178	33	9,534
Arusha Rural	15,646	88	2,150	12	17,796	37,026	95	1,911	5	38,937	52,673	93	4,061	7	56,733
Meru	9,395	81	2,196	19	11,591	35,871	90	3,782	10	39,653	45,265	88	5,978	12	51,244
Total	**34,466**	78	**9,915**	22	**44,381**	**139,013**	93	**11,262**	7	**150,275**	**173,479**	89	**21,177**	11	**194,657**

5.23 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season - MONDULI

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	143	5	357	11	0	0	1357	43	71	2	0	0	1214	39	0	0	3143	100
Paddy	0	0	0	0	0	0	357	83	0	0	0	0	71	17	0	0	429	100
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**143**	**4**	**357**	**10**	**0**	**0**	**1715**	**48**	**71**	**2**	**0**	**0**	**1286**	**36**	**0**	**0**	**3572**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOTS & TUBERS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	0	0	357	19	0	0	1286	67	0	0	0	0	286	15	0	0	1929	100
Cowpeas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**0**	**0**	**357**	**19**	**0**	**0**	**1286**	**67**	**0**	**0**	**0**	**0**	**286**	**15**	**0**	**0**	**1929**	**100**
Sunflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Cont. Table 5.23 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season - MONDULI

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	71	100	0	0	71	100
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	143	100	0	0	143	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	71	100	0	0	71	100
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	0	0	0	0	0	0	0	0	0	0	0	0	286	100	0	0	286	100
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	143	2	714	12	0	0	3000	52	71	1	0	0	1857	32	0	0	5787	100

5.24 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season - MONDULI

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	2000	9	3429	16	0	0	12002	56	214	1	143	1	3429	16	286	1	21504	100
Paddy	0	0	0	0	0	0	286	67	0	0	0	0	143	33	0	0	429	100
Sorghum	0	0	0	0	0	0	71	100	0	0	0	0	0	0	0	0	71	100
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	143	15	0	0	286	31	0	0	0	0	500	54	0	0	929	100
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**2000**	**9**	**3572**	**16**	**0**	**0**	**12645**	**55**	**214**	**1**	**143**	**1**	**4072**	**18**	**286**	**1**	**22932**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOTS & TUBERS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	929	6	1786	12	71	0	8216	53	143	1	0	0	4215	27	71	0	15431	100
Cowpeas	143	5	714	26	0	0	1143	42	71	3	0	0	429	16	214	8	2715	100
Green gram	0	0	357	9	0	0	2429	61	0	0	0	0	500	13	714	18	4001	100
Chick peas	0	0	714	33	0	0	1286	60	0	0	0	0	71	3	71	3	2143	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**1072**	**4**	**3572**	**15**	**71**	**0**	**13074**	**54**	**214**	**1**	**0**	**0**	**5215**	**21**	**1072**	**4**	**24290**	**100**
Sunflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	143	100	0	0	0	0	0	0	0	0	143	100
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**143**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**143**	**100**

Cont. Table 5.24 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season - MONDULI

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	71	100	0	0	0	0	0	0	0	0	71	100
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	0	0	0	0	0	0	71	100	0	0	71	100
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	71	100	0	0	71	100
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	143	100	0	0	143	100
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	71	100	0	0	71	100
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**17**	**0**	**0**	**0**	**0**	**357**	**83**	**0**	**0**	**429**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**100**
Total	**3072**	**6**	**7144**	**15**	**71**	**0**	**26004**	**54**	**429**	**1**	**143**	**0**	**9644**	**20**	**1357**	**3**	**47865**	**100**

5.25 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, ARUSHA

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	128	13	0	0	0	0	511	50	213	21	0	0	170	17	0	0	1023	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**128**	**13**	**0**	**0**	**0**	**0**	**511**	**50**	**213**	**21**	**0**	**0**	**170**	**17**	**0**	**0**	**1023**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOTS & TUBERS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	43	100	0	0	43	100
Beans	128	14	0	0	0	0	384	43	128	14	0	0	256	29	0	0	895	100
Cowpeas	0	0	0	0	0	0	0	0	0	0	0	0	128	100	0	0	128	100
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	128	100	0	0	128	100
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	128	100	0	0	128	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**128**	**10**	**0**	**0**	**0**	**0**	**384**	**29**	**128**	**10**	**0**	**0**	**682**	**52**	**0**	**0**	**1321**	**100**
Sunflower	0	0	0	0	0	0	0	0	43	100	0	0	0	0	0	0	43	100
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**43**	**100**

Cont. 5.25 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, ARUSHA

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	43	100	0	0	43	100
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	43	33	0	0	0	0	0	0	0	0	0	0	85	67	0	0	128	100
Onion	0	0	0	0	0	0	0	0	0	0	0	0	85	100	0	0	85	100
Cabbage	0	0	0	0	0	0	0	0	43	17	0	0	213	83	0	0	256	100
Tomatoes	43	50	0	0	0	0	0	0	0	0	0	0	43	50	0	0	85	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	256	100	0	0	256	100
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	43	100	0	0	43	100
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	128	100	0	0	128	100
Amaranths	0	0	0	0	0	0	0	0	43	25	0	0	128	75	0	0	170	100
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	43	100	0	0	43	100
FRUITS & VEGETABLES	**85**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**85**	**7**	**0**	**0**	**1065**	**86**	**0**	**0**	**1236**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**341**	**9**	**0**	**0**	**0**	**0**	**895**	**25**	**469**	**13**	**0**	**0**	**1918**	**53**	**0**	**0**	**3623**	**100**

5.26 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, ARUSHA

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	128	5	43	2	0	0	1747	71	256	10	43	2	256	10	0	0	2472	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**128**	**5**	**43**	**2**	**0**	**0**	**1747**	**71**	**256**	**10**	**43**	**2**	**256**	**10**	**0**	**0**	**2472**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	43	100	0	0	43	100
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOTS & TUBERS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43**	**100**	**0**	**0**	**43**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	85	4	0	0	0	0	1662	76	170	8	43	2	213	10	0	0	2174	100
Cowpeas	0	0	0	0	0	0	43	20	43	20	0	0	128	60	0	0	213	100
Green gram	0	0	0	0	0	0	43	33	0	0	0	0	85	67	0	0	128	100
Chick peas	0	0	0	0	0	0	256	60	85	20	0	0	85	20	0	0	426	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**85**	**3**	**0**	**0**	**0**	**0**	**2003**	**68**	**298**	**10**	**43**	**1**	**511**	**17**	**0**	**0**	**2941**	**100**
Sunflower	0	0	0	0	0	0	0	0	43	100	0	0	0	0	0	0	43	100
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**43**	**100**

Cont. 5.26 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, ARUSHA

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	43	100	0	0	43	100
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	0	0	0	0	0	0	128	100	0	0	128	100
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	170	100	0	0	170	100
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	85	100	0	0	85	100
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	85	100	0	0	85	100
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	43	100	0	0	43	100
FRUITS & VEGETABLES	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**554**	**100**	**0**	**0**	**554**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**213**	**4**	**43**	**1**	**0**	**0**	**3751**	**62**	**597**	**10**	**85**	**1**	**1364**	**23**	**0**	**0**	**6052**	**100**

5.27 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, KARATU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	891	67	0	0	0	0	356	27	0	0	0	0	89	7	0	0	1337	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	89	100	0	0	89	100
CEREALS	**891**	**63**	**0**	**0**	**0**	**0**	**356**	**25**	**0**	**0**	**0**	**0**	**178**	**13**	**0**	**0**	**1426**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	89	20	0	0	0	0	178	40	0	0	178	40	0	0	0	0	446	100
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOTS & TUBERS	**89**	**20**	**0**	**0**	**0**	**0**	**178**	**40**	**0**	**0**	**178**	**40**	**0**	**0**	**0**	**0**	**446**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	178	11	0	0	0	0	713	44	0	0	0	0	713	44	0	0	1604	100
Cowpeas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**178**	**11**	**0**	**0**	**0**	**0**	**713**	**44**	**0**	**0**	**0**	**0**	**713**	**44**	**0**	**0**	**1604**	**100**
Sunflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Cont. 5.27 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, KARATU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	0	0	0	0	0	0	1604	100	0	0	1604	100
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1604**	**100**	**0**	**0**	**1604**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**1159**	**23**	**0**	**0**	**0**	**0**	**1248**	**25**	**0**	**0**	**178**	**4**	**2495**	**49**	**0**	**0**	**5080**	**100**

5.28 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, KARATU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	16576	54	1604	5	178	1	11407	37	0	0	89	0	980	3	89	0	30924	100
Paddy	356	80	0	0	0	0	0	0	0	0	0	0	89	20	0	0	446	100
Sorghum	356	16	0	0	0	0	1515	68	0	0	0	0	356	16	0	0	2228	100
Finger Millet	267	43	0	0	0	0	356	57	0	0	0	0	0	0	0	0	624	100
Wheat	267	18	0	0	0	0	624	41	0	0	0	0	624	41	0	0	1515	100
Barley	0	0	0	0	0	0	178	50	0	0	0	0	178	50	0	0	356	100
CEREALS	**17824**	**49**	**1604**	**4**	**178**	**0**	**14081**	**39**	**0**	**0**	**89**	**0**	**2228**	**6**	**89**	**0**	**36093**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOTS & TUBERS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	3208	32	535	5	89	1	3921	39	0	0	0	0	2228	22	89	1	10070	100
Cowpeas	356	24	0	0	0	0	535	35	0	0	0	0	624	41	0	0	1515	100
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0	89	100	0	0	0	0	0	0	0	0	89	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**3565**	**31**	**535**	**5**	**89**	**1**	**4545**	**39**	**0**	**0**	**0**	**0**	**2852**	**24**	**89**	**1**	**11674**	**100**
Sunflower	0	0	89	3	0	0	2495	72	0	0	0	0	891	26	0	0	3476	100
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**89**	**3**	**0**	**0**	**2495**	**72**	**0**	**0**	**0**	**0**	**891**	**26**	**0**	**0**	**3476**	**100**

Cont. 5.28 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, KARATU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	178	50	89	25	0	0	0	0	0	0	0	0	89	25	0	0	356	100
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spinach	0	0	0	0	0	0	0	0	0	0	178	100	0	0	0	0	178	100
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**178**	**33**	**89**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**178**	**33**	**89**	**17**	**0**	**0**	**535**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**21567**	**42**	**2317**	**4**	**267**	**1**	**21121**	**41**	**0**	**0**	**267**	**1**	**6060**	**12**	**178**	**0**	**51778**	**100**

5.29 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, NGORONGORO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	355	63	0	0	0	0	213	38	0	0	0	0	0	0	0	0	568	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**355**	**63**	**0**	**0**	**0**	**0**	**213**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**568**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	71	33	0	0	0	0	0	0	0	0	0	0	142	67	0	0	213	100
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOTS & TUBERS	**71**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**142**	**67**	**0**	**0**	**213**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	142	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	100
Cowpeas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**142**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**142**	**100**
Sunflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Cont. 5.29 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, NGORONGORO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cabbage	71	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	100
Tomatoes	71	20	0	0	0	0	0	0	0	0	0	0	284	80	0	0	355	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	284	100	0	0	284	100
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**142**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**568**	**80**	**0**	**0**	**711**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**711**	**43**	**0**	**0**	**0**	**0**	**213**	**13**	**0**	**0**	**0**	**0**	**711**	**43**	**0**	**0**	**1634**	**100**

5.30 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, NGORONGORO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	5400	54	213	2	0	0	4050	40	0	0	71	1	355	4	0	0	10089	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	995	67	0	0	0	0	355	24	0	0	0	0	142	10	0	0	1492	100
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**6395**	**55**	**213**	**2**	**0**	**0**	**4405**	**38**	**0**	**0**	**71**	**1**	**497**	**4**	**0**	**0**	**11581**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	71	100	0	0	71	100
Irish potatoes	142	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	100
ROOTS & TUBERS	**142**	**67**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**33**	**0**	**0**	**213**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	2700	41	142	2	0	0	3410	52	0	0	0	0	284	4	0	0	6537	100
Cowpeas	0	0	0	0	0	0	71	100	0	0	0	0	0	0	0	0	71	100
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**2700**	**41**	**142**	**2**	**0**	**0**	**3481**	**53**	**0**	**0**	**0**	**0**	**284**	**4**	**0**	**0**	**6608**	**100**
Sunflower	0	0	0	0	0	0	71	100	0	0	0	0	0	0	0	0	71	100
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**100**

Cont. 5.30 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, NGORONGORO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**9237**	**50**	**355**	**2**	**0**	**0**	**7958**	**43**	**0**	**0**	**71**	**0**	**853**	**5**	**0**	**0**	**18473**	**100**

5.31 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, LONGIDO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	780	22	29	1	0	0	1242	35	87	2	87	2	1329	37	0	0	3554	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	29	7	0	0	0	0	404	93	0	0	433	100
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**780**	**20**	**29**	**1**	**0**	**0**	**1271**	**32**	**87**	**2**	**87**	**2**	**1734**	**43**	**0**	**0**	**3987**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	29	100	0	0	29	100
Irish potatoes	58	18	0	0	0	0	58	18	0	0	0	0	202	64	0	0	318	100
ROOTS & TUBERS	**58**	**17**	**0**	**0**	**0**	**0**	**58**	**17**	**0**	**0**	**0**	**0**	**231**	**67**	**0**	**0**	**347**	**100**
Mung Bean	0	0	0	0	0	0	29	50	0	0	0	0	29	50	0	0	58	100
Beans	87	3	29	1	0	0	1416	56	29	1	0	0	953	38	0	0	2514	100
Cowpeas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	29	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**116**	**4**	**29**	**1**	**0**	**0**	**1445**	**56**	**29**	**1**	**0**	**0**	**982**	**38**	**0**	**0**	**2600**	**100**
Sunflower	29	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	100
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**29**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29**	**100**

Cont. 5.31 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, LONGIDO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	29	100	0	0	0	0	0	0	0	0	29	100
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomatoes	29	10	0	0	0	0	0	0	0	0	0	0	260	90	0	0	289	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**29**	**9**	**0**	**0**	**0**	**0**	**29**	**9**	**0**	**0**	**0**	**0**	**260**	**82**	**0**	**0**	**318**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	29	100	0	0	0	0	0	0	0	0	29	100
Malay	0	0	0	0	0	0	29	100	0	0	0	0	0	0	0	0	29	100
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**1011**	**14**	**58**	**1**	**0**	**0**	**2831**	**39**	**116**	**2**	**87**	**1**	**3207**	**44**	**0**	**0**	**7310**	**100**

5.32 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, LONGIDO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	1011	21	58	1	0	0	1762	36	318	6	58	1	1705	35	0	0	4912	100
Paddy	0	0	0	0	0	0	29	100	0	0	0	0	0	0	0	0	29	100
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	116	80	0	0	0	0	29	20	0	0	144	100
Wheat	0	0	0	0	0	0	29	7	0	0	0	0	376	93	0	0	404	100
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**1011**	**18**	**58**	**1**	**0**	**0**	**1936**	**35**	**318**	**6**	**58**	**1**	**2109**	**38**	**0**	**0**	**5490**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irish potatoes	58	15	0	0	0	0	0	0	0	0	0	0	318	85	0	0	376	100
ROOTS & TUBERS	**58**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**318**	**85**	**0**	**0**	**376**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	202	6	29	1	0	0	1531	46	0	0	0	0	1531	46	0	0	3294	100
Cowpeas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**202**	**6**	**29**	**1**	**0**	**0**	**1531**	**46**	**0**	**0**	**0**	**0**	**1531**	**46**	**0**	**0**	**3294**	**100**
Sunflower	0	0	0	0	0	0	58	50	0	0	0	0	58	50	0	0	116	100
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**58**	**50**	**0**	**0**	**0**	**0**	**58**	**50**	**0**	**0**	**116**	**100**

Cont. 5.32 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, LONGIDO

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	87	100	0	0	87	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**87**	**100**	**0**	**0**	**87**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**1271**	**14**	**87**	**1**	**0**	**0**	**3525**	**38**	**318**	**3**	**58**	**1**	**4103**	**44**	**0**	**0**	**9361**	**100**

5.33 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, ARUSHA RURAL

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	6450	42	597	4	119	1	5972	38	597	4	0	0	1792	12	0	0	15527	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**6450**	**41**	**597**	**4**	**119**	**1**	**5972**	**38**	**597**	**4**	**0**	**0**	**1911**	**12**	**0**	**0**	**15646**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	119	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	100
Irish potatoes	119	10	0	0	0	0	239	20	0	0	119	10	717	60	0	0	1194	100
ROOTS & TUBERS	**239**	**18**	**0**	**0**	**0**	**0**	**239**	**18**	**0**	**0**	**119**	**9**	**717**	**55**	**0**	**0**	**1314**	**100**
Mung Bean	0	0	0	0	0	0	119	100	0	0	0	0	0	0	0	0	119	100
Beans	5375	44	358	3	0	0	4539	37	358	3	0	0	1553	13	0	0	12183	100
Cowpeas	119	50	0	0	0	0	0	0	0	0	0	0	119	50	0	0	239	100
Green gram	0	0	0	0	0	0	478	80	0	0	0	0	119	20	0	0	597	100
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**5494**	**41**	**358**	**3**	**0**	**0**	**5136**	**39**	**358**	**3**	**0**	**0**	**1911**	**14**	**0**	**0**	**13258**	**100**
Sunflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	119	25	0	0	0	0	358	75	0	0	0	0	0	0	0	0	478	100
OIL SEEDS & OIL NUTS	**119**	**25**	**0**	**0**	**0**	**0**	**358**	**75**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**478**	**100**

Cont. 5.33 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, ARUSHA RURAL

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radish	0	0	0	0	0	0	0	0	0	0	0	0	239	100	0	0	239	100
Turmeric	119	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	100
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Onion	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Cabbage	239	29	0	0	0	0	0	0	0	0	0	0	597	71	0	0	836	100
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	239	100	0	0	239	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	478	100	0	0	478	100
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	239	100	0	0	239	100
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**358**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2150**	**86**	**0**	**0**	**2508**	**100**
Cotton	0	0	119	100	0	0	0	0	0	0	0	0	0	0	0	0	119	100
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	119	100	0	0	0	0	0	0	0	0	0	0	0	0	119	100
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**12661**	**38**	**1075**	**3**	**119**	**0**	**11705**	**35**	**956**	**3**	**119**	**0**	**6689**	**20**	**0**	**0**	**33323**	**100**

5.34 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, ARUSHA RURAL

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	12183	34	2269	6	0	0	16960	48	1792	5	0	0	2389	7	0	0	35593	100
Paddy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	1194	91	0	0	0	0	119	9	0	0	1314	100
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**12183**	**33**	**2269**	**6**	**0**	**0**	**18155**	**49**	**1792**	**5**	**0**	**0**	**2508**	**7**	**0**	**0**	**36907**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	119	33	0	0	0	0	239	67	0	0	358	100
Irish potatoes	119	13	0	0	119	13	119	13	119	13	0	0	478	50	0	0	956	100
ROOTS & TUBERS	**119**	**9**	**0**	**0**	**119**	**9**	**239**	**18**	**119**	**9**	**0**	**0**	**717**	**55**	**0**	**0**	**1314**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	10033	31	1433	4	0	0	14333	45	1194	4	0	0	5016	16	0	0	32010	100
Cowpeas	358	25	0	0	0	0	717	50	0	0	0	0	358	25	0	0	1433	100
Green gram	1553	46	119	4	0	0	1194	36	119	4	0	0	358	11	0	0	3344	100
Chick peas	239	18	0	0	0	0	956	73	119	9	0	0	0	0	0	0	1314	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
PULSES	**12183**	**32**	**1553**	**4**	**0**	**0**	**17199**	**45**	**1433**	**4**	**0**	**0**	**5853**	**15**	**0**	**0**	**38220**	**100**
Sunflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	358	60	0	0	0	0	0	0	119	20	0	0	119	20	0	0	597	100
OIL SEEDS & OIL NUTS	**358**	**60**	**0**	**0**	**0**	**0**	**0**	**0**	**119**	**20**	**0**	**0**	**119**	**20**	**0**	**0**	**597**	**100**

Cont. 5.34 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, ARUSHA RURAL

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	119	50	0	0	0	0	119	50	0	0	0	0	0	0	0	0	239	100
Radish	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	239	100	0	0	239	100
Onion	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Cabbage	119	33	0	0	0	0	0	0	0	0	0	0	239	67	0	0	358	100
Tomatoes	119	33	0	0	0	0	0	0	0	0	0	0	239	67	0	0	358	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	119	100	0	0	119	100
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	119	20	0	0	0	0	478	80	0	0	597	100
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**358**	**17**	**0**	**0**	**0**	**0**	**239**	**11**	**0**	**0**	**0**	**0**	**1553**	**72**	**0**	**0**	**2150**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**25202**	**32**	**3822**	**5**	**119**	**0**	**35832**	**45**	**3464**	**4**	**0**	**0**	**10749**	**14**	**0**	**0**	**79188**	**100**

5.35 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, MERU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	1830	21	0	0	0	0	5368	60	976	11	122	1	610	7	0	0	8907	100
Paddy	0	0	0	0	0	0	122	50	0	0	0	0	122	50	0	0	244	100
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**1830**	**20**	**0**	**0**	**0**	**0**	**5490**	**60**	**976**	**11**	**122**	**1**	**732**	**8**	**0**	**0**	**9151**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irish potatoes	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
ROOTS & TUBERS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**122**	**100**	**0**	**0**	**122**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beans	732	14	0	0	0	0	3294	63	366	7	0	0	732	14	122	2	5246	100
Cowpeas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green gram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chick peas	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**732**	**14**	**0**	**0**	**0**	**0**	**3294**	**61**	**366**	**7**	**0**	**0**	**854**	**16**	**122**	**2**	**5368**	**100**
Sunflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Cont. 5.35 : Number of households storing Crops by Method of Storage and Crop Type Short Rainy Season, MERU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	0	0	0	0	0	0	244	100	0	0	244	100
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	488	100	0	0	488	100
Onion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cabbage	366	60	0	0	0	0	244	40	0	0	0	0	0	0	0	0	610	100
Tomatoes	366	17	0	0	0	0	244	11	0	0	0	0	1586	72	0	0	2196	100
Spinach	244	67	0	0	0	0	0	0	0	0	0	0	122	33	0	0	366	100
Carrot	0	0	0	0	0	0	0	0	122	50	0	0	122	50	0	0	244	100
Chillies	366	75	0	0	0	0	0	0	0	0	0	0	122	25	0	0	488	100
Amaranths	244	67	0	0	0	0	122	33	0	0	0	0	0	0	0	0	366	100
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	244	100	0	0	244	100
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
FRUITS & VEGETABLES	**1586**	**30**	**0**	**0**	**0**	**0**	**610**	**11**	**122**	**2**	**0**	**0**	**3050**	**57**	**0**	**0**	**5368**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	122	100	0	0	0	0	0	0	0	0	122	100
Malay	0	0	0	0	0	0	122	100	0	0	0	0	0	0	0	0	122	100
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**4148**	**21**	**0**	**0**	**0**	**0**	**9517**	**47**	**1464**	**7**	**122**	**1**	**4758**	**24**	**122**	**1**	**20132**	**100**

5.36 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, MERU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Maize	5490	14	1708	4	1098	3	19155	50	5856	15	122	0	5124	13	0	0	38555	100
Paddy	0	0	0	0	0	0	488	67	0	0	0	0	244	33	0	0	732	100
Sorghum	122	33	0	0	0	0	122	33	122	33	0	0	0	0	0	0	366	100
Finger Millet	122	20	0	0	0	0	488	80	0	0	0	0	0	0	0	0	610	100
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEREALS	**5734**	**14**	**1708**	**4**	**1098**	**3**	**20254**	**50**	**5978**	**15**	**122**	**0**	**5368**	**13**	**0**	**0**	**40263**	**100**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
Sweet Potato	244	67	0	0	0	0	0	0	0	0	0	0	122	33	0	0	366	100
Irish potatoes	0	0	0	0	0	0	122	100	0	0	0	0	0	0	0	0	122	100
ROOTS & TUBERS	**244**	**40**	**0**	**0**	**0**	**0**	**122**	**20**	**0**	**0**	**0**	**0**	**244**	**40**	**0**	**0**	**610**	**100**
Mung Bean	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
Beans	2928	13	732	3	366	2	12689	56	1586	7	122	1	4392	19	0	0	22816	100
Cowpeas	122	20	0	0	0	0	488	80	0	0	0	0	0	0	0	0	610	100
Green gram	0	0	0	0	0	0	366	75	122	25	0	0	0	0	0	0	488	100
Chick peas	0	0	0	0	0	0	122	100	0	0	0	0	0	0	0	0	122	100
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**3050**	**13**	**732**	**3**	**366**	**2**	**13665**	**57**	**1708**	**7**	**122**	**1**	**4514**	**19**	**0**	**0**	**24158**	**100**
Sunflower	976	24	0	0	0	0	1586	38	122	3	0	0	1464	35	0	0	4148	100
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	122	100	0	0	0	0	0	0	0	0	122	100
Soya Beans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS	**976**	**23**	**0**	**0**	**0**	**0**	**1708**	**40**	**122**	**3**	**0**	**0**	**1464**	**34**	**0**	**0**	**4270**	**100**

Cont. 5.36 : Number of households storing Crops by Method of Storage and Crop Type Long Rainy Season, MERU

Crop	In locally made traditional structure		In Improved locally made structure		In modern store		In Sacks/open drum		In airtight drum		Unprotected pile		Not stored		Other (Specify)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Okra	0	0	0	0	0	0	122	100	0	0	0	0	0	0	0	0	122	100
Radish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
Bitteer Aubergine	0	0	0	0	0	0	0	0	0	0	0	0	244	100	0	0	244	100
Onion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
Tomatoes	0	0	0	0	0	0	0	0	0	0	0	0	854	100	0	0	854	100
Spinach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
Chillies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	0	0	0	0	0	0	0	0	0	0	0	0	122	100	0	0	122	100
Cucumber	0	0	0	0	0	0	0	0	0	0	0	0	244	100	0	0	244	100
Egg Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**0**	**0**	**0**	**0**	**0**	**0**	**122**	**6**	**0**	**0**	**0**	**0**	**1830**	**94**	**0**	**0**	**1952**	**100**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**10005**	**14**	**2440**	**3**	**1464**	**2**	**35871**	**50**	**7809**	**11**	**244**	**0**	**13421**	**19**	**0**	**0**	**71253**	**100**

5.37: ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Households and Planted Area by Organic Fertiliser Use and District- SHORT RAINY SEASON

District	Organic Fertlizer Use						% of Planted area using Organic Fertlizer
	Number of Households using Organic Fertlizer	Planted Area Applied with Organic Fertlizer	Number of Households NOT using Organic Fertlizer	Planted Area NOT Applied with Organic Fertlizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Monduli	714	390	3,215	4,570	3,929	4,960	7.9
Arusha	895	998	341	629	1,236	1,627	61.4
Karatu	267	126	4,278	2,708	4,545	2,834	4.5
Ngorongoro	71	29	995	611	1,066	640	4.5
Longido	231	216	3,987	5,562	4,218	5,778	3.7
Arusha Rural	5,972	2,532	11,824	7,371	17,796	9,903	25.6
Meru	1,098	704	10,493	7,550	11,591	8,254	8.5
Total	**9,249**	**4,996**	**35,133**	**29,001**	**44,381**	**33,997**	**14.7**

5.38: ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Households and Planted Area by Organic Fertiliser Use and District - LONG RAINY SEASON

District	Organic Fertlizer Use						% of Planted area using Organic Fertlizer
	Number of Households using Organic Fertlizer	Planted Area Applied with Organic Fertlizer	Number of Households NOT using Organic Fertlizer	Planted Area NOT Applied with Organic Fertlizer	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Monduli	1,429	2,268	20,432	41,860	21,861	44,128	5.1
Arusha	597	785	1,918	3,295	2,515	4,080	19.2
Karatu	4,367	1,883	27,537	24,893	31,904	26,776	7.0
Ngorongoro	71	29	10,018	14,364	10,089	14,393	0.2
Longido	87	406	5,229	6,738	5,316	7,144	5.7
Arusha Rural	11,466	6,911	27,471	24,429	38,937	31,339	22.1
Meru	5,734	3,923	33,919	35,177	39,653	39,101	10.0
Total	**23,751**	**16,205**	**126,524**	**150,756**	**150,275**	**166,961**	9.7

5.39: ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Households and Planted Area by Inorganic Fertiliser Use and District - SHORT RAINY SEASON

District	Inorganic Fertilizer Use						% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area NOT Applied with Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Monduli	3,929	329	0	4,631	3,929	4,960	6.6
Arusha	1,236	41	0	1,586	1,236	1,627	2.5
Karatu	4,545	189	0	2,645	4,545	2,834	6.7
Ngorongoro	1,066	14	0	626	1,066	640	2.2
Longido	4,218	1,516	0	4,263	4,218	5,778	26.2
Arusha Rural	17,796	1,262	0	8,641	17,796	9,903	12.7
Meru	11,591	1,806	0	6,448	11,591	8,254	21.9
Total	**44,381**	**5,158**	**0**	**28,839**	**44,381**	**33,997**	**15.2**

5.40: ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Households and Planted Area by Inorganic Fertiliser Use andDistrict - LONG RAINY SEASON

District	Inorganic Fertilizer Fertlizer Use						% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area NOT Applied with Inorganic Fertilizer	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Monduli	21,861	221	0	43,907	21,861	44,128	0.5
Arusha	2,515	0	0	4,080	2,515	4,080	0.0
Karatu	31,904	584	0	26,192	31,904	26,776	2.2
Ngorongoro	10,089	0	0	14,393	10,089	14,393	0.0
Longido	5,316	722	0	6,422	5,316	7,144	10.1
Arusha Rural	38,937	1,454	0	29,886	38,937	31,339	4.6
Meru	39,653	6,453	0	32,648	39,653	39,101	16.5
Total	**150,275**	**9,433**	**0**	**157,528**	**150,275**	**166,961**	5.7

5.41: :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Fungicide Use and District - Short Rainy Season

District	Fungicide Use						% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Number of Households NOT using Fungicide	Planted Area NOT Applied with Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Monduli	714	362	3,215	4,599	3,929	4,960	7.3
Arusha	256	226	980	1,402	1,236	1,627	13.9
Karatu	178	72	4,367	2,762	4,545	2,834	2.5
Ngorongoro	0	0	1,066	640	1,066	640	-
Longido	925	1,234	3,294	4,544	4,218	5,778	21.4
Arusha Rural	1,792	694	16,005	9,209	17,796	9,903	7.0
Meru	2,684	845	8,907	7,409	11,591	8,254	10.2
Total	**6,549**	**3,432**	**37,833**	**30,565**	**44,381**	**33,997**	**10.1**

5.42: :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Fungicide Use and District - Long Rainy Season

District	Fungicide Use						% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Number of Households NOT using Fungicide	Planted Area NOT Applied with Fungicide	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Monduli	1,143	1,135	20,718	42,993	21,861	44,128	2.6
Arusha	43	35	2,472	4,046	2,515	4,080	0.8
Karatu	1,248	643	30,657	26,133	31,904	26,776	2.4
Ngorongoro	71	58	10,018	14,335	10,089	14,393	0.4
Longido	722	757	4,594	6,387	5,316	7,144	10.6
Arusha Rural	1,553	408	37,384	30,931	38,937	31,339	1.3
Meru	1,708	777	37,945	38,324	39,653	39,101	2.0
Total	**6,488**	**3,813**	**143,788**	**163,149**	**150,275**	**166,961**	**2.3**

5.43 : :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Herbicide Use and District - Short Rainy Season

District	Herbicide Use						% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Number of Households NOT using Herbicides	Planted Area NOT Applied with Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Monduli	714	318	3,215	4,642	3,929	4,960	6.4
Arusha	85	90	1,151	1,537	1,236	1,627	5.5
Karatu	178	72	4,367	2,762	4,545	2,834	2.5
Ngorongoro	71	14	995	626	1,066	640	2.2
Longido	1,271	1,939	2,947	3,840	4,218	5,778	33.6
Arusha Rural	358	73	17,438	9,830	17,796	9,903	0.7
Meru	1,952	1,015	9,639	7,239	11,591	8,254	12.3
Total	**4,631**	**3,521**	**39,751**	**30,476**	**44,381**	**33,997**	**10.4**

5.44: :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Herbicide Use and District - Long Rainy Season

District	Herbicide Use						% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Number of Households NOT using Herbicides	Planted Area NOT Applied with Herbicide	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Monduli	1,357	1,020	20,503	43,108	21,861	44,128	2.3
Arusha	43	17	2,472	4,063	2,515	4,080	0.4
Karatu	1,871	1,230	30,033	25,546	31,904	26,776	4.6
Ngorongoro	0	0	10,089	14,393	10,089	14,393	0.0
Longido	1,156	1,924	4,160	5,220	5,316	7,144	26.9
Arusha Rural	1,672	1,003	37,265	30,336	38,937	31,339	3.2
Meru	2,928	3,192	36,725	35,909	39,653	39,101	8.2
Total	**9,028**	**8,386**	**141,248**	**158,575**	**150,275**	**166,961**	**5.0**

5.45: :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Improved Seed Use and District - Short Rainy Season

District	Improved Seed						% of area planted using improved seed
	Number of Households using Improved Seed	Planted Area Improved Seed Used	Number of Households NOT using Improved Seeds	Planted Area Improved Seed not Used	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Monduli	1,786	1,802	2,143	3,158	3,929	4,960	36.3
Arusha	1,065	874	170	753	1,236	1,627	53.7
Karatu	1,604	686	2,941	2,149	4,545	2,834	24.2
Ngorongoro	284	180	782	460	1,066	640	28.1
Longido	2,138	2,956	2,080	2,822	4,218	5,778	51.2
Arusha Rural	9,675	3,044	8,122	6,859	17,796	9,903	30.7
Meru	6,711	3,653	4,880	4,601	11,591	8,254	44.3
Total	**23,263**	**13,195**	**21,119**	**20,802**	**44,381**	**33,997**	**38.8**

5.46: :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Improved Seed Use and District - Long Rainy Season

District	Improved Seed						% of area planted using improved seed
	Number of Households using Improved Seed	Planted Area Improved Seed Used	Number of Households NOT using Improved Seeds	Planted Area Improved Seed not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Monduli	5,287	6,136	16,574	37,992	21,861	44,128	13.9
Arusha	1,151	1,009	1,364	3,072	2,515	4,080	24.7
Karatu	12,120	7,874	19,784	18,902	31,904	26,776	29.4
Ngorongoro	3,979	3,841	6,110	10,551	10,089	14,393	26.7
Longido	1,791	2,273	3,525	4,872	5,316	7,144	31.8
Arusha Rural	18,513	10,146	20,424	21,193	38,937	31,339	32.4
Meru	22,938	17,291	16,715	21,809	39,653	39,101	44.2
Total	**65,778**	**48,570**	**84,497**	**118,392**	**150,275**	**166,961**	**29.1**

5.47 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of crop Growing Households and Planted Area (hectare) by Local Seed Use and District; 2007/08 Agriculture Year - SHORT Rainy Season

District	Using Local seed		Not using Local seed		TOTAL		% of Planted Area Using Local seeds
	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	
Monduli	2,500	2,856	1,429	2,104	3,929	4,960	57.6
Arusha	1,065	641	170	993	1,236	1,627	39.4
Karatu	3,208	2,103	1,337	731	4,545	2,834	74.2
Ngorongoro	782	460	284	180	1,066	640	71.9
Longido	2,918	2,671	1,300	3,107	4,218	5,778	46.2
Arusha Rural	13,974	6,136	3,822	3,766	17,796	9,903	62.0
Meru	6,466	4,359	5,124	3,895	11,591	8,254	52.8
Total	30,915	19,227	13,467	14,776	44,381	33,997	56.6

5.48 ANNUAL CROP AND VEGETABLE PRODUCTION: Number of crop Growing Households and Planted Area (hectare) by Local Seed Use and District; 2007/08 Agriculture Year - LONG Rainy Season

District	Using Local seed		Not using Local seed		TOTAL		% of Planted Area Using Local seeds
	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	Number of Households	Planted Area (ha)	
Monduli	20,289	37,321	1,572	6,807	21,861	44,128	85
Arusha	2,387	2,837	128	1,243	2,515	4,080	70
Karatu	26,468	17,235	5,436	9,818	31,904	26,776	64
Ngorongoro	9,166	10,347	924	4,046	10,089	14,393	72
Longido	4,420	4,795	896	2,349	5,316	7,144	67
Arusha Rural	32,846	19,480	6,091	11,859	38,937	31,339	62
Meru	27,086	21,183	12,567	18,058	39,653	39,101	54
Total	**122,662**	**113,199**	**27,613**	**54,180**	**150,275**	**166,961**	**68**

5.49: :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Insecticides Use by District - SHORT RAINY SEASON

District	Insecticide Use						% of Planted area using Insecticides
	Number of Households using Insecticides	Planted Area Applied with Insecticides	Number of Households NOT using Insecticides	Planted Area Without Insecticides	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Monduli	1,072	781	2,858	4,179	3,929	4,960	15.7
Arusha	341	300	895	1,327	1,236	1,627	18.5
Karatu	891	776	3,654	2,058	4,545	2,834	27.4
Ngorongoro	0	0	1,066	640	1,066	640	0.0
Longido	1,560	2,264	2,658	3,514	4,218	5,778	39.2
Arusha Rural	2,389	1,393	15,408	8,509	17,796	9,903	14.1
Meru	4,270	1,502	7,321	6,753	11,591	8,254	18.2
Total	**10,523**	**7,016**	**33,858**	**26,981**	**44,381**	**33,997**	20.6

5.50: :ANNUAL CROP & VEGETABLE PRODUCTION: Number of Households and Planted Area by Insecticide Use and District - Long Rainy Season

District	Insecticide Use						% of Planted area using Insecticides
	Number of Households using Insecticides	Planted Area Applied with Insecticides	Number of Households NOT using Insecticides	Planted Area Without Insecticides	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Monduli	2,858	2,187	19,003	41,941	21,861	44,128	5.0
Arusha	128	112	2,387	3,968	2,515	4,080	2.7
Karatu	2,406	2,739	29,498	24,037	31,904	26,776	10.2
Ngorongoro	0	0	10,089	14,393	10,089	14,393	0.0
Longido	1,387	1,872	3,929	5,273	5,316	7,144	26.2
Arusha Rural	2,867	2,264	36,071	29,075	38,937	31,339	7.2
Meru	4,392	2,940	35,261	36,160	39,653	39,101	7.5
Total	**14,037**	**12,114**	**136,238**	**154,847**	**150,275**	**166,961**	7.3

5.51: ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Households and Planted Area by Irrigation Use and District -SHORT RAINY SEASON

District	Irrigation use						% of area planted under irrigation in Short rainy season
	Number of Households using Irrigation	Planted Area with Irrigation	Number of Households NOT using Irrigation	Planted Area with no Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Monduli	1,857	994	2,072	3,966	3,929	4,960	20.0
Arusha	256	166	980	1,461	1,236	1,627	10.2
Karatu	802	325	3,743	2,509	4,545	2,834	11.5
Ngorongoro	355	230	711	410	1,066	640	36.0
Longido	549	1,415	3,669	4,363	4,218	5,778	24.5
Arusha Rural	4,658	2,519	13,138	7,383	17,796	9,903	25.4
Meru	5,368	4,881	6,222	3,373	11,591	8,254	59.1
Total	**13,846**	**10,531**	**30,536**	**23,466**	**44,381**	**33,997**	31.0

5.52: ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Households and Planted Area by Irrigation Use and District -LONG RAINY SEASON

District	Irrigation use						% of area planted under irrigation in long rainy season
	Number of Households using Irrigation	Planted Area with Irrigation	Number of Households NOT using Irrigation	Planted Area with no Irrigation	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Monduli	1,643	1,350	20,218	42,778	21,861	44,128	3.1
Arusha	341	126	2,174	3,955	2,515	4,080	3.1
Karatu	2,317	1,312	29,587	25,464	31,904	26,776	4.9
Ngorongoro	497	365	9,592	14,028	10,089	14,393	2.5
Longido	751	1,512	4,565	5,632	5,316	7,144	21.2
Arusha Rural	3,941	2,586	34,996	28,753	38,937	31,339	8.3
Meru	7,687	6,015	31,966	33,086	39,653	39,101	15.4
Total	**17,178**	**13,266**	**133,097**	**153,696**	**150,275**	**166,961**	7.9

MARKETING

5.53 MARKETING: Number of Crop Producing households reporting Selling agricultural produce during 2007/08 by District and Season

SHORT RAINY SEASON

District	Number of households that sold	%	Number of households that did not sell	%	Total number of households
Monduli	2,286	58	1,643	42	3,929
Arusha	767	62	469	38	1,236
Karatu	2,674	59	1,871	41	4,545
Ngorongoro	853	80	213	20	1,066
Longido	1,849	44	2,369	56	4,218
Arusha Rural	7,644	43	10,152	57	17,796
Meru	7,809	67	3,782	33	11,591
Total	**23,881**	54	**20,500**	46	**44,381**

5.54 MARKETING: Number of Crop Producing households reporting Selling agricultural produce during 2007/08 by District and Season

LONG RAINY SEASON

District	Number of households that sold	%	Number of households that did not sold	%	Total number of households
Monduli	12,788	58	9,073	42	21,861
Arusha	1,620	64	895	36	2,515
Karatu	19,784	62	12,120	38	31,904
Ngorongoro	6,466	64	3,624	36	10,089
Longido	2,543	48	2,774	52	5,316
Arusha Rural	16,602	43	22,335	57	38,937
Meru	28,428	72	11,225	28	39,653
Total	**88,230**	59	**62,045**	41	**150,275**

5.55 MARKETING PROBLEMS: Number of Households Reporting Marketing Problems for agricultural products by Crop - ARUSHA, SHORT RAINY SEASON

Crop	Open Market Price too low	No Transport	Transport Cost too high	No buyer	Crop Market too Far	Farmer Association problems	Cooperative problems	Trade Union Problems	Government Rugulatory Problems	Lack of Market Information	No problem	Other	Not Applicable
Maize	7,972	1,377	918	71	398	0	0	119	29	342	1,402	191	21,238
Paddy	479	0	122	0	0	0	0	0	0	0	71	0	0
Sorghum	0	0	0	0	0	0	0	0	0	0	0	0	0
Finger Millet	119	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	433
Barley	0	0	0	0	89	0	0	0	0	0	0	0	0
CEREALS													
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweet Potato	231	0	160	0	89	0	0	0	0	0	118	0	209
Irish potatoes	563	148	58	0	119	0	0	0	0	29	478	119	119
ROOTS & TUBERS	**794**	**148**	**218**	**0**	**209**	**0**	**0**	**0**	**0**	**29**	**596**	**119**	**328**
Mung Bean	72	0	0	0	0	0	0	0	0	0	0	0	148
Beans	5,633	990	1,060	0	968	0	0	0	0	390	1,314	119	14,039
Cowpeas	43	43	43	0	0	0	0	0	0	0	0	0	239
Green gram	324	0	43	0	0	0	0	0	0	0	0	0	358
Chick peas	369	29	0	0	0	0	0	0	0	0	0	0	0
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	**6,441**	**1,062**	**1,145**	**0**	**968**	**0**	**0**	**0**	**0**	**390**	**1,314**	**119**	**14,784**
Sunflower	29	0	0	0	0	0	0	0	0	0	0	0	43
Simsim	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	0
Soya Beans	119	0	0	0	0	0	0	0	0	0	119	0	239
OIL SEEDS & OIL NUTS	**148**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**119**	**0**	**281**

Cont..5.55 MARKETING PROBLEMS: Number of Households Reporting Marketing Problems for agricultural products by Crop - ARUSHA, SHORT RAINY SEASON

Crop	Open Market Price too low	No Transport	Transport Cost too high	No buyer	Crop Market too Far	Farmer Association problems	Cooperative problems	Trade Union Problems	Government Rugulatory Problems	Lack of Market Information	No problem	Other	Not Applicable
Okra	287	0	0	0	0	0	0	0	0	0	0	0	0
Radish	119	0	0	0	0	0	0	0	0	0	119	0	0
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	119
Bitteer Aubergine	327	122	244	0	0	0	0	0	0	0	0	0	43
Onion	369	178	89	0	399	0	0	0	89	0	0	0	713
Cabbage	1,117	43	0	0	162	0	0	0	0	122	239	0	162
Tomatoes	1,912	71	739	71	356	29	0	0	0	0	0	71	58
Spinach	676	193	71	0	43	0	0	0	0	0	0	0	43
Carrot	114	0	0	0	358	0	0	0	0	0	241	0	122
Chillies	451	0	0	0	43	0	0	0	0	122	0	0	0
Amaranths	329	119	0	0	0	122	0	0	0	119	0	0	85
Cucumber	244	0	0	0	0	0	0	0	0	0	0	0	0
Egg Plant	165	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**6,110**	**726**	**1,143**	**71**	**1,360**	**151**	**0**	**0**	**89**	**363**	**600**	**71**	**1,345**
Cotton	0	0	0	0	0	0	0	0	119	0	0	0	0
Tobacco	122	0	0	0	0	0	0	0	0	0	0	0	29
Malay	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**122**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**119**	**0**	**0**	**0**	**29**
Total	**22,186**	**3,314**	**3,546**	**143**	**3,024**	**151**	**0**	**119**	**237**	**1,124**	**4,103**	**501**	**38,439**

5.56 MARKETING PROBLEMS: Number of Households Reporting Marketing Problems for agricultural products by Crop - ARUSHA, LONG RAINY SEASON

Crop	Open Market Price too low	No Transport	Transport Cost too high	No buyer	Crop Market too Far	Farmer Association problems	Cooperative problems	Trade Union Problems	Goernment Rugulatory Problems	Lack of Market Information	No problem	Other	Not Applicable
Maize	38,896	5,934	3,617	267	5,609	71	1,400	119	642	4,227	8,375	172	74,718
Paddy	1,202	0	0	122	89	0	0	0	0	0	71	0	151
Sorghum	798	71	178	0	89	0	178	0	89	231	89	0	2,434
Finger Millet	484	0	0	0	116	0	89	0	0	0	0	0	690
Wheat	2,435	0	478	0	356	0	89	0	0	0	71	0	732
Barley	0	0	0	0	178	0	0	0	0	89	0	0	89
CEREALS	**43,815**	**6,005**	**4,273**	**389**	**6,438**	**71**	**1,756**	**119**	**731**	**4,547**	**8,607**	**172**	**78,813**
Cassava	0	0	0	0	0	0	0	0	0	0	0	0	122
Sweet Potato	236	119	0	0	119	122	0	0	0	122	0	0	119
Irish potatoes	387	29	0	0	239	0	0	0	0	119	29	0	792
ROOTS & TUBERS	**623**	**148**	**0**	**0**	**358**	**122**	**0**	**0**	**0**	**241**	**29**	**0**	**1,033**
Mung Bean	122	0	0	0	0	0	0	0	0	0	0	0	0
Beans	24,014	4,820	2,368	0	3,892	0	240	29	161	623	4,951	122	51,111
Cowpeas	3,018	364	89	0	0	0	0	0	0	0	695	0	2,392
Green gram	2,969	119	0	0	0	71	71	0	0	0	931	0	3,799
Chick peas	2,282	71	239	43	119	0	0	0	0	0	193	0	1,147
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	119
PULSES	**32,404**	**5,375**	**2,696**	**43**	**4,011**	**71**	**311**	**29**	**161**	**623**	**6,770**	**122**	**58,569**
Sunflower	2,408	254	118	0	0	0	713	0	0	446	211	0	3,704
Simsim	143	0	0	0	0	0	0	0	0	0	0	0	0
Groundnut	0	0	0	0	0	0	0	0	0	0	0	0	122
Soya Beans	358	0	0	0	0	0	0	0	0	0	0	0	239
OIL SEEDS & OIL NUTS	**2,909**	**254**	**118**	**0**	**0**	**0**	**713**	**0**	**0**	**446**	**211**	**0**	**4,065**

Cont..5.56 MARKETING PROBLEMS: Number of Households Reporting Marketing Problems for agricultural products by Crop - ARUSHA, LONG RAINY SEASON

Crop	Open Market Price too low	No Transport	Transport Cost too high	No buyer	Crop Market too Far	Farmer Association problems	Cooperative problems	Trade Union Problems	Goernment Regulatory Problems	Lack of Market Information	No problem	Other	Not Applicable
Okra	119	0	0	0	0	0	0	0	0	0	122	0	119
Radish	162	0	0	0	0	0	0	0	0	0	0	0	71
Turmeric	122	0	0	0	0	0	0	0	0	0	0	0	0
Bitteer Aubergine	244	119	0	0	0	0	0	0	0	0	0	0	119
Onion	408	0	0	0	0	0	0	0	0	0	0	0	267
Cabbage	310	0	0	0	241	0	0	0	0	0	0	0	0
Tomatoes	753	0	244	0	0	0	0	122	0	0	122	0	58
Spinach	271	178	0	0	119	0	0	0	0	0	0	43	0
Carrot	71	0	122	0	0	0	0	0	0	0	0	0	0
Chillies	85	0	0	0	0	0	0	0	0	0	0	0	0
Amaranths	284	119	0	0	0	0	0	0	0	0	119	0	281
Cucumber	122	0	0	122	0	0	0	0	0	0	0	0	0
Egg Plant	43	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES	**2,995**	**417**	**366**	**122**	**361**	**0**	**0**	**122**	**0**	**0**	**363**	**43**	**917**
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0
Malay	71	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**82,817**	**12,199**	**7,453**	**554**	**11,168**	**265**	**2,781**	**270**	**892**	**5,858**	**15,980**	**336**	**143,398**

INPUT USE SHORT RAINY SEASON

5.57: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MONDULI

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	714	456	19,646,123	2,429	2,401	3,143	2,856	15.9
Paddy	143	72	785,845	429	174	429	246	29.4
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	0	.	.	0	.	0	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**528**	**20,431,968**		**2,574**	**3,572**	**3,102**	**17.0**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	0	.	0	-	0.0
ROOTS & TUBERS		**.**	**.**		**.**	**0**	-	**0.0**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	286	210	7,858,449	1,643	1,605	1,929	1,815	11.6
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	0	.	0	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	**286**	**210**	**7,858,449**	**1,643**	**1,605**	**1,929**	**1,815**	**11.6**
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**0**	**.**	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**.**	**0**	-	**0.0**
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	0	.	.	0	.	0	-	0.0
Cabbage	71	7	178,601	0	.	71	-	0.0
Tomatoes	143	29	3,429,141	0	.	143	-	0.0
Spinach	0	.	.	0	.	0	-	0.0
Carrot	71	7	178,601	0	.	71	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**43**	**3,786,344**		**.**	**286**	**-**	**0.0**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS	**0**	**.**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**1,429**	**781**	**32,076,761**	**4,501**	**4,179**	**5,787**	**4,960**	**15.7**

5.58: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	170	149	4,006,226	895	572	1,023	720	20.7
Paddy	0	.	.	0	.	-	-	0.0
Sorghum	0	.	.	0	.	-	-	0.0
Finger Millet	0	.	.	0	.	-	-	0.0
Wheat	0	.	.	0	.	-	-	0.0
Barley	0	.	.	0	.	-	-	0.0
CEREALS		**149**	**4,006,226**		**572**		**720**	**20.7**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	0	.	0	-	0.0
ROOTS & TUBERS		**.**	**.**		**.**	**0**	**#VALUE!**	#######
Mung Bean	0	.	.	43	43	43	-	0.0
Beans	128	86	2,898,121	767	767	895	853	10.1
Cowpeas	0	.	.	128	128	128	-	0.0
Green gram	0	.	.	128	128	128	-	0.0
Chick peas	0	.	.	128	128	128	-	0.0
Field Peas	0	.	.	0	0	0	-	0.0
PULSES		**86**	**2,898,121**		**604**	**1,321**	**690**	**12.5**
Sunflower	0	.	.	43	9	43	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	0	.	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**9**		-	**0.0**
Okra	0	.	.	43	9	43	-	0.0
Radish	0	.	.	0	0	0	-	0.0
Turmeric	0	.	.	0	0	0	-	0.0
Bitteer Aubergine	43	9	852,388	85	13	128	22	40.0
Onion	0	.	.	85	15	85	-	0.0
Cabbage	128	16	1,619,538	128	22	256	38	42.7
Tomatoes	43	3	426,194	43	9	85	12	28.6
Spinach	128	37	1,280,714	128	20	256	57	65.3
Carrot	0	.	.	43	4	43	-	0.0
Chillies	0	.	.	128	23	128	-	0.0
Amaranths	0	.	.	170	20	170	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	43	9	43	-	0.0
FRUITS & VEGETABLES		**65**	**4,178,834**		**143**		**208**	**31.5**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS		**.**	**.**		**.**		-	**0.0**
Malay	**0**	**.**	**.**	**0**	**.**	**0**	-	0.0
Total	**639**	**300**	**11,083,181**	**3,026**	**1,327**	**3,623**	**1,627**	**18.5**

5.59: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - KARATU

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	178	72	712,945	1,159	872	1,337	945	7.6
Paddy	0	.	.	0	.	0	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	0	.	.	0	.	0	-	0.0
Barley	0	.	.	89	36	89	-	0.0
CEREALS		**72**	**712,945**		**908**		**981**	**7.4**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	446	216	446	-	0.0
Irish potatoes	0	.	.	0	.	0	-	0.0
ROOTS & TUBERS		**.**	**.**		**216**	**446**	**-**	**0.0**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	624	577	2,673,543	980	609	1,604	1,186	48.7
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	0	.	0	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES		**577**	**2,673,543**		**609**	**1,604**	**1,186**	**48.7**
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	0	.	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**.**		**-**	**0.0**
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	267	126	6,772,975	1,337	325	1,604	451	28.0
Cabbage	0	.	.	0	.	0	-	0.0
Tomatoes	0	.	.	0	.	0	-	0.0
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	.	.	0	.	0	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**126**	**6,772,975**		**325**		**451**	**28.0**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS		**.**	**.**		**.**		**-**	**0.0**
Malay	**0**	**.**	**.**	**0**	**.**	**0**	-	0.0
Total	**1,069**	**776**	**10,159,463**	**4,010**	**2,058**	**5,080**	**2,834**	**27.4**

5.60: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - NGORONGORO

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	568	449	568	449	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS	**0**	**0**	**.**	**568**	**449**	**568**	**449**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	213	72	213	72	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS	**0**	**0**	**.**	**213**	**72**	**213**	**72**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	142	33	142	33	0.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**0**	**0**	**.**	**142**	**33**	**142**	**33**	**0.0**
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	0	0	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS	**0**	**0**	**.**	**0**	**.**	**0**	-	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	71	14	71	14	0.0
Tomatoes	0	0	.	355	43	355	43	0.0
Spinach	0	0	.	284	29	284	29	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES	**0**	**0**	**.**	**711**	**86**	**711**	**86**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**0**	**0**	**.**	**1634**	**640**	**1634**	**640**	**0.0**

5.61: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - LONGIDO

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,069	667	18,217,658	2,514	2,302	3,554	2,969	22.5
Paddy	0	.	.	0	.	0	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	144	351	4,362,715	289	246	433	597	58.8
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**1,018**	**22,580,373**		**2,548**		3,565	28.5
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	29	6	29	-	0.0
Irish potatoes	318	228	6,076,020	0	.	318	-	0.0
ROOTS & TUBERS		**228**	6,076,020		**6**	**347**	234	97.5
Mung Bean	0	.	.	58	23	58	-	0.0
Beans	1,040	898	12,741,439	1,502	862	2,514	1,760	51.0
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	29	6	29	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES		**898**	**12,741,439**		**891**	**2,600**	1,789	50.2
Sunflower	29	18	0	0	.	29	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	0	.	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS		**18**	**0**		**.**		-	0.0
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	29	47	693,412	0	.	29	-	0.0
Cabbage	0	.	.	0	.	0	-	0.0
Tomatoes	202	56	8,413,684	144	64	289	120	47.0
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	.	.	0	.	0	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**103**	**9,107,095**		**64**		167	61.8
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	29	6	29	-	0.0
CASH CROPS	**0**	**.**	**.**	**29**	**6**	**29**	-	0.0
Malay	0	.	.	0	.	0	-	0.0
Total	**2,831**	**2,264**	**50,504,926**	**4,594**	**3,514**	**7,310**	5,778	39.2

5.62: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA RURAL

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	358	397	4,777,551	15,169	4,646	15,527	5,042	7.9
Paddy	0	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	119	73	119	-	0.0
Wheat	0	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	0	-	0.0
CEREALS		**397**	**4,777,551**		**4,718**		5,115	7.8
Cassava		0	.	0	0	0	-	0.0
Sweet Potato		0	.	119	24	119	24	0.0
Irish potatoes		447	13,711,572	358	109	1,194	556	80.4
ROOTS & TUBERS		**447**	**13,711,572**		**133**		580	77.1
Mung Bean	0	0	.	119	97	119	97	0.0
Beans	478	261	6,688,572	11,705	2,771	12,183	3,032	8.6
Cowpeas	0	0	.	239	53	239	53	0.0
Green gram	0	0	.	597	157	597	157	0.0
Chick peas	0	0	.	119	19	119	19	0.0
Field Peas	0	0	.	0	0	0	-	0.0
PULSES		**261**	**6,688,572**		**3,096**		3,357	7.8
Sunflower	0	0	.	0	0		-	0.0
Simsim	0	0	.	0	0		-	0.0
Groundnut	0	0	.	0	0		-	0.0
OIL SEEDS & OIL NUTS			**0**				-	0.0
Okra	0	0	.	0	0	0	-	0.0
Radish	0	0	.	239	94	239	94	0.0
Turmeric	0	0	.	119	77	119	77	0.0
Bitteer Aubergine	119	48	477,755	0	0	119	48	100.0
Onion	119	24	812,184	0	0	119	24	100.0
Cabbage	478	127	11,466,123	358	68	836	195	65.3
Tomatoes	239	33	2,030,459	119	42	239	75	43.5
Spinach	119	16	1,791,582	0	0	119	16	100.0
Carrot	239	24	1,194,388	358	36	478	60	40.0
Chillies	0	0	.	0	0	0	-	0.0
Amaranths	119	16	1,791,582	119	2	239	18	0.0
Cucumber	0	0	.	0	0	0	-	0.0
Egg Plant	0	0	.	0	0	0	-	0.0
FRUITS & VEGETABLES		**288**	**19,564,073**		**320**		609	47.4
Cotton	0	0	.	119	145		145	0.0
Tobacco	0	0	.	0	0		-	0.0
CASH CROPS							-	0.0
Total	**3,105**	**1,393**	**44,741,768**	**30,457**	**8,509**		**9,903**	14.1

5.63: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Insecticide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MERU

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,708	533	9,467,927	7,199	4,174	8,907	4,707	11.3
Paddy	0	0	0	244	62	244	62	0.0
Sorghum	0	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	0	-	0.0
CEREALS		**533**	**9,467,927**		**4,236**		4,769	11.2
Cassava	0	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	0	-	0.0
Irish potatoes	0	0	0	122	49	122	49	0.0
ROOTS & TUBERS			**0**		49		49	0.0
Mung Bean	0	0	0	0	0	0	-	0.0
Beans	488	123	2,940,426	4,758	2,122	5,246	2,245	5.5
Cowpeas	0	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	0	-	0.0
Chick peas	122	49	488,037	0	0	122	49	100.0
Field Peas	0	0	0	0	0	0	-	0.0
PULSES		**173**	**3,428,463**		**2,122**		2,294	7.5
Sunflower	0	0	0	0	0	0	-	0.0
Simsim	0	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	0	-	0.0
Soya Beans	0	0	0	0	0	0	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**				-	0.0
Okra	0	0	0	244	62	244	62	0.0
Radish	0	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	0	-	0.0
Bitteer Aubergine	244	49	7,320,562	244	37	488	86	57.1
Onion	0	0	0	0	0	0	-	0.0
Cabbage	610	32	1,366,505	0	0	610	32	100.0
Tomatoes	1,952	584	51,719,773	244	74	2,196	658	88.7
Spinach	366	11	780,860	0	0	366	11	100.0
Carrot	122	25	1,220,094	122	0	244	25	100.0
Chillies	366	10	683,252	122	25	488	35	29.6
Amaranths	366	9	780,860	0	0	366	9	100.0
Cucumber	244	74	5,978,459	0	0	244	74	100.0
Egg Plant	0	0	0	122	49	122	49	0.0
FRUITS & VEGETABLES		**795**	**69,850,366**		**272**		1,067	74.5
Cotton	0	0	0	0	0	0	-	0.0
Tobacco	0	0	0	122	74	122	74	0.0
CASH CROPS							-	0.0
Total	**6,589**	**1,502**	**82,746,757**	**13,543**	**6,753**	**20,132**	**8,254**	**18.2**

5.64: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Local Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MONDULI

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with LocalSeeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,643	1,316	25,684,157	30,934	1,540	3,143	2,856	46.1
Paddy	286	72	6,143,951	9,573	174	429	246	29.4
Sorghum	0	0	0	.	.	0	-	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	0	0	0	.	.	0	-	0.0
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**1,388**	**31,828,108**		**1,714**	**3,572**	**3,102**	**44.8**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	0	0	0	.	.	0	-	0.0
Irish potatoes	0	0	0	.	.	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	1,500	1,468	18,483,112	78,156	347	1,929	1,815	80.9
Cowpeas	0	0	0	.	.	0	-	0.0
Green gram	0	0	0	.	.	0	-	0.0
Chick peas	0	0	0	.	.	0	-	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES	**1,500**	**1,468**	**18,483,112**	**78,156**	**347**	**1,929**	**1,815**	**80.9**
Sunflower	0	0	0	.	.	0	-	0.0
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	**0**	**.**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**.**	**0**	**-**	**0.0**
Okra	0	0	0	.	.	0	-	0.0
Radish	0	0	0	.	.	0	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	0	0	0	.	.	0	-	0.0
Cabbage	0	0	0	.	7	71	7	0.0
Tomatoes	0	0	0	.	29	143	29	0.0
Spinach	0	0	0	.	.	0	-	0.0
Carrot	0	0	0	.	7	71	7	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	0	0	0	.	.	0	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**0**		**43**	**286**	**43**	**0.0**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	.	0	-	0.0
Total	**3,429**	**2,856**	**50,311,219**	**118,663**	**2,104**	**5,787**	**4,960**	**57.6**

5.65: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Local Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with LocalSeeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	256	135	2,748,953	9,163	586	1,023	720	18.7
Paddy	0	0	.	.	.	-	-	0.0
Sorghum	0	0	.	.	.	-	-	0.0
Finger Millet	0	0	.	.	.	-	-	0.0
Wheat	0	0	.	.	.	-	-	0.0
Barley	0	0	.	.	.	-	-	0.0
CEREALS		**135**	**2,748,953**		**586**		**720**	**18.7**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	0	0	.	.	.	0	-	0.0
Irish potatoes	0	0	.	.	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**.**	**0**	**-**	0.0
Mung Bean	0	0	.	.	9	43	-	0.0
Beans	767	396	16,792,053	20,415	184	895	580	68.2
Cowpeas	128	30	2,984,425	1,918	.	128	-	-
Green gram	85	26	647,815	5,327	4	128	30	85.7
Chick peas	128	41	1,534,299	3,836	6	128	47	86.4
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**493**	**21,958,592**		**204**	**1,321**	**697**	**70.7**
Sunflower	43	9	213,097	426	.	43	-	-
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS		**9**	**213,097**		**.**		**-**	-
Okra	0	0	.	.	9	43	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	0	0	.	.	22	128	-	0.0
Onion	0	0	.	.	15	85	-	0.0
Cabbage	43	4	1,790,016	85,239	33	256	38	11.5
Tomatoes	0	0	.	.	12	85	-	0.0
Spinach	0	0	.	.	57	256	-	0.0
Carrot	0	0	.	.	4	43	-	0.0
Chillies	0	0	.	.	23	128	-	0.0
Amaranths	0	0	.	.	20	170	-	0.0
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	9	43	-	0.0
FRUITS & VEGETABLES		**4**	**1,790,016**		**204**		**208**	**2.1**
Cotton	0	0	.	.	.	0	-	**0.0**
Tobacco	0	0	.	.	.	0	-	**0.0**
CASH CROPS		0	**.**		**.**		-	**0.0**
Malay	**0**	0	**.**	**.**	**.**	**0**	-	**0.0**
Total	**1,449**	**641**	**26,710,658**	**126,324**	**993**	**3,623**	**1,634**	**39.2**

5.66: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Local Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - KARATU

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with LocalSeeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	713	530	14,094,027	7,753	415	1,337	945	56.1
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	36	89	-	0.0
CEREALS		**530**	**14,094,027**		**451**		**981**	**54.0**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	446	216	5,035,262	2,744,837	.	446	-	-
Irish potatoes	0	0	.	.	.	0	-	0.0
ROOTS & TUBERS		**0**	**5,035,262**		**.**	**446**	**-**	**-**
Mung Bean	0	0	.	.	.	0	-	0.0
Beans	1,604	1,186	63,166,908	67,106	.	1,604	-	-
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	0	0	.	.	.	0	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**1,186**	**63,166,908**		**.**	**1,604**	**-**	**-**
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**		**-**	**0.0**
Okra	0	0	.	.	.	0	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	0	0	.	.	.	0	-	0.0
Onion	624	171	14,642,104	24,686	280	1,604	451	38.0
Cabbage	0	0	.	.	.	0	-	0.0
Tomatoes	0	0	.	.	.	0	-	0.0
Spinach	0	0	.	.	.	0	-	0.0
Carrot	0	0	.	.	.	0	-	0.0
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	0	0	.	.	.	0	-	0.0
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES		**171**	**14,642,104**		**280**		**451**	**38.0**
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	0	0	.	.	.	0	-	0.0
CASH CROPS		0	**.**		**.**		-	0.0
Malay	**0**	0	**.**	**.**	**.**	**0**	-	0.0
Total	**3,386**	**2,103**	**96,938,300**	**2,844,382**	**731**	**5,080**	**2,834**	**74.2**

5.67: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Local Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - NGORONGORO

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with LocalSeeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	497	327	4,632,503	12,434	122	568	449	72.8
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	.	0	-	0.0
CEREALS	**497**	**327**	**4,632,503**	**12,434**	**122**	**568**	**449**	**72.8**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	142	65	1,065,760	156,311	7	213	72	90.0
Irish potatoes	0	0	.	.	.	0	-	0.0
ROOTS & TUBERS	**142**	**65**	**1,065,760**	**156,311**	**7**	**213**	**72**	**90.0**
Mung Bean	0	0	.	.	.	0	-	0.0
Beans	142	33	1,477,854	6,252	.	142	-	-
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	0	0	.	.	.	0	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES	**142**	**33**	**1,477,854**	**6,252**	**.**	**142**	**-**	**-**
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS	**0**	0	**.**	**.**	**.**	**0**	**-**	**0.0**
Okra	0	0	.	.	.	0	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	0	0	.	.	.	0	-	0.0
Onion	0	0	.	.	.	0	-	0.0
Cabbage	0	0	.	.	14	71	-	0.0
Tomatoes	213	22	1,136,811	12,079	22	355	43	50.0
Spinach	142	14	888,133	3,197	14	284	29	50.0
Carrot	0	0	.	.	.	0	-	0.0
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	0	0	.	.	.	0	-	0.0
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES	**355**	**36**	**2,024,944**	**15,276**	**50**	**711**	**86**	**41.7**
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	0	0	.	.	.	0	-	0.0
CASH CROPS	**0**	0	**.**	**.**	**.**	**0**	-	0.0
Malay	0	0	.	.	.	0	-	0.0
Total	**1,137**	**460**	**9,201,061**	**190,274**	**180**	**1,634**	**640**	**72**

5.68: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Local Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - LONGIDO

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with LocalSeeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,676	996	15,504,164	35,711	1,972	3,554	2,969	33.6
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	347	257	20,542,320	69,341	339	433	597	43.1
Barley	0	0	.	.	.	0	-	0.0
CEREALS		**1,254**	**36,046,485**		**2,312**		**3,565**	**35.2**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	29	6	173,353	289	.	29	-	-
Irish potatoes	87	158	51,023,541	258,296	70	318	228	69.2
ROOTS & TUBERS		**164**	51,196,893		**70**	**347**	**234**	**70.0**
Mung Bean	29	12	462,274	578	12	58	23	50.0
Beans	1,849	1,195	57,769,858	62,378	564	2,514	1,760	67.9
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	29	6	1,156	3,178	.	29	-	-
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**1,213**	**58,233,288**		**576**	**2,600**	**1,789**	**67.8**
Sunflower	0	0	.	.	18	29	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**18**		**-**	**0.0**
Okra	0	0	.	.	.	0	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	0	0	.	.	.	0	-	0.0
Onion	0	0	.	.	47	29	-	0.0
Cabbage	0	0	.	.	.	0	-	0.0
Tomatoes	58	35	780,088	26,003	85	289	120	29.3
Spinach	0	0	.	.	.	0	-	0.0
Carrot	0	0	.	.	.	0	-	0.0
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	0	0	.	.	.	0	-	0.0
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES		**35**	**780,088**		**132**		**167**	**21.1**
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	29	6	130,015	87	.	29	-	-
CASH CROPS	**29**	**6**	**130,015**	**87**	**.**	**29**	**-**	**-**
Malay	0	0	.	.	.	0	-	0.0
Total	**4,132**	**2,671**	**146,386,769**	**455,860**	**3,107**	**7,310**	**5,778**	**46.2**

5.69: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Local Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA RURAL

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with LocalSeeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	7,644	2,638	65,321,070	90,654	2,404	15,527	5,042	52.3
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	73	119	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	.	0	-	0.0
CEREALS		**2,638**	**65,321,070**		**2,477**		**5,115**	**51.6**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	0	0	.	.	24	119	-	0.0
Irish potatoes	1,075	544	38,865,380	104,509	12	1,194	556	97.8
ROOTS & TUBERS		**544**	**38,865,380**		**36**	**1,314**	**580**	**93.8**
Mung Bean	0	0	.	.	97	119	-	0.0
Beans	10,391	2,336	163,220,979	169,723	696	12,183	3,032	77.1
Cowpeas	239	53	418,036	597	.	239	-	-
Green gram	597	157	6,628,852	6,808	.	597	-	-
Chick peas	0	0	.	.	19	119	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**2,546**	**170,267,867**		**812**	**13,258**	**3,357**	**75.8**
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	358	85	3,845,929	4,180	12	478	97	87.5
OIL SEEDS & OIL NUTS		**85**	**3,845,929**		**12**		**97**	**87.5**
Okra	0	0	.	.	.	0	-	0.0
Radish	119	22	597,194	5,972	73	239	94	23.1
Turmeric	119	77	358,316	13,138	.	119	-	-
Bitteer Aubergine	119	0	358,316	59,719	.	119	-	-
Onion	0	0	.	.	24	119	-	0.0
Cabbage	239	31	8,420,434	71,663	163	836	195	16.1
Tomatoes	0	.	.	.	75	239	-	0.0
Spinach	0	.	.	.	16	119	-	0.0
Carrot	0	.	.	.	60	478	-	0.0
Chillies	0	.	.	.	.	0	-	0.0
Amaranths	0	.	.	.	18	239	-	0.0
Cucumber	0	.	.	.	.	0	-	0.0
Egg Plant	0	.	.	.	.	0	-	0.0
FRUITS & VEGETABLES		**179**	**9,734,261**		**430**		**609**	**29.4**
Cotton	119	145	17,199,185	14,333	.	119	-	-
Tobacco	0	0	.	.	.	0	-	-
CASH CROPS	**119**	**145**	**17,199,185**	**14,333**	**.**	**119**	-	-
Malay	0	0	.	.	.	0	-	-
Total	**21,021**	**6,136**	**305,233,691**	**541,297**	**3,766**	**33,323**	**9,903**	**62.0**

5.70: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Local Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MERU

Crop	Local Seeds use							% of Planted area using Local seeds
	Number of Households using Local Seeds	Planted Area Applied with LocalSeeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	4,514	2,444	25,307,184	62,103	2,263	8,907	4,707	51.9
Paddy	0	0	.	.	62	244	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	.	0	-	0.0
CEREALS		**2,444**	**25,307,184**		**2,325**		4,769	51.2
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	0	0	.	.	.	0	-	0.0
Irish potatoes	122	49	6,100,469	12,201	.	122	-	-
ROOTS & TUBERS		**49**	**6,100,469**		.	**122**	-	-
Mung Bean	0	0	.	.	.	0	-	0.0
Beans	3,904	1,683	110,016,584	469,370	562	5,246	2,245	75.0
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	0	0	.	.	49	122	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**1,683**	**110,016,584**		**612**	**5,368**	2,294	73.3
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**		-	0.0
Okra	122	49	1,464,112	488	12	244	62	80.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	122	0	610,047	24,402	62	488	62	0.0
Onion	0	0	.	.	.	0	-	0.0
Cabbage	122	1	219,617	2,196	30	610	32	3.9
Tomatoes	244	31	2,867,220	21,962	627	2,196	658	4.7
Spinach	122	1	61,005	3,050	10	366	11	10.9
Carrot	0	0	.	.	49	244	-	0.0
Chillies	122	1	109,808	1,464	34	488	35	1.8
Amaranths	0	0	.	.	9	366	-	0.0
Cucumber	0	0	.	.	74	244	-	0.0
Egg Plant	0	0	.	.	49	122	-	0.0
FRUITS & VEGETABLES		**108**	**5,331,810**		**959**		1,067	10.2
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	122	74	4,392,337	9,761	.	122	-	-
CASH CROPS					.			1.9
Total	**0**	**74**	**.**	**.**	**3,895**	**0**	3,969	1.9

5.71: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Fungicide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MONDULI

Crop	Fungicide use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	572	275	17,860,112	2,572	2,581	3,143	2,856	9.6
Paddy	0	.	.	429	246	429	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	0	.	.	0	.	0	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**275**	**17,860,112**		**2,827**	**3,572**	3,102	8.9
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	0	.	0	-	0.0
ROOTS & TUBERS		**.**	**.**		**.**	**0**	-	0.0
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	143	58	6,429,640	1,786	1,757	1,929	1,815	3.2
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	0	.	0	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	**143**	**58**	**6,429,640**	**1,786**	**1,757**	**1,929**	1,815	3.2
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**0**	**.**	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**.**	**0**	-	0.0
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	0	.	.	0	.	0	-	0.0
Cabbage	0	.	.	71	7	71	-	0.0
Tomatoes	143	29	3,786,344	0	.	143	-	0.0
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	.	.	71	7	71	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**29**	**3,786,344**		**14**	**286**	43	66.7
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS	**0**	**.**	**.**	**0**	**.**	**0**	-	0.0
Malay	0	.	.	0	.	0	-	0.0
Total	**857**	**362**	**28,076,096**	**4,929**	**4,599**	**5,787**	**4,960**	**7.3**

5.72: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Fungicide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA

Crop	Fungicide use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	128	140	4,722,232	938	580	1,023	720	19.5
Paddy	0	.	.	0	.	-	-	0.0
Sorghum	0	.	.	0	.	-	-	0.0
Finger Millet	0	.	.	0	.	-	-	0.0
Wheat	0	.	.	0	.	-	-	0.0
Barley	0	.	.	0	.	-	-	0.0
CEREALS		**140**	**4,722,232**		**580**		720	19.5
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	0	.	0	-	0.0
ROOTS & TUBERS		**.**	**.**		**.**	**0**	-	0.0
Mung Bean	0	.	.	43	9	43	-	0.0
Beans	43	35	852,388	852	539	895	574	6.0
Cowpeas	0	.	.	128	30	128	-	0.0
Green gram	0	.	.	128	30	128	-	0.0
Chick peas	0	.	.	128	47	128	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES		**35**	**852,388**		**656**	**1,321**	690	5.0
Sunflower	0	.	.	43	9	43	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	0	.	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**9**		-	0.0
Okra	0	.	.	43	9	43	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	43	9	426,194	85	13	128	22	40.0
Onion	0	.	.	85	15	85	-	0.0
Cabbage	43	4	426,194	213	33	256	38	11.5
Tomatoes	43	3	340,955	43	9	85	12	28.6
Spinach	85	35	767,150	170	23	256	57	60.4
Carrot	0	.	.	43	4	43	-	0.0
Chillies	0	.	.	128	23	128	-	0.0
Amaranths	0	.	.	170	20	170	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	43	9	43	-	0.0
FRUITS & VEGETABLES		**51**	**1,960,493**		**157**		208	24.5
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS		**.**	**.**		**.**		-	0.0
Malay	**0**	**.**	**.**	**0**	**.**	**0**	-	0.0
Total	**384**	**226**	**7,535,114**	**3,282**	**1,402**	**3,623**	**1,627**	**13.9**

5.73: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Fungicide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - KARATU

Crop	Fungicide use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	1,337	945	1,337	945	0.0
Paddy	0	0	.	0	.	0	-	-
Sorghum	0	0	.	0	.	0	-	-
Finger Millet	0	0	.	0	.	0	-	-
Wheat	0	0	.	0	.	0	-	-
Barley	0	0	.	89	36	89	36	0.0
CEREALS		0	**.**		**981**		981	0.0
Cassava	0	0	.	0	.	0	-	-
Sweet Potato	0	0	.	446	216	446	216	0.0
Irish potatoes	0	0	.	0	.	0	-	-
ROOTS & TUBERS		0	**.**		**216**	**446**	216	0.0
Mung Bean	0	0	.	0	.	0	-	-
Beans	0	0	.	1,604	1,186	1,604	1,186	0.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES		0	**.**		**1,186**	**1,604**	1,186	0.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	0	0	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**		-	0.0
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	178	72	1,425,890	1,426	379	1,604	451	16.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**72**	**1,425,890**		**379**		**451**	**16.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		0	**.**		**.**		-	0.0
Malay	**0**	0	**.**	**0**	**.**	**0**	-	0.0
Total	**178**	**72**	**1,425,890**	**4,901**	**2,762**	**5,080**	**2,834**	**2.5**

5.74: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Fungicide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - NGORONGORO

Crop	Fungicide use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	568	449	568	449	0.0
Paddy	0	0	.	0	0	0	-	0.0
Sorghum	0	0	.	0	0	0	-	0.0
Finger Millet	0	0	.	0	0	0	-	0.0
Wheat	0	0	.	0	0	0	-	0.0
Barley	0	0	.	0	0	0	-	0.0
CEREALS		**0**	**.**		**449**		**449**	**0.0**
Cassava	0	0	.	0	0	0	-	0.0
Sweet Potato	0	0	.	213	72	213	72	0.0
Irish potatoes	0	0	.	0	0	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**72**	**213**	**72**	**0.0**
Mung Bean	0	0	.	0	0	0	-	0.0
Beans	0	0	.	142	33	142	33	0.0
Cowpeas	0	0	.	0	0	0	-	0.0
Green gram	0	0	.	0	0	0	-	0.0
Chick peas	0	0	.	0	0	0	-	0.0
Field Peas	0	0	.	0	0	0	-	0.0
PULSES		0	**.**		**33**	**142**	33	0.0
Sunflower	0	0	.	0	0	0	-	0.0
Simsim	0	0	.	0	0	0	-	0.0
Groundnut	0	0	.	0	0	0	-	0.0
Soya Beans	0	0	.	0	0	0	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		0		-	0.0
Okra	0	0	.	0	0	0	-	0.0
Radish	0	0	.	0	0	0	-	0.0
Turmeric	0	0	.	0	0	0	-	0.0
Bitteer Aubergine	0	0	.	0	0	0	-	0.0
Onion	0	0	.	0	0	0	-	0.0
Cabbage	0	0	.	71	14	71	14	0.0
Tomatoes	0	0	.	355	43	355	43	0.0
Spinach	0	0	.	284	29	284	29	0.0
Carrot	0	0	.	0	0	0	-	0.0
Chillies	0	0	.	0	0	0	-	0.0
Amaranths	0	0	.	0	0	0	-	0.0
Cucumber	0	0	.	0	0	0	-	0.0
Egg Plant	0	0	.	0	0	0	-	0.0
FRUITS & VEGETABLES		**0**	**.**		**86**		**86**	**0.0**
Cotton	0	0	.	0	0	0	-	0.0
Tobacco	0	0	.	0	0	0	-	0.0
CASH CROPS		0	**.**		0		-	0.0
Malay	0	0	.	0	0	0	-	0.0
Total	**0**	**0**	**.**	**1634**	**640**	**1634**	**640**	**0.0**

5.75: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Fungicide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - LONGIDO

Crop	Fungicide use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	260	170	4,550,514	3,294	2,799	3,554	2,969	5.7
Paddy	0	.	.	0	.	0	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	29	281	10,401,175	404	316	433	597	47.1
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**450**	**14,951,689**		**3,115**		3,565	12.6
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	29	6	29	-	0.0
Irish potatoes	318	228	8,673,424	0	.	318	-	0.0
ROOTS & TUBERS		**228**	8,673,424		**6**	**347**	234	97.5
Mung Bean	29	12	130,015	29	12	58	23	50.0
Beans	376	412	7,020,793	2,196	1,348	2,514	1,760	23.4
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	29	6	29	-	0.0
Field Peas	0	.	.	0	.	0	-	-
PULSES		**424**	**7,150,808**		**1,365**	**2,600**	1,789	23.7
Sunflower	0	.	.	29	18	29	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	0	.	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**18**		-	0.0
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	29	47	1,155,686	0	.	29	-	0.0
Cabbage	0	.	.	0	.	0	-	0.0
Tomatoes	231	85	8,027,107	58	35	289	120	70.7
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	.	.	0	.	0	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**132**	**9,182,793**		**35**		167	78.9
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	29	6	29	-	0.0
CASH CROPS	**0**	**.**	**.**	**29**	**6**	**29**	-	0.0
Malay	0	.	.	0	.	0	-	0.0
Total	**1,271**	**1,234**	**39,958,713**	**6,096**	**4,544**	**7,310**	**5,778**	**21.4**

5.76: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Fungicide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA RURAL

Crop	Fungicide use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	15,527	5,042	15,527	5,042	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	119	73	119	73	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		0	**.**		**5,115**		5,115	0.0
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	119	24	119	24	0.0
Irish potatoes	836	496	11,886,309	358	60	1,194	556	89.1
ROOTS & TUBERS		**496**	**11,886,309**		**85**	**1,314**	580	85.4
Mung Bean	0	0	.	119	97	119	97	0.0
Beans	0	0	.	12,183	3,032	12,183	3,032	0.0
Cowpeas	0	0	.	239	53	239	53	0.0
Green gram	0	0	.	597	157	597	157	0.0
Chick peas	0	0	.	119	19	119	19	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES		0	**.**		**3,357**	**13,258**	3,357	0.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	0	0	.	478	97	478	97	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**97**		**97**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	239	94	239	94	0.0
Turmeric	0	0	.	119	77	119	77	0.0
Bitteer Aubergine	119	48	477,755	0	.	119	-	0.0
Onion	119	24	537,475	0	.	119	-	0.0
Cabbage	239	63	3,224,847	597	132	836	195	32.3
Tomatoes	119	27	1,194,388	119	48	239	75	35.5
Spinach	0	0	.	119	16	119	16	0.0
Carrot	358	36	1,731,862	239	24	478	60	60.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	239	18	239	18	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**198**	**7,166,327**		**411**		609	32.6
Cotton	0	0	.	119	145	119	145	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	0	**.**	**119**	**145**	**119**	145	0.0
Yam	**0**	0	**.**	**0**	**.**	**0**	-	0.0
Total	**1791.5817**	**694**	**19052636**	**31651**	**9209**	**33323**	9,903	7.0

5.77: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Fungicide use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MERU

Crop	Fungicide use							% of Planted area using Fungicide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	122	25	1,220,094	8,785	4,683	8,907	4,707	0.5
Paddy	0	.	.	244	62	244	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	0	.	.	0	.	0	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**25**	**1,220,094**		**4,745**		4,769	0.5
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	122	49	122	-	0.0
ROOTS & TUBERS		.	.		49	**122**	-	0.0
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	244	99	3,782,291	5,002	2,146	5,246	2,245	4.4
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	122	49	122	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES		**99**	**3,782,291**		**2,196**	**5,368**	-	0.0
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	0	.	.	0	.	0	-	0.0
OIL SEEDS & OIL NUTS		.	.		.		-	0.0
Okra	0	.	.	244	62	244	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	244	49	4,514,347	244	37	488	86	57.1
Onion	0	.	.	0	.	0	-	0.0
Cabbage	610	32	1,464,112	0	.	610	-	0.0
Tomatoes	1,830	510	48,449,922	366	148	2,196	658	77.5
Spinach	366	11	780,860	0	.	366	-	0.0
Carrot	122	25	1,220,094	122	25	244	49	50.0
Chillies	366	10	732,056	122	25	488	35	29.6
Amaranths	366	9	671,052	0	.	366	-	0.0
Cucumber	244	74	4,392,337	0	.	244	-	0.0
Egg Plant	0	.	.	122	49	122	-	0.0
FRUITS & VEGETABLES		**721**	**62,224,780**		**346**		1,067	67.6
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	122	74	122	-	0.0
CASH CROPS		.	.		**74**		-	0.0
Malay	0	.	.	0	.	0	-	0.0
Total	**4,514**	**845**	**67,227,164**	**15,617**	**7,409**	**20,132**	8,254	10

5.78: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Improved Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MONDULI

Crop	Improved Seeds use							% of Planted area using Improved Seeds
	Number of Households using Improved Seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Without Improved Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,500	1,311	31,851,724	36,649	1,546	3,143	2,856	46
Paddy	143	174	5,358,034	11,430	72	429	246	71
Sorghum	0	0	.	.	.	0	0	0
Finger Millet	0	0	.	.	.	0	0	0
Wheat	0	0	.	.	.	0	0	0
Barley	0	0	.	.	.	0	0	0
CEREALS	1,643	1,484	37,209,757	48,079	1,618	3,572	**3,102**	**48**
Cassava	**0**	**0**	**.**	**.**	**.**	**0**	0	0
Sweet Potato	0	**0**	.	.	.	0	0	0
Irish potatoes	0	**0**	.	.	.	0	0	0
ROOTS & TUBERS	0	**0**	.	.	.	0	-	-
Mung Bean	0	**0**	.	.	.	0	0	0
Beans	429	275	1,560,974	1,357	1,540	1,929	1,815	15
Cowpeas	**0**	**0**	**.**	**.**	**.**	**0**	0	0
Green gram	0	**0**	.	.	.	0	0	0
Chick peas	0	**0**	.	.	.	0	0	0
Field Peas	0	**0**	.	.	.	0	0	0
PULSES	429	275	1,560,974	1,357	1,540	1,929	**1,815**	**15**
Sunflower	0	0	.	.	.	0	0	0
Simsim	0	0	.	.	.	0	0	0
Groundnut	0	0	.	.	.	0	0	0
Soya Beans	**0**	0	**.**	**.**	**.**	**0**	0	0
OIL SEEDS & OIL NUTS	0	.	.	.	.	0	-	-
Okra	0	0	.	.	.	0	0	0
Radish	0	0	.	.	.	0	0	0
Turmeric	0	0	.	.	.	0	0	0
Bitteer Aubergine	0	0	.	.	.	0	0	0
Onion	**0**	0	**.**	**.**	**.**	**0**	0	0
Cabbage	71	7	214,321	7,144	.	71	-	-
Tomatoes	143	29	1,643,130	17,860	.	143	-	-
Spinach	0	0	.	.	.	0	0	0
Carrot	71	7	107,161	3,572	.	71	-	-
Chillies	0	0	.	.	.	0	0	0
Amaranths	0	0	.	.	.	0	0	0
Cucumber	0	0	.	.	.	0	0	0
Egg Plant	0	0	.	.	.	0	0	0
FRUITS & VEGETABLES	286	43	1,964,612	28,576	.	286	-	-
Cotton	0	0	.	.	.	0	0	0
Tobacco	0	0	.	.	.	0	0	0
CASH CROPS	0	0	.	.	.	0	**0**	**0**
Malay	0	0	.	.	.	0	0	0
Total	2,358	1,802	40,735,343	78,013	3,158	5,787	**4,960**	**36**

5.79: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Improved Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA

Crop	Improved Seeds use							% of Planted area using Improved Seeds
	Number of Households using Improved Seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Without Improved Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	767	531	24,591,407	11,763	190	1,023	720	73.7
Paddy	0	0	.	.	.	-	-	0.0
Sorghum	0	0	.	.	.	-	-	0.0
Finger Millet	0	0	.	.	.	-	-	0.0
Wheat	0	0	.	.	.	-	-	0.0
Barley	0	0	.	.	.	-	-	0.0
CEREALS		**531**	**24,591,407**		**190**		720	73.7
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	0	0	.	.	.	0	-	0.0
Irish potatoes	0	0	.	.	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**.**	**0**	-	0.0
Mung Bean	43	9	21,310	341	.	43	-	-
Beans	170	145	10,974,502	4,347	429	895	574	25.2
Cowpeas	0	0	.	.	30	128	-	0.0
Green gram	43	4	213,097	170	26	128	30	14.3
Chick peas	0	0	.	.	47	128	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**157**	**11,208,908**		**533**	**1,321**	690	22.8
Sunflower	0	0	.	.	9	43	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**9**		-	0.0
Okra	43	9	127,858	8,524	.	43	-	-
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	128	0	362,265	50,291	.	128	-	-
Onion	85	15	3,963,606	1,279	.	85	-	-
Cabbage	213	24	345,217	33,030	14	256	38	62.7
Tomatoes	85	12	383,575	6,393	.	85	-	-
Spinach	256	50	1,653,634	20,884	8	256	57	86.8
Carrot	43	4	42,619	5,541	.	43	-	-
Chillies	128	23	895,008	8,652	.	128	-	-
Amaranths	170	20	468,814	34,138	.	170	-	-
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	43	9	119,334	4,262	.	43	-	-
FRUITS & VEGETABLES		**186**	**8,361,931**		**22**		208	89.6
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	0	0	.	.	.	0	-	0.0
CASH CROPS		0	**.**		**.**		-	0.0
Malay	**0**	0	**.**	**.**	**.**	**0**	-	0.0
Total	**2,216**	**874**	**44,162,247**	**189,614**	**753**	**3,623**	**1,627**	**53.7**

5.80: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Improved Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - KARATU

Crop	Improved Seeds use							% of Planted area using Improved Seeds
	Number of Households using Improved Seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Without Improved Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	624	370	18,465,270	6,862	575	1,337	945	39.2
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	89	36	3,297,370	4,456	.	89	-	-
CEREALS		**406**	**21,762,640**		**575**		**981**	**41.4**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	0	0	.	.	216	446	-	0.0
Irish potatoes	0	0	.	.	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**216**	**446**	**-**	**0.0**
Mung Bean	0	0	.	.	.	0	-	0.0
Beans	0	0	.	.	1,186	1,604	-	0.0
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	0	0	.	.	.	0	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		0	**.**		**1,186**	**1,604**	**-**	**0.0**
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**		**-**	**0.0**
Okra	0	0	.	.	.	0	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	0	0	.	.	.	0	-	0.0
Onion	980	280	9,303,929	9,447	171	1,604	451	62.0
Cabbage	0	0	.	.	.	0	-	0.0
Tomatoes	0	0	.	.	.	0	-	0.0
Spinach	0	0	.	.	.	0	-	0.0
Carrot	0	0	.	.	.	0	-	0.0
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	0	0	.	.	.	0	-	0.0
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES		**280**	**9,303,929**		**171**		**451**	**62.0**
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	0	0	.	.	.	0	-	0.0
CASH CROPS		0	**.**		**.**		**-**	**0.0**
Malay	**0**	0	**.**	**.**	**.**	**0**	-	0.0
Total	**1,693**	**686**	**31,066,569**	**20,765**	**2,149**	**5,080**	**2,834**	**24.2**

5.81: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Improved Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - NGORONGORO

Crop	Improved Seeds use							% of Planted area using Improved Seeds
	Number of Households using Improved Seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Without Improved Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	71	122	14,210	2,132	327	568	449	27.2
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	.	0	-	0.0
CEREALS	**71**	**122**	**14,210**	**2,132**	**327**	**568**	**449**	**27.2**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	71	7	142,101	35,525	65	213	72	10.0
Irish potatoes	0	0	.	.	.	0	-	0.0
ROOTS & TUBERS	**71**	**7**	**142,101**	**35,525**	**65**	**213**	**72**	**10.0**
Mung Bean	0	0	.	.	.	0	-	0.0
Beans	0	0	.	.	33	142	-	0.0
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	0	0	.	.	.	0	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES	**0**	0	**.**	**.**	**33**	**142**	**-**	**0.0**
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS	**0**	0	**.**	**.**	**.**	**0**	**-**	**0.0**
Okra	0	0	.	.	.	0	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	0	0	.	.	.	0	-	0.0
Onion	0	0	.	.	.	0	-	0.0
Cabbage	71	14	177,627	1,776	.	71	-	-
Tomatoes	142	22	426,304	3,553	22	355	43	50.0
Spinach	142	14	298,413	8,881	14	284	29	50.0
Carrot	0	0	.	.	.	0	-	0.0
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	0	0	.	.	.	0	-	0.0
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES	**355**	**50**	**902,343**	**14,210**	**36**	**711**	**86**	**58.3**
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	0	0	.	.	.	0	-	0.0
CASH CROPS	**0**	0	**.**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	.	.	0	-	0.0
Total	**497**	**180**	**1,058,655**	**51,867**	**460**	**1,634**	**640**	**28**

5.82: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Improved Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - LONGIDO

Crop	Improved Seedsuse							% of Planted area using Improved Seeds
	Number of Households using Improved Seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Without Improved Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,878	1,901	80,030,077	42,789	1,068	3,554	2,969	64.0
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	87	339	6,934,116	48,539	257	433	597	56.9
Barley	0	0	.	.	.	0	-	0.0
CEREALS		**2,240**	**86,964,193**		**1,325**		**3,565**	**62.8**
Cassava	0	.	.	.	.	0	-	0.0
Sweet Potato	0	.	.	.	6	29	-	0.0
Irish potatoes	231	70	29,758,917	341,505	158	318	228	30.8
ROOTS & TUBERS		**70**	29,758,917		**164**	**347**	**234**	**30.0**
Mung Bean	29	12	577,843	1,156	12	58	23	50.0
Beans	665	485	25,537,773	26,119	1,274	2,514	1,760	27.6
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	0	0	.	.	6	29	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**497**	**26,115,616**		**1,292**	**2,600**	**1,789**	**27.8**
Sunflower	29	18	144,461	29	.	29	-	-
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	0	0	.	.	.	0	-	0.0
OIL SEEDS & OIL NUTS		**18**	**144,461**		**.**		-	-
Okra	0	0	.	.	.	0	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	0	0	.	.	.	0	-	0.0
Onion	29	47	7,396,391	55,473	.	29	-	-
Cabbage	0	0	.	.	.	0	-	0.0
Tomatoes	231	85	3,790,650	49,983	35	289	120	70.7
Spinach	0	0	.	.	.	0	-	0.0
Carrot	0	0	.	.	.	0	-	0.0
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	0	0	.	.	.	0	-	0.0
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES		**132**	**11,187,041**		**35**		**167**	**78.9**
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	0	0	.	.	6	29	-	0.0
CASH CROPS	**0**	**0**	**.**	**.**	**6**	**29**	**-**	**0.0**
Malay	0	0	.	.	.	0	-	0.0
Total	**3,178**	**2,956**	**154,170,228**		**2,822**		**5,778**	**51.2**

5.83: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Improved Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - ARUSHA RURAL

Crop	Improved Seeds use							% of Planted area using Improved Seeds
	Number of Households using Improved Seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Without Improved Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	7,883	2,124	102,651,661	64,855	2,918	15,527	5,042	42.1
Paddy	0	0	.	.	.	0	-	0.0
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	119	73	716,633	11,944	.	119	-	-
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	.	0	-	0.0
CEREALS		**2,196**	**103,368,294**		**2,918**		5,115	42.9
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	119	24	3,583,163	1,194	.	119	-	-
Irish potatoes	119	12	7,166,327	11,944	544	1,194	556	2.2
ROOTS & TUBERS		**36**	**10,749,490**		**544**	**1,314**	580	6.3
Mung Bean	119	97	6,688,572	239	.	119	-	-
Beans	1,792	295	23,172,318	43,715	2,737	12,183	3,032	9.7
Cowpeas	0	0	.	.	53	239	-	0.0
Green gram	0	0	.	.	157	597	-	0.0
Chick peas	119	19	716,633	358	.	119	-	-
Field Peas	0	0	.	.	.	0	-	0.0
PULSES		**411**	**30,577,523**		**2,946**	**13,258**	3,357	12.2
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
oya Beans	119	12	167,214	239	85	478	97	12.5
OIL SEEDS & OIL NUTS		**12**	**167,214**		**85**		97	12.5
Okra	0	0	.	.	.	0	-	0.0
Radish	119	54	716,633	1,194	40	239	94	57.7
Turmeric	0	0	.	.	77	119	-	0.0
Bitteer Aubergine	0	0	.	.	48	119	-	0.0
Onion	119	24	4,598,393	59,719	.	119	-	-
Cabbage	597	163	18,584,675	164,228	31	836	195	83.9
Tomatoes	239	51	3,702,602	62,705	24	239	75	67.7
Spinach	119	16	955,510	11,944	.	119	-	-
Carrot	478	60	3,593,913	149,298	.	478	-	-
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	239	18	298,597	19,110	.	239	-	-
Cucumber	0	0	.	.	.	0	-	0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES		**388**	**32,450,323**		**221**		609	63.7
Cotton	0	0	.	.	145	119	-	0.0
Tobacco	0	0	.	.	.	0	-	0.0
CASH CROPS	**0**	0	**.**	**.**	**145**	**119**	-	0.0
Malay	**0**	0	**.**	**.**	**.**	**0**	-	0.0
Total	**12,302**	**3,044**	**177,312,844**	**602,688**	**6,859**	**33,323**	9,903	31

5.84: :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Households by Improved Seeds use by Crop during 2007/08 agriculture year - SHORT RAINY SEASON - MERU

Crop	Improved Seeds use							% of Planted area using Improved Seeds
	Number of Households using Improved Seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved Seeds	Planted Area Without Improved Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	4,392	2,085	139,185,852	58,564	2,623	8,907	4,707	44.3
Paddy	244	62	976,075	3,416	.	244	-	-
Sorghum	0	0	.	.	.	0	-	0.0
Finger Millet	0	0	.	.	.	0	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	.	0	-	0.0
CEREALS		**2,146**	**140,161,927**		**2,623**	**9,151**	**4,769**	**45.0**
Cassava	0	0	.	.	.	0	-	0.0
Sweet Potato	0	0	.	.	.	0	-	0.0
Irish potatoes	0	0	.	.	49	122	-	0.0
ROOTS & TUBERS		0	**.**		**49**	**122**	**-**	**0.0**
Mung Bean	0	0	.	.	.	0	-	0.0
Beans	1,342	562	30,770,764	42,459	1,683	5,246	2,245	25.0
Cowpeas	0	0	.	.	.	0	-	0.0
Green gram	0	0	.	.	.	0	-	0.0
Chick peas	122	49	2,440,187	2,440	.	122	-	-
Field Peas	0	0	.	.	.	0	-	0.0
PULSES	**1,464**	**612**	**33,210,951**	**44,899**	**1,683**	**5,368**	**2,294**	**26.7**
Sunflower	0	0	.	.	.	0	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	.	0	-	0.0
Soya Beans	**0**	0	**.**	**.**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**	**0**	-	-
Okra	122	12	61,005	6,100	49	244	62	20.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	.	0	-	0.0
Bitteer Aubergine	366	0	1,159,089	24,402	25	488	25	0.0
Onion	0	0	.	.	.	0	-	0.0
Cabbage	488	27	829,664	29,282	5	610	32	84.4
Tomatoes	1,952	573	31,033,084	286,722	85	2,196	658	87.1
Spinach	244	6	280,622	6,100	5	366	11	56.5
Carrot	244	49	2,440,187	24,402	.	244	-	-
Chillies	366	33	2,086,360	29,892	2	488	35	93.0
Amaranths	366	9	634,449	3,782	.	366	-	-
Cucumber	244	74	5,124,394	48,804	.	244	-	-
Egg Plant	122	49	1,464,112	18,301	.	122	-	-
FRUITS & VEGETABLES		**895**	**45,112,966**		**172**	**5,368**	**1,067**	**83.9**
Cotton	0	0	.	.	.	0	-	0.0
Tobacco	0	0	.	.	74	122	-	0.0
CASH CROPS	**0**	0	**.**	**.**	**74**	**122**	-	0.0
Total	**10,615**	**3,653**	**218,485,844**	**584,669**	**4,601**	**20,132**	**8,254**	**44.3**

5.85 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Monduli

Crop	Herbicide use							% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	643	275	17,874,400	2,786	2,581	3,143	2,856	9.6
Paddy	0	0	.	429	246	429	246	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**275**	**17,874,400**		**2,827**	**3,572**	**3,102**	**8.9**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**.**	**0**	-	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	143	29	4,286,427	1,929	1,786	1,929	1,815	1.6
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**143**	**29**	**4,286,427**	**1,929**	**1,786**	**1,929**	**1,815**	**1.6**
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**	**0**	**-**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	71	7	71	7	0.0
Tomatoes	71	14	357,202	71	14	143	29	50.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	71	7	71	7	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**14**	**357,202**		**29**	**286**	**43**	**33.3**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	0	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**857**	**318**	**22,518,029**	**5,358**	**4,642**	**5,787**	**4,960**	**6.4**

5.86 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha

Crop	Herbicide use							% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	43	43	1,278,583	980	677	1,023	720	6.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**43**	**1,278,583**		**677**	**1,023**	**720**	**6.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	-	-
Mung Bean	0	0	.	43	9	43	9	0.0
Beans	43	43	1,278,583	852	531	895	574	7.5
Cowpeas	0	0	.	128	30	128	30	0.0
Green gram	0	0	.	128	30	128	30	0.0
Chick peas	0	0	.	128	47	128	47	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	43	43	1,278,583	1,279	647	1,321	690	6.3
Sunflower	0	0	.	43	9	43	9	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**9**	**43**	**9**	**0.0**
Okra	0	0	.	43	9	43	9	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	128	22	128	22	0.0
Onion	0	0	.	85	15	85	15	0.0
Cabbage	0	0	.	256	38	256	38	0.0
Tomatoes	43	3	1,065,486	43	9	85	12	28.6
Spinach	0	0	.	256	57	256	57	0.0
Carrot	0	0	.	43	4	43	4	0.0
Chillies	0	0	.	128	23	128	23	0.0
Amaranths	0	0	.	170	20	170	20	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	43	9	43	9	0.0
FRUITS & VEGETABLES		**3**	**1,065,486**		**204**	**1,236**	**208**	**1.7**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	-
Malay	0	0	.	0	.	0	-	0.0
Total	**128**	**90**	**3,622,651**	**3,495**	**1,537**	**3,623**	**1,627**	**5.5**

5.87 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Karatu

Crop	Herbicide use							% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	1,337	945	1,337	945	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	89	36	89	36	0.0
CEREALS		0	**.**		**981**	**1,426**	**981**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	446	216	446	216	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**216**		**216**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	1,604	1,186	1,604	1,186	0.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	1,604	1,186	1,604	1,186	0.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**		-	-
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	178	72	6,683,857	1,426	379	1,604	451	16.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**72**	**6,683,857**		**379**		**451**	**16.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	0	**.**	**0**	**.**	**0**	**-**	-
Malay	0	0	.	0	.	0	-	0.0
Total	**178**	**72**	**6,683,857**	**4,901**	**2,762**	**5,080**	**2,834**	**2.5**

5.88 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Ngorongoro

Crop	Herbicide use							% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	568	449	568	449	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		0	**.**		**449**	**568**	**449**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	213	72	213	72	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**72**	**213**	**72**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	142	33	142	33	0.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	142	33	142	33	0.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**	**0**	-	-
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	71	14	71	14	0.0
Tomatoes	71	7	497,355	284	36	355	43	16.7
Spinach	71	7	497,355	213	22	284	29	25.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**14**	**994,709**		**72**	**711**	**86**	**16.7**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		0	**.**		**.**	**0**	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	**142**	**14**	**994,709**	**1,492**	**626**	**1,634**	**640**	**2.2**

5.89 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Longido

Crop	Herbicide use							% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	982	655	36,597,805	2,571	2,314	3,554	2,969	22.1
Paddy	0	.	.	0	.	0	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	318	246	7,511,960	116	351	433	597	41.2
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**901**	**44,109,764**		**2,665**	**3,987**	**3,565**	**25.3**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	29	6	29	-	0.0
Irish potatoes	289	222	5,394,165	29	6	318	228	97.4
ROOTS & TUBERS		**222**	**5,394,165**		**12**	**347**	**234**	**95.0**
Mung Bean	29	12	130,015	29	12	58	23	50.0
Beans	636	749	17,104,154	1,878	1,011	2,514	1,760	42.5
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	29	6	0	0	.	29	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	693	766	17,234,169	1,907	1,023	2,600	1,789	42.8
Sunflower	0	.	.	29	18	29	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**0**	**.**	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**18**	**29**	**-**	**0.0**
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	0	.	.	29	47	29	-	0.0
Cabbage	0	.	.	0	.	0	-	0.0
Tomatoes	144	50	3,426,609	144	70	289	120	41.5
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	.	.	0	.	0	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**50**	**3,426,609**		**117**	**318**	**167**	**29.8**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	29	6	29	-	0.0
CASH CROPS	**0**	**.**	**.**	**29**	**6**	**29**	-	0.0
Malay	0	.	.	0	.	0	-	0.0
Total	**2,427**	**1,939**	**70,164,707**	**4,883**	**3,840**	**7,310**	**5,778**	**33.6**

5.90 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha Rural

Crop	Herbicide use							% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	15,527	5,042	15,527	5,042	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	119	73	119	73	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		0	**.**		**5,115**	**15,646**	5,115	0.0
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	119	24	119	24	0.0
Irish potatoes	0	0	.	1,194	556	1,194	556	0.0
ROOTS & TUBERS		0	**.**		**580**	**1,314**	580	0.0
Mung Bean	0	0	.	119	97	119	97	0.0
Beans	0	0	.	12,183	3,032	12,183	3,032	0.0
Cowpeas	0	0	.	239	53	239	53	0.0
Green gram	0	0	.	597	157	597	157	0.0
Chick peas	0	0	.	119	19	119	19	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	13,258	3,357	13,258	3,357	0.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	**.**	**478**	**97**	**478**	97	0.0
OIL SEEDS & OIL NUTS		0	**.**		**97**	**478**	97	0.0
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	239	94	239	94	0.0
Turmeric	0	0	.	119	77	119	77	0.0
Bitteer Aubergine	0	0	.	119	48	119	48	0.0
Onion	0	0	.	119	24	119	24	0.0
Cabbage	119	48	1,791,582	717	147	836	195	24.8
Tomatoes	0	0	.	239	75	239	75	0.0
Spinach	0	0	.	119	16	119	16	0.0
Carrot	239	24	1,194,388	358	36	478	60	40.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	239	18	239	18	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**73**	**2,985,970**		**536**	**2,508**	609	11.9
Cotton	0	0	.	119	145	119	145	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		**0**	**.**		**145**	**119**	**145**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**358**	**73**	**2,985,970**	**33,085**	**9,830**	**33,323**	**9,903**	**0.7**

5.91 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Meru

Crop	Herbicide use							% of Planted area using Herbicide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	732	519	12,310,746	8,175	4,189	8,907	4,707	11.0
Paddy	0	.	.	244	62	244	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	0	.	.	0	.	0	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**519**	**12,310,746**		**4,251**	**9,151**	**4,769**	**10.9**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	122	49	122	-	0.0
ROOTS & TUBERS		**.**	**.**		**49**	**122**	**-**	**0.0**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	244	247	9,028,694	5,002	1,998	5,246	2,245	11.0
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	122	49	122	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	244	247	9,028,694	5,124	2,047	5,368	2,294	10.8
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**0**	.	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**.**	**0**	**-**	**0.0**
Okra	0	.	.	244	62	244	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	488	86	488	-	0.0
Onion	0	.	.	0	.	0	-	0.0
Cabbage	366	22	658,851	244	10	610	32	68.8
Tomatoes	854	137	7,552,380	1,342	521	2,196	658	20.9
Spinach	122	4	390,430	244	7	366	11	34.8
Carrot	244	49	2,440,187	0	.	244	-	0.0
Chillies	244	8	634,449	244	27	488	35	22.5
Amaranths	244	4	488,037	122	5	366	9	47.4
Cucumber	122	25	1,952,150	122	49	244	74	33.3
Egg Plant	0	.	.	122	49	122	-	0.0
FRUITS & VEGETABLES		**249**	**14,116,484**		**818**	**5,368**	**1,067**	**23.4**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	122	74	122	-	0.0
CASH CROPS	**0**	**.**	**.**	**122**	**74**	**122**	**-**	**0.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**3,172**	**1,015**	**35,455,924**	**16,959**	**7,239**	**20,132**	**8,254**	**12.3**

5.92 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Monduli

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,357	763	1,786	2,093	3,143	2,856	26.7
Paddy	429	145	0	101	429	246	58.8
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	-
Wheat	0	0	0	0	0	-	-
Barley	0	0	0	0	0	-	-
CEREALS		**907**		**2,195**	**3,572**	**3,102**	**29.3**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	-	0.0
Irish potatoes	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**0**		**0**	**0**	**-**	**0.0**
Mung Bean	0	0	0	0	0	-	0.0
Beans	143	58	1,786	1,757	1,929	1,815	3.2
Cowpeas	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	-	0.0
Chick peas	0	0	0	0	0	-	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	**143**	**58**	**1,786**	**1,757**	**1,929**	**1,815**	**3.2**
Sunflower	0	0	0	0	0	-	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**		**0**	**0**	**-**	**0.0**
Okra	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	0	0	0	0	0	-	0.0
Cabbage	0	0	71	7	71	7	0.0
Tomatoes	143	29	0	0	143	29	100.0
Spinach	0	0	0	0	0	-	0.0
Carrot	0	0	71	7	71	7	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**29**		**14**	**286**	**43**	**66.7**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**-**	**0.0**
Malay	0	0	0	0	0	-	0.0
Total	**2,072**	**994**	**3,715**	**3,966**	**5,787**	**4,960**	**20.0**

5.93 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	213	61	810	659	1,023	720	8.5
Paddy	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**61**		**659**	**1,023**	**720**	**8.5**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	-	0.0
Irish potatoes	0	0	0	0	0	-	0.0
ROOTS & TUBERS		0		0	**0**	-	-
Mung Bean	0	0	43	9	43	9	0.0
Beans	213	44	682	530	895	574	7.6
Cowpeas	43	4	85	26	128	30	14.3
Green gram	43	9	85	22	128	30	28.6
Chick peas	43	4	85	43	128	47	9.1
Field Peas	0	0	0	0	0	-	0.0
PULSES	341	61	980	629	1,321	690	8.8
Sunflower	43	9	0	0	43	9	100.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**9**		0	**43**	**9**	**100.0**
Okra	0	0	43	9	43	9	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	85	13	43	9	128	22	60.0
Onion	43	4	43	10	85	15	29.4
Cabbage	85	5	170	33	256	38	12.5
Tomatoes	0	0	85	12	85	12	0.0
Spinach	85	5	170	52	256	57	8.2
Carrot	43	4	0	0	43	4	100.0
Chillies	43	4	85	19	128	23	18.5
Amaranths	43	0	128	20	170	20	1.7
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	43	9	43	9	0.0
FRUITS & VEGETABLES		**36**		**172**	**1,236**	**208**	**17.1**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS	**0**	0	**0**	0	**0**	-	**0.0**
Malay	0	0	0	0	0	-	0.0
Total	**1,023**	**166**	**2,600**	**1,461**	**3,623**	**1,627**	**10.2**

5.94 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Karatu

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	356	180	980	764	1,337	945	19.1
Paddy	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	89	36	89	36	0.0
CEREALS		**180**		**800**	**1,426**	**981**	**18.4**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	89	36	356	180	446	216	16.7
Irish potatoes	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**36**		**180**	**446**	**216**	**16.7**
Mung Bean	0	0	0	0	0	-	0.0
Beans	89	18	1,515	1,168	1,604	1,186	1.5
Cowpeas	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	-	0.0
Chick peas	0	0	0	0	0	-	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	89	18	1,515	1,168	1,604	1,186	1.5
Sunflower	0	0	0	0	0	-	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		0		**0**	**0**	-	-
Okra	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	267	90	1,337	361	1,604	451	20.0
Cabbage	0	0	0	0	0	-	0.0
Tomatoes	0	0	0	0	0	-	0.0
Spinach	0	0	0	0	0	-	0.0
Carrot	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**90**		**361**	**1,604**	**451**	**20.0**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS	**0**	0	**0**	0	**0**	-	**0.0**
Malay	0	0	0	0	0	-	0.0
Total	**802**	**325**	**4,278**	**2,509**	**5,080**	**2,834**	**11.5**

5.95 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Ngorongoro

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	71	115	497	334	568	449	25.6
Paddy	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**115**		**334**	**568**	**449**	**25.6**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	142	50	71	22	213	72	70.0
Irish potatoes	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**50**		**22**	**213**	**72**	**70.0**
Mung Bean	0	0	0	0	0	-	0.0
Beans	0	0	142	33	142	33	0.0
Cowpeas	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	-	0.0
Chick peas	0	0	0	0	0	-	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	0	0	142	33	142	33	0.0
Sunflower	0	0	0	0	0	-	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		0		0	**0**	-	**0.0**
Okra	0	0	0	0	0	-	**0.0**
Radish	0	0	0	0	0	-	**0.0**
Turmeric	0	0	0	0	0	-	**0.0**
Bitteer Aubergine	0	0	0	0	0	-	**0.0**
Onion	0	0	0	0	0	-	**0.0**
Cabbage	71	14	0	0	71	14	100.0
Tomatoes	213	29	142	14	355	43	66.7
Spinach	213	22	71	7	284	29	75.0
Carrot	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**65**		**22**	**711**	**86**	**75.0**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS		0		0	**0**	-	**0.0**
Malay	0	0	0	0	0	-	0.0
Total	**711**	**230**	**924**	**410**	**1,634**	**640**	**36.0**

5.95 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Longido

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	347	290	3,207	2,679	3,554	2,969	9.8
Paddy	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	173	444	260	152	433	597	74.5
Barley	0	0	0	0	0	-	0.0
CEREALS		**734**		**2,831**	**3,987**	**3,565**	**20.6**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	29	6	29	6	0.0
Irish potatoes	87	158	231	70	318	228	69.2
ROOTS & TUBERS		**158**		**76**	**347**	**234**	**67.5**
Mung Bean	0	0	58	23	58	23	0.0
Beans	376	468	2,138	1,292	2,514	1,760	26.6
Cowpeas	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	-	0.0
Chick peas	0	0	29	6	29	6	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	376	468	2,225	1,321	2,600	1,789	26.2
Sunflower	29	18	0	0	29	18	100.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**18**		0	**29**	**18**	**100.0**
Okra	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	0	0	29	47	29	47	0.0
Cabbage	0	0	0	0	0	-	0.0
Tomatoes	87	38	202	82	289	120	31.7
Spinach	0	0	0	0	0	-	0.0
Carrot	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**38**		**129**	**318**	**167**	**22.8**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	29	6	29	6	0.0
CASH CROPS	**0**	0	**29**	**6**	**29**	**6**	**0.0**
Malay	0	0	0	0	0	-	0.0
Total	**1,098**	**1,415**	**6,212**	**4,363**	**7,310**	**5,778**	**24.5**

5.96 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha Rural

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	2,628	1,087	12,899	3,955	15,527	5,042	21.6
Paddy	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	119	73	0	0	119	73	100.0
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**1,160**		**3,955**	**15,646**	**5,115**	**22.7**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	119	24	119	24	0.0
Irish potatoes	597	157	597	399	1,194	556	28.3
ROOTS & TUBERS		**157**		**423**	**1,314**	**580**	**27.1**
Mung Bean	0	0	119	97	119	97	0.0
Beans	2,508	763	9,675	2,269	12,183	3,032	25.2
Cowpeas	0	0	239	53	239	53	0.0
Green gram	0	0	597	157	597	157	0.0
Chick peas	0	0	119	19	119	19	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	2,508	763	10,749	2,595	13,258	3,357	22.7
Sunflower	0	0	0	0	0	-	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	**478**	**97**	**478**	97	0.0
OIL SEEDS & OIL NUTS		0		**97**	**478**	**97**	**0.0**
Okra	0	0	0	0	0	-	0.0
Radish	239	94	0	0	239	94	100.0
Turmeric	0	0	119	77	119	77	0.0
Bitteer Aubergine	119	48	0	0	119	48	100.0
Onion	0	0	119	24	119	24	0.0
Cabbage	478	149	358	46	836	195	76.4
Tomatoes	239	75	0	0	239	75	100.0
Spinach	119	16	0	0	119	16	100.0
Carrot	478	39	0	21	478	60	65.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	239	18	0	0	239	18	100.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**440**		**169**	**2,508**	**609**	**72.3**
Cotton	0	0	119	145	119	145	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS		0		**145**	**119**	**145**	**0.0**
Malay	0	0	0	0	0	-	0.0
Total	**7,764**	**2,519**	**25,560**	**7,383**	**33,323**	**9,903**	**25.4**

5.97 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Meru

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	3,172	2,380	5,734	2,327	8,907	4,707	50.6
Paddy	244	62	0	0	244	62	100.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**2,442**		**2,327**	**9,151**	**4,769**	**51.2**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	-	0.0
Irish potatoes	0	0	122	49	122	49	0.0
ROOTS & TUBERS		0		**49**	**122**	**49**	**0.0**
Mung Bean	0	0	0	0	0	-	0.0
Beans	2,806	1,467	2,440	778	5,246	2,245	65.3
Cowpeas	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	-	0.0
Chick peas	122	49	0	0	122	49	100.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	**2,928**	**1,516**	**2,440**	**778**	**5,368**	**2,294**	**66.1**
Sunflower	0	0	0	0	0	-	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		0		0	**0**	-	0.0
Okra	244	62	0	0	244	62	100.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	366	62	122	25	488	86	71.4
Onion	0	0	0	0	0	-	0.0
Cabbage	366	18	244	14	610	32	55.5
Tomatoes	1,708	573	488	85	2,196	658	87.1
Spinach	122	2	244	9	366	11	21.7
Carrot	0	0	244	49	244	49	0.0
Chillies	122	0	366	35	488	35	1.4
Amaranths	366	8	0	1	366	9	84.2
Cucumber	244	74	0	0	244	74	100.0
Egg Plant	122	49	0	0	122	49	100.0
FRUITS & VEGETABLES		**849**		**218**	**5,368**	**1,067**	**79.6**
Cotton	0	0	0	0	0	-	0.0
Tobacco	122	74	0	0	122	74	100.0
CASH CROPS	**122**	**74**	**0**	0	**122**	**74**	**100.0**
Malay	0	0	0	0	0	-	0.0
Total	**10,127**	**4,881**	**10,005**	**3,373**	**20,132**	**8,254**	**59.1**

5.98 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) -Monduli

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	714	289		2,786	2,567	3,143	2,856	10.1
Paddy	0	0	.	429	246	429	246	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**289**	**26,933,049**		**2,813**	**3,572**	**3,102**	**9.3**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	214	101	5,472,338	1,857	1,714	1,929	1,815	5.6
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**214**	**101**	**5,472,338**	**1,857**	**1,714**	**1,929**	**1,815**	**5.6**
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**.**	**0**	**-**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	71	7	71	7	0.0
Tomatoes	0	0	.	143	29	143	29	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	71	7	71	7	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**.**		**43**	**286**	**43**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**929**	**390**	**32,405,387**	**5,358**	**4,570**	**5,787**	**4,960**	**7.9**

5.99 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	682	483	9,439,350	341	237	1,023	720	67.1
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**483**	**9,439,350**		**237**	**1,023**	**720**	**67.1**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	43	9	6,819	0	.	43	-	0.0
Beans	597	298	7,918,689	298	276	895	574	51.9
Cowpeas	128	30	863,470	0	.	128	-	0.0
Green gram	128	30	1,994,589	0	.	128	-	-
Chick peas	43	4	852,388	85	43	128	47	9.1
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	938	371	11,635,955	384	319	1,321	690	53.8
Sunflower	43	9	255,717	0	.	43	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**9**	**255,717**		**.**	**43**	**-**	**0.0**
Okra	43	9	6,819	0	.	43	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	43	1	20,457	128	20	128	22	5.0
Onion	43	10	255,717	43	4	85	15	70.6
Cabbage	170	29	444,094	85	9	256	38	77.1
Tomatoes	85	12	70,748	0	.	85	-	0.0
Spinach	170	27	411,704	85	30	256	57	47.1
Carrot	0	0	.	43	4	43	4	0.0
Chillies	85	19	134,677	43	4	128	23	81.5
Amaranths	170	20	390,394	0	.	170	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	43	9	6,819	0	.	43	-	0.0
FRUITS & VEGETABLES		**136**	**1,741,430**		**72**	**1,236**	**208**	**65.2**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**2,515**	**998**	**23,072,451**	**1,151**	**629**	**3,623**	**1,627**	**61.4**

5.100 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Karatu

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	178	108	4,723,259	1,159	836	1,337	945	944.6
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	89	36	89	36	36.1
CEREALS		**108**	**4,723,259**		**872**	**1,426**	**981**	**980.7**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	446	216	446	216	216.5
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**216**	**446**	**216**	**216.5**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	1,604	1,186	1,604	1,186	1186.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	1,604	1,186	1,604	1,186	1186.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**.**	**0**	**-**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	89	18	6,238,267	1,515	433	1,604	451	451.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**18**	**6,238,267**		**433**	**1,604**	**451**	**451.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**267**	**126**	**10,961,526**	**4,812**	**2,708**	**5,080**	**2,834**	**2834.1**

5.101 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Ngorongoro

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	568	449	568	449	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**0**	**.**		**449**	**568**	**449**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	213	72	213	72	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**72**	**213**	**72**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	142	33	142	33	0.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	142	33	142	33	0.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**.**	**0**	**-**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	71	14	2,486,773	0	.	71	-	0.0
Tomatoes	71	14	2,486,773	284	29	355	43	50.0
Spinach	0	0	.	284	29	284	29	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**29**	**4,973,546**		**58**	**711**	**86**	**50.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		**0**	**.**		**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**142**	**29**	**4,973,546**	**1,492**	**611**	**1,634**	**640**	**4.7**

5.102 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Longido

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	144	91	2,918,107	3,409	2,878	3,554	2,969	3.1
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	29	12	288,922	404	585	433	597	2.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**102**	**3,207,029**		**3,463**	**3,987**	**3,565**	**3.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	29	6	29	6	0.0
Irish potatoes	58	20	1,762,421	260	208	318	228	9.9
ROOTS & TUBERS		**20**	**1,762,421**		**213**	**347**	**234**	**9.6**
Mung Bean	0	0	.	58	23	58	23	0.0
Beans	87	82	2,398,049	2,427	1,678	2,514	1,760	4.9
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	29	6	29	6	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	87	82	2,398,049	2,514	1,707	2,600	1,789	4.8
Sunflower	0	0	.	29	18	29	18	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**18**	**29**	**18**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	29	47	29	47	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	29	12	1,444,608	260	108	289	120	10.8
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES	**29**	**12**	**1,444,608**	**289**	**155**	**318**	**167**	**7.5**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	29	6	29	6	0.0
CASH CROPS	**0**	0	**.**	**29**	**6**	**29**	6	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	**347**	**216**	**8,812,106**	**6,963**	**5,562**	**7,310**	**5,778**	**3.9**

5.103 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha Rural

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	5,255	1,572	17,952,366	10,391	3,470	15,527	5,042	31.2
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	119	73	119	157	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**1,572**	**17,952,366**		**3,542**	**15,646**	**4,379**	**35.9**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	119	24	119	24	0.0
Irish potatoes	239	85	6,903,562	1,075	471	1,194	471	17.9
ROOTS & TUBERS		**85**	**6,903,562**		**496**	**1,314**	**496**	**17.1**
Mung Bean	0	0	.	119	97	119	933	0.0
Beans	4,061	837	12,744,118	8,122	2,195	12,183	2,195	38.1
Cowpeas	0	0	.	239	53	239	53	0.0
Green gram	0	0	.	597	157	597	157	0.0
Chick peas	0	0	.	119	19	119	19	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	4,061	837	12,744,118	9,197	2,521	13,258	2,521	33.2
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	**.**	**478**	**97**	**478**	97	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**97**	**478**	**97**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	239	94	239	94	0.0
Turmeric	0	0	.	119	77	119	114	0.0
Bitteer Aubergine	0	0	.	119	48	119	-	0.0
Onion	0	0	.	119	24	119	27	0.0
Cabbage	0	0	.	836	195	836	195	0.0
Tomatoes	0	0	.	239	75	239	75	0.0
Spinach	0	0	.	119	16	119	55	0.0
Carrot	358	36	4,180,357	239	24	478	24	150.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	119	2	179,158	119	16	239	16	15.2
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**39**	**4,359,516**		**570**	**2,508**	**570**	**6.8**
Cotton	0	0	.	119	145	119	145	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		**0**	**.**		**145**	**119**	**145**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**10,033**	**2,532**	**41,959,561**	**23,649**	**7,371**	**33,323**	**9,903**	**25.6**

5.104 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Meru

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	732	340	12,017,923	8,297	4,368	8,907	4,707	7.2
Paddy	0	0	.	244	62	244	62	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**340**	**12,017,923**		**4,430**	**9,151**	**4,769**	**7.1**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	122	49	122	-	0.0
ROOTS & TUBERS		**.**	**.**		**49**	**122**	**-**	**0.0**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	366	272	1,268,897	4,880	1,973	5,246	2,245	12.1
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	122	49	122	49	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	366	272	1,268,897	5,002	2,023	5,368	2,294	11.8
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**.**	**0**	**-**	**0.0**
Okra	0	0	.	244	62	244	62	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	488	86	488	86	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	610	32	610	32	0.0
Tomatoes	244	74	17,569,350	1,952	584	2,196	658	11.3
Spinach	0	0	.	366	11	366	11	0.0
Carrot	0	0	.	244	49	244	49	0.0
Chillies	0	0	.	488	35	488	35	0.0
Amaranths	0	0	.	366	9	366	9	0.0
Cucumber	0	0	.	244	74	244	74	0.0
Egg Plant	0	0	.	122	49	122	49	0.0
FRUITS & VEGETABLES		**74**	**17,569,350**		**993**	**5,368**	**1,067**	**6.9**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	122	19	427,033	122	56	122	74	25.0
CASH CROPS	**122**	**19**	**427,033**	**122**	**56**	**122**	**74**	**25.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**1,464**	**704**	**31,283,203**	**18,911**	**7,550**	**20,132**	**8,254**	**8.5**

5.105 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) -Monduli

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	214	69	7,358,366	3,072	2,787	3,143	2,856	2.4
Paddy	429	231	21,896,497	71	14	429	246	94.1
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**300**	**29,254,863**		**2,802**	**3,572**	**3,102**	**9.7**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	1,929	1,815	1,929	1,815	0.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**0**	0	**.**	**1,929**	**1,815**	**1,929**	**1,815**	**0.0**
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**	**0**	**-**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	71	7	71	7	0.0
Tomatoes	143	29	3,857,784	0	.	143	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	71	7	71	7	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**29**	**3,857,784**		**14**	**286**	**43**	**66.7**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS	**0**	.	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**786**	**329**	**33,112,648**	**5,215**	**4,631**	**5,787**	**4,960**	**6.6**

5.106 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	1,023	720	1,023	720	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**0**	**.**		**720**	**1,023**	**720**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	.	43	9	43	9	0.0
Beans	0	0	.	895	574	895	574	0.0
Cowpeas	0	0	.	128	30	128	30	0.0
Green gram	0	0	.	128	30	128	30	0.0
Chick peas	0	0	.	128	47	128	47	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	1,321	690	1,321	690	0.0
Sunflower	0	0	.	43	9	43	9	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**9**	**43**	**9**	**0.0**
Okra	0	0	.	43	9	43	9	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	43	9	2,130,971	85	13	128	22	40.0
Onion	43	3	20,457	85	11	85	15	22.1
Cabbage	43	3	2,130,971	256	34	256	38	8.6
Tomatoes	0	0	.	85	12	85	12	0.0
Spinach	43	26	4,261,942	213	31	256	57	45.3
Carrot	0	0	.	43	4	43	4	0.0
Chillies	0	0	.	128	23	128	23	0.0
Amaranths	0	0	.	170	20	170	20	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	43	9	43	9	0.0
FRUITS & VEGETABLES		**41**	**8,544,342**		**167**	**1,236**	**208**	**19.7**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**170**	**41**	**8,544,342**	**3,537**	**1,586**	**3,623**	**1,627**	**2.5**

5.107 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizeruse and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Karatu

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	267	108	23,348,942	1,159	836	1,337	945	11.5
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	89	36	89	36	0.0
CEREALS		108	**23,348,942**		**872**	**1,426**	**981**	**11.0**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	446	216	446	-	0.0
Irish potatoes	0	.	.	0	.	0	-	0.0
ROOTS & TUBERS		.	**.**		**216**	**446**	**-**	**0.0**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	0	.	.	1,604	1,186	1,604	-	0.0
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	0	.	0	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	0	.	.	1,604	1,186	1,604	-	0.0
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**0**	.	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		.	**.**		**.**	**0**	**-**	**0.0**
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	267	81	28,606,909	1,337	370	1,604	451	18.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**81**	**28,606,909**		**370**	**1,604**	**451**	**18.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	0	**.**	**0**	**.**	**0**	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	**535**	**189**	**51,955,851**	**4,634**	**2,645**	**5,080**	**2,834**	**6.7**

5.108 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Ngorongoro

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	568	449	568	449	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		0	**.**		**449**	**568**	**449**	0.0
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	213	72	213	72	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		0	**.**		**72**	**213**	**72**	0.0
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	142	33	142	33	0.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	142	33	142	33	0.0
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**	**0**	-	0.0
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	71	14	71	14	0.0
Tomatoes	71	7	355,253	284	36	355	43	16.7
Spinach	71	7	355,253	213	22	284	29	25.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**14**	**710,507**		**72**	**711**	**86**	16.7
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		0	**.**		**.**	**0**	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	**142**	**14**	**710,507**	**1,492**	**626**	**1,634**	**640**	2.2

5.109 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Longido

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	462	313	17,297,731	3,091	2,656	3,554	2,969	10.5
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	144	433	2,990,338	289	164	433	597	72.5
Barley	0	0	.	0	.	0	-	0.0
CEREALS	607	746	**20,288,069**		**2,820**	**3,987**	**3,565**	**20.9**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	29	6	29	6	0.0
Irish potatoes	260	208	31,896,936	58	20	318	228	91.0
ROOTS & TUBERS	260	0	**31,896,936**		**26**	**347**	**26**	**0.0**
Mung Bean	0	0	.	58	23	58	23	0.0
Beans	347	444	4,226,922	2,167	1,315	2,514	1,760	25.3
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	29	6	0	0	.	29	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	376	450	4,226,922	2,225	1,339	2,600	1,789	25.2
Sunflower	29	18	2,166,911	0	.	29	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	0	0	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS	29	18	**2,166,911**		**.**	**29**	**-**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	29	47	29	47	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	231	94	5,836,504	87	26	289	120	78.7
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES	231	94	**5,836,504**		**72**	**318**	**167**	**56.6**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	29	6	29	6	0.0
CASH CROPS	0	0	**.**	**29**	**6**	**29**	6	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	1,502	1,516	**64,415,342**	**5,836**	**4,263**	**7,310**	**5,778**	**26.2**

5.110 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Arusha Rural

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	956	415	39,265,500	14,810	4,627	15,527	5,042	8.2
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	119	73	477,755	0	.	119	-	0.0
Wheat	0	.	.	0	.	0	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		487	**39,743,255**		**4,627**	**15,646**	5,115	9.5
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	119	24	119	24	0.0
Irish potatoes	358	266	20,185,154	956	290	1,194	556	47.8
ROOTS & TUBERS		266	**20,185,154**		**314**	**1,314**	580	45.8
Mung Bean	0	266	.	119	97	119	363	73.3
Beans	717	219	9,525,243	11,705	2,813	12,183	3,032	7.2
Cowpeas	0	0	.	239	53	239	53	0.0
Green gram	0	0	.	597	157	597	157	0.0
Chick peas	0	0	.	119	19	119	19	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	717	219	9,525,243	12,780	3,139	13,258	3,357	6.5
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	**.**	**478**	**97**	**478**	97	0.0
OIL SEEDS & OIL NUTS		0	**.**		**97**	**478**	97	0.0
Okra	0	0	.	0	.	0	-	0.0
Radish	239	94	4,777,551	0	.	239	-	0.0
Turmeric	0	0	.	119	77	119	77	0.0
Bitteer Aubergine	0	0	.	119	48	119	48	0.0
Onion	119	24	5,733,062	0	.	119	-	0.0
Cabbage	358	133	9,823,840	478	62	836	195	68.2
Tomatoes	239	39	2,179,758	119	36	239	75	51.6
Spinach	0	0	.	119	16	119	16	0.0
Carrot	0	0	.	478	60	478	60	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	239	18	239	18	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**290**	**22,514,210**		**319**	**2,508**	609	47.7
Cotton	0	0	.	119	145	119	145	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		0	**.**		**145**	**119**	145	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	**3,105**	**1,262**	**91,967,862**	**30,935**	**8,641**	**33,323**	9,903	12.7

5.111 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - SHORT RAINY SEASON (VULI) - Meru

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	2,562	701	79,781,929	6,344	4,007	8,907	4,707	14.9
Paddy	244	62	5,490,422	0	.	244	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**763**	**85,272,351**		**4,007**	**9,151**	**4,769**	**16.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	122	49	1,220,094	0	.	122	-	0.0
ROOTS & TUBERS		**49**	**1,220,094**		**.**	**122**	**-**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	610	100	2,891,622	4,636	2,145	5,246	2,245	4.5
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	122	49	122	49	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	610	100	2,891,622	4,758	2,194	5,368	2,294	4.4
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	**.**		**.**	**0**	**-**	**0.0**
Okra	244	62	1,647,127	0	.	244	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	366	0	22,632,739	122	25	488	25	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	488	27	634,449	122	5	610	32	84.4
Tomatoes	1,708	547	82,319,724	488	111	2,196	658	83.1
Spinach	244	6	268,421	122	5	366	11	56.5
Carrot	244	49	10,980,844	0	.	244	-	0.0
Chillies	244	8	268,421	244	27	488	35	22.5
Amaranths	366	9	366,028	0	.	366	-	0.0
Cucumber	244	74	12,810,984	0	.	244	-	0.0
Egg Plant	122	49	2,806,216	0	.	122	-	0.0
FRUITS & VEGETABLES		**894**	**134,734,950**		**173**	**5,368**	**1,067**	**83.8**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	122	74	122	74	0.0
CASH CROPS	**0**	0	**.**	**122**	**74**	**122**	**74**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**7,809**	**1,806**	**224,119,017**	**12,323**	**6,448**	**20,132**	**8,254**	**21.9**

ANNUAL CROP AND VEGETABLE PRODUCTION LONG RAINY SEASON (MASIKA)

5.112 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Fungicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Fungicide use							% of Planted area using Insecticide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	71	87	1,428,809	21,432	26,392	21,504	26,479	0.3
Paddy	0	0	0	429	159	429	159	0.0
Sorghum	0	0	0	71	43	71	43	0.0
Finger Millet	0	0	0	0	.	0	-	0.0
Wheat	643	817	26,397,245	357	513	929	1,330	61.4
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**904**	**27,826,054**		**27,108**	**22,932**	**28,012**	**3.2**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	0	0	0	0	-	0.0
Beans	71	43	321,482	15,431	10,652	15,431	10,695	0.4
Cowpeas	143	145	621,532	2,572	1,197	2,715	1,342	10.8
Green gram	0	0	.	4,001	2,461	4,001	2,461	0.0
Chick peas	143	29	6,858,283	2,072	1,133	2,143	1,162	2.5
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	357	217	7,801,297	24,075	15,444	24,290	15,661	1.4
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	143	376	143	376	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**376**	**143**	**376**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	71	7	71	7	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	71	14	1,143,047	0	.	71	-	0.0
Cabbage	0	0	.	71	14	71	14	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	143	10	143	10	0.0
Carrot	0	0	.	71	5	71	5	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		14	1,143,047		36	429	51	28.6
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	0	0	.	0	.	0	-	0.0
Malay	0	0	.	71	29	71	29	0.0
Total	**1,143**	**1,135**	**36,770,398**	**46,936**	**42,993**	**47,865**	**44,128**	**2.6**

5.113 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Fungicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Fungicide use							% of Planted area using Insecticide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	2,472	1,979	2,472	1,979	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**0**	**.**		**1,979**	**2,472**	**1,979**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	43	4	43	4	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**4**	**43**	**4**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	2,174	1,386	2,174	1,386	0.0
Cowpeas	0	0	.	213	104	213	104	0.0
Green gram	0	0	.	128	22	128	22	0.0
Chick peas	43	35	532,743	384	450	426	485	7.1
Field Peas	0	0	.	0	.	0	#VALUE!	0.0
PULSES	**43**	**35**	**532,743**	**2,898**	**1,962**	**2,941**	**1,996**	**1.7**
Sunflower	0	0	.	43	9	43	9	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**9**	**43**	**9**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	43	9	43	9	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	128	28	128	28	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	170	21	170	21	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	85	11	85	11	0.0
Amaranths	0	0	.	85	6	85	6	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	43	17	43	17	0.0
FRUITS & VEGETABLES		**0**	**.**		**92**	**554**	**92**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**43**	**35**	**532,743**	**6,009**	**4,046**	**6,052**	**4,080**	**0.8**

5.114 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Fungicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Fungicide use							% of Planted area using Insecticide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	802	307	11,228,880	30,122	19,911	30,924	20,218	1.5
Paddy	0	0	.	446	198	446	198	0.0
Sorghum	0	0	.	2,228	507	2,228	507	0.0
Finger Millet	0	0	.	624	135	624	135	0.0
Wheat	356	144	14,682,207	1,159	913	1,515	1,057	13.7
Barley	89	54	2,851,779	356	126	356	180	30.0
CEREALS		**505**	**28,762,866**		**21,791**	**36,093**	**22,296**	**2.3**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	535	99	4,723,259	9,536	3,232	10,070	3,331	3.0
Cowpeas	0	0	.	1,515	551	1,515	551	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	89	36	2,138,834	0	.	89	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	624	135	6,862,094	11,051	3,783	11,674	3,918	3.5
Sunflower	0	0	.	3,476	429	3,476	429	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**429**	**3,476**	**429**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	356	126	356	126	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	89	3	1,069,417	89	3	178	6	50.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**3**	**1,069,417**		**129**	**535**	**132**	**2.2**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	0	0	.	0	.	0	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	**1,961**	**643**	**36,694,377**	**49,906**	**26,133**	**51,778**	**26,776**	**2.4**

5.115 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Fungicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Fungicide use							% of Planted area using Insecticide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	71	29	.	10,018	9,020	10,089	9,049	0.3
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	1,492	994	1,492	994	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**29**	**.**		**10,014**	**11,581**	**10,043**	**0.3**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	71	14	71	14	0.0
Irish potatoes	0	0	.	142	20	142	20	0.0
ROOTS & TUBERS		**0**	**.**		**35**	**213**	**35**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	71	29	.	6,466	4,229	6,537	4,258	0.7
Cowpeas	0	0	.	71	29	71	29	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	71	29	.	6,537	4,258	6,608	4,287	0.7
Sunflower	0	0	.	71	29	71	29	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**29**	**71**	**29**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**.**		**.**	**0**	-	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	-	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**142**	**58**	**.**	**18,331**	**14,335**	**18,473**	**14,393**	**0.4**

5.116 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Fungicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Fungicide use							% of Planted area using Insecticide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	347	263	5,070,573	4,565	3,556	4,912	3,819	6.9
Paddy	0	.	.	29	12	29	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	144	94	144	-	0.0
Wheat	0	.	.	404	597	404	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**263**	**5,070,573**		**4,258**	**5,490**	**4,521**	**5.8**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	231	120	6,991,901	144	97	376	216	55.4
ROOTS & TUBERS		**120**	**6,991,901**		**97**	**376**	**216**	**55.4**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	260	345	8,407,616	3,063	1,936	3,294	2,281	15.1
Cowpeas	0	.	.	0	.	0	-	0.0
Green gram	0	.	.	0	.	0	-	0.0
Chick peas	0	.	.	0	.	0	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	260	345	8,407,616	3,063	1,936	3,294	2,281	15.1
Sunflower	0	.	.	116	76	116	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**0**	.	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**76**	**116**	**-**	**0.0**
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	0	.	.	0	.	0	-	0.0
Cabbage	0	.	.	0	.	0	-	0.0
Tomatoes	58	29	953,441	29	20	87	50	58.8
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	.	.	0	.	0	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**29**	**953,441**		**20**	**87**	**50**	**58.8**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS	**0**	**.**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**896**	**757**	**21,423,531**	**8,494**	**6,387**	**9,361**	**7,144**	**10.6**

5.117 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Fungicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) -Arusha Rural

Crop	Fungicide use							% of Planted area using Insecticide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	239	46	1,672,143	35,354	16,499	35,593	16,545	0.3
Paddy	0	.	.	0	.	0	-	0.0
Sorghum	0	.	.	0	.	0	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	0	.	.	1,314	1,018	1,314	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**46**	**1,672,143**		**17,517**	**36,907**	**17,563**	**0.3**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	358	94	358	-	0.0
Irish potatoes	836	273	11,389,682	119	12	956	285	95.8
ROOTS & TUBERS		**273**	**11,389,682**		**106**	**1,314**	**379**	**71.9**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	119	15	477,755	31,890	10,543	32,010	10,558	0.1
Cowpeas	0	.	.	1,433	515	1,433	-	0.0
Green gram	0	.	.	3,344	1,179	3,344	-	0.0
Chick peas	0	.	.	1,314	551	1,314	-	0.0
Field Peas	0	.	.	119	48	119	-	0.0
PULSES	119	15	477,755	38,101	12,837	38,220	12,851	0.1
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**119**	12	1,194,388	**478**	97	**597**	109	11.1
OIL SEEDS & OIL NUTS		**12**	**1,194,388**		**97**	**597**	**109**	**11.1**
Okra	0	.	.	239	68	239	-	0.0
Radish	0	.	.	119	12	119	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	119	24	477,755	119	48	239	73	33.3
Onion	0	.	.	119	48	119	-	0.0
Cabbage	0	.	.	358	109	358	-	0.0
Tomatoes	239	39	2,388,776	119	48	358	87	44.4
Spinach	0	.	.	119	24	119	-	0.0
Carrot	0	.	.	0	.	0	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	597	16	597	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**63**	**2,866,531**		**374**	**2,150**	**437**	**14.4**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS	**0**	**.**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**1,672**	**408**	**17,600,499**	**77,516**	**30,931**	**79,188**	**31,339**	**1.3**

5.118 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Fungicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Fungicide use							% of Planted area using Insecticide
	Number of Households using Fungicide	Planted Area Applied with Fungicide	Cost of Fungicide	Number of Households NOT using Fungicide	Planted Area Without Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	366	169	5,429,417	38,189	27,954	38,555	28,123	0.6
Paddy	0	.	.	732	210	732	-	0.0
Sorghum	0	.	.	366	114	366	-	0.0
Finger Millet	0	.	.	610	321	610	-	0.0
Wheat	0	.	.	0	.	0	-	0.0
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**169**	**5,429,417**		**28,599**	**40,263**	**28,768**	**0.6**
Cassava	0	.	.	122	20	122	-	0.0
Sweet Potato	0	.	.	366	10	366	-	0.0
Irish potatoes	0	.	.	122	25	122	-	0.0
ROOTS & TUBERS		**.**	**.**		**54**	**610**	**-**	**0.0**
Mung Bean	122	49	3,660,281	0	.	122	-	0.0
Beans	366	52	3,757,889	22,450	7,522	22,816	7,573	0.7
Cowpeas	0	.	.	610	67	610	-	0.0
Green gram	0	.	.	488	222	488	-	0.0
Chick peas	0	.	.	122	12	122	-	0.0
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	488	101	7,418,170	23,670	7,823	24,158	7,924	1.3
Sunflower	0	.	.	4,148	1,648	4,148	-	0.0
Simsim	0	.	.	0	.	0	-	0.0
Groundnut	122	12	183,014	0	.	122	-	0.0
Soya Beans	**0**	**.**	**.**	**0**	**.**	**0**	**-**	0.0
OIL SEEDS & OIL NUTS		**12**	**183,014**		**1,648**	**4,270**	**1,661**	**0.7**
Okra	0	.	.	122	12	122	-	0.0
Radish	0	.	.	0	.	0	-	0.0
Turmeric	0	.	.	122	49	122	-	0.0
Bitteer Aubergine	0	.	.	244	35	244	-	0.0
Onion	0	.	.	0	.	0	-	0.0
Cabbage	0	.	.	122	25	122	-	0.0
Tomatoes	732	247	40,141,084	122	30	854	277	89.3
Spinach	0	.	.	0	.	0	-	0.0
Carrot	122	49	6,100,469	0	.	122	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	122	49	122	-	0.0
Cucumber	244	198	4,880,375	0	.	244	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**494**	**51,121,927**		**200**	**1,952**	**694**	**71.2**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS	**0**	**.**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**2,074**	**777**	**64,152,528**	**69,179**	**38,324**	**71,253**	**39,101**	**2.0**

5.119 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	71	29	1,928,892	21,432	26,450	21,504	26,479	0.1
Paddy	0	0	0	429	159	429	159	0.0
Sorghum	0	0	0	71	43	71	43	0.0
Finger Millet	0	0	0	0	0	0	-	0.0
Wheat	143	202	3,377,704	786	1,128	929	1,330	15.2
Barley	0	0	0	0	0	0	-	0.0
CEREALS		**231**	**5,306,596**		**27,780**		28,012	0.8
Cassava	0	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	0	-	0.0
Irish potatoes	0	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**0**		-	0.0
Mung Bean	0	0	0	0	0	0	-	0.0
Beans	643	283	3,893,504	14,931	10,412	15,431	10,695	2.7
Cowpeas	1,000	612	10,358,865	1,715	730	2,715	1,342	45.6
Green gram	572	366	6,715,402	3,429	2,095	4,001	2,461	14.9
Chick peas	1,214	680	18,324,475	1,000	482	2,143	1,162	58.5
Field Peas	0	0	0	0	0	0	-	0.0
PULSES		**1,941**	**39,292,246**		**13,719**		**15,661**	**12.4**
Sunflower	0	0	0	0	0	0	-	0.0
Simsim	0	0	0	143	376	143	376	0.0
Groundnut	0	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	**0**	**0**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**0**		**-**	**0.0**
Okra	0	0	0	0	0	0	-	0.0
Radish	0	0	0	71	7	71	7	0.0
Turmeric	0	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	0	-	0.0
Onion	71	14	2,679,017	0	0	71	-	14.0
Cabbage	0	0	0	71	14	71	14	0.0
Tomatoes	0	0	0	0	0	0	-	0.0
Spinach	0	0	0	143	10	143	10	0.0
Carrot	0	0	0	71	5	71	5	0.0
Chillies	0	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	.	0	.	0.0
Cucumber	0	0	0	0	.	0	.	0.0
Egg Plant	0	0	0	0			-	0.0
FRUITS & VEGETABLES		14	2,679,017		36		50	28.9
Cotton	0	0	.	0	0	0	-	0.0
Tobacco	0	0	.	0	0	0	-	0.0
CASH CROPS		0	.		0	0	-	0.0
Malay	0	0	0	71	29	71	29	0.0
Total	**3,715**	**2,187**	**47,277,860**	**44,365**	**41,941**	**47,865**	**41,941**	**5.2**

5.120 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	85	73	1,363,822	2,387	1,906	2,472	1,979	3.7
Paddy	0	0	0	0	0	0	-	-
Sorghum	0	0	0	0	0	0	-	-
Finger Millet	0	0	0	0	0	0	-	-
Wheat	0	0	0	0	0	0	-	-
Barley	0	0	0	0	0	0	-	-
CEREALS		**73**	**1,363,822**		**1,906**	**2,472**	**1,979**	**3.7**
Cassava	0	0	0	0	0	0	-	-
Sweet Potato	0	0	0	43	4	43	4	0.0
Irish potatoes	0	0	0	0	0	0	-	-
ROOTS & TUBERS		**0**	**0**		**4**	**43**	**4**	**0.0**
Mung Bean	0	0	0	0	0	0	-	-
Beans	0	0	0	2,174	1,386	2,174	1,386	0.0
Cowpeas	0	0	0	213	104	213	104	0.0
Green gram	0	0	0	128	22	128	22	0.0
Chick peas	43	35	1,534,299	384	450	426	485	7.1
Field Peas	0	0	0	0	.	0	-	0.0
PULSES	**43**	**35**	**1,534,299**	**2,898**	**1,962**	**2,941**	1,996	1.7
Sunflower	0	0	0	43	9	43	9	0.0
Simsim	0	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	0		**9**	**43**	9	0.0
Okra	0	0	0	0	0	0	-	0.0
Radish	0	0	0	43	9	43	9	0.0
Turmeric	0	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	0	-	0.0
Onion	0	0	0	128	28	128	28	0.0
Cabbage	0	0	0	0	0	0	-	0.0
Tomatoes	0	0	0	0	0	0	-	0.0
Spinach	0	0	0	170	21	170	21	0.0
Carrot	0	0	0	0	0	0	-	0.0
Chillies	43	2	767,150	43	9	85	11	20.6
Amaranths	43	2	767,150	43	4	85	6	32.4
Cucumber	0	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	43	17	43	17	0.0
FRUITS & VEGETABLES		**4**	**1,534,299**		**88**	**554**	**92**	**4.7**
Cotton	0	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**-**	**0.0**
Malay	0	0	0	0	0	0	-	0.0
Total	**213**	**112**	**4,432,420**	**5,839**	**3,968**	**6,052**	**4,080**	**2.7**

5.121 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,782	1,298	10,282,001	29,231	18,920	30,924	20,218	6.4
Paddy	0	0	0	446	198	446	198	0.0
Sorghum	0	0	0	2,228	507	2,228	507	0.0
Finger Millet	0	0	0	624	135	624	135	0.0
Wheat	624	541	3,208,252	891	516	1,515	1,057	51.2
Barley	267	144	2,317,071	89	36	356	180	80.0
CEREALS		**1,983**	**15,807,323**		**20,313**	**36,093**	**22,296**	**8.9**
Cassava	0	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	0	-	0.0
Irish potatoes	0	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**0**	**0**	**-**	**0.0**
Mung Bean	0	0	0	0	0	0	-	0.0
Beans	1,782	738	10,872,408	8,288	2,593	10,070	3,331	22.2
Cowpeas	0	0	0	1,515	551	1,515	551	0.0
Green gram	0	0	0	0	0	0	-	0.0
Chick peas	0	0	0	89	36	89	36	0.0
Field Peas	0	0	0	0	0	0	-	0.0
PULSES	1,782	738	10,872,408	9,892	3,180	11,674	3,918	18.8
Sunflower	0	0	0	3,476	429	3,476	429	0.0
Simsim	0	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**429**	**3,476**	**429**	**0.0**
Okra	0	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	0	-	0.0
Onion	89	18	4,990,613	267	108	356	126	14.3
Cabbage	0	0	0	0	0	0	-	0.0
Tomatoes	0	0	0	0	0	0	-	0.0
Spinach	0	0	0	178	6	178	6	0.0
Carrot	0	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		18	4,990,613		114	535	132	13.7
Cotton	0	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	0	-	0.0
CASH CROPS	0	0	0	0	0	0	-	0.0
Malay	0	0	0	0	0	0	-	0.0
Total	**4,545**	**2,739**	**31,670,344**	**47,322**	**24,037**	**51,778**	**26,776**	**10.2**

5.122 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	0	10,089	9,049	10,089	9,049	0.0
Paddy	0	0	0	0	0	0	-	0.0
Sorghum	0	0	0	1,492	994	1,492	994	0.0
Finger Millet	0	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	0	-	0.0
CEREALS		**0**	**0**		**10,043**	**11,581**	**10,043**	**0.0**
Cassava	0	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	71	14	71	14	0.0
Irish potatoes	0	0	0	142	20	142	20	0.0
ROOTS & TUBERS		**0**	**0**		**35**	**213**	**35**	**0.0**
Mung Bean	0	0	0	0	0	0	-	0.0
Beans	0	0	0	6,537	4,258	6,537	4,258	0.0
Cowpeas	0	0	0	71	29	71	29	0.0
Green gram	0	0	0	0	0	0	-	0.0
Chick peas	0	0	0	0	0	0	-	0.0
Field Peas	0	0	0	0	0	0	-	0.0
PULSES	0	0	0	6,608	4,287	6,608	4,287	0.0
Sunflower	0	0	0	71	29	71	29	0.0
Simsim	0	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**29**	**71**	**29**	**0.0**
Okra	0	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	0	-	0.0
Onion	0	0	0	0	0	0	-	0.0
Cabbage	0	0	0	0	0	0	-	0.0
Tomatoes	0	0	0	0	0	0	-	0.0
Spinach	0	0	0	0	0	0	-	0.0
Carrot	0	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**0**	**0**		**0**	**0**	**-**	**0.0**
Cotton	0	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**0**	**0**	**0**	**-**	**0.0**
Malay	0	0	0	0	0	0	-	0.0
Total	**0**	**0**	**0**	**18,473**	**14,393**	**18,473**	**14,393**	**0.0**

5.123 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	896	570	23,677,119	4,045	3,249	4,912	3,819	14.9
Paddy	0	0	0	29	12	29	12	0.0
Sorghum	0	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	144	94	144	94	0.0
Wheat	144	351	823,426	260	246	404	597	58.8
Barley	0	0	0	0	0	0	-	0.0
CEREALS		921	24,500,545		3,600	5,490	4,521	20.4
Cassava	0	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	0	-	0.0
Irish potatoes	289	199	3,987,117	87	18	376	216	91.9
ROOTS & TUBERS		**199**	**3,987,117**		**18**	**376**	**216**	**91.9**
Mung Bean	0	0	0	0	0	0	-	0.0
Beans	838	705	7,826,884	2,514	1,576	3,294	2,281	30.9
Cowpeas	0	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	0	-	0.0
Chick peas	0	0	0	0	0	0	-	0.0
Field Peas	0	0	0	0	0	0	-	0.0
PULSES	838	705	7,826,884	2,514	1,576	3,294	2,281	30.9
Sunflower	29	18	462,274	87	58	116	76	23.1
Simsim	0	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	**0**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**18**	**462,274**		**58**	**116**	**76**	**23.1**
Okra	0	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	0	-	0.0
Onion	0	0	0	0	0	0	-	0.0
Cabbage	0	0	0	0	0	0	-	0.0
Tomatoes	58	29	462,274	29	20	87	50	58.8
Spinach	0	0	0	0	0	0	-	0.0
Carrot	0	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		29	462,274		20	87	50	58.8
Cotton	0	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	0	-	0.0
CASH CROPS	0	0	0	0	0	0	-	0.0
Malay	0	0	0	0	0	0	-	0.0
Total	**2,254**	**1,872**	**37,239,095**	**7,194**	**5,273**	**9,361**	**7,144**	**26.2**

5.124 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha Rural

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,075	684	5,971,939	34,518	15,861	35,593	16,545	4.1
Paddy	0	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	0	-	0.0
Wheat	0	0	0	1,314	1,018	1,314	1,018	0.0
Barley	0	0	0	0	0	0	-	0.0
CEREALS		**684**	**5,971,939**		**16,879**	**36,907**	**17,563**	**3.9**
Cassava	0	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	358	94	358	94	0.0
Irish potatoes	717	249	13,556,302	239	36	956	285	87.3
ROOTS & TUBERS		**249**	**13,556,302**		**131**	**1,314**	**379**	**65.6**
Mung Bean	0	0	.	0	0	0	-	0.0
Beans	1,194	821	6,999,113	30,815	9,737	32,010	10,558	7.8
Cowpeas	0	0	.	1,433	515	1,433	515	0.0
Green gram	119	48	1,074,949	3,225	1,131	3,344	1,179	4.1
Chick peas	597	290	3,654,827	717	261	1,314	551	52.6
Field Peas	0	0	.	119	48	119	48	0.0
PULSES	1,911	1,160	11,728,888	36,309	11,691	38,220	12,851	9.0
Sunflower	0	0	.	0	0	0	-	0.0
Simsim	0	0	.	0	0	0	-	0.0
Groundnut	0	0	.	0	0	0	-	0.0
Soya Beans	**119**	**12**	**1,194,388**	**478**	**97**	**597**	109	11.1
OIL SEEDS & OIL NUTS		12	1,194,388		97	597	109	11.1
Okra	0	0	.	239	68	239	68	0.0
Radish	0	0	.	119	12	119	12	0.0
Turmeric	0	0	.	0	0	0	-	0.0
Bitteer Aubergine	119	24	477,755	119	48	239	73	33.3
Onion	0	0	.	119	48	119	48	0.0
Cabbage	119	48	644,969	239	60	358	109	44.4
Tomatoes	358	87	14,917,904	0	0	358	87	100.0
Spinach	0	0	.	119	24	119	24	0.0
Carrot	0	0	.	0	0	0	-	0.0
Chillies	0	0	.	0	0	0	-	0.0
Amaranths	0	0	.	597	16	597	16	0.0
Cucumber	0	0	.	0	0	0	-	0.0
Egg Plant	0	0	.	0	0	0	-	0.0
FRUITS & VEGETABLES		**160**	**16,040,628**		**278**	**2,150**	**437**	**36.5**
Cotton	0	0	.	0	0	0	-	0.0
Tobacco	0	0	.	0	0	0	-	0.0
CASH CROPS	0	0	.	0	0	0	-	0.0
Malay	0	0	.	0	0	0	-	0.0
Total	**4,419**	**2,264**	**48,492,146**	**74,769**	**29,075**	**79,188**	**31,339**	**7.2**

5.125 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Insecticide use							% of Planted area using Insecticide
	Number of Households using Insecticide	Planted Area Applied with Insecticide	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Without Insecticide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	2,928	2,173	21,308,937	36,237	25,950	38,555	28,123	7.7
Paddy	244	49	1,220,094	488	161	732	210	23.5
Sorghum	0	0	0	366	114	366	114	0.0
Finger Millet	0	0	0	610	321	610	321	0.0
Wheat	0	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	0	-	0.0
CEREALS		**2,223**	**22,529,031**		**26,545**	**40,263**	**28,768**	**7.7**
Cassava	0	0	.	122	20	122	20	0.0
Sweet Potato	0	0	.	366	10	366	10	0.0
Irish potatoes	0	0	.	122	25	122	25	0.0
ROOTS & TUBERS		**0**	**.**		**54**	**610**	**54**	**0.0**
Mung Bean	122	49	6,100,469	0	0	122	49	100.0
Beans	1,220	224	6,913,051	21,840	7,350	22,816	7,573	3.0
Cowpeas	0	0	.	610	67	610	67	0.0
Green gram	0	0	.	488	222	488	222	0.0
Chick peas	0	0	.	122	12	122	12	0.0
Field Peas	0	0	.	0	0	0	-	0.0
PULSES	1,342	273	13,013,520	23,060	7,651	24,158	7,924	3.4
Sunflower	0	0	.	4,148	1,648	4,148	1,648	0.0
Simsim	0	0	.	0	0	0	-	0.0
Groundnut	0	0	.	122	12	122	12	0.0
Soya Beans	**0**	0	**.**	**0**	**0**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**1,661**	**4,270**	**1,661**	**0.0**
Okra	0	0	.	122	12	122	12	0.0
Radish	0	0	.	0	0	0	-	0.0
Turmeric	0	0	.	122	49	122	49	0.0
Bitteer Aubergine	0	0	.	244	35	244	35	0.0
Onion	0	0	.	0	0	0	-	0.0
Cabbage	0	0	.	122	25	122	25	0.0
Tomatoes	732	247	64,786,977	122	30	854	277	89.3
Spinach	0	0	.	0	0	0	-	0.0
Carrot	122	49	195,215	0	0	122	49	100.0
Chillies	0	0	.	0	0	0	-	0.0
Amaranths	0	0	.	122	49	122	49	0.0
Cucumber	122	148	4,392,337	122	49	244	198	75.0
Egg Plant	0	0	.	0	0	0	-	0.0
FRUITS & VEGETABLES		**445**	**69,374,529**		**249**	**1,952**	**694**	**64.1**
Cotton	0	0	.	0	0	0	-	0.0
Tobacco	0	0	.	0	0	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**0**	**0**	**-**	**0.0**
Malay	0	0	.	0	0	0	-	0.0
Total	**5,490**	**2,940**	**104,917,080**	**66,617**	**36,160**	**71,253**	**39,101**	**7.5**

5.126 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Herbicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Herbicide use							% of Planted area using Insecticide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	71	22	335,770	21,504	26,457	21,504	26,479	0.1
Paddy	0	.	.	429	159	429	-	0.0
Sorghum	0	.	.	71	43	71	-	0.0
Finger Millet	0	.	.	0	.	0	-	0.0
Wheat	429	564	30,240,742	500	766	929	1,330	42.4
Barley	0	.	.	0	.	0	-	0.0
CEREALS		**586**	**30,576,512**		**27,426**	**22,932**	**28,012**	**2.1**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	0	.	0	-	0.0
Irish potatoes	0	.	.	0	.	0	-	0.0
ROOTS & TUBERS		**.**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	286	94	1,443,097	15,431	10,601	15,431	10,695	0.9
Cowpeas	143	145	285,762	2,572	1,197	2,715	1,342	10.8
Green gram	71	43	285,762	4,001	2,418	4,001	2,461	1.8
Chick peas	286	137	1,264,496	2,000	1,025	2,143	1,162	11.8
Field Peas	0	.	.	0	.	0	-	0.0
PULSES		**419**	**3,279,117**		**15,241**	**24,290**	**15,661**	**2.7**
Sunflower	0	.	.	0	.	0	-	0.0
Simsim	0	.	.	143	376	143	-	0.0
Groundnut	0	.	.	0	.	0	-	0.0
Soya Beans	**0**	.	.	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**.**	**.**		**376**	**143**	**-**	**0.0**
Okra	0	.	.	0	.	0	-	0.0
Radish	0	.	.	71	7	71	-	0.0
Turmeric	0	.	.	0	.	0	-	0.0
Bitteer Aubergine	0	.	.	0	.	0	-	0.0
Onion	71	14	371,490	0	.	71	-	0.0
Cabbage	0	.	.	71	14	71	-	0.0
Tomatoes	0	.	.	0	.	0	-	0.0
Spinach	0	.	.	143	10	143	-	0.0
Carrot	0	.	.	71	5	71	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	0	.	0	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**14**	**371,490**		**36**	**429**	**51**	**28.6**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS		**.**	**.**		**.**	**0**	**-**	**0.0**
Malay	0	.	.	71	29	71	-	0.0
Total	**1,357**	**1,020**	**34,227,119**	**47,079**	**43,108**	**47,865**	**44,128**	**2.3**

5.127 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households byHerbicide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Herbicide use							% of Planted area using Insecticide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	2,472	1,979	2,472	1,979	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**0**	**.**		**1,979**	**2,472**	**1,979**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	43	4	43	4	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**4**	**43**	**4**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	2,174	1,386	2,174	1,386	0.0
Cowpeas	0	0	.	213	104	213	104	0.0
Green gram	0	0	.	128	22	128	22	0.0
Chick peas	43	17	434,718	426	467	426	485	3.6
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**43**	**17**	**434,718**	**2,941**	**1,979**	**2,941**	**1,996**	**0.9**
Sunflower	0	0	.	43	9	43	9	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**9**	**43**	**9**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	43	9	43	9	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	128	28	128	28	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	170	21	170	21	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	85	11	85	11	0.0
Amaranths	0	0	.	85	6	85	6	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	43	17	43	17	0.0
FRUITS & VEGETABLES		**0**	**.**		**92**	**554**	**92**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**43**	**17**	**434,718**	**6,052**	**4,063**	**6,052**	**4,080**	**0.4**

5.128 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Herbicide use							% of Planted area using Insecticide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	267	81	2,049,716	30,657	20,137	30,924	20,218	0.4
Paddy	0	0	.	446	198	446	198	0.0
Sorghum	0	0	.	2,228	507	2,228	507	0.0
Finger Millet	0	0	.	624	135	624	135	0.0
Wheat	624	667	4,411,346	891	390	1,515	1,057	63.1
Barley	178	108	2,272,512	178	72	356	180	60.0
CEREALS		**857**	**8,733,574**		**21,439**	**36,093**	**22,296**	**3.8**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	802	292	4,745,539	9,268	3,039	10,070	3,331	8.8
Cowpeas	89	3	891,181	1,426	548	1,515	551	0.5
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	89	36	89	36	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	891	295	5,636,720	10,783	3,623	11,674	3,918	7.5
Sunflower	0	0	.	3,476	429	3,476	429	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**429**	**3,476**	**429**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0
Onion	178	72	9,357,400	178	54	356	126	57.1
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	178	6	1,782,362	0	.	178	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**78**	**11,139,762**		**54**	**535**	**132**	**59.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	0	0	.	0	.	0	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	**2,317**	**1,230**	**25,510,056**	**49,461**	**25,546**	**51,778**	**26,776**	**4.6**

5.129 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Herbicide use							% of Planted area using Insecticide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	10,089	9,049	10,089	9,049	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	1,492	994	1,492	994	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**0**	**.**		**10,043**	**11,581**	**10,043**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	71	14	71	14	0.0
Irish potatoes	0	0	.	142	20	142	20	0.0
ROOTS & TUBERS		**0**	**.**		**35**	**213**	**35**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	6,537	4,258	6,537	4,258	0.0
Cowpeas	0	0	.	71	29	71	29	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	6,608	4,287	6,608	4,287	0.0
Sunflower	0	0	.	71	29	71	29	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**29**	**71**	**29**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**.**		**.**	**0**	**-**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**0**	**0**	**.**	**0**	**14,393**	**18,473**	**-**	**0.0**

5.130 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Herbicide use							% of Planted area using Insecticide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	896	678	17,694,710	4,045	3,141	4,912	3,819	17.8
Paddy	0	0	.	29	12	29	12	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	144	94	144	94	0.0
Wheat	202	222	3,322,597	202	374	404	597	37.3
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**901**	**21,017,307**		**3,620**	**5,490**	**4,521**	**19.9**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	173	91	1,834,652	202	126	376	216	41.9
ROOTS & TUBERS		**91**	**1,834,652**		**126**	**376**	**216**	**41.9**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	722	889	18,418,747	2,600	1,392	3,294	2,281	39.0
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	722	889	18,418,747	2,600	1,392	3,294	2,281	39.0
Sunflower	0	0	.	116	76	116	76	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**76**	**116**	**76**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	58	44	187,799	29	6	87	50	88.2
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**44**	**187,799**		**6**	**87**	**50**	**88.2**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**2,051**	**1,924**	**41,458,505**	**7,367**	**5,220**	**9,361**	**7,144**	**26.9**

5.131 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha Rural

Crop	Herbicide use							% of Planted area using Insecticide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	119	34	477,755	35,473	16,512	35,593	16,545	0.2
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	1,194	919	20,543,471	119	99	1,314	1,018	90.3
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**953**	**21,021,226**		**16,611**	**36,907**	**17,563**	**5.4**
Cassava	0	.	.	0	.	0	-	0.0
Sweet Potato	0	.	.	358	94	358	-	0.0
Irish potatoes	119	12	1,911,021	836	273	956	285	4.2
ROOTS & TUBERS		**12**	**1,911,021**		**367**	**1,314**	**379**	**3.2**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	119	15	477,755	31,890	10,543	32,010	10,558	0.1
Cowpeas	0	0	.	1,433	515	1,433	515	0.0
Green gram	0	0	.	3,344	1,179	3,344	1,179	0.0
Chick peas	0	0	.	1,314	551	1,314	551	0.0
Field Peas	0	0	.	119	48	119	48	0.0
PULSES	119	15	477,755	38,101	12,837	38,220	12,851	0.1
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**119**	**12**	**1,194,388**	**478**	**97**	**597**	109	11.1
OIL SEEDS & OIL NUTS		**12**	**1,194,388**		**97**	**597**	**109**	**11.1**
Okra	0	0	.	239	68	239	68	0.0
Radish	0	0	.	119	12	119	12	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	239	73	239	73	0.0
Onion	0	0	.	119	48	119	48	0.0
Cabbage	0	0	.	358	109	358	109	0.0
Tomatoes	119	12	1,194,388	239	75	358	87	13.9
Spinach	0	0	.	119	24	119	24	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	597	16	597	16	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**12**	**1,194,388**		**425**	**2,150**	**437**	**2.8**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**1,792**	**1,003**	**25,798,777**	**77,396**	**30,336**	**79,188**	**31,339**	**3.2**

5.132 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Insecticide use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Herbicide use							% of Planted area using Insecticide
	Number of Households using Herbicide	Planted Area Applied with Herbicide	Cost of Herbicide	Number of Households NOT using Herbicide	Planted Area Without Herbicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	2,318	2,594	66,312,094	36,237	25,529	38,555	28,123	9.2
Paddy	244	37	976,075	488	173	732	210	17.6
Sorghum	0	0	.	366	114	366	114	0.0
Finger Millet	0	0	.	610	321	610	321	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**2,631**	**67,288,169**		**26,136**	**40,263**	**28,768**	**9.1**
Cassava	0	0	.	122	20	122	20	0.0
Sweet Potato	0	0	.	366	10	366	10	0.0
Irish potatoes	0	0	.	122	25	122	25	0.0
ROOTS & TUBERS		**0**	**.**		**54**	**610**	**54**	**0.0**
Mung Bean	0	0	.	122	49	122	49	0.0
Beans	488	240	3,721,286	22,328	7,334	22,816	7,573	3.2
Cowpeas	0	0	.	610	67	610	67	0.0
Green gram	0	0	.	488	222	488	222	0.0
Chick peas	0	0	.	122	12	122	12	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	488	240	3,721,286	23,670	7,685	24,158	7,924	3.0
Sunflower	0	0	.	4,148	1,648	4,148	1,648	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	122	12	122	12	0.0
Soya Beans	**0**	0	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**1,661**	**4,270**	**1,661**	**0.0**
Okra	0	0	.	122	12	122	12	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	122	49	122	49	0.0
Bitteer Aubergine	0	0	.	244	35	244	35	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	122	25	122	25	0.0
Tomatoes	122	25	976,075	732	252	854	277	8.9
Spinach	0	0	.	0	.	0	-	0.0
Carrot	122	49	3,660,281	0	.	122	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	122	49	1,952,150	0	.	122	-	0.0
Cucumber	244	198	5,734,441	0	.	244	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**321**	**12,322,947**		**373**	**1,952**	**694**	**46.3**
Cotton	0	.	.	0	.	0	-	0.0
Tobacco	0	.	.	0	.	0	-	0.0
CASH CROPS	**0**	**.**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	.	.	0	.	0	-	0.0
Total	**3,660**	**3,192**	**83,332,402**	**67,593**	**35,909**	**71,253**	**39,101**	**8.2**

5.133 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,143	900	20,361	25,579	21,504	26,479	3.4
Paddy	429	159	0	0	429	159	100.0
Sorghum	0	0	71	43	71	43	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	929	1,330	929	1,330	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**1,059**		**26,953**		**28,012**	**3.8**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	-	0.0
Irish potatoes	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**0**		**.**		**-**	**0.0**
Mung Bean	0	0	0	0	0	-	0.0
Beans	500	276	14,931	10,419	15,431	10,695	2.6
Cowpeas	0	0	2,715	1,342	2,715	1,342	0.0
Green gram	0	0	4,001	2,461	4,001	2,461	0.0
Chick peas	0	0	2,143	1,162	2,143	1,162	0.0
Field Peas	0	0	0		0	-	0.0
PULSES		**276**		**15,385**		**15,661**	**1.8**
Sunflower	0	0	0	0	0	-	0.0
Simsim	0	0	143	376	143	376	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	**0**	0	-	0.0
OIL SEEDS & OIL NUTS		**0**		**376**		**376**	**0.0**
Okra	0	0	0	0	0	-	0.0
Radish	0	0	71	7	71	7	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	71	14	0	0	71	14	100.0
Cabbage	0	0	71	14	71	14	0.0
Tomatoes	0	0	0	0	0	-	0.0
Spinach	0	0	143	10	143	10	0.0
Carrot	0	0	71	5	71	5	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**14**		**36**		**51**	**28.6**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS		**0**		**.**		**-**	**0.0**
Malay	0	0	71	29	71	29	0.0
Total	**2,143**	**1,350**	**45,722**	**42,778**	**47,865**	**44,128**	**3.1**

5.134 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	256	55	2,216	1,924	2,472	1,979	2.8
Paddy	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**55**		**1,924**		**1,979**	**2.8**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	43	4	0	0	43	4	100.0
Irish potatoes	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**4**		**0**		**4**	**100.0**
Mung Bean	0	0	0	0	0	-	0.0
Beans	256	35	1,918	1,351	2,174	1,386	2.5
Cowpeas	43	9	170	96	213	104	8.3
Green gram	0	0	128	22	128	22	0.0
Chick peas	0	0	426	485	426	485	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	**298**	**44**	**2,642**	**1,952**	**2,941**	**1,996**	**2.2**
Sunflower	43	9	0	0	43	9	100.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	0	0	-	0.0
OIL SEEDS & OIL NUTS		**9**		**0**		**9**	**100.0**
Okra	0	0	0	0	0	-	0.0
Radish	43	1	0	8	43	9	12.5
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	43	4	85	24	128	28	15.2
Cabbage	0	0	0	0	0	-	0.0
Tomatoes	0	0	0	0	0	-	0.0
Spinach	43	4	128	16	170	21	20.8
Carrot	0	0	0	0	0	-	0.0
Chillies	43	2	43	9	85	11	20.6
Amaranths	43	2	43	4	85	6	32.4
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	43	17	43	17	0.0
FRUITS & VEGETABLES		**14**		**78**		**92**	**15.2**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS		**0**		**0**		**-**	**0.0**
Malay	0	0	0	0	0	-	0.0
Total	**852**	**126**	**5,200**	**3,955**	**6,052**	**4,080**	**3.1**

5.135 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	2,139	976	28,785	19,241	30,924	20,218	4.8
Paddy	178	72	267	126	446	198	36.4
Sorghum	0	0	2,228	507	2,228	507	0.0
Finger Millet	0	0	624	135	624	135	0.0
Wheat	0	0	1,515	1,057	1,515	1,057	0.0
Barley	0	0	356	180	356	180	0.0
CEREALS		**1,049**		**0**		**1,049**	**100.0**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	-	0.0
Irish potatoes	0	0	0	0	0	-	0.0
ROOTS & TUBERS		**0**		**0**		**-**	**0.0**
Mung Bean	0	0	0	0	0	-	0.0
Beans	446	144	9,625	3,187	10,070	3,331	4.3
Cowpeas	89	3	1,426	548	1,515	551	0.5
Green gram	0	0	0	0	0	-	0.0
Chick peas	0	0	89	36	89	36	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	535	147	11,140	3,771	11,674	3,918	3.8
Sunflower	0	0	3,476	429	3,476	429	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	**0**	0	-	0.0
OIL SEEDS & OIL NUTS		**0**		**429**		**429**	**0.0**
Okra	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	356	110	0	16	356	126	87.5
Cabbage	0	0	0	0	0	-	0.0
Tomatoes	0	0	0	0	0	-	0.0
Spinach	178	6	0	0	178	6	100.0
Carrot	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**116**		**16**		**132**	**88.0**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS	0	0	0	0	0	-	0.0
Malay	0	0	0	0	0	-	0.0
Total	**3,386**	**1,312**	**48,391**	**25,464**	**51,778**	**26,776**	**4.9**

5.136 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	355	236	9,734	8,814	10,089	9,049	2.6
Paddy	0	0	0	0	0	-	0.0
Sorghum	142	93	1,350	900	1,492	994	9.4
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**329**		**9,714**		**10,043**	**3.3**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	71	14	0	0	71	14	100.0
Irish potatoes	0	0	142	20	142	20	0.0
ROOTS & TUBERS		**14**		**20**		**35**	**41.7**
Mung Bean	0	0	0	0	0	-	0.0
Beans	71	22	6,466	4,236	6,537	4,258	0.5
Cowpeas	0	0	71	29	71	29	0.0
Green gram	0	0	0	0	0	-	0.0
Chick peas	0	0	0	0	0	-	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	71	22	6,537	4,265	6,608	4,287	0.5
Sunflower	0	0	71	29	71	29	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	0	0	-	0.0
OIL SEEDS & OIL NUTS		**0**		**29**		**29**	**0.0**
Okra	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	0	0	0	0	0	-	0.0
Cabbage	0	0	0	0	0	-	0.0
Tomatoes	0	0	0	0	0	-	0.0
Spinach	0	0	0	0	0	-	0.0
Carrot	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**0**		**0**		**-**	**0.0**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS	0	0	0	0	0	-	0.0
Malay	0	0	0	0	0	-	0.0
Total	**639**	**365**	**17,834**	**14,028**	**18,473**	**14,393**	**2.5**

5.137 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	693	456	4,218	3,363	4,912	3,819	11.9
Paddy	0	0	29	12	29	12	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	29	23	116	70	144	94	25.0
Wheat	58	298	347	298	404	597	50.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**778**	**4,709**	**3,743**	**5,490**	**4,521**	**17.2**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	0	0	0	-	0.0
Irish potatoes	58	41	318	175	376	216	18.9
ROOTS & TUBERS		**41**	**318**	**175**	**376**	**216**	**18.9**
Mung Bean	0	0	0	0	0	-	0.0
Beans	665	629	2,629	1,652	3,294	2,281	27.6
Cowpeas	0	0	0	0	0	-	0.0
Green gram	0	0	0	0	0	-	0.0
Chick peas	0	0	0	0	0	-	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	665	629	2,629	1,652	3,294	2,281	27.6
Sunflower	87	58	29	18	116	76	76.9
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**0**	0	0	0	0	-	0.0
OIL SEEDS & OIL NUTS		**58**	**29**	**18**	**116**	**76**	**76.9**
Okra	0	0	0	0	0	-	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	0	0	0	0	0	-	0.0
Onion	0	0	0	0	0	-	0.0
Cabbage	0	0	0	0	0	-	0.0
Tomatoes	29	6	58	44	87	50	11.8
Spinach	0	0	0	0	0	-	0.0
Carrot	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	0	0	0	0	0	-	0.0
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**6**	**58**	**44**	**87**		**0.0**
Cotton	0	0	0	0	0		0.0
Tobacco	0	0	0	0	0		0.0
CASH CROPS	0	0	0	0	0		0.0
Malay	0	0	0	0	0		0.0
Total	**1,618**	**1,512**	**7,743**	**5,632**	**9,361**		**0.0**

5.138 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha Rural

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	2,867	1,545	32,726	15,000	35,593	16,545	9.3
Paddy	0	0	0	0	0	-	0.0
Sorghum	0	0	0	0	0	-	0.0
Finger Millet	0	0	0	0	0	-	0.0
Wheat	0	0	1,314	1,018	1,314	1,018	0.0
Barley	0	0	0	.	0	-	0.0
CEREALS		**1,545**		**16,018**		**17,563**	**8.8**
Cassava	0	0	0	0	0	-	0.0
Sweet Potato	0	0	358	94	358	94	0.0
Irish potatoes	239	79	717	206	956	285	27.6
ROOTS & TUBERS		**79**		**301**		**379**	**20.7**
Mung Bean	0	0	0	0	0	-	0.0
Beans	2,628	711	29,382	9,847	32,010	10,558	6.7
Cowpeas	0	0	1,433	515	1,433	515	0.0
Green gram	0	0	3,344	1,179	3,344	1,179	0.0
Chick peas	0	0	1,314	551	1,314	551	0.0
Field Peas	0	0	119	48	119	48	0.0
PULSES	2,628	711	35,593	12,140	38,220	12,851	5.5
Sunflower	0	0	0	0	0	-	0.0
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	0	0	0	-	0.0
Soya Beans	**119**	**12**	**478**	**97**	**597**	109	11.1
OIL SEEDS & OIL NUTS		**12**		**97**		**109**	**11.1**
Okra	119	29	119	39	239	68	42.9
Radish	0	0	119	12	119	12	0.0
Turmeric	0	0	0	0	0	-	0.0
Bitteer Aubergine	239	73	0	0	239	73	100.0
Onion	0	0	119	48	119	48	0.0
Cabbage	119	48	239	60	358	109	44.4
Tomatoes	358	87	0	0	358	87	100.0
Spinach	0	0	119	24	119	24	0.0
Carrot	0	0	0	0	0	-	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	119	2	478	14	597	16	14.7
Cucumber	0	0	0	0	0	-	0.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**239**		**198**		**437**	**54.8**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS	0	0	0	0	0	-	0.0
Malay	0	0	0	0	0	-	0.0
Total	**6,808**	**2,586**	**72,380**	**28,753**	**79,188**	**31,339**	**8.3**

5.139 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by use of Irrigation and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Irrigation use						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area Without Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	6,711	4,140	31,844	23,983	38,555	28,123	14.7
Paddy	610	161	122	49	732	210	76.5
Sorghum	0	0	366	114	366	114	0.0
Finger Millet	244	37	366	284	610	321	11.5
Wheat	0	0	0	0	0	-	0.0
Barley	0	0	0	0	0	-	0.0
CEREALS		**4,337**		**24,430**		**28,768**	**15.1**
Cassava	0	0	122	20	122	20	0.0
Sweet Potato	0	0	366	10	366	10	0.0
Irish potatoes	0	0	122	25	122	25	0.0
ROOTS & TUBERS		**0**		**54**		**54**	**0.0**
Mung Bean	122	49	0	0	122	49	100.0
Beans	3,172	1,071	19,644	6,502	22,816	7,573	14.1
Cowpeas	0	0	610	67	610	67	0.0
Green gram	0	0	488	222	488	222	0.0
Chick peas	0	0	122	12	122	12	0.0
Field Peas	0	0	0	0	0	-	0.0
PULSES	3,294	1,121	20,864	6,804	24,158	7,924	14.1
Sunflower	610	46	3,538	1,602	4,148	1,648	2.8
Simsim	0	0	0	0	0	-	0.0
Groundnut	0	0	122	12	122	12	0.0
Soya Beans	**0**	0	**0**	**0**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**46**		**1,614**		**1,661**	**2.8**
Okra	0	0	122	12	122	12	0.0
Radish	0	0	0	0	0	-	0.0
Turmeric	0	0	122	49	122	49	0.0
Bitteer Aubergine	122	12	122	22	244	35	35.7
Onion	0	0	0	0	0	-	0.0
Cabbage	0	0	122	25	122	25	0.0
Tomatoes	732	252	122	25	854	277	91.1
Spinach	0	0	0	0	0	-	0.0
Carrot	0	0	122	49	122	49	0.0
Chillies	0	0	0	0	0	-	0.0
Amaranths	122	49	0	0	122	49	100.0
Cucumber	244	198	0	0	244	198	100.0
Egg Plant	0	0	0	0	0	-	0.0
FRUITS & VEGETABLES		**511**		**183**		**694**	**73.7**
Cotton	0	0	0	0	0	-	0.0
Tobacco	0	0	0	0	0	-	0.0
CASH CROPS	0	0	0	0	0	-	0.0
Malay	0	0	0	0	0	-	0.0
Total	**12,689**	**6,015**	**58,564**	**33,086**	**71,253**	**39,101**	**15.4**

5.140 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Improved Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Improved Seeds use							% of Planted area using Insecticide
	Number of Households using Improved seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved seeds	Planted Area Without Improved seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	5,072	5,217	267,848,099	120,734	21,262	21,504	26,479	19.7
Paddy	0	0	0	.	159	429	159	0.0
Sorghum	0	0	0	.	43	71	43	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	143	434	48,579,504	40,007	897	929	1,330	32.6
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**5,651**	**316,427,603**		**22,361**	**22,932**	**28,012**	**20.2**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	0	0	0	.	.	0	-	0.0
Irish potatoes	0	0	0	.	.	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	857	457	2,629,008	2,286	10,238	15,431	10,695	4.3
Cowpeas	0	0	0	.	1,342	2,715	1,342	0.0
Green gram	0	0	0	.	2,461	4,001	2,461	0.0
Chick peas	0	0	0	.	1,162	2,143	1,162	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES		**457**	**2,629,008**		**15,204**	**24,290**	**15,661**	**2.9**
Sunflower	0	0	0	.	.	0	-	**0.0**
Simsim	0	0	0	.	376	143	376	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**376**	**143**	**376**	**0.0**
Okra	0	0	0	.	.	0	-	0.0
Radish	0	0	0	.	7	71	7	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	71	14	2,857,618	572	.	71	-	0.0
Cabbage	0	0	0	.	14	71	14	0.0
Tomatoes	0	0	0	.	.	0	-	0.0
Spinach	143	10	242,898	14,288	.	143	-	0.0
Carrot	71	4	121,449	7,144	1	71	5	75.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	0	0	0	.	.	0	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**28**	**3,221,964**		**23**	**429**	**51**	**54.7**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS		**0**	**0**		**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	29	71	29	0.0
Total	**6,358**	**6,136**	**322,278,576**	**185,031**	**37,992**	**47,865**	**44,128**	**13.9**

5.141 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Improved Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Improved Seeds use							% of Planted area using Insecticide
	Number of Households using Improved seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved seeds	Planted Area Without Improved seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,151	815	60,421,557	29,280	1,164	2,472	1,979	41.2
Paddy	0	0	0	.	.	0	-	0.0
Sorghum	0	0	0	.	.	0	-	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	0	0	0	.	.	0	-	0.0
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**815**	**60,421,557**		**1,164**	**2,472**	**1,979**	**41.2**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	0	0	0	.	4	43	4	0.0
Irish potatoes	0	0	0	.	.	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**4**	**43**	**4**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	85	107	13,552,977	9,376	1,279	2,174	1,386	7.7
Cowpeas	43	1	106,549	43	104	213	104	0.8
Green gram	0	0	0	.	22	128	22	0.0
Chick peas	0	0	0	.	485	426	485	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES	**128**	**108**	**13,659,525**	**9,419**	**1,888**	**2,941**	**1,996**	**5.4**
Sunflower	0	0	0	.	9	43	9	0.0
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**9**	**43**	**9**	**0.0**
Okra	0	0	0	.	.	0	-	0.0
Radish	43	9	127,858	4,262	.	43	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	128	28	809,769	25,572	.	128	-	0.0
Cabbage	0	0	0	.	.	0	-	0.0
Tomatoes	0	0	0	.	.	0	-	0.0
Spinach	170	21	660,601	25,742	.	170	-	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	85	11	1,385,131	8,524	.	85	-	0.0
Amaranths	0	0	0	.	6	85	6	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	43	17	119,334	4,262	.	43	-	0.0
FRUITS & VEGETABLES		**86**	**3,102,694**		**6**	**554**	**92**	**93.1**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	.	0	-	0.0
Total	**1,747**	**1,009**	**3,072**	**107,060**	**3,072**	**6,052**	**4,080**	**24.7**

5.142 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Improved Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Improved Seeds use							% of Planted area using Insecticide
	Number of Households using Improved seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved seeds	Planted Area Without Improved seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	11,496	7,181	458,316,377	13,037	13,037	30,924	20,218	35.5
Paddy	178	72	846,622	126	126	446	198	36.4
Sorghum	0	0	0	507	507	2,228	507	0.0
Finger Millet	0	0	0	135	135	624	135	0.0
Wheat	178	63	5,614,440	994	994	1,515	1,057	6.0
Barley	178	108	9,268,282	72	72	356	180	60.0
CEREALS		**7,425**	**474,045,721**		**14,871**	**36,093**	**22,296**	**33.3**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	0	0	0	.	.	0	-	0.0
Irish potatoes	0	0	0	.	.	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	1,426	413	21,049,695	2,918	2,918	10,070	3,331	12.4
Cowpeas	89	36	534,709	515	515	1,515	551	6.5
Green gram	0	0	0	.	.	0	-	0.0
Chick peas	0	0	0	36	36	89	36	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES	1,515	449	21,584,403	3,469	3,469	11,674	3,918	11.5
Sunflower	0	0	0	429	429	3,476	429	0.0
Simsim	0	0	0	.	.	0		0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**429**	**3,476**	**429**	**0.0**
Okra	0	0	0	.	.	0	-	0.0
Radish	0	0	0	.	.	0	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	0	0	0	126	126	356	126	0.0
Cabbage	0	0	0	.	.	0	-	0.0
Tomatoes	0	0	0	.	.	0	-	0.0
Spinach	0	0	0	6	6	178	6	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	0	0	0	.	.	0	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**0**		**132**	**535**	**132**	**0.0**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	.	0	-	0.0
Total	**13,546**	**7,874**	**495,630,124**	**18,902**	**18,902**	**51,778**	**26,776**	**29.4**

5.143 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Improved Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Improved Seeds use							% of Planted area using Insecticide
	Number of Households using Improved seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved seeds	Planted Area Without Improved seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	4,121	3,683	164,260,254	1,217,169	5,366	10,089	9,049	40.7
Paddy	0	0	0	.	0	0	-	0.0
Sorghum	0	0	0	.	994	1,492	994	0.0
Finger Millet	0	0	0	.	0	0	-	0.0
Wheat	0	0	0	.	0	0	-	0.0
Barley	0	0	0	.	0	0	-	0.0
CEREALS		**3,683**	**164,260,254**		**6,360**	**11,581**	**10,043**	**36.7**
Cassava	0	0	0	.	0	0	-	0.0
Sweet Potato	0	0	0	.	14	71	14	0.0
Irish potatoes	0	0	0	.	20	142	20	0.0
ROOTS & TUBERS		**0**	**0**		**35**	**213**	**35**	**0.0**
Mung Bean	0	0	0	.	0	0	-	0.0
Beans	213	129	4,227,515	4,476	4,128	6,537	4,258	3.0
Cowpeas	0	0	0	.	29	71	29	0.0
Green gram	0	0	0	.	0	0	-	0.0
Chick peas	0	0	0	.	0	0	-	0.0
Field Peas	0	0	0	.	0	0	-	0.0
PULSES	213	129	4,227,515	4,476	4,157	6,608	4,287	3.0
Sunflower	71	29	1,065,760	142	0	71	29	100.0
Simsim	0	0	0	.	0	0	-	0.0
Groundnut	0	0	0	.	0	0	-	0.0
Soya Beans	**0**	0	0	**.**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**29**	**1,065,760**		**0**	**71**	**29**	**100.0**
Okra	0	0	0	.	0	0	-	0.0
Radish	0	0	0	.	0	0	-	0.0
Turmeric	0	0	0	.	0	0	-	0.0
Bitteer Aubergine	0	0	0	.	0	0	-	0.0
Onion	0	0	0	.	0	0	-	0.0
Cabbage	0	0	0	.	0	0	-	0.0
Tomatoes	0	0	0	.	0	0	-	0.0
Spinach	0	0	0	.	0	0	-	0.0
Carrot	0	0	0	.	0	0	-	0.0
Chillies	0	0	0	.	0	0	-	0.0
Amaranths	0	0	0	.	0	0	-	0.0
Cucumber	0	0	0	.	0	0	-	0.0
Egg Plant	0	0	0	.	0	0	-	0.0
FRUITS & VEGETABLES		**0**	**0**		**0**	**0**	**-**	**0.0**
Cotton	0	0	0	.	0	0	-	0.0
Tobacco	0	0	0	.	0	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**0**	**0**	**-**	**0.0**
Malay	0	0	0	.	0	0	-	0.0
Total	**4,405**	**3,841**	**169,553,528**	**1,221,787**	**10,551**	**18,473**	**14,393**	**26.7**

5.144 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Improved Seeds and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Improved Seeds use							% of Planted area using Insecticide
	Number of Households using Improved seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved seeds	Planted Area Without Improved seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,618	1,346	53,716,289	4,363,900	2,474	4,912	3,819	35.2
Paddy	0	0	0	.	12	29	12	0.0
Sorghum	0	0	0	.	0	0	-	0.0
Finger Millet	0	0	0	.	94	144	94	0.0
Wheat	58	281	26,291,858	43,916	0	404	281	100.0
Barley	0	0	0	.	0	0	-	0.0
CEREALS		**1,626**	**80,008,147**		**2,895**	**5,490**	**4,521**	**36.0**
Cassava	0	0	0	.	0	0	-	0.0
Sweet Potato	0	0	0	.	0	0	-	0.0
Irish potatoes	202	88	25,829,584	116,609	129	376	216	40.5
ROOTS & TUBERS		**88**	**25,829,584**		**129**	**376**	**216**	**40.5**
Mung Bean	0	0	0	.	0	0	-	0.0
Beans	607	480	27,058,656	25,310	1,801	3,294	2,281	21.0
Cowpeas	0	0	0	.	0	0	-	0.0
Green gram	0	0	0	.	0	0	-	0.0
Chick peas	0	0	0	.	0	0	-	0.0
Field Peas	0	0	0	.	0	0	-	0.0
PULSES	607	480	27,058,656	25,310	1,801	3,294	2,281	21.0
Sunflower	58	29	288,922	58	47	116	76	38.5
Simsim	0	0	0	.	0	0	-	0.0
Groundnut	0	0	0	.	0	0	-	0.0
Soya Beans	**0**	0	0	**.**	0	**0**	-	0.0
OIL SEEDS & OIL NUTS		**29**	**288,922**		**47**	**116**	**76**	**38.5**
Okra	0	0	0	.	0	0	-	0.0
Radish	0	0	0	.	0	0	-	0.0
Turmeric	0	0	0	.	0	0	-	0.0
Bitteer Aubergine	0	0	0	.	0	0	-	0.0
Onion	0	0	0	.	0	0	-	0.0
Cabbage	0	0	0	.	0	0	-	0.0
Tomatoes	87	50	13,105,480	39,582	0	87	50	100.0
Spinach	0	0	0	.	0	0	-	0.0
Carrot	0	0	0	.	0	0	-	0.0
Chillies	0	0	0	.	0	0	-	0.0
Amaranths	0	0	0	.	0	0	-	0.0
Cucumber	0	0	0	.	0	0	-	0.0
Egg Plant	0	0	0	.	0	0	-	0.0
FRUITS & VEGETABLES		**50**	**13,105,480**		**0**	**87**	**50**	**100.0**
Cotton	0	0	0	.	0	0	-	0.0
Tobacco	0	0	0	.	0	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**0**	**0**	**-**	**0.0**
Malay	0	0	0	.	0	0	-	0.0
Total	**2,629**	**2,273**	**146,290,789**	**4,589,374**	**4,872**	**9,361**	**7,144**	**31.8**

5.145 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Improved Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha Rural

Crop	Improved Seeds use							% of Planted area using Insecticide
	Number of Households using Improved seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved seeds	Planted Area Without Improved seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	17,080	7,885	377,457,606	4,066,174	8,661	35,593	16,545	47.7
Paddy	0	0	0	.	.	0	-	0.0
Sorghum	0	0	0	.	.	0	-	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	358	387	25,679,338	84,802	631	1,314	1,018	38.0
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**8,272**	**403,136,944**		**9,292**	**36,907**	**17,563**	**47.1**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	119	24	895,791	17,916	70	358	94	25.6
Irish potatoes	358	109	31,197,410	71,663	176	956	285	38.2
ROOTS & TUBERS		**133**	**32,093,201**		**246**	**1,314**	**379**	**35.1**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	5,016	1,331	95,837,679	90,773	9,227	32,010	10,558	12.6
Cowpeas	0	0	0	.	515	1,433	515	0.0
Green gram	0	0	0	.	1,179	3,344	1,179	0.0
Chick peas	358	145	14,690,970	9,794	406	1,314	551	26.3
Field Peas	0	0	0	.	48	119	48	0.0
PULSES	5,375	1,476	110,528,649	100,567	11,375	38,220	12,851	11.5
Sunflower	0	0	0	.	.	0	-	0.0
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**239**	**24**	**453,867**	**597**	**85**	**597**	109	22.2
OIL SEEDS & OIL NUTS		**24**	**453,867**		**85**	**597**	**109**	**22.2**
Okra	0	0	0	.	68	239	68	0.0
Radish	0	0	0	.	12	119	12	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	73	239	73	0.0
Onion	119	48	597,194	29,860	.	119	-	0.0
Cabbage	239	73	12,254,419	68,677	36	358	109	66.7
Tomatoes	358	87	6,163,041	20,305	.	358	-	0.0
Spinach	119	24	597,194	83,607	.	119	-	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	358	10	597,194	7,166	7	597	16	58.1
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**242**	**20,209,042**		**195**	**2,150**	**437**	**55.3**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	.	0	-	0.0
Total	**24,724**	**10,146**	**566,421,703**	**4,551,334**	**21,193**	**79,188**	**31,339**	**32.4**

5.146 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Improved Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Improved Seeds use							% of Planted area using Insecticide
	Number of Households using Improved seeds	Planted Area Applied with Improved Seeds	Cost of Improved Seeds	Number of Households NOT using Improved seeds	Planted Area Without Improved seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	21,718	15,815	789,522,163	607,851	12,308	38,555	28,123	56.2
Paddy	244	99	1,464,112	3,172	111	732	210	47.1
Sorghum	0	0	.	.	114	366	-	0.0
Finger Millet	0	0	.	.	321	610	-	0.0
Wheat	0	0	.	.	.	0	-	0.0
Barley	0	0	.	.	.	0	-	0.0
CEREALS		15,914	790,986,276		12,854	40,263	28,768	55.3
Cassava	0	0	.	.	20	122	-	0.0
Sweet Potato	0	0	.	.	10	366	-	0.0
Irish potatoes	0	0	.	.	25	122	-	0.0
ROOTS & TUBERS		0	.		54	610	-	0.0
Mung Bean	122	49	54,904,218	5,490	.	122	-	0.0
Beans	3,782	778	78,976,667	97,974	6,795	22,816	7,573	10.3
Cowpeas	0	0	.	.	67	610	-	0.0
Green gram	0	0	.	.	222	488	-	0.0
Chick peas	0	0	.	.	12	122	-	0.0
Field Peas	0	0	.	.	.	0	-	0.0
PULSES	3,904	828	133,880,885	103,464	7,096	24,158	7,924	10.4
Sunflower	0	0	.	.	1,648	4,148	-	0.0
Simsim	0	0	.	.	.	0	-	0.0
Groundnut	0	0	.	.	12	122	-	0.0
Soya Beans	**0**	0	**.**	**.**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	.		1,661	4,270	-	0.0
Okra	0	0	.	.	12	122	-	0.0
Radish	0	0	.	.	.	0	-	0.0
Turmeric	0	0	.	.	49	122	-	0.0
Bitteer Aubergine	122	12	732,056	6,100	22	244	35	35.7
Onion	0	0	.	.	.	0	-	0.0
Cabbage	122	25	2,440,187	1,464,112	.	122	-	0.0
Tomatoes	610	216	14,885,143	91,629	61	854	277	78.1
Spinach	0	0	.	.	.	0		0.0
Carrot	122	49	3,782,291	91,507	.	122	-	0.0
Chillies	0	0	.	.	.	0	-	0.0
Amaranths	122	49	12,200,937	2,440	.	122		0.0
Cucumber	244	198	16,227,247	231,818	.	244		0.0
Egg Plant	0	0	.	.	.	0	-	0.0
FRUITS & VEGETABLES		550	50,267,862		144	1,952	694	79.2
Cotton	0	.	.	.	.	0	-	0.0
Tobacco	0	.	.	.	.	0	-	0.0
CASH CROPS	0	.	.	.	.	0	-	0.0
Malay	0	.	.	.	.	0	-	0.0
Total	27,208	17,291	975,135,022	2,602,094	21,809	71,253	39,101	44.2

5.147 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Local seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with Local Seeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	16,431	20,776	288,980,612	553,092	5,702	21,504	26,479	78.5
Paddy	429	159	10,716,067	15,645	.	429	-	0.0
Sorghum	71	43	571,524	7,144	.	71	-	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	786	897	42,949,997	93,301	434	929	1,330	67.4
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**21,876**	**343,218,200**		**6,136**	**22,932**	**28,012**	**78.1**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	0	0	0	.	.	0	-	0.0
Irish potatoes	0	0	0	.	.	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	14,574	10,104	411,082,624	478,508	591	15,431	10,695	94.5
Cowpeas	2,715	1,342	25,292,419	24,147	.	2,715	-	0.0
Green gram	4,001	2,418	44,257,357	32,720	43	4,001	2,461	98.2
Chick peas	2,143	1,162	34,620,041	50,151	.	2,143	-	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES		**15,026**	**515,252,442**		**635**	**24,290**	**15,661**	**95.9**
Sunflower	0	0	0	.	.	0	-	0.0
Simsim	143	376	1,357,369	2,858	.	143	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**376**	**1,357,369**		**.**	**143**	**-**	**0.0**
Okra	0	0	0	.	.	0	-	0.0
Radish	71	7	142,881	71	.	71	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	0	0	0	.	14	71	14	0.0
Cabbage	71	7	250,042	7,144	7	71	14	50.0
Tomatoes	0	0	0	.	.	0	-	0.0
Spinach	0	0	0	.	10	143	10	0.0
Carrot	0	0	0	.	5	71	5	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	0	0	0	.	.	0	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**14**	**392,922**		**36**	**429**	**51**	**28.6**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS		**0**	**0**		**.**	**0**	**-**	**0.0**
Malay	71	29	571,524	572	.	71	-	0.0
Total	**41,507**	**37,321**	**860,792,456**	**1,265,353**	**6,807**	**47,865**	**44,128**	**84.6**

5.148 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Local Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with Local Seeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,321	1,030	24,348,477	51,527	949	2,472	1,979	52.0
Paddy	0	0	0	.	.	0	-	0.0
Sorghum	0	0	0	.	.	0	-	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	0	0	0	.	.	0	-	0.0
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**1,030**	**24,348,477**		**949**	**2,472**	**1,979**	**52.0**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	43	4	426,194	8,524	.	43	-	0.0
Irish potatoes	0	0	0	.	.	0	-	0.0
ROOTS & TUBERS		**4**	**426,194**		**.**	**43**	**-**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	2,088	1,193	75,250,261	81,403	192	2,174	1,386	86.1
Cowpeas	170	104	4,879,924	3,452	1	213	104	99.2
Green gram	128	14	788,459	1,321	8	128	22	65.0
Chick peas	426	485	25,652,631	20,969	.	426	-	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES	**2,813**	**1,795**	**106,571,275**	**107,145**	**201**	**2,941**	**1,996**	**90.0**
Sunflower	43	1	213,097	426	8	43	9	12.5
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**1**	**213,097**		**8**	**43**	**9**	**12.5**
Okra	0	0	0	.	.	0	-	0.0
Radish	0	0	0	.	9	43	9	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	0	0	0	.	28	128	28	0.0
Cabbage	0	0	0	.	.	0	-	0.0
Tomatoes	0	0	0	.	.	0	-	0.0
Spinach	0	0	0	.	21	170	21	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	0	0	0	.	11	85	11	0.0
Amaranths	85	6	340,955	1,918	.	85	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	17	43	17	0.0
FRUITS & VEGETABLES		**6**	**340,955**		**86**	**554**	**92**	**6.9**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	.	0	-	0.0
Total	**4,305**	**2,837**	**131,899,998**	**169,540**	**1,243**	**6,052**	**4,080**	**69.5**

5.149 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Local Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with Local Seeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	19,962	11,865	397,642,726	400,586	8,631	30,924	20,495	57.9
Paddy	267	126	6,149,149	33,152	72	446	198	63.6
Sorghum	2,228	482	6,505,621	16,130	25	2,228	507	95.1
Finger Millet	624	135	2,874,059	4,812	.	624	-	0.0
Wheat	1,337	961	78,067,454	122,270	96	1,515	1,057	90.9
Barley	178	72	1,648,685	8,912	108	356	180	40.0
CEREALS		**13,642**	**492,887,693**		**8,932**	**36,093**	**22,573**	**60.4**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	0	0	0	.	.	0	-	0.0
Irish potatoes	0	0	0	.	.	0	-	0.0
ROOTS & TUBERS		**0**	**0**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	8,644	2,750	169,805,713	153,016	580	10,070	3,331	82.6
Cowpeas	1,426	280	8,421,660	13,100	272	1,515	551	50.7
Green gram	0	0	0	.	.	0	-	0.0
Chick peas	89	36	2,138,834	1,782	.	89	-	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES	**10,159**	**3,066**	**180,366,208**	**167,898**	**852**	**11,674**	**3,918**	**78.3**
Sunflower	3,476	395	17,333,559	29,855	34	3,476	429	92.0
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**395**	**17,333,559**		**34**	**3,476**	**429**	**92.0**
Okra	0	0	0	.	.	0	-	0.0
Radish	0	0	0	.	.	0	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	356	126	32,973,696	3,832	.	356	-	0.0
Cabbage	0	0	0	.	.	0	-	0.0
Tomatoes	0	0	0	.	.	0	-	0.0
Spinach	178	6	178,236	8,912	.	178	-	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	0	0	0	.	.	0	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**132**	**33,151,932**		**.**	**535**	**-**	**0.0**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	0.0
Malay	0	0	0	.	.	0	-	0.0
Total	**38,766**	**17,235**	**723,739,393**	**796,359**	**9,818**	**51,778**	**27,053**	**63.7**

5.150 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Local seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with Local Seeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	5,968	5,165	56,830,584	92,366	3,884	10,089	9,049	57.1
Paddy	0	0	0	.	.	0	-	0.0
Sorghum	1,492	994	10,707,335	14,352	.	1,492	-	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	0	0	0	.	.	0	-	0.0
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**6,159**	**67,537,919**		**3,884**	**11,581**	**10,043**	**61.3**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	71	14	213,152	36,094	.	71	-	0.0
Irish potatoes	142	20	1,108,390	4,974	.	142	-	0.0
ROOTS & TUBERS		**0**	**1,321,542**		**.**	**213**	**-**	**0.0**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	6,324	4,125	122,832,388	150,059	133	6,537	4,258	96.9
Cowpeas	71	29	213,152	355	.	71	-	0.0
Green gram	0	0	0	.	.	0	-	0.0
Chick peas	0	0	0	.	.	0	-	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES	6,395	4,154	123,045,540	150,414	133	6,608	4,287	96.9
Sunflower	0	0	0	.	29	71	29	0.0
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**0**		**29**	**71**	**29**	**0.0**
Okra	0	0	0	.	.	0	-	0.0
Radish	0	0	0	.	.	0	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	0	0	0	.	.	0	-	0.0
Cabbage	0	0	0	.	.	0	-	0.0
Tomatoes	0	0	0	.	.	0	-	0.0
Spinach	0	0	0	.	.	0	-	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	0	0	0	.	.	0	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**0**		**.**	**0**	**-**	**0.0**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	.	0	-	0.0
Total	**14,068**	**10,347**	**191,905,002**	**298,200**	**4,046**	**18,473**	**14,393**	**71.9**

5.151 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Local Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with Local Seeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	3,294	2,417	77,695,793	82,632	1,402	4,912	3,819	63.3
Paddy	29	12	130,015	520	.	29	-	0.0
Sorghum	0	0	0	.	.	0	-	0.0
Finger Millet	144	94	1,716,194	2,196	.	144	-	0.0
Wheat	347	316	28,487,662	74,253	281	404	597	52.9
Barley	0	0	0	.	.	0	-	0.0
CEREALS		2,838	108,029,663		1,683	5,490	4,521	62.8
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	0	0	0	.	.	0	-	0.0
Irish potatoes	173	129	25,771,800	190,977	88	376	216	59.5
ROOTS & TUBERS		129	25,771,800		88	376	216	59.5
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	2,687	1,782	116,627,101	1,014,548	499	3,294	2,281	78.1
Cowpeas	0	0	0	.	.	0	-	0.0
Green gram	0	0	0	.	.	0	-	0.0
Chick peas	0	0	0	.	.	0	-	0.0
Field Peas	0	0	0	.	.	0	-	0.0
PULSES	2,687	1,782	116,627,101	1,014,548	499	3,294	2,281	78.1
Sunflower	58	47	1,097,902	838	29	116	76	61.5
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**0**	0	0	**.**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		47	1,097,902		29	116	76	61.5
Okra	0	0	0	.	.	0	-	0.0
Radish	0	0	0	.	.	0	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	0	0	0	.	.	0	-	0.0
Onion	0	0	0	.	.	0	-	0.0
Cabbage	0	0	0	.	.	0	-	0.0
Tomatoes	0	0	0	.	50	87	50	0.0
Spinach	0	0	0	.	.	0	-	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	0	0	0	.	.	0	-	0.0
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		0	0		50	87	50	0.0
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	0	0	0	.	.	0	-	0.0
Malay	0	0	0	.	.	0	-	0.0
Total	6,732	4,795	251,526,466	1,365,963	2,349	9,361	7,144	67.1

5.152 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Local Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha Rural

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with Local Seeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	18,513	8,057	232,016,523	215,826	8,488	35,593	16,545	48.7
Paddy	0	0	0	.	.	0	-	0.0
Sorghum	0	0	0	.	.	0	-	0.0
Finger Millet	0	0	0	.	.	0	-	0.0
Wheat	956	631	33,036,767	123,022	387	1,314	1,018	62.0
Barley	0	0	0	.	.	0	-	0.0
CEREALS		**8,688**	**265,053,290**		**8,875**	**36,907**	**17,563**	**49.5**
Cassava	0	0	0	.	.	0	-	0.0
Sweet Potato	239	70	5,016,429	80,621	24	358	94	74.4
Irish potatoes	597	176	14,452,093	23,291	109	956	285	61.8
ROOTS & TUBERS		**246**	**19,468,521**		**133**	**1,314**	**379**	**64.9**
Mung Bean	0	0	0	.	.	0	-	0.0
Beans	26,993	8,175	393,301,399	381,249	2,383	32,010	10,558	77.4
Cowpeas	1,433	508	6,366,087	7,286	7	1,433	515	98.6
Green gram	3,344	1,179	16,840,868	137,116	.	3,344	-	0.0
Chick peas	956	394	21,140,664	20,305	157	1,314	551	71.5
Field Peas	119	36	2,149,898	1,433	12	119	48	75.0
PULSES	32,846	10,292	439,798,917	547,388	2,559	38,220	12,851	80.1
Sunflower	0	0	0	.	.	0	-	0.0
Simsim	0	0	0	.	.	0	-	0.0
Groundnut	0	0	0	.	.	0	-	0.0
Soya Beans	**358**	**85**	**812,184**	**1,194**	**24**	**597**	109	77.8
OIL SEEDS & OIL NUTS		**85**	**812,184**		**24**	**597**	**109**	**77.8**
Okra	239	68	2,627,653	14,333	.	239	-	0.0
Radish	119	12	836,071	5,972	.	119	-	0.0
Turmeric	0	0	0	.	.	0	-	0.0
Bitteer Aubergine	239	73	2,747,092	83,607	.	239	-	0.0
Onion	0	0	0	.	48	119	48	0.0
Cabbage	119	12	1,731,862	2,986	97	358	109	11.1
Tomatoes	0	0	0	.	87	358	87	0.0
Spinach	0	0	0	.	24	119	24	0.0
Carrot	0	0	0	.	.	0	-	0.0
Chillies	0	0	0	.	.	0	-	0.0
Amaranths	239	5	477,755	26,874	11	597	16	32.4
Cucumber	0	0	0	.	.	0	-	0.0
Egg Plant	0	0	0	.	.	0	-	0.0
FRUITS & VEGETABLES		**170**	**8,420,434**		**267**	**2,150**	**437**	**38.8**
Cotton	0	0	0	.	.	0	-	0.0
Tobacco	0	0	0	.	.	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**.**	**0**	**-**	**0.0**
Malay	0	0	0	.	.	0		0.0
Total	**54,464**	**19,480**	**733,553,346**	**1,125,113**	**11,859**	**79,188**	**31,339**	**0.0**

5.153 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Local Seeds use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Local Seeds use							% of Planted area using Local Seeds
	Number of Households using Local Seeds	Planted Area Applied with Local Seeds	Cost of Local Seeds	Number of Households NOT using Local Seeds	Planted Area Without Local Seeds	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	16,959	11,718	305,845,775	760,972	16,546	38,555	28,264	41.5
Paddy	488	108	5,124,394	12,933	102	732	210	51.5
Sorghum	366	114	1,220,094	1,098	0	366	114	100.0
Finger Millet	610	321	1,488,514	2,318	0	610	321	100.0
Wheat	0	0	0	.	0	0	-	0.0
Barley	0	0	0	.	0	0	-	0.0
CEREALS		**12,261**	**313,678,777**		**16,647**	**40,263**	**28,908**	**42.4**
Cassava	122	20	732,056	9,761	0	122	20	100.0
Sweet Potato	366	10	91,507	366	0	366	10	100.0
Irish potatoes	122	25	12,200,937	244,019	0	122	25	100.0
ROOTS & TUBERS		**54**	**13,024,501**		**0**	**610**	**54**	**100.0**
Mung Bean	0	0	0	.	49	122	49	0.0
Beans	19,033	6,768	412,184,386	690,939	806	22,816	7,573	89.4
Cowpeas	610	67	976,075	1,586	0	610	67	100.0
Green gram	488	222	4,794,968	6,344	0	488	222	100.0
Chick peas	122	12	244,019	244	0	122	12	100.0
Field Peas	0	0	0	.	0	0	-	0.0
PULSES	20,254	7,069	418,199,448	699,114	855	24,158	7,924	89.2
Sunflower	4,148	1,648	18,032,985	14,397	0	4,148	1,648	100.0
Simsim	0	0	0	.	0	0	-	0.0
Groundnut	122	12	195,215	244	0	122	12	100.0
Soya Beans	**0**	0	0	**.**	**0**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**1,661**	**18,228,200**		**0**	**4,270**	**1,661**	**100.0**
Okra	122	12	854,066	1,220	0	122	12	100.0
Radish	0	0	0	.	0	0	-	0.0
Turmeric	122	49	1,220,094	1,220	0	122	49	100.0
Bitteer Aubergine	122	22	610,047	24,402	12	244	35	64.3
Onion	0	0	0	.	0	0	-	0.0
Cabbage	0	0	0	.	25	122	25	0.0
Tomatoes	244	54	2,074,159	15,861	222	854	277	19.6
Spinach	0	0	0	.	0	0	-	0.0
Carrot	0	0	0	.	49	122	49	0.0
Chillies	0	0	0	.	0	0	-	0.0
Amaranths	0	0	0	.	49	122	49	0.0
Cucumber	0	0	0	.	198	244	198	0.0
Egg Plant	0	0	0	.	0	0	-	0.0
FRUITS & VEGETABLES		**138**	**4,758,366**		**556**	**1,952**	**694**	**19.9**
Cotton	0	0	0	.	0	0	-	0.0
Tobacco	0	0	0	.	0	0	-	0.0
CASH CROPS	**0**	**0**	**0**	**.**	**0**	**0**	**-**	**0.0**
Malay	0	0	0	.	0	0	-	0.0
Total		**14,114**	**767,889,292**	**1,787,925**	**18,058**	**71,253**	**32,172**	**0.0**

5.154 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,429	2,094	19,413,942	20,289	24,384	21,504	26,479	8
Paddy	0	0	.	429	159	429	159	0
Sorghum	0	0	.	71	43	71	43	0
Finger Millet	0	0	.	0	0	0	0	0
Wheat	0	0	.	929	1,330	929	1,330	0
Barley	0	0	.	0	0	0	0	0
CEREALS	**1,429**	**2,094**	**19,413,942**	**21,718**	**25,917**	**22,932**	**28,012**	**7**
Cassava	0	0	.	0	0	0	0	0
Sweet Potato	0	0	.	0	0	0	0	0
Irish potatoes	0	0	.	0	0	0	0	0
ROOTS & TUBERS	**0**	**0**	**.**	**0**	**0**	**0**	**0**	**0**
Mung Bean	0	0	.	0	0	0	0	0
Beans	429	174	6,858,283	15,145	10,522	15,431	10,695	2
Cowpeas	0	0	.	2,715	1,342	2,715	1,342	0
Green gram	0	0	.	4,001	2,461	4,001	2,461	0
Chick peas	0	0	.	2,143	1,162	2,143	1,162	0
Field Peas	0	0	.	0	0	0	0	0
PULSES	**429**	**174**	**6,858,283**	**24,004**	**15,487**	**24,290**	**15,661**	**1**
Sunflower	0	0	.	0	0	0	0	0
Simsim	0	0	.	143	376	143	376	0
Groundnut	0	0	.	0	0	0	0	0
Soya Beans	0	0	.	0	0	0	0	0
OIL SEEDS & OIL NUTS	**0**	**0**	**.**	**143**	**376**	**143**	**376**	**0**
Okra	0	0	.	0	0	0	0	0
Radish	0	0	.	71	7	71	7	0
Turmeric	0	0	.	0	0	0	0	0
Bitteer Aubergine	0	0	.	0	0	0	0	0
Onion	0	0	.	71	14	71	14	0
Cabbage	0	0	.	71	14	71	14	0
Tomatoes	0	0	.	0	0	0	0	0
Spinach	0	0	.	143	10	143	10	0
Carrot	0	0	.	71	5	71	5	0
Chillies	0	0	.	0	0	0	0	0
Amaranths	0	0	.	0	0	0	0	0
Cucumber	0	0	.	0	0	0	0	0
Egg Plant	0	0	.	0	0	0	0	0
FRUITS & VEGETABLES	**0**	**0**	**.**	**429**	**51**	**429**	**51**	**0**
Cotton	0	0	.	0	0	0	0	0
Tobacco	0	0	.	0	0	0	0	0
CASH CROPS	**0**	**0**	**.**	**0**	**0**	**0**	**0**	**0**
Malay	0	0	.	71	29	71	29	0
Total	**1,857**	**2,268**	**26,272,225**	**46,365**	**41,860**	**47,865**	**44,128**	**5**

5.155 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	597	336	5,126,264	1,875	1,643	2,472	1,979	17.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**336**	**5,126,264**		**1,643**	**2,472**	**1,979**	**17.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	43	4	213,097	0	.	43	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**4**	**213,097**		**.**	**43**	**-**	**0.0**
Mung Bean	0	.	.	0	.	0	-	0.0
Beans	511	239	3,208,390	1,662	1,147	2,174	1,386	17.2
Cowpeas	85	9	596,672	128	95	213	104	9.1
Green gram	43	4	51,143	85	17	128	22	20.0
Chick peas	43	104	681,911	384	381	426	485	21.4
Field Peas	0	.	.	0	.	0	-	0.0
PULSES	**682**	**356**	**4,538,116**	**2,259**	**1,640**	**2,941**	**1,996**	**17.9**
Sunflower	43	9	255,717	0	.	43	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**9**	**255,717**		**.**	**43**	**-**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	43	9	43	9	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	128	28	745,840	0	.	128	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	170	21	433,013	0	.	170	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	85	11	177,297	0	.	85	-	0.0
Amaranths	43	2	170,478	43	4	85	6	32.4
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	43	17	6,819	0	.	43	-	0.0
FRUITS & VEGETABLES		**79**	**1,533,447**		**13**	**554**	**92**	**86.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**1,833**	**785**	**11,666,641**	**4,219**	**3,295**	**6,052**	**4,080**	**19.2**

5.156 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	3,476	1,557	70,247,341	28,607	18,661	30,924	20,218	7.7
Paddy	0	0	.	446	198	446	198	0.0
Sorghum	713	50	2,539,866	1,871	457	2,228	507	9.9
Finger Millet	178	14	1,581,846	535	122	624	135	10.0
Wheat	89	36	1,604,126	1,426	1,021	1,515	1,057	3.4
Barley	0	0	.	356	180	356	180	0.0
CEREALS		1,656	75,973,179		20,640	36,093	22,296	7.4
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		0	.		.	0	-	0.0
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	1,515	131	9,401,959	9,803	3,200	10,070	3,331	3.9
Cowpeas	0	0	.	1,515	551	1,515	551	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	89	36	89	36	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	1,515	131	9,401,959	11,407	3,788	11,674	3,918	3.3
Sunflower	1,248	96	3,475,606	2,495	333	3,476	429	22.4
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		96	3,475,606		333	3,476	429	22.4
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	356	126	356	126	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	178	6	178	6	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		0	.		132	535	132	0.0
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	0	0	.	0	.	0	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	7,219	1,883	88,850,744	47,678	24,893	51,778	26,776	7.0

5.157 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	71	14	909,448	10,018	9,035	10,089	9,049	0.2
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	85,261	1,492	994	1,492	994	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**14**	**994,709**		**10,028**	**11,581**	**10,043**	**0.1**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	71	14	71	14	0.0
Irish potatoes	0	0	.	142	20	142	20	0.0
ROOTS & TUBERS		**0**	**.**		**35**	**213**	**35**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	71	14	710,507	6,466	4,243	6,537	4,258	0.3
Cowpeas	0	0	.	71	29	71	29	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**71**	**14**	**710,507**	**6,537**	**4,272**	**6,608**	**4,287**	**0.3**
Sunflower	0	0	.	71	29	71	29	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**29**	**71**	**29**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**.**		**.**	**0**	**-**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**142**	**29**	**1,705,216**	**18,331**	**14,364**	**18,473**	**14,393**	**0.2**

5.158 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	58	32	144,461	4,854	3,787	4,912	3,819	0.8
Paddy	0	0	.	29	12	29	12	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	144	94	144	94	0.0
Wheat	29	257	462,274	376	339	404	597	43.1
Barley	0	0	.	0	.	0	-	0.0
CEREALS		290	606,735		4,231	5,490	4,521	6.4
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	376	216	376	216	0.0
ROOTS & TUBERS		0	.		216	376	216	0.0
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	58	117	2,499,171	3,236	2,164	3,294	2,281	5.1
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**58**	**117**	**2,499,171**	**3,236**	**2,164**	**3,294**	**2,281**	**5.1**
Sunflower	0	0	.	116	76	116	76	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		0	.		76	116	76	0.0
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	87	50	87	50	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		0	.		50	87	50	0.0
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	0	0	.	0	.	0	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	144	406	3,105,906	9,217	6,738	9,361	7,144	5.7

5.159 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha Rural

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	10,391	4,046	73,932,606	25,560	12,500	35,593	16,545	24.5
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	119	99	597,194	1,194	919	1,314	1,018	9.7
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**4,145**	**74,529,800**		**13,418**	**36,907**	**17,563**	**23.6**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	358	94	621,082	0	.	358	-	0.0
Irish potatoes	0	.	.	956	285	956	-	0.0
ROOTS & TUBERS		**94**	**621,082**		**285**	**1,314**	**379**	**24.9**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	8,838	2,143	46,855,834	23,529	8,415	32,010	10,558	20.3
Cowpeas	0	0	.	1,433	515	1,433	515	0.0
Green gram	836	331	2,388,776	2,628	848	3,344	1,179	28.1
Chick peas	119	19	83,607	1,194	532	1,314	551	3.5
Field Peas	119	48	119,439	0	.	119	-	0.0
PULSES	9,913	2,541	49,447,656	28,785	10,310	38,220	12,851	19.8
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**239**	**60**	**238,878**	**358**	**48**	**597**	109	55.6
OIL SEEDS & OIL NUTS		**60**	**238,878**		**48**	**597**	**109**	**55.6**
Okra	119	29	358,316	119	39	239	68	42.9
Radish	0	0	.	119	12	119	12	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	239	73	239	73	0.0
Onion	0	0	.	119	48	119	48	0.0
Cabbage	0	0	.	358	109	358	109	0.0
Tomatoes	0	0	.	358	87	358	87	0.0
Spinach	119	24	836,071	0	.	119	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	597	16	3,893,704	0	.	597	-	0.0
Cucumber	0	.	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**70**	**5,088,092**		**368**	**2,150**	**437**	**15.9**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**21,857**	**6,911**	**129,925,507**	**58,167**	**24,429**	**79,188**	**31,339**	**22.1**

5.160 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Organic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Organic Fertilizer use							% of Planted area using Organic Fertilizer
	Number of Households using Organic Fertilizer	Planted Area Applied with Organic Fertilizer	Cost of Organic Fertilizer	Number of Households NOT using Organic Fertilizer	Planted Area Without Organic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	5,368	3,254	195,021,734	34,285	24,869	38,555	28,123	11.6
Paddy	0	0	.	732	210	732	210	0.0
Sorghum	122	15	610,047	244	99	366	114	13.0
Finger Millet	0	0	.	610	321	610	321	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**3,269**	**195,631,781**		**25,499**	**40,263**	**28,768**	**11.4**
Cassava	0	0	.	122	20	122	20	0.0
Sweet Potato	0	0	.	366	10	366	10	0.0
Irish potatoes	0	0	.	122	25	122	25	0.0
ROOTS & TUBERS		**0**	**.**		**54**	**610**	**54**	**0.0**
Mung Bean	0	0	.	122	49	122	49	0.0
Beans	1,952	568	27,422,339	21,108	7,005	22,816	7,573	7.5
Cowpeas	0	0	.	610	67	610	67	0.0
Green gram	0	0	.	488	222	488	222	0.0
Chick peas	0	0	.	122	12	122	12	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES		**568**	**27,422,339**		**7,356**	**24,158**	**7,924**	**7.2**
Sunflower	244	49	854,066	3,904	1,599	4,148	1,648	3.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	122	12	122	12	0.0
Soya Beans	**0**	0	.	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**49**	**854,066**		**1,611**	**4,270**	**1,661**	**3.0**
Okra	0	0	.	122	12	122	12	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	122	49	122	49	0.0
Bitteer Aubergine	122	12	1,220,094	122	22	244	35	35.7
Onion	0	0	.	0	.	0	-	0.0
Cabbage	122	25	732,056	0	.	122	-	0.0
Tomatoes	0	.	.	854	277	854	-	0.0
Spinach	0	.	.	0	.	0	-	0.0
Carrot	0	.	.	122	49	122	-	0.0
Chillies	0	.	.	0	.	0	-	0.0
Amaranths	0	.	.	122	49	122	-	0.0
Cucumber	0	.	.	244	198	244	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**37**	**1,952,150**		**657**	**1,952**	**694**	**5.3**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		**0**	**.**		**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**7,931**	**3,923**	**225,860,335**	**64,665**	**35,177**	**71,253**	**39,101**	**10.0**

5.161 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Monduli

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	214	105	7,144,045	21,504	26,374	21,504	26,479	0.4
Paddy	357	101	24,646,954	71	58	429	159	63.6
Sorghum	0	0	.	71	43	71	43	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	929	1,330	929	1,330	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**206**	**31,790,999**		**27,806**	**22,932**	**28,012**	**0.7**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	15,431	10,695	15,431	10,695	0.0
Cowpeas	0	0	.	2,715	1,342	2,715	1,342	0.0
Green gram	0	0	.	4,001	2,461	4,001	2,461	0.0
Chick peas	0	0	.	2,143	1,162	2,143	1,162	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES		**0**	**.**		**15,661**	**24,290**	**15,661**	**0.0**
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	143	376	143	376	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**376**	**143**	**376**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	71	7	71	7	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	71	14	6,000,998	0	.	71	-	0.0
Cabbage	0	0	.	71	14	71	14	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	143	10	143	10	0.0
Carrot	0	0	.	71	5	71	5	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	.	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**14**	**6,000,998**		**36**	**429**	**51**	**28.6**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS		**0**	**.**		**.**	**0**	**-**	**0.0**
Malay	0	0	.	71	29	71	29	0.0
Total	**643**	**221**	**37,791,997**	**47,436**	**43,907**	**47,865**	**44,128**	**0.5**

5.162 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	2,472	1,979	2,472	1,979	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**0**	**.**		**1,979**	**2,472**	**1,979**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	43	4	43	4	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**4**	**43**	**4**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	2,174	1,386	2,174	1,386	0.0
Cowpeas	0	0	.	213	104	213	104	0.0
Green gram	0	0	.	128	22	128	22	0.0
Chick peas	0	0	.	426	485	426	485	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	**0**	**0**	**.**	**2,941**	**1,996**	**2,941**	**1,996**	**0.0**
Sunflower	0	0	.	43	9	43	9	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**9**	**43**	**9**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	43	9	43	9	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	128	28	128	28	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	170	21	170	21	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	85	11	85	11	0.0
Amaranths	0	0	.	85	6	85	6	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	43	17	43	17	0.0
FRUITS & VEGETABLES		**0**	**.**		**92**	**554**	**92**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**0**	**0**	**.**	**6,052**	**4,080**	**6,052**	**4,080**	**0.0**

5.163 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Karatu

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	624	242	29,328,766	30,300	19,976	30,924	20,218	1.2
Paddy	89	36	712,945	356	162	446	198	18.2
Sorghum	0	0	.	2,228	507	2,228	507	0.0
Finger Millet	0	0	.	624	135	624	135	0.0
Wheat	178	72	338,649	1,337	985	1,515	1,057	6.8
Barley	0	0	.	356	180	356	180	0.0
CEREALS		**350**	**30,380,360**		**21,946**	**36,093**	**22,296**	**1.6**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	0	0	.	0	.	0	-	0.0
ROOTS & TUBERS		**0**	**.**		**.**	**0**	**-**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	267	108	6,060,031	9,803	3,223	10,070	3,331	3.2
Cowpeas	89	3	891,181	1,426	548	1,515	551	0.5
Green gram	0	0	.	0	0	0	-	0.0
Chick peas	0	0	.	89	36	89	36	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	356	111	6,951,212	11,318	3,807	11,674	-	0.0
Sunflower	0	0	.	3,476	429	3,476	429	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**429**	**3,476**	**429**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	356	117	58,443,649	89	9	356	126	92.9
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	178	6	1,782,362	0	.	178	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**123**	**60,226,011**		**9**	**535**	**132**	**93.2**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**1,782**	**584**	**97,557,582**	**50,084**	**26,192**	**51,778**	**26,776**	**2.2**

5.164 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Ngorongoro

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	0	0	.	10,089	9,049	10,089	9,049	0.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	1,492	994	1,492	994	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**0**	**.**		**10,043**	**11,581**	**10,043**	**0.0**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	71	14	71	14	0.0
Irish potatoes	0	0	.	142	20	142	20	0.0
ROOTS & TUBERS		**0**	**.**		**35**	**213**	**35**	**0.0**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	0	0	.	6,537	4,258	6,537	4,258	0.0
Cowpeas	0	0	.	71	29	71	29	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	0	0	.	6,608	4,287	6,608	4,287	0.0
Sunflower	0	0	.	71	29	71	29	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**29**	**71**	**29**	**0.0**
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	0	0	.	0	.	0	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**0**	**.**		**.**	**0**	**-**	**0.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**0**	**0**	**.**	**18,473**	**14,393**	**18,473**	**14,393**	**0.0**

5.165 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Longido

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	202	155	9,751,101	4,738	3,664	4,912	3,819	4.1
Paddy	0	0	.	29	12	29	12	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	144	94	144	94	0.0
Wheat	29	105	2,166,911	376	491	404	597	17.6
Barley	0	0	.	0	.	0	-	0.0
CEREALS		260	11,918,013		4,261	5,490	4,521	5.8
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	0	.	0	-	0.0
Irish potatoes	202	114	15,977,360	173	102	376	216	52.7
ROOTS & TUBERS		114	15,977,360		102	376	216	52.7
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	173	281	4,232,700	3,120	2,000	3,294	2,281	12.3
Cowpeas	0	0	.	0	.	0	-	0.0
Green gram	0	0	.	0	.	0	-	0.0
Chick peas	0	0	.	0	.	0	-	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	173	281	4,232,700	3,120	2,000	3,294	2,281	12.3
Sunflower	29	18	2,166,911	87	58	116	76	23.1
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**0**	0	.	**0**	.	**0**	-	0.0
OIL SEEDS & OIL NUTS		18	2,166,911		58	116	76	23.1
Okra	0	0	.	0	.	0	-	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	0	0	.	0	.	0	-	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	0	.	0	-	0.0
Tomatoes	87	50	1,863,544	0	.	87	-	0.0
Spinach	0	0	.	0	.	0	-	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	0	.	0	-	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		50	1,863,544		.	87	-	0.0
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	0	0	.	0	.	0	-	0.0
Malay	0	0	.	0	.	0	-	0.0
Total	722	722	36,158,528	8,668	6,422	9,361	7,144	10.1

5.166 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Arusha Rural

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	1,553	664	38,632,474	34,637	15,881	35,593	16,545	4.0
Paddy	0	0	.	0	.	0	-	0.0
Sorghum	0	0	.	0	.	0	-	0.0
Finger Millet	0	0	.	0	.	0	-	0.0
Wheat	0	0	.	1,314	1,018	1,314	1,018	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**664**	**38,632,474**		**16,899**	**36,907**	**17,563**	**3.8**
Cassava	0	0	.	0	.	0	-	0.0
Sweet Potato	0	0	.	358	94	358	94	0.0
Irish potatoes	597	151	27,470,920	597	134	956	285	53.1
ROOTS & TUBERS		**151**	**27,470,920**		**228**	**1,314**	**379**	**39.9**
Mung Bean	0	0	.	0	.	0	-	0.0
Beans	717	370	12,212,615	31,412	10,188	32,010	10,558	3.5
Cowpeas	0	0	.	1,433	515	1,433	515	0.0
Green gram	0	0	.	3,344	1,179	3,344	1,179	0.0
Chick peas	0	0	.	1,314	551	1,314	551	0.0
Field Peas	0	0	.	119	48	119	48	0.0
PULSES	717	370	12,212,615	37,623	12,481	38,220	12,851	2.9
Sunflower	0	0	.	0	.	0	-	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	0	.	0	-	0.0
Soya Beans	**119**	**12**	**4,777,551**	**478**	**97**	**597**	109	11.1
OIL SEEDS & OIL NUTS		**12**	**4,777,551**		**97**	**597**	**109**	**11.1**
Okra	0	0	.	239	68	239	68	0.0
Radish	119	12	716,633	0	.	119	-	0.0
Turmeric	0	0	.	0	.	0	-	0.0
Bitteer Aubergine	119	48	1,433,265	119	24	239	73	66.7
Onion	0	0	.	119	48	119	48	0.0
Cabbage	358	109	5,404,605	0	.	358	-	0.0
Tomatoes	358	87	11,137,666	0	.	358	-	0.0
Spinach	0	0	.	119	24	119	24	0.0
Carrot	0	0	.	0	.	0	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	0	0	.	597	16	597	16	0.0
Cucumber	0	0	.	0	.	0	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**256**	**18,692,169**		**181**	**2,150**	**437**	**58.6**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**3,941**	**1,454**	**101,785,730**	**76,202**	**29,886**	**79,188**	**31,339**	**4.6**

5.167 :ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area & Number of Crop Growing Households by Inorganic Fertilizer use and Crop for the 2007/08 agriculture year - LONG RAINY SEASON (MASIKA) - Meru

Crop	Inorganic Fertilizer use							% of Planted area using Inorganic Fertilizer
	Number of Households using Inorganic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Cost of Inorganic Fertilizer	Number of Households NOT using Inorganic Fertilizer	Planted Area Without Inorganic Fertilizer	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Maize	10,615	5,352	599,761,474	28,550	22,771	38,555	28,123	19.0
Paddy	732	210	18,545,425	0	.	732	-	0.0
Sorghum	0	0	.	366	114	366	114	0.0
Finger Millet	0	0	.	610	321	610	321	0.0
Wheat	0	0	.	0	.	0	-	0.0
Barley	0	0	.	0	.	0	-	0.0
CEREALS		**5,562**	**618,306,899**		**23,205**	**40,263**	**28,768**	**19.3**
Cassava	0	0	.	122	20	122	20	0.0
Sweet Potato	0	0	.	366	10	366	10	0.0
Irish potatoes	0	0	.	122	25	122	25	0.0
ROOTS & TUBERS		**0**	**.**		**54**	**610**	**54**	**0.0**
Mung Bean	122	49	5,490,422	0	.	122	-	0.0
Beans	1,098	293	14,787,536	21,840	7,281	22,816	7,573	3.9
Cowpeas	0	0	.	610	67	610	67	0.0
Green gram	0	0	.	488	222	488	222	0.0
Chick peas	0	0	.	122	12	122	12	0.0
Field Peas	0	0	.	0	.	0	-	0.0
PULSES	1,220	0	20,277,958	23,060	7,582	24,158	7,582	0.0
Sunflower	0	0	.	4,148	1,648	4,148	1,648	0.0
Simsim	0	0	.	0	.	0	-	0.0
Groundnut	0	0	.	122	12	122	12	0.0
Soya Beans	**0**	0	**.**	**0**	**.**	**0**	-	0.0
OIL SEEDS & OIL NUTS		**0**	**.**		**1,661**	**4,270**	**1,661**	**0.0**
Okra	0	0	.	122	12	122	12	0.0
Radish	0	0	.	0	.	0	-	0.0
Turmeric	0	0	.	122	49	122	49	0.0
Bitteer Aubergine	0	0	.	244	35	244	35	0.0
Onion	0	0	.	0	.	0	-	0.0
Cabbage	0	0	.	122	25	122	25	0.0
Tomatoes	732	252	67,044,150	122	25	854	277	91.1
Spinach	0	0	.	0	.	0	-	0.0
Carrot	122	49	15,251,172	0	.	122	-	0.0
Chillies	0	0	.	0	.	0	-	0.0
Amaranths	122	49	5,856,450	0	.	122	-	0.0
Cucumber	244	198	6,344,487	0	.	244	-	0.0
Egg Plant	0	0	.	0	.	0	-	0.0
FRUITS & VEGETABLES		**548**	**94,496,259**		**146**	**1,952**	**694**	**79.0**
Cotton	0	0	.	0	.	0	-	0.0
Tobacco	0	0	.	0	.	0	-	0.0
CASH CROPS	**0**	**0**	**.**	**0**	**.**	**0**	**-**	**0.0**
Malay	0	0	.	0	.	0	-	0.0
Total	**13,787**	**6,453**	**733,081,116**	**58,198**	**32,648**	**71,253**	**39,101**	**16.5**

ACCESS TO EQUIPMENTS

6.1.1 ACCESS TO EQUIPMENT: Number of Agriculture Households that used Agricultural Equipment/Asset by type and District for 2007/08 agriculture year

District	Equipment/Asset Name												Total number of Agricultural Households
	Sword		Hand Hoe		Hand Sprayer		Grater, Chiper, Oil Press na Oil Mill		Oxplough		Oxplanter		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	28,076	24.0	25,933	22.1	6,644	5.7	357	0.3	10,287	8.8	500	0.4	28,933
Arusha	2,515	25.9	2,387	24.6	1,108	11.4	0	0.0	938	9.6	43	0.4	2,557
Karatu	32,261	28.9	33,330	29.8	5,080	4.5	178	0.2	7,932	7.1	624	0.6	36,093
Ngorongoro	18,757	29.7	16,342	25.9	6,608	10.5	213	0.3	6,252	9.9	0	0.0	28,776
Longido	9,477	27.0	8,639	24.6	2,080	5.9	202	0.6	2,109	6.0	29	0.1	11,644
Arusha Rural	47,178	30.1	47,656	30.4	9,077	5.8	478	0.3	8,002	5.1	717	0.5	48,253
Meru	48,438	28.5	48,926	28.7	24,890	14.6	854	0.5	12,445	7.3	366	0.2	49,292
Total	**186,701**	**28.1**	**183,212**	**27.6**	**55,487**	**8.4**	**2,283**	**0.3**	**47,966**	**7.2**	**2,278**	**0.3**	**205,547**

Cont. 6.1.1 ACCESS TO EQUIPMENT: Number of Agriculture Households that used Agricultural Equipment/Asset by type and District for 2007/08 agriculture year

District	Equipment/Asset Name												Total number of Agricultural Households
	Ox cart		Trekta		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	1,072	.9	572	.5	500	.4	1,214	1.0	10,073	8.6	10,359	8.8	28,933
Arusha	256	2.6	85	.9	85	.9	43	.4	1,023	10.5	554	5.7	2,557
Karatu	3,743	3.3	1,426	1.3	1,515	1.4	891	.8	6,327	5.7	5,704	5.1	36,093
Ngorongoro	639	1.0	142	.2	71	.1	568	.9	5,755	9.1	2,060	3.3	28,776
Longido	347	1.0	144	.4	58	.2	231	.7	2,774	7.9	2,398	6.8	11,644
Arusha Rural	2,030	1.3	1,314	.8	956	.6	717	.5	8,600	5.5	7,644	4.9	48,253
Meru	3,416	2.0	244	.1	244	.1	610	.4	9,151	5.4	5,978	3.5	49,292
Total	**11,503**	**1.7**	**3,927**	**.6**	**3,429**	**.5**	**4,275**	**.6**	**43,702**	**6.6**	**34,698**	**5.2**	**205,547**

Cont. 6.1.1 ACCESS TO EQUIPMENT: Number of Agriculture Households that used Agricultural Equipment/Asset by type and District for 2007/08 agriculture year

District	Equipment/Asset Name										Total number of Agricultural Households
	Cow		Donkey		Thrasher		Power tiller		Rigder		
	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	10,716	9.1	10,073	8.6	286	.2	143	.1	357	.3	28,933
Arusha	128	1.3	511	5.3	43	.4	0	.0	0	.0	2,557
Karatu	7,575	6.8	4,456	4.0	356	.3	267	.2	89	.1	36,093
Ngorongoro	2,132	3.4	3,410	5.4	142	.2	71	.1	0	.0	28,776
Longido	3,612	10.3	2,571	7.3	144	.4	87	.2	231	.7	11,644
Arusha Rural	13,735	8.8	7,047	4.5	1,075	.7	119	.1	239	.2	48,253
Meru	7,687	4.5	5,368	3.2	1,342	.8	122	.1	122	.1	49,292
Total	**45,584**	**6.9**	**33,438**	**5.0**	**3,388**	**.5**	**809**	**.1**	**1,038**	**.2**	**205,547**

6.1.2 ACCESS TO EQUIPMENT: Number of Agricultural Equipment/Asset owned by type and District for 2007/08 agriculture year

District	Equipment/Asset Name											
	Sword		Hand Hoe		Hand Sprayer		Grater, Chiper, Oil Press na Oil Mill		Oxplough		Oxplanter	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	49,508	13.1	73,155	19.4	6,930	1.8	3,786	1.0	12,073	3.2	8,430	2.2
Arusha	5,200	23.7	7,075	32.3	1,193	5.4	.	.	1,449	6.6	170	0.8
Karatu	59,976	22.2	96,337	35.7	5,704	2.1	2,139	0.8	11,140	4.1	2,317	0.9
Ngorongoro	34,957	21.2	43,270	26.2	9,379	5.7	1,705	1.0	8,455	5.1	.	.
Longido	17,595	15.9	24,529	22.2	3,005	2.7	1,676	1.5	2,745	2.5	29	0.0
Arusha Rural	88,146	26.6	129,949	39.2	10,272	3.1	956	0.3	9,436	2.8	836	0.3
Meru	97,974	27.0	150,194	41.3	26,964	7.4	2,074	0.6	15,007	4.1	366	0.1
Total	**353,356**	**21.6**	**524,509**	**32.0**	**63,446**	**3.9**	**12,336**	**0.8**	**60,305**	**3.7**	**12,149**	**0.7**

Cont. 6.1.2 ACCESS TO EQUIPMENT: Number of Agricultural Equipment/Asset owned by type and Region for 2007/08 agriculture year

Region	Equipment/Asset Name											
	Ox cart		Trekta		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	6,573	1.7	572	.2	500	.1	5,072	1.3	38,364	10.2	40,221	10.7
Arusha	256	1.2	85	.4	85	.4	170	.8	3,452	15.8	1,236	5.6
Karatu	6,417	2.4	1,426	.5	1,515	.6	3,832	1.4	19,071	7.1	14,526	5.4
Ngorongoro	2,487	1.5	1,492	.9	71	.0	5,968	3.6	21,102	12.8	5,187	3.1
Longido	404	.4	1,300	1.2	1,185	1.1	780	.7	8,090	7.3	7,743	7.0
Arusha Rural	2,269	.7	1,553	.5	1,075	.3	2,030	.6	21,141	6.4	15,049	4.5
Meru	10,981	3.0	366	.1	366	.1	976	.3	19,399	5.3	10,981	3.0
Total	**29,386**	**1.8**	**6,794**	**.4**	**4,797**	**.3**	**18,830**	**1.1**	**130,619**	**8.0**	**94,943**	**5.8**

Cont. 6.1.2 ACCESS TO EQUIPMENT: Number of Agricultural Equipment/Asset owned by type and District for 2007/08 agriculture year

	Equipment/Asset Name									
	Cow		Donkey		Thrasher		Power tiller		Rigder	
District	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	76,727	20.4	45,293	12.0	6,001	1.6	3,286	.9	429	.1
Arusha	341	1.6	1,151	5.3	43	.2	.	.	.	.
Karatu	24,597	9.1	13,992	5.2	3,030	1.1	3,743	1.4	89	.0
Ngorongoro	16,839	10.2	13,571	8.2	284	.2	213	.1	.	.
Longido	28,343	25.6	7,685	6.9	1,849	1.7	2,600	2.4	1,069	1.0
Arusha Rural	34,279	10.3	12,422	3.7	1,553	.5	119	.0	358	.1
Meru	14,031	3.9	9,517	2.6	1,464	.4	2,684	.7	122	.0
Total	**195,157**	**11.9**	**103,630**	**6.3**	**14,224**	**.9**	**12,646**	**.8**	**2,067**	**.1**

6.2.1 ACCESS TO EQUIPMENT: Number of Agricultural Households that Used Tractors/Draft animals to cultivate Land By Type and District for 2007/08 agriculture year

	Oxen		Bulls		Cows		Donkeys		Tractor		Power Tiller	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	15,288	53.0	5,501	19.1	429	1.5	3,000	10.4	4,501	15.6	143	0.5
Arusha	1,492	43.2	384	11.1	0	0.0	469	13.6	1,108	32.1	0	0.0
Karatu	13,368	50.8	5,258	20.0	980	3.7	1,782	6.8	4,456	16.9	446	1.7
Ngorongoro	6,039	72.0	639	7.6	0	0.0	1,350	16.1	355	4.2	0	0.0
Longido	3,034	53.8	636	11.3	693	12.3	636	11.3	636	11.3	0	0.0
Arusha Rural	16,244	56.4	3,464	12.0	717	2.5	1,314	4.6	6,927	24.1	119	0.4
Meru	18,057	60.4	6,344	21.2	366	1.2	1,464	4.9	3,416	11.4	244	0.8
Total	**73,522**	**56.0**	**22,226**	**16.9**	**3,185**	**2.4**	**10,015**	**7.6**	**21,399**	**16.3**	**952**	**0.7**

6.2.2 ACCESS TO EQUIPMENT: Number of Tractors/Draft animals Owned by Type and District for 2007/08 agriculture year

	Oxen		Bulls		Cows		Donkeys		Tractor		Power Tiller	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	36,792	22.60	21,432	13.16	74,441	45.72	29,076	17.86	1,072	0.66	.	.
Arusha	3,452	57.45	1,023	17.02	426	7.09	980	16.31	128	2.13	.	.
Karatu	17,824	36.56	11,853	24.31	11,051	22.67	4,634	9.51	1,604	3.29	1,782	3.66
Ngorongoro	34,673	69.22	2,558	5.11	4,831	9.65	7,460	14.89	568	1.13	.	.
Longido	8,032	20.07	3,958	9.89	23,172	57.91	4,045	10.11	173	0.43	636	1.59
Arusha Rural	21,260	25.11	12,661	14.95	35,712	42.17	13,735	16.22	1,314	1.55	.	.
Meru	17,203	38.42	9,639	21.53	8,053	17.98	4,148	9.26	5,246	11.72	488	1.09
Total	**139,236**	**31.85**	**63,123**	**14.44**	**157,686**	**36.07**	**64,080**	**14.66**	**10,106**	**2.31**	**2,906**	**0.66**

IRRIGATION

6.5.1: IRRIGATION: Number of Agriculture Households reporting use of Irrigation during 2007/08 agricultural Year by District

District	Households practicing irrigation		Households not practicing irrigation		Total Number of Households	
	Number	%	Number	%	Number	%
Monduli	3,000	10	25,933	90	28,933	100
Karatu	2,406	7	33,687	93	36,093	100
Ngorongoro	853	3	27,923	97	28,776	100
Longido	433	4	11,210	96	11,644	100
Arusha Rural	4,419	9	43,953	91	48,373	100
Meru	10,005	20	39,287	80	49,292	100
Total	**21,372**	**10**	**184,295**	**90**	**205,667**	**100**

Table 6.5.2: IRRIGATION: Number of Agriculture Households using irrigation by Source of Irrigation Water by District during the 2007/08 agricultural Year

District	Main Source of Irrigation Water							
	River	Borehole	Lake	Canal	Dam	Tap Water	Well	Total
Monduli	2,643	71	0	0	0	286	0	3,000
Karatu	535	0	0	0	0	1,782	89	2,406
Ngorongoro	568	0	0	0	0	284	0	853
Longido	404	0	0	0	0	0	29	433
Arusha Rural	1,314	0	0	0	119	2,150	478	4,061
Meru	7,443	0	0	0	0	2,562	0	10,005
Total	**12,907**	**71**	**0**	**0**	**119**	**7,320**	**596**	**21,014**

Table 6.5.3 IRRIGATION: Number of Agriculture Households by method of used to obtain water and District during 2007/08 agriculture year

District	Main method of Obtaining Water					
	Gravity	Hand bucket	Hand pump	motor pump	Other	Total
Monduli	3,000	0	0	0	0	3,000
Karatu	2,317	89	0	0	0	2,406
Ngorongoro	853	0	0	0	0	853
Longido	404	0	0	29	0	433
Arusha Rural	4,061	0	0	0	0	4,061
Meru	10,005	0	0	0	0	10,005
Total	20,896	89	**0**	29	0	21,014

AGRICULTURE CREDIT

7.1 AGRICULTURE CREDIT: Number of Agriculture Households receiving Credit by District During the 2007/08 Agriculture Year

District	Households Receiving Credit					
	borrowed money for agriculture		Did not borrow money for agriculture		Total	
	Number	%	Number	%	Number	%
Monduli	714	2.5	28,219	97.5	28,933	100.0
Arusha	298	11.7	2,259	88.3	2,557	100.0
Karatu	713	2.0	35,380	98.0	36,093	100.0
Ngorongoro	639	2.2	28,136	97.8	28,776	100.0
Longido	29	.2	11,615	99.8	11,644	100.0
Arusha Rural	119	.2	48,253	99.8	48,373	100.0
Meru	1,220	2.5	48,072	97.5	49,292	100.0
Total	3,734	1.8	201,933	98.2	205,667	100.0

7.2 AGRICULTURE CREDIT: Number of Credits by sex of the household Member receiving credit from source B and District During the 2007/08 Agriculture Year

Region	Male		Female		Total	
	Number	%	Number	%	Number	%
Monduli	357	50	357	50	714	100
Arusha	85	29	213	71	298	100
Karatu	535	75	178	25	713	100
Ngorongoro	568	89	71	11	639	100
Longido	0	0	29	100	29	100
Arusha Rural	119	100	0	0	119	100
Meru	610	50	610	50	1,220	100
Total	**2,275**	**61**	**1,459**	**39**	**3,734**	**100**

7.3 AGRICULTURE CREDIT: Number of Households receiving Credits by Main Source of credit and District During the 2007/08 Agriculture Year

District	Family, friend or relative		Bank		Cooperative		Savings & credit Soc		Private individual		Trader/trade store		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	71	10.0	214	30.0	0	0.0	143	20.0	143	20.0	0	0	714	100
Arusha	0	0.0	85	28.6	43	14.3	85	28.6	43	14.3	0	0	298	100
Karatu	267	37.5	178	25.0	89	12.5	89	12.5	0	0.0	0	0	713	100
Ngorongoro	142	22.2	142	22.2	0	0.0	0	0.0	0	0.0	0	0	639	100
Longido	29	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	29	100
Arusha Rural	119	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	119	100
Meru	122	10.0	488	40.0	0	0.0	244	20.0	122	10.0	0	0	1,220	100
Total	**751**	**20.1**	**1,108**	**29.7**	**132**	**3.5**	**561**	**15.0**	**308**	**8.2**	**0**	**0**	**3,734**	**100**

7.4 AGRICULTURE CREDIT: Number of Households Reporting the Main reasons for Not Using Credit by District During the 2007/08 Agriculture Year

Region	Not needed		Not available		Did not want to go into debt		Interest rate/cost too high		Did not know how to get credit		Difficult bureaucratic procedure		Credit granted too late		Other (specify)		Dont know about credit		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	2,500	8.9	1,786	6.3	3,501	12.4	857	3.0	8,859	31.4	1,572	5.6	214	0.8	429	1.5	8,501	30.1	28,219	100
Arusha	256	11.3	43	1.9	213	9.4	0	0.0	1,620	71.7	0	0.0	43	1.9	0	0.0	85	3.8	2,259	100
Karatu	3,386	9.6	12,387	35.0	4,723	13.4	802	2.3	7,129	20.2	535	1.5	89	0.3	178	0.5	6,149	17.4	35,380	100
Ngorongoro	1,847	6.6	6,466	23.0	3,339	11.9	71	0.3	9,663	34.3	782	2.8	142	0.5	142	0.5	5,684	20.2	28,136	100
Longido	578	5.0	3,438	29.6	1,213	10.4	58	0.5	3,149	27.1	58	0.5	58	0.5	0	0.0	3,063	26.4	11,615	100
Arusha Rural	7,166	14.9	3,225	6.7	11,944	24.8	1,792	3.7	15,288	31.7	1,194	2.5	358	0.7	0	0.0	7,286	15.1	48,253	100
Meru	6,466	13.5	6,466	13.5	5,246	10.9	3,538	7.4	16,959	35.3	244	0.5	610	1.3	122	0.3	8,419	17.5	48,072	100
Total	**22,201**	11.0	**33,811**	16.7	**30,180**	14.9	**7,118**	3.5	**62,667**	31.0	**4,384**	2.2	**1,514**	0.7	**871**	0.4	**39,187**	19.4	**201,933**	100

7.5 AGRICULTURE CREDIT: Number of Households receiving Credits by Main Source of credit B and District During the 2007/08 Agriculture Year

District	Family, friend or relative		Bank		Savings & credit Soc		Cooperative		Savings & credit Soc		Trader/trade store		Private individual		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	0	0.0	71	100.0	0	0	0	0	0	0	0	0	0	0	71	100
Arusha	89	50.0	89	50.0	0	0	0	0	0	0	0	0	0	0	178	100
Karatu	0	0.0	71	100.0	0	0	0	0	0	0	0	0	0	0	71	100
Ngorongoro	0	0.0	29	100.0	0	0	0	0	0	0	0	0	0	0	29	100
Longido	0	0.0	239	100.0	0	0	0	0	0	0	0	0	0	0	239	100
Arusha Rural	122	100	0	0.0	0	0	0	0	0	0	0	0	0	0	122	100
Meru	211	29.7	499	70.3	0	0	0	0	0	0	0	0	0	0	711	100
Total	**422**	29.7	**999**	70.3	0	0	0	0	0	0	0	0	0		**1,421**	**100**

7.6 AGRICULTURE CREDIT: Number of Households receiving Credits by Main Source of credit C and District During the 2007/08 Agriculture Year

District	Family, friend or relative		Bank		Savings & credit Soc		Cooperative		Savings & credit Soc		Trader/trade store		Private individual		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	0	0	143	100	0	0	0	0	0	0	0	0	0	0.0	143	8.0
Arusha	89	33	178	67	0	0	0	0	0	0	0	0	0	0.0	267	15.0
Karatu	0	0	71	100	0	0	0	0	0	0	0	0	0	0.0	71	4.0
Ngorongoro	29	17	144	83	0	0	0	0	0	0	0	0	0	0.0	173	9.7
Longido	119	50	119	50	0	0	0	0	0	0	0	0	0	0.0	239	13.4
Arusha Rural	0	0	0	0	0	0	0	0	0	0	0	0	122	0.0	0	0.0
Meru	237	27	656	73	0	0	0	0	0	0	0	0	122	0.0	894	50.0
Total	**475**	27	**1,312**	73	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**244**	**0**	**1,787**	100.0

7.7: Provision of credit A by sex and District During the 2007/08 Agriculture Year

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Monduli	357	50	357	50	714	100
Arusha	85	29	213	71	298	100
Karatu	535	75	178	25	713	100
Ngorongoro	568	89	71	11	639	100
Longido	0	0	29	100	29	100
Arusha Rural	119	100	0	0	119	100
Meru	610	50	610	50	1,220	100
Total	**2,275**	**61**	**1,459**	**39**	**3,734**	**100**

7.8 : Provision of credit B by sex and District During the 2007/08 Agriculture Year

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Monduli	0	0	143	100	143	100
Arusha	0	0	0	0	0	0
Karatu	0	0	178	100	178	100
Ngorongoro	0	0	0	0	0	0
Longido	0	0	178	100	178	100
Arusha Rural	119	100	0	0	119	100
Meru	0	0	122	100	122	100
Total	**119**	**18**	**530**	**82**	**649**	**100**

CROP EXTENSION

8.1 : CROP EXTENSION: Number of Agriculture Households that received Crop Advice During the 2007/08 Agriculture Year

District	Households that received Crop Advices		Households that did NOT receive Crop advices		Crop Growing Households
	Number	%	Number	%	
Monduli	18,789	77.1	5,572	22.9	24,361
Arusha	2,174	85.0	384	15.0	2,557
Karatu	26,290	77.8	7,486	22.2	33,776
Ngorongoro	7,176	66.0	3,695	34.0	10,871
Longido	5,143	75.1	1,705	24.9	6,847
Arusha Rural	40,370	86.4	6,330	13.6	46,701
Meru	39,043	80.4	9,517	19.6	48,560
Total	138,984	**80.0**	**34,688**	**20.0**	**173,673**

8.2 : CROP EXTENSION: Number of Agriculture Households Participated in Out Grower Agreement During the 2007/08 Agriculture Year

Region	Number of Households Participated in Out Grower Agreement		Number of Households NOT Participated in Out GrowerAgreement		Total Number of Households	
	Number	%	Number	%	Number	%
Monduli	143	0.5	28,791	99.5	28,933	100
Arusha	0	0.0	2,557	100.0	2,557	100
Karatu	713	2.0	35,380	98.0	36,093	100
Ngorongoro	71	0.2	28,704	99.8	28,776	100
Longido	144	1.2	11,499	98.8	11,644	100
Arusha Rural	956	2.0	47,417	98.0	48,373	100
Meru	5,734	11.6	43,557	88.4	49,292	100
Total	**7,761**	**3.8**	**197,906**	**96.2**	**205,667**	**100**

8.3 : CROP EXTENSION: Number of Agriculture Households Participated in Contract Production Agreement During the 2007/08

District	Number of Hholds Participated in Production Agreement		Number of Hholds NOT Participated in Production Agreement		Total Number of Households	
	Number	%	Number	%	Number	%
Monduli	429	1.5	28,505	98.5	28,933	100
Arusha	0	0.0	2,557	100.0	2,557	100
Karatu	1,248	3.5	34,845	96.5	36,093	100
Ngorongoro	142	0.5	28,633	99.5	28,776	100
Longido	87	0.7	11,557	99.3	11,644	100
Arusha Rural	956	2.0	47,417	98.0	48,373	100
Meru	976	2.0	48,316	98.0	49,292	100
Total	3,837	1.9	201,830	98.1	205,667	100

8.4 : EXTENSION MESSAGES: Number of Agriculture Households By Source of Extension Messages By District During the 2007/08 Agriculture Year

District	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		Total Households that received advices	%
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%		
Monduli	18,146	85.8	3,072	3.8	0	0.0	214	0.2	1,572	1.9	4,787	8.3	71	0.1	18,789	100
Arusha	1,534	56.3	85	0.7	43	0.3	1,065	20.0	298	3.7	1,023	17.0	256	2.0	2,174	100
Karatu	25,131	86.6	2,050	2.1	1,337	2.1	2,050	2.4	2,406	2.2	4,010	4.4	267	0.2	26,290	100
Ngorongoro	6,892	88.0	497	3.1	0	0.0	213	1.0	284	1.7	782	6.2	0	0.0	7,176	100
Longido	4,449	79.2	404	1.7	29	0.1	289	2.0	491	3.0	2,051	13.5	144	0.5	5,143	100
Arusha Rural	38,459	84.0	11,586	8.1	1,075	0.4	1,433	1.1	4,061	2.5	5,733	3.6	478	0.2	40,370	100
Meru	38,311	82.7	13,177	7.3	244	0.1	1,098	0.4	9,883	4.6	8,053	4.7	732	0.2	39,043	100
Total	132,923	**83.9**	30,871	**5.7**	2,727	**0.5**	6,363	**1.3**	18,995	**3.1**	26,438	**5.3**	1,949	**0.2**	**138,984**	100

8.5 CROP EXTENSION: Number of households receiving extension advice on Spacing by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	14,502	95.3	286	1.9	0	0.0	0	0.0	214	1.4	214	1.4	0	0.0	15,217
Arusha	938	53.7	0	0.0	0	0.0	426	24.4	128	7.3	213	12.2	43	2.4	1,747
Karatu	20,675	87.9	267	1.1	446	1.9	267	1.1	356	1.5	1,426	6.1	89	0.4	23,527
Ngorongoro	5,400	91.6	142	2.4	0	0.0	0	0.0	142	2.4	213	3.6	0	0.0	5,897
Longido	3,380	80.1	58	1.4	0	0.0	173	4.1	58	1.4	549	13.0	0	0.0	4,218
Arusha Rural	30,337	92.0	1,194	3.6	119	0.4	119	0.4	478	1.4	717	2.2	0	0.0	32,965
Meru	32,699	91.2	1,586	4.4	122	0.3	0	0.0	366	1.0	976	2.7	122	0.3	35,871
Total	**107,932**	**90.4**	**3,534**	**3.0**	**687**	**0.6**	**986**	**0.8**	**1,742**	**1.5**	**4,308**	**3.6**	**254**	**0.2**	**119,443**

8.6 CROP EXTENSION: Number of households receiving extension advice on Use of Agrochemicals by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	10,859	93.8	429	3.7	0	0.0	0	0.0	71	0.6	214	1.9	0	0.0	11,573
Arusha	469	57.9	43	5.3	0	0.0	85	10.5	43	5.3	170	21.1	0	0.0	810
Karatu	13,100	88.6	267	1.8	267	1.8	446	3.0	267	1.8	446	3.0	0	0.0	14,794
Ngorongoro	3,197	93.8	0	0.0	0	0.0	0	0.0	0	0.0	213	6.3	0	0.0	3,410
Longido	2,254	77.2	58	2.0	0	0.0	29	1.0	29	1.0	491	16.8	58	2.0	2,918
Arusha Rural	15,646	87.9	956	5.4	119	0.7	239	1.3	358	2.0	358	2.0	119	0.7	17,796
Meru	28,184	92.4	1,220	4.0	122	0.4	244	0.8	122	0.4	488	1.6	122	0.4	30,502
Total	73,710	90.1	2,972	3.6	509	0.6	1,043	1.3	891	1.1	2,381	2.9	299	0.4	81,804

8.7 CROP EXTENSION: Number of households receiving extensionadvice on Erosion Control by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	12,359	94.5	286	2.2	0	0.0	71	0.5	214	1.6	143	1.1	0	0.0	13,074
Arusha	810	67.9	0	0.0	0	0.0	128	10.7	0	0.0	213	17.9	43	3.6	1,193
Karatu	17,289	86.6	891	4.5	446	2.2	178	0.9	446	2.2	713	3.6	0	0.0	19,962
Ngorongoro	1,918	87.1	213	9.7	0	0.0	0	0.0	0	0.0	71	3.2	0	0.0	2,203
Longido	1,647	79.2	29	1.4	0	0.0	0	0.0	87	4.2	318	15.3	0	0.0	2,080
Arusha Rural	18,871	82.7	3,105	13.6	0	0.0	119	0.5	358	1.6	358	1.6	0	0.0	22,813
Meru	23,792	85.2	3,050	10.9	0	0.0	122	0.4	244	0.9	732	2.6	0	0.0	27,940
Total	76,686	85.9	7,575	8.5	446	0.5	619	0.7	1,349	1.5	2,548	2.9	43	0.0	89,265

8.8 CROP EXTENSION: Number of households receiving extension advice on Organic Fertlizer use by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	10,287	86.7	357	3.0	0	0.0	71	0.6	143	1.2	1,000	8.4	0	0.0	11,859
Arusha	767	50.0	0	0.0	43	2.8	341	22.2	43	2.8	298	19.4	43	2.8	1,534
Karatu	15,061	87.1	89	0.5	356	2.1	446	2.6	267	1.5	1,069	6.2	0	0.0	17,289
Ngorongoro	2,487	87.5	213	7.5	0	0.0	0	0.0	71	2.5	71	2.5	0	0.0	2,842
Longido	1,849	82.1	58	2.6	29	1.3	29	1.3	116	5.1	173	7.7	0	0.0	2,254
Arusha Rural	22,335	72.5	4,658	15.1	0	0.0	597	1.9	1,194	3.9	2,030	6.6	0	0.0	30,815
Meru	25,622	78.1	2,928	8.9	0	0.0	122	0.4	1,342	4.1	2,806	8.6	0	0.0	32,821
Total	78,408	78.9	8,304	8.4	428	0.4	1,606	1.6	3,176	3.2	7,449	7.5	43	0.0	99,414

8.9 CROP EXTENSION: Number of households receiving extension advice on use of Inorganic Fertilizer by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	7,073	77.3	286	3.1	0	0.0	0	0.0	357	3.9	1,429	15.6	0	0.0	9,144
Arusha	767	81.8	0	0.0	0	0.0	0	0.0	0	0.0	170	18.2	0	0.0	938
Karatu	10,872	84.7	356	2.8	89	0.7	535	4.2	535	4.2	446	3.5	0	0.0	12,833
Ngorongoro	1,279	90.0	71	5.0	0	0.0	0	0.0	0	0.0	71	5.0	0	0.0	1,421
Longido	2,022	92.1	58	2.6	0	0.0	0	0.0	29	1.3	87	3.9	0	0.0	2,196
Arusha Rural	17,438	83.4	1,194	5.7	119	0.6	239	1.1	836	4.0	1,075	5.1	0	0.0	20,902
Meru	25,622	82.4	2,074	6.7	0	0.0	244	0.8	1,952	6.3	1,220	3.9	0	0.0	31,112
Total	65,074	82.8	4,040	5.1	209	0.3	1,018	1.3	3,709	4.7	4,498	5.7	0	0.0	78,546

8.10 CROP EXTENSION: Number of households receiving extension advice on Use of Improved Seeds by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	8,930	79.6	643	5.7	0	0.0	0	0.0	429	3.8	1,214	10.8	0	0.0	11,216
Arusha	1,236	67.4	0	0.0	0	0.0	213	11.6	0	0.0	298	16.3	85	4.7	1,833
Karatu	18,982	88.0	535	2.5	446	2.1	356	1.7	446	2.1	713	3.3	89	0.4	21,567
Ngorongoro	3,908	94.8	142	3.4	0	0.0	0	0.0	0	0.0	71	1.7	0	0.0	4,121
Longido	2,947	87.9	0	0.0	0	0.0	116	3.4	116	3.4	173	5.2	0	0.0	3,351
Arusha Rural	27,949	88.6	1,314	4.2	119	0.4	478	1.5	836	2.7	836	2.7	0	0.0	31,532
Meru	28,062	85.5	1,708	5.2	0	0.0	0	0.0	2,074	6.3	976	3.0	0	0.0	32,821
Total	92,014	86.4	4,342	4.1	565	0.5	1,163	1.1	3,900	3.7	4,282	4.0	174	0.2	106,440

8.11 CROP EXTENSION: Number of households receiving extension advice on Mechanization and Labor Saving Technologies by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	11,788	85.9	714	5.2	0	0.0	0	0.0	71	0.5	1,143	8.3	0	0.0	13,717
Arusha	725	60.7	0	0.0	0	0.0	170	14.3	43	3.6	213	17.9	43	3.6	1,193
Karatu	13,813	84.2	267	1.6	446	2.7	980	6.0	356	2.2	535	3.3	0	0.0	16,398
Ngorongoro	4,121	92.1	71	1.6	0	0.0	0	0.0	0	0.0	284	6.3	0	0.0	4,476
Longido	1,907	78.6	0	0.0	0	0.0	87	3.6	144	6.0	289	11.9	0	0.0	2,427
Arusha Rural	21,857	90.1	956	3.9	119	0.5	119	0.5	239	1.0	956	3.9	0	0.0	24,246
Meru	20,010	76.6	2,074	7.9	0	0.0	122	0.5	1,952	7.5	1,830	7.0	122	0.5	26,110
Total	74,220	83.8	4,082	4.6	565	0.6	1,479	1.7	2,806	3.2	5,250	5.9	165	0.2	88,567

8.12 CROP EXTENSION: Number of households receiving extension advice on Irrigation Technologies by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	6,787	84.8	500	6.3	0	0.0	0	0.0	143	1.8	572	7.1	0	0.0	8,001
Arusha	128	15.0	0	0.0	0	0.0	511	60.0	43	5.0	170	20.0	0	0.0	852
Karatu	7,129	87.0	356	4.3	267	3.3	89	1.1	267	3.3	89	1.1	0	0.0	8,199
Ngorongoro	1,847	74.3	71	2.9	0	0.0	71	2.9	142	5.7	355	14.3	0	0.0	2,487
Longido	1,242	75.4	58	3.5	0	0.0	29	1.8	87	5.3	202	12.3	29	1.8	1,647
Arusha Rural	11,705	81.0	1,911	13.2	119	0.8	119	0.8	478	3.3	119	0.8	0	0.0	14,452
Meru	18,057	77.1	3,416	14.6	0	0.0	122	0.5	854	3.6	976	4.2	0	0.0	23,426
Total	46,896	79.4	6,313	10.7	387	0.7	942	1.6	2,013	3.4	2,484	4.2	29	0.0	59,064

8.13 CROP EXTENSION: Number of households receiving extension advice on by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	8,501	88.8	572	6.0	0	0.0	0	0.0	286	3.0	214	2.2	0	0.0	9,573
Arusha	1,023	60.0	0	0.0	0	0.0	426	25.0	128	7.5	128	7.5	0	0.0	1,705
Karatu	15,774	85.9	356	1.9	446	2.4	267	1.5	446	2.4	1,069	5.8	0	0.0	18,358
Ngorongoro	2,629	82.2	71	2.2	0	0.0	71	2.2	71	2.2	355	11.1	0	0.0	3,197
Longido	1,907	73.3	29	1.1	0	0.0	29	1.1	87	3.3	549	21.1	0	0.0	2,600
Arusha Rural	21,260	82.0	2,269	8.8	358	1.4	358	1.4	478	1.8	1,194	4.6	0	0.0	25,918
Meru	23,182	84.8	976	3.6	0	0.0	244	0.9	1,830	6.7	1,098	4.0	0	0.0	27,330
Total	**74,276**	**83.8**	**4,273**	**4.8**	**804**	**0.9**	**1,396**	**1.6**	**3,325**	**3.7**	**4,608**	**5.2**	**0**	**0.0**	**88,682**

8.14 CROP EXTENSION: Number of households receiving extension advice on Vermin Control by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/NewsPaper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	9,859	75.8	572	4.4	0	0.0	71	0.5	286	2.2	2,215	17.0	0	0.0	13,002
Arusha	213	33.3	0	0.0	0	0.0	213	33.3	43	6.7	170	26.7	0	0.0	639
Karatu	9,268	83.9	178	1.6	267	2.4	267	2.4	356	3.2	624	5.6	89	0.8	11,051
Ngorongoro	2,487	87.5	0	0.0	0	0.0	142	5.0	0	0.0	213	7.5	0	0.0	2,842
Longido	1,589	64.7	116	4.7	0	0.0	0	0.0	58	2.4	693	28.2	0	0.0	2,456
Arusha Rural	17,796	87.6	836	4.1	0	0.0	239	1.2	478	2.4	956	4.7	0	0.0	20,305
Meru	16,959	76.0	854	3.8	0	0.0	0	0.0	1,708	7.7	2,684	12.0	122	0.5	22,328
Total	58,172	80.1	2,555	3.5	267	0.4	933	1.3	2,929	4.0	7,555	10.4	211	0.3	72,622

AGRICULTURE CONSTRAINTS

Table 9.11.1 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
District	Number	%	Number	%	Number	%	Number	%
Monduli	2,215	7.7	1,286	4.4	3,501	12.1	357	1.2
Arusha	256	10.0	43	1.7	810	31.7	43	1.7
Karatu	14,615	40.5	624	1.7	3,030	8.4	2,050	5.7
Ngorongoro	5,187	18.0	7,034	24.4	711	2.5	213	.7
Longido	2,196	18.9	231	2.0	1,820	15.6	404	3.5
Arusha Rural	27,949	57.9	956	2.0	4,180	8.7	1,075	2.2
Meru	18,667	38.0	1,098	2.2	3,904	7.9	1,220	2.5
Total	**71,084**	**34.6**	**11,271**	**5.5**	**17,956**	**8.7**	**5,362**	**2.6**

Cont. Table 9.11.1 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
District	Number	%	Number	%	Number	%	Number	%
Monduli	2,143	7.4	500	1.7	572	2.0	2,358	8.1
Arusha	213	8.3	0	.0	85	3.3	170	6.7
Karatu	1,604	4.4	802	2.2	89	.2	4,991	13.8
Ngorongoro	2,060	7.2	142	.5	0	.0	924	3.2
Longido	376	3.2	0	.0	0	.0	289	2.5
Arusha Rural	597	1.2	1,792	3.7	717	1.5	3,464	7.2
Meru	1,952	4.0	1,220	2.5	244	.5	9,273	18.9
Total	**8,946**	**4.4**	**4,456**	**2.2**	**1,707**	**.8**	**21,468**	**10.5**

Cont. Table 9.11.1 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
District	Number	%	Number	%	Number	%	Number	%
Monduli	857	3.0	0	.0	71	.2	1,072	3.7
Arusha	85	3.3	0	.0	0	.0	0	.0
Karatu	178	.5	0	.0	0	.0	267	.7
Ngorongoro	1,208	4.2	0	.0	71	.2	1,847	6.4
Longido	809	6.9	29	.2	29	.2	549	4.7
Arusha Rural	836	1.7	119	.2	0	.0	239	.5
Meru	3,050	6.2	0	.0	0	.0	2,928	6.0
Total	**7,024**	**3.4**	**148**	**.1**	**171**	**.1**	**6,902**	**3.4**

Cont. Table 9.11.1 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
District	Number	%	Number	%	Number	%	Number	%
Monduli	429	1.5	143	.5	0	.0	0	.0
Arusha	213	8.3	0	.0	0	.0	0	.0
Karatu	267	.7	535	1.5	0	.0	89	.2
Ngorongoro	284	1.0	0	.0	0	.0	0	.0
Longido	202	1.7	29	.2	29	.2	0	.0
Arusha Rural	119	.2	478	1.0	0	.0	0	.0
Meru	854	1.7	488	1.0	0	.0	0	.0
Total	**2,369**	**1.2**	**1,672**	**.8**	**29**	**.0**	**89**	**.0**

Cont. Table 9.11.1 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint									
	Crop Processing		Marketing Information		Higher Transport Costs		Destruction by Animals			
District	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	143	.5	143	.5	71	.2	2,786	9.6	0	.0
Arusha	0	.0	0	.0	0	.0	0	.0	0	.0
Karatu	0	.0	980	2.7	802	2.2	446	1.2	267	.7
Ngorongoro	0	.0	426	1.5	71	.2	639	2.2	0	.0
Longido	0	.0	0	.0	29	.2	1,387	11.9	0	.0
Arusha Rural	0	.0	0	.0	119	.2	0	.0	0	.0
Meru	0	.0	122	.2	2,562	5.2	488	1.0	0	.0
Total	**143**	**.1**	**1,671**	**.8**	**3,655**	**1.8**	**5,746**	**2.8**	**267**	**.1**

Cont. Table 9.11.1 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
District	Number	%	Number	%	Number	%	Number	%
Monduli	2,786	9.6	71	.2	500	1.7	0	.0
Arusha	0	.0	0	.0	0	.0	0	.0
Karatu	446	1.2	0	.0	267	.7	0	.0
Ngorongoro	639	2.2	0	.0	1,421	4.9	71	.2
Longido	1,387	11.9	0	.0	376	3.2	0	.0
Arusha Rural	0	.0	119	.2	0	.0	0	.0
Meru	488	1.0	0	.0	610	1.2	0	.0
Total	**5,746**	**2.8**	**191**	**.1**	**3,174**	**1.5**	**71**	**.0**

Cont. Table 9.11.1 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%	Number	%
Monduli	9,716	33.6	0	.0	28,933	100.0
Arusha	639	25.0	0	.0	2,557	100.0
Karatu	4,099	11.4	89	.2	36,093	100.0
Ngorongoro	6,324	22.0	142	.5	28,776	100.0
Longido	2,860	24.6	0	.0	11,644	100.0
Arusha Rural	5,375	11.1	119	.2	48,253	100.0
Meru	488	1.0	0	.0	49,170	100.0
Total	**29,501**	**14.4**	**351**	**.2**	**205,425**	**100.0**

Table 9.11.2 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the Second most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
District	Number	%	Number	%	Number	%	Number	%
Monduli	929	3.2	429	1.5	1,429	4.9	643	2.2
Arusha	256	10.0	85	3.3	256	10.0	43	1.7
Karatu	2,495	6.9	1,782	4.9	3,743	10.4	2,495	6.9
Ngorongoro	3,553	12.3	3,268	11.4	1,421	4.9	71	.2
Longido	953	8.2	1,185	10.2	1,242	10.7	231	2.0
Arusha Rural	3,703	7.7	3,822	7.9	6,330	13.1	2,628	5.4
Meru	5,368	10.9	1,708	3.5	8,907	18.1	2,806	5.7
Total	**17,257**	**8.4**	**12,279**	**6.0**	**23,328**	**11.4**	**8,917**	**4.3**

Cont. Table 9.11.2 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the Second most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
District	Number	%	Number	%	Number	%	Number	%
Monduli	2,500	8.6	286	1.0	1,214	4.2	5,572	19.3
Arusha	341	13.3	426	16.7	43	1.7	384	15.0
Karatu	10,783	29.9	624	1.7	1,426	4.0	4,901	13.6
Ngorongoro	497	1.7	142	.5	284	1.0	2,345	8.1
Longido	1,271	10.9	58	.5	202	1.7	636	5.5
Arusha Rural	3,583	7.4	3,822	7.9	956	2.0	10,988	22.8
Meru	4,880	9.9	2,074	4.2	976	2.0	11,103	22.6
Total	**23,857**	**11.6**	**7,432**	**3.6**	**5,101**	**2.5**	**35,929**	**17.5**

Cont. Table 9.11.2 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the Second most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,286	4.4	71	.2	0	.0	2,286	7.9
Arusha	213	8.3	0	.0	0	.0	43	1.7
Karatu	624	1.7	0	.0	0	.0	535	1.5
Ngorongoro	4,618	16.0	71	.2	0	.0	3,268	11.4
Longido	607	5.2	0	.0	29	.2	1,098	9.4
Arusha Rural	2,867	5.9	239	.5	0	.0	597	1.2
Meru	2,806	5.7	0	.0	0	.0	1,342	2.7
Total	**13,021**	**6.3**	**381**	**.2**	**29**	**.0**	**9,169**	**4.5**

Cont. Table 9.11.2 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting theSecond most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,143	4.0	714	2.5	71	.2	0	.0
Arusha	43	1.7	0	.0	0	.0	0	.0
Karatu	980	2.7	891	2.5	0	.0	0	.0
Ngorongoro	853	3.0	497	1.7	0	.0	71	.2
Longido	607	5.2	87	.7	29	.2	0	.0
Arusha Rural	1,075	2.2	1,672	3.5	0	.0	0	.0
Meru	1,952	4.0	1,464	3.0	0	.0	0	.0
Total	**6,652**	**3.2**	**5,326**	**2.6**	**100**	**.0**	**71**	**.0**

Cont. Table 9.11.2 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the Second most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
			Crop Processing		Marketing Information		Higher Transport Costs	
District	Number	%	Number	%	Number	%	Number	%
Monduli	286	1.0	0	.0	643	2.2	429	1.5
Arusha	0	.0	0	.0	0	.0	0	.0
Karatu	446	1.2	0	.0	802	2.2	356	1.0
Ngorongoro	71	.2	0	.0	2,274	7.9	497	1.7
Longido	0	.0	0	.0	0	.0	376	3.2
Arusha Rural	239	.5	0	.0	0	.0	478	1.0
Meru	122	.2	122	.2	122	.2	2,074	4.2
Total	**1,163**	**.6**	**122**	**.1**	**3,841**	**1.9**	**4,210**	**2.0**

Cont. Table 9.11.2 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the Second most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
District	Number	%	Number	%	Number	%	Number	%
Monduli	3,143	10.9	0	.0	1,715	5.9	0	.0
Arusha	43	1.7	0	.0	128	5.0	0	.0
Karatu	1,159	3.2	89	.2	802	2.2	0	.0
Ngorongoro	497	1.7	142	.5	1,563	5.4	0	.0
Longido	809	6.9	0	.0	491	4.2	0	.0
Arusha Rural	119	.2	119	.2	1,314	2.7	119	.2
Meru	0	.0	122	.2	732	1.5	0	.0
Total	**5,770**	**2.8**	**473**	**.2**	**6,745**	**3.3**	**119**	**.1**

Cont. Table 9.11.2 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting theSecond most important Constraint by District, 2007/08 Agricultural Year

	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%	Number	%
Monduli	3,929	13.6	214	.7	28,933	100.0
Arusha	256	10.0	0	.0	2,557	100.0
Karatu	1,069	3.0	89	.2	36,093	100.0
Ngorongoro	2,629	9.1	142	.5	28,776	100.0
Longido	1,734	14.9	0	.0	11,644	100.0
Arusha Rural	3,344	6.9	239	.5	48,253	100.0
Meru	488	1.0	0	.0	49,170	100.0
Total	**13,449**	**6.5**	**684**	**.3**	**205,425**	**100.0**

Table 9.11.3 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
District	Number	%	Number	%	Number	%	Number	%
Monduli	857	3.0	357	1.2	1,286	4.4	1,357	4.7
Arusha	341	13.3	0	.0	170	6.7	0	.0
Karatu	891	2.5	980	2.7	2,941	8.1	2,050	5.7
Ngorongoro	924	3.2	924	3.2	1,563	5.4	355	1.2
Longido	347	3.0	491	4.2	1,705	14.6	260	2.2
Arusha Rural	2,269	4.7	956	2.0	5,136	10.6	2,867	5.9
Meru	3,416	6.9	0	.0	5,612	11.4	2,684	5.5
Total	**9,045**	**4.4**	**3,708**	**1.8**	**18,413**	**9.0**	**9,573**	**4.7**

Cont. Table 9.11.3 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,572	5.4	429	1.5	857	3.0	5,144	17.8
Arusha	213	8.3	170	6.7	213	8.3	639	25.0
Karatu	2,674	7.4	802	2.2	535	1.5	6,506	18.0
Ngorongoro	711	2.5	497	1.7	142	.5	2,487	8.6
Longido	925	7.9	173	1.5	173	1.5	780	6.7
Arusha Rural	3,105	6.4	3,105	6.4	1,911	4.0	10,152	21.0
Meru	4,636	9.4	1,708	3.5	2,074	4.2	8,541	17.4
Total	**13,835**	**6.7**	**6,885**	**3.4**	**5,906**	**2.9**	**34,248**	**16.7**

Cont. Table 9.11.3 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,500	5.2	143	.5	71	.2	3,286	11.4
Arusha	43	1.7	0	.0	0	.0	43	1.7
Karatu	1,337	3.7	89	.2	89	.2	2,941	8.1
Ngorongoro	3,197	11.1	71	.2	71	.2	5,613	19.5
Longido	665	5.7	0	.0	0	.0	1,040	8.9
Arusha Rural	2,628	5.4	597	1.2	119	.2	3,822	7.9
Meru	3,172	6.5	122	.2	122	.2	1,708	3.5
Total	**12,541**	**6.1**	**1,022**	**.5**	**473**	**.2**	**18,453**	**9.0**

Cont. Table 9.11.3 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing			
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,857	6.4	857	3.0	0	.0	572	2.0
Arusha	298	11.7	43	1.7	0	.0	85	3.3
Karatu	7,129	19.8	802	2.2	267	.7	446	1.2
Ngorongoro	1,279	4.4	1,279	4.4	0	.0	0	.0
Longido	1,213	10.4	318	2.7	58	.5	87	.7
Arusha Rural	2,389	5.0	2,867	5.9	119	.2	0	.0
Meru	3,416	6.9	4,026	8.2	0	.0	854	1.7
Total	**17,583**	**8.6**	**10,192**	**5.0**	**445**	**.2**	**2,043**	**1.0**

Cont. Table 9.11.3 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Crop Processing		Marketing Information		Higher Transport Costs		Destruction by Animals	
District	Number	%	Number	%	Number	%	Number	%
Monduli	71	.2	1,214	4.2	1,286	4.4	1,715	5.9
Arusha	0	.0	128	5.0	0	.0	0	.0
Karatu	0	.0	891	2.5	802	2.2	446	1.2
Ngorongoro	0	.0	1,421	4.9	568	2.0	1,279	4.4
Longido	58	.5	0	.0	260	2.2	1,213	10.4
Arusha Rural	119	.2	358	.7	239	.5	0	.0
Meru	488	1.0	1,098	2.2	1,708	3.5	366	.7
Total	**737**	**.4**	**5,111**	**2.5**	**4,863**	**2.4**	**5,019**	**2.4**

Cont. Table 9.11.3 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Stealing		Pest and Disease		Local Government Taxation		Extended dry spell	
District	Number	%	Number	%	Number	%	Number	%
Monduli	71	.2	1,786	6.2	143	.5	2,500	8.6
Arusha	0	.0	43	1.7	0	.0	128	5.0
Karatu	89	.2	1,604	4.4	0	.0	1,782	4.9
Ngorongoro	0	.0	1,918	6.7	142	.5	4,050	14.1
Longido	0	.0	578	5.0	29	.2	1,242	10.7
Arusha Rural	0	.0	2,389	5.0	0	.0	3,105	6.4
Meru	244	.5	2,318	4.7	0	.0	854	1.7
Total	**405**	**.2**	**10,636**	**5.2**	**314**	**.2**	**13,662**	**6.7**

Cont. Table 9.11.3 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint			
	Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%
Monduli	0	.0	28,933	100.0
Arusha	0	.0	2,557	100.0
Karatu	0	.0	36,093	100.0
Ngorongoro	284	1.0	28,776	100.0
Longido	29	.2	11,644	100.0
Arusha Rural	0	.0	48,253	100.0
Meru	0	.0	49,170	100.0
Total	**313**	**.2**	**205,425**	**100.0**

Table 9.11.4 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FORTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,000	3.5	572	2.0	1,929	6.7	857	3.0
Arusha	170	6.7	0	.0	43	1.7	128	5.0
Karatu	2,050	5.7	535	1.5	1,604	4.4	1,604	4.4
Ngorongoro	2,345	8.1	2,274	7.9	1,421	4.9	639	2.2
Longido	520	4.5	347	3.0	1,271	10.9	202	1.7
Arusha Rural	1,792	3.7	1,672	3.5	3,225	6.7	2,747	5.7
Meru	1,586	3.2	488	1.0	5,002	10.2	1,952	4.0
Total	**9,463**	**4.6**	**5,887**	**2.9**	**14,495**	**7.1**	**8,130**	**4.0**

Cont. Table 9.11.4 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FORTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,786	6.2	214	.7	643	2.2	5,429	18.8
Arusha	170	6.7	128	5.0	170	6.7	511	20.0
Karatu	2,050	5.7	356	1.0	356	1.0	2,317	6.4
Ngorongoro	497	1.7	284	1.0	426	1.5	1,492	5.2
Longido	1,098	9.4	202	1.7	58	.5	1,271	10.9
Arusha Rural	2,389	5.0	2,628	5.4	1,433	3.0	6,569	13.6
Meru	2,806	5.7	2,074	4.2	2,074	4.2	4,880	9.9
Total	**10,796**	**5.3**	**5,887**	**2.9**	**5,161**	**2.5**	**22,471**	**10.9**

Cont. Table 9.11.4 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FORTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,929	6.7	286	1.0	71	.2	2,000	6.9
Arusha	256	10.0	0	.0	0	.0	43	1.7
Karatu	891	2.5	178	.5	0	.0	446	1.2
Ngorongoro	1,989	6.9	71	.2	71	.2	1,918	6.7
Longido	693	6.0	0	.0	0	.0	1,040	8.9
Arusha Rural	1,553	3.2	1,075	2.2	119	.2	4,778	9.9
Meru	2,440	5.0	122	.2	0	.0	1,830	3.7
Total	**9,752**	**4.7**	**1,732**	**.8**	**262**	**.1**	**12,055**	**5.9**

Cont. Table 9.11.4 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FORTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing			
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,572	5.4	1,214	4.2	71	.2	643	2.2
Arusha	213	8.3	213	8.3	0	.0	0	.0
Karatu	2,406	6.7	9,447	26.2	89	.2	1,426	4.0
Ngorongoro	4,050	14.1	1,350	4.7	142	.5	142	.5
Longido	722	6.2	404	3.5	29	.2	29	.2
Arusha Rural	3,225	6.7	5,614	11.6	0	.0	358	.7
Meru	6,589	13.4	5,490	11.2	0	.0	976	2.0
Total	**18,777**	**9.1**	**23,733**	**11.6**	**332**	**.2**	**3,574**	**1.7**

Cont. Table 9.11.4 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FORTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Crop Processing		Marketing Information		Higher Transport Costs		Destruction by Animals	
District	Number	%	Number	%	Number	%	Number	%
Monduli	143	.5	1,715	5.9	286	1.0	1,000	3.5
Arusha	85	3.3	0	.0	43	1.7	85	3.3
Karatu	89	.2	2,674	7.4	2,495	6.9	535	1.5
Ngorongoro	0	.0	1,279	4.4	1,421	4.9	924	3.2
Longido	0	.0	87	.7	289	2.5	1,445	12.4
Arusha Rural	0	.0	1,194	2.5	836	1.7	478	1.0
Meru	244	.5	2,318	4.7	3,050	6.2	366	.7
Total	**561**	**.3**	**9,266**	**4.5**	**8,420**	**4.1**	**4,832**	**2.4**

Cont. Table 9.11.4 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FORTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Stealing		Pest and Disease		Local Government Taxation		Extended dry spell	
District	Number	%	Number	%	Number	%	Number	%
Monduli	0	.0	2,072	7.2	71	.2	3,358	11.6
Arusha	0	.0	128	5.0	0	.0	170	6.7
Karatu	713	2.0	1,693	4.7	0	.0	2,139	5.9
Ngorongoro	355	1.2	2,558	8.9	284	1.0	2,274	7.9
Longido	0	.0	578	5.0	29	.2	1,213	10.4
Arusha Rural	597	1.2	2,747	5.7	119	.2	3,105	6.4
Meru	366	.7	2,806	5.7	244	.5	1,464	3.0
Total	**2,031**	**1.0**	**12,582**	**6.1**	**748**	**.4**	**13,724**	**6.7**

Cont. Table 9.11.4 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FORTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint			
	Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%
Monduli	71	.2	28,933	100.0
Arusha	0	.0	2,557	100.0
Karatu	0	.0	36,093	100.0
Ngorongoro	568	2.0	28,776	100.0
Longido	116	1.0	11,644	100.0
Arusha Rural	0	.0	48,253	100.0
Meru	0	.0	49,170	100.0
Total	**755**	**.4**	**205,425**	**100.0**

Table 9.11.5 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,072	3.7	500	1.7	1,715	5.9	857	3.0
Arusha	170	6.7	0	.0	170	6.7	0	.0
Karatu	1,069	3.0	980	2.7	2,495	6.9	1,782	4.9
Ngorongoro	2,345	8.1	2,984	10.4	1,137	4.0	355	1.2
Longido	462	4.0	491	4.2	1,185	10.2	173	1.5
Arusha Rural	1,075	2.2	1,314	2.7	2,986	6.2	1,792	3.7
Meru	1,708	3.5	610	1.2	3,904	7.9	2,928	5.9
Total	**7,902**	**3.8**	**6,880**	**3.3**	**13,592**	**6.6**	**7,888**	**3.8**

Cont. Table 9.11.5 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,286	4.4	572	2.0	1,072	3.7	4,072	14.1
Arusha	170	6.7	43	1.7	0	.0	213	8.3
Karatu	1,604	4.4	624	1.7	713	2.0	1,604	4.4
Ngorongoro	213	.7	213	.7	426	1.5	853	3.0
Longido	693	6.0	116	1.0	433	3.7	1,242	10.7
Arusha Rural	4,180	8.7	2,389	5.0	1,194	2.5	4,180	8.7
Meru	2,074	4.2	1,464	3.0	1,342	2.7	3,660	7.4
Total	**10,222**	**5.0**	**5,420**	**2.6**	**5,181**	**2.5**	**15,825**	**7.7**

Cont. Table 9.11.5 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Extension Services		Access to Forest Resources		Hunting and Gathering		Access to Potable Water	
District	Number	%	Number	%	Number	%	Number	%
Monduli	1,429	4.9	0	.0	143	.5	2,215	7.7
Arusha	341	13.3	0	.0	0	.0	43	1.7
Karatu	535	1.5	89	.2	178	.5	178	.5
Ngorongoro	1,208	4.2	213	.7	0	.0	1,776	6.2
Longido	780	6.7	0	.0	0	.0	376	3.2
Arusha Rural	1,314	2.7	1,194	2.5	119	.2	2,508	5.2
Meru	1,708	3.5	244	.5	122	.2	1,586	3.2
Total	**7,314**	**3.6**	**1,741**	**.8**	**563**	**.3**	**8,682**	**4.2**

Cont. Table 9.11.5 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Access to Credit		Access to Off Farm Income		Threshing		Harvesting	
District	Number	%	Number	%	Number	%	Number	%
Monduli	2,143	7.4	429	1.5	0	.0	214	.7
Arusha	298	11.7	85	3.3	43	1.7	0	.0
Karatu	1,782	4.9	1,604	4.4	0	.0	0	.0
Ngorongoro	1,208	4.2	711	2.5	71	.2	71	.2
Longido	780	6.7	318	2.7	0	.0	0	.0
Arusha Rural	6,091	12.6	5,136	10.6	478	1.0	0	.0
Meru	5,612	11.4	5,246	10.6	244	.5	0	.0
Total	**17,916**	**8.7**	**13,529**	**6.6**	**835**	**.4**	**285**	**.1**

Cont. Table 9.11.5 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
			Crop Processing		Marketing Information		Higher Transport Costs	
District	Number	%	Number	%	Number	%	Number	%
Monduli	929	3.2	0	.0	2,143	7.4	786	2.7
Arusha	43	1.7	0	.0	298	11.7	43	1.7
Karatu	9,179	25.4	0	.0	3,208	8.9	2,584	7.2
Ngorongoro	213	.7	71	.2	2,771	9.6	711	2.5
Longido	87	.7	0	.0	87	.7	231	2.0
Arusha Rural	119	.2	239	.5	597	1.2	1,194	2.5
Meru	122	.2	366	.7	2,806	5.7	2,928	5.9
Total	**10,692**	**5.2**	**676**	**.3**	**11,911**	**5.8**	**8,477**	**4.1**

Cont. Table 9.11.5 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
District	Number	%	Number	%	Number	%	Number	%
Monduli	857	3.0	214	.7	2,858	9.9	143	.5
Arusha	85	3.3	43	1.7	298	11.7	0	.0
Karatu	178	.5	713	2.0	2,941	8.1	0	.0
Ngorongoro	1,350	4.7	213	.7	2,060	7.2	71	.2
Longido	1,127	9.7	0	.0	838	7.2	0	.0
Arusha Rural	119	.2	358	.7	2,269	4.7	0	.0
Meru	1,098	2.2	488	1.0	3,904	7.9	122	.2
Total	**4,815**	**2.3**	**2,029**	**1.0**	**15,169**	**7.4**	**336**	**.2**

Cont. Table 9.11.5 AGRICULTURE CONSTRAINTS: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%	Number	%
Monduli	1,929	6.7	1,357	4.7	28,933	100.0
Arusha	170	6.7	0	.0	2,557	100.0
Karatu	1,871	5.2	178	.5	36,093	100.0
Ngorongoro	6,039	21.0	1,492	5.2	28,776	100.0
Longido	2,080	17.9	144	1.2	11,644	100.0
Arusha Rural	7,286	15.1	119	.2	48,253	100.0
Meru	4,758	9.7	244	.5	49,292	100.0
Total	**24,135**	**11.7**	**3,536**	**1.7**	**205,547**	**100.0**

POVERTY MODULE

10.1 HOUSEHOLD FACILITIES: Number of households reporting average number of rooms and type of building Materials and District, 2007/08 Agricultural Year

District	Roofing Materials								
	Number of rooms	Iron Sheets	Tiles	Concrete	Asbestos	Grass/Leaves	Grass & Mud	Other	Total
Monduli	2	6,358	71	214	643	20,218	1,429	0	28,933
Arusha	3	2,472	0	0	0	85	0	0	2,557
Karatu	3	19,428	713	89	802	13,457	1,604	0	36,093
Ngorongoro	2	2,913	0	0	0	15,560	10,018	284	28,776
Longido	2	1,647	29	0	0	7,830	2,051	87	11,644
Arusha Rural	2	34,996	956	119	478	10,391	1,314	0	48,253
Meru	3	45,998	244	488	488	1,830	244	0	49,292
Total	**2**	**113,811**	**2,013**	**911**	**2,411**	**69,371**	**16,660**	**371**	**205,547**
%		**55.4**	**1.0**	**0.4**	**1.2**	**33.7**	**8.1**	**0.2**	**100.0**

10.2 HOUSEHOLD FACILITIES: Number of households reporting average number of rooms by type of Floor Materials and District, 2007/08 Agricultural Year

District		Floor Materials						
	Number of rooms	Earth,Sand, Dung	Wood Planks, Bamboo, Palm	Parquet Or Polished Wood	Ceramic Tiles, Terrazzo	Cement	Other	Total
Monduli	2	27,004	429	0	0	1,429	71	28,933
Arusha	3	1,364	43	0	85	1,023	43	2,557
Karatu	3	30,568	713	178	89	4,545	0	36,093
Ngorongoro	2	27,283	426	0	0	1,066	0	28,776
Longido	2	10,892	289	29	29	404	0	11,644
Arusha Rural	2	34,757	2,389	0	358	10,749	0	48,253
Meru	3	21,962	610	244	488	25,988	0	49,292
Total	**2**	**153,830**	**4,898**	**451**	**1,050**	**45,204**	**114**	**205,547**
%		**74.8**	**2.4**	**0.2**	**0.5**	**22.0**	**0.1**	**100.0**

10.3 HOUSEHOLD FACILITIES: Number of households by type of Wall Materials and District, 2007/08 Agricultural Year

District	Wall Materials								
	Grass	Poles and Mud	Sun-Dried Bricks	Baked Bricks	Wood,Timber	Cement Blocks	Stones	Other	Total
Monduli	4,144	23,147	143	286	0	1,143	0	71	28,933
Arusha	256	1,406	170	85	0	554	0	85	2,557
Karatu	7,129	16,843	6,506	4,812	446	267	0	89	36,093
Ngorongoro	10,800	17,123	0	284	213	284	0	71	28,776
Longido	3,380	7,107	87	58	953	29	0	29	11,644
Arusha Rural	10,869	21,738	3,583	4,778	1,433	5,733	0	119	48,253
Meru	2,562	10,127	7,931	16,349	3,050	9,029	0	244	49,292
Total	**39,140**	**97,492**	**18,419**	**26,652**	**6,096**	**17,039**	**0**	**709**	**205,547**
%	**19.0**	**47.4**	**9.0**	**13.0**	**3.0**	**8.3**	**0.0**	**0.3**	**100.0**

10.4 HOUSEHOLD FACILITIES: Number of Agricultural Households reporting ownership of Assets by District, 2007/08 Agricultural Year

District	Radio			Landline phone			Mobile phone			Iron			Wheelbarrow		
	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
Monduli	15,860	13,074	28,933	786	28,148	28,933	12,002	16,931	28,933	3,501	25,433	28,933	1,357	27,576	28,933
Arusha	2,216	341	2,557	43	2,515	2,557	1,790	767	2,557	1,236	1,321	2,557	639	1,918	2,557
Karatu	22,101	13,992	36,093	1,337	34,756	36,093	18,091	18,002	36,093	9,803	26,290	36,093	3,386	32,706	36,093
Ngorongoro	12,576	16,200	28,776	497	28,278	28,776	12,008	16,768	28,776	2,771	26,005	28,776	1,350	27,426	28,776
Longido	5,316	6,327	11,644	116	11,528	11,644	3,814	7,830	11,644	780	10,863	11,644	722	10,921	11,644
Arusha Rural	35,593	12,661	48,253	2,986	45,267	48,253	24,604	23,649	48,253	19,349	28,904	48,253	13,019	35,234	48,253
Meru	41,117	8,175	49,292	976	48,316	49,292	31,722	17,569	49,292	26,354	22,938	49,292	16,105	33,187	49,292
Total	**134,779**	**70,768**	**205,547**	**6,740**	**198,807**	**205,547**	**104,031**	**101,516**	**205,547**	**63,794**	**141,754**	**205,547**	**36,579**	**168,968**	**205,547**
%	**65.6**	**34.4**	**100.0**	**3.3**	**96.7**	**100.0**	**50.6**	**49.4**	**100.0**	**31.0**	**69.0**	**100.0**	**17.8**	**82.2**	**100.0**

cont… 10.4 HOUSEHOLD FACILITIES: Number of Agricultural Households reporting ownership of Assets by District, 2007/08 Agricultural Year

	Bicycle			Vehicle			Television / Video			Refrigerator			Motor Cycle		
District	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
Monduli	6,144	22,790	28,933	2,286	26,647	28,933	357	28,576	28,933	143	28,791	28,933	429	28,505	28,933
Arusha	1,492	1,065	2,557	256	2,301	2,557	341	2,216	2,557	213	2,344	2,557	170	2,387	2,557
Karatu	16,041	20,052	36,093	3,832	32,261	36,093	267	35,825	36,093	178	35,915	36,093	802	35,291	36,093
Ngorongoro	2,203	26,573	28,776	568	28,207	28,776	0	28,776	28,776	213	28,562	28,776	71	28,704	28,776
Longido	1,762	9,881	11,644	318	11,326	11,644	202	11,441	11,644	58	11,586	11,644	376	11,268	11,644
Arusha Rural	16,721	31,532	48,253	5,016	43,237	48,253	4,658	43,595	48,253	3,225	45,028	48,253	2,508	45,745	48,253
Meru	20,498	28,794	49,292	3,294	45,998	49,292	6,955	42,337	49,292	2,806	46,486	49,292	1,220	48,072	49,292
Total	**64,861**	**140,687**	**205,547**	**15,571**	**189,977**	**205,547**	**12,780**	**192,767**	**205,547**	**6,836**	**198,711**	**205,547**	**5,576**	**199,971**	**205,547**
%	**31.6**	**68.4**	**100.0**	**7.6**	**92.4**	**100.0**	**6.2**	**93.8**	**100.0**	**3.3**	**96.7**	**100.0**	**2.7**	**97.3**	**100.0**

10.5 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Main Source of Energy for Lighting by District, 2007/08 Agricultural Year

District	Electricity	Solar	Gas (Biogas)	Hurricane Lamp	Pressure Lamp	Wick Lamp	Candles	Firewood	Total
Monduli	214	286	71	4,286	500	21,646	71	1,857	28,933
Arusha	128	469	0	1,279	0	682	0	0	2,557
Karatu	713	802	0	8,199	2,317	22,725	891	446	36,093
Ngorongoro	71	213	0	3,055	568	13,784	213	10,871	28,776
Longido	0	116	0	953	173	9,072	87	1,242	11,644
Arusha Rural	3,225	1,075	239	21,977	2,150	19,230	0	358	48,253
Meru	5,368	1,220	122	27,086	1,586	13,543	244	122	49,292
Total	**9,719**	**4,180**	**432**	**66,835**	**7,295**	**100,682**	**1,506**	**14,896**	**205,547**
%	**4.7**	**2.0**	**0.2**	**32.5**	**3.5**	**49.0**	**0.7**	**7.2**	**100.0**

10.7 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year

District	Piped Water	Protected Well	Protected / Covered Spring	Uprotected Well	Unprotected Spring	Surface Water (Lake / Dam / River / Stream)	Covered Rainwater Catchment	Uncovered Rainwater Catchment	Water Vendor	Tanked Truck	Bottled water	Other	Total
Monduli	8,359	429	214	714	1,143	17,003	286	714	0	0	0	71	28,933
Arusha	2,174	43	0	0	170	0	43	128	0	0	0	0	2,557
Karatu	16,754	2,495	535	8,288	2,852	4,367	446	178	0	178	0	0	36,093
Ngorongoro	7,673	711	142	2,345	4,831	9,876	0	2,913	0	0	71	213	28,776
Longido	5,923	202	982	925	780	1,965	116	722	0	29	0	0	11,644
Arusha Rural	38,459	478	239	1,792	1,075	5,375	358	239	0	239	0	0	48,253
Meru	33,675	1,342	244	610	2,928	8,297	244	0	0	0	0	1,952	49,292
Total	**113,017**	**5,699**	**2,356**	**14,673**	**13,780**	**46,882**	**1,492**	**4,895**	**0**	**446**	**71**	**2,237**	**205,547**
%	**55.0**	**2.8**	**1.1**	**7.1**	**6.7**	**22.8**	**0.7**	**2.4**	**0.0**	**0.2**	**0.0**	**1.1**	**100.0**

10.8 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	2-2.99 Km	3-4.99 Km	5-9.99 Km	10Km and above	Total
Monduli	2,143	1,072	0	5,358	12,859	1,072	3,215	3,215	0	28,933
Arusha	1,918	0	0	639	0	0	0	0	0	2,557
Karatu	0	12,031	0	5,347	16,041	2,674	0	0	0	36,093
Ngorongoro	4,263	0	0	6,395	10,658	2,132	3,197	1,066	1,066	28,776
Longido	867	1,300	0	2,109	4,334	2,167	433	433	0	11,644
Arusha Rural	14,213	10,749	1,792	14,333	3,583	0	3,583	0	0	48,253
Meru	10,981	10,859	3,660	12,811	1,830	5,490	0	3,660	0	49,292
Total	**34,385**	**36,011**	**5,452**	**46,992**	**49,305**	**13,534**	**10,429**	**8,374**	**1,066**	**205,547**
%	**16.7**	**17.5**	**2.7**	**22.9**	**24.0**	**6.6**	**5.1**	**4.1**	**0.5**	**100.0**

10.9 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year

District	Less than 10	10-19 Minutes	20-29 Minutes	30-39 Minutes	40-49 Minutes	50-59 Minutes	1 Hour and Above	Total
Monduli	2,143	1,072	1,072	9,644	0	1,072	13,931	28,933
Arusha	1,279	0	639	639	0	0	0	2,557
Karatu	5,347	1,337	4,010	16,041	0	1,337	8,021	36,093
Ngorongoro	2,132	0	3,197	6,395	0	1,066	15,986	28,776
Longido	1,734	0	867	2,109	0	0	6,934	11,644
Arusha Rural	17,796	5,375	7,166	8,958	1,792	1,792	5,375	48,253
Meru	18,301	3,538	0	18,301	0	0	9,151	49,292
Total	**48,732**	**11,321**	**16,952**	**62,088**	**1,792**	**5,266**	**59,397**	**205,547**
%	**23.7**	**5.5**	**8.2**	**30.2**	**0.9**	**2.6**	**28.9**	**100.0**

10.10 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year

District	Piped Water	Protected Well	Protected / Covered Spring	Uprotected Well	Unprotected Spring	Surface Water (Lake / Dam / River / Stream)	Covered Rainwater Catchment	Uncovered Rainwater Catchment	Water Vendor	Tanker truck	Bottled water	Other	Total HH
Monduli	11,359	1,072	500	786	1,643	13,145	71	143	0	143	0	71	28,933
Arusha	1,577	85	85	43	554	128	0	0	85	0	0	0	2,557
Karatu	20,230	3,119	535	1,337	4,010	4,991	446	1,159	178	89	0	0	36,093
Ngorongoro	8,739	924	568	1,989	4,831	8,668	71	2,842	0	71	0	71	28,776
Longido	6,587	491	1,127	780	2,051	462	0	116	0	29	0	0	11,644
Arusha Rural	38,579	358	358	717	2,150	5,733	0	0	0	358	0	0	48,253
Meru	32,088	1,952	244	976	4,514	7,199	122	0	122	0	0	2,074	49,292
Total	**119,160**	**8,001**	**3,418**	**6,627**	**19,755**	**40,326**	**710**	**4,259**	**385**	**690**	**0**	**2,217**	**205,547**
%	**58.0**	**3.9**	**1.7**	**3.2**	**9.6**	**19.6**	**0.3**	**2.1**	**0.2**	**0.3**	**0.0**	**1.1**	**100.0**

10.11 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	2-2.99 Km	3-4.99 Km	5-9.99 Km	10Km and above	Total
Monduli	1,072	0	0	1,072	4,286	3,215	10,716	7,501	1,072	28,933
Arusha	639	0	0	0	1,279	639	0	0	0	2,557
Karatu	0	5,347	0	8,021	17,378	5,347	0	0	0	36,093
Ngorongoro	1,066	0	1,066	6,395	9,592	1,066	5,329	3,197	1,066	28,776
Longido	0	433	0	1,676	5,201	1,734	867	1,300	433	11,644
Arusha Rural	14,213	8,958	0	12,541	7,166	0	3,583	1,792	0	48,253
Meru	10,981	12,689	5,490	9,151	3,660	5,490	0	1,830	0	49,292
Total	**27,971**	**27,427**	**6,556**	**38,854**	**48,562**	**17,491**	**20,495**	**15,620**	**2,571**	**205,547**
%	**13.6**	**13.3**	**3.2**	**18.9**	**23.6**	**8.5**	**10.0**	**7.6**	**1.3**	**100.0**

10.12 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year

District	Less than 10 Minutes	10 - 19 Minutes	20 - 29 Minutes	30 - 39 Minutes	40 - 49 Minutes	50 - 59 Minutes	above one Hour	Total
Monduli	1,072	1,072	0	3,215	0	0	23,575	28,933
Arusha	639	0	0	639	0	0	1,279	2,557
Karatu	2,674	1,337	4,010	10,694	1,337	0	16,041	36,093
Ngorongoro	0	0	3,197	6,395	1,066	1,066	17,052	28,776
Longido	0	0	433	867	0	0	10,343	11,644
Arusha Rural	14,213	3,583	7,166	10,749	1,792	0	10,749	48,253
Meru	14,641	3,538	1,830	16,471	1,830	0	10,981	49,292
Total	**33,239**	**9,530**	**16,637**	**49,030**	**6,024**	**1,066**	**90,021**	**205,547**
%	**16.2**	**4.6**	**8.1**	**23.9**	**2.9**	**0.5**	**43.8**	**100.0**

10.13 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting type of TOILET the household normally use by District, 2007/08 Agricultural Year

District	No Toilet / Bush	Flush Toilet	Traditional Pit Latrine	Improved Pit Latrine - hh Owned	Other Type	Total
Monduli	21,932	214	5,429	1,357	0	28,933
Arusha	0	213	1,875	469	0	2,557
Karatu	2,495	446	29,944	2,584	624	36,093
Ngorongoro	21,173	284	5,968	355	995	28,776
Longido	9,303	29	2,196	87	29	11,644
Arusha Rural	8,480	1,553	34,279	3,703	239	48,253
Meru	976	1,830	39,531	6,955	0	49,292
Total	**64,360**	**4,569**	**119,222**	**15,510**	**1,886**	**205,547**

10.14 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Number of meals the household normally has per day by District, 2007/08 Agricultural Year

District	One	Two	Three	Total
Monduli	1,572	16,431	10,930	28,933
Arusha	213	384	1,960	2,557
Karatu	446	15,774	19,873	36,093
Ngorongoro	213	19,255	9,308	28,776
Longido	1,387	4,305	5,952	11,644
Arusha Rural	4,419	20,424	23,410	48,253
Meru	1,098	22,572	25,622	49,292
Total	**9,348**	**99,144**	**97,056**	**205,547**

10.15 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Number of days the household Consumed Meat during the Preceeding Week by District, 2007/08 Agricultural Year

District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Monduli	12,431	7,644	7,787	786	143	71	0	71	28,933
Arusha	597	1,065	511	298	0	85	0	0	2,557
Karatu	6,060	14,526	13,546	1,426	356	89	0	89	36,093
Ngorongoro	10,160	9,663	5,187	1,563	639	1,492	0	71	28,776
Longido	3,698	3,785	3,120	867	87	29	29	29	11,644
Arusha Rural	8,600	20,185	14,213	4,539	597	119	0	0	48,253
Meru	10,005	19,521	14,031	2,684	1,952	732	122	244	49,292
Total	**51,550**	**76,390**	**58,396**	**12,163**	**3,775**	**2,618**	**151**	**505**	**205,547**
%	**25.1**	**37.2**	**28.4**	**5.9**	**1.8**	**1.3**	**0.1**	**0.2**	**100.0**

10.16 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Number of days the household Consumed Fish during the Preceeding Week by District, 2007/08 Agricultural Year

District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Monduli	18,860	7,716	1,500	500	286	71	0	0	28,933
Arusha	1,108	852	256	298	43	0	0	0	2,557
Karatu	12,031	12,833	9,447	802	713	178	89	0	36,093
Ngorongoro	24,157	3,268	1,279	0	71	0	0	0	28,776
Longido	7,743	2,774	1,040	58	29	0	0	0	11,644
Arusha Rural	24,127	13,019	8,002	2,508	358	0	239	0	48,253
Meru	19,033	18,179	7,199	3,294	1,220	244	122	0	49,292
Total	**107,060**	**58,641**	**28,722**	**7,461**	**2,720**	**494**	**450**	**0**	**205,547**
%	**52.1**	**28.5**	**14.0**	**3.6**	**1.3**	**0.2**	**0.2**	**0.0**	**100.0**

10.17 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting the status of food satisfaction of the household during the Preceeding Year by District, 2007/08 Agricultural Year

District	Never	Seldom	Sometimes	Often	Always	Total
Monduli	2,715	8,501	5,215	7,430	5,072	28,933
Arusha	1,620	341	213	341	43	2,557
Karatu	6,862	18,269	1,515	5,614	3,832	36,093
Ngorongoro	4,618	8,810	1,279	5,400	8,668	28,776
Longido	1,734	3,063	1,040	3,207	2,600	11,644
Arusha Rural	19,110	17,199	3,941	5,614	2,389	48,253
Meru	19,033	17,935	4,758	5,246	2,318	49,292
Total	**55,692**	**74,119**	**17,962**	**32,852**	**24,922**	**205,547**
%	**27.1**	**36.1**	**8.7**	**16.0**	**12.1**	**100.0**

10.18 HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Main Source of Income by District, 2007/08 Agricultural Year

District	Sales of Food Crops	Sale of Livestock	Sale of Livestock Products	Sales of Cash Crops	Sale of Forest Products	Business Income	Wages & Salaries in Cash	Other Casual Cash Earnings	Cash Remittance	Fishing	Other	Not applicable	Total
Monduli	9,859	12,145	1,929	1,000	286	1,143	71	1,929	357	0	143	71	28,933
Arusha	1,747	128	85	0	0	213	170	170	43	0	0	0	2,557
Karatu	20,675	3,030	1,069	2,228	0	1,159	2,050	5,169	356	89	0	267	36,093
Ngorongoro	2,913	23,518	568	142	71	497	284	568	213	0	0	0	28,776
Longido	2,918	6,876	607	58	0	347	87	636	87	0	29	0	11,644
Arusha Rural	26,038	3,344	5,016	1,194	0	4,539	3,105	3,344	836	0	0	836	48,253
Meru	26,476	1,830	2,806	6,222	0	4,026	3,904	2,440	1,220	0	366	0	49,292
Total	**90,626**	**50,871**	**12,081**	**10,845**	**357**	**11,924**	**9,672**	**14,257**	**3,112**	**89**	**538**	**1,175**	**205,547**
%	**44.1**	**24.7**	**5.9**	**5.3**	**0.2**	**5.8**	**4.7**	**6.9**	**1.5**	**0.0**	**0.3**	**0.6**	**100.0**

EROSION CONTROL

11.1 EROSION CONTROL: Number of Households with Soil Erosion Problem on their Land By District

District	Have any erosion problem on their farming land		Do not have any erosion problem on their farming land		Total	
	Number	%	Number	%	Number	%
Monduli	7,930	27.4	21,003	72.6	28,933	100.0
Arusha	767	30.0	1,790	70.0	2,557	100.0
Karatu	9,981	27.7	26,112	72.3	36,093	100.0
Ngorongoro	1,705	5.9	27,070	94.1	28,776	100.0
Longido	1,791	15.4	9,852	84.6	11,644	100.0
Arusha Rural	5,853	12.1	42,520	87.9	48,373	100.0
Meru	6,833	13.9	42,459	86.1	49,292	100.0
Total	**34,860**	**16.9**	**170,807**	**83.1**	**205,667**	**100.00**

11.2 EROSION CONTROL: Number of Households with Erosion Control/Water Harvesting Facilities on their Land By District

	Presence of Erosion Control/Water Harvesting Facilities					
	Have any erosion control/water harvesting facilities		Do not have have any erosion control/water harvesting facilities		Total	
District	Number	%	Number	%	Number	%
Monduli	5,715	19.8	23,218	80.2	28,933	100.0
Arusha	597	23.3	1,960	76.7	2,557	100.0
Karatu	9,447	26.2	26,646	73.8	36,093	100.0
Ngorongoro	711	2.5	28,065	97.5	28,776	100.0
Longido	838	7.2	10,806	92.8	11,644	100.0
Arusha Rural	6,091	12.6	42,281	87.4	48,373	100.0
Meru	7,443	15.1	41,849	84.9	49,292	100.0
Total	**30,841**	**15**	**174,826**	**85**	**205,667**	**100**

11.3 EROSION CONTROL: Number of Erosion Control/Water Harvesting Structures by Type and District as of 2007/08agriculture year

District	Terraces	Erosion Control Bunds	Gabions / Sandbag	Vetiver Grass	Tree Belts	Water Harvesting Bunds	Drainage Ditches	Others
Monduli	4,787	23,718	7,644	4,001	429	5,072	357	214
Arusha	0	426	511	298	256	0	256	1,023
Karatu	12,566	19,339	4,278	0	3,654	4,456	3,386	178
Ngorongoro	1,350	782	355	0	142	355	639	0
Longido	14,966	1,329	87	578	87	404	1,300	260
Arusha Rural	23,649	5,375	358	1,194	1,911	0	1,792	597
Meru	19,155	6,833	13,055	4,514	976	2,562	5,246	0
Total	76,473	57,801	26,288	10,586	7,454	12,850	12,977	2,273

PERMANENT CROPS

12.1 PERMANENT CROPS: Number of Households Planting Permanent Crops by District , 2007/08 Agriculture Year - Arusha

District	Have Crops/Fruit Trees		Does Not Have Crops/Fruit Trees		Total	
	Number	Row N %	Number	Row N %	Number	Row N %
Monduli	1,715	5.9	27,219	94.1	28,933	100.0
Arusha	1,108	43.3	1,449	56.7	2,557	100.0
Karatu	9,268	25.7	26,825	74.3	36,093	100.0
Ngorongoro	142	.5	28,633	99.5	28,776	100.0
Longido	144	1.2	11,499	98.8	11,644	100.0
Arusha Rural	9,316	19.3	39,056	80.7	48,373	100.0
Meru	27,940	56.7	21,352	43.3	49,292	100.0
Total	**49,634**	**24.1**	**156,033**	**75.9**	**205,667**	**100.0**

12.2: PERMANENT CROPS: Planted Area and Area Harvested by Type of Planting and Distict

District	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)
	Number of household	Area	Number of household	Area	Number of household	Area	
Monduli	1,429	593	500	296	1,715	889	596
Arusha	298	46	980	431	1,108	477	401
Karatu	5,525	2,055	3,921	1,471	9,268	3,526	3,441
Ngorongoro	71	56	142	28	142	84	84
Longido	87	7	144	34	144	41	36
Arusha Rural	3,105	795	7,405	2,959	9,316	3,754	2,868
Meru	9,639	3,510	20,986	10,521	27,940	14,031	13,262
Total	**20,154**	**7,062**	**34,079**	**15,740**	**49,634**	**22,802**	**20,689**

12.3 PERMANENT CROPS: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop- Monduli

Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Banana	1,214	540	313	2,470	2,470,196.4	7.9	7,893.8
Coffee	71	28	28	0	0.0	0.0	0.0
Mango	143	42	7	127	127,164.0	18.1	18,084.8
Pigeon pea	429	150	150	43	42,864.3	0.3	286.5
Coconut	71	8	2	2	2,143.2	1.1	1,071.6
Orange	71	32	32	4	4,286.4	0.1	132.2
Avocado	214	53.90	38	160	160,027	4.2	4,245.3
Sugar Cane	71	28	28	0	0.0	0.0	0.0
Lime Lemon	71	7.39	7.39	1	1,429	0.2	193.4
Other	286	61	38	161	161,455.4	4.3	4,283.2
Total	**2,358**	**889**	**596**	**2,808**	**2,808,109.7**	**4.7**	**4,712.0**

12.4 PERMANENT CROPS: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop- Arusha

Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cassava	85	6.31	5	11	10,655	2.1	2081.4
Pigeon pea	213	27.18	27	10	9,675	0.4	355.9
Cashewnut	43	16.78	17	1	1,023	0.1	61.0
Coffee	43	1.88	1.88	1	852	0.5	454.3
Sugar Cane	85	35.74	35	43	43,472	1.3	1258.9
Tamarin	43	1.27	1.27	0	426	0.3	336.9
Nutmeg	128	8.75	9	0	341	0.0	39.0
Jack Fruit	213	23.64	19	2	1,875	0.1	98.3
Mpesheni	128	13.48	13	10	10,229	0.8	759.0
Banana	639	131.85	92	474	473,843	5.1	5130.3
Avocado	597	62.45	52	32	32,391	0.6	621.1
Mango	554	53.56	47	22	22,375	0.5	474.3
Papaw	256	21.94	20	6	5,967	0.3	294.0
Orange	213	16.77	16	6	5,754	0.4	351.7
Grape	43	.76	.76	2	2,131	2.8	2797.4
Guava	426	35.25	29	5	5,498	0.2	187.5
Lime Lemon	213	19.46	19	4	3,836	0.2	205.2
Total	**3,921**	**477.04**	**401**	**630**	**630,341**	**1.6**	**1570.9**

12.5 PERMANENT CROPS: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop- Karatu

Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Banana	535	30	20	77	76,998.0	3.8	3,808.7
Coffee	178	9	9	6	6,060.0	0.7	690.9
Mango	89	1	1	58	57,926.8	43.2	43,194.8
Pigeon pea	8,912	3,457	3,383	2,187	2,186,958.1	0.6	646.4
Avocado	89	17.54	18	0	0.0	0.0	0.0
Guava	178	10.98	10	23	22,725	2.4	2,351.9
Lime Lemon	89	.35	0.35	12	11,585	33.1	33,101.0
Other	356	29	27	34	34,310.5	1.3	1,261.2
Total	**10,070**	**3,526**	**3,441**	**2,362**	**2,362,253.4**	**0.7**	**686.5**

12.6 PERMANENT CROPS: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop- Ngorongoro

Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Banana	142	50	50	37	36,946.3	0.7	735.7
Papaw	71	34	34	7	7,105.1	0.2	208.9
Total	**213**	**84**	**84**	**44**	**44,051.4**	**0.5**	**523.0**

12.7 PERMANENT CROPS: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop- Longido

Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Banana	116	19	15	36	36,375.2	2.4	2,372.2
Mango	29	1	1	23	23,373.8	25.7	25,685.8
Pigeon pea	29	15	15	6	5,778.4	0.4	395.4
Orange	29	1	1	17	17,335.3	12.7	12,700.0
Nutmeg	29	.80	1	1	867	1.1	1,088.6
Mpesheni	29	1.02	1	1	1,156	1.1	1,128.9
Avocado	58	2.59	1	12	11,672	15.7	15,690.5
Papaw	29	.68	1	1	867	1.3	1,270.0
Mandarine tangerine	29	.45	0	17	17,335	38.1	38,100.0
Total	**376**	**41**	**36**	**115**	**114,759.6**	**3.2**	**3,194.6**

12.8 PERMANENT CROPS: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop- Arusha Rural

Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cassava	239	61.41	61	54	53,747	0.9	875.3
Pigeon pea	358	450.43	421	105	104,987	0.2	249.5
Sisal	119	35.27	35	31	31,054	0.9	880.5
Coffee	2,389	483.35	406.24	415	415,289	1.0	1022.3
Mpesheni	119	1.54	2	12	11,944	7.8	7767.6
Banana	8,600	2179.62	1712.22	16037	16,036,568	9.4	9366.0
Avocado	1,792	466.98	164	1,090	1,089,998	6.7	6665.5
Mango	358	35.89	30	36	35,832	1.2	1176.0
Papaw	119	4.52	2	4	3,583	1.5	1500.0
Orange	239	17.35	17	45	45,387	2.6	2649.5
Guava	358	17.43	17	57	57,331	3.3	3289.3
Total	**14,691**	**3,754**	**2,868**	**17,886**	**17,885,719**	**6.2**	**6,235**

12.9 PERMANENT CROPS: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop- Meru

Crop	Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Quantity Harvested (kgs)	Yield (tons/Ha)	Yield (Kg/Ha)
	Number of households	Area					
Cassava	1,342	366.88	367	1,339	1,339,419	3.7	3650.8
Pigeon pea	4,514	1339.12	1,339	1,112	1,111,505	0.8	830.0
Star Fruit	244	28.01	24	85	85,407	3.5	3533.4
Coconut	244	36.86	36	59	58,564	1.6	1618.7
Coffee	13,055	4923.88	4,601	7,175	7,175,493	1.6	1559.6
Sugar Cane	122	4.68	5	0	0	0.0	0.0
Banana	20,986	5989.24	5,906	40,520	40,520,411	6.9	6861.0
Avocado	5,856	848.08	593	2,610	2,609,536	4.4	4399.7
Mango	2,074	147.36	111	801	800,503	7.2	7195.6
Papaw	2,318	170.99	114	1,130	1,129,929	9.9	9890.2
Orange	1,952	142.83	137	1,223	1,223,266	8.9	8919.8
Guava	732	22.00	19	275	274,643	14.8	14835.3
Lime Lemon	366	11.12	10	87.846	87,847	8.8	8834.8
Total	**53,806**	**14031.04**	**13,262**	**56416**	**56,416,524**	**4.3**	**4254.0**

12.10: PERMANENT CROPS: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - ARUSHA

	Cashew nut								Banana							
	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)
District	Number of Household	Area	Number of Household	Area	Number of Household	Area			Number of Household	Area	Number of Household	Area	Number of Household	Area		
Monduli	0	.	0	.	0	.	.	.	929	330	500	210	1,214	540	313	2,470,196
Arusha	43	17	43	0	43	17	17	1,023	85	6	639	126	639	132	92	473,843
Karatu	0	.	0	.	0	.	.	.	178	9	446	21	535	30	20	76,998
Ngorongoro	0	.	0	.	0	.	.	.	71	28	142	22	142	50	50	36,946
Longido	0	.	0	.	0	.	.	.	87	7	116	11	116	19	15	36,375
Arusha Rural	0	.	0	.	0	.	.	.	2,747	496	6,689	1,684	8,600	2,180	1,712	16,036,568
Meru	0	.	0	.	0	.	.	.	6,711	2,338	16,593	3,651	20,986	5,989	5,906	40,520,411
Total	**43**	**17**	**43**	**0**	**43**	**17**	**17**	**1,023**	**10,808**	**3,215**	**25,124**	**5,724**	**32,231**	**8,939**	**8,109**	**59,651,337**

12.11: PERMANENT CROPS: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - ARUSHA

	Coffee								Mango							
	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)
District	Number of Household	Area	Number of Household	Area	Number of Household	Area			Number of Household	Area	Number of Household	Area	Number of Household	Area		
Monduli	71	28	0	0	71	28	28	0	0	0	143	42	143	42	7	127,164
Arusha	0	0	43	2	43	2	.	852	43	2	554	51	554	54	47	22,375
Karatu	0	0	178	9	178	9	9	6,060	89	0	89	1	89	1	1	57,927
Ngorongoro	0	.	0	.	0	.	.	.	0	.	0	.	0	.	.	.
Longido	0	.	0	.	0	.	.	.	0	0	29	1	29	1	1	23,374
Arusha Rural	239	59	2,389	425	2,389	483	406	415,289	0	0	358	36	358	36	30	35,832
Meru	2,196	533	11,957	4,391	13,055	4,924	4,601	7,175,493	0	0	2,074	147	2,074	147	111	800,503
Total	**2,506**	**620**	**14,567**	**4,827**	**15,736**	**5,447**	**5,044**	**7,597,694**	**132**	**3**	**3,247**	**278**	**3,247**	**281**	**198**	**1,067,175**

12.12: PERMANENT CROPS: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - ARUSHA

	Pigeon pea								Coconut							
	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)
District	Number of Household	Area	Number of Household	Area	Number of Household	Area			Number of Household	Area	Number of Household	Area	Number of Household	Area		
Monduli	429	150	0	0	429	150	150	42,864	71	0	71	8	71	8	.	2,143
Arusha	170	19	43	8	213	27	27	9,675	0	.	0	.	0	.	.	.
Karatu	5,347	2,020	3,565	1,437	8,912	3,457	3,383	2,186,958	0	.	0	.	0	.	.	.
Ngorongoro	0	.	0	.	0	.	.	.	0	.	0	.	0	.	.	.
Longido	0	0	29	15	29	15	15	5,778	0	.	0	.	0	.	.	.
Arusha Rural	239	212	239	239	358	450	421	104,987	0	.	0	.	0	.	.	.
Meru	1,830	545	2,806	794	4,514	1,339	1,339	1,111,505	244	0	244	37	244	37	36	58,564
Total	**8,015**	**2,945**	**6,681**	**2,493**	**14,455**	**5,438**	**5,335**	**3,461,768**	**315**	**0**	**315**	**44**	**315**	**44**	**36**	**60,708**

12.13: PERMANENT CROPS: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - ARUSHA

	Orange								Sisal							
	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area Harvested (ha)	Quantity Harvested (kgs)
District	Number of Household	Area	Number of Household	Area	Number of Household	Area			Number of Household	Area	Number of Household	Area	Number of Household	Area		
Monduli	71	28	71	4	71	32	32	4,286	0	.	0	.	0	.	.	.
Arusha	0	0	213	17	213	17	16	5,754	0	.	0	.	0	.	.	.
Karatu	0	.	0	.	0	.	.	.	0	.	0	.	0	.	.	.
Ngorongoro	0	.	0	.	0	.	.	.	0	.	0	.	0	.	.	.
Longido	0	0	29	1	29	1	1	17,335	0	.	0	.	0	.	.	.
Arusha Rural	0	0	239	17	239	17	17	45,387	0	0	119	35	119	35	35	31,054
Meru	0	0	1,952	143	1,952	143	137	1,223,266	0	.	0	.	0	.	.	.
Total	**71**	**28**	**2,504**	**183**	**2,504**	**211**	**204**	**1,296,028**	**0**	**0**	**119**	**35**	**119**	**35**	**35**	**31,054**

12.14: PERMANENT CROPS: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - ARUSHA

	Sugar cane								Other							
	Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area				Area of Permanent Monocrop (ha)		Area of Permanent Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area			
District	Number of Household	Area	Number of Household	Area	Number of Household	Area	Area Harvested (ha)	Quantity Harvested (kgs)	Number of Household	Area	Number of Household	Area	Number of Household	Area	Area Harvested (ha)	Quantity Harvested (kgs)
Monduli	71	28	0	0	71	28	28	0	286	28	286	33	286	61	38	161,455
Arusha	0	0	85	36	85	36	35	43,472	2,131	2	2,131	191	2,131	193	167	73,348
Karatu	0	.	0	.	0	.	.	.	356	26	356	3	356	29	27	34,310
Ngorongoro	0	.	0	.	0	.	.	.	71	28	71	6	71	34	34	7,105
Longido	0	.	0	.	0	.	.	.	173	0	173	5	173	6	4	31,897
Arusha Rural	0	.	0	.	0	.	.	.	2,628	28	2,628	524	2,628	552	246	1,216,603
Meru	0	0	122	5	122	5	5	0	10,859	94	10,859	1,353	10,859	1,447	1,127	5,526,781
Total	**71**	**28**	**207**	**40**	**279**	**69**	**67**	**43,472**	**16,504**	**207**	**16,504**	**2,115**	**16,504**	**2,322**	**1,643**	**7,051,500**

CATTLE PRODUCTION

9.1.1 CATTLE PRODUCTION: Total Number of Households Rearing Cattle by District during 2007/08 Agriculture Year

District	Households rearing cattle		Households not rearing cattle		Total Agriculture households	Total Number of Households Rearing Livestock
	Number	%	Number	%		
Monduli	23,218	80	5,715	20	28,933	25,647
Arusha	2,216	87	341	13	2,557	2,387
Karatu	20,319	56	15,774	44	36,093	24,507
Ngorongoro	25,365	88	3,410	12	28,776	27,355
Longido	10,083	87	1,560	13	11,644	11,008
Arusha Rural	34,637	72	13,735	28	48,253	37,982
Meru	32,210	65	17,081	35	49,292	38,677
Total	**148,049**	**72**	**57,617**	**28**	**205,547**	**167,562**

9.1.2 CATTLE PRODUCTION: Number of Cattle by Type and District as of 1st October 2008

District	Indigenous			Improved Beef			Improved Dairy			Total		
	Number of households	Number of Cattle	%	Number of households	Number of Cattle	%	Number of households	Number of Cattle	%	Number of households	Number of Cattle	
Monduli	23,075	438,073	99.5	71	71	0.0	572	2,000	0.5	23,718	440,145	100
Arusha	1,705	18,710	83.6	298	1,023	4.6	895	2,642	11.8	2,898	22,375	100
Karatu	19,784	148,738	97.0	89	713	0.5	1,426	3,832	2.5	21,299	153,283	100
Ngorongoro	25,365	707,309	99.8	213	426	0.1	284	924	0.1	25,862	708,659	100
Longido	10,054	191,959	99.0	116	809	0.4	404	1,098	0.6	10,575	193,866	100
Arusha Rural	24,007	128,636	71.8	2,747	13,735	7.7	13,497	36,907	20.6	40,251	179,278	100
Meru	20,986	83,088	71.6	1,098	1,708	1.5	14,763	31,234	26.9	36,847	116,031	100
Total	**124,977**	**1,716,514**	**94.6**	**4,633**	**18,486**	**1.0**	**31,841**	**78,637**	**4.3**	**161,450**	**1,813,637**	**100**

9.1.3 CATTLE PRODUCTION: Number of Households rearing cattle, Head of Cattle and Average Head per Household by Herd size During the 2007/08 Agricultural Year -Arusha

Herd size	**Cattle Rearing Households**	**%**	**Herd of Cattle**	**Average Per Houseold**
1 - 5	81,762	55.2	217,669	2.7
6 - 10	30,036	20.3	228,683	7.6
11 - 15	11,853	8.0	151,955	12.8
16 - 20	5,812	3.9	105,914	18.2
21 - 30	6,786	4.6	172,020	25.4
31 - 40	3,217	2.2	112,839	35.1
41 - 50	2,387	1.6	108,942	45.6
51 - 60	1,314	0.9	72,629	55.3
61 -100	2,722	1.8	207,058	76.1
101 -150	1,205	0.8	157,186	130.5
151+	955	0.6	278,742	291.9
Total	**148,049**	**100.0**	**1,813,637**	**12.3**

9.1.4 CATTLE PRODUCTION: Total Number of indigenous Cattle by Category of cattle and District During the 2007/08 Agricultural Year

	Cattle Type															
	Castrated Bulls (Oxen)		Uncastrated Bulls		Cows		Steers		Heifers		Male Calves		Female Calves		Total	
District	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%
Monduli	51,509	13	52,652	15	172,814	23	15,717	5	42,793	12	46,365	14	56,224	18	438,073	100
Arusha	4,731	21	2,174	15	5,924	24	43	1	1,492	9	2,344	16	2,003	15	18,710	100
Karatu	29,765	16	25,310	17	49,282	28	4,456	5	9,892	7	14,794	12	15,239	14	148,738	100
Ngorongoro	84,692	13	57,196	16	302,463	22	16,200	4	69,914	11	85,403	18	91,442	17	707,309	100
Longido	16,035	11	14,822	15	78,789	24	8,032	4	26,494	11	21,525	17	26,263	18	191,959	100
Arusha Rural	26,754	15	16,960	15	40,012	32	3,583	2	15,766	11	13,258	12	12,302	13	128,636	100
Meru	24,158	21	11,835	14	26,232	31	122	0	6,344	11	6,466	10	7,931	12	83,088	100
Total	237,644	15	180,947	15	675,516	26	48,152	3	172,695	11	190,154	14	211,404	16	1,716,514	100

9.1.5 CATTLE PRODUCTION: Total Number of iImproved Beef Cattle by Category of cattle and District During the 2007/08 Agricultural Year

	Cattle Type															
	Castrated Bulls (Oxen)		Uncastrated Bulls		Cows		Steers		Heifers		Male Calves		Female Calves		Total	
District	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%
Monduli	.	0	.	0	71	100	.	0	.	0	.	0	.	0	71	100
Arusha	85	13	298	38	170	13	.	0	128	13	128	13	213	13	1,023	100
Karatu	356	33	178	33	178	33	.	0	.	0	.	0	.	0	713	100
Ngorongoro	.	0	71	33	142	33	.	0	213	33	.	0	.	0	426	100
Longido	29	11	116	33	173	11	29	11	347	22	116	11	.	0	809	100
Arusha Rural	956	6	1,194	19	3,105	22	3,703	14	1,911	11	1,792	17	1,075	11	13,735	100
Meru	488	25	244	17	.	0	.	0	610	33	244	17	122	8	1,708	100
Total	**1,914**	**11**	**2,102**	**22**	**3,841**	**18**	**3,731**	**9**	**3,209**	**16**	**2,279**	**15**	**1,410**	**9**	**18,486**	**100**

9.1.6 CATTLE PRODUCTION: Total Number of iImproved Diary Cattle by Category of cattle and District During the 2007/08 Agricultural Year

District	Cattle Type															
	Castrated Bulls (Oxen)		Uncastrated Bulls		Cows		Steers		Heifers		Male Calves		Female Calves		Total	
	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%	Total Cattle	%
Monduli	.	0	357	6	643	31	214	13	143	13	286	19	357	19	2,000	100
Arusha	.	0	43	2	1,492	49	170	5	170	10	384	17	384	17	2,642	100
Karatu	356	6	356	13	1,604	45	267	3	535	13	535	13	178	6	3,832	100
Ngorongoro	.	0	.	0	213	33	213	17	.	0	284	33	213	17	924	100
Longido	116	16	58	11	491	42	116	5	173	11	.	0	144	16	1,098	100
Arusha Rural	119	1	956	4	21,021	48	.	0	4,539	14	4,658	13	5,614	21	36,907	100
Meru	244	1	2,196	7	15,251	46	1,952	5	4,758	15	3,538	13	3,294	12	31,234	100
Total	**835**	**1**	**3,966**	**6**	**40,715**	**46**	**2,933**	**3**	**10,318**	**14**	**9,685**	**13**	**10,185**	**16**	**78,637**	**100**

9.1.7 CATTLE PRODUCTION: Total Number Households rearing Cattle and Method of Cattle Identification by District during, 2007/08 Agricultural Year

District	Branding		Cattle Clan		Ear notching		Colour		Earings		Others		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	17,789	74	786	3	4,215	18	500	2	0	0	643	3	23,933	100
Arusha	767	35	43	2	597	27	597	27	85	4	128	6	2,216	100
Karatu	9,268	37	3,565	14	1,337	5	8,110	32	178	1	2,584	10	25,042	100
Ngorongoro	21,955	85	426	2	2,487	10	142	1	213	1	497	2	25,720	100
Longido	5,316	52	896	9	1,907	19	1,589	15	318	3	260	3	10,286	100
Arusha Rural	10,033	28	1,194	3	7,286	21	13,377	38	836	2	2,628	7	35,354	100
Meru	1,220	4	5,856	18	13,665	41	10,127	30	854	3	1,586	5	33,309	100
Total	**66,348**	**43**	**12,766**	**8**	**31,493**	**20**	**34,442**	**22**	**2,485**	**2**	**8,326**	**5**	**155,859**	**100**

9.2.1 CATTLE PRODUCTION: Number of Milked Cows by Category of Cattle, Season and District, During the 2007/08 Agricultural Year

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
Monduli	1,000	102,446	103,446	65,511	67,797	133,308
Arusha	5,583	3,495	9,078	6,009	2,941	8,950
Karatu	7,486	25,042	32,528	1,515	19,517	21,032
Ngorongoro	.	288,395	288,395	213	130,946	131,160
Longido	549	50,359	50,908	2,225	24,472	26,696
Arusha Rural	21,380	30,337	51,717	18,752	26,396	45,148
Meru	15,251	14,153	29,404	16,715	11,469	28,184
Total	**51,249**	**514,227**	**565,476**	**110,940**	**283,537**	**394,478**

9.2.2 CATTLE PRODUCTION: Average milk production per cow per day, by Category of Cow, Season and District, During the 2007/08 Agricultural Year

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
	Mean (ltr)	Mean (lts)	Mean (lts)	Mean (lts)	Mean (lts)	Mean (lts)
Monduli	3	2	2	3	1	1
Arusha	5	3	4	4	2	3
Karatu	6	2	2	4	1	2
Ngorongoro	.	2	2	1	1	1
Longido	5	2	2	2	1	1
Arusha Rural	6	2	4	5	1	3
Meru	6	3	5	5	2	4
Total	6	2	3	5	1	2

9.2.3 CATTLE PRODUCTION: Average number of days for cows on milked, by category of Cattle, Season and District, During the 2007/08 Agricultural Year

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
	Mean	Mean	Mean	Mean	Mean	Mean
Monduli	153	141	141	224	120	124
Arusha	284	196	232	287	162	213
Karatu	171	138	141	134	118	120
Ngorongoro	60	138	137	95	108	107
Longido	150	137	137	144	107	110
Arusha Rural	214	185	198	201	161	179
Meru	169	174	171	137	143	139
Total	**193**	**152**	**162**	**173**	**129**	**142**

9.2.4 CATTLE PRODUCTION: Average Cattle Milk price (Tshs/litre) per season by category of cow and District, During the 2007/08 Agricultural Year

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
	Mean	Mean	Mean	Mean	Mean	Mean
Monduli	307	314	314	529	458	460
Arusha	439	427	432	451	475	464
Karatu	420	448	444	436	494	486
Ngorongoro	700	465	467	400	658	657
Longido	408	394	395	536	563	560
Arusha Rural	453	449	451	484	503	493
Meru	412	397	405	434	469	448
Total	432	411	416	460	532	510

9.2.5 CATTLE PRODUCTION: Average Cattle Milk price (Tshs/litre) per season by category of cow and Region, During the 2007/08 Agricultural Year

District	Number of milked cows		Average milk production per cow per day (lts)		Average number of days cows milked		Average price per litre per season (Tshs)	
	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season
Monduli	103,446	133,308	2	1	141	124	366	551
Arusha	9,078	8,950	4	3	232	213	432	464
Karatu	32,528	21,032	2	2	141	120	488	528
Ngorongoro	288,395	131,160	2	1	137	107	481	669
Longido	50,908	26,696	2	1	137	110	404	560
Arusha Rural	51,717	45,148	4	3	198	179	517	502
Meru	29,404	28,184	5	4	171	139	425	448
Total	**565,476**	**394,478**	**3**	**2**	**162**	**142**	**453**	**534**

GOAT PRODUCTION

9.3.1 GOAT PRODUCTION: Number of Agriculture Households Rearing Goats by District during the 2007/08 Agricultural Year

	Raising goats		Not raising goats		Total	Total livestock keeping households
	No of households	%	No of households	%		
Monduli	23,504	81	5,429	19	28,933	25,647
Arusha	1,577	62	980	38	2,557	2,387
Karatu	20,052	56	16,041	44	36,093	24,507
Ngorongoro	24,868	86	3,908	14	28,776	27,355
Longido	10,286	88	1,358	12	11,644	11,008
Arusha Rural	20,185	42	28,188	58	48,373	37,982
Meru	22,206	45	27,086	55	49,292	38,677
Total	**122,677**	**60**	**82,990**	**40**	**205,667**	**167,562**

9.3.2 GOAT PRODUCTION: Number of Goats by Type and District as of 1st October 2008

	Indigenous			Improved for Meat			Improved Dairy			Total	
District	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats
Monduli	23,504	427,142	99.6	0	0	0.0	286	1,572	0.4	23,790	428,714
Arusha	1,577	24,080	100.0	0	0	0.0	0	0	0.0	1,577	24,080
Karatu	20,052	173,602	99.4	0	0	0.0	178	980	0.6	20,230	174,582
Ngorongoro	24,868	654,519	99.9	0	0	0.0	355	568	0.1	25,223	655,087
Longido	10,257	228,652	98.4	29	520	0.2	347	3,120	1.3	10,632	232,293
Arusha Rural	19,349	128,038	90.7	0	0	0.0	1,194	13,138	9.3	20,543	141,177
Meru	20,742	128,476	79.1	122	244	0.2	2,928	33,797	20.8	23,792	162,516
Total	120,348	1,764,510	97.0	151	764	0.0	5,289	53,176	2.9	125,787	1,818,450

9.3.3 GOAT PRODUCTION: Number of Households Rearing Goats, Head of Goats and Average Head per Household by Herd Size as of 1st October 2008- ARUSHA

Herd Size	Goat rearing households		Herd of Goats		Average Goats per household
	Number	%	Number	%	
1 - 4	40,806	33.26	111,041	6.1	2.72
5 - 9	30,571	24.92	196,772	10.8	6.44
10 - 14	16,798	13.69	188,712	10.4	11.23
15 - 19	7,501	6.11	124,065	6.8	16.54
20 - 24	7,519	6.13	156,839	8.6	20.86
25 - 29	3,583	2.92	95,907	5.3	26.77
30 - 34	3,577	2.92	110,878	6.1	31.00
35 - 39	1,568	1.28	57,821	3.2	36.88
40+	10,754	8.77	776,413	42.7	72.20
Total	**122,677**	**100.00**	**1818450**	**100.0**	**14.82**

9.3.4 GOAT PRODUCTION: Total Number of Goats by Category and Type of Goat as of 1st October 2008 - ARUSHA REGION

Category	Indigenous		Improved Meat		Improved Dairy		Total	
	Number	%	Number	%	Number	%	Number	%
Billy Goats	234,956	95.6	180	0.1	10,692	4.3	245,828	100.0
She Goats	226,318	98.8	87	0.0	2,560	1.1	228,964	100.0
Castrated Goat	796,910	97.0	0	0.0	24,683	3.0	821,593	100.0
Male Kid	251,477	97.8	266	0.1	5,435	2.1	257,178	100.0
She Kid	254,849	96.2	231	0.1	9,806	3.7	264,887	100.0
Total	**1,764,510**	**97.0**	**764**	**0.0**	**53,176**	**2.9**	**1,818,450**	**100.0**

9.3.5 GOAT PRODUCTION: Total Number of Indigenous Goat by Category and District as of 1st October 2008

District	Goat Type											
	Billy Goat		Castrated Goat		She Goat		Male Kid		She Kid		Total	
	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%
Monduli	58,581	14	53,437	13	172,672	40	68,369	16	74,084	17	427,142	100
Arusha	3,111	13	2,259	9	13,042	54	3,069	13	2,600	11	24,080	100
Karatu	31,548	18	18,180	10	83,771	48	21,210	12	18,893	11	173,602	100
Ngorongoro	75,314	12	95,918	15	300,260	46	92,508	14	90,519	14	654,519	100
Longido	22,825	10	27,448	12	107,219	47	34,699	15	36,462	16	228,652	100
Arusha Rural	21,738	17	15,288	12	56,136	44	16,005	13	18,871	15	128,038	100
Meru	21,840	17	13,787	11	63,811	50	15,617	12	13,421	10	128,476	100
Total	**234,956**	**13**	**226,318**	**13**	**796,910**	**45**	**251,477**	**14**	**254,849**	**14**	**1,764,510**	**100**

9.3.6 GOAT PRODUCTION: Number of Improved Goats for Meat by Category and District as of 1st october 2008

District	Goat Type											
	Billy Goat		Castrated Goat		She Goat		Male Kid		She Kid		Total	
	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%	Total Goat	%
Monduli	0	0	0	0	0	0	0	0	0	0	0	0
Arusha	0	0	0	0	0	0	0	0	0	0	0	0
Karatu	0	0	0	0	0	0	0	0	0	0	0	0
Ngorongoro	0	0	0	0	0	0	0	0	0	0	0	0
Longido	58	11	87	17	0	0	144	28	231	44	520	100
Arusha Rural	0	0	0	0	0	0	0	0	0	0	0	0
Meru	122	50	0	0	0	0	122	50	0	0	244	100
Total	**180**	**24**	**87**	**11**	**0**	**0**	**266**	**35**	**231**	**30**	**764**	**100**

9.3.7 GOAT PRODUCTION: Number of Improved Dairy Goats by Category and District as of 1st October 2008

	Goat Type											
	Billy Goat		Castrated Goat		She Goat		Male Kid		She Kid		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	0	0.0	0	0.0	857	54.5	0	0.0	714	45.5	1,572	100
Arusha	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	.
Karatu	0	0.0	0	0.0	0	0.0	980	100.0	0	0.0	980	100
Ngorongoro	71	12.5	0	0.0	497	87.5	0	0.0	0	.	568	100
Longido	58	1.9	0	0.0	578	18.5	1,531	49.1	953	30.6	3,120	100
Arusha Rural	2,389	18.2	119	0.9	8,719	66.4	239	1.8	1,672	12.7	13,138	100
Meru	8,175	24.2	2440	7.2	14,031	41.5	2,684	7.9	6,466	19.1	33,797	100
Total	10,692	20.1	2,560	4.8	24,683	46.4	5,435	10.2	9,806	18.4	53,176	100

9.3.8 GOAT PRODUCTION: Milk Production from Goat By Season and District, During the 2007/08 Agricultural Year

	Number of Milked goat		Average milk production per goat per day (lts)		Average number of days for goats on milked		Average price per litre per season (Tshs)	
	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season
District	Sum	Sum	Mean	Mean	Mean	Mean	Mean	Mean
Monduli	45,936	20,575	.7	.5	64	56	331	473
Arusha	.	.	.	.	.	.	.	.
Karatu	4,545	2,852	.5	.3	59	47	432	375
Ngorongoro	90,447	49,380	.9	.5	68	56	353	530
Longido	40,045	9,506	.6	.4	69	56	388	624
Arusha Rural	9,913	5,255	1.0	.7	65	66	461	529
Meru	8,297	6,222	1.2	.8	69	51	439	453
Total	**199,183**	**93,790**	**.8**	**.6**	**66**	**56**	**379**	**498**

SHEEP PRODUCTION

9.4.1 SHEEP PRODUCTION: Number of Households Rearing Sheep by District during the 2007/08 Agriculture Year

District	Number of households raising or managing sheep	%	Number of households not raising or managing sheep	%	Number of agriculture households	Total livestock keeping households
Monduli	18,289	63.2	10,645	36.8	28,933	25,647
Arusha	1,492	58.3	1,065	41.7	2,557	2,387
Karatu	14,348	39.8	21,745	60.2	36,093	24,507
Ngorongoro	21,528	74.8	7,247	25.2	28,776	27,355
Longido	8,639	74.2	3,005	25.8	11,644	11,008
Arusha Rural	18,394	38.0	29,979	62.0	48,253	37,982
Meru	15,861	32.2	33,431	67.8	49,292	38,677
Total	**98,550**	**47.9**	**107,117**	**52.1**	**205,547**	**167,562**

9.4.2 SHEEP PRODUCTION: Number of Sheep by Type and District as of 1st October 2008

District	Total			
	Number of households raising or managing sheep	%	Total Sheep	%
Monduli	18,289	18.6	308,837	22
Arusha	1,492	1.5	15002	1
Karatu	14,348	14.6	87,692	6
Ngorongoro	21,528	21.8	599,099	43
Longido	8,639	8.8	152,493	11
Arusha Rural	18,394	18.7	148,582	11
Meru	15,861	16.1	90,531	6
Total	**98,550**	**100.0**	1,402,236	100

9.4.3 SHEEP PRODUCTION: Total Number of Indigenous Sheep by Category of Sheep and District as of 1st October 2007/08 Agriculture year

District	Number of Indigenous					Total
	Ram	Castrated Sheep	She Sheep	Male Lamb	She Lamb	
Monduli	44,007	31,362	147,167	35,649	50,651	308,837
Arusha	2,728	639	7,032	1,833	2,770	15,002
Karatu	21,299	10,159	39,747	8,644	7,842	87,692
Ngorongoro	77,872	76,379	299,834	62,738	82,277	599,099
Longido	18,578	17,191	74,715	20,253	21,756	152,493
Arusha Rural	21,141	11,227	54,703	11,944	49,567	148,582
Meru	11,469	5,734	36,969	30,014	6,344	90,531
Total	**197,093**	**152,693**	**660,167**	**171,075**	**221,208**	**1,402,236**

9.4.4 SHEEP PRODUCTION: Number of Households rearing Sheep, Head of Sheep and Average Head per Household by Herd size During the 2007/08 Agricultural Year, Arusha

Herd size	Sheep Rearing Households	%	Herd of sheep	Average Per Houseold
1 - 4	44,874	46	109,881	2
5 - 9	24,325	25	156,879	6
10 - 14	8,505	9	94,637	11
15 - 19	4,296	4	69,694	16
20 - 24	4,004	4	82,993	21
25 - 29	1,910	2	49,881	26
30 - 34	2,290	2	72,244	32
35 - 39	428	0	15,577	36
40+	7,918	8	750,449	95
Total	98,550	100	1,402,236	14

9.4.5 SHEEP PRODUCTION: Total Number of Sheep by Breed Type During the 2007/08 Agriculture Year - ARUSHA REGION

Category	Number of Indigenous	%	Number of Improved	%	Total	%
Rams	197,093	100	0	0	197,093	14
Castrated Sheep	152,693	100	0	0	152,693	11
She Sheep	660,167	100	0	0	660,167	47
Male Lamb	171,075	100	0	0	171,075	12
Female Lamb	221,208	100	0	0	221,208	16
Total	**1,402,236**	**100**	**0**	**0**	**1,402,236**	**100**

PIG PRODUCTION

9.5.1 PIG PRODUCTION: Number of Households Raising Pigs by District during 2007/08 Agriculture Year

District	During the 2007/2008 Agriculture Year					
	Number of households raising Pigs	%	Number of households not raising pigs	%	Total	%
Monduli	286	1.0	28,648	99.0	28,933	100.0
Arusha	170	6.7	2,387	93.3	2,557	100.0
Karatu	7,040	19.5	29,052	80.5	36,093	100.0
Ngorongoro	0	0.0	28,776	100.0	28,776	100.0
Longido	260	2.2	11,384	97.8	11,644	100.0
Arusha Rural	478	1.0	47,895	99.0	48,373	100.0
Meru	244	0.5	49,048	99.5	49,292	100.0
Total	**8,478**	**4.1**	**197,189**	**95.9**	**205,667**	**100.0**

9.5.2 PIG PRODUCTION: Number of Households Rearing Pigs, Heard of Pigs and Average Heard per Household by Heard Size as of 1st October 2008 - ARUSHA

Heard Size	Pig rearing households		Heard of pigs		Average per household
	Number	%	Number	%	
1-4	7,234	85	13,130	47.8	2
5-9	767	9	4,942	18.0	6
10-14	114	1	1,440	5.2	13
15-19	279	3	4,426	16.1	16
20-24	43	1	1,406	5.1	33
25-29	0	0	0	0.0	0
30-39	0	0	0	0.0	0
40+	43	1	2,131	7.8	50
Total	**8,478**	**100**	**27,475**	**100.0**	**3**

9.5.3 PIG PRODUCTION: Total Number of Pigs by Type of Pigs and District as of 1st October 2008

District	Pig Type					
	Boar	Castrated Male	Sow / Gilt	Male Piglet	She Piglet	Total
Monduli	214	357	500	357	1,143	2,572
Arusha	1,023	0	1,747	554	1,065	4,390
Karatu	2,763	2,050	7,308	2,406	3,386	17,913
Ngorongoro	0	0	0	0	0	0
Longido	173	144	578	144	231	1,271
Arusha Rural	239	119	239	0	0	0
Meru	244	0	488	0	0	732
Total	**4,656**	**2,671**	**10,860**	**3,462**	**5,826**	**27,475**

9.5.4 PIG PRODUCTION : Number of Pigs per Household by District as of 1st October 2008

District	Number of households	Number of pigs	Average per household
Monduli	286	2,572	9
Arusha	170	4,390	16
Karatu	7,040	17,913	65
Ngorongoro	0	0	0
Longido	260	1,271	5
Arusha Rural	478	597	2
Meru	244	732	3
Total	8,478	**27,475**	100

CHICKEN AND OTHER LIVESTOCK

9.6.1 CHICKEN PRODUCTION: Number of CHICKEN by Type and District as of 1st October 2008

District	Indigineous chicken			Layers			Broilers			Total		
	Number of Households	Number of Indigineous Chicken	%	Number of Households	Number of Layers	%	Number of Households	Number of Broilers	%	Households Realing Chicken	Number of Chicken	%
Monduli	12,574	129,450	98	286	1,072	1	143	1,143	1	12,931	131,665	100
Arusha	1,875	18,284	100	0	0	0	0	0	0	1,875	18,284	100
Karatu	20,943	154,442	100	0	0	0	178	535	0	21,121	154,976	100
Ngorongoro	4,121	42,346	100	0	0	0	71	71	0	4,121	42,417	100
Longido	1,271	20,513	99	29	289	1	0	0	0	1,271	20,802	100
Arusha Rural	24,843	196,835	99	119	2,389	1	119	119	0	24,843	199,343	100
Meru	35,749	387,746	100	122	732	0	0	0	0	35,749	388,478	100
Total	101,376	949,616	99	556	4,481	0	512	1,868	0	**101,911**	955,966	100

9.6.2 CHICKEN PRODUCTION : Number of Households Keeping Chickens and Average Number of Chickens per Household by Flock Size as of 1st October 2008 - Arusha

Heard Size	Indigineous chicken				Layers				Broilers			
	Number of Households	Number of Indigineous Chicken	%	Number of Chicken Per Household	Number of Households	Number of Layers	%	Number of Chicken Per Household	Number of Households	Number of Broilers	%	Number of Chicken Per Household
1-49	100,734	908,949	99.3	9	556	4,481	0.5	8	512	1,868	0.2	4
50-99	613	37,778	100.0	62	0	0	0.0	0	0	0	0.0	0
100-299	29	2,889	100.0	100	0	0	0.0	0	0	0	0.0	0
Total	**101,376**	**949,616**	**99.3**	**9**	**556**	**4,481**	**0.5**	**8**	**512**	**1,868**	**0.2**	**4**

9.6.3 : THER LIVESTOCK : Total Number of Other Livestock by Type as of 1st October 2008

Type	Chicken		Others	
	Number	%	Type	Number
Indigenous Chicken	949,616	99.3	Ducks	7,410
Layer	4,481	0.5	Guinea pigs	3,689
Broiler	1,868	0.2	Turkeys	3,053
		0	Rabbits	3,487
		0	Donkey	105,023
		0	Horses	71
		0	Dogs	81,213
TOTAL	**955,966**	**100**		

PESTS AND PARASITES

9.7.1: : Number of Livestock Rearing households deworming Livestock by District during 2007/08 Agriculture Year

District	Deworming Livestock		Not Deworm Livestock		Total	
	Number	%	Number	%	Number of Livestock Rearing households	%
Monduli	26,576	99	357	1	25,647	15
Arusha	2,429	95	128	5	2,387	1
Karatu	28,518	94	1,961	6	24,507	15
Ngorongoro	26,573	96	1,066	4	27,355	16
Longido	10,892	97	347	3	11,008	7
Arusha Rural	36,907	85	6,330	15	37,982	23
Meru	42,459	95	2,318	5	38,677	23
Total	**174,354**	**93**	**12,507**	**7**	**167,562**	**100**

9.7.2: : Number of Livestock Rearing households that dewormed Livestock by type of livestock and District, 2007/08 Agricultural Year

District	Cattle				Goats/Sheep				Pigs				Chicken			
	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total
Monduli	20,932	2,358	3,286	26,576	23,718	572	2,286	26,576	714	2,715	23,147	26,576	4,358	10,788	11,430	26,576
Arusha	2,216	128	128	2,472	1,790	128	511	2,429	170	0	2,259	2,429	810	895	725	2,429
Karatu	18,804	1,871	8,021	28,696	20,586	1,782	6,327	28,696	6,149	3,208	19,339	28,696	11,853	8,199	8,644	28,696
Ngorongoro	22,097	2,700	1,847	26,644	22,168	3,410	995	26,573	213	4,831	21,528	26,573	995	7,531	18,047	26,573
Longido	8,437	1,618	925	10,979	10,257	260	491	11,008	376	693	9,910	10,979	578	1,329	9,101	11,008
Arusha Rural	30,935	1,911	4,300	37,145	21,977	4,061	11,108	37,145	358	4,658	31,890	36,907	8,361	16,960	12,541	37,862
Meru	32,454	610	9,517	42,581	26,842	3,294	12,445	42,581	488	4,758	37,335	42,581	16,471	19,033	7,077	42,581
Total	**135,875**	**11,196**	**28,023**	**175,094**	**127,338**	**13,507**	**34,164**	**175,009**	**8,469**	**20,864**	**145,408**	**174,741**	**43,425**	**64,736**	**67,565**	**175,725**

9.7.3 : Number of Livestock Rearing Households Normally Encountering Tick Problems by District during 2007/08 Agriculture Year

District	Tick Problem		No Tick Problem		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	24,718	92	1,286	5	1,000	4	27,004	100
Arusha	1,875	76	597	24	0	0	2,472	100
Karatu	19,160	63	6,506	21	4,812	16	30,478	100
Ngorongoro	24,015	87	2,842	10	782	3	27,639	100
Longido	9,448	84	1,473	13	289	3	11,210	100
Arusha Rural	25,202	58	13,497	31	4,419	10	43,117	100
Meru	31,478	70	6,711	15	6,711	15	44,899	100
Total	**135,897**	**73**	**32,911**	**18**	**18,013**	**10**	**186,821**	**100**

9.7.4 : Number of Livestock Rearing Households by Method of Tick Control and District during 2007/08 Agriculture Year

District	Dipping		Spraying		Smearing		None		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	3,358	12.4	20,718	76.7	500	1.9	2,286	8.5	143	0.5	27,004	100
Arusha	43	1.7	1,875	75.9	128	5.2	426	17.2	0	0.0	2,472	100
Karatu	1,248	4.1	16,665	54.7	1,069	3.5	11,318	37.1	178	0.6	30,478	100
Ngorongoro	3,481	12.6	20,463	74.0	426	1.5	2,771	10.0	497	1.8	27,639	100
Longido	1,502	13.4	7,916	70.6	318	2.8	1,416	12.6	58	0.5	11,210	100
Arusha Rural	2,269	5.3	26,515	61.5	3,703	8.6	10,630	24.7	0	0.0	43,117	100
Meru	2,562	5.7	27,330	60.9	1,098	2.4	13,787	30.7	122	0.3	44,899	100
Total	**14,463**	**7.7**	**121,483**	**65.0**	**7,242**	**3.9**	**42,634**	**22.8**	**998**	**0.5**	**186,821**	**100**

9.7.5 : Number of Livestock Rearing Households normally Encountering Tsetse Flies Problems by District during 2007/08 Agriculture Year

District	Households Encoutering Tsetse problems		Households Without Tsetse Problems		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	19,575	72	6,001	22	1,429	5	27,004	100
Arusha	1,321	53	1,108	45	43	2	2,472	100
Karatu	12,209	40	12,744	42	5,525	18	30,478	100
Ngorongoro	14,494	52	10,942	40	2,203	8	27,639	100
Longido	2,658	24	7,801	70	751	7	11,210	100
Arusha Rural	14,572	34	23,529	55	5,016	12	43,117	100
Meru	25,988	58	12,201	27	6,711	15	44,899	100
Total	**90,817**	**49**	**74,326**	**40**	**21,677**	**12**	**186,821**	**100**

9.7. 6 : Number of Livestock Rearing Households by Method of Tsetse Flies Control and District during 2007/08 Agriculture Year

District	Dipping		Spraying		Trappig		None		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Monduli	2,715	10	14,502	54	714	3	7,501	28	1,572	6	27,004	100
Arusha	213	9	1,236	50	170	7	767	31	85	3	2,472	100
Karatu	802	2.6	10,427	34.2	1,069	3.5	16,754	55.0	1,426	4.7	30,478	100
Ngorongoro	1,279	4.6	7,745	28.0	1,492	5.4	15,134	54.8	1,989	7.2	27,639	100
Longido	433	3.9	1,994	17.8	347	3.1	8,234	73.5	202	1.8	11,210	100
Arusha Rural	1,194	2.8	15,527	36.0	2,628	6.1	23,410	54.3	358	0.8	43,117	100
Meru	2,562	5.7	15,861	35.3	1,220	2.7	21,596	48.1	3,660	8.2	44,899	100
Total	**9,199**	**4.9**	**67,292**	**36.0**	**7,641**	**4.1**	**93,396**	**50.0**	**9,293**	**5.0**	**186,821**	**100**

9.7.7: : Number of Livestock Rearing Households normally Encountering Newcastle Disease Problems by District during 2007/08 Agriculture Year

District	Households Encoutering Newcastle Disease problems		Households NOT Encoutering Newcastle Disease problems		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	11,573	43	4,215	16	11,216	42	27,004	100
Arusha	1,918	78	341	14	213	9	2,472	100
Karatu	13,279	44	8,823	29	8,377	27	30,478	100
Ngorongoro	1,492	5	4,618	17	21,528	78	27,639	100
Longido	925	8	867	8	9,419	84	11,210	100
Arusha Rural	21,021	49	9,675	22	12,422	29	43,117	100
Meru	26,598	59	10,493	23	7,809	17	44,899	100
Total	**76,806**	**41**	**39,031**	**21**	**70,984**	**38**	**186,821**	**100**

9.7.8: : Number of Livestock Rearing Households by Method of Newcastle Disease Control and District during 2007/08 Agriculture Year

District	Vaccination		Local Herbs		None		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	2,072	8	9,716	36	15,217	56	27,004	100
Arusha	554	22	1,321	53	597	24	2,472	100
Karatu	3,386	11	9,714	32	17,378	57	30,478	100
Ngorongoro	284	1	1,492	5	25,862	94	27,639	100
Longido	376	3	491	4	10,343	92	11,210	100
Arusha Rural	11,347	26	10,749	25	21,021	49	43,117	100
Meru	11,103	25	11,347	25	22,450	50	44,899	100
Total	**29,122**	**16**	**44,831**	**24**	**112,868**	**60**	**186,821**	**100**

9.7.9 : Number of Livestock Rearing Households normally Encountering Fowl Typhoid Disease Problems by District during 2007/08 Agriculture Year

District	Households Encoutering Fowl Typhoid Disease problems		Households NOT Encoutering Fowl Typhoid Disease problems		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	7,001	26	8,573	32	11,430	42	27,004	100
Arusha	980	40	1,236	50	256	10	2,472	100
Karatu	6,417	21	15,328	50	8,734	29	30,478	100
Ngorongoro	497	2	4,618	17	22,523	81	27,639	100
Longido	433	4	1,213	11	9,563	85	11,210	100
Arusha Rural	10,391	24	17,677	41	15,049	35	43,117	100
Meru	12,079	27	24,768	55	8,053	18	44,899	100
Total	**37,799**	**20**	**73,414**	**39**	**75,608**	**40**	**186,821**	**100**

9.7.10 : Number of Livestock Rearing Households by Method of Fowl Typhoid Disease Control and District during 2007/08 Agriculture Year

District	Vaccination		Local Herbs		None		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	429	2	6,787	25	19,789	73	27,004	100
Arusha	170	7	980	40	1,321	53	2,472	100
Karatu	980	3	5,525	18	23,973	79	30,478	100
Ngorongoro	71	0	1,776	6	25,791	93	27,639	100
Longido	202	2	347	3	10,661	95	11,210	100
Arusha Rural	3,344	8	9,913	23	29,860	69	43,117	100
Meru	4,026	9	6,955	15	33,919	76	44,899	100
Total	**9,223**	**5**	**32,283**	**17**	**145,314**	**78**	**186,821**	**100**

9.7.11 : Number of Livestock Rearing Households normally Encountering Foot and Mouth Disease Problems by District during 2007/08 Agriculture Year

District	Households Encoutering Foot and Mouth Disease		Households NOT Encoutering Foot and Mouth Disease		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	3,786	14	19,789	73	3,429	13	27,004	100
Arusha	511	21	1,790	72	170	7	2,472	100
Karatu	3,476	11	17,556	57	9,536	31	30,568	100
Ngorongoro	4,547	16	20,392	74	2,700	10	27,639	100
Longido	1,936	17	8,176	73	1,098	10	11,210	100
Arusha Rural	8,002	19	27,232	63	7,883	18	43,117	100
Meru	9,151	20	24,036	54	11,713	26	44,899	100
Total	**31,410**	**17**	**118,971**	**64**	**36,529**	**20**	**186,910**	**100**

9.7.11 : Number of Livestock Rearing Households normally Encountering Foot and Mouth Disease Problems by District during 2007/08 Agriculture Year

District	Households Encoutering Foot and Mouth Disease		Households NOT Encoutering Foot and Mouth Disease		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	3,786	14	19,789	73	3,429	13	27,004	100
Arusha	511	21	1,790	72	170	7	2,472	100
Karatu	3,476	11	17,556	57	9,536	31	30,568	100
Ngorongoro	4,547	16	20,392	74	2,700	10	27,639	100
Longido	1,936	17	8,176	73	1,098	10	11,210	100
Arusha Rural	8,002	19	27,232	63	7,883	18	43,117	100
Meru	9,151	20	24,036	54	11,713	26	44,899	100
Total	**31,410**	**17**	**118,971**	**64**	**36,529**	**20**	**186,910**	**100**

9.7.12 : Number of Livestock Rearing Households normally Encountering Lympyskin Disease Problems by District during 2007/08 Agriculture Year

District	Households Encoutering Lympyskin Disease		Households NOT Encoutering Lympyskin Disease		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Monduli	13,359	49	10,287	38	3,358	12	27,004	100
Arusha	469	19	1,790	72	213	9	2,472	100
Karatu	2,584	8	18,447	60	9,536	31	30,568	100
Ngorongoro	5,329	19	19,965	72	2,345	8	27,639	100
Longido	2,196	20	8,032	72	982	9	11,210	100
Arusha Rural	11,108	26	24,604	57	7,405	17	43,117	100
Meru	9,517	21	23,670	53	11,713	26	44,899	100
Total	**44,562**	**24**	**106,796**	**57**	**35,552**	**19**	**186,910**	**100**

LIVESTOCK EXTENSION

9.8.1 LIVESTOCK EXTENSION: Number of households receiving extension advice by District during the 2007/08 agriculture year

District	Receiving Livestock services		Not Receiving Livestock Extension services		Total Livestock Keepers
	Number	%	Number	%	
Monduli	19,575	73	7,287	27	26,862
Arusha	1,449	60	980	40	2,429
Karatu	20,675	70	9,001	30	29,676
Ngorongoro	16,129	58	11,652	42	27,781
Longido	7,512	67	3,640	33	11,152
Arusha Rural	34,040	80	8,600	20	42,640
Meru	32,332	72	12,567	28	44,899
Total	**131,712**	**71**	**53,727**	**29**	**185,440**

9.8.2 LIVESTOCK EXTENSION: Number of Households receiving Livestock advice (overall) By Source of Extension and Region during the 2007/08 agriculture year

Region	Source of Livestock Extension												Number of Household receiving Extension
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Monduli	18,789	96.0	4,215	21.5	857	4.4	143	0.7	2,429	12.4	4,144	21.2	19,575
Arusha	1,193	82.4	170	11.8	0	0.0	554	38.2	85	5.9	469	32.4	1,449
Karatu	19,784	95.7	1,782	8.6	1,515	7.3	2,584	12.5	1,159	5.6	1,782	8.6	20,675
Ngorongoro	15,063	93.4	4,547	28.2	1,137	7.0	213	1.3	142	0.9	1,350	8.4	16,129
Longido	6,674	88.8	1,040	13.8	58	0.8	231	3.1	404	5.4	1,242	16.5	7,512
Arusha Rural	32,487	95.4	12,183	35.8	597	1.8	717	2.1	3,225	9.5	2,389	7.0	34,040
Meru	30,502	94.3	8,907	27.5	2,074	6.4	1,464	4.5	6,833	21.1	3,416	10.6	32,332
Total	**124,493**	**94.5**	**32,845**	**24.9**	**6,238**	**4.7**	**5,906**	**4.5**	**14,277**	**10.8**	**14,792**	**11.2**	**131,712**

9.8.13 LIVESTOCK EXTENSION: Number of households receiving extension advice on Livestock Feeds processing by District during the 2007/08 agriculture year

District	Source of Livestock Extension														Total Number of households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Monduli	4,501	76.8	214	3.7	71	1.2	0	0.0	929	15.9	143	2.4	0	0.0	5,858
Arusha	384	81.8	0	0.0	0	0.0	0	0.0	0	0.0	85	18.2	0	0.0	469
Karatu	3,208	87.8	178	4.9	0	0.0	0	0.0	178	4.9	89	2.4	0	0.0	3,654
Ngorongoro	1,350	51.4	1,208	45.9	71	2.7	0	0.0	0	0.0	0	0.0	0	0.0	2,629
Longido	1,011	76.1	87	6.5	0	0.0	58	4.3	29	2.2	116	8.7	29	2.2	1,329
Arusha Rural	10,033	78.5	1,553	12.1	0	0.0	239	1.9	597	4.7	358	2.8	0	0.0	12,780
Meru	13,177	85.7	732	4.8	244	1.6	366	2.4	610	4.0	244	1.6	0	0.0	15,373
Total	**33,664**	**80.0**	**3,972**	**9.4**	**387**	**0.9**	**663**	**1.6**	**2,343**	**5.6**	**1,035**	**2.5**	**29**	**0.1**	**42,092**

FISH FARMING

9.9.1 FISH FARMING: Number of Agriculture Households Practising Fish Farming by District during the 2007/08 Agriculture Year

Was Fish farming carried out by this household during 2007/08

District	Yes	%	No	%	Total
Monduli	0	0	28933	100	28933
Arusha	0	0	2557	100	2557
Karatu	0	0	36093	100	36093
Ngorongoro	0	0	28776	100	28776
Longido	0	0	11644	100	11644
Arusha Rural	0	0	48373	100	48373
Meru	122	0	49170	100	49292
Total	122	0	205545	100	205667

BEE KEEPING

9.10.1 BEE KEEPING: Number of Agricultural Households involved in Honey Production/Collection and District, 2007/08 Agricultural Year

District	Agricultural Households Involved in Honey Production/Collection		Agricultural Households NOT Involved in Honey Production/Collection		Total	
	Number	%	Number	%	Number	%
Monduli	1,143	4	27,790	96	28,933	100
Arusha	170	7	2,387	93	2,557	100
Karatu	1,069	3	35,023	97	36,093	100
Ngorongoro	2,416	8	26,360	92	28,776	100
Longido	376	3	11,268	97	11,644	100
Arusha Rural	1,075	2	47,178	98	48,253	100
Meru	2,074	4	47,218	96	49,292	100
Total	**8,323**	**4**	**197,224**	**96**	**205,547**	**100**

9.10.2 BEE KEEPING: Number of Agricultural Households By Honey production/Collection and District , 2007/08 Agricultural Year

District	Number of Agricultural Households that Poduced/Collected Honey			Number of Agricultural Households that did NOT Poduce/Collect Honey			Total		
	Stingless Bee	Sting Bee	Total	Stingless Bee	Sting Bee	Total	Stingless Bee	Sting Bee	Total
Monduli	143	786	929	214	0	214	357	786	1,143
Arusha	43	170	213	0	0	0	43	170	213
Karatu	178	802	980	0	89	89	178	891	1,069
Ngorongoro	71	2,203	2,274	142	142	284	213	2,345	2,558
Longido	0	347	347	29	0	29	29	347	376
Arusha Rural	358	597	956	239	0	239	597	597	1,194
Meru	732	1,220	1,952	0	0	0	732	1,220	1,952
Total	**1,525**	**6,125**	**7,650**	**624**	**231**	**855**	**2,149**	**6,356**	**8,506**

9.10.3 BEE KEEPING: Number of Bee hives by Type, Size of Bees and District during the 2007/08 Agriculture Year

District	Number of Improved Bee Hives						Number of Local Bee Hives					
	Stingless Bee		Sting Bee		Total		Stingless Bee		Sting Bee		Total	
	Number households	Number of Hives	Number households	Number of Hives	Number households	Number of Hives	Number households	Number of Hives	Number households	Number of Hives	Number households	Number of Hives
Monduli	357	71,440	786	357	1,143	71,798	357	218,679	786	9,287	1,143	227,966
Arusha	43	0	170	0	213	0	43	85	170	469	213	554
Karatu	178	89	891	0	1,069	89	178	891	891	41,796	1,069	42,688
Ngorongoro	213	1,421	2,345	10,018	2,558	11,439	213	924	2,345	29,983	2,558	30,907
Longido	29	0	347	0	376	0	29	0	347	5,923	376	5,923
Arusha Rural	597	239	597	478	1,194	717	597	956	597	8,600	1,194	9,555
Meru	732	122	1,342	0	2,074	122	732	5,368	1,342	4,514	2,074	9,883
Total	**2,149**	**73,311**	**6,478**	**10,853**	**8,628**	**84,165**	**2,149**	**226,903**	**6,478**	**100,573**	**8,628**	**327,476**

9.10.4 BEE KEEPING: Quantity of Honey Harvested and Sold by Size of Bees and District during the 2007/08 Agriculture Year

District	Stingless Bee				Sting Bee				Total	
	Honey Harvested		Honey Sold		Honey Harvested		Honey Sold		Honey Sold	Honey Harvested
	Quantity (lts)	%	Quantity (lts)	%	Quantity (lts)	%	Quantity (lts)	%		
Monduli	294,335	49	291,120	60	303,408	51	191,318	40	482,437	597,742
Arusha	4,262	40	4,262	44	6,393	60	5,455	56	9,717	10,655
Karatu	4,278	17	1,782	20	20,586	83	7,129	80	8,912	24,864
Ngorongoro	6,395	5	9,237	4	113,894	95	239,370	96	248,606	120,289
Longido	57,784	53	0	0	51,544	47	55,733	100	55,733	109,328
Arusha Rural	1,792	6	717	12	25,799	94	5,375	88	6,091	27,590
Meru	15,617	48	5,612	36	16,959	52	10,127	64	15,739	32,577
Total	**384,462**	**42**	**312,730**	**38**	**538,583**	**58**	**514,506**	**62**	**827,236**	**923,045**

9.10.5 BEE KEEPING: Average price of Honey (Tshs/litre) by Size of Bees and District during the 2007/08 Agriculture Year

District	Stingless Bee (Price per Litre)	Sting Bee (Price per Litre)	Average Price Per Litre
Monduli	1,860	1,068	1,316
Arusha	5,000	2,125	2,700
Karatu	2,500	1,900	2,000
Ngorongoro	4,333	2,333	2,500
Longido	0	1670.00	1,542
Arusha Rural	0	1,800	900
Meru	1,833	1,850	1,844
Total	**1,670**	**1,932**	**1,865**

9.10.6 BEE KEEPING: Number of Agriculture Households by Location of Selling Honey and District during the 2007/08 Agriculture Year

District	Neighbour		Local market		Secondary market		Processing industry		Large scale farm		Trade at farm		Did not sell		Other		Total	
	Stinglessbee	Sting Bee	Stingless bee	Sting Bee	Stingless bee	Sting Bee	Stinglessbee	Sting Bee	Stinglessbee	Sting Bee	Stingless bee	Sting Bee	Stingless bee	Sting Bee	Stingles sbee	Sting Bee	Stingless bee	Sting Bee
Arusha	833	2,692	71	641	89	0	0	0	0	0	122	162	913	2,861	122	0	2,149	6,356
Monduli																		
Arusha																		
Karatu																		
Ngorongoro																		
Longido																		
Arusha Rural																		
Meru																		
Total	833	2,692	71	641	89	0	0	0	0	0	122	162	913	2,861	122	0	2,149	6,356

APPENDIX III QUESTIONNAIRES

United Republic of Tanzania

ACQ1 *CONFIDENTIAL*

Small holder/Small Scale Farmer questionnaire

Identification

Agricultural Sample Census 2007/2008

Enumerator Name ..... **Signature** .....

Date of Enumeration

d d / m m / y y y y

Start Time

End Time

Hour	Minutes

Field level checking by:

District Supervisor	Name	Signature	Date	/	/
Regional Supervisor	Name	Signature	Date	/	/
National Supervisor	Name	Signature	Date	/	/

I To be filled by the supervisor ONLY after Field/farm level checking of the enumeration process. This should be countersigned by the Supervisor in front of the enumerator

Distric checking in Office

District Supervisor	Name	Signature	Date	/	/

All questionnaires must be checked at the district office.

For Use at Regional Level Only

Data entered by:	Name	Signature	Date	/	/
Queried	Name	Signature	Date	/	/

See the back page for details of queries

Ministry of Agriculturte and Food Security, Ministry of Livestock and Fisheries Development, Ministry of Agriculture and Environment of Zanzibar, Ministry of Water and Irrigation, Prime Ministers' Office Regional Adminstration and Local Government, Ministry of Industry Trade and Marketing, National Bureau of Statistics, and the Office of the Government Statistician General of Revolution Governemnet of Zanzibar

Definition and working page for page 1

General Definitions

Who is a Smallholder /Small Scale farmer?
Should have one or more of the following: in the 2007/08 farming season had one or more cultivated and planted farms. The farm land may either be owned, rented, borrowed. The farmer may also be raising 1 and 50 head of cattle, and/or between 5 and 100 head of sheep/Goats/Pigs, and/or between 50 and 1000

Household: A group of people who occupy the whole of part one or more housing units and makes joint provision for food and/or other household items. Usually such a group comprises a husband, wife, and their children. Other relatives may be members of the household if they happen to live and get food provisions from the same household. People who live together and eat from the same pot may be considered as member s of the same household even if they stay in separate dwellings. An individual who lives and east alone is considered as an independent household.

Household Head: A person who is acknowledged by all other members of the household either by virtue of his age or standing in the household as the head. He/she should be a permanent resident of the house and he/she is the main person responsible for decision making regarding use of household resources..

Agricultural Holding: This is an economic unit of agricultural production under single management. This unit may have been grown various crops. For the purpose of the survey, the agricultural holdings are restricted to those which meet one of the following conditions:
- Having or operated at least 25 sq meter of arable land
- Own or keep at least one head of cattle or five goats/sheep/five pigs or fifty chicken/ducks/turkeys during the agricultural year 2007/08 (from October 2007 to September 2008).

Question Specific Definitions:

Type of Agriculture holding Codes (Q2.1):
Crops only: A holding is referred to be a crop only holding if it has cultivated at least one piece of land. This also applies to all households owning or have kept livestock whose number does not qualify such households to be an agricultural holding (No cattle, less than 5 goats/sheep/pigs, less than 50 chickens/turkeys/rabbits).

Livestock only: A holding is referred to be a livestock only holding if it has exercised livestock husbandry only during the 2007/08 agricultural year.

NOTE
For agricultural holding only and pastoralist holding only; the number of livestock should be at least one head of cattle, not less than five goats/sheep/pigs, not less than 50 chickens /turkeys /rabbits. This also applies to households having or operated less than 25 sq meter of cultivated land (which does not qualify the household to be considered as agricultural holding) but has the number of livestock that makes the holding qualifies to be considered as livestock holding.

Pastoralist holding: This refers to a household which practices livestock production as its major income generating activity and a means of subsistence, but moves from one place to another searching for water and pasture for the livestock. This movement usually involves long distances and in many cases the whole household unit moves with the livestock and they have no permanent place of residence.

Both crops and livestock: A holding is referred to be a both crops and livestock if it has cultivated a piece of land equal or exceeding 25 sq meter and if such households have own or kept livestock whose number qualify such household be considered as an agricultural holding.

Procedures for questions:

Q 2.1 Type of agriculture household/holding

Using the options under the question classify the type of agriculture household/holding

Note: If the household had an acre of crops and raised 40 chickens during 2007/08, it is classified as 'Crops only' as the number of chickens does not qualify the household as a livestock holding.

1.0 IDENTIFICATION DETAILS

Identification

1.1 **Location**

Na.	Location Name	Codes
1.1.1	Rgion ……	
1.1.2	District ……	
1.1.3	Ward ……	
1.1.4	Village ……	

1.2 Deatails of the respondent or household head

Na.		Codes
1.2.1	Name and number of local leader	
1.2.2	Name and number of household head ……	
1.2.3	**Sex of household head**	
1.2.4	Name of respondent ……	
1.2.5	**Relationship of Respondent to household head**	

Relationship to household head codes (Q 1.2.5)

Head of Household *……..1 Son /Daughter…….....3 Grandson/Granddaughter…….....5 No relationship…….7*
Spouse……..……..2 Father/Mother……..4 Other relatives……6

2.0 ACTIVITIES OF THE HOUSEHOLD

2.1	Typeof Agriculture Household	

Household agricultural activities codes(Q 2.1)

Crops only……....1 Livestock only …….....2 Pastoralist……..…3 Crops and Livestock …….....4

Definition and working page for page 2

Question Specific Definitions:

Relation to head (Col 2):
Household Head: A person who is acknowledged by all other members of the household either by virtue of their age or standing as the household head.

Read and Write (Col 8)
Any other language: Must be a written language.
For someone who can read and write in Kiswahili and any other language apart from English, the correct code is 1. For one who can read and write in English and any other language apart from Kiswahili the the correct code is 2. Code 4 should only be used for any other language which is not English or Kiswahili.

Education Level Reached (Col 10):
Ask the respondent the highest educational level reached. This aims at establishing whether at the time of enumeration the member of the household is studying has completed or has never studied. Make further enquiry for the level of education reached for those who have completed studies. Establish if the member had attained any training after graduation for the purposes for completing column number 9. For those who still continue attending studies during the period of this survey, establish their learning stage. For instance for a household member who studied up to Standard Three but did complete his/her education at this level, then his/her highest education level reached is Standard Two. For those indicated under code 3 (not studied) in column 8 should be marked code 99 (Not applicable) in column 9.

Section 3.0 Note

Make sure that you define the hh proper to ensure that all the members of the hh are included. Ensure that you stress that the hh is not just the hh heads direct family and that it includes other people living and eating together with the family.

If you notice that the hh is large or you see many people around the hh and you have been given a smaller number of the hh members, make further enquiries until you are sure that you have captured all the hh members.

Section 3.0 Household information.

ii) For each household member complete columns 1,2,3 and 3
After completing columns 1, 2, 3 and 3 for each household member, go back to the first household member and complete the remaining columns for that member.
iii) Repeat step 2 for the rest of the household members.

3.0 HOUSEHOLD INFORMATION

Identification

3.1 Give details of personal particulars of all hh members beginning with hh head

Not applicable for children under 5 years

Na.	Names of hh members *(Start with hh Head)*	Ex Start with hh Head	Sex M = 1 F = 2	Age *(98 years or more enter 97, under one year old write 00)*	Marital Status	Parental Survival		Reard and Write	Education status	Levek of education attained	On farm engagements	Main activity	Off farm income yes=1 no=2
						Mother	Father						
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	*(12)*	*(13)*
01	……..….	1											
02	……..….												
03	……..….												
04	……..….												
05	……..….												
06	……..….												
07	……..….												
08	……..….												
09	……..….												
10	……..….												
11	……..….												
12	……..….												
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18	……..….												
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20	……..….												
21	……..….												
22	……..….												
23	……..….												
24	……..….												
25	……..….												
26	……..….												
27	……..….												
28	……..….												
29	……..….												
30	……..….												
31	……..….												
32	……..….												
33	……..….												

Relationship to household head (Col 2)

Head of household.....1
Female/Male…..…..….2
Son/Daugther…….....3
Father/Mother……...….4
Grandson/daughter….5
Other Relatives….....6

Marrital Status(Col 4)

Married.....…….…1
Single.....…….…2
Co-habiting 3
Divorced
Separated..... ……..…...4
Widow/widower...……..5

Survival of Parents(Col 6 & 7)

Yes.....1 No ….....2
Dont't know ...…….…….3

Ed.ucation Level(Col 9)

Studying ……..1
Has completed…….....2
Never been to school ...…3

Reading and writing (Col 8)

Kiswahili…….....……..1
English …….....……2
Kiswahili and English….....3
Lugha nyingine…….....…...4
Canno tread or write.....….5

Education Level (Col 10)

Primary education	Secondary Education
Below Standard One.....00	Form One.....11
Standard One 01	Form Two 12
Standard Two.....02	Fomr Three.....13
Standard Three.....03	Form Four 14
Standard Four.....04	Form Five 15
Standard Five.....05	Form Six 16
Standard Six 06	Training after Seo.ondary Ed.....17
Standard Seven.....07	University and other Tertiary Ed...8
Daras Standard Eight ..08	Adult
Education.....19	
Training after Primary Ed...09	Not apllicable 99
Pre Form One.....10	

Involvement in farming activitie (Col 11)

Works on farm full time…...1
Works on farm part time…..2
Rarely works on farm....….3
Never works on farm.....… 4

..... **Main activity (Col 12)**

Crop farming: ……..01.
Livestock farming/herding: ….02.
Pastoralist ……03
Fishing ……..04
Fish farming …….……05
Paid employment / Government/parastal……06
Private/NGOs ……07
Self employee (Off- farm cativities)
- With employees ……...08
- Without employees ……...09
Non paid household member (off – farm activities) ……10.
Unemployed but available for work ….11
Unemployed but unavailable for work..12
House mother ……13
Student ……14
Unable to work too old, too young, retired, disabled,child 15
Others (specify) …….....98

Off-farm Income (Col 13)

These are income made from activities NOT on the HH's farming activites. This can be from formal employmenbt (e.g. in gpvrenment etc.), temporary jobs, casual labourers and income generation activity and includes working for cash on other people's farms.
Indicate whether each member was involved in an off farm income generating activity during 2007/08

Definitions and working page for page 3

Definitions for Key Specific Questions
Section 4.1 – Land Access/Ownership
These are areas that were used by the households for the 2007/08 farming season

Lease/Certificate of Ownership: Area under lease/certificate of ownership refers to the areas which were issued by the government. The household possesses government issued leasehold little or certificate of ownership. The land will normally be officially surveyed and boundaries marked. This includes leased land bought from others where the lease/certificate of ownership has been transferred.

Customary Law: This refers to the land which the household does not have an official government but its right of use is granted by the traditional leaders.
Bought: This refers to the areas of customary land that has been bought from others. This land does not have an official title and therefore is not leasehold.
Rented from others: Land rented from others for cash or for a fixed amount in crop produce (e.g. fixed number of bags at harvest).

Borrowed: use granted by land owner free of charge. Land owner can either be a lease holder or has right of access through customary law.
Share cropping: where the household is permitted to use land which is then paid for from a percentage of the harvested crop

Section 4.2 Land Use

Temporary crops: are sown and harvested during the same agricultural year

Permanent crops: are crops once sown or planted last for some years and need not to be replanted after each annual harvest.

Permanent crops /mixed crops: This is a mixture of permanent and seasonal crops. The two crops can either be randomly planted together or in a particular pattern e; for example intercropping (1 row of maize and 1 row of beans). A field that has been divided into plots for different crops is not mixed).

This is further subdivided into:

Mixture of Permanent crops – two or more permanent crops grown tougher

Mixture of Permanent and Temporary crops – permanent crop and annual crop together

Mixture of Temporary crops– two or more temporary, annual crops grown together

Pasture land: this is an area of owned/allocated land which is set aside for livestock grazing. It can be improved pasture where the farmer has planted grass, applied fertilized or where other means have been applied to improve the pasture. Or it can be natural pasture.

Natural Bush: Land which has naturally grown shrubs and trees and is considered productive but is not utilized for farming or livestock production.

Overview to section 4

Overview to section 4
Section 4.0: Preliminary note
Land Access/Ownership
Land access/ownership refers to the area utilized by the members of the household. This does not include communal land where the resources are shared between household members. It does not include official communal land that the household has sole access to for example a plot for crop farming in the communal area.

Procedures for questions

Section 4.0 – Land Ownership

1. Ask the respondent if he knows the total areas of land the household has sole access to. If he knows make a note in the calculation space
2 Ask the respondent the area of the different land ownership categories the household has sole access to (Q4.1, 1 to 4.1.7) and record in the appropriate spaces.
3. Add up the area of the different categories of land and compare it with the total area obtained in step 1 (if the respondent provided the information)
4. If the total area is different find out which one is correct and make

Section 4.2: Land Use

1. Ask the respondent the area of the different land use categories the household has sole access to (Q4.2.1 to 4.2.12) and record in the appropriate spaces.

2. Add up the area of the different categories of land and compare it with the total area obtained in section 4.0. The total area should be the same.

3. If the total area is different find out which one is correct and make amendments where appropriate.

4.0 LAND ACCESS/OWNERSHIP/TENURE Identification

4.1 LAND ACCESS/OWNERSHIP/TENURE

Give details on Area owned by the household during 2007/08 agricultural season.

	Give area as reported by the respondent in acres	Area in Acre		
			4.1.8	Was the whole household area used during the 2007/08 agricultural season? (Yes=1, No=2)
4.1.1	Area under certificate of ownership			
4.1.2	Area owned under customary law			
4.1.3	Area bought		4.1.9	Do you consider to have enough land for your household? (Yes=1, No=2)
4.1.4	Area rented from others			
4.1.5	Area borrowed from others			
4.1.6	Area share cropped from others		4.1.10	Is there any female who owns land or has customary rights to land ownership in this household? (Yes=1, No=2)
4.1.7	Area under other forms of tenure			
	Total area			

4.2 LAND USE

Area used by the household for various agricultural activities during 2007/08 agricultural season

	Enter area as reported by the respondent in acres	Area in acre	Working space for calculations
4.2.1	Area planted temporary monocrops		
4.2.2	Area planted temporary mixed crops (e.g. maize and beans)		
4.2.3	Area planted permanent moncrops		
4.2.4	Area planted permanent mixed crops (e.g. banana, coffee, trees)		
4.2.5	Area planted permanent and temporary mixed crops (e.g. maize and banana)		
4.2.6	Area under pasture		
4.2.7	Area under fallow		
4.2.8	Area under natural forest		
4.2.9	Area planted trees		
4.2.10	Area rented to others		
4.2.11	Area unsuitable for agricultrure		
4.2.12	Uncultivated arable land (minus area under fallow)		
	Total area		

Definitions and working page for page 4

Working table for the calculation area for annual mixed crops

Mixed crops 1	Crop Name	Total area of mixed (acre)	Area for plants (acre)	Total number of plants	Total area of plants (acre)
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)=(d)*(e)*
Permanent crop 1			0.000		
Permanent crop 2			0.000		
Permanent crop 3			0.000		
Permanent crop 4			0.000		
			Total area for permanent crops		
Total Area for mixed crops			**The remaining area for temp crops**		

	% of temporary	Area for permanent crop
Name of the crop temp/permanent 1		
Name of the crop temp/permanent 2		
Name of the crop temp/permanent 3		
Check total area	Check total area for temporary crops	

Mixed crops	Name of plant	Total area mix (acre)	Area for the plant (acre)	Total of plants	Total area for plants (acre)
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)=(d)*(e)*
Permanent crop 1			0.000		
Permanent crop 2			0.000		
Permanent crop 3			0.000		
Permanent crop 4			0.000		
			Total area for permanent crops		
Total area for mixed crops			**The remaining area for temp crops**		

	% of temporary	Area for temporary crop
Name of the crop temp/permanent 1		
Name of the crop temp/permanent 2		
Name of the crop temp/permanent 3		
Check total area	Check total area for temporary crops	

Planted Area: Area in acre the household was able to plant
Harvested Area: Area in acre the household was able to harvest a large portion of harvests. this is the same as the area planted minus the area that was destroyed by floods/ pets /

Temporary/Annual Crops
Crops planted and harvested within 12 months after which time the plants die . Most annual crops are planted and harvested on a seasonal base.

Cash crop codes:

Code	Crop
50	Cotton
51	Tobacco
53	Payrethrum
62	Jute
19	Seaweed

Crop Codes(Creal / Tubers/ Roots:

Code	Crop
11	Maizei
12	Paddy
13	Sorghum
14	Buirush Millet
15	Finger Millet
16	Wheat
17	Barley
22	Sweet Potatoes
23	Irish Potatyoes
24	Yams
25	Cocoyamsi
26	Onions
27	Gingeri

Vegetable Codes:

Code	Crop
86	Cabbage
87	Tomatoes
88	Spinach
89	Carrot
90	Chillies
91	Amaranths
92	Pumpkin
93	Cucumber
94	Egg plant
95	Water mellon
96	Cauliflower
06	Melllon
05	nyanyachungu
02	Ocra
03	Radish
01	Green Beans
04	Bizari

Crop Codes Legumes and Oil

Code	Crop
31	Beans
32	Cowpeas
33	Green Gram
34	Chick Peas
35	Dengu
36	Bambara nuts
37	Njegere
41	Sun flower
42	Simsim
43	Ground uts
47	Soya beans
48	Caster Seed

Instructions for calculating the area of mixed crops in a mixture

A. If the mixed crop is mixed annual ly only enter the total area of the field in the remaining area under temporary Crop and go to step one of these instructions.

B. If the mixed crop is mixed permanent and annual try to work tyhe percent age taken by the different crops and calculate the area of annual crops outlined in step 1. Otherwise use the number of trees method to calculate the area of annula crops in the mix.

C: Number of trees method to calculate annual crop areas in a permanent-annual crop mix.:

(i) List each of the permanent crop in collumn **b** and enter the ground area per acre for each permanent crop (from instrcutions for page 8) in colum d.

(ii) Enter the number of permanent trees in the mix in collumn e as will be provided to you by the respondent

(iii) Calculate the area occpied by each crop by multiplying collumn d and collumn e and sum up these to obatin the total area of permanent crops in the mix.

iv) To obatin the area for tempofrary crops , substract **(-)** the area fro permanent crops from thne total area of crop mix and enter the resulst in in the total area under temporary crops.

(v) Proceed to step 1 to calculate the area under each temporary crop.

1. Enter the name of each temporary crop in tyhe crop mix and estimate percentages of each crop**.**

2. Using the percentage for each crop, calculate the are for each crop from the remaining area under tenmporary crop.

3. After completing the exrcise for all the fields, sum the area of each crop in tyhe mix plus any monocrops and uenter the totals in section 5.1.1 Collumn 3.

4. Once the quantity harvested is obtained , cakIculate the yields (metric tonnes/acre) and compare the figures with the norms given in the crops code box. If there is significantly differentce, check the area and the amouint harvested..

5.0 PERMANENT AND TEMPORARY CROP PRODUCTION — Identificatoion

5.1 ANNUAL CROPS AND VEGATBLE PRODUCTION-SHORT RAINY SEASON

Did your household palnted any crop duding short rainy season for 2007/08 agricultural year? Yes = 1, No = 2,(If the answer is yes proceed to Section 5.3)

5.1.1 Provide the following details for each crop planted during the short rainy season for 2007/08 agricultural year

Name of Crop	Planting: Crop code	Planting: Actual area plnated (acre)	Main crop owner: Enetr the number of the hh member from page 2 on informati on for hh members	Pembejeo: Use of Seeds: The type of seed plant ed	Use of seeds	Quantity: Quant ity	Quantity: Quantity used	Cost (Tshs)	Irriga ted area	Use of fertilisers (If 6 is the answer in col 11 proceed to col 16): Cultiv ated area	Tyep of fertili sers used	Quantity of fertilisers: Meas urem ent	Quantity of fertilisers: Quantity used	Coist (Ths)	Use of chemicals agaisnt weeds (If 6 is the answer in col 11 proceed to col 20): Cultiv ated areaE neo lililot umik a	Qunaity of agrochemicals: Quant ity	Qunaity of agrochemicals: Quantity used	Cost
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	*(12)*	*(13)*	*(14)*	*(15)*	*(16)*	*(17)*	*(18)*	*(19)*
……																		
……																		
……																		
……																		
……																		
……																		
……																		
……																		
……																		
Total area planted																		

Type of seeds planted (Col 5)
Local seeds …1
Improved seeds……..2

Use of agricultural seeds (Col 6,)
For the whole crop……..1
3/4 of the whole crop……..2
1/2 of tyhe whole crop……..3
1/4 ofd the whole crop……..4
Under 1/4 of the whole crop...5

Qunatity (Col 7)
Kg ……1
Seedlings….2
Gram…..3

Use of farm inputs (SCol10,11 & 16)
For the whole crop……..1
3/4 of the wholrecrop……..2
1/2 of tyhe whole crop……..3
1/4 ofd the whole crop……..4
Under 1/4 of the whole crop...5
Not used ……..6

Type of fertilsers (Col 12)
Organic fertiliser……..1
inorganic fertlisers……..2

Quantity (Col 17)
Kig ……1
Litre……..2
Gram…..3
Millilitre…..6

Kipimo (S'wima 13)
Kilo ……1
Lita……..2
Milli-lita..3

Main crop owner: (Col 4)
Enter number of hh member from page 2 on details on hh members in Q. 3

5.2 ANNUAL CROPS AND VEGATBLE PRODUCTION-LONG RAINY SEASON CONTINUED …

5.2.1 Provide the following details for each crop planted during the short rainy season for 2007/08 agricultural year

Identification

Name of crop	Crop code	Use of fungicides (If 6 is the answer in col 20 proceed to col 24)				Use of pesticides (If 6 is the answer in col 24 proceed to col 28)				Harvesting and Storage			Marketing		
		Area used	Size		Cost	Area used	Size		Cost	Quantity harvested (kg)	Quantity stored (kg)	Main storage methods	Quantity sold (kg)	Where was the crop mostly sold?	Main problems in crop marketing
			Quantity	Used			Quantity	Used							
(1)	(2)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
……															
……															
……															
……															
……															
……															
……															
……															
……															

Use of farm inputs (Col 20&24)

For the whole crop.....1
3/4 of the wholrecrop.....2
1/2 of tyhe whole crop.....3
1/4 ofd the whole crop.....4
Under 1/4 of the whole crop...5
Not used 6

Quantity (Col 21&25)

Kig 1
Litre.....2
Gram.....3
Millilitre.....6

Main Storage mechanisms (Col 30)

Locall storage facilities.....1
Improved Local storage facilitiies 2
Modern store.....3
Open drums/sacks.. 4
Cealed drums.....5
In heaps.....O.....6
not Stored.....7
Other means ()Specify.....8

Where the crop was sold(Col 32)

Neighbours.....01 Private Businessman.....08
Open markets. .....02 Contract farming.....09
Auctions.....03 Not sold.....10
Main Market.....04 Others 98
Cooperative Union....05
Farmers Association..06
Large Scale farm.....07

Marketing problems (Col 33)

Very low prices.....01 No problem 11
No transport.....02 Others (Specify 98
High transport costs.....03 Not applicable 99
Lack of crop buyers 04
Markets located far away ..05
Problems with farmers Associations 06
Probloems with cooperative Unions 7
Problems with Businessmen Association ...8
Strigent Government Conditions ...9

Definitions and working page for page 5

Storage (Col. 30, Q 5.1.1):
- **Traditionally Made strcutures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of tradional storagesrutures improved through modern technology.

Marketing Challenges Q 5.1.1 Col. 33:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulating transportation and selling of crops.

Inputs (Q 5.1.1)

Farm Yard Manure: An organics fertliser made on farm from animal dung. .
Compost: An organic fertiliser made on farm from decomposed plant materials.
Insectcides: This is the chemical usde in protecting plants or killing pests.
Fungicides: Protects plants from fungi attack.
Herbicide: Chemicals used to control or kills weeds.
Improved seeds: Scientifically attested to be suitable for agricultural use.

Working area/calculation space

Questions specific definitions

Q 5.1.1. Instructions on crops storage:
1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.

2. For the listed crops give explanations on storage.

Crops storage is keeping/reserving crops in a container or a special place for future use.

Q 5.1.1 Col 31
1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Definitions and working page for page 6

Working table for the calculation area for annual mixed crops

Mixed crops 1	Crop Name	Total area of mixed (acre)	Area for plants (acre)	Total number of plants	Total area of plants (acre)
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)=(d)*(e)*
Permanent crop 1			0.000		
Permanent crop 2			0.000		
Permanent crop 3			0.000		
Permanent crop 4			0.000		
			Total area for permanent crops		
Total Area for mixed crops			**The remaining area for temp crops**		

	% of temporary	Area for permanent crop
Name of the crop temp/permanent 1		
Name of the crop temp/permanent 2		
Name of the crop temp/permanent 3		
Check total area	Check total area for temporary crops	

Mazao mchanganyiko 2	Name of plant	Total area mix (acre)	Area for the plant (acre)	Total of plants	Total area for plants (acre)
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)=(d)*(e)*
Permanent crop 1			0.000		
Permanent crop 2			0.000		
Permanent crop 3			0.000		
Permanent crop 4			0.000		
			Total area for permanent crops		
Total area for mixed crops			**The remaining area for temp crops**		

	% of temporary	Area for temporary crop
Name of the crop temp/permanent 1		
Name of the crop temp/permanent 2		
Name of the crop temp/permanent 3		
Check total area	Check total area for temporary crops	

Planted Area: Area in acre the household was able to plant
Harvested Area: Area in acre the household was able to harvest a large portion of harvests. this is the same as the area planted minus the area that was destroyed by floods/ pets /

Temporary/Annual Crops
Crops planted and harvested within 12 months after which time the plants die . Most annual crops are planted and harvested on a seasonal base.

Cash crop codes:

Code	Crop
50	Cotton
51	Tobacco
53	Payrethrum
62	Jute
19	Seaweed

Crop Codes(Creal / Tubers/ Roots:

Code	Crop
11	Maizei
12	Paddy
13	Sorghum
14	Buirush Millet
15	Finger Millet
16	Wheat
17	Barley
22	Sweet Potatoes
23	Irish Potatyoes
24	Yams
25	Cocoyamsi
26	Onions
27	Gingeri

Vegetable Codes:

Code	Crop
86	Cabbage
87	Tomatoes
88	Spinach
89	Carrot
90	Chillies
91	Amaranths
92	Pumpkin
93	Cucumber
94	Egg plant
95	Water mellon
96	Cauliflower
06	Melllon
05	nyanyachungu
02	Ocra
03	Radish
01	Green Beans
04	Bizari

Crop Codes Legumes and Oil

Code	Crop
31	Beans
32	Cowpeas
33	Green Gram
34	Chick Peas
35	Dengu
36	Bambara nuts
37	Njegere
41	Sun flower
42	Simsim
43	Ground uts
47	Soya beans
48	Caster Seed

Instructions for calculating the area of mixed crops in a mixture

A. If the mixed crop is mixed annual ly only enter the total area of the field in the remaining area under temporary Crop and go to step one of these instructions

B. If the mixed crop is mixed permanent and annual try to work tyhe percent age taken by the different crops and calcualet the area of annual crops outlined in step 1. Otherwise use the number of trees method to calculate the area of annula crops in the mix.

C: Number of trees method to calculate annual crop areas in a permanent-annual crop mix.:

(i) List each of tyhe permanent crop in collumn **b** and enter the ground area per acre for each permanent crop (from instrcutions for page 8) in colum d.

(ii) Enter the number of permanent trees in the mix in collumn e as will be provided to you by the respondent

(iii) Calculate the area occpied by each crop by multiplying collumn d and collumn e and sum up these to obatin the total area of permanent crops in the mix.

iv) To obatin the area for tempofrary crops , substract **(-)** the area fro permanent crops from thne total area of crop mix and enter the resulst in in the total area under temporary crops.

(v) Proceed to step 1 to calculate the area under each temporary crop.

1. Enter the name of each temporary crop in tyhe crop mix and estimate percentages of each crop**.**

2. Using the percentage for each crop, calculate the are for each crop from the remaining area under tenmporary crop.

3. After completing the exrcise for all the fields, sum the area of each crop in tyhe mix plus any monocrops and uenter the totals in section 5.1.1 Collumn 3.

4. Once the quantity harvested is obtained , caklculate the yields (metric tonnes/acre) and compare the figures with the norms given in the crops code box. If there is significantly differentce, check the area and the amouint harvested..

5.3 PERMANENT/PERENNIAL CROPS AND FRUIT TREE PRODUCTION

Identification

Does your household have any permanent/perennial crops or fruit trees Yes =1, No = 2, (If answer is NO proceed to Section 6.0)

5.3.1 Give details on permanent/perennial crops or fruit trees

		Production Section				Farm inputs									
		Monocrops	Mixed crops		Main crop owner: Enetr the number of the hh member from page 2 on information for hh	Uses of seeds					Irrigation	Uses of Fertilisers (If 6 is the answer in col 13 proceed to col. 17)			
Name of permanent/perennial crop	crop code of permanent / perennial crop/fruit trees	Area for trees/seedling/branch/bushes	Are for mixed crops (Acre)	Number of Tplants/ trees in the crop mixh of permanent and perennial crop		Type of planted seeds	Cultivated area	Size: Quantity	Size: Used	Cost (Ths)		Area used	The type of fertiliser used	Quantity of fertiliser (kg)	Cost (Ths)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
……															
……															
……															
……															
……															
……															
……															
……															
……															

Type of seed planted (Col 7)
Local seeds.....1
Improved seeds.....2
Dont't know/ Not applicable...3

Main crop owner (Col 6):
nter the number of the hh member from page 2 on information for hh members in Q 3

Area cultivated (col. 8)
For the whole crop.....1
3/4 of the whole crop.....2
1/2 of tyhe whole crop.....3
1/4 ofd the whole crop.....4
Under 1/4 of the whole crop...

Qunatity (Col 9)
Kg 1
Seedlings....2
Gram.....3

Use of farm inputs (Col 12 & 13)
For the whole crop.....1
3/4 of the wholrecrop.....2
1/2 of tyhe whole crop.....3
1/4 ofd the whole crop.....4
Under 1/4 of the whole crop...5
Not used 6

Type of fertilsers (Col 14)
Organic fertiliser... 1

5.3 PERMANENT/PERENNIAL CROPS AND FRUIT TREE PRODUCTION CONTINUED .....

Identification

5.3.1 Give details on permanent/perennial crops or fruit trees during 2007/08 agricultural year

Name of crop	Crop code	Uses of weeds control chemical (If 6 is the naswer in col 17 Proceed to col 21)				Use of fungicides (If 6 is the answer in col 20 proceed to col 24)				Use of pesticides (If 6 is the answer in col 25 proceed to col 29)				Crop harvesting and storage					Marketing	
		Area used	Size		Cost	Area used	Size		Cost	Area used	Size		Cost	Harvested area (acre)	Quantity of mature plants	Quantity harvested (kg)	Quantity stored (kg)	Njia Kuu ya kuhifadhi	Quantity sold (kg)	Main marketing problem
			Quantity	Used			Quantity	Used			Quantity	Used								
(1)	(2)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)

Area used (Col 20&24)
For the whole crop.....1
3/4 of the wholrecrop..... 2
1/2 of tyhe whole crop..... 3
1/4 ofd the whole crop..... 4
Under 1/4 of the whole crop...5

Main Storage mechanisms (Col 33)
Locall storage facilities... 1
Improved Local storage facilitiiies 2
Modern store... 3
Open drums/sacks..... 4
Cealed drums.... 5
In heaps.....6
not Stored.....7
Other means ()Specify..... 8

Marketing problems (Col 35)
Very low prices.....01 No problem 11
No transport.....02 Others (Specify 98
High transport costs.....03 Not applicable 99
Lack of crop buyers 04
Markets located far away ..05
Problems with farmers Associations 06
Probloems with cooperative Unions 7
Problems with Businessmen Association ...8
Strigent Government Conditions ...9

Quantity (Col 18, 22, & 26)
Kig 1
Litre.....2
Gram... ..3
Millilitre... ..6

Definitions and working page for page 7

Storage (Col. 30, Q 5.2.1):
- **Traditionally Made strcutures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of tradional storagesrutures improved through modern technology.

Marketing Challenges Q 5.2.1 Col. 33:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulating transportation and selling of crops.

Inputs (Q 5.2.1)

Farm Yard Manure: An organics fertliser made on farm from animal dung. .
Compost: An organic fertiliser made on farm from decomposed plant materials.
Insectcides: This is the chemical usde in protecting plants or killing pests.
Fungicides: Protects plants from fungi attack.
Herbicide: Chemicals used to control or kills weeds.
Improved seeds: Scientifically attested to be suitable for agricultural use.

Working area/calculation space

Questions specific definitions

Q 5.2.1. Instructions on crops storage:
1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.

2. For the listed crops give explanations on storage.

Crops storage is keeping/reserving crops in a container or a special place for future use.

Q 5.2.1 Col 33
1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Definitions and working page for page 8

Permanent Crops:
These are crops once planted last longer in the farm and need not be replanted after each annual harvest. Most of the permanent plants include tress such as coconut tress, apple trees, grape trees, banana trees, pineapple trees etc.

Number of Trees:
These include manure trees and premature trees.

Number of mature plants:
A total of fruit bearing tress (e.g. mango trees, orange trees, avocado trees e.t.c).

Instructions for permanent monocrops and crop mix:
A. For a field with permanent monocrop enter farm size in collumn. 3.
B. For a field with a permanent crop mix or a temporary crop mix, enter the number of trees only in collumn **4**.
C. For a field with a permanent crop mix /temporary annual crops , either:
-Enter the area in collumn 4, if the total arae for permanent crops was obatined through calcualtion of percentages of each crop
OR
Enter the number of tree in collumn 5, if the number of plants/ seedlings of permanent crops was excluded

21 Cassava: Cassava is a temporary crop, in order to simplify data collection on areas of production, data on cassava will be collected from areas under permanent crops.

Permanent crops:(crop oils)

Code	Crop	Area per crop
44	Palm Trees	0.00049
45	Coconut tree	0.00037
46	Cashew nut tress	0.00062

Permanent crops (Cash crops)

Code	Crop	Area per crop
53	Sisal	0.00012
54	Coffee	0.00049
55	Tea	0.00037
56	Cocoa	0.00049
57	Rubber	0.00099
58	Wattle	0.00099
59	Kapok	0.00124
60	Sugar-cane	0.00012
61	Cardamon	0.00049
63	Tamarin	0.00099
64	Cinarmon	0.00124
65	Nutmeg	0.00099
66	Clove	0.00074
18	Black pepper	0.00037
34	Pigeon Peas	0.00025
21	Cassava	0.00019
75	Pineapple	0.00006
86	Lemon Grass	

Permanent crops:

Code	Crop	Area per crop
70	Passion Fruit	0.00074
71	Bananas	0.00037
72	Avocado	0.00099
73	Mango	0.00099
74	Pawpaw	0.00037
76	Orange	0.00074
77	Grape fruit	0.00074
78	Grape	0.00012
79	Mandarin	0.00074
80	Guava .	0.00074
81	Plums	0.00074
82	Apples	0.00074
83	Peaches	0.00074
84	**Mifyoksi**	0.00074
85	Lime/lemon	0.00074
68	Pomelo	0.00099
69	Jack Fruit	0.00074
97	Durian	0.00074
98	Bilimbi	0.00074
99	Rambutan	0.00074
67	Bread Fruit	0.00099
38	Malay apple	0.00074
39	Star Fruit (Sakua)	0.00074

Definitions and working page for page 9

Storage (Col. 33, Q 5.3.1):
- **Traditionally Made strcutures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of tradional storagesrutures improved through modern technology.

Marketing Challenges Q 5.3.1 Col. 35:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulating transportation and selling of crops.

Inputs (Q 5.3.1)

Farm Yard Manure: An organics fertliser made on farm from animal dung. .
Compost: An organic fertiliser made on farm from decomposed plant materials.
Insectcides: This is the chemical usde in protecting plants or killing pests.
Fungicides: Protects plants from fungi attack.
Herbicide: Chemicals used to control or kills weeds.
Improved seeds: Scientifically attested to be suitable for agricultural use.

Questions specific definitions

Q 5.3.1. Instructions on crops storage:
1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.

2. For the listed crops give explanations on storage.

Q 5.3.1 Col 35
1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Working area/calculation space

Definitions and working page for page 10

Investment in agriculture
Investment activities:
Investment activities refer to medium to long term farm development structures and projects. This can be irrigation structures, erosion conrol and water harvesting structures or other permanent or semi-permanent investment made on the land that the household owns.

Irrigated farming: Section 6.5:
Source of irrigation water (Col 1): The main source of the water used for irrigation.
Method of obtaining water (Col 2): The mechanism by which the water is extracted from the source
Irrigatable area (Col 3): The area the irrigation system is designed to cover in acrage
Area of irrigated land during the 2007/08 (Col 5): Area of land under irrigation during the 2007/08 agricultural year. This is the actual area nd NOT the cumulative areas recultivated in 2 or more cropping seasons.

Farm Implements (Col. 1):

Machette : Includea all implements use in tree cutting namely cicle, et.c.

Sprimkler: The pump carrued on the back or a hand used water pump
Hand used small tractor: A small tractor used in cultivation while the user walks on foot (see photo).

Section 6.2 Use of draft animals
Animals used in agricultural activities by the household during 2007/08 agricultural season.

Castrated Bulls: Castrated oxen meant for use in agricultural production.
Uncastrated Bulls: mature bulls used for garicultrural activities but are not castrated**.**
Cow: Farmers also use mature female cattle in agricultural activities due to shortage of bulls
Donkey: Mature Male or female donekys are also used for agricultural production.

Q 6.5 Irrigation.
1. If a household uses irrigated farming give explanations aon source and method of obatining water**.** .
2. See Col 10, Q. 5.1.1 and 5.2.1 and **Col** 12, Q 5.3.1 to see if irrigation was applied to any crop.

Farm implements, Q 6.1:
1. Collumn **2** Indicate whether or not inputs were used
2. Complete collumn 3 by entering the number of inputs used.

Farm inputs: Sections 6.3 and 6.4

1. Collumn **2** Indicate whether or not inputs were used.
2. Compelte collumn 3 by indicating where the inouts were obatined and collumn 4 by indicating the distance from where the inputs were obatined

Compost: An organic fertiliser made on farm from decomposed plant materials.
Insectcides: This is the chemical usde in protecting plants or killing pests.
Fungicides: Protects plants from fungi attack.
Herbicide: Chemicals used to control or kills weeds.
Improved seeds: Scientifically attested to be suitable for agricultural use.

Tractor tiller	
Tractor hallow	
Castrated bulls	
Uncastrated bulls	
Cows	
Donkeys	
Shredding Machine	
Power Tiller	
Oxen pulled plough for making terraces	

6.2.6	Power Tiller	

6.3 USE OF ORGANIC FERTILISERS

6.3.1 Give details on the use of organic fertlisers during 2007/08 agriculture year

	Type of fertiliser	Used Yes=1, No=2	Quantity	Quantity used	Area used (Acre)
	(1)	(2)	(3)	(4)	(5)
6.3.2	Manure				
6.3.3	Compost				

KQuantity (Col 3)
Kg……1
Ton……2

ACCES TO INPUTS

Give details on inputs used during 2007/08 agricultural year

Name of inputs	Used (Yes=1, No=2)	Source	Distance
(1)	*(2)*	*(3)*	*(4)*
Inorganic fertilisers			
Farm yard manure			
Compost			
Insecticides/Fungicide			
Pest and weeds control chemicals			
Improved seeds			

Source (Col.3)
Government……01
Cooperative Union…… ...02
Farm inputs store/market……03
Auction……04
Development project……05
Corp buyers……06
Large Scake farms……07
Made by the household……08
Form neighbour……09
Cooperative Union……10
Others ……98
Not applicable……99

Distance from the source (Cola 4)
Under 1 kilometre……1
Btween One and three kilometres ……2
Btween three and 10 killometres3
Between 10 and 20 Kilometres ……4
Over 20 Kilometres……5
Not applicable……9

IRRIGATED FARMING

Did the household use irrigated farming during 2007/08 agriculture year? Yes=1, No = 2

If the answer is yes proceed to Section 6.6

Na.	Main source of water for irrigation	Main source of obtaining water	Area that can be irrigated (Acre)	Area irrigated during 2007/08 agriculture year (Acre)
	(1)	*(2)*	*(3)*	*(4)*
6.5.2				

Source of irrigation water (Col 1)
River……1 Wells ……4
Lake ……2 Deep wells……5
Dams……3 Cannals …… 6
Tape water……7

Means of obtaining water(C0l2)
Flwoing. (gravity)……1
Using a bucket……2
Water pump (using hand or leg)……3
Electric /fuel driven pump/ mafuta……4
Other (Specify)……8

Definitions and working page for page 11

Q 6.6

The type of erosion contro/Water harvesting (Col 1)
Terraces: Structures constructed on mountain slopes to provide flat terrain for crop planting.

Erosion control bunds: these are bunks of earth/stones built perpendicular to the slope to slow dowm the speed of water and thus preventing soil erosion. Its differs from terraces in that the soils on these banks are not at ground level **.**

Gabions: A box like structure made of wire and filled with large stones to prevent gully errosion.

Sand bags: Are used in controlling and preventing gully errosion
Tree belt/wind breaks: Trees planted against the wind direction for breaking wind speed..

Section 7.0 Acces to credit for crop or livestock production
Credit refers to something provided in cash or in kind (such as farm inputs, machines, livestock and other things) for crop or livestock production. The value of the credit must be repaid back to the lender. An Interest may or may not be attached to the value of the credit
The credit may be repaid either in cash or through farm produce to be harvested **.**

In this question the enumerator is at liberty to inquire up to three sources of credit where the farmer accessed credit from more than one source.

Section 8.0 Agricultural Extension Services
Agricultural Extension Services: Refers to educational services provided to farmers by exetsion officers for the purposes of increasing crop and livestock production.

Share-cropping: Refers to farming where smallholder / Smallscale farmer enters into an agreement with large scale farmer where the former sells produce to the latter in exchange of provisions of farm inputs and the like. .

Contract farming Farming: Farming agreement entered between smallscale and large scale farmerswith regards to markets of farm produce and provision of farm inputs

Q 6.6 Number of water harvestin structures and year of construction

1. The number water haversting structures refers to the number of wokring / maintained structures and does not include derelict or iireparable structures.

2. Year of construction refers to the year in which the structures were built, and not the year the structures were last repaired.The year should be written in figures e.g. 1998, 2006.

Section 7.0 Source of agriculture credit
If tghe farmer obtained credit from more than one source the use the code from the list provided. Start with the main source of credit in Section **"7.1.1".a**

Section 8.0 Agricultural extension services

1. Ask if the household did receive agricultural extension services during 2007/08 agricultural season from the respondents listed in collumn 1, then enter column 2.

2. Complete all columns for every extension officer**.**

6.6 SOIL EROSION Identification

6.6.1 Did the household experience soil erosion during 2007/08 agriculture year? *(Yes=1,No=2)*

6.6.2 Did the household applied any methods for erosion contro/water harvesting during 2007/08 agricultural year? (Yes=1, No =2) (If the answer is No, Proceed to Section *7.0)*

Na.	Mechanisms of controlling erosion/ Water harvesting	Number of water harvesting	Year of construction
	(1)	*(2)*	*(3)*
6.6.3	Terraces		
6.6.4	Bunks for erosion control		
6.6.5	Gabions/sand bags		
6.6.6	Vetiva leaves		

	Type of erosion control/water harvesting	Number of water harvesting	Year of construction
	(1)	*(2)*	*(3)*
6.6.7	Tree belt		
6.6.8	Soil bunks of water harvesting		
6.6.9	Trenches		
6.6.10	Other		

7.0 ACCESS TO ON FARM CREDITS

7.1 Is there any household member who accessed on farm credit during 2007/08 agriculture year? Yes=1, No=2 (If answer is NO, Proceed to Section *7.2)*

SELECT UP TO THREE SOURCES AND PROCEED TO QUESTIONA 8.0

(Source of credit Q 7.1.1, 7.1.2, 7.1.3)
Relative..... 1 Saccos....4 NGO/Development projectsi.....7
Bank.. .....2 Busineman/Shop.....5
Cooperative Union.....3 Priviate individuaks.....6 Other.....9

		7.1.1a	**7.1.2a**	**7.1.3a**
Source of credit				
Credit provided to (Male=1, Female=2)	**7.1.1b**	**7.1.2b**	**7.1.3b**	

7.2 IF THE ANSWER TO QUESTION 7.1 IS NO

Give reasons for not accessing credit

Reasons for not accessing credit (Q 7.2)COL
Not required .....1 Did not to be indebted.....3 Did nott know how to access credit.....5 Credit delayed.....7 Did not credit existed.....9
Not available .....2 High interest rates.....4 Bureaucracy.....6 Other (Specify).....8

8.0 ADVISORY SERVICES IN AGRICULTURE

8.1 Did the household participate in outgrowers scheme during 2007/08 agriculture year? (Yes=1, No=2)

8.2 Did the household participate in the contract farming during 2007/08 agriculture year? (Yes=1, No=2)

8.3 Did your household receive agricultural advise on the following : *(IF THE ANSWER IS NO IN COL 2 PROCEED TO THE FOLLOWING QUESTION*

Na.	Advise on agriculture	Rceived advice (Yes=1, No=2)	Source of advise
	(1)	(2)	(3)
8.3.1	Spacing		
8.3.2	Use of agrochemicals		
8.3.3	Soil erosion control		
8.3.4	Use of organic manure		
8.3.5	Matumizi ya mbolea za viwandani		
8.3.6	Use of improved seeds		
8.3.7	Use of modern farm implements		
8.3.8	Irrigation		
8.3.9	Crop Storage		
8.3.10	Pest control		
8.3.11	Other (Specify)		

Source of agricultural advice (Cokl. 3)
Government.....1 NGO/Development project.....2 Cooperative....3 Large Scale farmer....4 Ratdio/Newspapers....5 Neighbour .....6 Other source.....8

Definitions and working page for page 12

Q 9.1 and 9.3 : What is required is to establish whether or not the household kept or raised the listed livetsock during 2007/08 agricultural season (i.e. from October 2007 to September 2008). Also to establish the number of livestock as of 1st October 2008

Keeping or raising livestock is to to keep livestock at home while providing the livestock with animal feeds and medication and other services. The livestock could be owned by the farmer or kept on behalf of relatives or neighbours .

Sections 9.1.1 to 9.1.7 Cattle

Note:
Q 9.1 is for the actual number of cattle owned or kept by the household (as of 1st October 2008). This number does not include herds of cattle kept on behalf by relatives or neighbours; that is, the cattle outside the residential area of the household under survey.
1. If the the household keep mature fecund female cattle, it is expected that such a household will have calves which will be entered in question 9.1.6 or 9.1.7

Type of cattle (sectioin 9.1.1 to 9.1.7)

Bull: Mature uncastrated made cattle used for breeding
Cow: Mature female cattle that has given birth at least once

Ox: Castrated made cattle used for farm work

Steer: Castrated made cattle used for meat

Heifer: Female cattle of 1 year up to the first calving

Section 9.3 Goat
Note:
Question 9.3 is for the actual number of owned or raised by the household (as of 1st October 2008) This number does not include goats kept on behalf by relatives or neighbours, that is the goat outside the residential area of the household under survey.

1. If the household has she goats, you would normally expect them to have kids

Type of Goat (Qs 9.3.1 to 9.3.5)

Billy Goat (he-goat): Mature Uncastrated male goat used for breeding
Castrated goat: Male goat that has been castrated
She Goat: Mature female goat over 9 months of age

9.0 LIVESTOCK (LIVESTOCK AND FISH) Identification

9.1 CATTLE

Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No= 2 (If the answer is No proceed to Section 9.3)

Number of cattle as of 1.10.2008

No.	Type of cattle	Number of indigenous cattle	Number of improved cattle		Total
			for meat	Dairy	
		(2)	(3)	(4)	(5)
9.1.1	Castrated bulls				
9.1.2	uncastrated bulls				
9.1.3	Cows				
9.1.4	Steers				
9.1.5	Heifer				
9.1.6	Male calves				
9.1.7	Female calves				
				Grand total	

9.1.8 What main methods do you use to identify your cattle?

Cattle idenfificatio methods
Iron stamp (chapa moto)…….1 Throat….2 Ear/tail cutting…..3
Colour……..4 Earings…5 Other ……..8

9.2 Milk production: CATTLE

Na.	Season	Type of cattle	Number of milked cows	Average of milk per cow per day (litre)	Average number of days which your cows were milked	Average price per litre per season
	(1)	(2)	(3)	(4)	(5)	(6)
9.2.1	Rainy	Improved		.		
9.2.2		Indigenous		.		
9.2.3	Dry	Improved		.		
9.2.4		Indigenous		.		

9.3 GOAT

Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No= 2 (If the answer is No proceed to Section 9.3)

Number of goats as of 1.10.2008

Na.	Tyep of goat	Number of indigenous goat	Number of improved		Total
			for meat	Dairy	
	(1)	(2)	(3)	(4)	(5)
9.3.1	Male uncastrated goat				
9.3.2	Male castrated goat				
9.3.3	She goat				
9.3.4	Male kid				
9.3.5	She kid				
				Grand total	

Milk Production: GOAT

Na.	Season	Number of ilked goats	Average of milk per goat per day (litre)	Average number of days which your she goats were milked	Average price per litre per season
	(1)	(2)	(3)	(4)	(5)
9.3.6	Rainy		.		
9.3.7	Dry		.		

Definitions and working page for page 13

Q 9.1 and 9.3 : What is required is to establish whether or not the household kept or raised the listed livetsock during 2007/08 agricultural season (i.e. from October 2007 to September 2008). Also to establish the number of livestock as of 1st October 2008

Keeping or raising livestock is to to keep livestock at home while providing the livestock with animal feeds and medication and other services. The livestock could be owned by the farmer or kept on behalf of relatives or neighbours .

Sections 9.4 Sheep

Note:
Q 9.4 is for the actual number of sheep owned or kept by the household (as of 1st October 2008). This number does not include sheep kept on behalf by relatives or neighbours; that is, the sheep outside the residential area of the household under survey.

1. If the the household keep ewes, it is expected that such a household will have calves which will be entered in question 9.1.6 or 9.1.7

Type of Sheepe (Sectioin 9.4.1 to 9.4.5)

Ram: Mature Uncastrated male sheept used for breeding

Castrated sheep: Male sheep that has been castrated

Ewe: Mature female sheep over 9 months of age

Lamb: Young sheep under 9 months of age.

Section 9.5 Pigs
Note:
Question 9.3 is for the actual number of pigs owned or raised by the household (as of 1st October 2008). This number does not include pigs kept on behalf by relatives or neighbours, that is the cattle outside the residential area of the household under survey. .

1. If the household has she goats, you would normally expect them to have kids in column

Type of Pigs (Qs 9.5.1 to 9.5.5)

Boar: Mature Uncastrated male pig used for breeing
Sow: Mature female pig that has given birth to at least one ltter of pigs.
Gilt; Female pig of over 3 months up to the first farrowing
Piglet: Young pig less than 3 months of age

Identification

9.4 SHEEP

Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No 2 (If the answer is No proceed to Section 9.5)

Number of sheep as of 1.10.2008

Na.	Type of sheep	Number of indigenous sheep	Number of improved	Total
	(1)	(2)	(3)	(5)
9.4.1	Ram			
9.4.2	Castrated sheep			
9.4.3	She sheep			
9.4.4	Male lamb			
9.4.5	Female lamb			
	Grand total			

9.5 PIGS

Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No= 2 (If the answer is No proceed to Section 9.6)

Number of pigsp as of 1.10.2008

Na.	Type Pigs	Number of pigs
	(1)	(2)
9.5.1	Boar	
9.5.2	Castrated male	
9.5.3	Sow/Gilt	
9.5.4	Male piglet	
9.5.5	Female piglet	
	Grand total	

9.6 OTHER LIVESTOCK

	Type of animal	Number as of 1 October 2008	Number of eggs 2007/08 agriculture year
	(1)	(2)	(3)
9.6.1	Local chicken		
9.6.2	Layers		
9.6.3	Broilers		
9.6.4	Ducks		
9.6.5	Guinea pigs		

	Type of animal	Number as of 1 October 2008	Number of Eggs 2007/08 agriculture year
	1	(2)	(3)
9.6.6	Turkeys		
9.6.7	Rabbit		
9.6.8	Donkeys		
9.6.9	Horses		
9.6.10	Dogs		

Definitions and working page for page 14

Control of livestock dieases causing bugs

Livestock worm control medicine: Medicine used to kill or control livestock on livestock . It is often used for cattle, goats, sheep and pigs.

Tiick: Is a dangerous bug that sucks blood form livestock and transmits animals diseases from one to the other animal.

Tse tse fly: A fly like bug that sucks blood from livetsock and transmits diseases sleewping sickness from one to the other animal.

Livestock advice (Section 9.8)
IA service provided by extension officers to livestock keepers for increasing livestock production.

9.7 LIVESTOCK DISEASES AND PEST CONTROL

Identificatio

	Did you livestock during 2007/08 agriculture year? (Yes=1, No=2) (If the answer is No proceed to Section 9.7.5	
9.7.1	Which animals did your deworm? (Yes=1,No =2, Not applicable=3 in the relevant box) Cattle **9.7.2** Goat/Sheep **9.7.3** Pigs **9.7.4** Poutry	
9.7.5	Do you experience tick problem with your livestock? (Yes =1, No = 2, Not applicable 3)	
9.7.6	How did you control tick problem? *Control method (Q. 9.7.6): Dipping……1 Spaying……..2 Application of medicine on back bone……..3 None..4 ..... Other……8*	
9.7.7	Do you experience Tse tse problem with your livestock? (Yes =1, No = 2, Not applicable 3)	
9.7.8	How did you control Tse tse problem with your livestock? *Control method (Q. 9.7.8): Dipping……1 Spaying……..2 Traps……..3 None..4 ..... Other……8*	
9.7.9 9.7.7	Do you experience Newcastle disease problem with your poutry? (Yes =1, No = 2, Not applicable 3)	
9.7.10	How do you control Newcastle disease problem with your poutry? *Control/Curative methods (Q. 9.7.10) Vaccination..1 Herbs....2 None..3*	
9.7.11	Did you experience Fowl Typhoid with your poutry?Yes=1, No=2 , Not applicanblei=3	
9.7.12	How did you cotrol/ cure Fowl Typhoid with your poutry? *Contro/curative methods(Swali 9.7.12 Vaccination..1 Herbs....2 Noe.3*	
9.7.13	Were your cattle vaccinated agaionst the following diseases? (Yes = 1, No = 2, Not applicable=3). **9.7.13 A:** Foot and Mouth diseases **9.7.13B:** Skin disease	

NOTE : If answers to Qs *9.1 to 9.6 is No (THAIS THE HOUSEHOUSE DOES NOT RAISE LIVESTOCK,) Proceed to q 9.9*

9.8 Extenmsion services on livestock

Did you receive the following extension advice on the followingJe? *(IF THE ANSWER IS NO IN COL 2 PROCEED TO THE FOLLOWING QUESTION*

Na.	**Livestock extension advice**	Received Extension advice (Yes=1, No=2)	Soure of Extension
	(1)	(2)	(3)
9.8.1	Feed and better feeding methods		
9.8.2	Improved livestock shed (Goat, Dairy cattle, Poutry and pigs)		
9.8.3	Milking and hygiene		
9.8.4	Cattle fattening		
9.8.5	Livetsock diseases control		
9.8.6	Livestock keeping in line with land availability		
9.8.7	Pasture establsihment and maintanence		
9.8.8	Forming and strengthening groups/cooperatives		
9.8.9	Calf rearing		
9.8.10	Basics of production and use of improved bulls (AI)		
9.8.11	Animals feed production		
9.8.12	Other extension advice (Specify) ……		

Source of agriculture extesnion(S/wima 3)
SGovernment……1 NGO/Development project…..2 Cooperative Union….3 Large Scale farmer….4 Radio/TV/Newspapere.5 Neighbour……6 Other source …..8

Definitions and working page for page 15

General definitions

Fish farming: Refers to the rearing/production of fish. It is different from fishing in that in fish farming the fish have to be reared. While in fishing, fishing nets or traps are used to catch fish from rivers, lakes and the sea; thus fishing should not be included in this section

I

Question Specific Definitions (Q 9.9)

Production unit number (Col 1): A production unit is a pond river/lake which is treated as a separate entity for the production of fish eg it may be by virtue of manageable size, maturity of fish, tye of fish etc. eg. a farmer may have 3 fish ponds (each one is a separate production unit).

Frequency of stocking (Col . 5): What is the number of time the farmer puts new fingerlings into the pond each year.

Fingerlings: These are young immature fish used for stocking ponds.

Sols: (Col 10 & 11)

If no fish were sold enter "0" in column 10 and 11`

Fish sold (Col.12)

Kama hakuna samaki waliouzwa jaza "0" katika safuwima 12

Working space for page 15

9.9 FISH FARMING Identification

Did your household practice fish farming? Yes=1, No=2 (*If the answer is no proceed to section 9.10)*

Give details on the fish farming during 2007/08 agriculture year

No.	Number of Ponds	Aina ya ufugaji	Square area of pond (m^2)	Source of fingerings	What is the frequency of stocking during the period?	Kiwango cha Huduma ya bwawa	Total number of stoked fish: Tialpia	Mwatiko	Crabs	Lulu	Total number of fish harvested	Total weight of all fish: waliovuliwa (kg)	waliouzwa (kg)	What is the main fish outlet?
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
9.9.1	1													
9.9.2	2													
9.9.3	3													

Type of farming (SCol 2)
Natural pond……..1
Small earth pond…….2
Large pond……..3
Other ……..8

Standard of servives to the pond (Col6)
High leve ……1
Intermediate level……2
Low leve……3
Don't know……..8

Source of fingerings(Col 4)
From the pond……..1 Neighbour…….4
Government……..2 Business man…..5
NGO/Development Project…3 Natural Pond……..6
Other ……..8

mainly sold to? (Col 14)
Neighbour…1 Auction……..3 Large Scale farmers……..5
Open market….2 Fish processing industry..4 Private business people ….6
Did not sell…….7 Other ……..8

9.10 HONEY PRODUCTION

Is there honey production/harvesting in your household? Yes=1, No=2 (If answer is no PROCEED to Section 9.11)

Give details on honery harvesting during 2007/08 agriculture year

Numbe	Type of honey	Harvesting done ? (Yes=1, No=2)	Number of improved bee hives	Number of local bee hives	Amount sold per year (Litre)	Amount of honey sold (litre)	Price per litre	Main market)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
9.10.1	Small bees							
9.10.2	Large bees							

Honey outlet Co 8
Neighbour…1 Auction……...3
Large Scale farmers……..5
Open market….2 Fish processing industry..4
Private business people ….6
Did not sell…….7

9.11 AGRICULURAL CHALLENGES

From the list of cahhalengs in farming on the right of the page, SELECT FIVE MAIN CHALLENGES WHICH constrain your development in agriculture

No	With first five priorities	Code
	(1)	(2)
9.11.1	Priority 1	
9.11.2	Priority 2	
9.11.3	Priority 3	

No	Important for	Code
	(1)	(2)
9.11.4	Priority 4	
9.11.5	Prioty 5	

LIST OF CHALLENGES

01 Land availability
02 Land owenership
03 Poor farm implementso
04 Soil fertility
05 Availability of imrpoved seeds
06 Irrigation services
07 Availability of agrochemicals
08 Cists of farm inputs
09 Extension services
10 Availability of forest resources
11 Huntinf and collection problems
12 Water availability
13 Access to credits
14 Lack of off farm incomes
15 Harvesting problems
16 Kupukuchua
17 Crop stiorage
18 Crop processing
19 Market information
20 High transporation costs
21 Destructive animals
22 Crop thefty
23 Pests and diseases
24 Advice from Local government
25 Long dry spells
26 Conflicts between livetsock keepera and pastoralists

Definitions and working page for page 16

10.0 Household poverty indicators

Number of rooms used for sleeping in the household (Q 10.1.4)
Include sitting room, during room, kitchen, etc if used for sleeping.

It also includes rooms outside the main dwelling

A room is defined as a space which is separate from the rest of the building by a permanent wall or division. A building / house that is not divided into rooms is considered to have one room.

Household assets (Q 10.2):
There assets must be functionin. Do not include if broken.

Access to drinking water (Q 10.4):
If there is more than one source use the one, which the hh uses most frequently.

Main source of hh cash income:(Q 10.7:
Activity that provides the hh with the most can during 2007/08 agricultural season.

10.0 POVERTY INDICATORS

Idetification

10.1 HOUSE CONSTRUCTION

Specify materials used in the construction of the following
sehemu zifuatazo

10.1.1 Roof **10.1.2** Floor **10.1.3 Wall**

Roofing materials
Iron sheets……..1
Tiles……..2
Concrete……3
Asbestos ….4
GrassiMakuti……..5
Grass and mud….6
Other …….. .8

Floor matrials
Earthen material……..1
Wood……..2
Wooden tiles…3
Tiles……..4
Cement……5
Other……..8

Main materials
Grass and pieces of woods……..1 Mud……2
Wet bricks……3 Burnt bricks…4
Wood……..5 Block bricks……6
Stonese ……..7 Bricks /Mawe ya kichanga……..8

10.1.4 Number of bedrooms

10.2 Household property

Does your houshold woen the following?, (Yeso=1 No =2)

Number	Property	Yes=1, No=2
	(1)	(2)
10.2.1	Radio (Radio, Radio Casette, music system)	
10.2.2	Land line	
10.2.3	Celkl phone	
10.2.4	Iron	
10.2.5	Trolley	
10.2.6	Bycicle	
10.2.7	Vehicle	
10.2.8	TV/ Video	
10.2.9	Refrigerator	
10.2.10	Motorbike/vespa	

10.3 Energy use and availability in the hsousehold

Main source of energy

10.3.1 Lightining 10.3.2 Cooking

Nishati za Kuangazia
Umeme……01
Sola……..02
Gesi (biogas) ……03
Taa ya kandili……04
Karabai……05
Kibatari……06
Mishumaa……07
kuni……08
Nyingine …….. 98

Nishati za kupikia
Umeme……01
Sola……..02
Gesi (biogas) ……03
Gesi (Kiwandani)…..04
Mafuta ya taa……05
Mkaa……06
Kuni ……07
Mabaki ya Mazao….08
Kinyesi cha
Wanyama……09
Nyingine ……..98

10.4 Availability of drinking water

	Season	Main source of water	Distance from source (km)	Time spent waitingor going to and from the source (Hours)
	(1)	(2)	(3)	(4)
10.4.1	Rainy		.	.
10.4.2	Dry period		.	.

Main sourece of drinking water
Col. 2
Tape water……..01 Water venders……09
Arificial well……..02 Boozer……10
Arificial spring… ……..03 Bottled water……11
Openwell……..04 Other (Specify)……98
Natural spring……05
Lake water,piond,river,stream n etc……06
Covered Rain water harvesting well..07

Note: *Code01,* ***Bomba*** *kwa Zanzibar hujulikana kama Mfereji*

10.5 Toilet facilities

10.5.1 What type of toilet does your hosuehold use?

Tyep of toilet
No toilet/in the buish……1 Pit latrine….4
Flash toilet……..2 Other type (Specify)……..……..8
Ordinal pit latrine……3

10.6 Eating patterns

10.6.1	**How many meals does your hosue usually get per day** ?	
10.6.2	How days did the household eat meat last week?	
10.6.3	How days did the household eat fish last week?	
10.6.4	How many times did the household experience food shortages last year?	

Food shortage problems
(Swali 10.6.4)
Never ……..…1
Few times……..2
Sometimes……..3
Many times……4
Often……..5

10.7 Main source of household cash income?

10.7.1 What are the sources of household income?

Code for source of income
Selling food crops……..01 Sales of foerst products..05 Cash assisnatce…09
Sales of livestock……..02 Business……06 Fishingi……10
Sales of livestock products……03 Salaries……07 Other……98
Sales of cash crops…04 Casual labour……08 None……99

TIME OF FINISHING THE INTERVIEW Hour Minutes

Average/maximum yields per area

Use this table to compare the yields calculated in Sections 5.1, 5.2 and 5.3.

These stats are strictly to be used used as a guide for the purpose of assisting to get the correct area and yields for each crop.

	Name of Crop	Kilogram/ha		Kilogram/acre				Name of Crop	Kilogram/ha		Kilogram/acre	
		Average	Max	Average	Max				Average	Max	Average	Max
11	Maize	1,150	6,250	466	2,530		86	Cabbage	20,000	50,000	8,097	20,243
12	Paddy	700	4,000	283	1,619		87	Tomatoes	25,000	60,000	10,121	24,291
13	Sorghum	750	3,500	304	1,417		88	Spinach	15,000	17,000	6,073	6,883
14	Bulrush Millet	350	3,000	142	1,215		89	Carrot	25,000	30,000	10,121	12,146
15	Funger Millet	300	2,500	121	1,012		90	Pepper	3,500		1,417	0
16	Wheat	1,150	4,500	466	1,822		91	Amaranthus	20,000	40,000	8,097	16,194
17	Barley	1,400	1,800	567	729		92	Pumpkin	35,000	40,000	14,170	16,194
16	Cassava	3,000	7,000	1,215	2,834		93	Cucumber	5,000	10,000	2,024	4,049
17	Sweet potatoes	600	8,000	243	3,239		94	Egg plant	30,000	60,000	12,146	24,291
18	Irish potatoes	750	8,500	304	3,441		95	Water melon	10,000	20,000	4,049	8,097
19	Yams	4,000	10,000	466	1,822		96	Caouliflower	17,000	20,000	8,097	16,194
25	Coco yams	2,500	5,000	567	729		52	Cotton	800	25,000	14,170	16,194
26	Onions	30,000	50,000	1,215	2,834		54	Coffee	500	100	2,024	4,049
27	Ginger	20,000	30,000	243	3,239		55	Tea	2,500	10,000	12,146	24,291
31	Mahara Beans	400	1,300	304	3,441		56	Cocoa	150	1,000	4,049	8,097
32	Cow peas	300	1,750	121	709		57	Rubber	400	1,400	6,883	8,097
33	Green gram	1,500	1,800	1,012	2,024		58	Wattle			324	10,121
34	Pigeon peas	600	1,500	243	607		59	Kapok			0	0
35	Chick peas	500	1,500	202	607		60	Sugar cane	60,000	150,000	24,291	60,729
36	Bambara nuts	600	4,000	243	1,619		61	Cardamon	3,000		1,215	0
41	Sun flower	600	1,700	243	688		71	Banana	10,000	50,000	4,049	20,243
42	Simsim	300	1,000	121	405		72	Avocado			0	0
43	Gound nuts	600	4,000	243	1,619		73	Mango	10,000	25,000	4,049	10,121
47	Soyabeans	1,300	2,500	526	1,012		74	Pawpaw	50,000	70,000	20,243	28,340
48	Caster seeds	300	750	121	304		76	Orrage	15,000	40,000	6,073	16,194
75	Pineapple	25,000	60,000	10,121	24,291		77	Grape fruit	30,000	50,000	12,146	20,243
50	Cotton	300	1,500	121	607		78	Grapes	5,000	30,000	2,024	12,146
51	Tobacco	500	1,500	202	607		79	Mandarin	15,000	40,000	6,073	16,194
53	Pyrethrum			0	0		80	Quava	7,000	35,000	2,834	14,170
62	Jute	800	3,500	324	1,417		81	Plums			0	0
44	Palm oil	1,150	5,000	466	2,024		82	Tufaha		20,000	0	8,097
45	Cononut	1,500	8,000	607	3,239		83	Pea	15,000	27,000	6,073	10,931
46	Cashw nut	9	60/tree	4	24		84	Pitches	14,000	57,000	5,668	23,077
							66	Clove	4,500	5,000	1,772	1,969
								Black pepper	2,000	3,750		
								Mung'unye				
								Ocra	1,000	1,500		

Appendix V

Community Level Questionnaire

United Republic of Tanzania

ACQ 3 **CONFIDENTIAL**

Village/Community Level Formats

Access to and Use of Community Resources

Farmg Gate Prices of commodoties produced by the village

Agricultural Sample Census 2007/2008

NUMBER OF FARMERS HH IN THE VIALLAGE
To be filled by the enumerator after completeing form ACLF2

NUMBER OF HH MEMBERS
To be filled by the enumerator after completeing form ACLF2

Region	.....			Ward	
District	.....			Village	

Enumerator Name _____ Signature _____

Date of Enumeration

d d / m m / y y y y

Start Time

End Time

Hour	Minutes

Field level checking by:

District Supervisor	Name		Signature		Date / /
Regional Supervisor	Name		Signature		Date / /
National Supervisor	Name		Signature		Date / /

I To be filled by the supervisor ONLY after Field/farm level checking of the enumeration process. This should be countersigned by the Supervisor in front of the enumerator

Distric checking in Office

District Supervisor	Name		Signature		Date / /

All questionnaires must be checked at the district office.

For Use at Regional Level Only

Data entered by:	Name		Signature		Date / /
Queried	Name		Signature		Date / /

See the back page for details of queries

Ministry of Agriculturte and Food Security, Ministry of Livestock and Fisheries Development, Ministry of Agriculture and Environment of Zanzibar, Ministry of Water and Irrigation, Prime Ministers' Office Regional Adminstration and Local Government, Ministry of Industry Trade and Marketing, National Bureau of Statistics, and the Office of the Government Statistician General of Revolution Governemnet of Zanzibar

Definitions and working page for page 3

Question Specific Definitions:

Obtain answers to the following questions from the meeting between the enumerator and influencial farmers in the village Infuencial people can be Village Chairman, Village Governement Executive Officer, Councillor, Ward Chairman, Extension Officer in the village or any other person in the village and who is well informed about village matters. It is important to not that these questions must be asked in groups (of more than one people) to obtain answers discussed and approved by many people.

Definitions of some specific terms

Access to community resources. Section 1.0
Community Resources: Resources in which the hh members have no individual claim to and which are shared together by all the village
Community Land: The area officiall demarcated by the village as shared/public land.
Squatting farmers Land: Communal land where individual hhs make sole claim to (for crop farming or fenced livestock) without official rights to ownership.
Available remaining Land: Official area of communal land minus areas of squatting farners.
Givernment Land Reserve: Area set aside by the government as national reserve

Community tree planting scheme(Section 14.3)

Community Forest: A forest planted on the communal land which is planted, replanted or spt planted by the members of the village.

Plant Planting: An area designated by the village for planting a block of trees.

Spot Planted: Replanting an area where selective logging has been carried out. A tree is planted to replace the one that has been cut.

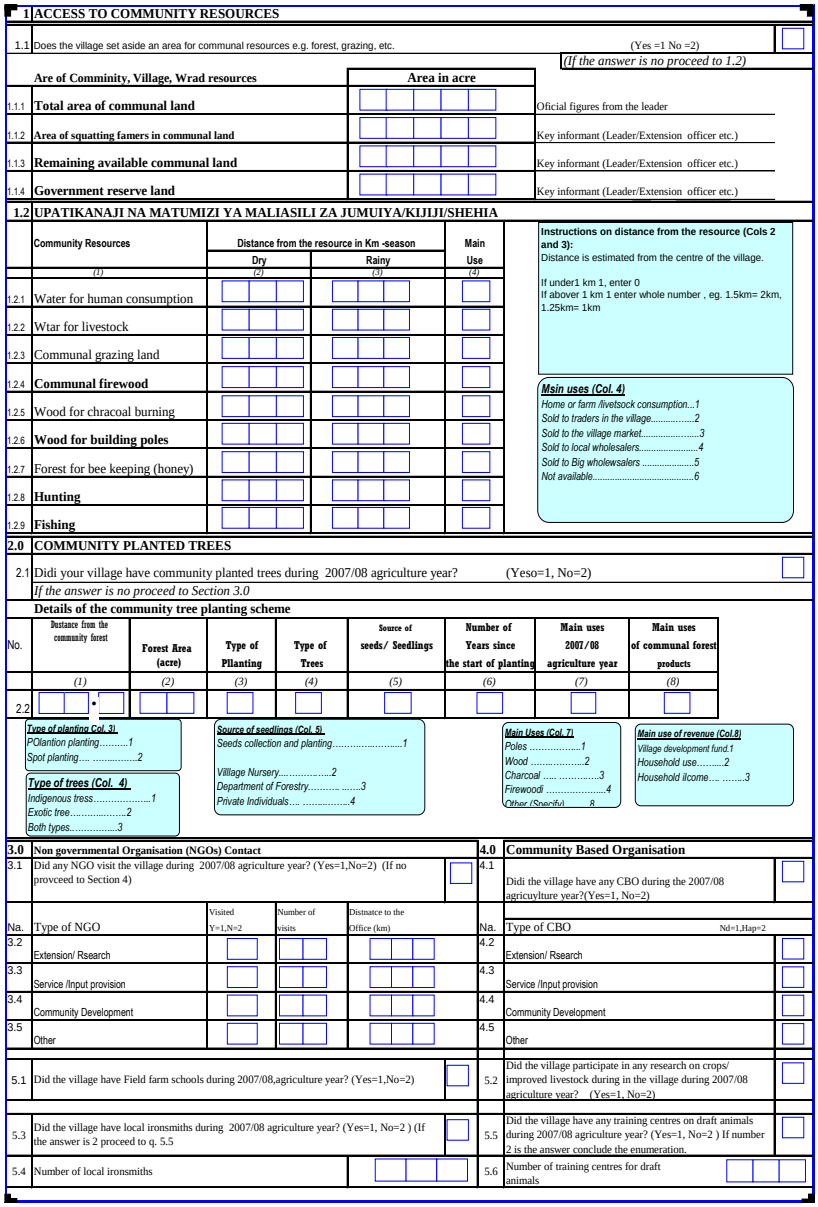
Indigeous Trees: Trees that are native to Tanzania

Exotic Trees: Trees that are not native to Tanzania

Non Government Organisation: Is managed by people from outside the village and it normally covers more than one village/District/Region. Its function is to provide deveoopment assistance to the farmer and is free from direct government links.

Village level organization: is managed by members of the village. Its purpose is normally to access/provide development assistance to the village

ACCESS TO COMMUNAL RESOURCES



1 ACCESS TO COMMUNITY RESOURCES

1.1 Does the village set aside an area for communal resources e.g. forest, grazing, etc. (Yes =1 No =2) ☐

(If the answer is no proceed to 1.2)

	Are of Comminity, Village, Wrad resources	Area in acre	
1.1.1	**Total area of communal land**	☐☐☐☐☐	Oficial figures from the leader
1.1.2	**Area of squatting famers in communal land**	☐☐☐☐☐	Key informant (Leader/Extension officer etc.)
1.1.3	**Remaining available communal land**	☐☐☐☐☐	Key informant (Leader/Extension officer etc.)
1.1.4	**Government reserve land**	☐☐☐☐☐	Key informant (Leader/Extension officer etc.)

1.2 UPATIKANAJI NA MATUMIZI YA MALIASILI ZA JUMUIYA/KIJIJI/SHEHIA

	Community Resources	Distance from the resource in Km -season		Main Use
		Dry	Rainy	
	(1)	(2)	(3)	(4)
1.2.1	Water for human consumption	☐☐☐	☐☐☐	☐
1.2.2	Wtar for livestock	☐☐☐	☐☐☐	☐
1.2.3	Communal grazing land	☐☐☐	☐☐☐	☐
1.2.4	**Communal firewood**	☐☐☐	☐☐☐	☐
1.2.5	Wood for chracoal burning	☐☐☐	☐☐☐	☐
1.2.6	**Wood for building poles**	☐☐☐	☐☐☐	☐
1.2.7	Forest for bee keeping (honey)	☐☐☐	☐☐☐	☐
1.2.8	**Hunting**	☐☐☐	☐☐☐	☐
1.2.9	**Fishing**	☐☐☐	☐☐☐	☐

Instructions on distance from the resource (Cols 2 and 3):
Distance is estimated from the centre of the village.

If under1 km 1, enter 0
If abover 1 km 1 enter whole number , eg. 1.5km= 2km, 1.25km= 1km

Msin uses (Col. 4)
Home or farm /livetsock consumption...1
Sold to traders in the village.....2
Sold to the village market.....3
Sold to local wholesalers.....4
Sold to Big wholewsalers 5
Not available.....6

2.0 COMMUNITY PLANTED TREES

2.1 Didi your village have community planted trees during 2007/08 agriculture year? (Yeso=1, No=2) ☐

If the answer is no proceed to Section 3.0

Details of the community tree planting scheme

No.	Dustance from the community forest	Forest Area (acre)	Type of Pllanting	Type of Trees	Source of seeds/ Seedlings	Number of Years since the start of planting	Main uses 2007/08 agriculture year	Main uses of communal forest products
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2.2	☐☐.☐	☐☐	☐	☐	☐	☐	☐	☐

Type of planting Col. 3)
POlantion planting.....1
Spot planting.... 2

Type of trees (Col. 4)
Indigenous tress.....1
Exotic tree.....2
Both types.....3

Source of seedlings (Col. 5)
Seeds collection and planting.....1
Villlage Nursery.....2
Department of Forestry..... 3
Private Individuals.... 4

Main Uses (Col. 7)
Poles 1
Wood 2
Charcoal 3
Firewoodi 4
Other (Specify) 8

Main use of revenue (Col.8)
Village development fund.1
Household use.....2
Household ilcome.... 3

3.0 Non governmental Organisation (NGOs) Contact

3.1 Did any NGO visit the village during 2007/08 agriculture year? (Yes=1,No=2) (If no provceed to Section 4) ☐

Na.	Type of NGO	Visited Y=1,N=2	Number of visits	Distnatce to the Office (km)
3.2	Extension/ Rsearch	☐	☐☐	☐☐☐
3.3	Service /Input provision	☐	☐☐	☐☐☐
3.4	Community Development	☐	☐☐	☐☐☐
3.5	Other	☐	☐☐	☐☐☐

5.1 Did the village have Field farm schools during 2007/08,agriculture year? (Yes=1,No=2) ☐

5.3 Did the village have local ironsmiths during 2007/08 agriculture year? (Yes=1, No=2) (If the answer is 2 proceed to q. 5.5 ☐

5.4 Number of local ironsmiths ☐☐☐

4.0 Community Based Organisation

4.1 Didi the village have any CBO during the 2007/08 agricuylture year?(Yes=1, No=2) ☐

Na.	Type of CBO Nd=1,Hap=2	
4.2	Extension/ Rsearch	☐
4.3	Service /Input provision	☐
4.4	Community Development	☐
4.5	Other	☐

5.2 Did the village participate in any research on crops/ improved livestock during in the village during 2007/08 agriculture year? (Yes=1, No=2) ☐

5.5 Did the village have any training centres on draft animals during 2007/08 agriculture year? (Yes=1, No=2) If number 2 is the answer conclude the enumeration. ☐

5.6 Number of training centres for draft animals ☐☐☐

Obtain answers to the following questions from the meeting of enumerator and key informants in the village.Key infomants can be a village chairman, Village Local Government Executive Officer, Councellor, Wrad Chairman, Village extsion officer, or any knowledgeble member in the community. Where possible ask these questions to a group inorder to reach a consensus . **The numebr should be below five people.**

Procedure: Administer this frpom after completing asll smallholder questionnaires for the village.
1. Copy the name of all crops from Sections 5.1, 5.2 and 5.3 grown in the village from smallholder questionnaires
This should also include livetsock raised by the household from questions 9.1, 9.3, 9.4 and 9.5 and enter them in col na 1 of this form.
Also see codes for livetsock below.
2. Enter price estimates per kg in col 5 and 6.

Name of crop/livestock	Code of crop/livestock	Name of main crop	Code of Main crop	Type of measure	Price of measure	
					Minimum Per year	Maximamun Per year
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Type of livestock(Col 2)
Cattle .....01 Ducks……..07
Goat.....02 Turkey…….08
Sheep.....03 Rabbit……09
Pigs.....04 Kanga……10
Poutry…….05 Simbilisi……..11
Donkeys……06

Main poroduct- CROPS (sCol.4)
Cereals……..01 Flowers eg. Pyrethrum.....07
Green maize…..02 Vegetables……..08
Green leaves and stem .....03 Fruit……..09
Straw, dry stems etc..04 Other……..10
Roots and tubers, etc.....05
Leaves (Tobacco etc)..... …..06

Main product- LIVESTOCK (Col. 4)
Live animals…..01
Meat 02
Milk.....03
Eggs.....04

***Q*uantity (Col.5)**
Kg……1
Number.....2
Litre……..3
A portion/piece ل.4

Appendix V

Village Community Level formats

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ACLF 1

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Agriculture Sample Census 2007/08

Sub-village /ward leader listing from

Region _____Code ☐☐ Ward _____Code ☐☐☐

District _____Code ☐☐ Village _____ Code ☐☐

Sub village leader Number	Name of Ward village leader	Number of Households		Comments
		Form Office Register	After enumeration	
(1)	(2)	(3)	(4)	(5)
☐☐☐		☐☐☐☐	☐☐☐☐	
☐☐☐		☐☐☐☐	☐☐☐☐	
☐☐☐		☐☐☐☐	☐☐☐☐	
☐☐☐		☐☐☐☐	☐☐☐☐	

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ACLF 2

Page Number…….. out of……

Agriculture Sample Census 2007/08

Household listing from-for listing hh heads and agriculture activities

Region _____ Code

District _____ Code ☐☐

Ward _____ Code ☐☐☐

Village _____ Code ☐☐

Name of sub village leader ☐☐

Name of sub village_____

Household number	Household head name	Number of										If the Respondent Qualifies X	Farmer Serial Number
		Fields a	Cattle				Goats	Sheep	Pigs	Kuku/Bata/	Rabbit		
			Total	Bulls	Cows	Calves							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
☐☐☐☐													
☐☐☐☐													
☐☐☐☐													
☐☐☐☐													

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ACLF 3

Household listing for 15 selected farmers

National Agriculture Sample Census 2007/08

Region _____ Code ☐☐ ward : _____ code ☐☐☐ ☐☐ Namba Sawia ☐☐☐

District _____ Code ☐☐ village _____ code ☐☐ ☐ Hatua ☐☐☐

S/N	Sub-village leader Number	Name of sub-village leader	Name of selected head of household	Name of Household Head	Number of					
					Field	Cattle	Goat	Sheep	Pigs	Poutry
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
☐☐	☐☐☐		☐☐☐☐							
☐☐	☐☐☐		☐☐☐☐							
☐☐	☐☐☐		☐☐☐☐							
☐☐	☐☐☐		☐☐☐☐							