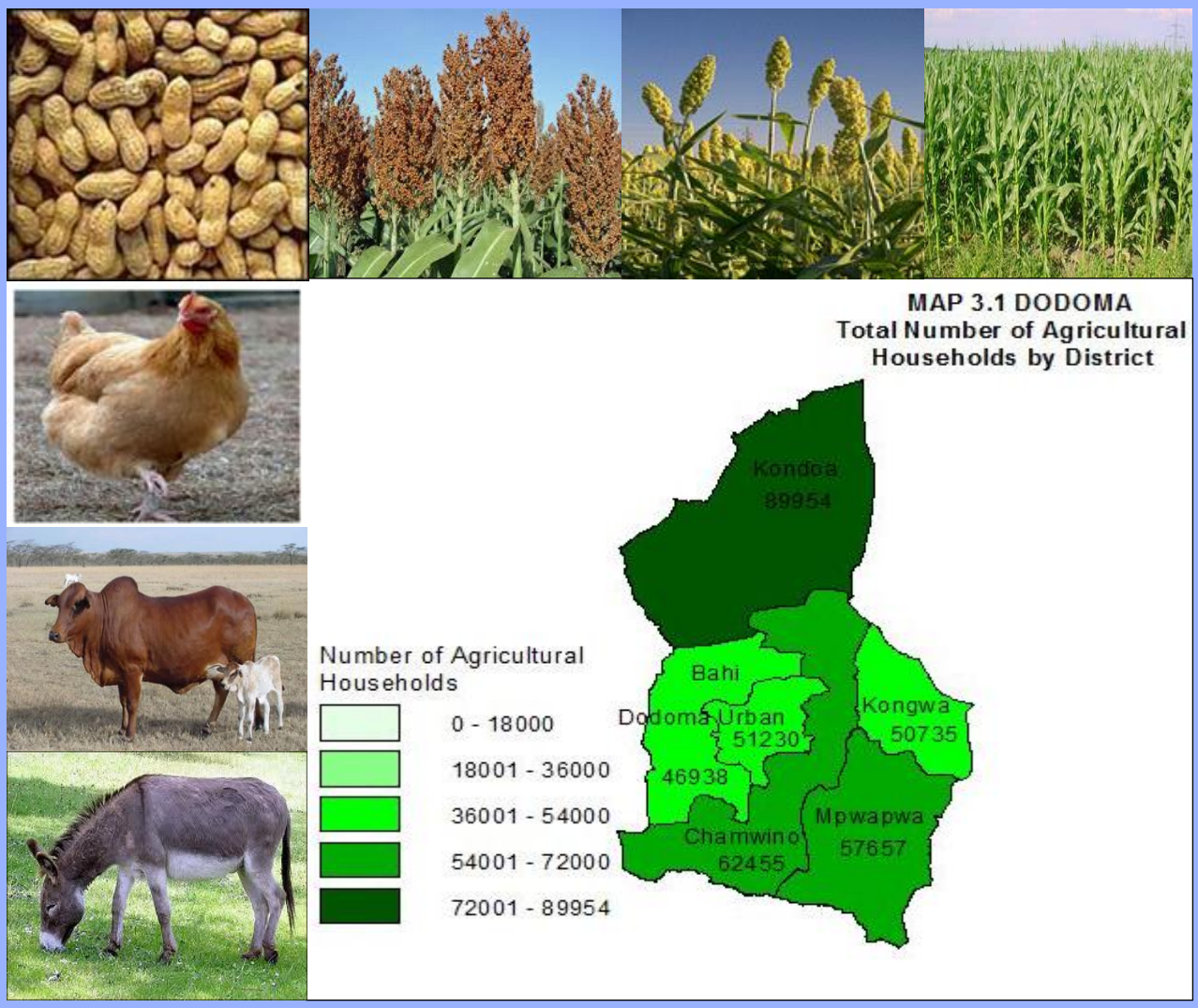
The United Republic of Tanzania

NATIONAL SAMPLE CENSUS OF AGRICULTURE **2007/2008**

Volume Va: REGIONAL REPORT: DODOMA REGION



Ministry of Agriculture, Food Security and Cooperatives, Ministry of Livestock Development and Fisheries; Ministry of Water and Irrigation; Ministry of Agriculture, Livestock and Natural Resource, 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

JULY, 2012

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2007/2008 SMALL HOLDER AGRICULTURE

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ABBREVIATIONS

ASDP	Agricultural Sector Development Programme
CSPro	Census and Survey Processing Program
CSTWG	Censuses and Surveys Technical Working Group
DADIPS	District Agricultural Development and Investment Projects
DADO	District Agricultural Development Officer
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
GIS	Geographical Information System
ha	Hectares
hh	Household
IAS	Integrated Agricultural Survey
ICR	Intelligent Character Recognition
ID	Identity
IEC	Information, Education and Communication
JICA	Japanese International Cooperation Agency
LRS	Long Rainy Season
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MITM	Ministry of Industry Trade and Marketing
MLFD	Ministry of Livestock and Fisheries 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 (MKUKUTA)
OCGS	Office of Chief Government Statistician Zanzibar
PMO-RALG	Prime Ministers Office, Regional Administration and Local Government
PPS	Probability Proportional to Size

PSU	Primary Sampling Unit
RS	Regional Supervisor
RSM	Regional Statistical Manager
SPSS	Statistical Package for Social Science
SRS	Short Rainy Season
TOT	Training of Trainers
UNDP	United Nations Development Programme
UNFAO	United Nations Food and Agriculture Organization

PREFACE

At the end of the 2007/08 Agricultural 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 (PMO/RALG) and Office of the Chief Government Statistician, (OCGS), Ministries of Agriculture and Natural Resources; Livestock and Fisheries conducted the Agricultural Sample Census. This is the fourth Agricultural 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.

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 scope and coverage as it provides data that can be disaggregated at district level and therefore, 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 data disaggregated at regional and district level and it focuses on small holders crop production and livestock keeping.

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) and the Japanese Government through the Japan International Cooperation Agency (JICA) and others who contributed through the pooled fund mechanism.

My appreciation also goes to all those who in one-way or the other have contributed to the success of the census. 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, 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, the Prime Minister's Office, Regional Administration and Local Government, Ministry of Industries, Trade and Marketing and the Office of the Chief Government Statistician, Zanzibar, the Food and Agriculture Organization of the United Nations and the Censuses and Surveys Technical Working Group (CSTWG).

Finally, I would like to extend my sincere gratitude to all the professionals, the consultants, Regional and District Supervisors and field enumerators for their commendable work. Certainly without their dedication, the census would not have been successful.

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

EXECUTIVE SUMMARY

The executive summary highlights the main census results obtained during the National Sample Census of Agriculture 2007/08. This report covers small-scale agriculture households which were selected using statistical sampling techniques in rural and urban areas of Dodoma region. These highlights describe the important findings in relation to agricultural production, productivity, husbandry, access to resources, levels of involvement in agricultural related activities and poverty in Dodoma region. It provides an overview of the agricultural households and up to district level in Dodoma region.

i) Household Characteristics

The census results show that most of the Agricultural households were engaged in crops only farming (256,105 hh, 71%) followed bu crops and livestock farming (102,402 hh, 29%). Kondoa district had the largest number of Agricultural households (89,954 hh, 25%) followed by Chamwino (62,455 hh , 17%) , Mpwapwa (57,657 hh,16%) Dodoma Urban (51,230hh, 14%), Kongwa (50,735hh ,14%) and Bahi (46,938 hh, 13% of the total Agricultural households in the region) .However, there was no pastrolism in the region and very few households (463 hh, 0.13%) were engaged in livestock only farming.

Dodoma region had a total literacy rate of 69 percent. The highest literacy rate was in Kondoa (76.%) followed by Dodoma urban (71%), Mpwapwa (67%), Bahi (66.%). Kongwa and Chamwino had the lowest literacy rates in the region (63% and 62% respectively). The literacy rate for the heads of households for both males and females in Dodoma region was 68 percent (75 % for males and 53 % for females). The results show that 39 percent of the population aged 5 years and above of the agricultural households in Dodoma region had completed different levels of education and 32 percent were still attending school. Those who have never attended school were 29 percent. Agricultural households in Dodoma Urban, Bahi and Kondoa districts had the highest percentages of the population aged 5 years and above who had completed different levels of education (each witht 40%).while Mpwapwa , Kongwa and and Chamwino had the least.each with about 37%

ii) Crop Production

Land Area

The total area of land available to smallholders in Dodoma region was 938,061 hectares. The total planted area was 816,459 ha giving 87% percent land utilization. The regional average land area utilized per household was 3.06 hectares. Kongwa, Mpwapwa and Dodoma Urban had highest

percentage of land utilization (slightly above 90%); while in Kondoa had the lowest (79%). However, the average area utilized per household was the highest in Kongwa (3.9 ha) followed by Kondoa (2.9 ha), Mpwapwa (2.8 ha), and Chamwino (2.4 ha). Bahi and Dodoma Urban had the smallest areas planted per household (1.8ha and 2.0) ha respectively.

iii) Crop Types

Cereals were the main crops grown in Dodoma region. The area planted with major cereals was 528,424 hectares s equivalent to (71%) of the total planted area, followed by oil seeds and Oil nuts (189,083 ha, 25 %) and pulses (24,865 ha, 3%). Roots and tubers and fruits and vegetables occupied small area (0.3% and 0.4% respectively)**.**

Cereal crops

Maize was the dominant cereal crop whereby, the total area planted with the crop was 338,843 ha (64 percent of cereal planted area) followed by sorghum (96,147 ha, 18.2%), bulrush millet (80,956 ha, 15.3%), and finger millet (9,660 ha, 1.8%). Paddy was not important and was planted in a very small area (2,818 ha, 0.5%). The total production of cereals was 475,671 tons of which maize accounted for 74 % of the totalproduction followed by sorghum 14.45 percent, bulrush millet 10 percent, finger millet 1.3percent and the least was paddy (0.4%).

- **Maize**

The number of households growing maize in Dodoma region was 260,043, representing 72 percent of the total agricultural households. More households grew maize in Kondoa (81,069 hh) followed by Kongwa (45,098 hh), Mpwapwa (41,713 hh), Chamwino (39,478 hh), Dodoma Urban (31,244 hh) and Bahi (21,441 hh). On average, the area under maize per household was 1.3 ha.

- **Sorghum**

Sorghum was the second most important cereal crop in the region in terms of planted area. The number of households that grew sorghum in Dodoma region during the wet season was 115,836 Equivalent to 32 percent of the total agricultural households in Dodoma region. The total production of sorghum was 68,739 tons from a planted area of 96,147 hectares resulting in a yield of 0.71 t/ha. The district with the largest planted area of sorghum was Mpwapwa (31,390 ha) followed by Chamwino (19,539 ha), Kongwa (17,503 ha), Bahi (13,331 ha) Kondoa (7,616 ha) and Dodoma Urban (6,769 ha).

- **Bulrush millet**

Bulrush millet was the third most important cereal crop in the region in terms of planted area. The number of households that grew bulrush millet was 106,450 and the production was 47,738 tons from a planted area of 80,956 ha. On average, the yield of bulrush millet was 0.6 tons/hectare and the area planted per household was 0.8 ha. The trend shows an increase of area planted with bulrush millet from 78,496 ha in 2002/2003 to 80,956 ha in 2007/08

Roots and Tuber Crops Production

There were 3,298 households growing major roots and tubers in the region. The total production of roots and tubers was 2,233 tonnes from planted area of 2,050 ha. The largest area was under cassava 1,148 ha this was followed by sweet potatoes876 ha, and yams 26 ha, Yams had the highest yield per hectare (4.5 t/ha) despite the small planted area.

- **Sweet Potatoes**

Sweet potato was the second most important tuber crop grown in Dodoma region. There were 2,255 households growing the crop in the region cultivating a total of 876 ha. or 43 percent of the total area under roots and tubers. Total production of sweet potatoes was 918 tons with an average production of 1.05 tons per hectare. Mpwapwa district had the largest planted area of sweet potatoes (288 ha, 33% of sweet potatoes planted area) followed by Chamwino (250 ha, 29%) and Kondoa (228 ha, 26%).

Pulses

The total area planted with pulses was 24,865 hectares, of which 9,698 ha (39%) were planted with beans. followed by bambaranuts (7,381 ha, 30%) and cowpeas (6,397 ha, 26%). Field peas and green gram were planted in small quantities and in total the crops occupied only 5.5% of the total pulse grown area. The total production of pulses increased from 5,350 tons in 2002/03 to 12,723 tons in 2007/08 equivalent to 137 percent increase. During the same period the area planted with pulses increased only slightly from 20,554 ha to 24,865 ha.

- **Beans**

Beans were the dominant pulse crops in the region and were grown by 20,406 households. The total production of beans in the region was 6,831 tons from a planted area of 9,698 hectares resulting in an average yield of 0.7 t/ha. Mpwapwa district had the largest area planted with beans in the region

(4,769 ha, 49% of the total area planted with beans), followed by Kondoa (4,189 ha, 43%) and Kongwa (657 ha, 7%).

Oil Seeds Production

Oil seeds and oil nuts were grown by 269,215 households. The total production of oilseed crops was 110,406 tons from a planted area of 189,083 hectares. Sunflower was the most dominant oil seed crop with a planted area 83,385 hectares (44% of the total area under oil seed crops), followed by groundnuts (79,024 ha, 42%), and simsim (26,617 ha, 14%).

- **Groundnuts**

The number of households growing groundnuts in Dodoma region was 123,790. The total production of groundnuts in the region was 44,906 tons from a planted area of 79,024 hectares resulting into an average yield of 0.57 tons per hectare. Mpwapwa had the largest area planted with groundnuts in Dodoma region (22,160 ha, 28%), followed by Kongwa (15,818 ha, 20%), Chamwino (15,502 ha, 19.6%), Dodoma Urban (10,825 ha, 13.7%), Bahi (10,110 ha, 12.8%) and Kondoa (4,609 ha, 5.8%).

Fruits and Vegetables

The total production of fruits and vegetables was 16,268 tons. The most cultivated vegetable crop was tomatoes with a production of 11,249 tons (69% of the total vegetables produced in the region), followed by onions (2,028 tons, 12.2%) and spinach (960 tons, 6%). The production of other fruit and vegetable crops was relatively small. The yield of tomatoes was 10.9t/ha while that of spinach was 7.5 tons and onion (4.6 tons/ha.)

- **Tomato**

The number of households growing tomatoes was 3,484 equivalent tos 35 percent of the total household growing fruits and vegetables in the region. The crop was grown on 1,034 hectares (30% of vegetable area) giving an average yield of 10.9 tons per hectare. Kongwa district had the largest planted area (1,034 ha) of tomatoes (53 % of the total area planted with tomatoes in the region), followed by Dodoma Urban (424 ha, 41%). The average planted area per tomato growing households was 0.3 hectares.

- **Onions**

A total of 2,028 tons of onion were produced from planted area of 455 ha. Highest amount of onions were produced in Mpwapwa (1,381 tons; 68%). This was followed by Kondoa (338 tons; 17%) and Kongwa (276 tones; 14 %). In 2003, onion production was 511 ha. This represents a 296 percent increase. Yield also increased dramatically from 1.7 tons to 4.6 tons per hectare.

Cash Crops

The most important permanent crop in Dodoma region was pigeon peas planted on 13,156 ha, accounting for 87.5 percent of planted area with permanent crops. This was followed by sugarcane (874 ha; 5.8%), banana (500 ha; 3.3%) and mango (284 ha, 1.9%). Other permanent crops such as oranges and cashewnuts were grown in small quantities and in smaller areas.

Permanent Crops

In terms of area planted, pigeon peas were the most important permanent crop grown by smallholders in Dodoma region. It was grown by 24,329 agricultural households (6.8% of the total crop growing households in the region). The average area planted with pigeon peas per household was relatively small (0.5 ha) and the average yield obtained by smallholders was 0.5 tons/ha (456 kg/ha). Kondoa had the largest planted area of pigeon peas in the region with 12,618 ha (96% of the total planted area with pigeon peas in the region).

iv) Implements Use

Fifty seven percent of the households had ox-plough, 6 percent ox-planter, 17 percent grater/chipper or oil mill and 20 percent had hand sprayer. Other agricultural equipments include; tractors and their implements, ox-carts and power tillers. Out of 96,750 households, 11 percent owned tractors, 21percent owned tractor harrow, 10 percent tractor plough, 14 percent power tillers, 15 percent threshers, 25 percent ox-carts and 4 percent ox-ridger.

Use of oxen as draught animal was dominant over donkeys in all districts. However, Dodoma Urban had higher percentage use of oxen (91%). This was followed by Kongwa (89%), Chamwino (81%), Bahi (76%). Lowest use of draught oxen was in Kondoa (67%) and Mpwapwa (62%). Nontheless, Kondoa and Mpwapwa had highest use of donkeys as draught animals than in other districts.

v) Input use

Improved Seeds

The planted area using improved seeds was 108,323 hectares which represents 14 percent of the total area planted with annual crops and vegetables. However, percentage of area planted with improved seeds within the district was the highest in Bahi (30%) followed by Mpwapwa (19%), Kongwa (16%), Dodoma Urban (13%), Chamwino, (10%) and Kondoa.

Use of Fertilizers

The use of fertilizers on annual crops in the region was relatively low compared to other regions with a planted area of 50,021 hectares (6% of the total planted area in the region). Of the planted area with fertilizer application, organic fertilizers was applied to 48,843 hectares or 98% percent of the area using organic or inorganic fertilizers, whilst the area under inorganic fertilizer was 1,179 hectare (2%).

Kondoa district had the highest proportion of the planted area using fertilizers (19,044 ha, 38% of the agricultural land using fertilizers.

Use of Pesticides and Herbicides

About 47% of the households used fungicides, while a moderate proportion used herbicides (33%) and insecticides were the least used (20%). Fungicides were applied on 8,556 hectares, while herbicides and insecticides were applied to 5,893 and 3,657 hectares respectively. The total area that has been applied with agrochemicals has declined from 40,678 ha in 2002/03 to 18,106 ha in 2007/08.

vi) Irrigation

In Dodoma region, the area of annual crops under irrigation was 8,344 hectares representing one percent of the total area planted area in the region. The district with the largest planted area under irrigation with annual crops was Bahi with 1,803 ha (29% of the total planted area with irrigation in the region). The main source of water used for irrigation was from rivers (43% of all households with irrigation). This was followed by tap water (23%), canals (17%), Lake (9%) and boreholes (7%).

vii) Crop Storage and Marketing

Crop Storage

The results show that there were 7,280 crop growing households that stored various agricultural products in the region (2% of the total crop growing households). Dodoma Urban had the highest proportion of household storing crops. Other districts stored very little of the produced crops. Most of the agricultural household stored their crops in sacks and/or open drums (883,468 households). This was followed by locally made traditional structures (438,431 households). Other storage methods were used in limited extent whilst, 278,178 households did not use any method to store crops.

Crop Marketing

The number of households that reported selling crops was 264,920 which represent 74 percent of the total number of crop growing households. The percentage of crop growing households selling crops was the highest in Kongwa (83.4%), followed by Bahi (78.6%), Kondoa (76.1%), Chamwino (69.8%), Dodoma Urban (68.1%) and Mpwapwa (68.4%). Low prices for agricultural produce were reported to be the main marketing problem reported by 61 percent of the cropping households.

viii) Agricultural Credit

The census results show that very few agricultural households (5,953; 1.7% of all crop growing households) accessed credit. The highest number of households that accessed credits were in Dodoma Urban (1,518 hh; 26% of the regional total). This was followed by Chamwino (1,542 hh; 26%), Kondoa (1,333 hh; 22%), Mpwapwa (712 hh; 12%), Kongwa (501 hh; 8%) and Bahi (348 hh; 6%). The major agricultural credit providers in the region was family, friends or relatives (2,648 households; 45%), followed by savings and credit societies which provided credits to 1,443 agricultural households (24%).and cooperatives (13%)

ix) Crop Extension Services

The number of Agricultural households that received crop extension was 327,446, accounting for 91 percent of total crop growing households in the region. Some districts had more access to extension services than others. Expressed as percent of agricultural household in the district, Kongwa ranked highest in terms of percent of household receiving extension advices (99%). This was followed by Kondoa (96%), Mpwapwa (992%), Bahi (95%), Dodoma Urban (88%) and Chamwino (79%).

x) Soil Erosion and Water Harvesting Facilities

The largest number of households with erosion control and water harvesting facilities were in Kondoa district (31,539 households, 35% of the total households with erosion control and water harvesting facilities in the district), followed by Mpwapwa (10,535 households; 18%), Dodoma Urban (5,566 households; 11%), Kongwa (5,261 households; 10%), Chamwino (3,547 households; 6%) and Bahi (579 household; 1%).

xi) Livestock and Poultry Production

- **Cattle**

The total number of cattle in the region was 1,185,501 5.6 percent of the total cattle population in Tanzania Mainland. The number of indigenous cattle was 1,166,715 (98.4% of the total number of cattle in the region), improved dairy cattle (3,473 cattle; 0.3%) and improved beef cattle (15,313 cattle; 1.3%). The district with the largest number of cattle was Kondoa which had 302,067 cattle (25% of the total cattle in the region). From 2003, there was a steady increase of cattle from 1,031,889 to 1,185,501 in 2008, representing an annual growth rate of 1.1 percent.

- **Goats**

The number of goat-rearing-households in the region was 71,694 (20% of all agricultural households in the region) with a total of 915,356 goats giving an average of 13 heads of goat per goat-rearing-household. Kondoa had the largest number of goats (260,088 goats; 28% of all goats in the region), followed by Mpwapwa (179,378, 20%), Bahi (148,463 goats; 16%), Chamwino (117,970 goats, 13%) Kongwa 105,730 goats; 12%) and, Dodoma Urban (103,726 goats; 11%). The overall annual growth rate of goat population from 1995 to 2008 was -0.12 percent.

- **Sheep**

The number of sheep-rearing households was 29,506 (8% of all agricultural households in Dodoma region) rearing 270,299 sheep, giving an average of 9 heads of sheep per sheep-rearing household. The district with the largest number of sheep was Bahi with 84,025 sheep (31% of the total sheep in the region), followed by Kondoa (48,642 sheep; 18%), Mpwapwa (45,556 sheep; 17%), Chamwino (36,085 sheep; 13%), Kongwa (30,692 sheep; 11%) and Dodoma Urban (25,299 sheep; 9%). Between 1999 and 2008 the annual growth rate was 3.7 percent.

- **Pigs**

The number of pig-rearing agricultural households in Dodoma region was 31,631 (8.8% of the total agricultural households in the region) rearing 116,854 pigs.equivalent to 4 pigs per pig-rearing household. The district with the largest number of pigs was Kongwa with 56,498 pigs (48% of the total pig population in the region), followed by Mpwapwa (37,015 pigs, 32%), Dodoma Urban (10,373 pigs, 9%) and Chamwino (10,024 pigs; 9%). Few pigs were raised in Kondoa and Bahi (each with 1%).

- **Chicken**

The number of households keeping chicken was 193,953 raising about1,947,024 chicken.equivalent to an average of 10 chickens per chicken-rearing household. In terms of total number of chicken in the country, Dodoma region ranked the 8th eighth out of the 21 Mainland regions and kept 5 percent of the total chicken population. The district with largest number of chickens was Kondoa with 511,736 chickens (26% of the total in Tanzania Mainland chicken in the region), followed Dodoma Urban (323,700 chicken, 17%, Mpwapwa (308,929 chicken; 16%), Kongwa (312,430 chicken; 16%), Chamwino (286,367 chicken; 15%) and Bahi (203,862 chicken; 10%).

xii) Pests and Parasites

The results show that 37 percent and 13 percent of the total livestock-keeping households reported to have encountered ticks and tsetse-fly problems respectively. Higher incidences of ticks were encountered in Kondoa (51% of livestock keeping household in the district) followed by Mpwapwa (34%), Chamwino (34%), Kongwa (29%), Dodoma Urban (28%) and Bahi (26%). Spraying was the most common method of tick control. Newcastle disease and Fowl typhoid were the common poultry diseases, however, a large proportion of household did not vaccinate against the Newcastle disease. Deworming of livestock was moderate and differed by species and district.

xiii) Poverty Indicators

Availability of Toilets

A large number of agricultural households in Dodoma region used traditional pit latrines (310,474 households, 87% of all agricultural households), 23,207 households (7%) used improved pit latrine, and 1,878 households (1%) used flush toilet. The remaining 20,641 households (6%) had no toilet facilities.

Source of Drinking Water

The main source of drinking water for agricultural households in Dodoma region was piped water used by 41 percent of the households as the main source during the dry season followed by unprotected well (27.7% of the households), protected wells (10.2%), surface water and catchments (each with7% , unprotected spring (3.9%), and protected spring (0.7).

Food Consumption Patterns and Quality

About one third of the households in Dodoma region normally had 2 meals per day (234,644 households; 65.4 percent of the agricultural households in the region) followed by those having 3 meals per day (115,479 households; 32.2%) and 1 meal per day (8,847 households; 2.5%).

The number of agricultural households that consumed meat during the week preceding the census was 234,435 (70% of the total agricultural household in the region) with 149,392 households (41.6% of those who consumed meat) consuming meat only once during the respective census week. As for fish, there were 114,858 households (32 % of those who consumed fish) consuming fish at least once during the respective census week.

Food sufficiency

In the region, 135,340 households (37.7% of the total agricultural households in the region) said they rarely experienced problems in satisfying the household food requirement. However, 34,793 households (9.7%) said they sometimes experienced problems, while 55,069 (15.3%) often had problems and 33,288 households (9.3%) always had problems. About 28 percent of the agricultural households said they were food secured

Main Sources of income

The main source of cash income of the households in Dodoma region was from sale of food crops (52%), followed by selling of cash crops (17%), casual labor (9%), businesses (6%), sale of livestock (3%). Others were sale forest products (3%), wages or salariesy (2%) and remittance (2%).

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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 potential of the region and its resources.

1.2 Geographical Location and Boundaries

Dodoma region is centrally positioned in Tanzania mainland. The region lies between latitude 40 and 70 (degrees) South Latitude and 350 - 370 (degrees) East Longitude. Four regions border Dodoma regions as follows: to the north, Dodoma region shares boarders with Arusha and to the East with Morogoro region. In the south it shares boarders with Iringa region and to the west, it shares borders with Singida region. Much of the region is plateau rising gradually from some 830 meters in Bahi swamps to 2,000 meters above sea level in the highlands North of Kondoa.

1.3 Land Area

Dodoma region is ranked 12th largest among the regions in Tanzania Mainland and covers an area of 41,310 square kilometers (equivalent to about 5% of the total area of Tanzania Mainland), of which 35,309 square kilometers are potential land (which is 85% of regions total land area).

1.4 Climate

Dodoma region has a dry savanna type of climate, which is characterized by a long dry season lasting between late April to early December and a short single wet season during the remaining months. The region lies in a rain shadow behind the mountains area of Dodoma in the eastern side.

1.4.1 Temperature

Temperature in the region varies according to altitude but generally the average maximum and minimum for October to December are 31^0C and 18^0C (degrees Centigrade) respectively. The corresponding figures for the cool dry season of June – August are 27^0C to 28^0 and 10^0 to 11^0C (degree centigrade).

1.4.2 Rainfall

The average rainfall for Dodoma town is 570mm, and about 85% of this falls in four months between December and March. Rainfall is somewhat higher in the more agriculturally productive

parts of Mpwapwa and Kondoa districts. Rainfall in Dodoma region is not only low but it is rather unpredictable in frequency and amount, particularly in the month of January in which most crops are generally sown.

1.5 Administrative Setup

Dodoma region is divided into six administrative districts as follows: Dodoma Urban, Kondoa, Mpwapwa Kongwa, Bahi and Chamwino.

1.6 Population

According to the 2008 projections based on 2002 Population and Housing Census; there were 2,000,544 inhabitants in Dodoma region. The population of Dodoma region ranked eighth of the 21 regions in Tanzania.

1.7 Socio - Economic Indicators

The regional Gross Domestic Product (GDP) at current prices for the year 2008 was estimated to be TShs 756,184 million. The region held 16th position among regions on GDP and contributed about 3.05 percent to the national GDP

- **Food Crops**

Food crops grown in Dodoma region are sorghum, maize, paddy, beans, bulrush millet, groundnuts and finger millet.

- **Cash Crops**

Cash crops grown are sunflower and simsim.

- **Livestock**

Dodoma region is almost entirely dependent on agriculture and animal husbandry, which are practiced in rural areas at subsistence level. It is also one of the regions with large numbers of livestock including cattle, goats, sheep, poultry and pigs.

2 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 2007/08 agricultural year. It also explains the sampling procedures, designing and implementation of the data processing system.

This report (Volume Va) 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; and

- 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.

2.3 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).

2.4 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.

2.4.1 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 were 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.

2.4.2 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.

2.4.3 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

2.4.4 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.

2.4.5 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.

2.4.6 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.

2.4.7 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.

2.4.8 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.

2.4.9 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.

2.4.10 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 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 cmpiling 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.

2.5 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 CENSUS RESULTS

This part of the report presents the results of the census data for Dodoma region which are based on the data tables presented in Appendix II. The results are presented in different forms including brief summaries, charts, condensed tables, graphs and maps in order to make it easier for the users to understand. Comparisons are made between related variables and between districts. Comparisons are also made with past censuses/surveys results such as the 2002/03 National Sample Census of Agriculture (NSCA), the 1997/98 Integrated Agricultural Survey, the 1998/99 District Integrated Agricultural Survey and the 1999/2000 Rapid Agricultural Appraisal Survey. The presentation of results is divided into four main sections which are; household characteristics, crop results, livestock results and poverty indicators. More effort has been made in analyzing the results in order to formulate solid conclusions.

3.1 Household Characteristics

3.1.1 Types of Household

The number of agricultural households in Dodoma region was 358,969 out of which, 256,105 (71%) were involved in growing crops only and 102,402 (29%) were involved in crop production as well as livestock keeping. There were few (463) agricultural households that were rearing livestock only (Chart 3.1; Map 3.1, 3.2; 3.3 and 3.4).

3.1.2 Livelihood Activities/Source of Income

The census results for Dodoma region shows that half (92%) of the agricultural households were involved in crop farming as an activity that provided most of their cash income. In the surveyed districts more households in Bahi (98%), Chamwino (94%) and Kongwa (98 %) were engaged in crop farming. Others were Dodoma Urban (77%), Mpwapwa (92%) and Kondoa (93%). Second in importance was employment where 20,207 hh were involved in employement, the leading district being Dodoma Urban (22%) followed by Mpwapwa (6%), and Chamwino (3%). Fish farming was practiced by about 258 households and most of fish keeping were in Bahi district (116 hh).and Mpwapwa (142 hh), about 5,206 hh were involed in other activities (Table 3.1)

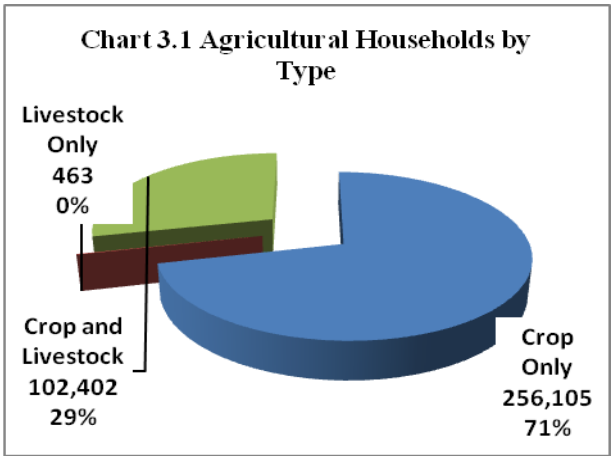
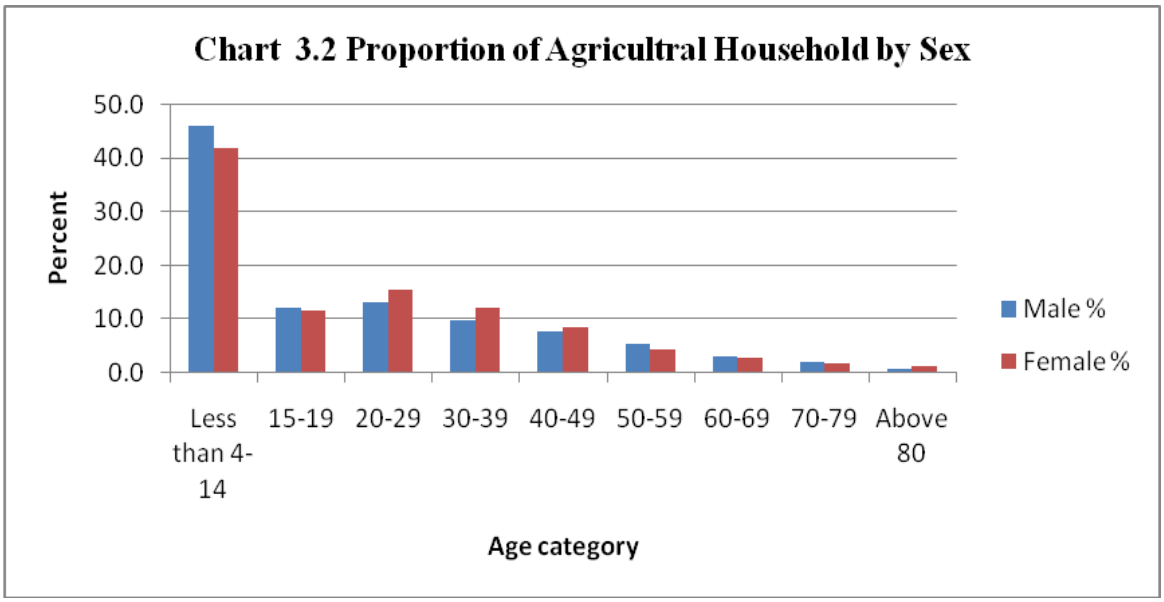


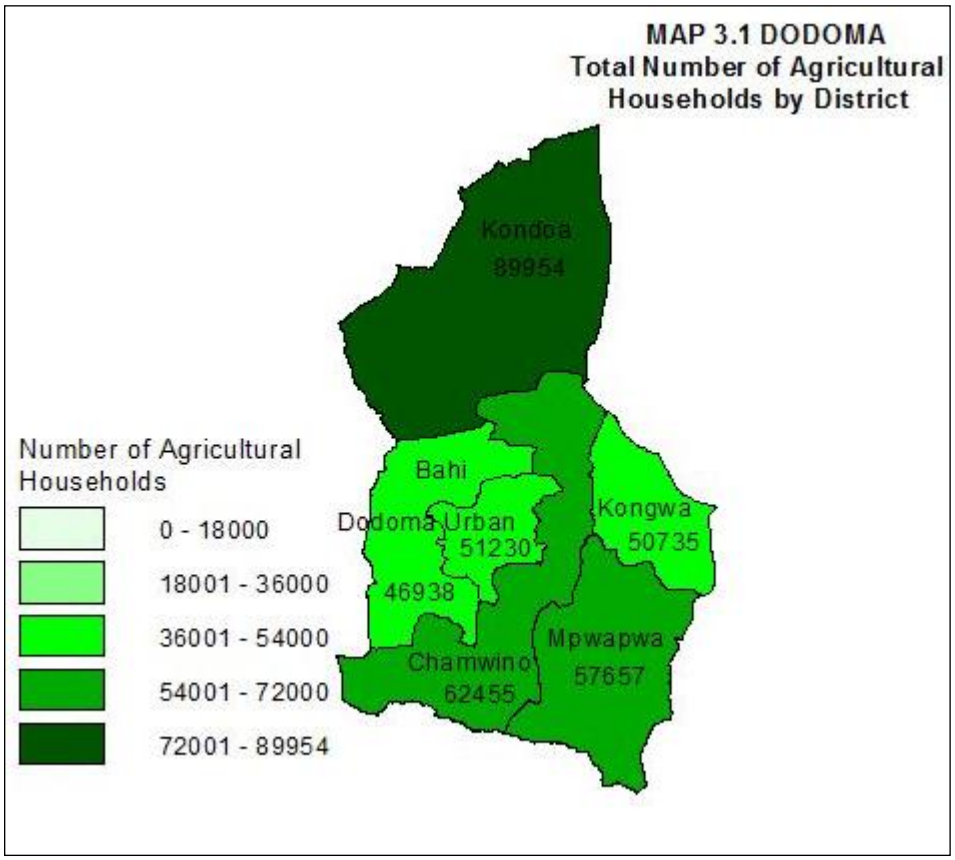
Table 3.1: Household Main Occupation

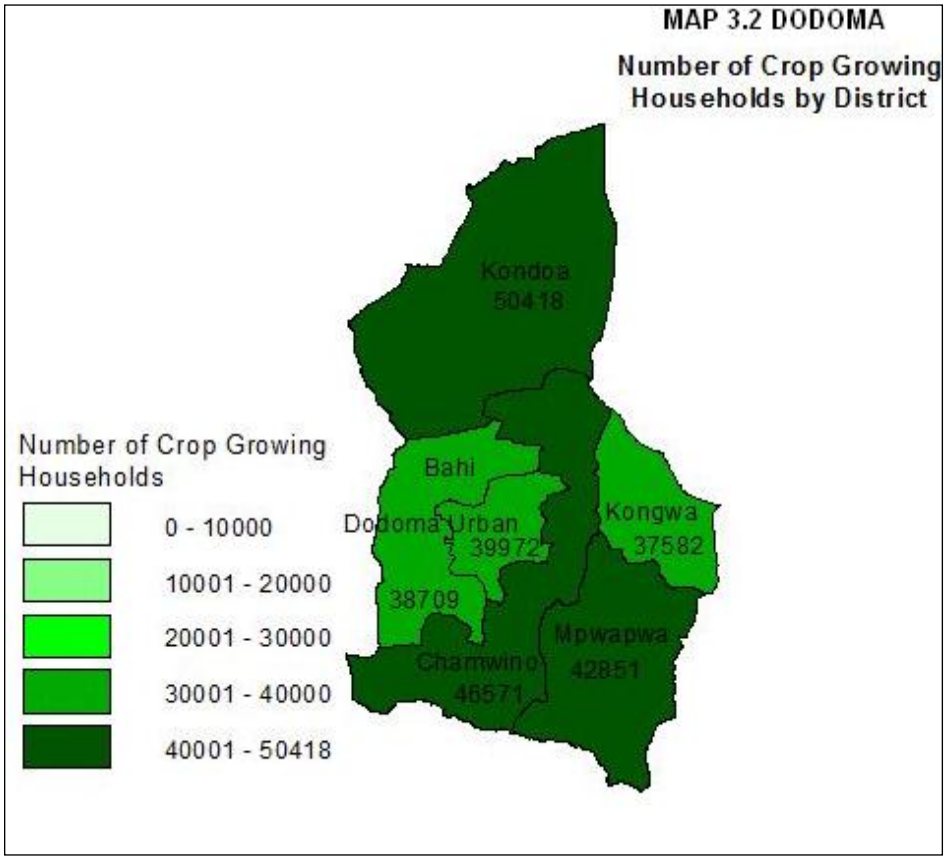
District	Main Activity										Total
	Crop/Seaweed Farming		Livestock Keeping / Herding		Fishing		Employment		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number
Kondoa	83,290	93	1,999	2	0	0	2,665	3	1,999	2	89,954
Mpwapwa	52,817	92	427	1	142	0	3,274	6	997	2	57,657
Kongwa	49,608	98	376	1	0	0	376	1	376	1	50,735
Dodoma Urban	39,213	77	379	1	0	0	11,385	22	253	0	51,230
Bahi	46,127	98	0	0	116	0	348	1	348	1	46,938
Chamwino	58,600	94	463	1	0	0	2,159	3	1,234	2	62,455
Total	**329,655**	**92**	**3,644**	**1**	**258**	**0**	**20,207**	**6**	**5,206**	**1**	**358,969**

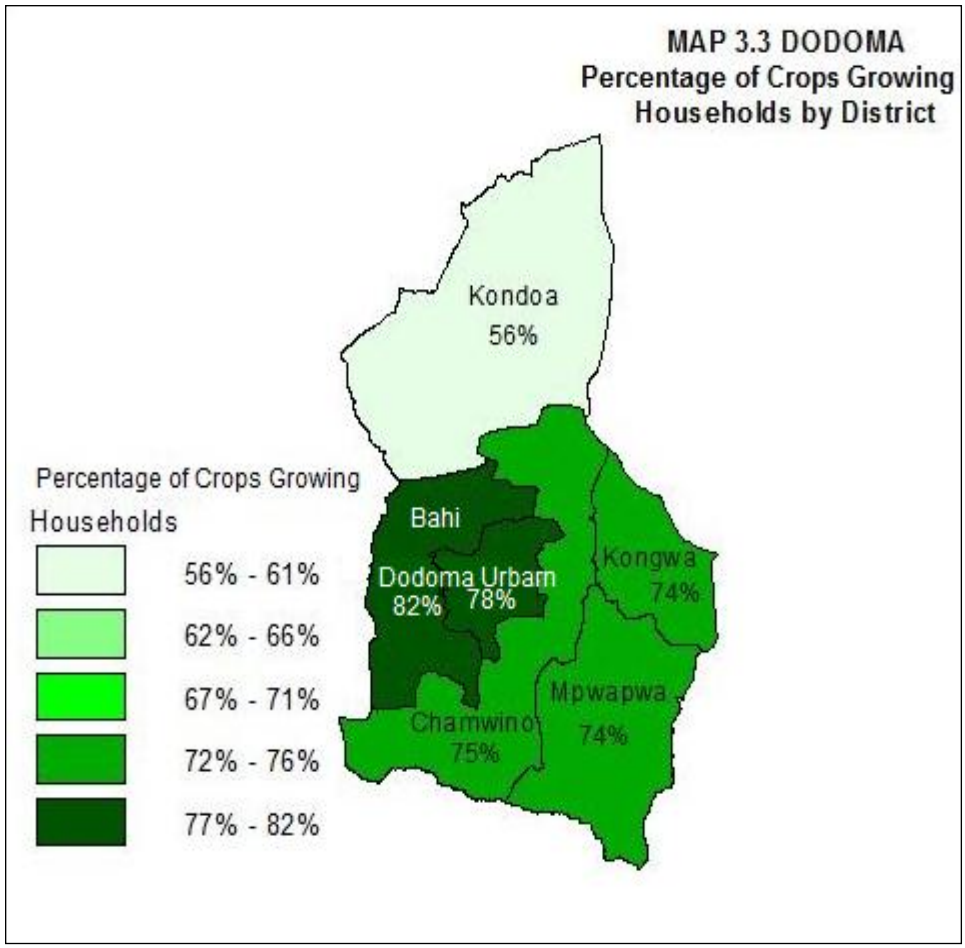
3.1.3 Sex and Age of Household Members

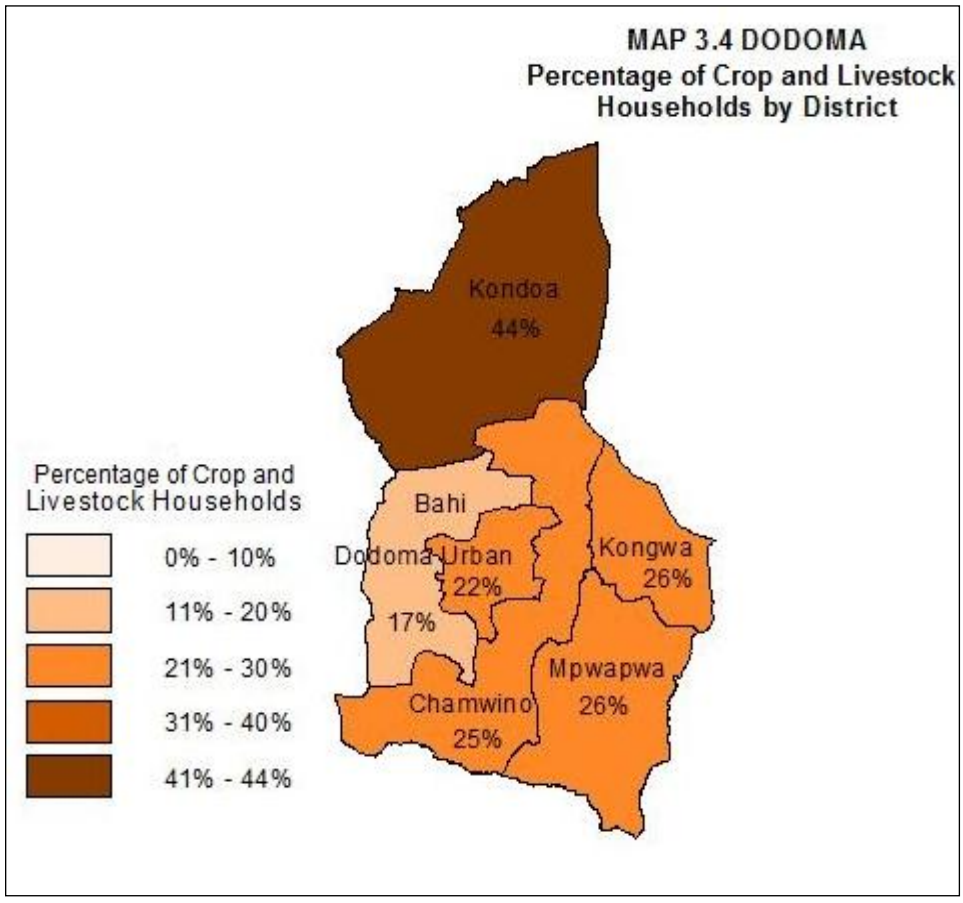
Age distribution by sex shows that there were high proportion of males and females in the age category of less than 4 years to 14 years. This group accounted for 46 of males and 42 of all women. About 35.9 percent and 40.6 percent of men and women respectively fell in the most agricultural active group i.e. in the range between 20 years and 59 years (Chart 3.2).




MAP 3.1 DODOMA
Total Number of Agricultural Households by District
Kondoa 89954
Bahi 46938
Dodoma Urban 51230
Kongwa 50735
Chamwino 62455
Mpwapwa 57657
Number of Agricultural Households
0 - 18000
18001 - 36000
36001 - 54000
54001 - 72000
72001 - 89954

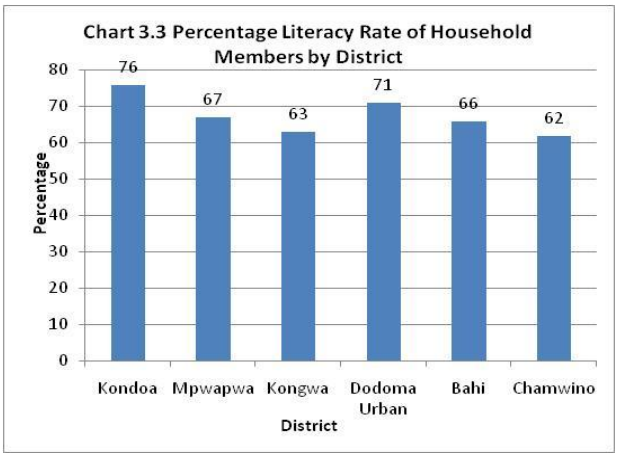

MAP 3.2 DODOMA
Number of Crop Growing Households by District
Kondoa 50418
Bahi 38709
Dodoma Urban 39972
Kongwa 37582
Chamwino 46571
Mpwapwa 42851
Number of Crop Growing Households
0 - 10000
10001 - 20000
20001 - 30000
30001 - 40000
40001 - 50418


MAP 3.3 DODOMA
Percentage of Crops Growing Households by District
Kondoa
56%
Bahi
Dodoma Urban
82%
78%
Kongwa
74%
Mpwapwa
74%
Chamwino
75%
Percentage of Crops Growing Households
56% - 61%
62% - 66%
67% - 71%
72% - 76%
77% - 82%


MAP 3.4 DODOMA
Percentage of Crop and Livestock Households by District
Kondoa
44%
Bahi
Dodoma Urban
22%
17%
Kongwa
26%
Mpwapwa
26%
Chamwino
25%
Percentage of Crop and Livestock Households
0% - 10%
11% - 20%
21% - 30%
31% - 40%
41% - 44%

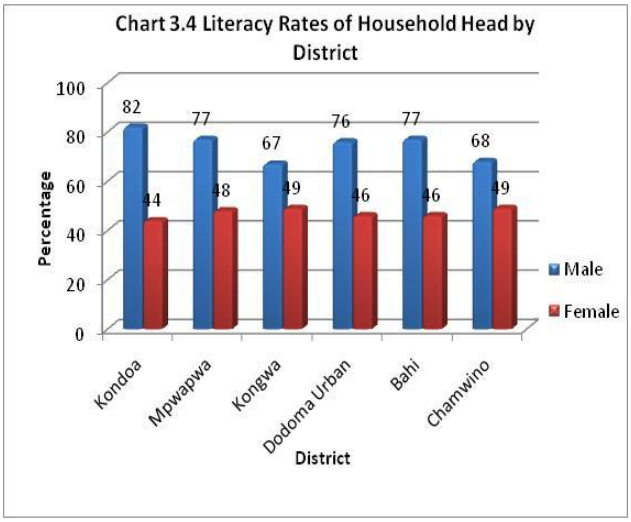
3.1.4 Level of Education

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 the agricultural 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 was based on the ability to read and write Swahili, English or both.

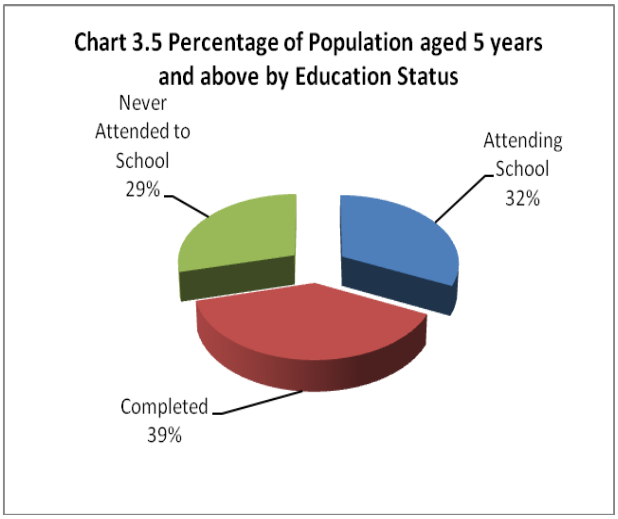


Literacy Level for Household Members

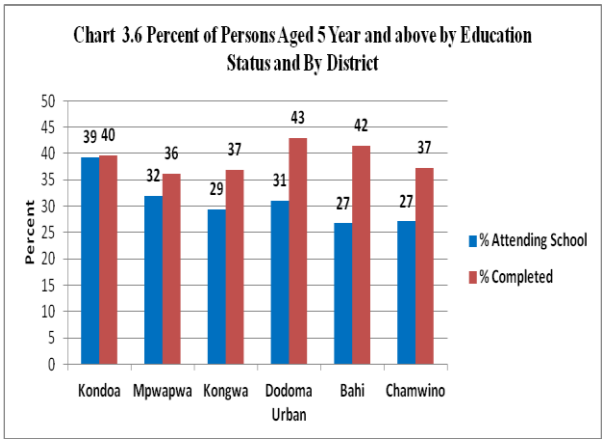
The total literacy rate for Dodoma was 69 percent according to 2007/08 census while in 2002/03 it was 60.6 percent. The highest literacy rate was in Kondoa (76%) followed by Dodoma Urban (71%), Mpwapwa (67%), Bahi (66%). Kongwa (63%) and Chamwino (62%) (Chart 3.3).

Literacy Rates for Heads of Households

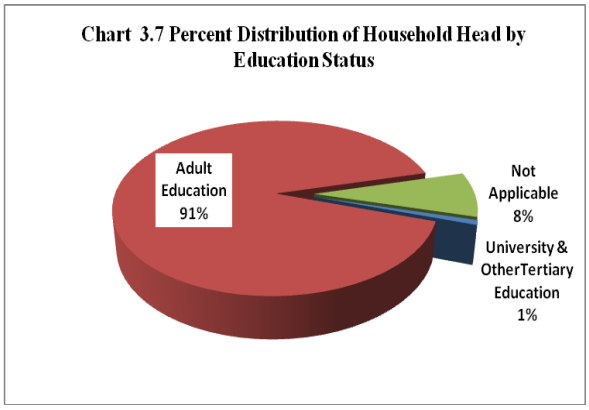
The literacy rates for the heads of households both males and females in Dodoma region were 75 and 47 percent respectively. Male heads of household literacy rate was higher than that of females in Kondoa (82 vs. 44%), Bahi (77 vs. 46%). Mpwapwa, Chamwino and Dodoma Urban the literacy rates between male and female household heads did not differ much (1% difference). It appeared that male household heads were more literate in each district (Chart 3.4).



Educational Status



The results show that 39 percent of the population aged 5 years and above in agricultural households had completed different levels of education and 32 percent were still attending school. Those who had never attended school were 29 percent, (Chart 3.5). Dodoma Urban, Bahi and Kondoa districts had the highest percentage of population aged 5 years and above who had completed different levels of education (about 40%). Whilst, Kondoa, had bigger proportion of person aged 5 and above whom were attending school, Bahi and Chamwino having the least (Chart 3.6).



The percentage of heads of agricultural households with formal education in Dodoma region was 116 (1%), those with adult education were 12,466 (91%), (Chart 3.7).

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 agricultural 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 agricultural designated land.

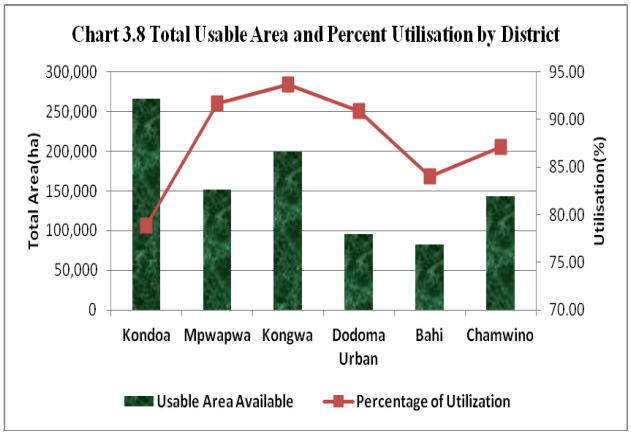
Usable land refers to the available land minus the land that cannot be used e.g. bare rock, shallow soils, steep slopes, swamp areas etc. It does however, include un-cleared bush. *Utilized land* refers to the land that was used during the year.

3.2.1 Area of Land Utilized

The total area of land available to smallholders in Dodoma region during the agricultural year 2007/08 was 938,061 hectare sand 855,264 hactares for the year 2002/03. The total planted area was 816,459 ha representing87% percent of land utilization. The regional average land area per household was 3.hectares during 2007/08 this census and 2.4 hectares during 2002/03.This was above the national average of 2.0 has per household

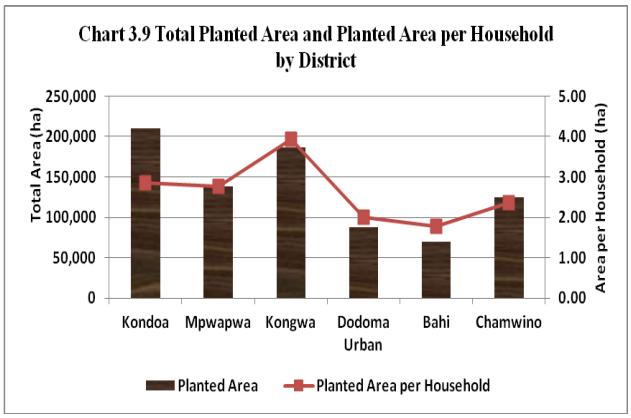
Percentage Utilized

About 74 percent percent of the total usable land available to smallholders was utilized for agricultural activities, (Map 3.5).



There were large difference in terms of land available and percentage of land utilization per district (Chart 3.8). Kongwa, Mpwapwa and Dodoma Urban had highest percentage utilization (slightly above 90%); while in Kondoa district had the lowest (79%) despite having large land area suitable for agriculture. Dodoma Urban and Bahi districts had small land available; however, land utilization was quite high being 91% for Dodoma Urban and 84% for Bahi.

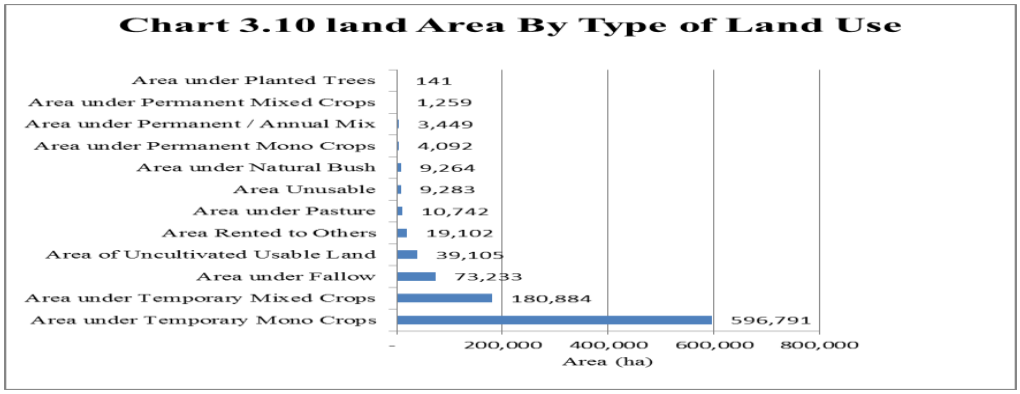
The average area utilized per household was the highest in Kongwa (3.9 ha) followed by Kondoa (2.9 ha), Mpwapwa (2.8 ha), and Chamwino (2.4 ha). Bahi and Dodoma Urban had the smallest area planted per household (1.8 ha and 2.0 ha respectively), (Chart 3.9)



3.2.2 Types of Land Use

The largest area of land was under temporary mono crops (596,791 ha; 63% of the total land available followed by area under temporary mixed crops (180,884 ha, 19%), area under fallow (73,233 ha, 7.7%), other uses (19,102 ha 2.0%); uncultivated usable area (39,105 ha, 4.1%) and area under pasture (10,742 ha, 1.1%). Other land use occupied less than 10,000 ha and their contribution to total land utilized were less than one percent, (Chart 3.10).

Dodoma region has only one main rainy season namely; the wet season, so the planted area is more or less the same as the area planted in the wet rainy season. During the dry spell, most of the cultivations are normally done in valley bottoms.



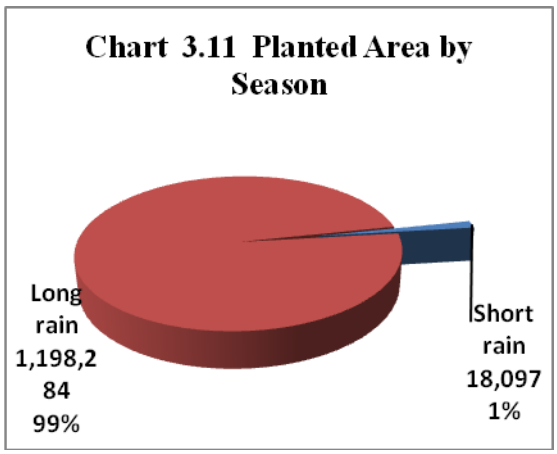
3.3 Annual Crop and Vegetable Production

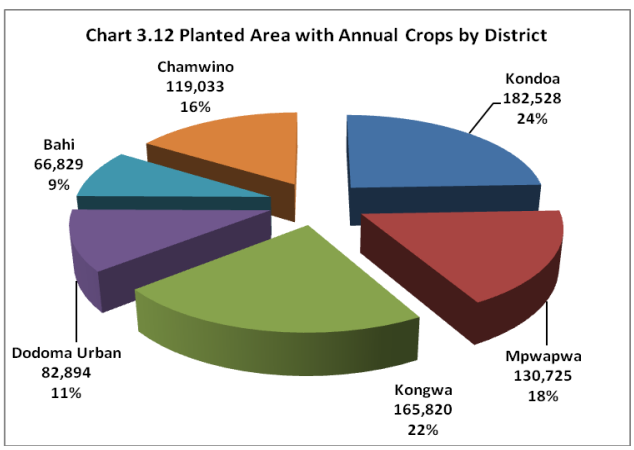
Dodoma region has a unimodal rainfall pattern starting in December and ending in March. With the exception of someirrigated annual crops and vegetables grown in the dry season, the rest of the crops are produced during the wet season. The quantity of crops produced in both seasons will be used as a basis for comparison with the past surveys and censuses.

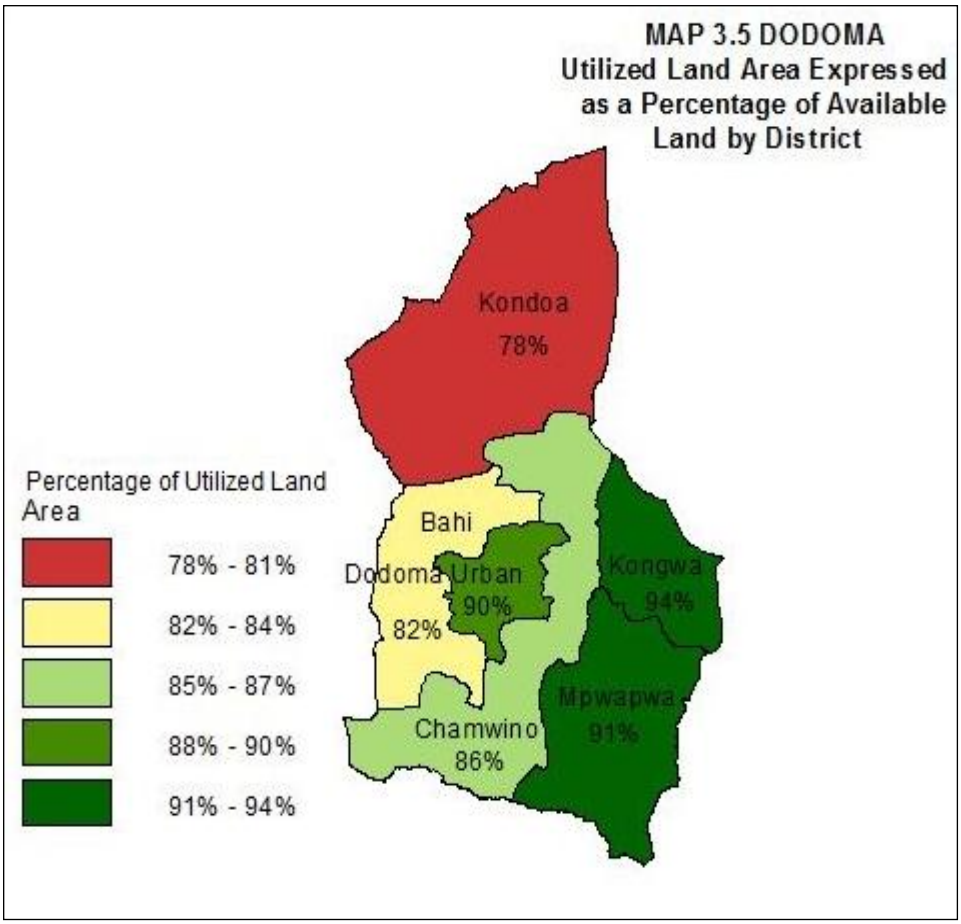
3.3.1 Area Planted

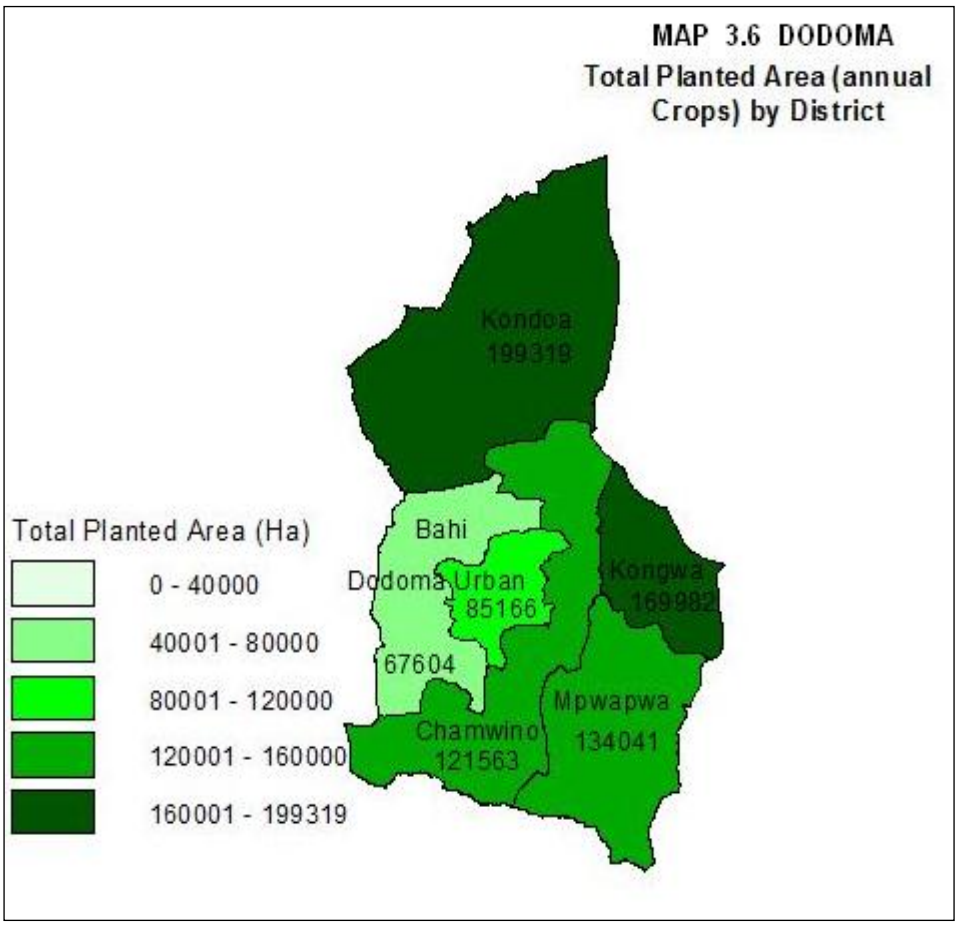
The area planted with annual crops and vegetables in the region was 747,828 hectares and most of it was planted during the wet season (Chart 3.11). Cultivation during the dry season was so small that comparisons between the wet and dry season is inappropriate. There is an increase of 88,850 hectares compared to the previous 2002/2003 census results

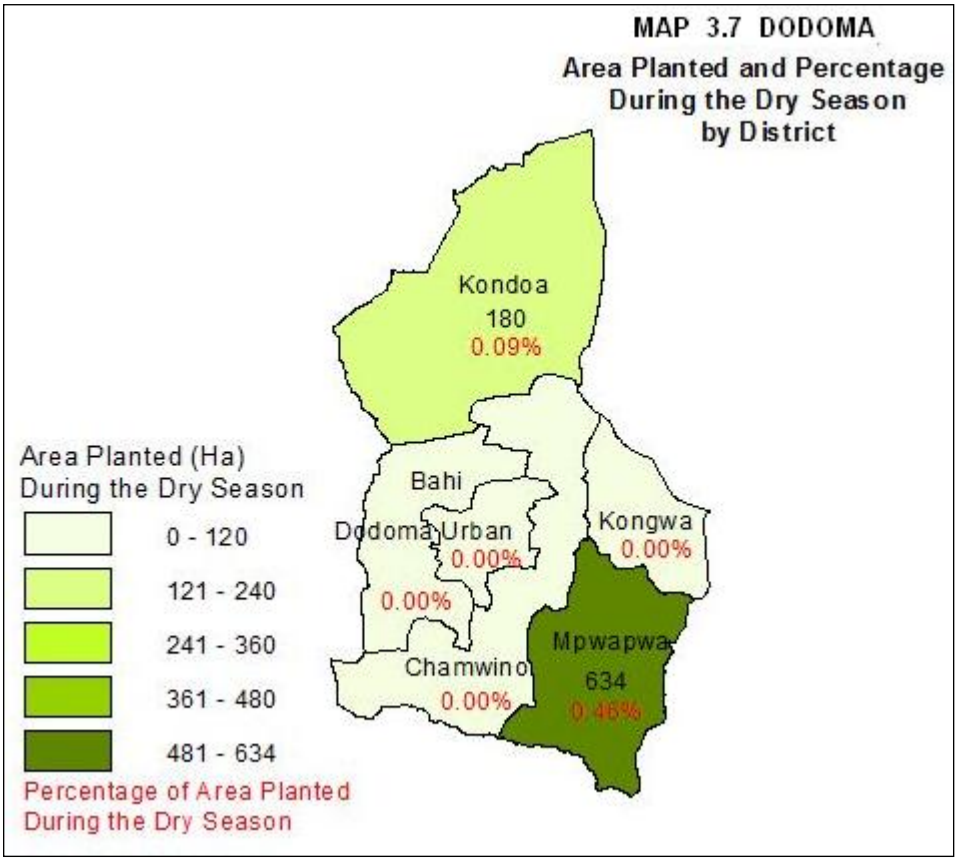
The district with the largest percentage of land area planted was Kondoa (24%), of total planted area.). It was followed by Kongwa (22%), Mpwapwa (17%), Chamwino (15.9%), Dodoma Urban (11%) and Bahi (8.9%), (Chart 3.12). The average area planted per household in the wet season was 2 hectares. Area planted during the dry season was very small, (Map 3.6 and 3.7).






MAP 3.5 DODOMA
Utilized Land Area Expressed as a Percentage of Available Land by District
Kondoa
78%
Bahi
Dodoma Urban
90%
82%
Kongwa
94%
Mpwapwa
91%
Chamwino
86%
Percentage of Utilized Land Area
78% - 81%
82% - 84%
85% - 87%
88% - 90%
91% - 94%


MAP 3.6 DODOMA
Total Planted Area (annual Crops) by District
Kondoa
199319
Bahi
Dodoma Urban
85166
67604
Kongwa
169982
Mpwapwa
134041
Chamwino
121563
Total Planted Area (Ha)
0 - 40000
40001 - 80000
80001 - 120000
120001 - 160000
160001 - 199319

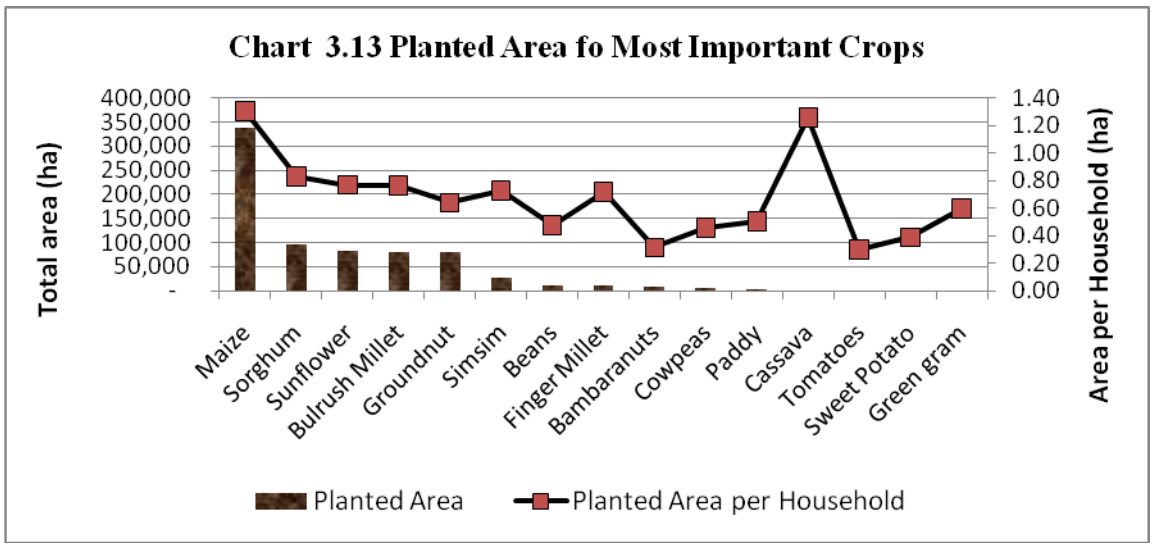

MAP 3.7 DODOMA
Area Planted and Percentage
During the Dry Season
by District
Kondoa
180
0.09%
Bahi
0.00%
Dodoma Urban
0.00%
0.00%
Kongwa
0.00%
Mpwapwa
634
0.46%
Chamwino
0.00%
Area Planted (Ha)
During the Dry Season
0 - 120
121 - 240
241 - 360
361 - 480
481 - 634
Percentage of Area Planted
During the Dry Season

Results on Crop Production

Results on crop production have been 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.

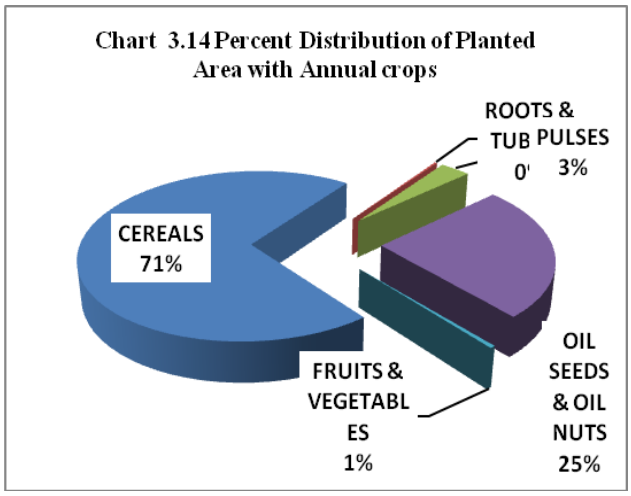
3.3.2 Crop Importance

Maize was the dominant annual crop grown in Dodoma region and had a planted area of 338,843ha. other crops in order of their importance based on area planted were, Sorghum (96,147 ha), Sunflower (83,385 ha), Bulrush millet (80,956 ha), groundnuts (79,024 ha) and Simsim 926,617 ha). The area planted with maize constituted 41 percent of the total area planted with annual crops in the region. The remaining crops were produced in relatively small areas, (Chart 3.13). The average planted area per household for maize were 1.3 ha, sorghum, sunflower and bulrush millet each with (0.8 ha) and 0.7 haper household.



3.3.3 Crop Types

Cereals were the main crops grown in Dodoma region. The area planted with major cereals was 528,424 hectares equivalent to 71% of the total planted area compared to 502,753 hectares in 2002/03. This was followed by oil seeds and oil nuts (189,083 ha, 25 %) and pulses (24,865 ha, 3%). Roots and tubers and fruits and vegetables occupied small areas (0.3% and 0.4% respectively), (Chart 3.14).



3.3.3.1 Cereal Crops Production

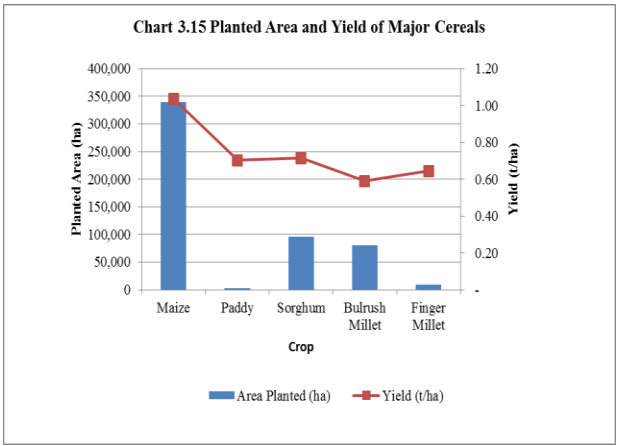
Maize was the dominant cereal crop where by, the total area planted with the crop was 338,843 ha (64 percent of the total major cereal planted area) followed by sorghum (96,147 ha, 18.2%), bulrush millet (80,956 ha, 15.3%), and finger millet (9,660 ha, 1.8%). Paddy was not important and was planted in a very small area (2,818 ha, 0.5%), (Map 3.9). The total production of cereals was 475,671 tons of which, maize accounted for 74 % of the total production, followed by sorghum (14 percent), bulrush millet (10%), finger millet (1.3%) and paddy (0.4%). Highest yield per hectare was also obtained from maize (1.0 tons/ha). Other cereals had yields ranging from 0.6 to 0.7 tons/ha, (Table 3.2, Chart 3.15).

Table 3.2: Area Production and Yield of Major Cereals

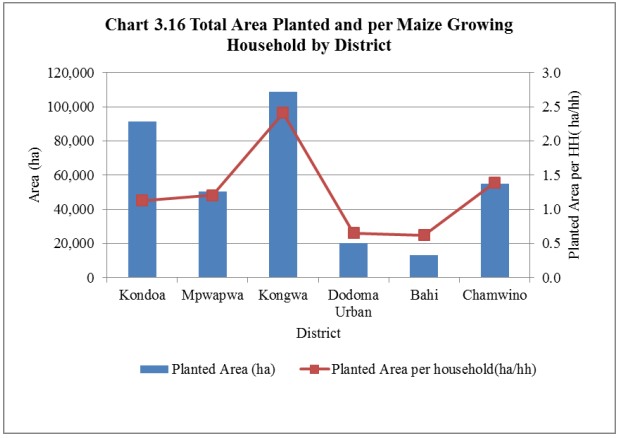
Crop	2007/2008			2002/2003		
	Area Planted	Amount Harvested	Yield (T/ha)	Area Planted	Amount Harvested (T)	Yield (T/ha) 2002/03
Maize	338,843	350,797	1	345,887	149,492	0.4
Paddy	2,818	1,983	0.7	4,225	2,587	0.6
Sorghum	96,147	68,739	0.7	63,932	22,032	0.3
Bulrush Millet	80,956	47,738	0.6	78,555	22,726	0.2
Finger millet	9,660	6,232	0.6	10,153	5,106	0.5
Total	**528,424**	**475,671**		**502,753**	**201,942**	

3.3.3.1.1 Maize

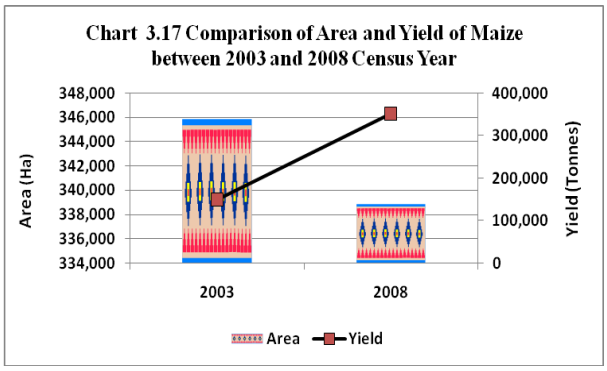
The number of households growing maize in Dodoma region was 260,043, representing 72 percent of the agricultural households. More households grew maize in Kondoa (81,069 hh) followed by Kongwa (45,098 hh), Mpwapwa (41,713 hh), Chamwino (39,478 hh), Dodoma Urban (31,244 hh) and Bahi (21,441 hh).



On average, the area under maize per household was 1.3 ha. The largest area planted with maize per household was in Kongwa district (2.4 ha), followed by Chamwino (1.4 ha), Mpwapwa (1.2ha), Kondoa (1.1 ha), Dodoma Urban (0.65 ha) and Bahi (0.62 ha), (Chart 3.16, Map 3.9).

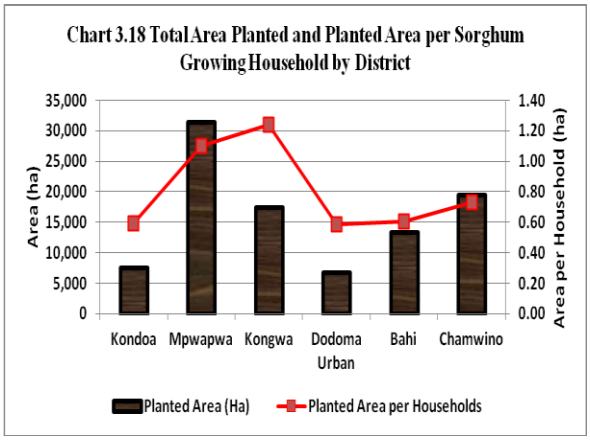


The trend shows that, planted area with maize increased sharply between 1997 and 1998 and has remained almost constant since then. Nonetheless, this has been due to the large increase in the planted area and not due to increased productivity. Between 2002/03 and 2007/08 area under maize decreased from 345,887 ha to 338,843 ha. However, production increased by 134 percent from 149,492 tons to 350,976 tons, (Chart 3.17). In the same period, yields of maize increased from 0.4 t/ha to 1 t/ha.

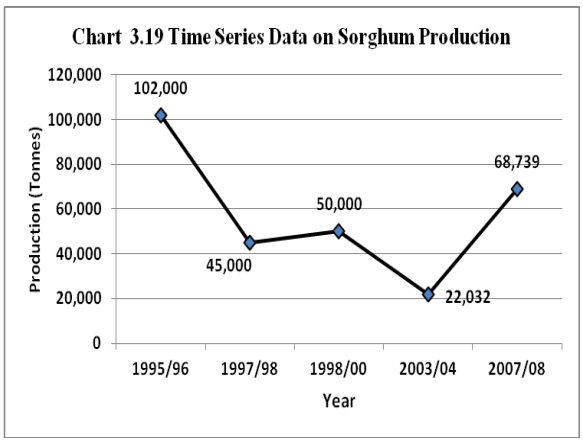


3.3.3.1.2 Sorghum

Sorghum was the second most important cereal crop in the region in terms of planted area. The number of households that grew sorghum in Dodoma region during the wet season was 115,836 Equivalent to 32 percent of the total agricultural households in Dodoma region. The total production of sorghum was 68,739 tons from a planted area of 96,147 hectares resulting in a yield of 0.71 t/ha. The district with the largest planted area of sorghum was Mpwapwa (31,390 ha) followed by Chamwino (19,539 ha), Kongwa (17,503 ha), Bahi (13,331 ha) Kondoa (7,616 ha) and Dodoma Urban (6,769), (Chart 3.18, Map 3.11). Kongwa district had the largest average area planted per household (1.24 ha) followed by Mpwapwa (1.1ha), Chamwino (0.73 ha), Bahi (0.60 ha), Kondoa (0.6 ha) and Dodoma Urban (0.6) (Chart 18 and Map 3.12).



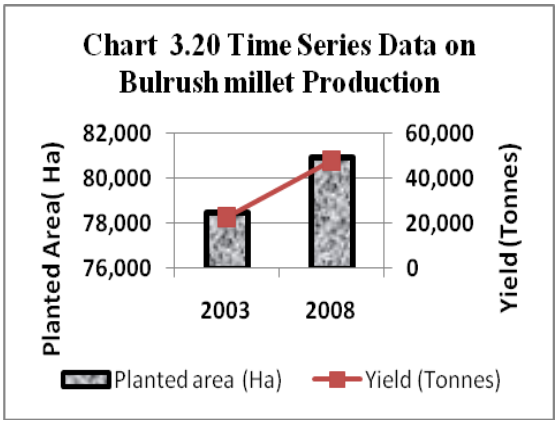
There was a large reduction in the production of sorghum from 102,000 tons in 1995/96 to 45,000 tons in 1997/98. During the period 1998 to 2000, the production remained constant at around 50,000 tons. From 2003 to 2008, production increased sharply up from 22,032 tons to 68,739 tons, representing an increase of 212 percent, (Chart 3.19). The increase in production could be attributed to the increase in the number of sorghum growing households from 87,130 in 2002/03 to 115,836 in 2007/08 as well as the increase in the area planted from 63,932 ha in 2002/03 to 96,147 ha in 2007/08. In the period (1995 to 2003), the



general trend was a decline in production as well as yield per hectare from 0.95 t/ha to about 0.3 t/ha, implying that, the dramatic reduction in the the quantity of sorghum production over the reported period was a factor of both a reduction in area planted as well as a declinei in the yields. However, between 2002/03 and 2007/08 production per hectare has doubled to 0.71 tons.

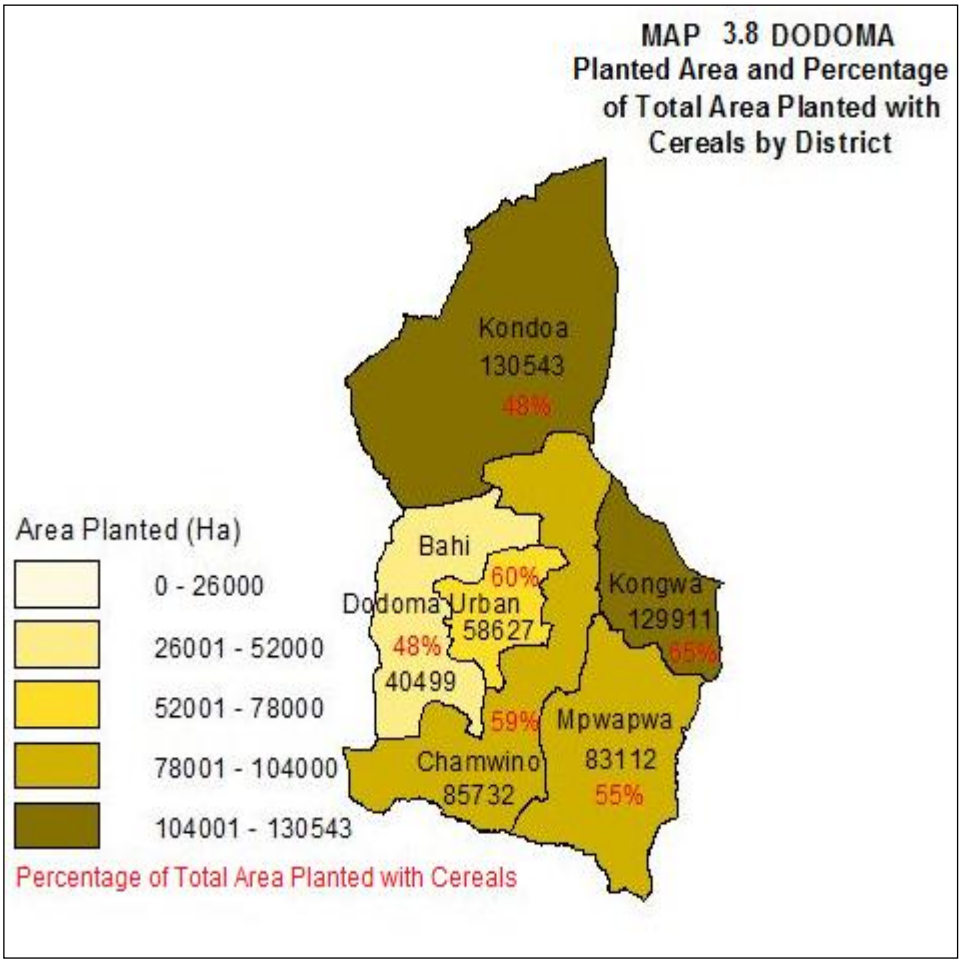
3.3.3.1.3 Bulrush millet

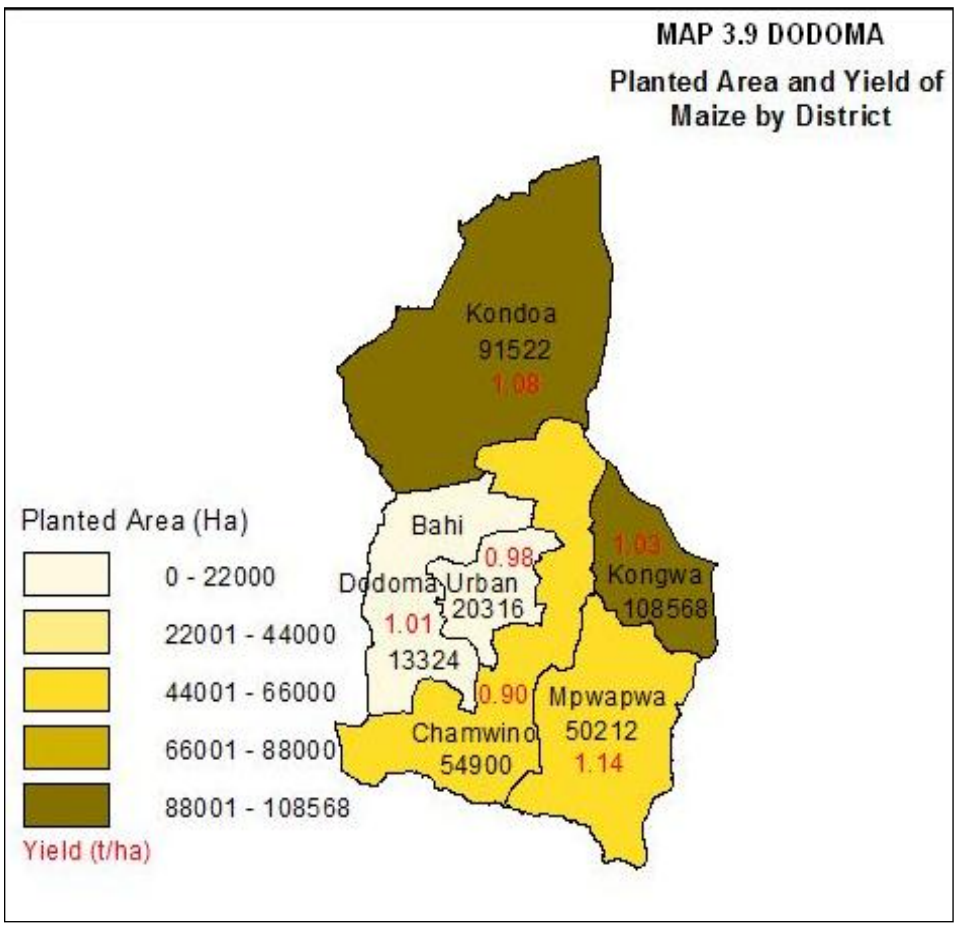
Bulrush millet was the third most important cereal crop in the region in terms of planted area. The number of households that grew bulrush millet was 106,450 and the production was 47,738 tons from a planted area of 80,956 ha, (Map 3.13 & 3.14). On average, the yield of bulrush millet was 0.6 Tons/hectare and the area planted per household was 0.8 ha. The trend shows an increase of area planted with bulrush millet from 78,496 ha to 80,956 ha between 2002/03 and 2007/08. There was also a corresponding increase in the yield from 22,711 tons to 47,748 tons, equivalent to 110 percent increase and the yield increased from 0.3 tons per hectare to 0.6 tons per hectare. (Chart 3.20).

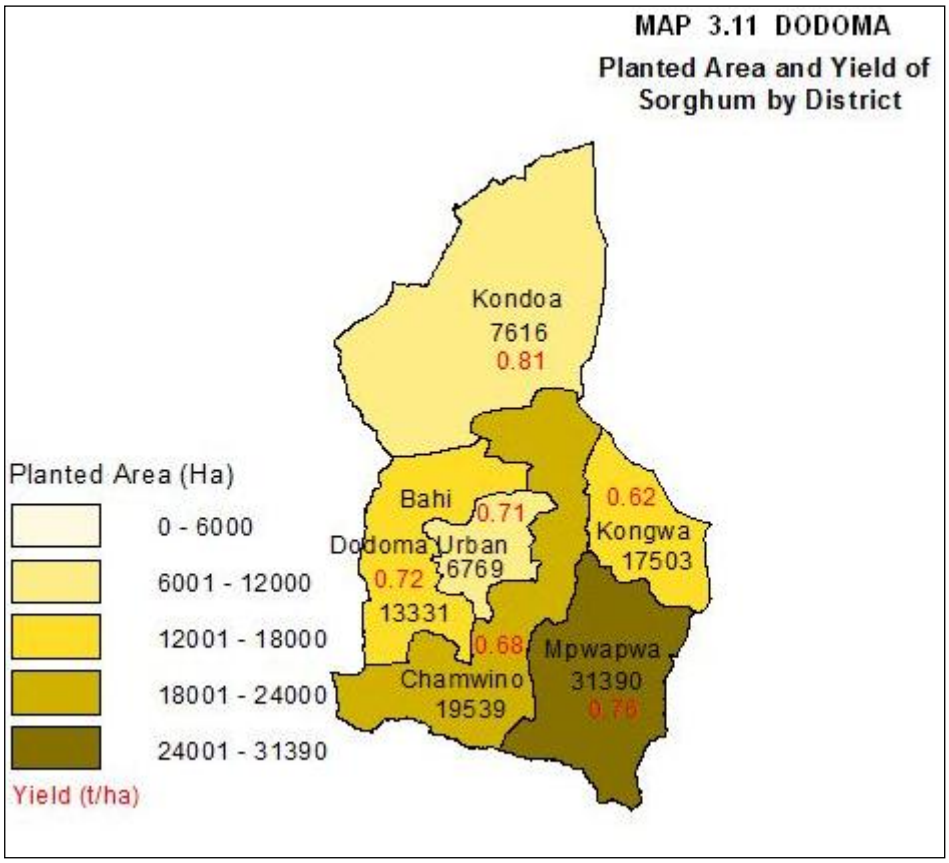


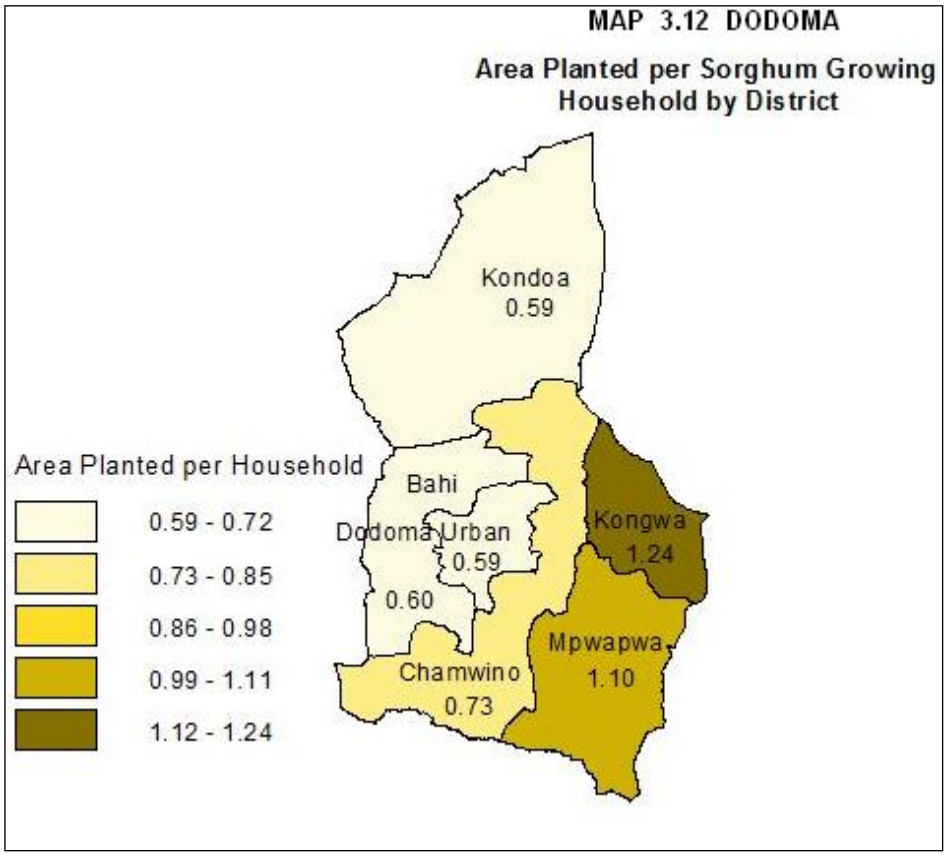
3.3.3.1.4 Other Cereals

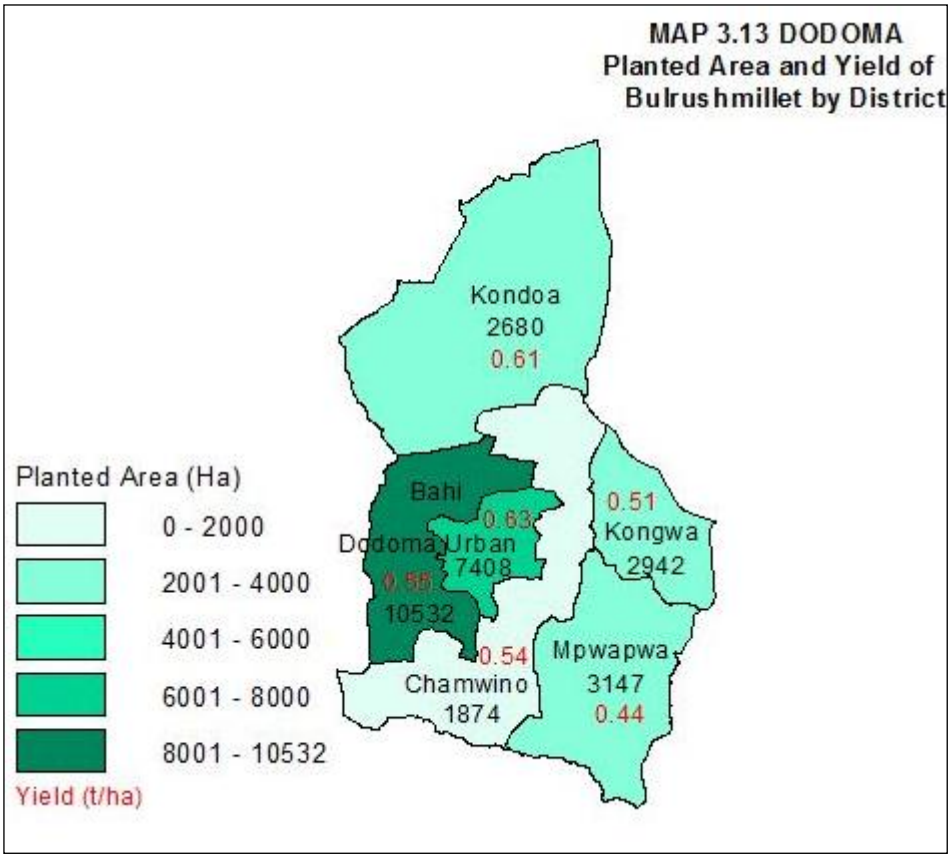
Finger millet and paddy were the fourth and fifth most important cereal crops grown in Dodoma region. These were planted on a total area of 12,478

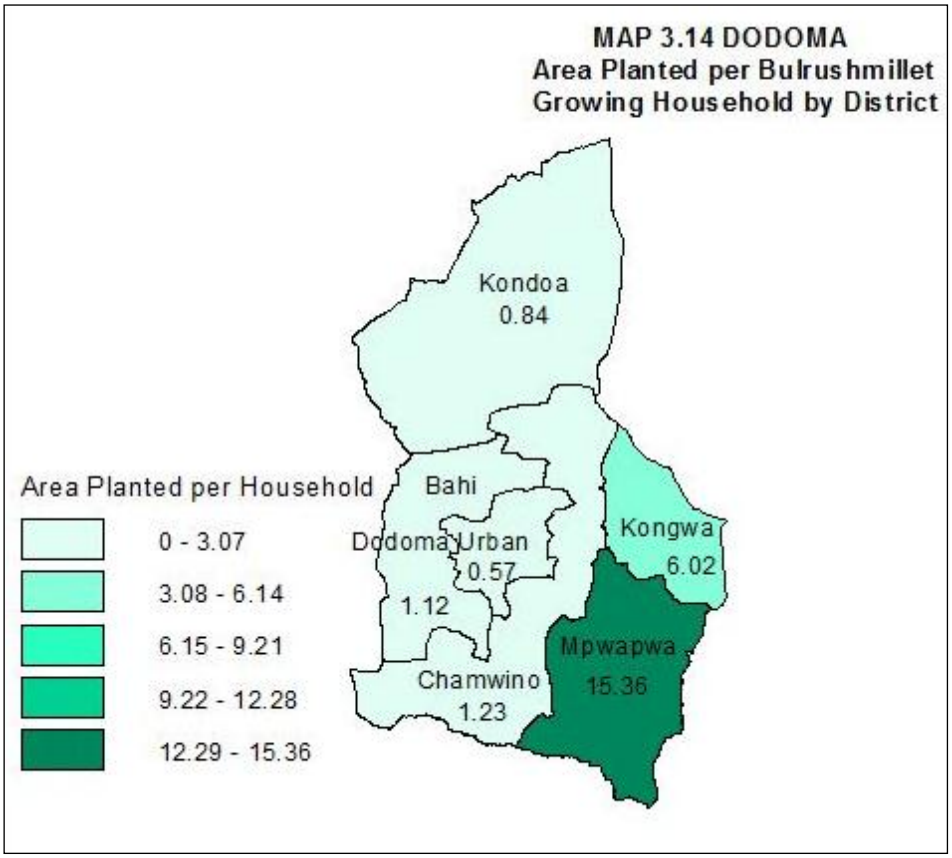

MAP 3.8 DODOMA
Planted Area and Percentage of Total Area Planted with Cereals by District
Kondoa
130543
48%
Bahi
60%
Dodoma Urban
58627
48%
40499
Kongwa
129911
65%
59%
Mpwapwa
83112
55%
Chamwino
85732
Area Planted (Ha)
0 - 26000
26001 - 52000
52001 - 78000
78001 - 104000
104001 - 130543
Percentage of Total Area Planted with Cereals


MAP 3.9 DODOMA
Planted Area and Yield of Maize by District
Kondoa
91522
1.08
Bahi
0.98
Dodoma Urban
20316
1.01
13324
1.03
Kongwa
108568
0.90
Mpwapwa
50212
1.14
Chamwino
54900
Planted Area (Ha)
0 - 22000
22001 - 44000
44001 - 66000
66001 - 88000
88001 - 108568
Yield (t/ha)


MAP 3.11 DODOMA
Planted Area and Yield of Sorghum by District
Kondoa
7616
0.81
Bahi
0.71
Dodoma Urban
6769
0.72
13331
0.62
Kongwa
17503
0.68
Mpwapwa
31390
0.76
Chamwino
19539
Planted Area (Ha)
0 - 6000
6001 - 12000
12001 - 18000
18001 - 24000
24001 - 31390
Yield (t/ha)

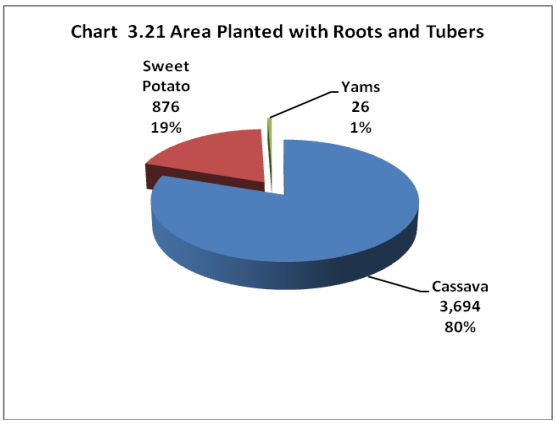

MAP 3.12 DODOMA
Area Planted per Sorghum Growing Household by District
Kondoa
0.59
Bahi
Dodoma Urban
0.59
0.60
Kongwa
1.24
Mpwapwa
1.10
Chamwino
0.73
Area Planted per Household
0.59 - 0.72
0.73 - 0.85
0.86 - 0.98
0.99 - 1.11
1.12 - 1.24


MAP 3.13 DODOMA
Planted Area and Yield of
Bulrushmillet by District
Kondoa
2680
0.61
Bahi
0.63
Dodoma Urban
7408
0.58
10532
0.51
Kongwa
2942
0.54
Chamwino
1874
Mpwapwa
3147
0.44
Planted Area (Ha)
0 - 2000
2001 - 4000
4001 - 6000
6001 - 8000
8001 - 10532
Yield (t/ha)


MAP 3.14 DODOMA
Area Planted per Bulrushmillet
Growing Household by District
Kondoa
0.84
Bahi
Dodoma Urban
0.57
1.12
Kongwa
6.02
Mpwapwa
15.36
Chamwino
1.23
Area Planted per Household
0 - 3.07
3.08 - 6.14
6.15 - 9.21
9.22 - 12.28
12.29 - 15.36

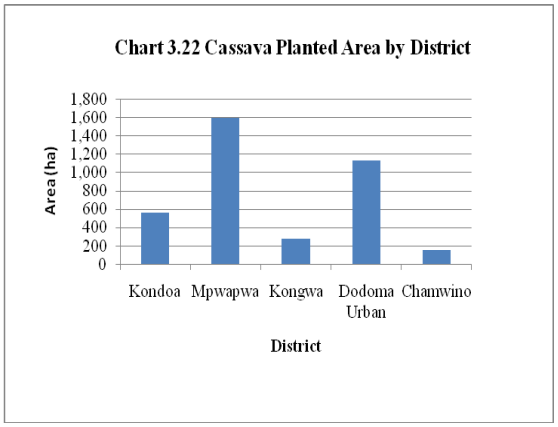
3.3.3.2 Roots and Tuber Crop Production

There were 8,757 households growing major roots and tubers in the region. The total production of roots and tubers was 4,974 tons from planted area of 2,049ha. The largest area was under cassava (3,694 ha,) followed by sweet potatoes (876 ha,) and yams (26 ha,) (Chart 3.21, Table 3. 3). Yams had the highest yield per hectares (4.5t/ha) despite the small planted area.



3.3.3.2.1 Cassava

The number of households growing cassava in Dodoma region was 6,376. This was 72.8 percent of the total root and tuber crop growing households. The area planted with cassava was larger than any other root and tuber crop in the region accounting for 80 percent of the total planted area of root and tuber crops.

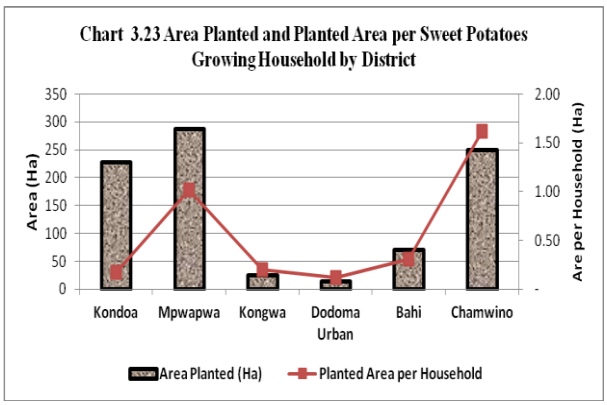


Mpwapwa District had the highest cassava planted area (1,587 ha, 42.9%) followed by Dodoma Urban (1,127 ha, 30.5%), Kondoa (555 ha, 15%), Kongwa (273, 7.3%), Chamwino (152, 4.1 %). Little cassava was grown in Bahi District, (Chart 3.22).

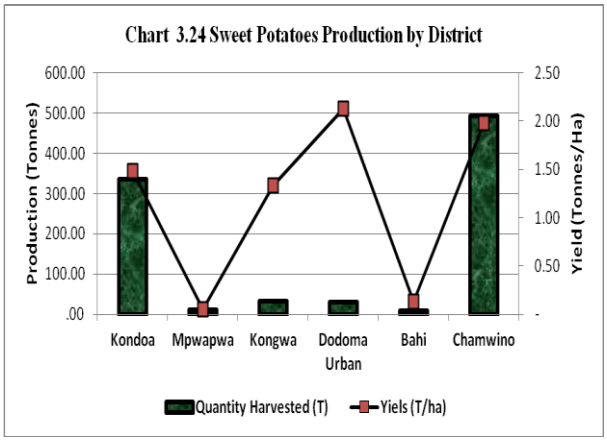
Table 3.3: Number of Household, Planted Area and Yield of Major Roots and Tubers Crops

Crop	Number of Household	Planted Area (ha)	Quantity harvested (Tons)	Yield /ha
Cassava	6,376	3,694	3,941	1.1
Sweet potatoes	2,255	876	918	1.05
Yams	126	26	115	4.50
Total	**8,757**	**4,596**	**4,974**	**1.09**

3.3.3.2.2 Sweet Potatoes

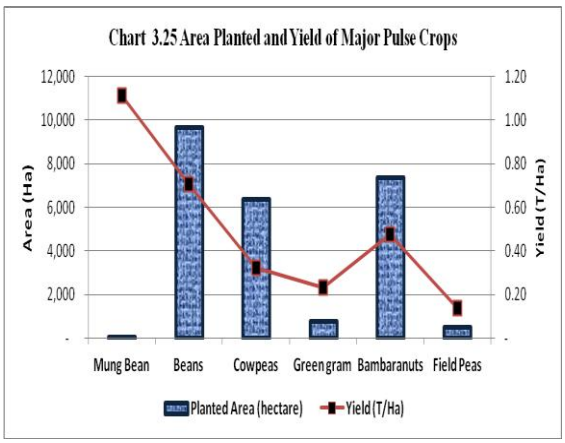


Sweet potato was the second most important tuber crop grown in Dodoma region. There were 2,255 households growing the crop in the region cultivating a total of 876 ha or 43 percent of the total area under roots and tubers. Total production of sweet potatoes was 918 tons with an average production of 1.05 tons per hectare. Mpwapwa district had the largest planted area of sweet potatoes (288 ha, 33% of sweet potatoes planted area) followed by Chamwino (250 ha, 29%) and Kondoa (228 ha, 26%). Bahi, Kongwa and Dodoma Urban district had the smallest area planted with sweet potatoes, the percentages being 8%, 3% and 2% respectively (Chart 2.23). However, Chamwino district had the largest planted area per household (1.62 ha), followed by Mpwapwa (1.0 ha). The planted areas per household for the remaining districts were less than 0.5 ha, whilst the regional average was 0.39 hectares per household.



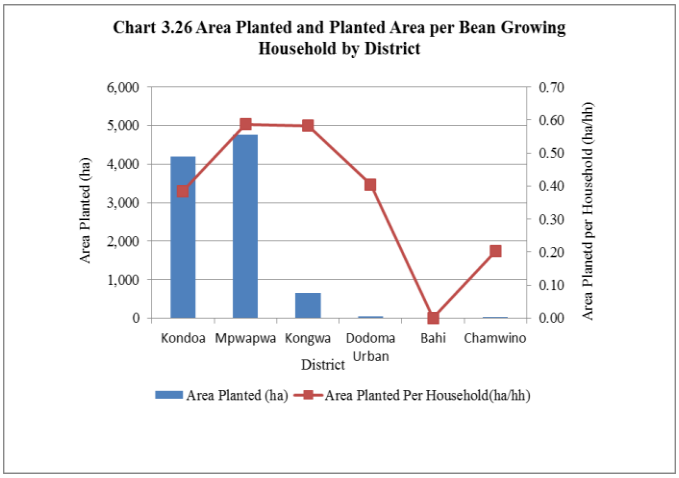
In terms of yield, the total production of sweet potatoes was 918 tons (an average of 1.1 t/ha). The highest production was recorded in Chamwino (493 tons,2t/ha) followed by Kondoa (336 tons,1.5 t/ha). For the remaining districts the production was less than 40 tons in each district. However, Dodoma Urban and Chamwino had the highest yield per hectare, at 2.13 and 1.98 tons respectively. The lowest yield per hectare was in Bahi and Mpwapwa districts (0.13 and 0.05 t/ha respectively), (Chart 3.24).

3.3.3.3 Pulse Crops Production



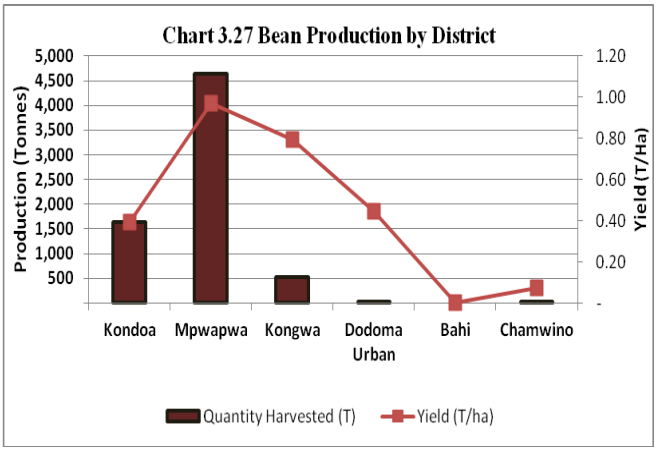
The total area planted with pulses was 24,865 hectares, of which 9,698 ha (39%) were planted with beans. followed by bambaranuts (7,381 ha, 30%) and cowpeas (6,397 ha, 26%). Field peas, mung beans and green gram were planted in small quantities and in total the three crops occupied 5.5% of the total pulse grown area, (Chart 3.25).

The total production of pulses increased from 5,350 tons in 2002/03 to 12,723 tons in 2007/08 equivalent to 137 percent increase. During the same period the area planted with pulses increased only slightly from 20,554 ha to 24,865 ha.

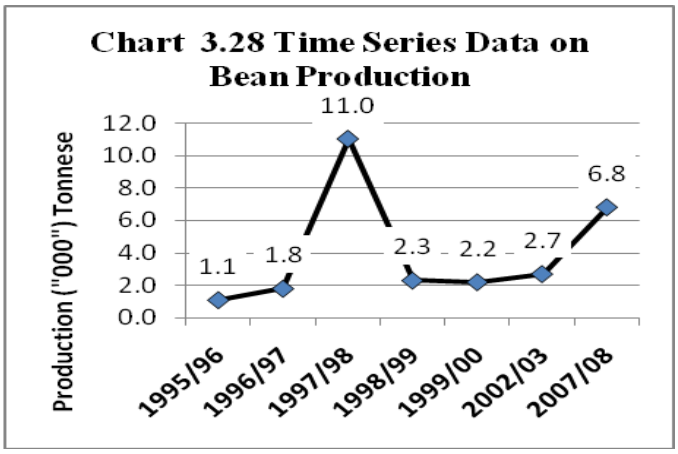


Beans

Beans were the dominant pulse crops in the region and were grown by 20,406 households. The total production of beans in the region was 6,831 tons from a planted area of 9,698 hectares resulting into an average yield of 0.7 t/ha. Mpwapwa District had the largest area planted with beans in the region (4,769 ha, 49% of the total area planted with beans) followed by Kondoa (4,189 ha, 43%) and Kongwa (657 ha, 7%). Dodoma Urban and Chamwino each had very small area planted with beans, whilst no beans were grown in Bahi district, (Chart 3.26,).



Mpwapwa district produced the largest amount of beans (4,637 tons, 68% of the total beans produced) in Dodoma region followed by Kondoa (1,648 tons, 24%) and Kongwa (521 tons, 8%). Productions from other districts were insignificant, (Chart 3.27) Mpwapwa had the highest yield (0.97 tons/ha), while Kongwa was the second with (0.79 tons) despite having small planted area. Kondoa district was the third with an average yield of 0.4 tons/ha. The regional average was 0.77 tons per hectare.

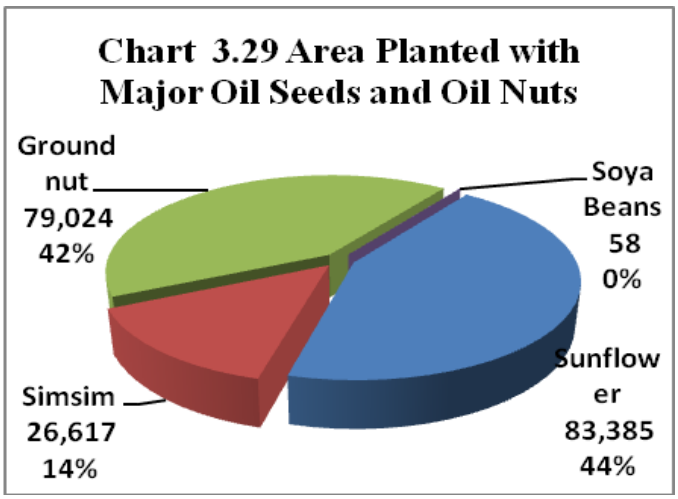


Production of beans increased rapidly in the period 1995 to 1998 from about 1,100 tones to 11, 000 tones, after which it decreased to 2,300 tons in 1999. Thereafter from, production remained constant up to 2002/03. In the past five years (2002/03 to 2007/08) production increased from 2,700 tons to 6,800 tones an increased of about 225 percent, (Chart 2.28). In the same period, the number of household

growing beans and area under beans has not increased significantly this mean that productions was mainly attributed to the increase of yield per hectare (from 0.3 to 0.7 t/ha).

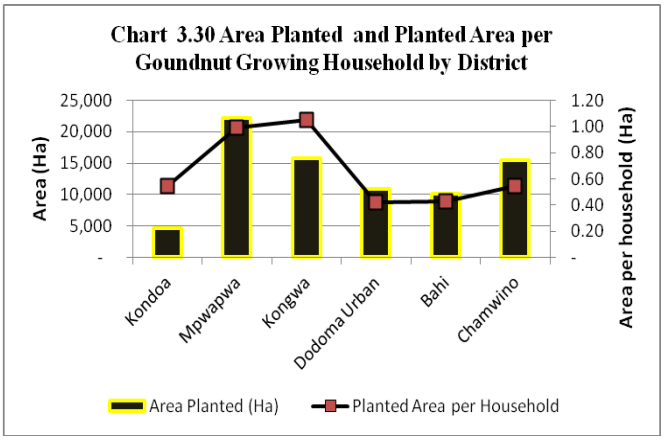
3.3.3.4 Oil Seeds Production

Oil seeds and oil nuts were grown by 269,215 households. The total production of oilseed crops was 110,406 tons from a planted area of 189,083 hectares. Sunflower was the most dominant oil seed crop with a planted area 83,385 hectares (44% of the total area under oil seed crops), followed by groundnuts (79,024 ha, 42%), and simsim (26,617 ha, 14%), (Chart 2.29).

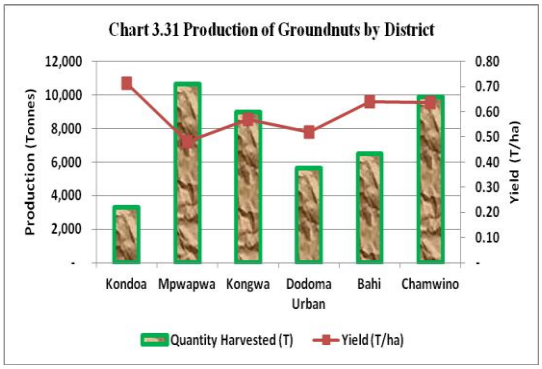


3.3.3.4.1 Groundnuts

The number of households growing groundnuts in Dodoma region was 123,790. The total production of groundnuts in the region was 44,906 tons from a planted area of 79,024 hectares resulting into an average yield of 0.57 tons per hectare. Mpwapwa had the largest area planted with groundnuts in Dodoma region (22,160 ha, 28%), followed by Kongwa (15,818 ha, 20%), Chamwino (15,502 ha, 19.6%), Dodoma Urban (10,825 ha, 13.7%), Bahi (10,110 ha, 12.8%) and Kondoa (4,609 ha, 5.8%) (Chart 3.30)



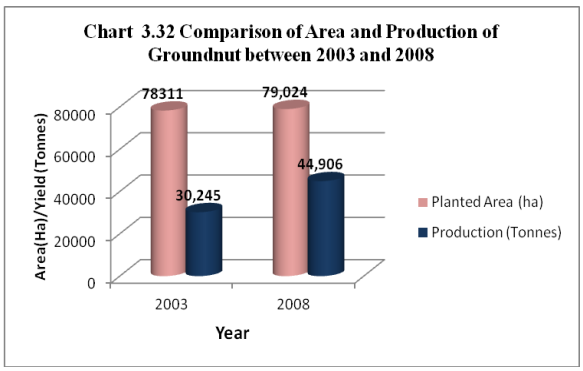
There are large variations in the area planted per groundnut growing household among districts in Dodoma region. The largest planted area per groundnut growing household was in Kongwa district (1.1 ha) followed by Mpwapwa (0.99 ha), Kondoa (0.6 ha), Chamwino (0.5 ha), Dodoma Urban and Bahi districts (0.4 ha each), (Chart 3.31).



Mpwapwa district had the highest groundnuts production estimated at 10,660 tons (24% of the total groundnut production in the region) followed by Chamwino (9,864 tons; 22%), Kongwa (8,994 t, 20%), Bahi (6,478 t, 14%), Dodoma Urban (5,629 t, 13%). The smallest groundnut production was

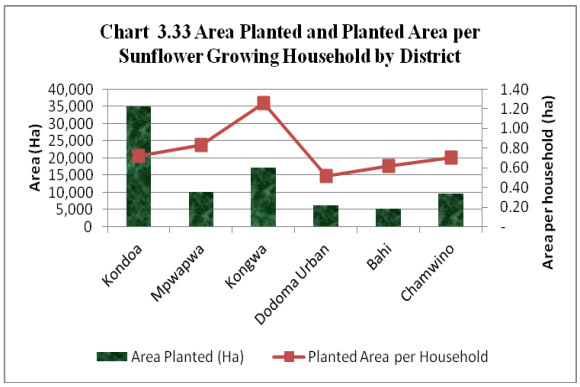
in Kondoa whereby a total of 3,282 tons (7%) were produced in 2007/08 agricultural year, (Chart 3.31).

However, the highest yield per hectare was in Kondoa (0.71 tons) and the lowest was in Dodoma Urban (0.48 t/ha), while the area under groundnut has remained constant, but production has increased by 48.5% between year 2002/03 and 2007/08 (Chart 3.32).



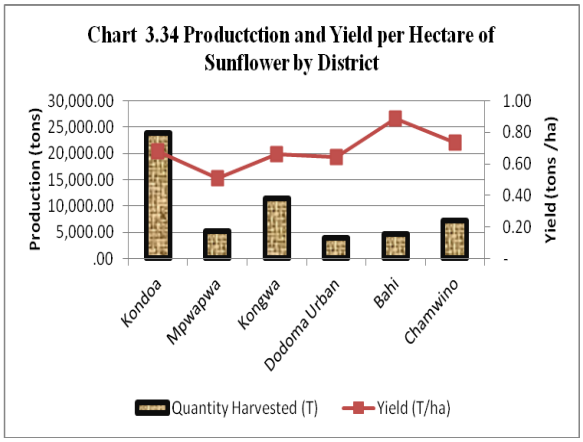
3.3.3.4.2 Sunflower

The number of households growing sunflower was 108,705, representing 30.3 percent of the agricultural households in Dodoma region. The total production of sunflower in the region was 56,068 tons from a planted area of 83,385 hectares resulting into an average yield of 0.67 tons per hectare. The largest planted area with sunflower was in Kondoa (35,036 ha; 42% of the total area under sunflower) followed by Kongwa (17,163 ha; 21%), Mpwapwa (10,092 ha; 12%), Chamwino (9,671 ha; 12%), Dodoma Urban (6,238 ha; 7%) and Bahi (5,185 ha; 6%), (Chart 3.33). (,.the highest production of sunflower per hectares was in Bahi district (0.89 t/ha). followed by Chamwino (0.74 t/ha), Kondoa (0.68 t/ha), Kongwa (0.66 t/ha), Dodoma Urban (0.64 t/ha) and Mpwapwa (0.51 t/ha), (Chart 3.34).

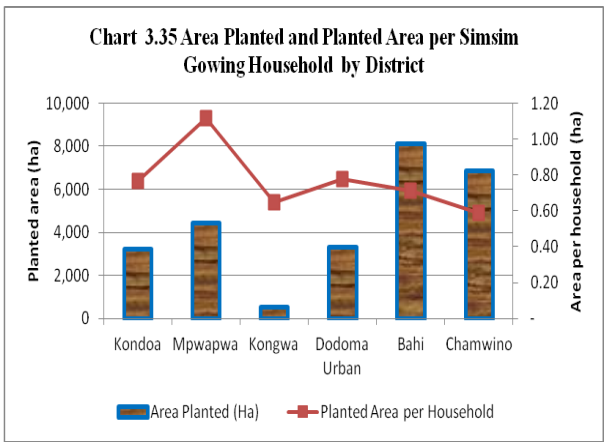


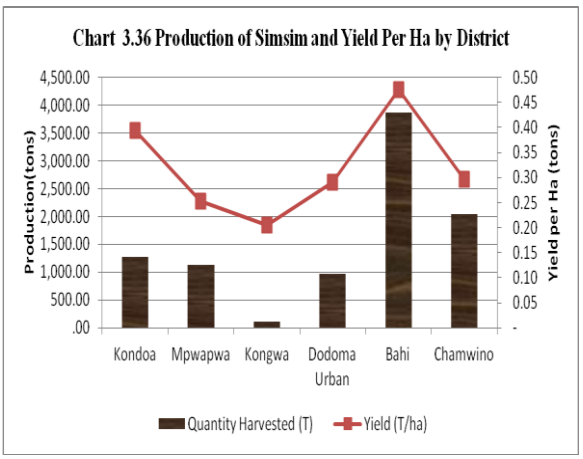
3.3.3.4.3 Simsim

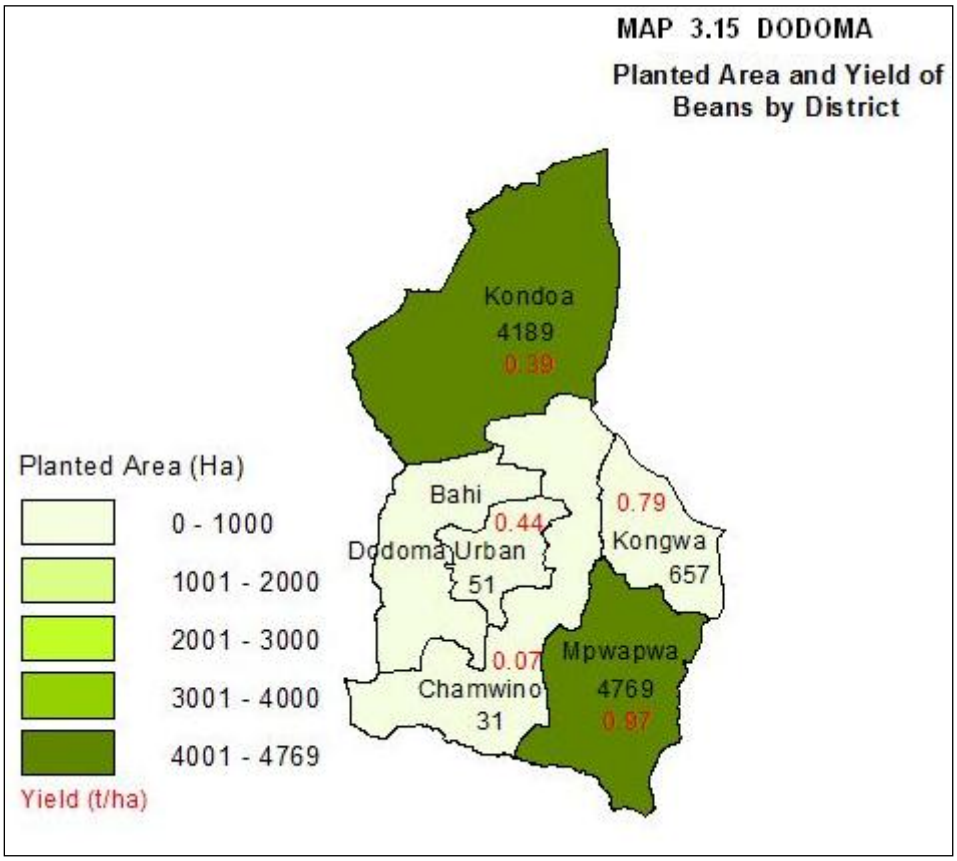
The number of households growing simsim was 36,578 representing 10 percent of the total agricultural households in Dodoma region. The total production of simsim in the region was 9,388 tons from a planted area of 26,617 hectares (3% of the total area) resulting in an average yield of 0.35 tons per hectare. On average, each household cultivated 0.73 ha. Bahi district had the largest planted area with simsim (8,141 ha; 31%). followed by Chamwino (6,889 ha; 26%), Mpwapwa (4,450 ha; 17%), Dodoma Urban (3,349 ha, 13%), Kondoa (3,222 ha; 12%). Very little simsim was grown in Kongwa (566 ha; 2%) (Chart 3.35).

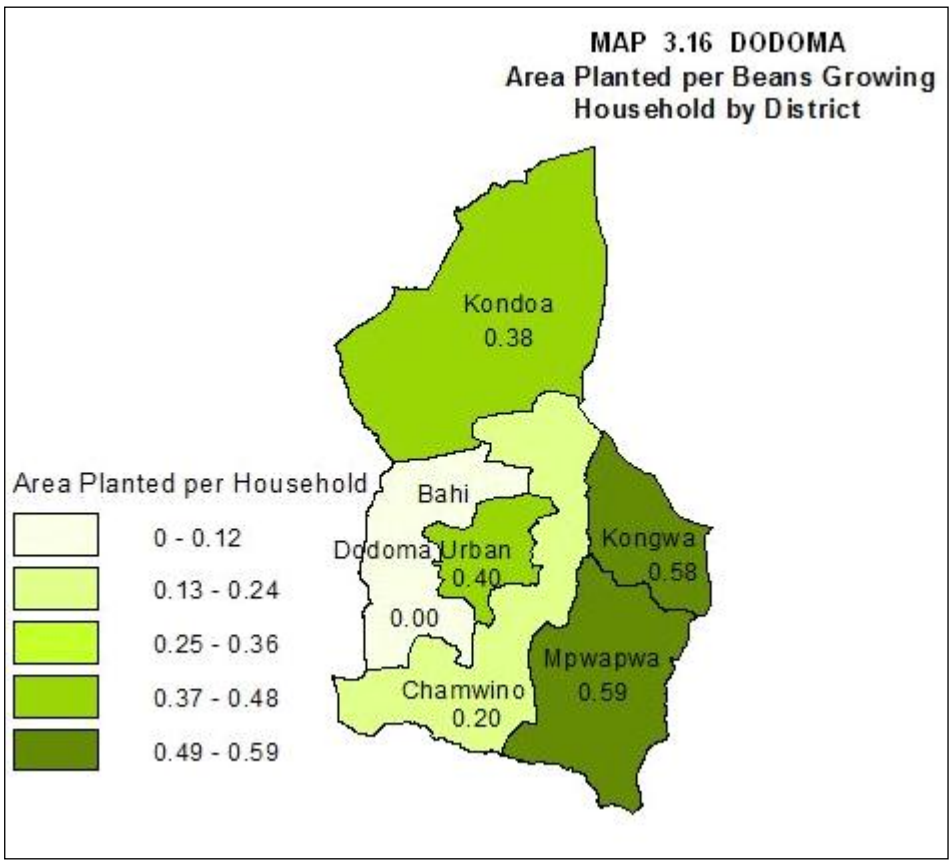


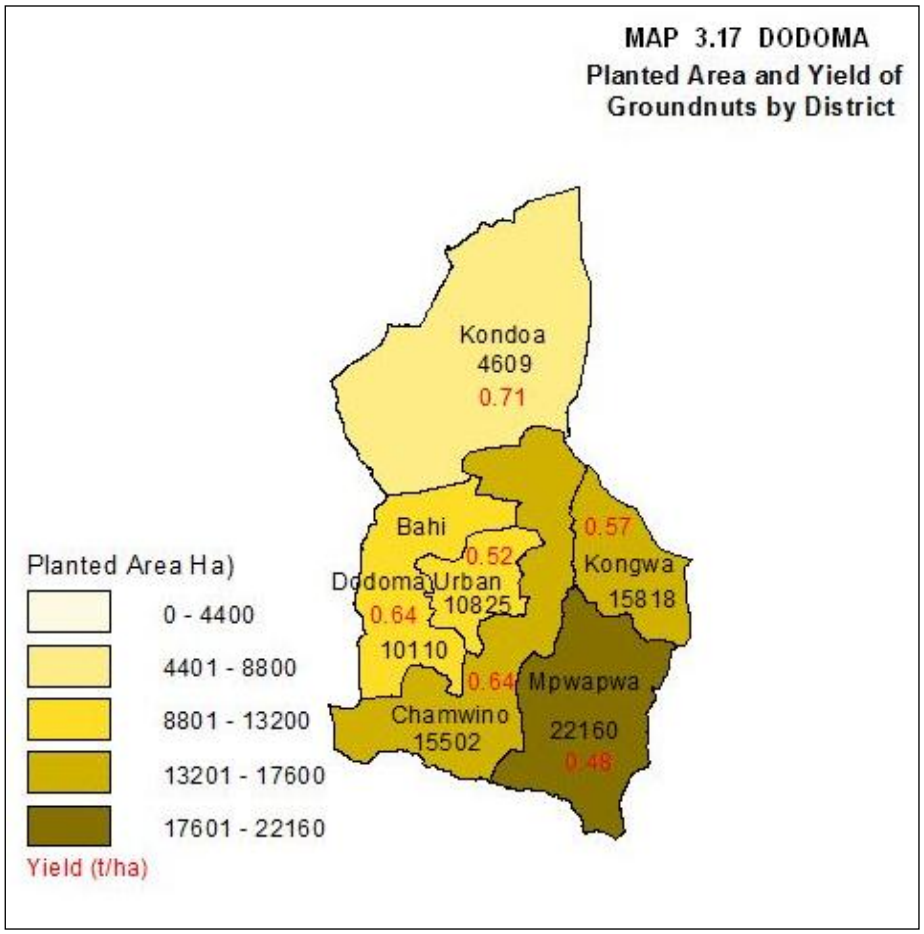
Bahi district had the highest yield (0.47 tons/ha) followed by Kondoa (0.39 tons/ha), Dodoma Urban (0.29 tons/ha), Chamwino (0.30 tons/ha), Mpwapwa (0.25 tons/ha) and the lowest yield was in Kongwa (0.21 tons/ha) (Chart 3.36).

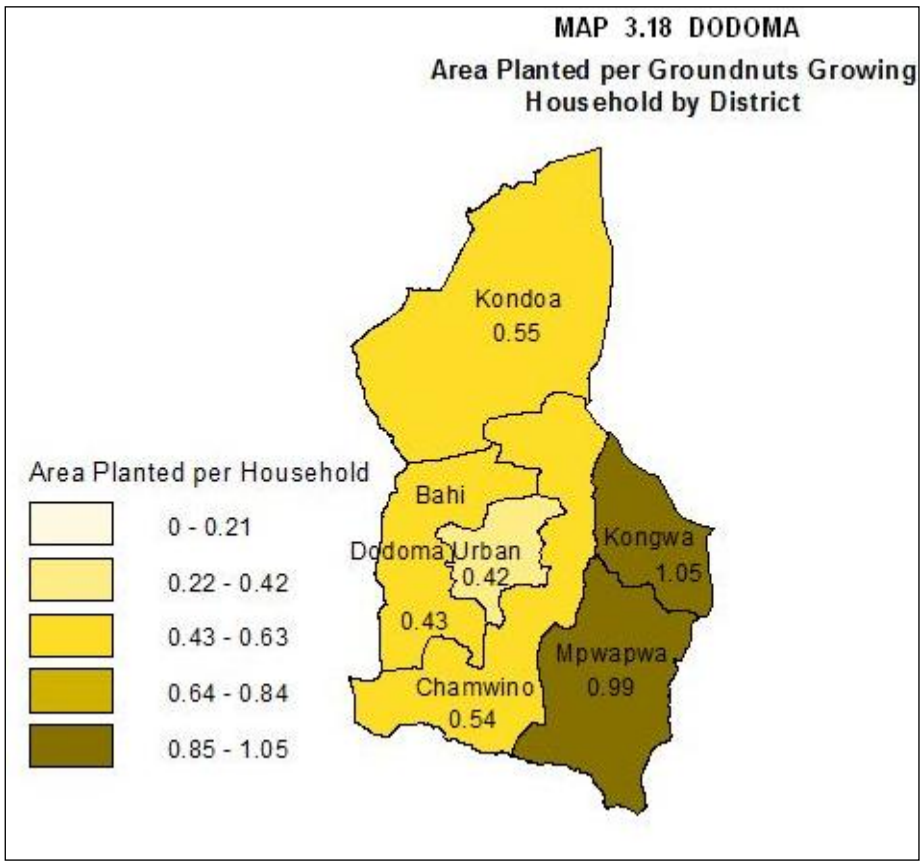





MAP 3.15 DODOMA
Planted Area and Yield of Beans by District
Kondoa
4189
0.39
Bahi
0.44
0.79
Kongwa
657
Dodoma Urban
51
0.07
Chamwino
31
Mpwapwa
4769
0.97
Planted Area (Ha)
0 - 1000
1001 - 2000
2001 - 3000
3001 - 4000
4001 - 4769
Yield (t/ha)


MAP 3.16 DODOMA
Area Planted per Beans Growing Household by District
Kondoa
0.38
Bahi
Dodoma Urban
0.40
0.00
Kongwa
0.58
Chamwino
0.20
Mpwapwa
0.59
Area Planted per Household
0 - 0.12
0.13 - 0.24
0.25 - 0.36
0.37 - 0.48
0.49 - 0.59


MAP 3.17 DODOMA
Planted Area and Yield of Groundnuts by District
Kondoa
4609
0.71
Bahi
0.52
0.57
Kongwa
15818
Dodoma Urban
10825
0.64
10110
0.64
Mpwapwa
Chamwino
15502
22160
0.48
Planted Area Ha)
0 - 4400
4401 - 8800
8801 - 13200
13201 - 17600
17601 - 22160
Yield (t/ha)


MAP 3.18 DODOMA
Area Planted per Groundnuts Growing Household by District
Kondoa
0.55
Bahi
0.43
Dodoma Urban
0.42
Kongwa
1.05
Mpwapwa
0.99
Chamwino
0.54
Area Planted per Household
0 - 0.21
0.22 - 0.42
0.43 - 0.63
0.64 - 0.84
0.85 - 1.05

3.3.3.5 Fruits and Vegetables

The collection of fruits 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.

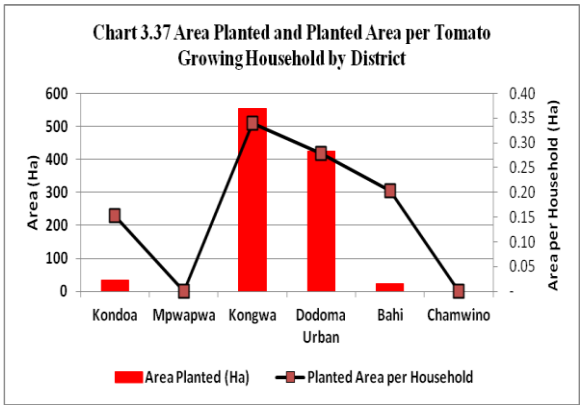
The total production of fruits and vegetables was 16,268 tons. The most cultivated vegetable crop was tomatoes with a production of 11,249 tons (69% of the total vegetables produced in the region), followed by onions (2,028 tons, 12.2%) and spinach (960 tons, 6%). The production of other fruit and vegetable crops was relatively small. The yield of tomatoes was 10.9ttons/haonions (4.6tons/ha and 7.5 tons/ha, for spinach (Table 3.4).

Table 3.4: Area, Production and Yield of Fruits and Vegetables

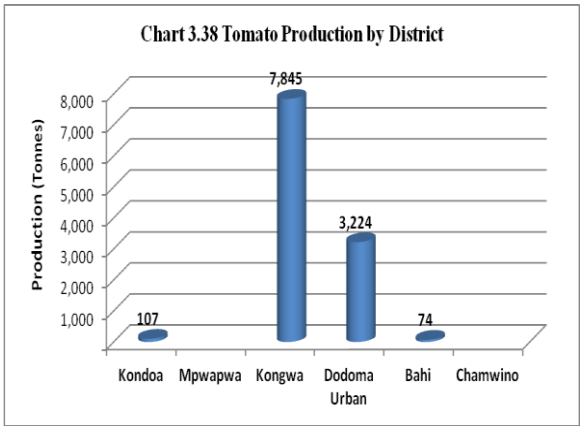
Crop	Number of Household	Planted Area (hectare)	Quantity Harvested (tons)	Yield (T/Ha)
Tomatoes	3,484	1,034	11,249	10.87
Radish	507	599	661	1.10
Okra	1,240	534	402	0.75
Onion	1,158	445	2,028	4.55
Aubergine	702	403	562	1.40
Turmeric	222	180	89	0.49
Spinach	1,487	129	960	7.45
Amaranths	444	40	94	2.33
Chillies	253	16	51	3.09
Cabbage	222	13	44	3.29
Water Mellon	126	13	126	9.88
Total	**9,847**	**3,407**	**16,268**	**4.77**

3.3.3.5.1 Tomatoes

The number of households growing tomatoes was 3,484 Equivalent to 35 percent of the total households growing fruits and vegetables in the region. The crop was grown on 1,034 hectares (30% of vegetable area) giving an average yield of 10.9 tons per hectare. Kongwa district had the largest planted area (1,034 ha) of tomatoes (53 % of the total area planted with tomatoes in the region), followed by Dodoma Urban (424 ha, 41%). The area under tomatoes in the remaining districts was very small, (Chart 3.37).

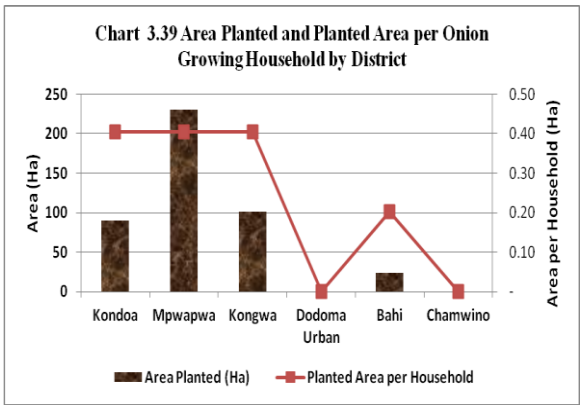


The average planted area per tomato growing household was 0.3 hectares; however, there were small district variations. The area planted per tomato growing household was the largest in Kongwa (0.34 ha) followed by Dodoma Urban (0.28 ha), Bahi (0.2 ha) and Kondoa (0.15 ha), (Chart 3.37). Kongwa district was leading in terms of quantity of tomatoes produced (7,845 tons; 70%). followed by Dodoma Urban (3,224 tons; 29%) (Chart 3.38, Map 3.19 & Map 3.20). Tomatoes production has increased from 1,982 tons in 2002/03 to 11,249 tons in 2007/08.

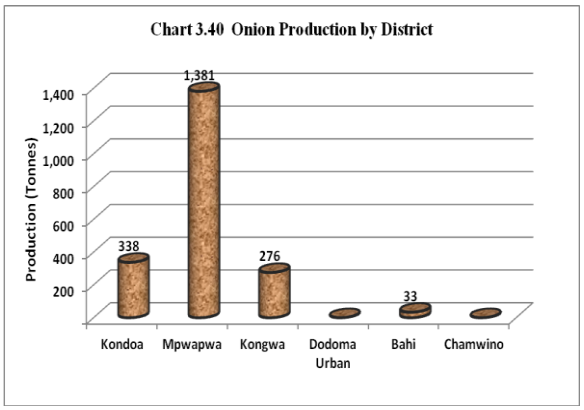


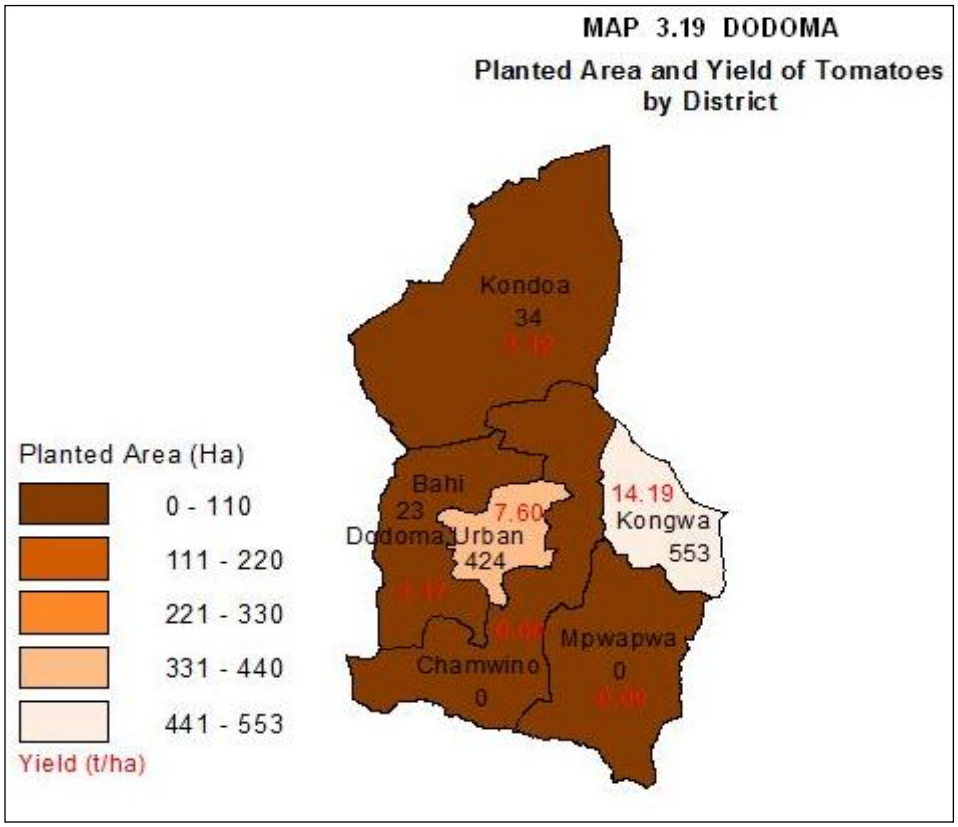
3.3.3.5.2 Onions

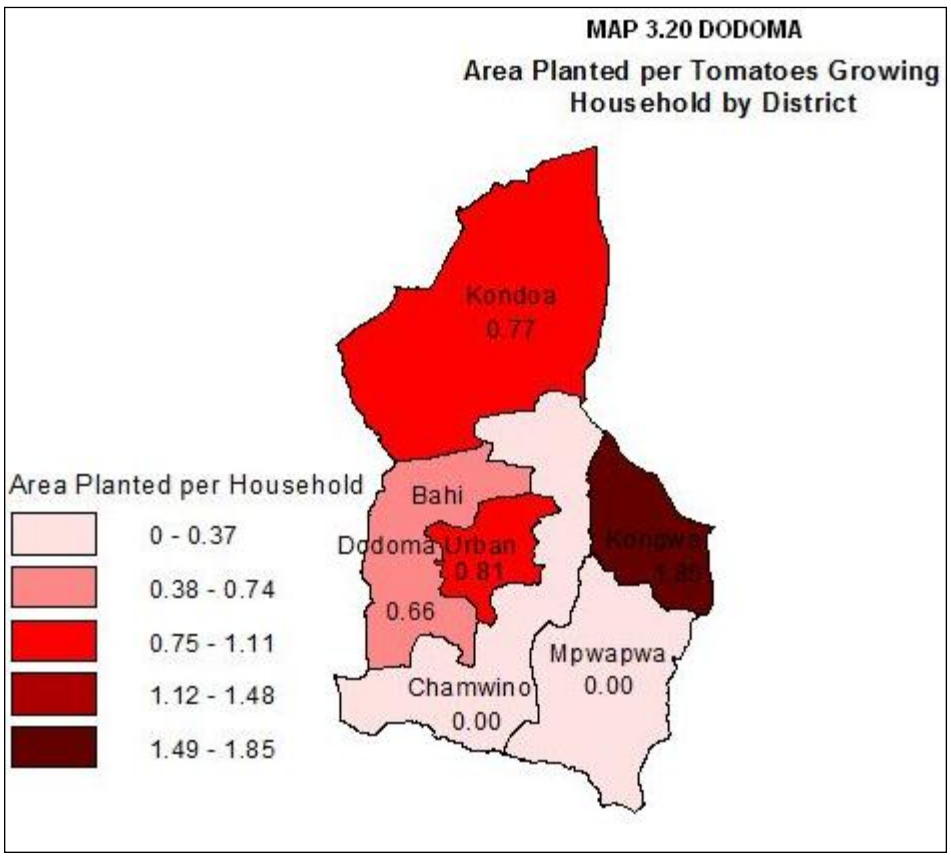
The number of households growing onions in the region was 1,158 equivalent to 12 percent of the total vegetables growing households in Dodoma region. Onion was planted on 445 ha, equivalent to 13 percent of the total area planted with vegetables. Mpwapwa district had the largest planted area of onion (231 ha, 52% of the total area planted with onion in the region), followed by Kongwa (101 ha, 23%), Kondoa (90 ha, 20%) and Bahi (23 ha; 5%). Little onion was grown in Dodoma Urban, and Chamwino. However, Mpwapwa, Kondoa and Kongwa had almost similar area planted per household (about 0.4 ha), (Chart 3.39, Map 3.21 and Map 3.22).



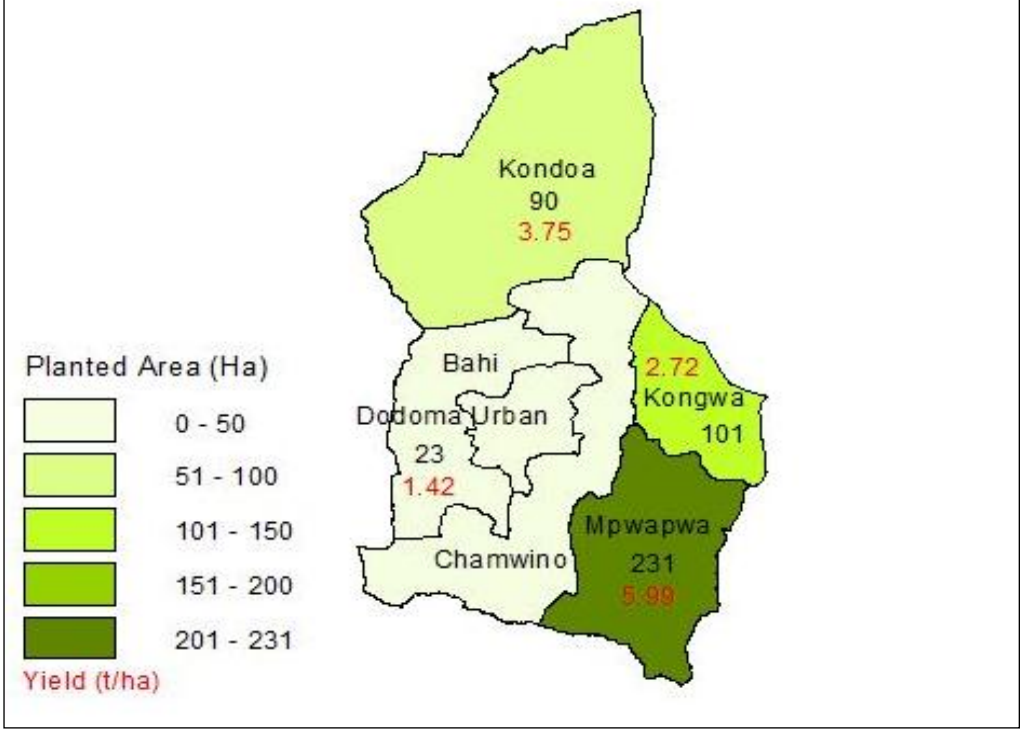
A total of 2,028 tons of onion were produced from planted area of 455 ha. The largest quantity of onions were produced in Mpwapwa (1,381 tons; 68%), followed by Kondoa (338 tons; 17%) and Kongwa (276 tons; 14 %), (Chart 3.40). In 2002/03, onion production was 511 tons. This represents a 297 percent increase compared to 2007/08 production. Yield has also increased dramatically from 1.7 tons to 4.6 tons per hectare. Other vegetables such as amaranths were grown in small areas (Map 3.23 & 3.24).



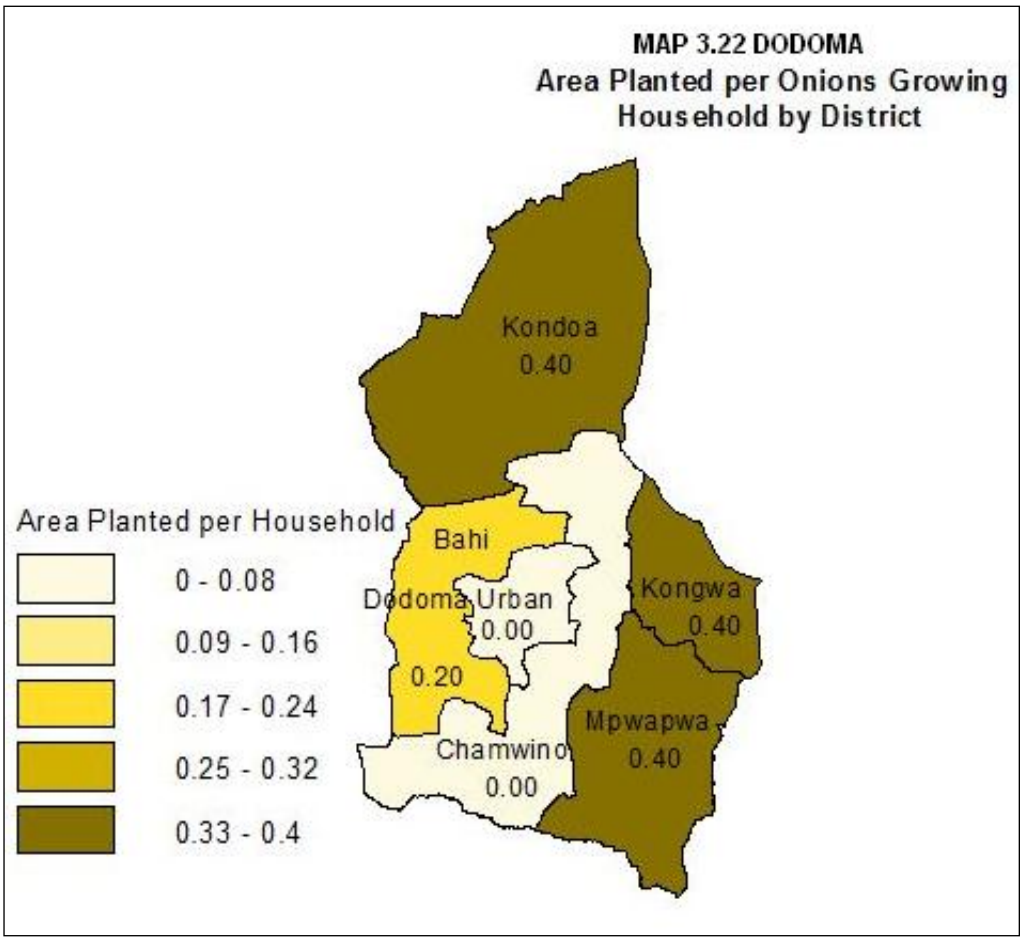

MAP 3.19 DODOMA
Planted Area and Yield of Tomatoes by District
Kondoa
34
Bahi
23
7.60
Dodoma Urban
424
14.19
Kongwa
553
Mpwapwa
0
Chamwino
0
Planted Area (Ha)
0 - 110
111 - 220
221 - 330
331 - 440
441 - 553
Yield (t/ha)

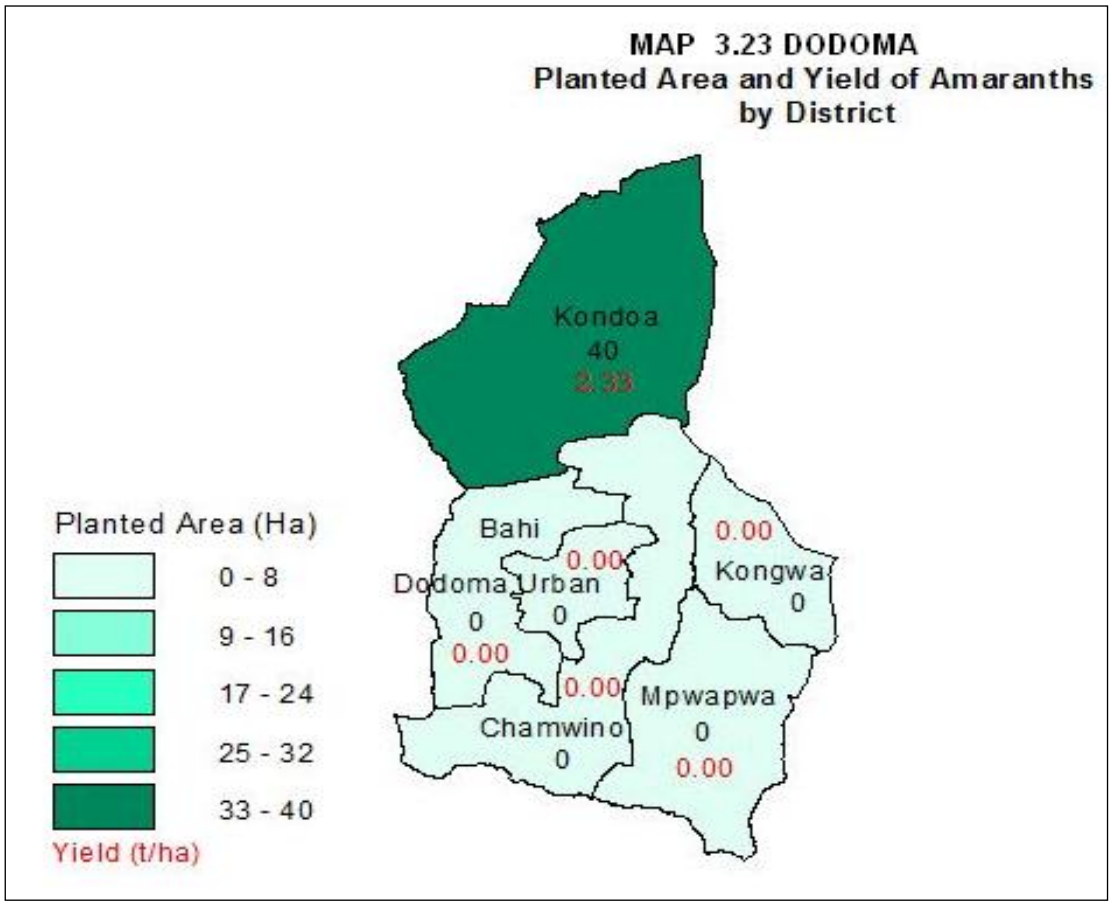

MAP 3.20 DODOMA
Area Planted per Tomatoes Growing Household by District
Kondoa
0.77
Bahi
0.66
Dodoma Urban
0.81
Kongwa
Mpwapwa
0.00
Chamwino
0.00
Area Planted per Household
0 - 0.37
0.38 - 0.74
0.75 - 1.11
1.12 - 1.48
1.49 - 1.85

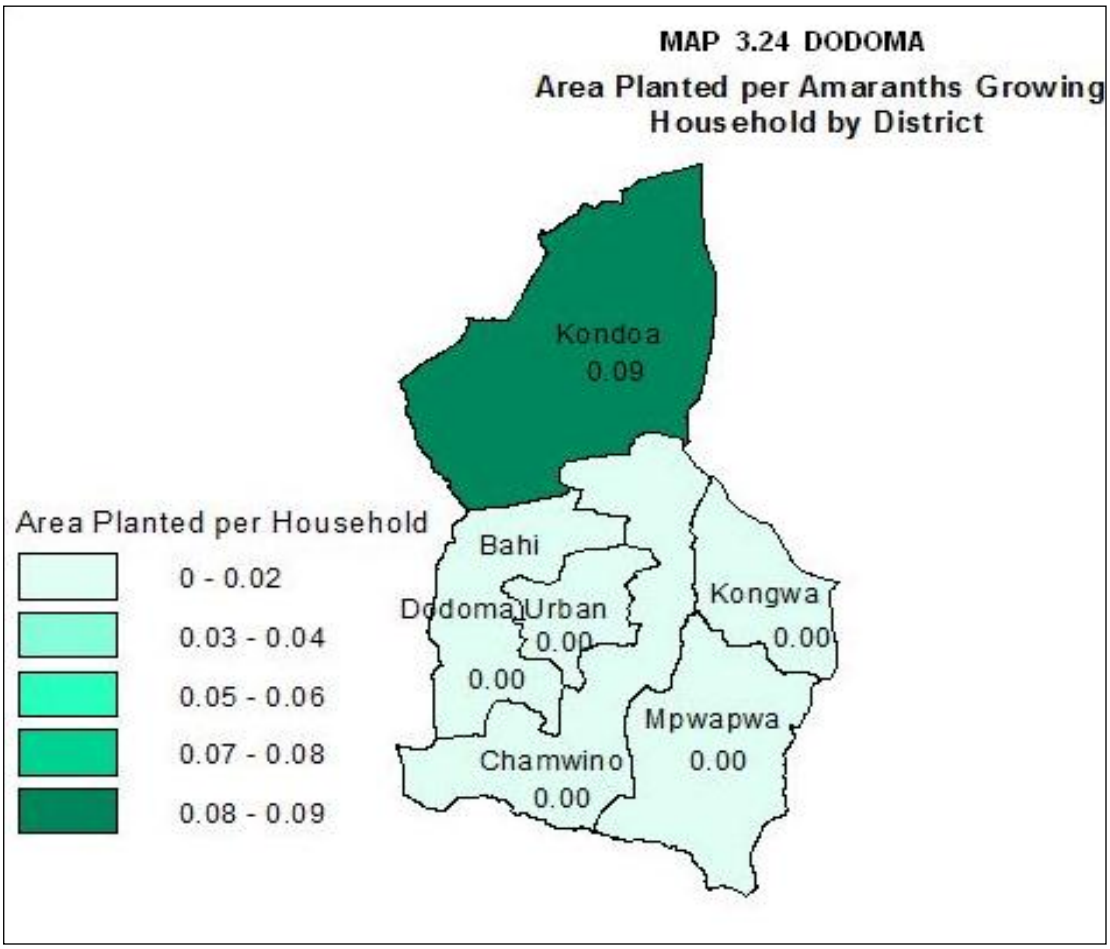
MAP 3.21 DODOMA
Planted Area and Yield of Onions



MAP 3.22 DODOMA
Area Planted per Onions Growing Household by District

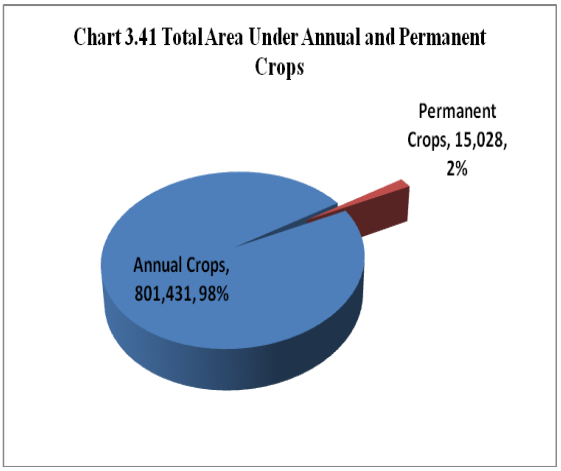



MAP 3.23 DODOMA
Planted Area and Yield of Amaranths by District
Kondoa
40
2.33
Bahi
0.00
0.00
Kongwa
0
Dodoma Urban
0
0
0.00
0.00
Mpwapwa
0
0.00
Chamwino
0
Planted Area (Ha)
0 - 8
9 - 16
17 - 24
25 - 32
33 - 40
Yield (t/ha)


MAP 3.24 DODOMA
Area Planted per Amaranths Growing Household by District
Kondoa
0.09
Bahi
Kongwa
0.00
Dodoma Urban
0.00
0.00
Mpwapwa
0.00
Chamwino
0.00
Area Planted per Household
0 - 0.02
0.03 - 0.04
0.05 - 0.06
0.07 - 0.08
0.08 - 0.09

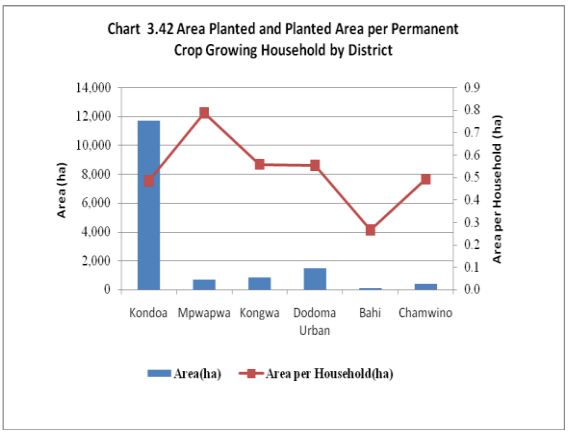
3.4 Permanent Crops

Permanent crops (sometimes referred as perennial crops) are crops that normally take over a year to mature and once mature can be harvested for a number of years. For most of the 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 results are presented for the most important permanent crops in terms of production, yield and area planted.



The planted area of smallholders with major permanent crops was 15,028 hectares (2% of the area planted with annual and permanent crops in the region), (Chart 3.41). However, the area planted with annual crops is not the actual physical land area as it includes the area planted more than once on the same land, whilst for the planted area for permanent crops is the same as the physical planted land area.

The most important permanent crop in Dodoma region was pigeon peas planted on 13,156 ha equivalent to 87.5 percent of the planted area with major permanent crops.,followed by sugarcane (874 ha; 5.8%), banana (500 ha; 3.3%) and mango (284 ha, 1.9%). Other permanent crops such as oranges and cashewnuts were grown in small quantities and in small areas (Table 3.5).



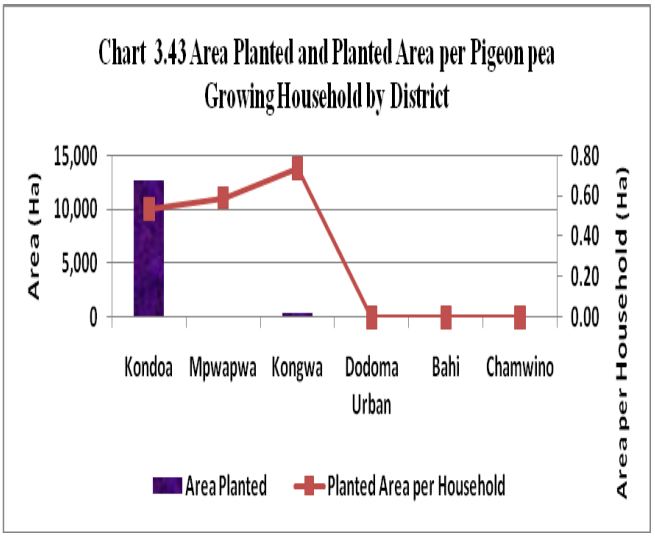
The area planted with permanent crops in Kondoa accounted for 73 percent of the total area under major perennials. Others were: 16 percent for Dodoma Urban, 4 percent for Mpwapwa, 4 percent for Kongwa and 2 percent for Chamwino Dodoma Urban district had the

largest area per household (0.91 ha) followed by Kongwa (0.56 ha), Mpwapwa (0.55 ha), and Kondoa (0.52 ha) and Chamwino (0.44 ha). Bahi district had the smallest area planted per household (0.18 ha) (Chart 3.42).

Table 3.5: Planted Area and Yield of Main Perennial Crops

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					
Cashew nut	232	55	46	37	37,087	0.81	813
Banana	2,044	500	402	3,513	3,512,719	8.73	8,732
Mango	2,023	284	226	896	896,230	3.97	3,971
Pigeon pea	24,329	13,156	13,156	5,994	5,993,713	0.46	456
Coconut	116	24	24	0	-	0.00	0
Orange	666	137	133	837	837,346	6.32	6,319
Sugar cane	3037	874	729	13167			
Total	**32,447**	**15,028**	**14,714**	**24,444**	**11,277,094**	**20**	**20,290**

3.4.1 Pigeon peas



The total production of pigeon peas by smallholders was 5,994 tons. In terms of area planted, pigeon peas were the most important permanent crop grown by smallholders in the region. It was grown by 24,329 agricultural households (6.7% of the total crop growing households in the region).The average area planted with pigeon peas per household was relatively small (0.5 ha) and the average yield obtained by smallholders was 0.5 tons/ha. The total area under pigeon peas was 13,156 hectares. Kondoa had the largest planted area of pigeon peas with 12,618 ha (96% of the total area planted with pigeon peas in the region), followed by Kongwa (370 ha, 3%) and Mpwapwa (168 ha, 1%). Pigeon peas were not grown in other districts or the area under the crop was very small, (Chart 3.43, Map 3.25 and Map 3.26). Other permanent crops such as banana and mango were grown in small areas (Map 3.27, 3.28,)

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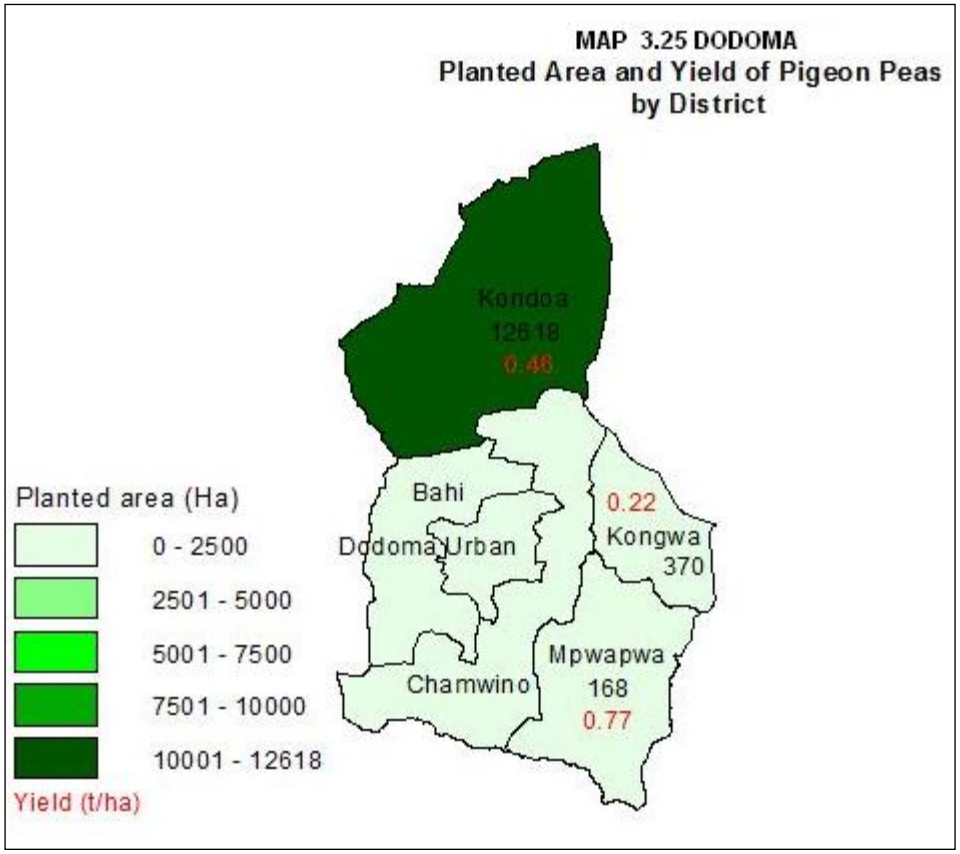
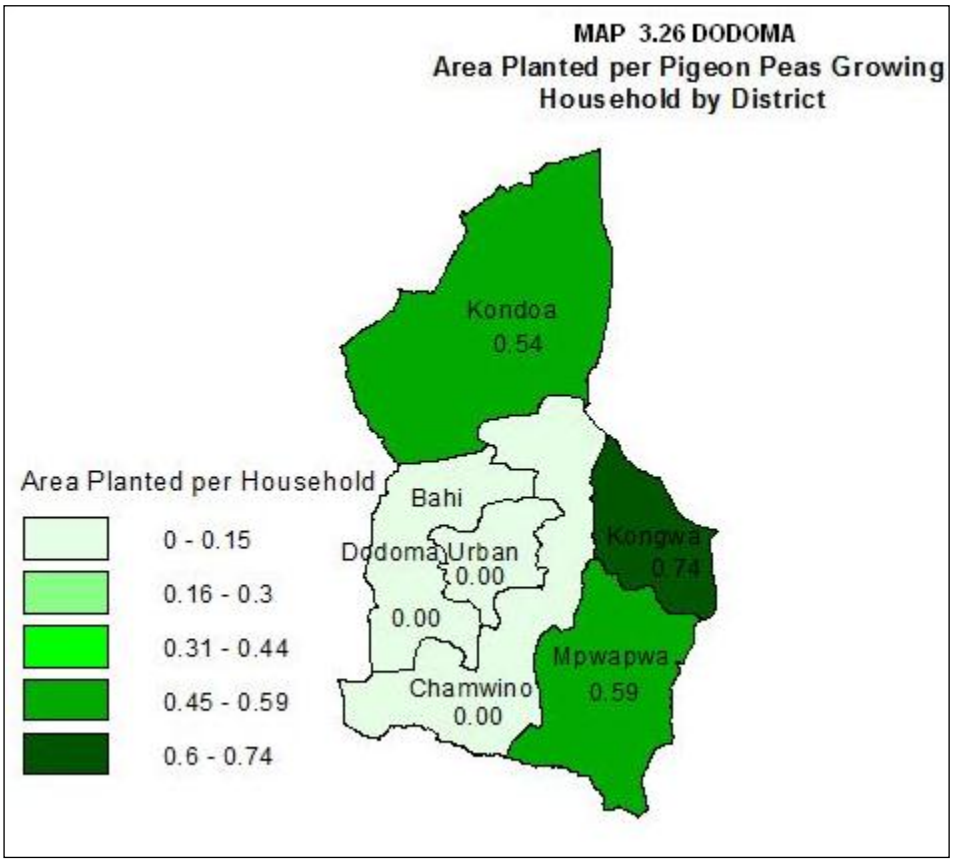
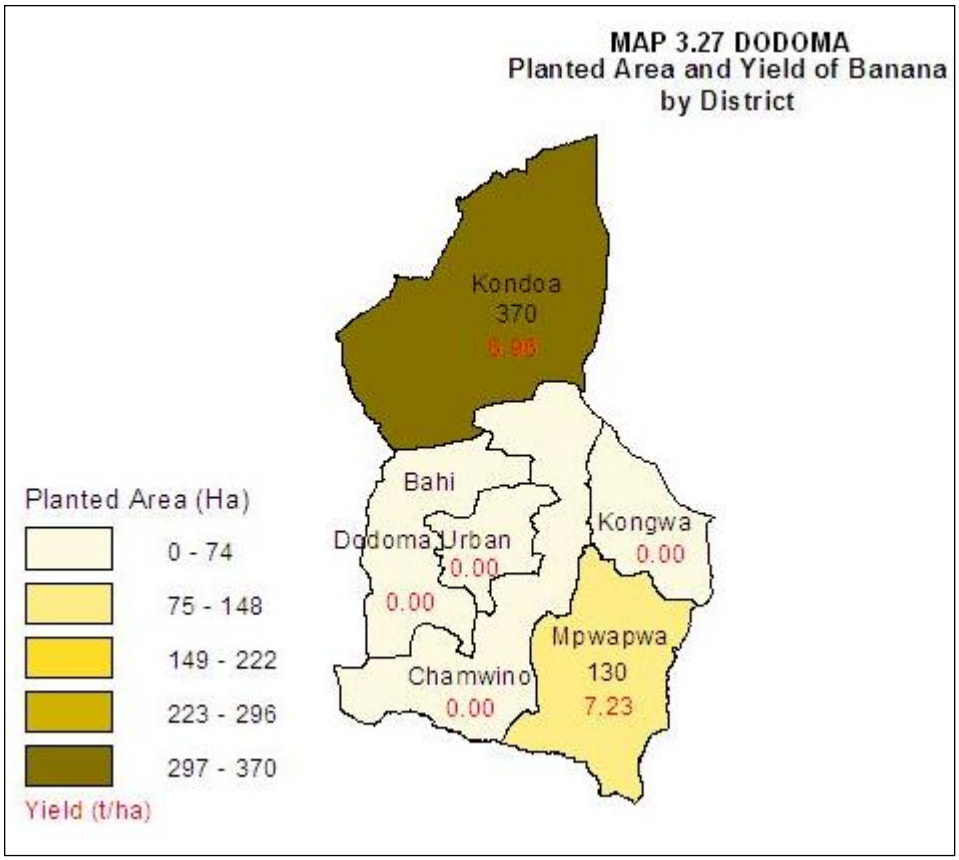
Comparison of pigeon peas production between 2002/03 and 2007/08 shows that the number of households growing pigeon pea has increased slightly (9.3%) while the area under pigeon peas has almost doubled (47% increase).Consequently, production increased by 17 percent and yield per hectare increased by 33 percent from 343 kg to 456 kg/ha. Nonetheless, the area planted per household declined by about 30 percent, (Table 3.6).

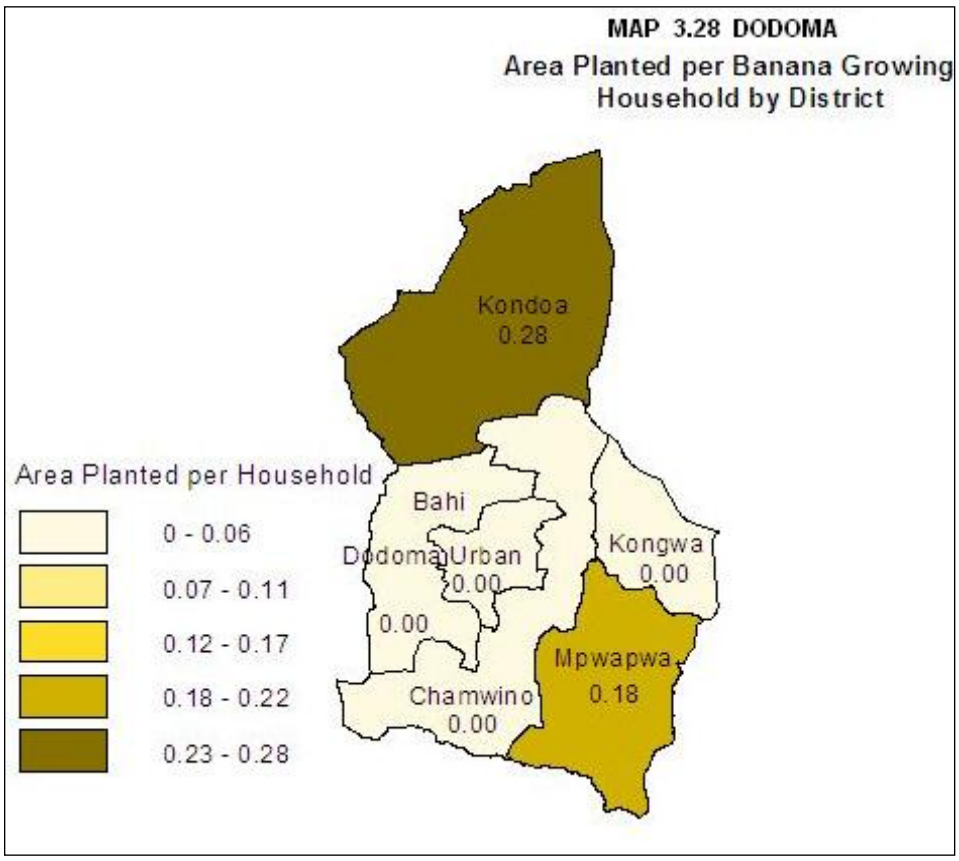
Table 3.6: Comparison of Pigeon pea Production Between 2002/03 and 2007/08 Agricultural Years

Attribute	Year		% Change
	2003	2008	
Number of household	24,329	26,588	9.3
Area under pigeon peas (Ha)	13,156	19,678	47
Yield (Tons)	5,140	5,994	17
Yield per Ha (kg)	343	456	33
Planted area HH	0.7	0.5	-28


MAP 3.25 DODOMA
Planted Area and Yield of Pigeon Peas by District
Kondoa
12618
0.46
Bahi
Dodoma Urban
0.22
Kongwa
370
Chamwino
Mpwapwa
168
0.77
Planted area (Ha)
0 - 2500
2501 - 5000
5001 - 7500
7501 - 10000
10001 - 12618
Yield (t/ha)

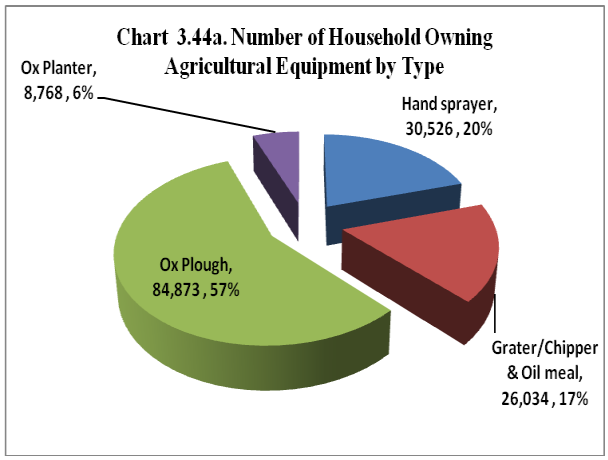

MAP 3.26 DODOMA
Area Planted per Pigeon Peas Growing Household by District
Kondoa
0.54
Bahi
0.00
Dodoma Urban
0.00
Kongwa
0.74
Chamwino
0.00
Mpwapwa
0.59
Area Planted per Household
0 - 0.15
0.16 - 0.3
0.31 - 0.44
0.45 - 0.59
0.6 - 0.74


MAP 3.27 DODOMA
Planted Area and Yield of Banana
by District
Kondoa
370
6.96
Bahi
Dodoma Urban
0.00
0.00
Kongwa
0.00
Mpwapwa
130
7.23
Chamwino
0.00
Planted Area (Ha)
0 - 74
75 - 148
149 - 222
223 - 296
297 - 370
Yield (t/ha)

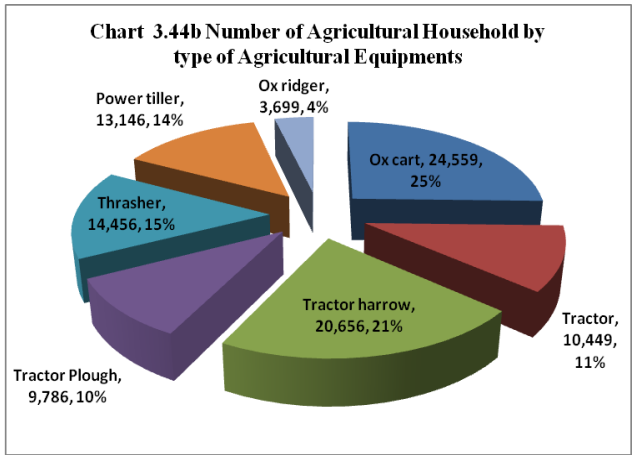

MAP 3.28 DODOMA
Area Planted per Banana Growing
Household by District
Kondoa
0.28
Bahi
Dodoma Urban
0.00
0.00
Kongwa
0.00
Mpwapwa
0.18
Chamwino
0.00
Area Planted per Household
0 - 0.06
0.07 - 0.11
0.12 - 0.17
0.18 - 0.22
0.23 - 0.28

3.5 Implement Use

Agricultural implements are a necessity for an efficient production. Most of the households owned hand hoes (47%) and swords (44%) as the basic agricultural tools. For other agricultural equipments/machinery, 6.8 percent of the households use ox-plough, 0.4 percent ox-planter, 0.3 percent grater/chipper or oil mill and 1.9 percent used hand sprayer (The estimates were based on 748,800 of households owning these equipments) Other agricultural equipments include; tractors and their implements, ox carts and power tillers. Out of 96,750 households, 11 percent owned tractors, 21percent owned tractor harrow, 10 percent tractor plough, 14 percent power tillers, 15 percent threshers, 25 percent ox carts and 4 percent ox-ridger, (Chart 3.44a and 3.44b). However, percent ownership of these equipments within districts was very small.

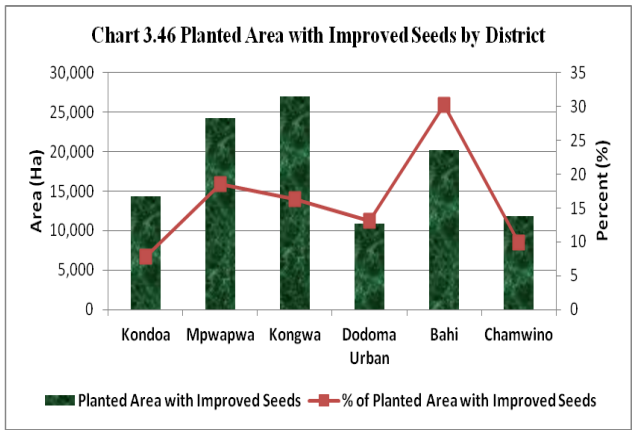


Use of oxen as draught animal was dominant over donkeys in all districts and Dodoma Urban had higher percentage use of oxen (91%). This was followed by Kongwa (89%), Chamwino (81%) and Bahi (76%). Lowest use of draught oxen was in Kondoa (67%) and Mpwapwa (62%). However, Kondoa and Mpwapwa had highest use of donkeys as draught animals than in other districts. Chart 3.45 shows the percentage use of draught animals by district.



3.5.1 Improved Seeds Use

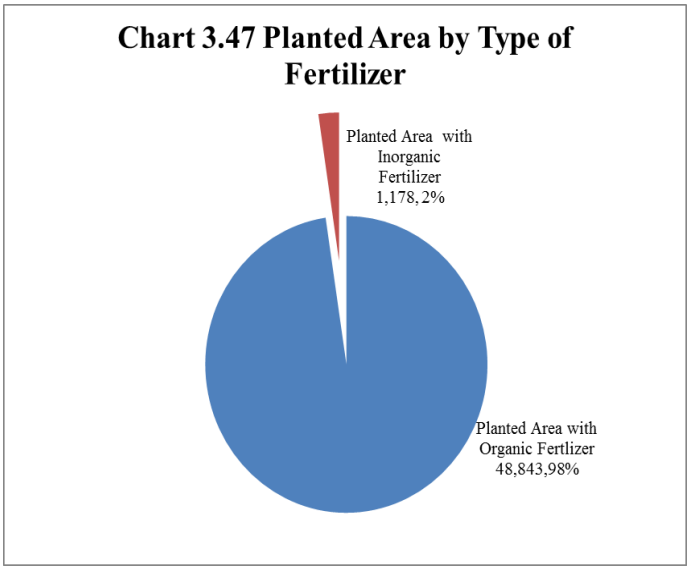
The planted area using improved seeds was 108,323 hectares which represents 14 percent of the total area planted with annual crops and vegetablesPercentage use of improved seeds increase from 13 percent in 2002/03 to 14 percent



in 2007/08. Kongwa district had the largest area planted with improved seeds (27,007 ha) followed by Mpwapwa (24,202 ha), Bahi (20,191 ha), Kondoa (14,283 ha), Chamwino (11,774 ha) and Dodoma Urban (10,867 ha). However, percentage of area planted with improved seeds within the district was highest in Bahi (30%). followed by Mpwapwa (19%), Kongwa (16%), Dodoma Urban (13%), Chamwino (10%) while Kondoa was the least with only 8 percent of the area planted with improved seeds, (Chart 3.46)

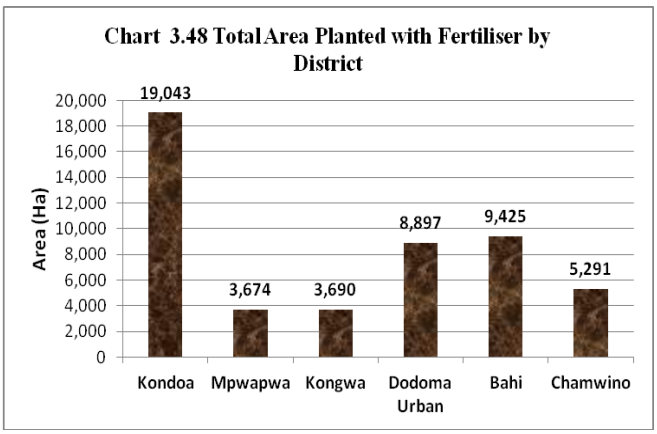
3.5.2 Fertilizer Use

The use of fertilizers on annual crops in the region was relatively low compared to other regions with a planted area of 50,021 hectares (6% of the total planted area in the region). Of the total planted area with fertilizer application, organic fertilizers were applied to 48,843 hectares or 98% percent of the area which used fertilizers, whilst the area under inorganic fertilizer was 1,179 hectares (2%), (Chart 3.47).



Kondoa district had the largest proportion of the planted area using fertilizers (19,044 ha, 38% of the agricultural land using fertilizers in the region. followed by Bahi (9,425 ha, 19%), Dodoma Urban (8,897 ha, 18%) and Chamwino (5,291, 11%). Mpwapwa and Kongwa had the smallest area applied with fertilizers in the region each accounting for 7 percent of the total planted area with fertilizer in the region, (Chart 3.48; Map 3.29).

3.5.3 Pesticide and Herbicides Use



Pesticides are chemicals used for controlling insect pests, diseases, while herbicides are used to control weeds. About 47% of the households which used agrochemicals use fungicides, while a moderate proportion use herbicides (33%) and insecticides were the least used (20%). Fungicides were applied on 8,556 hectares, while herbicides and insecticides were applied to 5,893 and 3,657 hectares respectively, (Table 3.8; Chart 3.49).

Fungicide, was the most pesticide used in the region In terms of total area, the leading districts were Mpwapwa (3,314 ha), followed by Kondoa (2,455 ha), and Kongwa (2,238 ha). Dodoma Urban, Chawino and Bahi had very little area applied with fungicide. As for insecticides, Kondoa and Kongwa districts had the largest planted areas, about 1,000 hectare whilst application of insecticides in the remaining districts was rather small. The largest planted area applied with herbicides was in Kongwa (3,043 ha) followed by Mpwapwa district (2,731 ha). Very little herbicide was used in Chamwino, Dodoma Urban and Bahi districts, (Table 3.7).

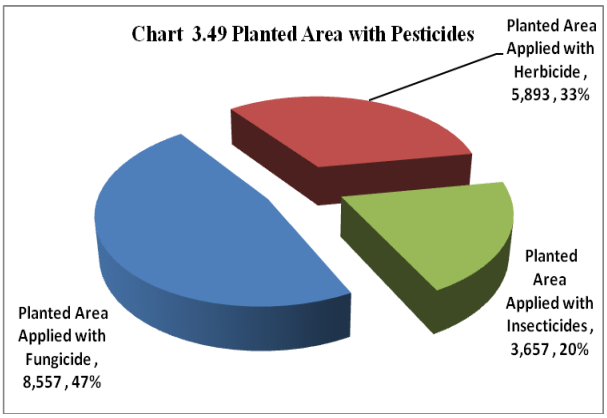
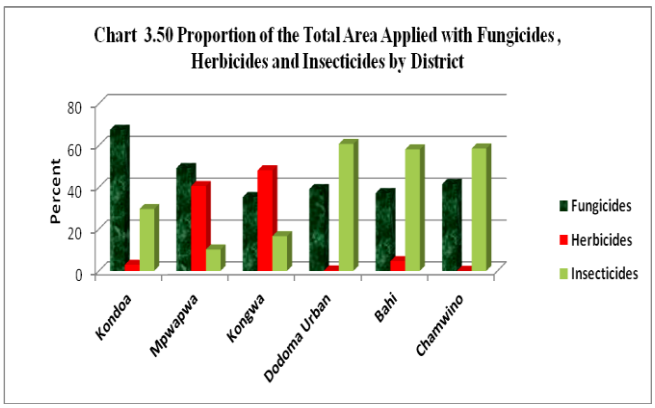


Table 3.7: Planted Area with Fungicide, Herbicides and Insecticides

District	Planted Area Applied with Fungicide	Planted Area Applied with Herbicide	Planted Area Applied with Insecticides	Total Planted Area
Kondoa	2,455	106	1,078	3,639
Mpwapwa	3,314	2,731	692	6,736
Kongwa	2,238	3,043	1,052	6,333
Dodoma Urban	323	1	501	825
Bahi	94	12	147	252
Chamwino	133	0	187	320
Total	**8,557**	**5,893**	**3,657**	**18,106**

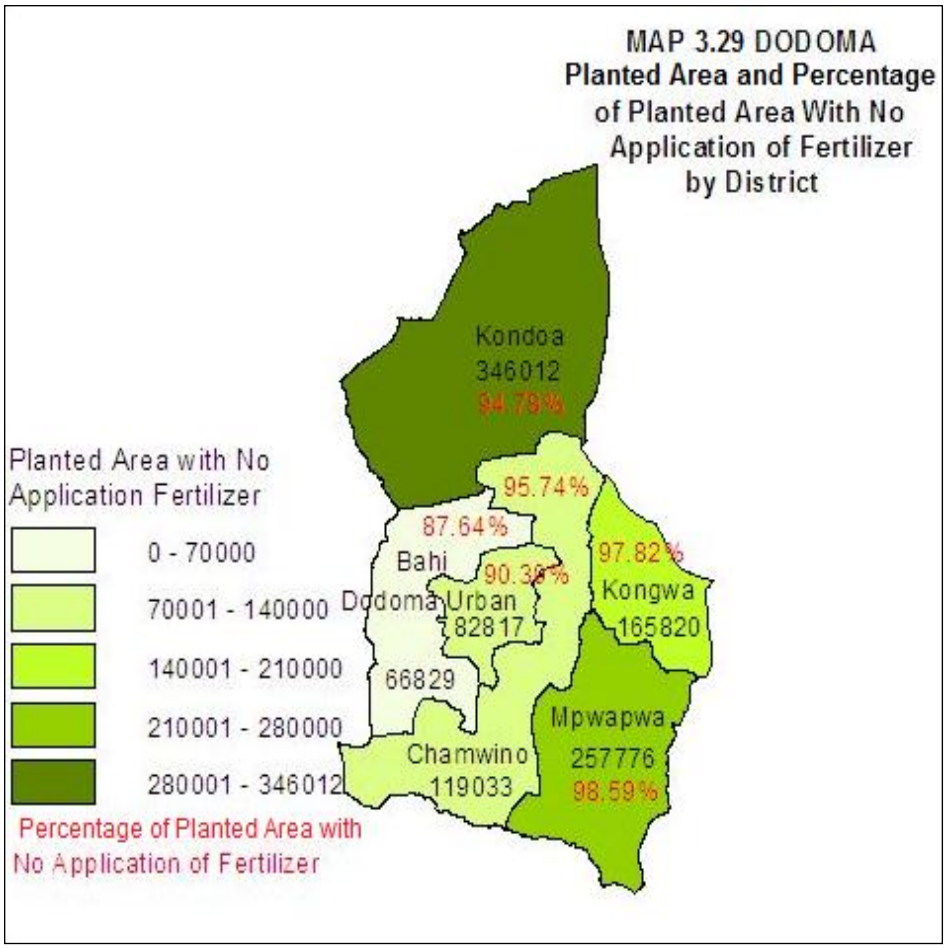
District wise, Kondoa had the highest proportion (67%), of the area applied with fungicides followed by Mpwapwa (49%), Chamwino (41%), Dodoma Urban (39%), Bahi (37%) and Kongwa (35%). Similarly, for herbicides. The largest proportion was in Kongwa (48%). followed by Mpwapwa (41%). Use of herbicides was low in Bahi and Kondoa, districts whereby only 5 and 3 percent of the planted area were applied with herbicides respectively. In general, insecticide use was moderately used in all the districts. The proportionof the area applied with insecticide was the largest in Dodoma Urban (61%), followed by Chamwino (59%), Bahi (58%), Kondoa (30%), Kongwa (17%) while Mpwapwa hadthe least proportion of only 10 percent of the planted area applied with insecticides, (Chart 3.50).



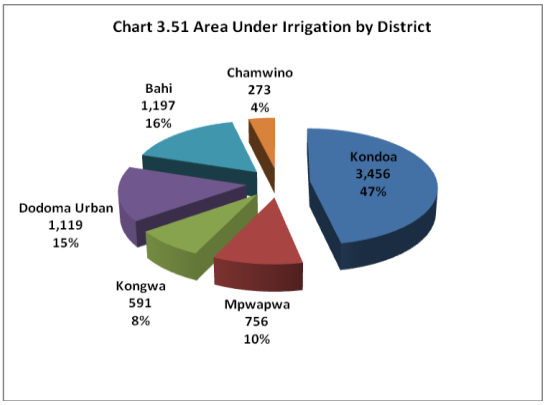
The total area that has been applied with agrochemicals has declined from 40,678 ha in 2002/03 to 18,106 ha in 2007/08. The reduction could be attributed to the decline in insecticide use from 24,511 ha in 2003 to only 3,657 ha in 2008 (Table 3.8).

Table 3.8: Comparison of Agrochemical Use between 2002/03 and 2007/08

Year	**2002/03**		**2007/08**	
Pesticide	**Area**	**%**	**Area**	**%**
Herbicides	6,915	17	5,893	33
Fungicides	9,252	23	8,557	47
Insecticides	24,511	60	3,657	20
Total	**40,678**		**18,106**	

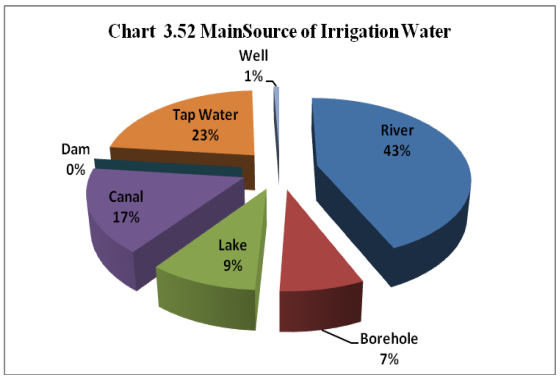

MAP 3.29 DODOMA
Planted Area and Percentage of Planted Area With No Application of Fertilizer by District
Kondoa
346012
94.79%
95.74%
87.64%
Bahi
97.82%
90.38%
Kongwa
165820
Dodoma Urban
82817
66829
Mpwapwa
257776
98.59%
Chamwino
119033
Planted Area with No Application Fertilizer
0 - 70000
70001 - 140000
140001 - 210000
210001 - 280000
280001 - 346012
Percentage of Planted Area with No Application of Fertilizer

3.6 Irrigation

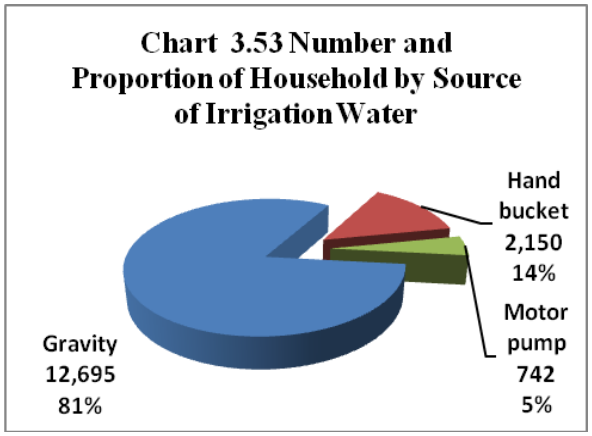


Water is the limiting factor to crop production in the majority of areas in Tanzania and without water most of other agricultural practices applied to crops do not result into significant increase in yields. This section deals with the area under irrigation and the means by which water was extracted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

3.6.1 Area Planted with Annual Crops and Under Irrigation



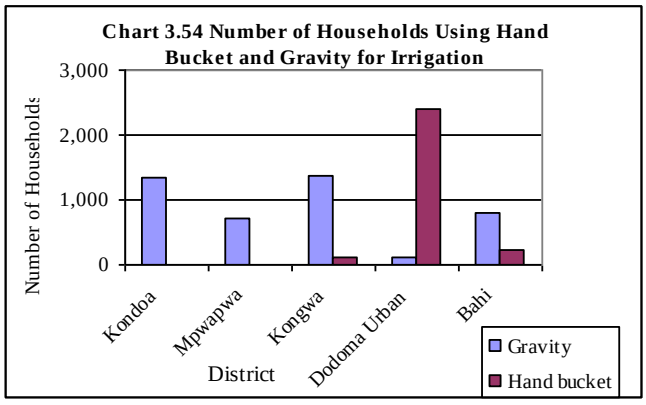
In Dodoma region, the area of annual crops under irrigation was 7,392 hectares representing one percent of the total planted area in the region. The district with the largest planted area under irrigation with annual crops was Kondoa with 3,456 ha (47% of the total planted area with irrigation in the region).followed by Bahi with 1,197 ha (16%), Dodoma Urban (1,119 ha; 15%), Mpwapwa (756 ha; 10%) Kongwa (591 ha; 8%) and Chamwino (273 ha 4%) (Chart 3.51; Map 3.30).



3.6.2 Sources of Water Used for Irrigation

The main source of water used for irrigation was from rivers (43% of all households with irrigation). This was followed by canals (17%) and tape water 23 %), (Chart 3.52).

3.6.3 Methods of Obtaining Water for Irrigation



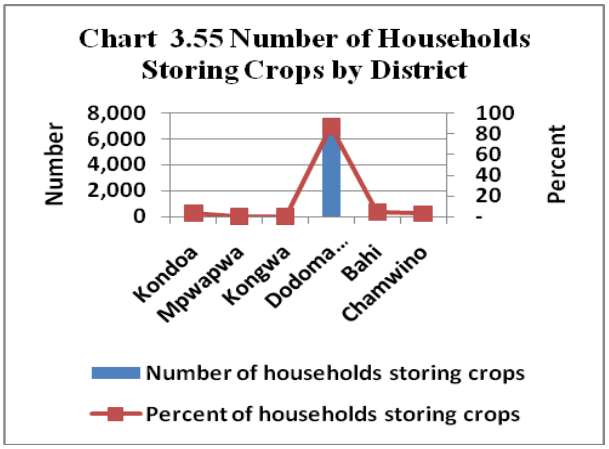
Gravity was the most common means of getting water for irrigation with 81 percent of the total households using this method in the region. This was followed by hand bucket (14%) and motor

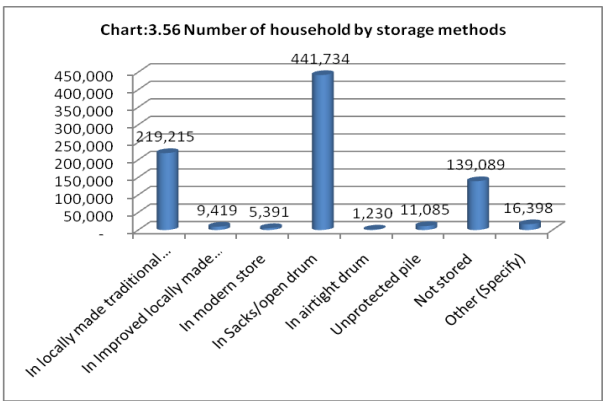
pump (5%), (Chart 3.53). Hand bucket was the commonest method of irrigation in Dodoma Urban while use of gravity was highest in Kongwa, followed by Kondoa, Bahi and Mpwapwa, (Chart 3.54)

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, to sell at higher prices or as seed for planting in the following season. The results show that there were 827,164 crop growing households that stored various agricultural products in the region. Dodoma Urban had the highest proportion of household storing crops. Other districts stored very little of the crop produced, (Chart 3.55).

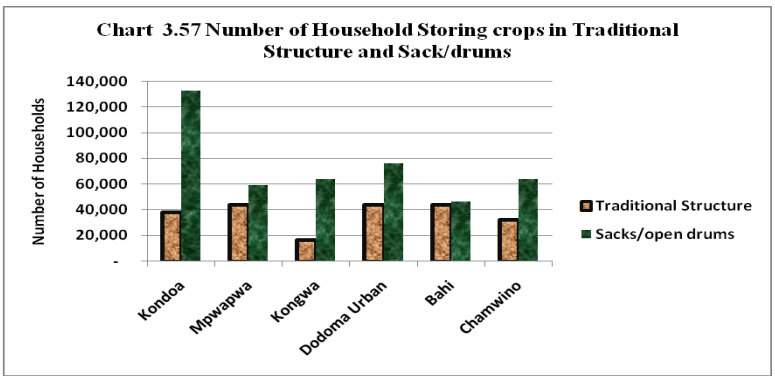




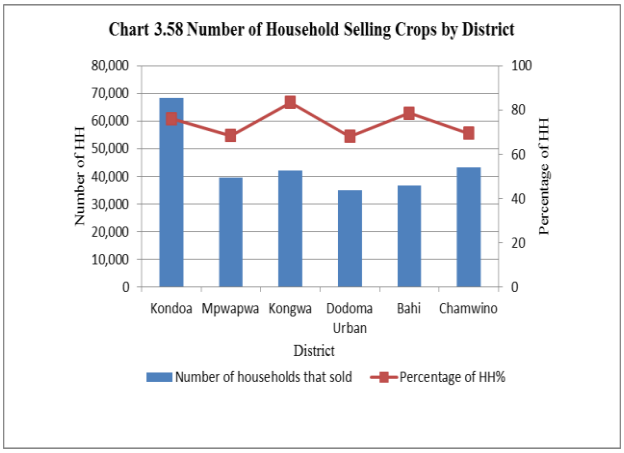
Methods of Storage

Most of the agricultural households stored their crops in sacks and/or open drums (441,734 hh) followed by locally made traditional structures (219,215 households). Other storage methods were used in limited extent whilst, 139,089 households did not use any method to store crops, (Chart 3.56).

The highest percentage of the households using locally made traditional structures was in Bahi, Dodoma Urban, Mpwapwa and Kondoa. Uses of such structures were the lowest in Kongwa district. Sacks or open drums were the most common method of crop storage and Kondoa district had more households using this method followed by Dodoma urban Chamwino and Kongwa districts. Uses of sacks/drums were moderately low in, and Mpwapwa and lowest in Bahi district, (Chart 3.57).

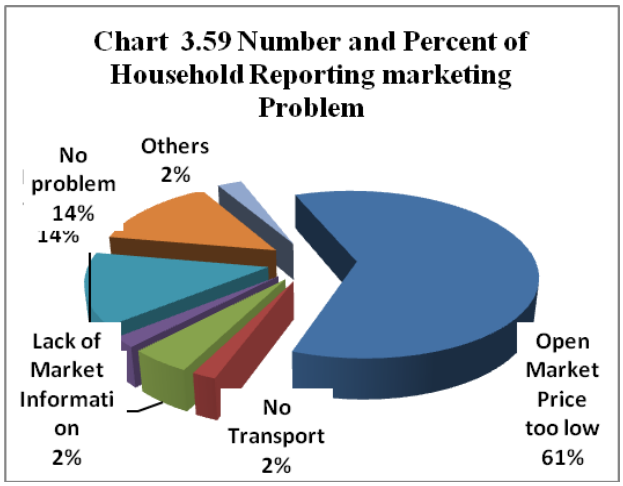


3.7.2 Crop Marketing



The number of households that reported selling crops was 264,920 which represent 74 percent of the total number of crop growing households .District wise the percentage of crop growing households selling crops was the highest in Kongwa (83.4%), followed by Bahi (78.6%), Kondoa (76.1%), Chamwino (69.8%), Dodoma Urban (68.1%) and Mpwapwa (68.4%), (Chart 3.58; Map 3.32).

Main Marketing Problems



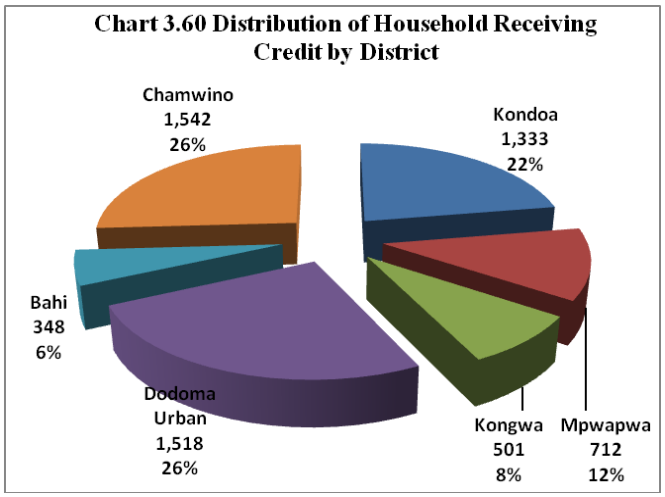
Low price for the agricultural produce was the main marketing problem as reported by 61 percent of the crop growing households in the region. Other problems in terms of their magnitudes were longer distances to the markets (14%), high transport (5%), no transport costs (2%) and lack of market information (2%). Other marketing problems wre minor and represented less than 3 percent cumulatively. These include: No buyers (0.9%), Farmers' associations (0.2%), Cooperative problems (0.5%), Trade union problems (0.3%) and Government regulations (0.6%), (Chart 3.59).

The severity of the problems differed depending on the location of a particular district. For example, transport costs were reported by 1,388 households in Chamwino versus 3,332 households in Kondoa. The number reporting low market price in Kondoa (92,841) was almost double that reporting the same in Dodoma Urban (48,194).

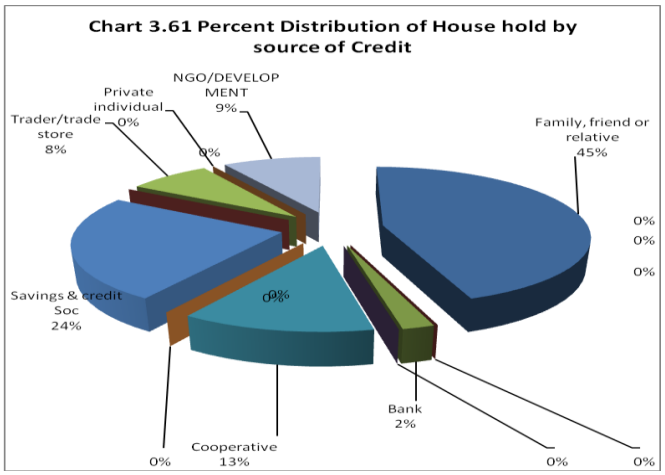
3.8 Access to Crop Production Services

3.8.1 Source and Access to Agricultural Credit

The census results show that in Dodoma region, very few agricultural households (5,953; 1.7% of all crop growing households) accessed credit. This was much higher compared to 0.5% in 2002/03. The highest number of households that received credits were in Dodoma Urban (1,518 hh; 25% of the regional total) followed by Chamwino (1,542 hh; 26%), Kondoa (1,333 hh; 22%), Mpwapwa (712 hh; 12%), Kongwa (501 hh; 8%) and Bahi (348 hh; 6%), (Chart 3.60).



The major agricultural credit providers in the region were family, friends or relatives (2,648 households; 45%), followed by saving and Credit Societies (1,443 households; 24 %), Cooperatives 13% and the rest of the agencies provided credit to18 percent of the farmers (Chart 3.61).

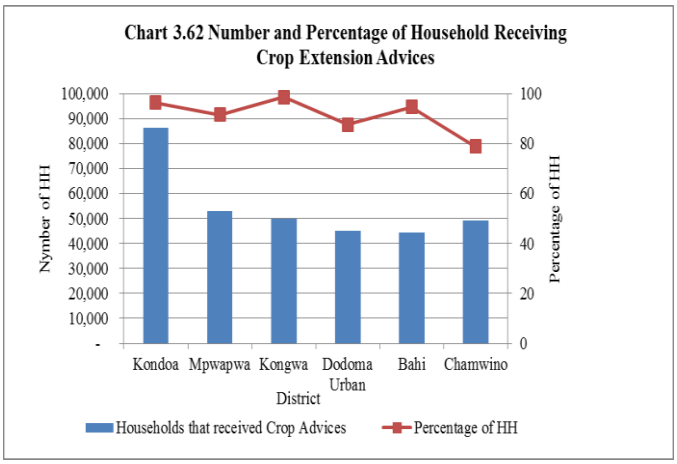


Compared to 2002/03 data, the number of households receiving credits from banks has declined from 27 percent to 2 percent in 2007/08. However, there was a rise in the number of households accessing credits from SACCOS from 7 percent in 2002/03 to 24 percent in 2007/08, while those receiving credits from religious organizations or development projects declined to zero. Only Kongwa district accessed credits from banks, whilst SACCOS were only active in Chamwino, Kondoa and Mpwapwa districts. Dodoma and Kongwa had a big proportion of their credit from Cooperatives in addition to sourcing from family, friends or relatives. Private individuals were less important in many districts except Dodoma urban and Chamwino districts, (Table 3.9).

Table 3.9: Percentage of Agricultural Household Receiving Credit by Type and District

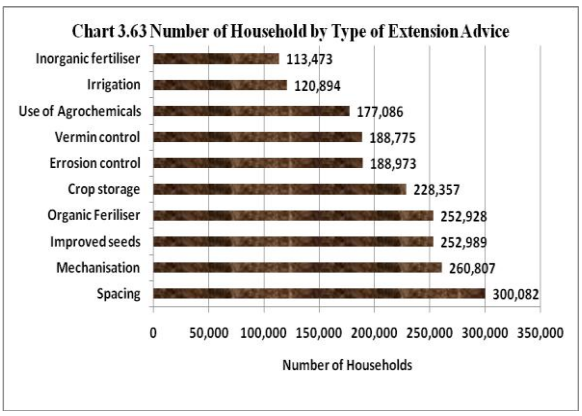
District	Family, friend, relative	Bank	Savings & credit Saccos	Cooperative	Private individual
Kondoa	33.3	0.0	33.3	33.3	0.0
Mpwapwa	80.0	0.0	20.0	0.0	0.0
Kongwa	25.0	25.0	0.0	50.0	0.0
Dodoma Urban	33.3	0.0	0.0	41.7	25.0
Bahi	66.7	0.0	0.0	33.3	0.0
Chamwino	50.0	0.0	50.0	0.0	10.0

3.8.2 Crop Extension



The number of Agricultural households that received crop extension was 327,446, accounting for 91 percent of the total crop growing households in the region. Some districts had more access to extension services than others. Expressed as percentage of agricultural households in each district, Kongwa ranked the highest in terms of percentage of households receiving extension advices (98%). followed by Kondoa (96%), Bahi (94%), Mpwapwa (92%0, Dodoma Urban (88%) and Chamwino (79%), (Chart 3.62, Map 3.31).

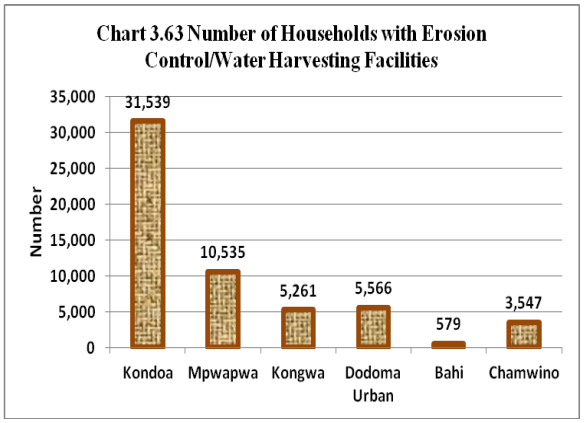
Type of Crop Extension Messages



Of the households which received extension messages the Government provided the largest proportion of the service (94.2%), followed by Radio/Newspaper and Television (21.4), NGOs (11.2%), largest scale farms (4.2%) and Cooperatives (0.8%). Spacing followed by mechanization, use of improved seeds, use of organic fertilizer and crop storage were the top most three extension advices provided to most of the households. Erosion control, vermin control, use of agrochemicals had moderate number of households, whilst fewer households received advice on irrigation and inorganic fertilizers use, (Chart 3.63).

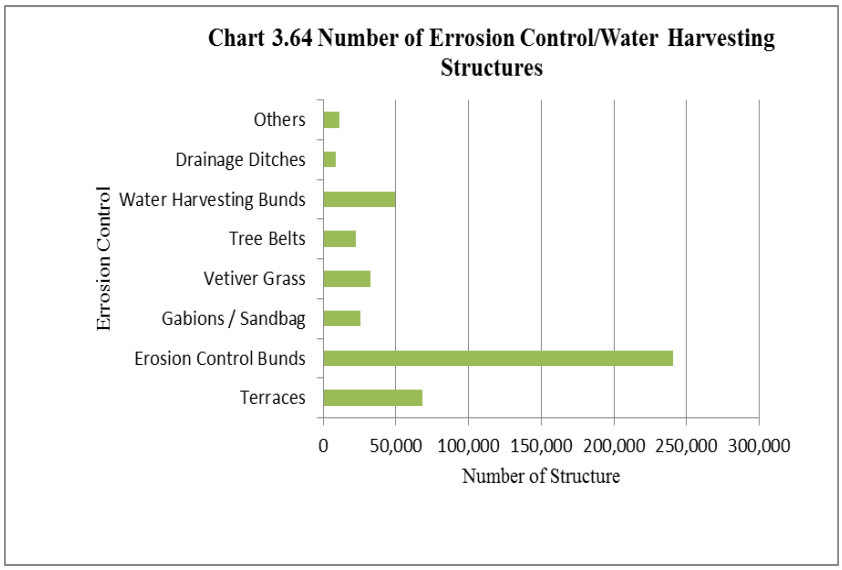
3.9 Erosion Control Facilities.

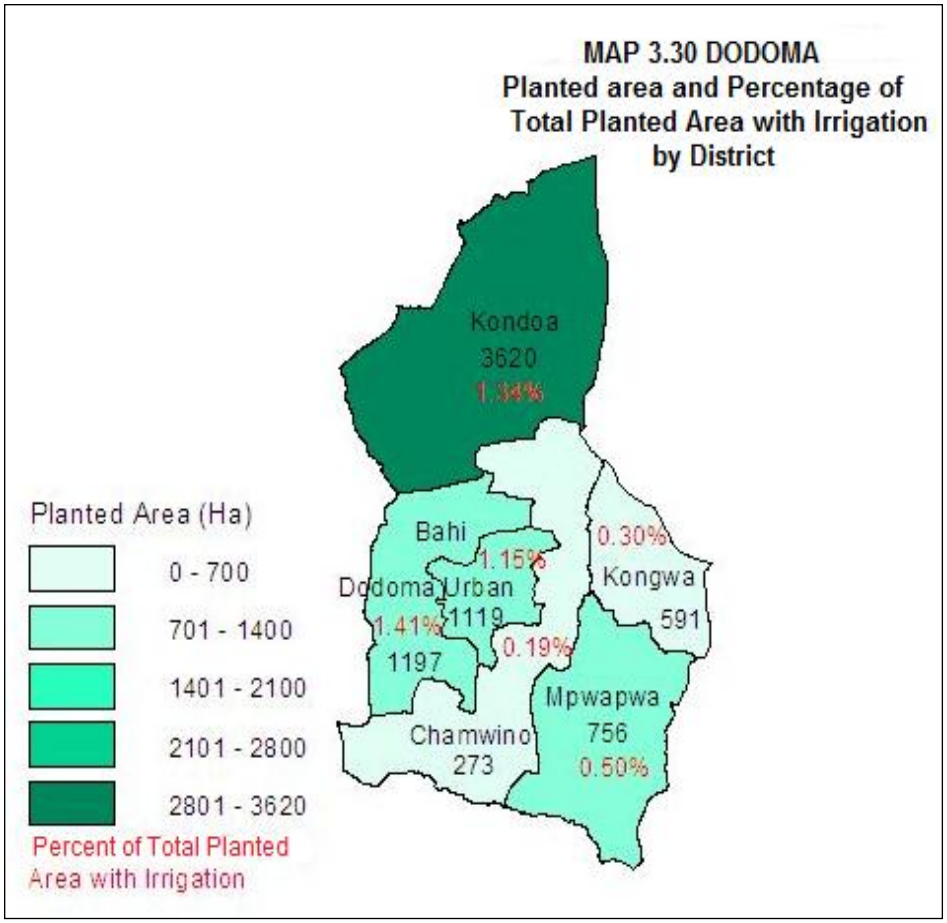
Erosion control and water harvesting facilities are grouped together as they normally have dual purposes of reducing erosion and increasing the amount of water available for crop production. The number of agricultural households that had soil erosion and water harvesting facilities on their farms was 57,028 which represent 16 percent of the total number of agricultural households in the region.

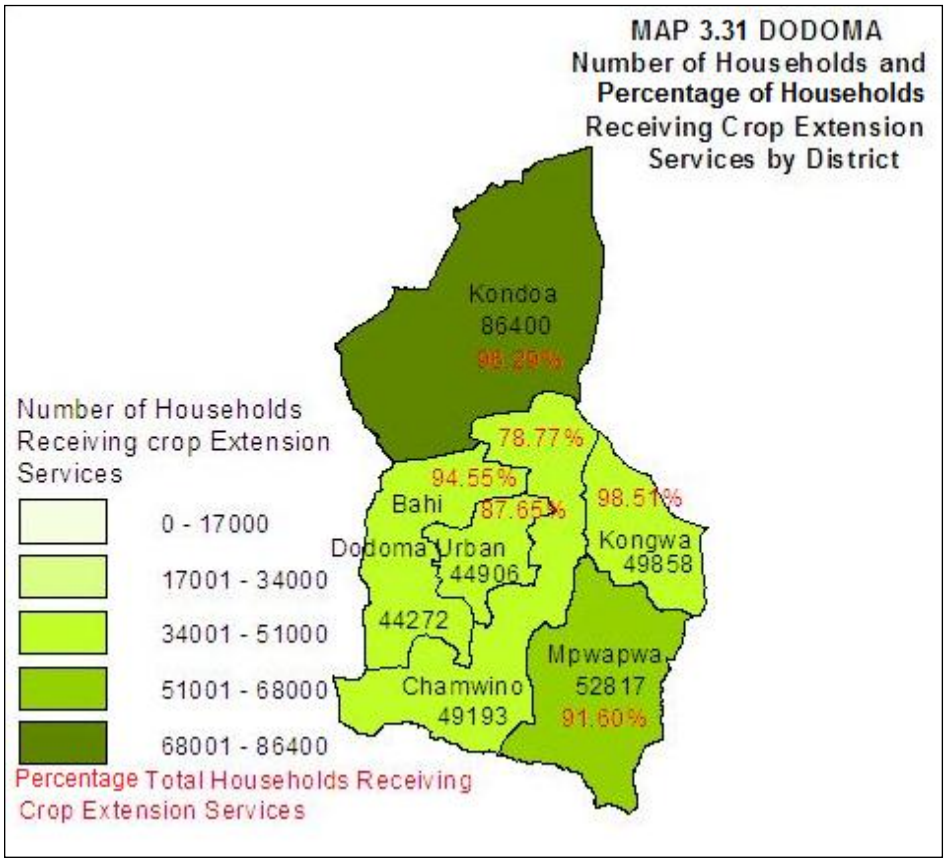


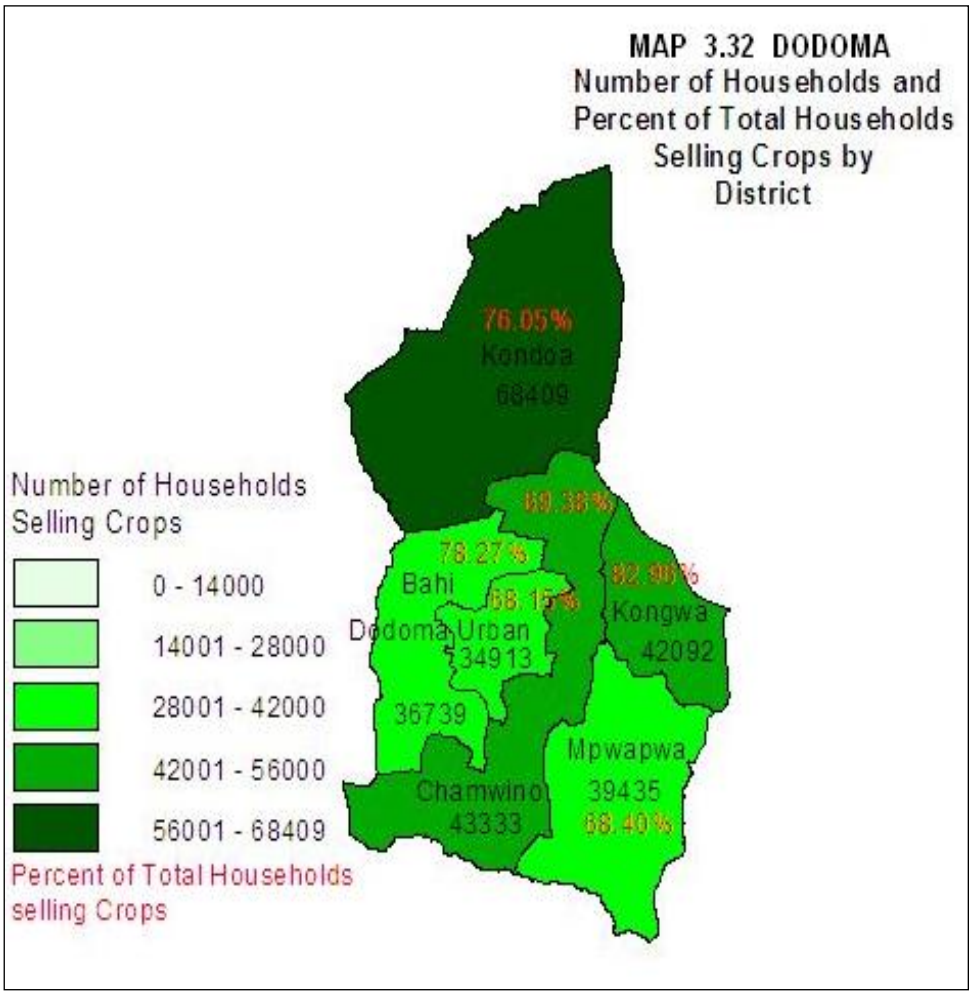
The largest number of households with erosion control and water harvesting facilities were in Kondoa district (31,539 households, 35% of the total households with erosion control and water harvesting facilities in the district), followed by Mpwapwa (10,535 households; 18%), Dodoma Urban (5,566 households; 11%), Kongwa (5,261 households; 10%), Chamwino (3,547 households; 6%) and Bahi (579 households; 1%), (Chart 3.63).

There were 459,071 erosion control/water harvesting structures in Dodoma out of 240,800 were erosion control bunds which equivalent to 52.1 percent of the total number of structures, followed by terraces (68117 structures; 15%), water harvesting bunds (49,415 structures; 11%), vertiver (32,803; 7%), gabions/sand bags (25,438 structures; 6%), tree belts (22,440; 5%) and drainage ditches (8,927 ditches; 2%), (Chart 3.65). Mpwapwa district had the largest number of erosion control/water harvesting facilities (197,031) and largest number of erosion control bunds and gabions followed by Kondoa with 169,468 structures, Dodoma Urban (39,340), Kongwa (27,435), and Chamwino (23,131 and Bahi (2,666). The number of terraces, erosion control bunds, vetivers and drainage ditches were the highest in Kondoa district, while tree belts were the most common in Dodoma Urban, (Table 3.11).




MAP 3.30 DODOMA
Planted area and Percentage of Total Planted Area with Irrigation by District
Kondoa
3620
1.34%
Bahi
1197
1.41%
1.15%
Dodoma Urban
1119
0.19%
Kongwa
591
0.30%
Mpwapwa
756
0.50%
Chamwino
273
Planted Area (Ha)
0 - 700
701 - 1400
1401 - 2100
2101 - 2800
2801 - 3620
Percent of Total Planted Area with Irrigation

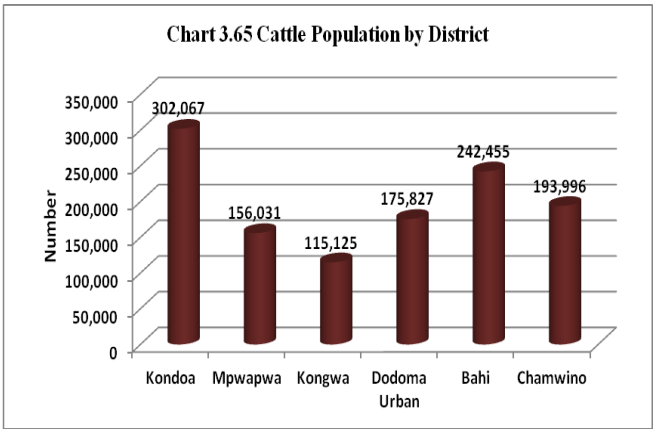

MAP 3.31 DODOMA
Number of Households and Percentage of Households Receiving Crop Extension Services by District
Kondoa
86400
98.25%
Bahi
44272
94.55%
87.65%
Dodoma Urban
44906
78.77%
Kongwa
49858
98.51%
Mpwapwa
52817
91.60%
Chamwino
49193
Number of Households Receiving crop Extension Services
0 - 17000
17001 - 34000
34001 - 51000
51001 - 68000
68001 - 86400
Percentage Total Households Receiving Crop Extension Services


MAP 3.32 DODOMA
Number of Households and Percent of Total Households Selling Crops by District
76.05%
Kondoa
68409
69.38%
78.27%
Bahi
68.15%
82.98%
Kongwa
42092
Dodoma Urban
34913
36739
Mpwapwa
39435
68.40%
Chamwino
43333
Number of Households Selling Crops
0 - 14000
14001 - 28000
28001 - 42000
42001 - 56000
56001 - 68409
Percent of Total Households selling Crops

3.10 LIVESTOCK RESULTS

Cattle were the dominant livestock type in the region followed by goats, sheep and pigs.The region ranked 8th in cattle population out of the 21 regions

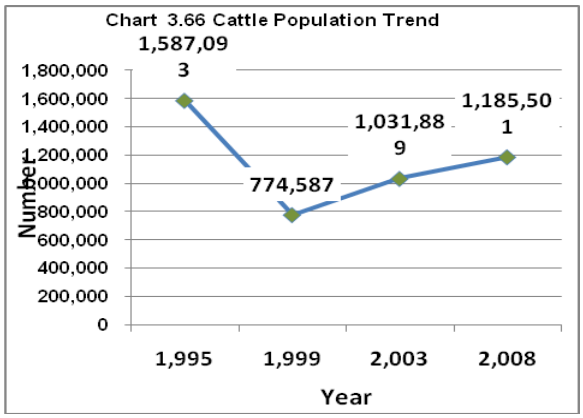
3.10.1 Cattle Population



The total number of cattle in the region was 1,185,501 or 5.6 percent of the total cattle population in Tanzania Mainland. The number of indigenous cattle was 1,166,715 (98.4% of the total number of cattle in the region), improved dairy cattle (3,473 cattle; 0.3%) and improved beef cattle (15,313 cattle; 1.3%). These cattle were kept by 76,145 agricultural households in the region. to the cattle production gives an average of 16 heads of cattle per cattle keeping household. The district with the largest number of cattle was Kondoa which had 302,067 cattle (25% of the total cattle in the region), followed by Bahi (242,455 cattle; 20%), Chamwino (193,996 cattle; 16%), Dodoma Urban (175,827 cattle, 15%), Mpwapwa (156,031 cattle; 13%) and the least was Kongwa district with 115,125 cattle (10%), (Chart 3.65 and Map 3.41). Dodoma Urban had the largest number of improved beef cattle 14,041 91.7 percent of thetotal beef cattle, while 4 percent were kept in Mpwapwa and the remaining 2 percent in Kondoa district, (Table 3.12, Map 3.33).

Table 3.10: Number of Cattle by Type

District	Number of Cattle by Type		
	Indigenous	Improved Beef	Improved Diary
Kondoa	300,734	444	888
Mpwapwa	154,465	712	854
Kongwa	114,624	0	501
Dodoma Urban	161,407	14,041	379
Bahi	241,644	116	695
Chamwino	193,841	0	154



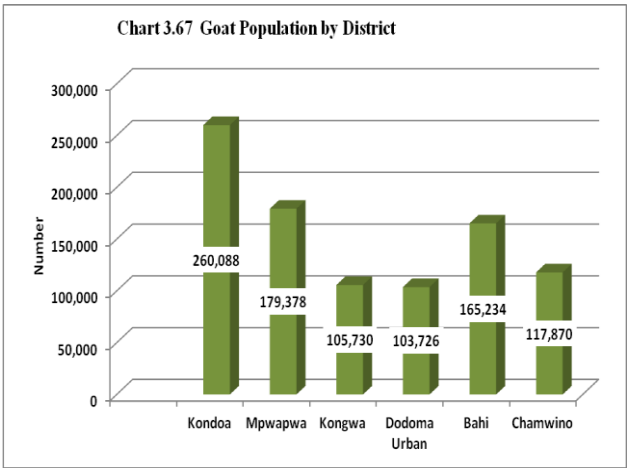
Cattle Population Trend

Cattle population in Dodoma region decreased during the period of five years from 1,587,093 in 1995 to 774,587 cattle in 1999. From 1999 there was a steady increase of cattle to 1,185,501 in 2008, representing an annual growth rate of 4.4 percent. The population of dairy cattle had increased from 2,944 in 2003 to 3,473 in 2008 representing an annual growth rate of 3.4 percent,

while that of beef increased from 5,344 to 15,313 equivalent of an annual growth rate of 23.4 percent. (Chart 3.66)

3.10.2 Goat Production

Goat rearing was the second most important livestock keeping activity in Dodoma region. In terms of total number of goats on the Mainland, Dodoma region ranked the 6th out of the 21 regions and kept 6 percent of all the goats in the Mainland.

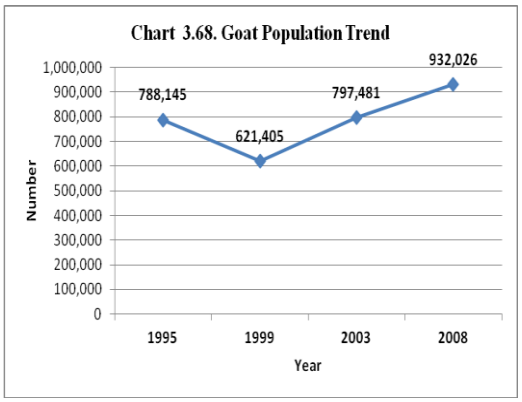


3.10.2.1 Goat Population

The number of goat-rearing-households in the region was 71,694 (20% of all agricultural households in the region) with a total of 915,356 goats giving an average of 13 heads of goat per goat-rearing-household. Kondoa had the largest number of goats (260,088 goats; 28% of all goats in the region), followed by Mpwapwa (179,378 goats; 20%), Bahi (148,463 16%), Chamwino (117,970 goats; 13%), Kongwa (105,730 goats; 12%) and Dodoma Urban (103,726 goats; 11%), (Chart 3.67 and Map 3.34).

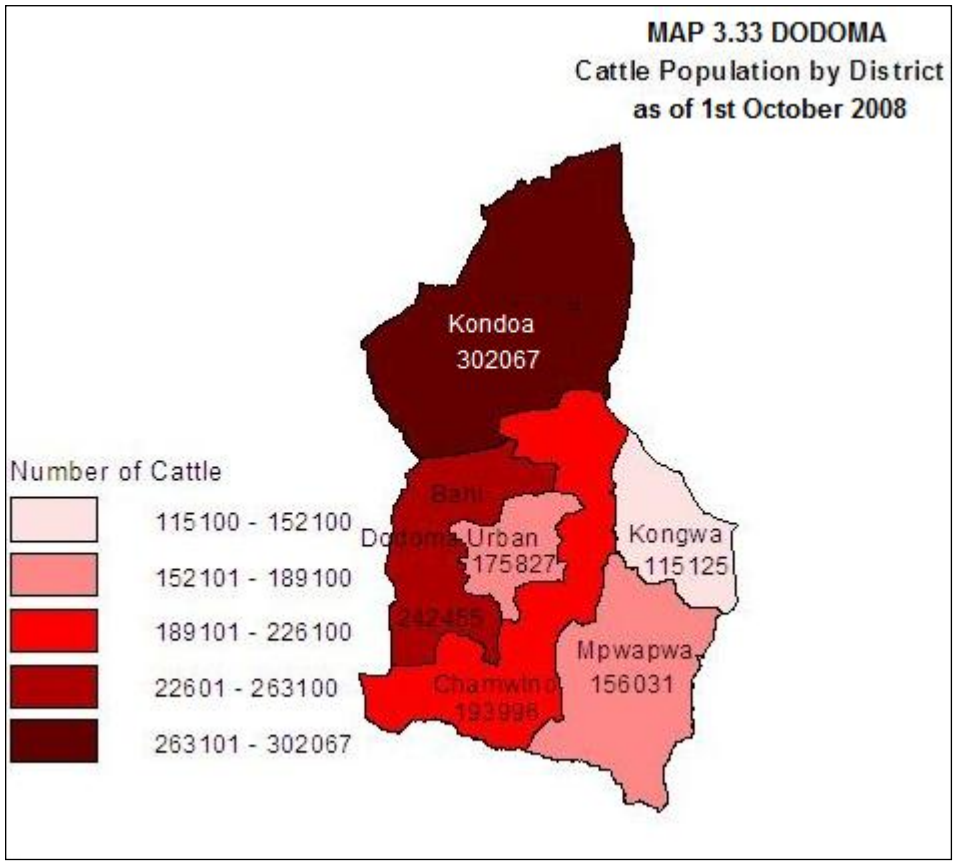
3.10.2.2 Goat Breeds

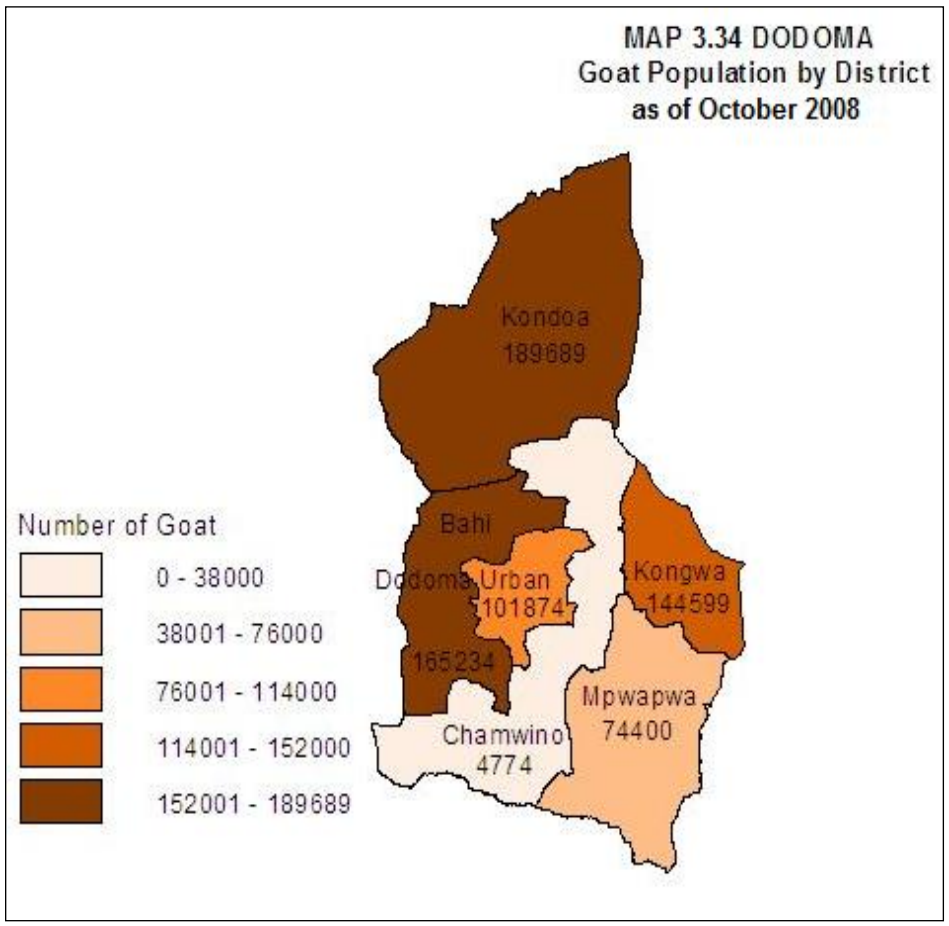
Goat husbandry in the region was dominated by the indigenous breed (906,466 goats) that constituted 99 percent of the total goats in the region. Indigenous goats were raised by 70,169 households. There were 729 households raising 3,343 improved dairy goats (0.4% of the goat population) and 796 households raising 5,546 (0.6 percent of the total goat population) improved meat goats.



3.10.2.3 Goat Population Trend

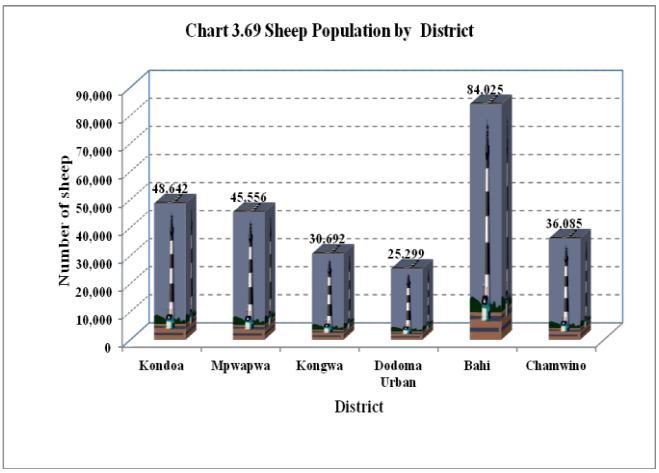
The overall annual growth rate of goat population from 1995 to 2008 was -0.12 percent. There was a slight increase in goat numbers between 1999 and 2003, from 621,405 to 797,481 followed by a decline to 680,570 in 2008. The annual increase between 2003 and 2008 was 3.2%, (Chart 3.68).


MAP 3.33 DODOMA
Cattle Population by District
as of 1st October 2008
Number of Cattle
115100 - 152100
152101 - 189100
189101 - 226100
22601 - 263100
263101 - 302067
Kondoa
302067
Bahi
Dodoma Urban
175827
242455
Kongwa
115125
Mpwapwa
156031
Chamwino
193996


MAP 3.34 DODOMA
Goat Population by District
as of October 2008
Number of Goat
0 - 38000
38001 - 76000
76001 - 114000
114001 - 152000
152001 - 189689
Kondoa
189689
Bahi
Dodoma Urban
101874
165234
Kongwa
144599
Mpwapwa
74400
Chamwino
4774

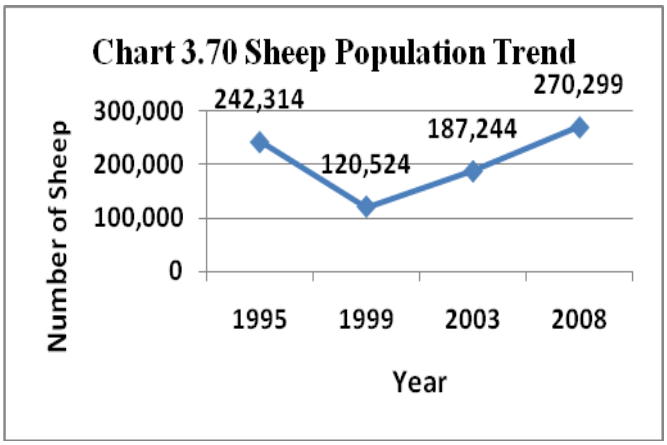
3.10.3 Sheep Production

Sheep rearing was the third most important livestock keeping activity in Dodoma region after cattle and goats. The region ranked the 8th out the of 21 Mainland regions and had 4.7 percent of all the sheep of Tanzania Mainland.



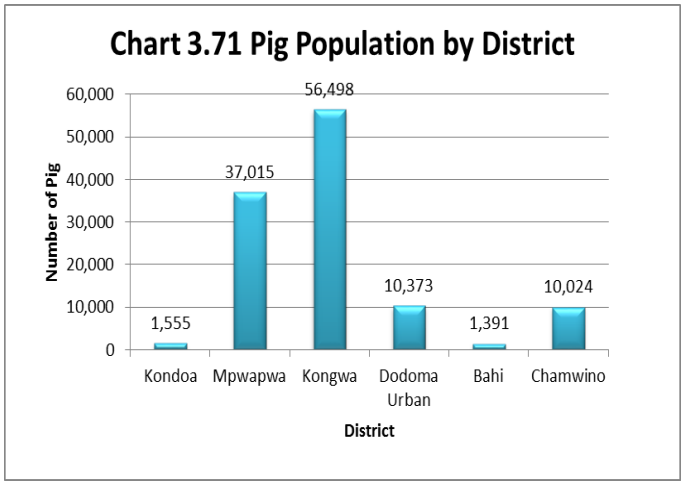
3.10.3.1 Sheep Population

The number of sheep-rearing households was 29,506 (8% of all the agricultural households in Dodoma region) rearing 270,299 sheep, giving an average of 9 heads of sheep per sheep-rearing household. The district with the largest number of sheep was Bahi with 84,025 sheep (31% of the total sheep in region), followed by Kondoa (48,642 sheep; 18%), Mpwapwa (45,556 sheep; 17%), Chamwino (36,085 sheep; 13%), Kongwa (30,692 sheep; 11%) and Dodoma Urban (25,299 sheep; 9%) (Chart 3.69 & Map 3.35). Sheep rearing was dominated by the indigenous breed that constituted 97 percent of all the sheep kept in the region. Only 3 percent of the total sheep in the region were of the improved breed.



3.10.3.2 Sheep Population Trend

Sheep population decreased between 1995 and 1999 from 242,314 to 120,524. Thereafter, the population grew steadily and by 2008 the number of sheep was 270,299. Between 1999 and 2008, the annual growth rate was 3.7 percent, (Chart 3.70).



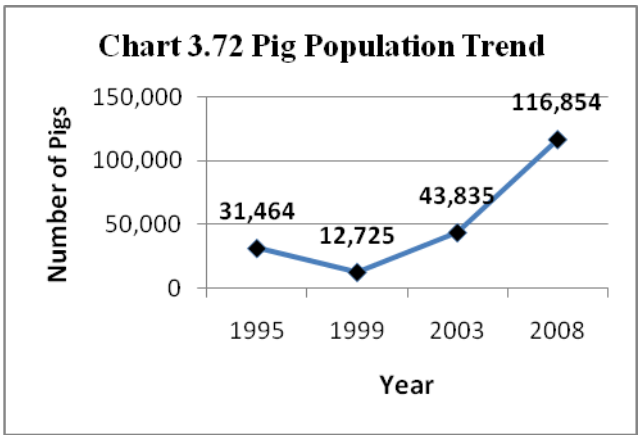
3.10.4 Pig Production

Pigs were the least important livestock keeping activity in the region after cattle, goats and sheep. However, the region ranks 5th out of the 21 Mainland regions and kept 7 percent of the total pigs on the Mainland. The number of pig-rearing agricultural households in Dodoma region was 31,631 (8.8% of the total agricultural households in the region) rearing 116,854 pigs. equivalent to an average of 4 pigs per pig-rearing household.

The district with the largest number of pigs was Kongwa with 56,498 pigs (48% of the total pig population in the region), followed by Mpwapwa (37,015 pigs, 32%), Dodoma Urban (10,373 pigs, 9%) and Chamwino (10,024 pigs; 9%). Few pigs were raised in Kondoa and Bahi (each with 1%) (Chart 3.71 & Map 3.36).

3.10.4.1 Pig Population Trend

The overall annual growth rate of the pig population for the thirteen years period from 1995 to 2008 was 13.6 percent. During this period, the pig population grew from 31,464 in 1995 to 116,854 in 2008. In the period between 2003 and 2008, the annual growth rate was 21.7 percent and the pig population increased from 43,835 to 116,854, (Chart 3.72). The increase in the number of pigs could be explained by the increase in the number of households raising pigs. In 2003, there were 14,859 households raising pigs and by 2008 the number has increased to 31,631.households.



3.10.5 Chicken Production

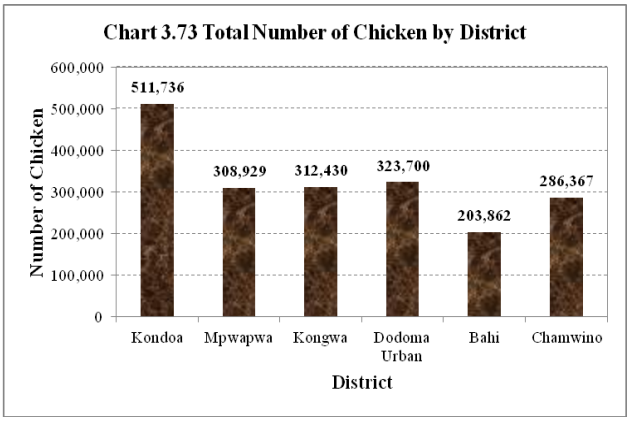
The poultry sector in Dodoma region was dominated by chicken production. The region contributed 6.7 percent to the total chicken population in Tanzania Mainland.

3.10.5.1 Chicken Population

The number of households keeping chicken was 193,953, raising about 1,947,024 chickens. Equivalent to an average of 10 chicken per chicken-rearing household. In terms of total number of

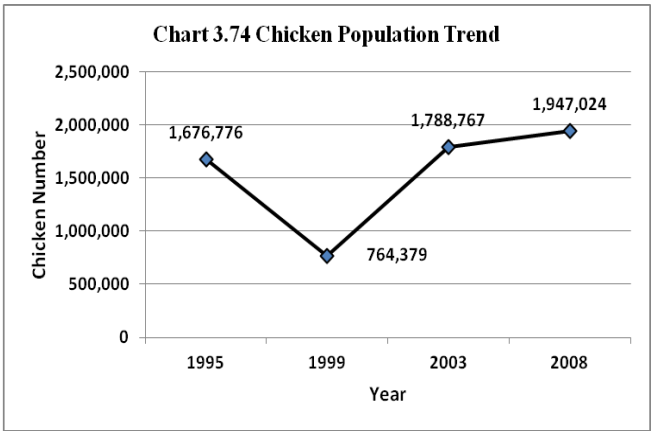
chicken in the country, Dodoma region ranked the 8th out of the 21 Mainland regions and kept 5 percent of the total chicken population in Tanzania Mainland.

The district with the largest number of chicken was Kondoa with 511,736 chickens (26% of the total chickens in the region), Dodoma Urban (323,700 chicken, 17%), Mpwapwa (308,929 chicken; 16%), Kongwa (312,430 chicken; 16%), Chamwino (286,367 chicken; 15%) and Bahi (203,862 chicken; 10%), (Chart 3.41).

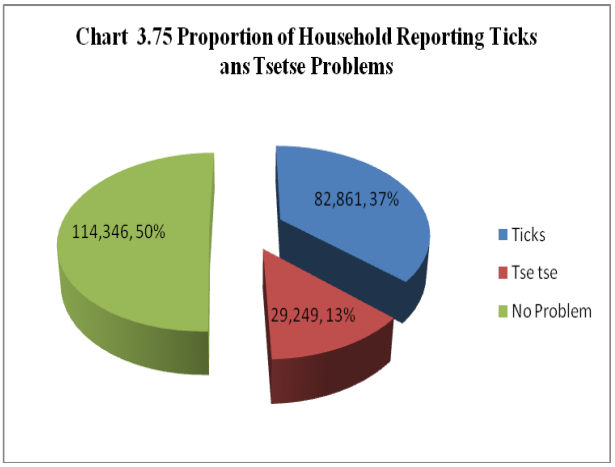


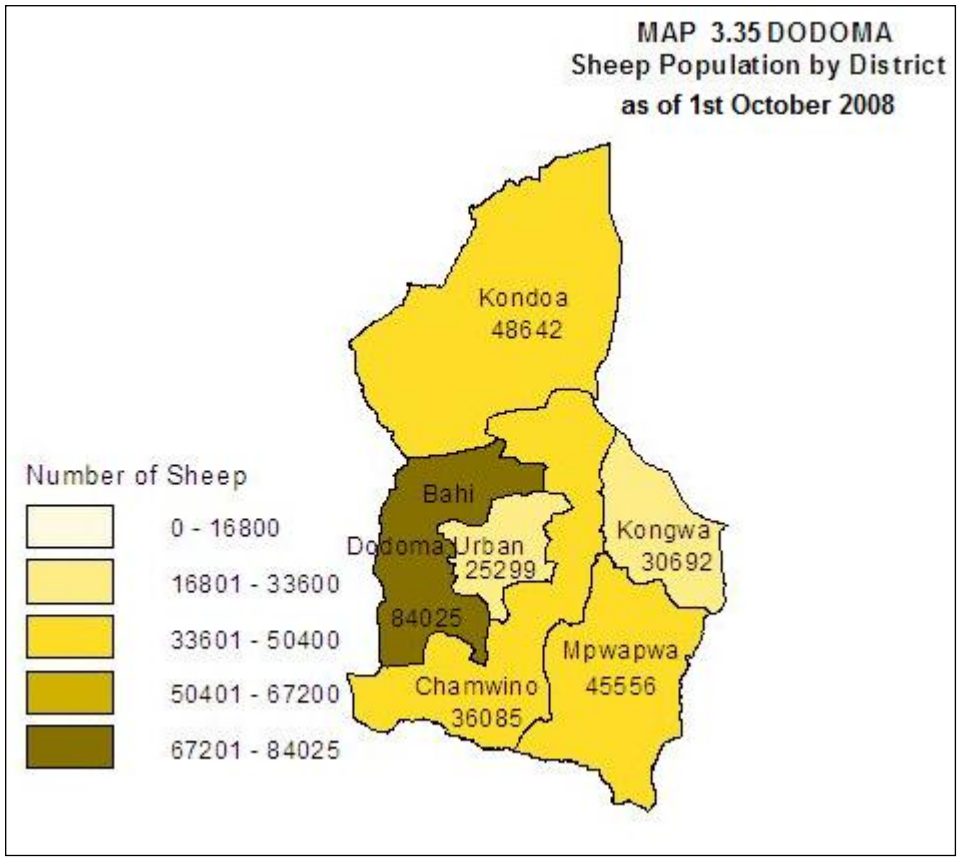
3.10.5.2 Chicken Population Trend

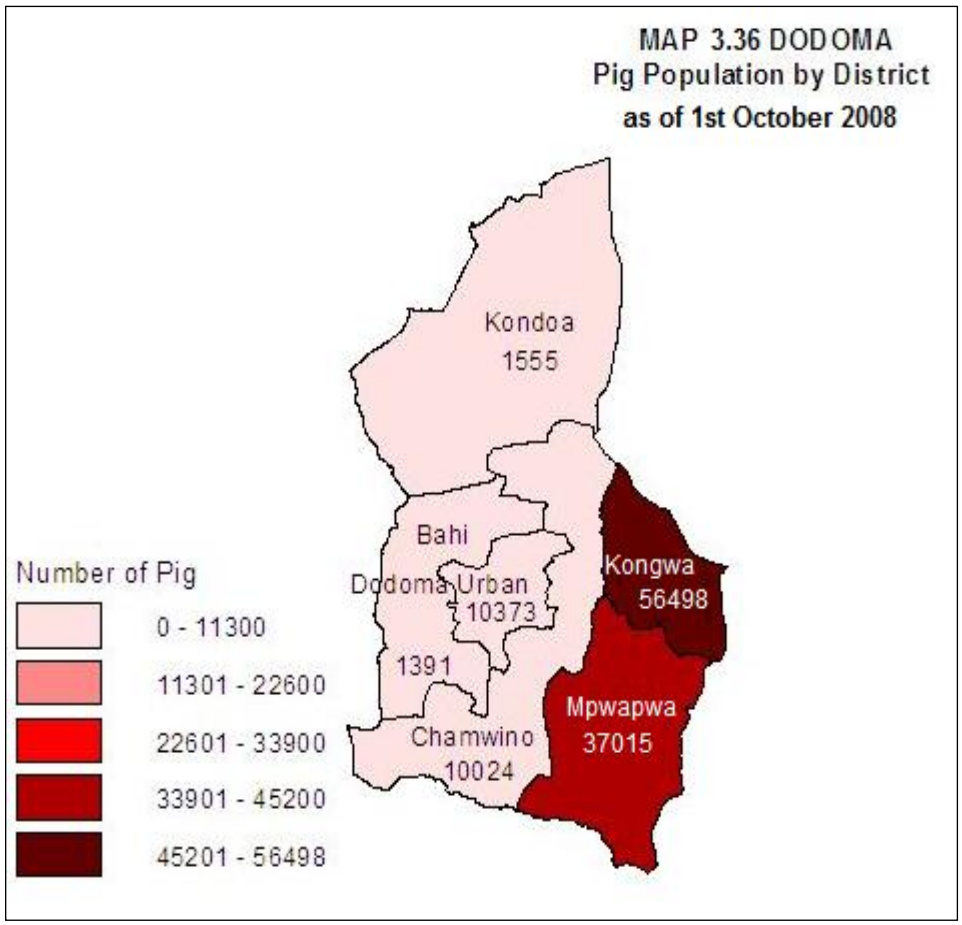
The chicken population trend shows a decline between 1995 and 1999 from 1,676,776 to 764,379 chicken. Thereafter, the population increased at an annual rate of 9.8 from 764,379 in 1999 to 1,947,024 in 2008. However, the largest increase was between 1999 and 2003 (Chart 3.74). about 99 percent of all the chicken in Dodoma region were of indigenous breeds. The dominance of indigenous breed makes the population trend for the indigenous chicken more-or-less the same as that of the total chicken in the region.

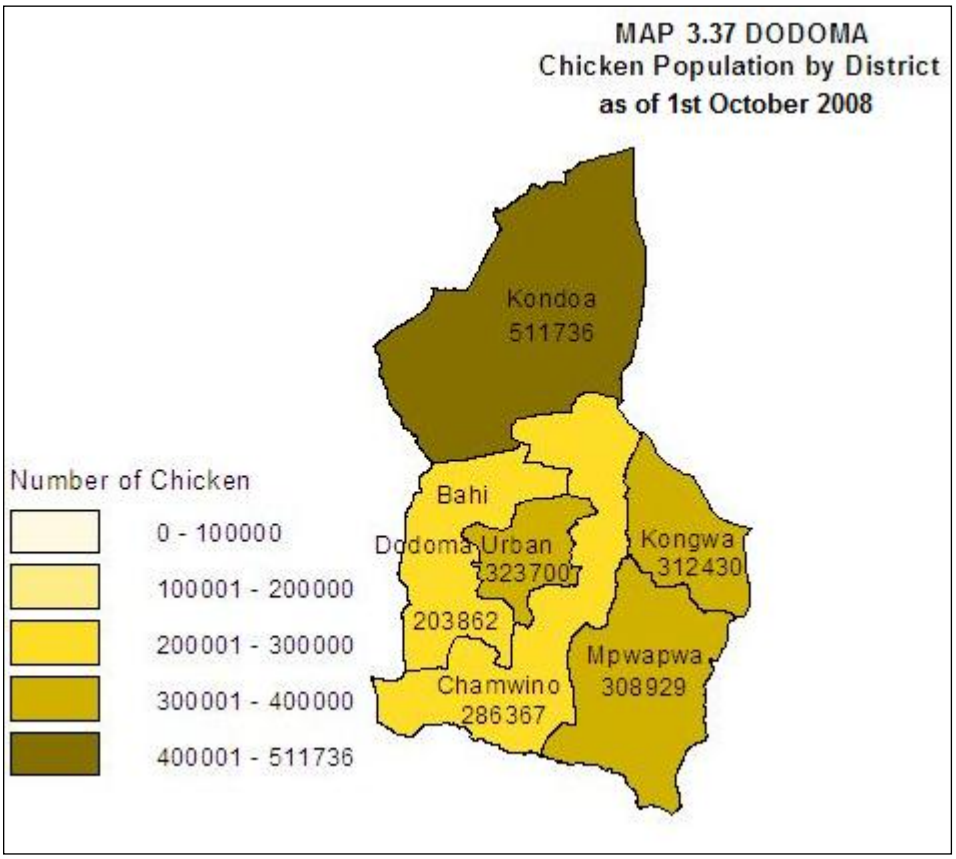


Most of the broilers were kept in Bahi district (3,013 birds; 89%), whilst layers were dominant in Chamwino (11,103 birds; 66%), Kongwa (3,758 birds; 22%) and Bahi (1,738 birds; 10%). Other districts had insignificant number of layers or broilers. The trend shows an initial increase in broilers and layers between 1995 and 1999. Thereafter, there was a significant large increase in the layers in 2003, while the number of broilers decreased from 22,327 to 7,859 chickens. The number of layers and broilers declined between 2003 and 2008 and the annual growth rate during this period was negative for both types being -10.7 and -15.5 percent for layers and broilers respectively, (Chart 3.75).




MAP 3.35 DODOMA
Sheep Population by District
as of 1st October 2008
Kondoa
48642
Bahi
84025
Dodoma Urban
25299
Kongwa
30692
Mpwapwa
45556
Chamwino
36085
Number of Sheep
0 - 16800
16801 - 33600
33601 - 50400
50401 - 67200
67201 - 84025

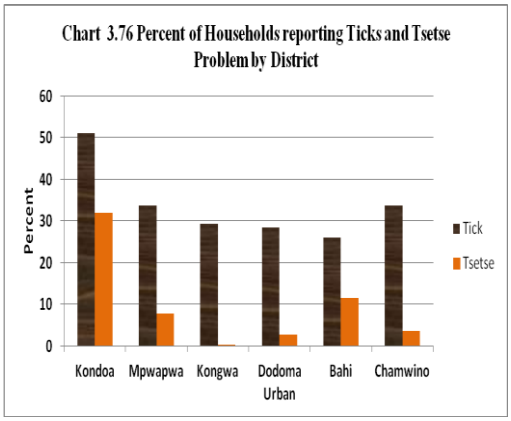

MAP 3.36 DODOMA
Pig Population by District
as of 1st October 2008
Kondoa
1555
Bahi
1391
Dodoma Urban
10373
Kongwa
56498
Mpwapwa
37015
Chamwino
10024
Number of Pig
0 - 11300
11301 - 22600
22601 - 33900
33901 - 45200
45201 - 56498


MAP 3.37 DODOMA
Chicken Population by District
as of 1st October 2008
Kondoa
511736
Bahi
Dodoma Urban
323700
Kongwa
312430
203862
Mpwapwa
308929
Chamwino
286367
Number of Chicken
0 - 100000
100001 - 200000
200001 - 300000
300001 - 400000
400001 - 511736

3.10.6 Pest and Parasite Incidence and Control

3.10.6.1 Ticks and Tse tse fly

The results show that 37 percent and 13 percent of the total livestock-keeping households reported to have encountered ticks and tsetse-fly problems respectively, indicating that ticks were the most dominant ectoparasite affecting livestock in Dodoma region, (Chart 3.76).



Higher incidences of ticks were encountered in Kondoa (51% of livestock keeping households in the district) followed by Mpwapwa (34%), Chamwino (34%), Kongwa (29%), Dodoma Urban (28%) and Bahi (26%). Likewise, more incidences of Tse tse fly were noted in Kondoa district with 32 percent of the households which reported the incindences followed by Bahi (11%), and Mpwapwa (8%) However, incidences of Tse tse fly were low in Chamwino (4%), Dodoma Urban (3%) and Kongwa (0.3%), (Chart 3.76, Map 3.38).

Compared to 2003 data the proportion of households encountering tse tse problem has remained almost the same (13%) while that encountering tick problem has declined from 42 percent to 36 percent.

The most practiced method of tick controlling was spraying with 23.7 percent of all the livestock-rearing households in the region using the method. Other methods used were dipping (11.4%), smearing (5.6%) and other traditional methods like hand picking (1.3%). However, 57.9 percent of the livestock-keeping households did not use any method.

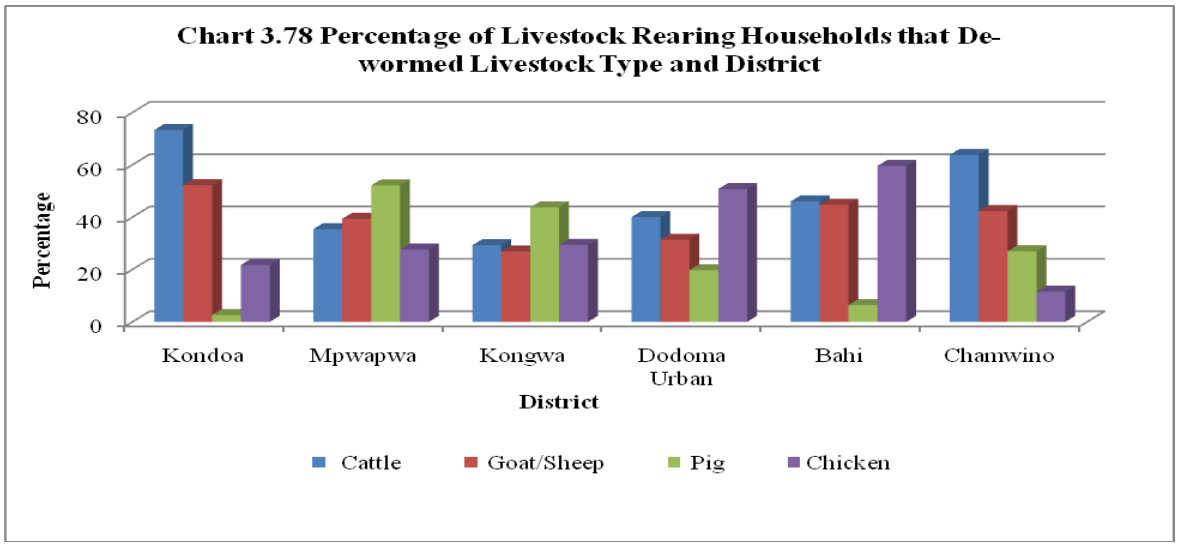
Table 3.11: Proportion of Household by Methods of Ticks and Tsetse Control

Control Method	Ticks	Tsetse
Dipping	11.4	4
Spraying	23.7	10
Smearing	5.6	-
Trapping	-	5
None	57.9	77

The most common method used to control tsetse flies was spraying which was practiced by 10 percent of the livestock rearing households; followed by trapping (5%) and dipping (4%). Like in the ticks' control, majority of the households did not use any of the three methods (77%), (Table 3.11).

3.10.6.2 De-worming

The percentage of the households that de-wormed cattle was 51 percent, goat/sheep (41%), chicken (29%) and pigs (24%). The number of households which de-wormed their livestock differed by district and specie (Chart 3.78). In Kondoa, higher proportion of cattle was dewormed followed by goat/sheep, chicken,. Pigs were few hence, low proportion of households reporting to deworm. In Mpwapwa, more pigs were kept, hence a higher proportion of households reporting to deworm. Cattle and goats also received attention in the de-warm control in the districts. In the remaining district, less than 40 percent of households reported to deworm against the internal parasites and there were slight differences between species. For example, in Dodoma Urban and Bahi, fewer pigs and sheep were dewormed while; moderate number of households in Mpwapwa and Kongwa adhered to the deworming of livestock kept.



3.10.6.3 Poultry Diseases

Newcastle and Fowl Typhoid were the most common poultry diseases. About 66 and 25 percent of agricultural households reported to have encountered Newcastle and or Typhoid in their chicken flocks. Higher incidences of Newcastle were reported in Kongwa and lowest in Mpwapwa. Incidence of Fowl typhoid was highest in Bahi district and lowest in Kongwa, (Table 3.12).

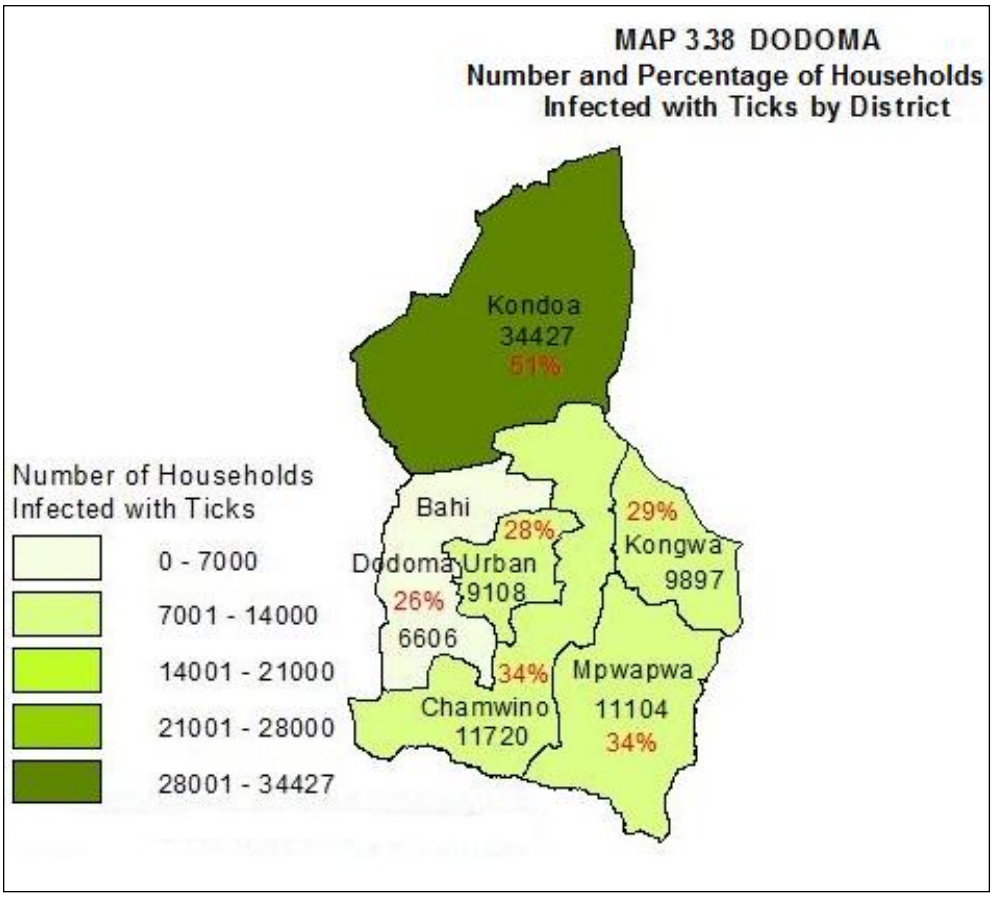
Table 3.12: Number of Household Reporting Incidences of Newcastle and Typhoid

District	Newcastle		Typhoid	
	Number	%	Number	%
Kondoa	44,644	66	18,213	27
Mpwapwa	19,219	58	7,688	23
Kongwa	24,178	72	4,760	14
Dodoma Urban	22,896	71	7,716	24
Bahi	16,341	64	10,547	42
Chamwino	22,977	66	7,556	22
Total	**150,254**	**66**	**56,480**	**25**

Only 24 percent of the agricultural households keeping chicken vaccinated their birds against Newcastle disease. Other used local herbs and the majority did not use any control method, (Table 3.13).

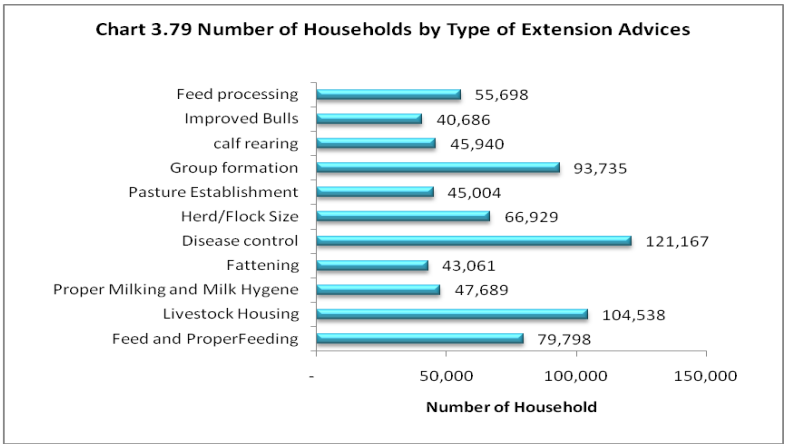
Table 3.13: Newcastle Control Methods

District	Vaccination		Local Herbs		None		Total	
	Number	%	Number	%	Number	%	Number	%
Kondoa	6,885	10	25,320	38	35,315	52	67,521	100
Mpwapwa	8,399	25	10,677	32	13,952	42	33,028	100
Kongwa	14,782	44	4,009	12	14,907	44	33,698	100
Dodoma Urban	9,614	30	11,132	35	11,385	35	32,130	100
Bahi	9,851	39	6,143	24	9,388	37	25,381	100
Chamwino	5,089	15	8,636	25	20,972	60	34,697	100
Total	**54,621**	**24**	**65,916**	**29**	**105,919**	**47**	**226,456**	**100**

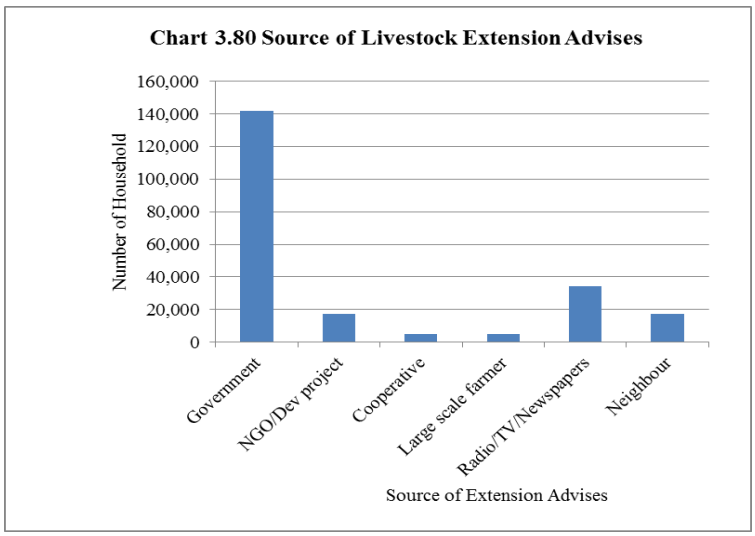

MAP 3.38 DODOMA
Number and Percentage of Households
Infected with Ticks by District
Number of Households
Infected with Ticks
0 - 7000
7001 - 14000
14001 - 21000
21001 - 28000
28001 - 34427
Kondoa
34427
61%
Bahi
28%
6606
Dodoma Urban
9108
26%
Kongwa
9897
29%
Chamwino
11720
34%
Mpwapwa
11104
34%

3.10.7 Access to Livestock Extension Services

The number of households that received livestock advice varied depending on the type of extension advices. Chart 3.79 shows that most of the extension advices were on disease control (121,167 households), followed by proper housing (104,538 households), group formation and strengthening (93,735 households), proper feeding and feed processing (79,798 households) and breeding (66,929 households). However, less than 50,000 households received advice on milking and milk hygiene, calf rearing, pasture establishment and fattening.



The main livestock extension agent was the government which provided service to 93.3 percent of all the households receiving livestock extension services. Others were Radio/Television/Newspapers (22.6%), Neighbours (11.3%), NGO and Development projects (11.2 %), large scale farms (3.4%) and Cooperatives (3.3%), (Chart 3.80).



3.11 Fish Farming

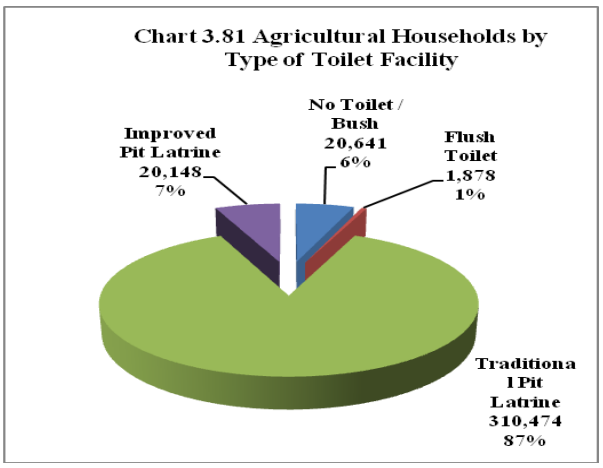
The number of households involved in fish farming in Dodoma region was very small (116 households representing 0.03 percent of the total agricultural households in the region). All the fish farming activities were done in Bahi district (Map 3.43).

3.12 Poverty Indicators

The agricultural census collected a selectedset of data on poverty for the purpose of providing a base for tracking progress in poverty reduction strategies undertaken by the government.

3.12.1 Type of Toilets

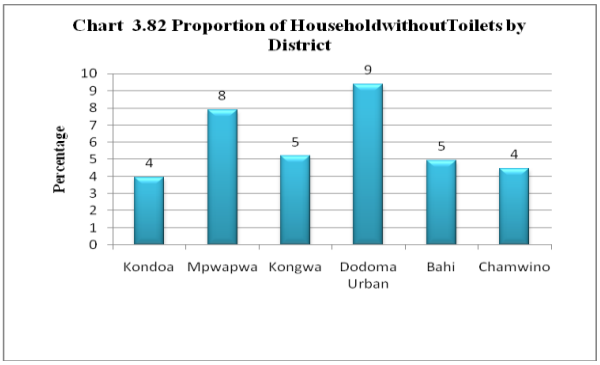
Most of the agricultural households in Dodoma region used traditional pit latrines (310,474 households, 87% of all agricultural households), 23,207 households (7%) used improved pit latrine, and 1,878 households (1%) used flush toilet. The remaining 20,641 households (6%) had no toilet facilities, (Chart 3.81, Map 3.39).



While the proportion of traditional pit latrine has remained almost the same, while that of improved pit latrine has increased from 1.3 percent in 2003 to 7 percent in 2008, (Table 3.14).

Table 3.14: Comparison of Proportion of Households by Toilet Facilities between 2003 and 2008

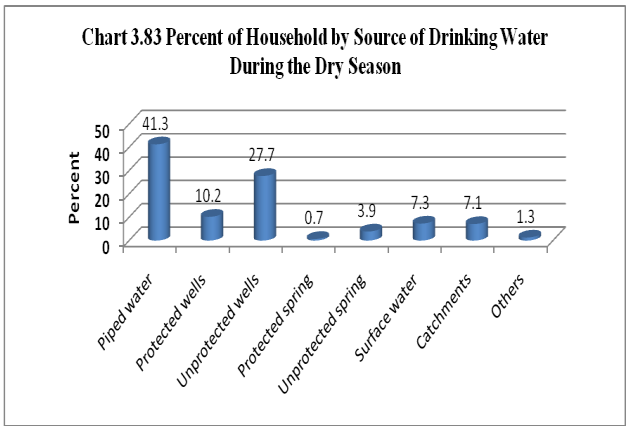
Type of Structure	Percentage of Households	
	2003	2008
Traditional Pit Latrine	90.9	87
Improved Pit Latrine	1.3	7
Flush Toilets	0.1	1
No Toilet/Bush	6.2	6



The distribution of the households without toilets within districts indicates that there were more households without toilets in Dodoma Urban district (4,807 households; 9%) followed by Mpwapwa (4,556 households; 8%), Kongwa (2,631 households, 5%) Bahi (2,318 households; 5%) Kondoa and Chamwino each with about 4 percent (Chart 3.82).

There were more households using grass as roofing materials in Kondoa and Kongwa (about 8%), than in any other district (Map 3.40).

3.12.2 Access to Drinking Water



The main source of drinking water in Dodoma region was piped water used by 148,255 households or 41 percent of the total agriculturalhouseholds in the region during the dry season followed by unprotected well (99,493 households, 27.7%), protected wells (36,512 households, 10.2%), surface water and catchments (7% each), unprotected spring (13,865 households 3.9%), and protected spring (2,679 households, 0.7%), (Chart 3.83). There were small variations during the wet season whereby the proportion of households the drawing water from surface water and catchments increased to 16 and 10 percent respectively. The situation did not improve much compared to 2003 data, whereby piped water constituted 50 percent during the dry season.

Source of Drinking Water by Season

About 19.3 percent of the agricultural households in the region obtained drinking water within a distance of less than 500 m during the dry season, 61.1 percent from a distance between half a kilometer and 2 kilometers and 19.6 percent from a distance more than 2 kilometers (Table 3.15). During the wet season the respective proportions were 21, 71.6 and 7.4 percent.

Table 3.15: Number of Households by Distance to Source of Water During the Dry Season

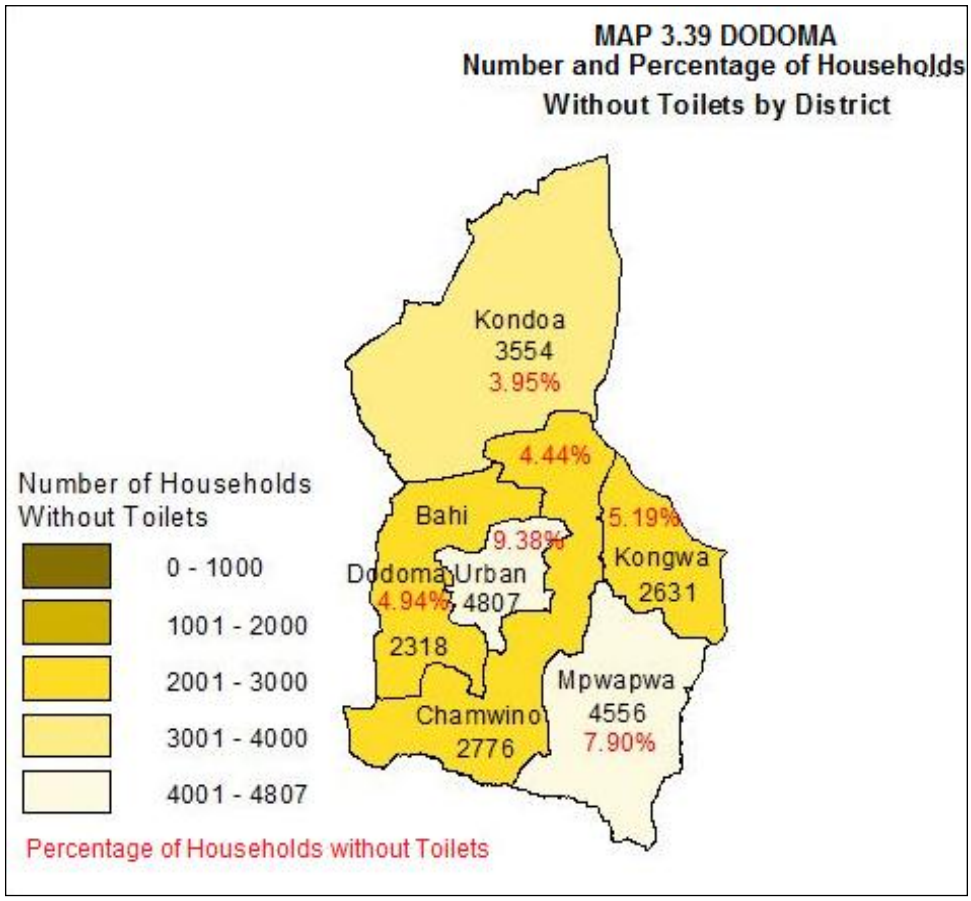
District	Less than100 Metres	100 - 299 m	300 - 499 m	500 - 999 m	1.00-1.99 Km	2.00 - 2.99 Km	3.00 - 4.99 Km	5.00 - 9.99 Km	10km and above	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	6,663	3,332	6,663	6,663	49,974	3,332	3,332	9,995	0	89,954
Mpwapwa	10,677	2,135	0	17,084	23,490	0	2,135	2,135	0	57,657
Kongwa	3,758	3,758	5,637	7,516	13,154	5,637	5,637	1,879	3,758	50,735
Dodoma Urban	5,692	7,590	1,897	13,282	15,179	1,897	1,897	3,795	0	51,230
Bahi	3,477	1,738	1,738	12,169	19,123	1,738	1,738	5,215	0	46,938
Chamwino	0	4,626	0	13,879	27,758	2,313	2,313	9,253	2,313	62,455
Total	**30,268**	**23,180**	**15,936**	**70,593**	**148,678**	**14,918**	**17,053**	**32,272**	**6,071**	**358,969**
%	**8.4**	**6.5**	**4.4**	**19.7**	**41.4**	**4.2**	**4.8**	**9.0**	**1.7**	**100.0**

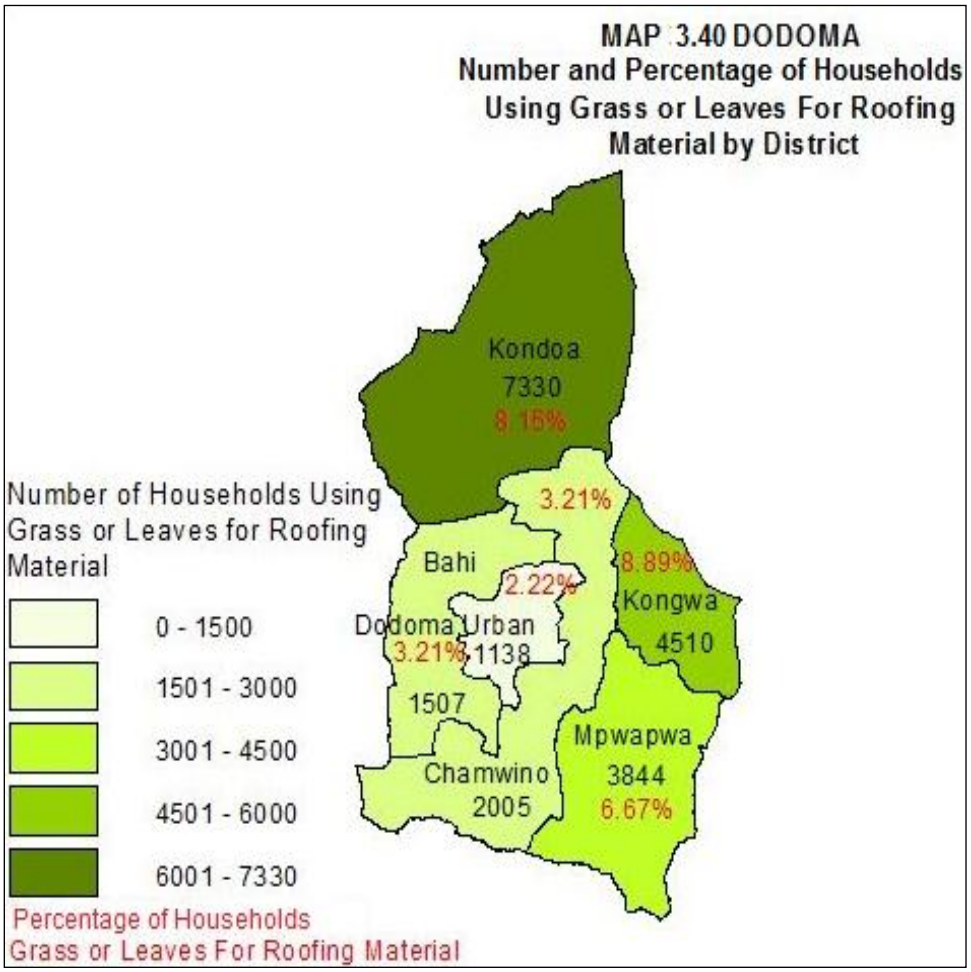
The highest proportion of the households getting water from a distance less than 100 meters were in Mpwapwa, followed by Kondoa, and the least was in Chamwino. Most of the households in each district got water at a distance between 1 and 2 kilometers while, Chamwino and Kongwa had the highest proportions of agricultural households obtaining water from a distance above 20 km during the dry season. There was reasonable number of households that got water from a distance between 2 and 9 kilometers in all the districts.

During the dry season, about 11 percent of the agricultural households spent less than 30 minutes to get water, and the remaining 89 percent had to spend more than 30 minutes. Most of the households spent between 30 and 39 minutes and more than one hour to get water. The number of households by distance varied between districts, though it appears that there were more households in Kondoa that had to walk for more than one hour to get water, (Table 3.16).

Table 3.16: Number of Agricultural Household Reporting time taken to and From the Source of Water

District	Less than10 Minutes	10 - 19 Minutes	20 - 29 Minutes	30 - 39 Minutes	40 - 49 Minutes	50 - 59 Minutes	1 Hour and above	Total
	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	3,332	6,663	0	13,326	0	6,663	59,969	89,954
Mpwapwa	2,135	6,406	0	10,677	6,406	0	32,032	57,657
Kongwa	5,637	0	0	9,395	1,879	0	33,824	50,735
Dodoma Urban	0	3,795	0	7,590	7,590	1,897	30,359	51,230
Bahi	8,692	0	1,738	5,215	1,738	1,738	27,815	46,938
Chamwino	0	0	2,313	20,818	0	2,313	37,010	62,455
Total	**19,797**	**16,864**	**4,052**	**67,022**	**17,614**	**12,612**	**221,009**	**358,969**
%	**5.5**	**4.7**	**1.1**	**18.7**	**4.9**	**3.5**	**61.6**	**100.0**

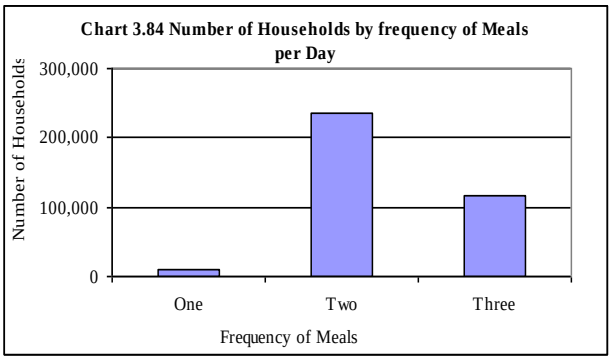

MAP 3.39 DODOMA
Number and Percentage of Households
Without Toilets by District
Kondoa
3554
3.95%
4.44%
Bahi
9.38%
5.19%
Kongwa
2631
Dodoma Urban
4.94%
4807
2318
Mpwapwa
4556
7.90%
Chamwino
2776
Number of Households
Without Toilets
0 - 1000
1001 - 2000
2001 - 3000
3001 - 4000
4001 - 4807
Percentage of Households without Toilets


MAP 3.40 DODOMA
Number and Percentage of Households
Using Grass or Leaves For Roofing
Material by District
Kondoa
7330
8.16%
3.21%
Bahi
2.22%
8.89%
Kongwa
4510
Dodoma Urban
3.21%
1138
1507
Mpwapwa
3844
6.67%
Chamwino
2005
Number of Households Using
Grass or Leaves for Roofing
Material
0 - 1500
1501 - 3000
3001 - 4500
4501 - 6000
6001 - 7330
Percentage of Households
Grass or Leaves For Roofing Material

3.12.3 Food Consumption Patterns

3.12.3.1 Number of Meals per Day

About one third of the households in Dodoma region normally had 2 meals per day (234,644 households, 65.4 percent of the agricultural households in the region) followed by those having 3 meals per day (115,479 households; 32.2%) and 1 meal per day (8,847 households; 2.5%), (Chart 3.84, Map 3.41). The corresponding data for 2003 were 69.8 percent for two meals, 25 percent for 3 meals and 4.5 percent for one meal.



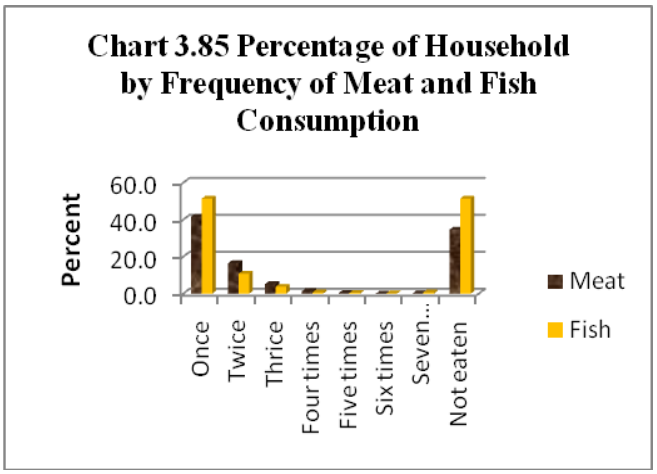
The proportion of households which had having one meal per day was less than five percent in all the districts, whereas, between 45 percent and 75 percent had two meals. For three meals per day, Chamwino and Bahi districts each had the lowest proportion of the households, about 21 percent), while Mpwapwa, Kongwa and Dodoma Urban were moderate (25 to 30%), and the highest was Kondoa (54.6%) (Table 3.17).

Table 3.17: Number.of Household Reporting Number of Meals per Day by District

District	Number of Meals			
	1	2	3	Total
	Number	Number	Number	Number
Kondoa	666	40,202	49,086	89,954
Mpwapwa	1,566	41,428	14,663	57,657
Kongwa	1,378	36,454	12,903	50,735
Dodoma Urban	2,150	33,521	15,559	51,230
Bahi	927	36,160	9,851	46,938
Chamwino	2,159	46,880	13,416	62,455
Total	**8,847**	**234,644**	**115,479**	**358,969**
%	**2.5**	**65.4**	**32.2**	**100.0**

3.12.3.2 Meat Consumption Frequencies

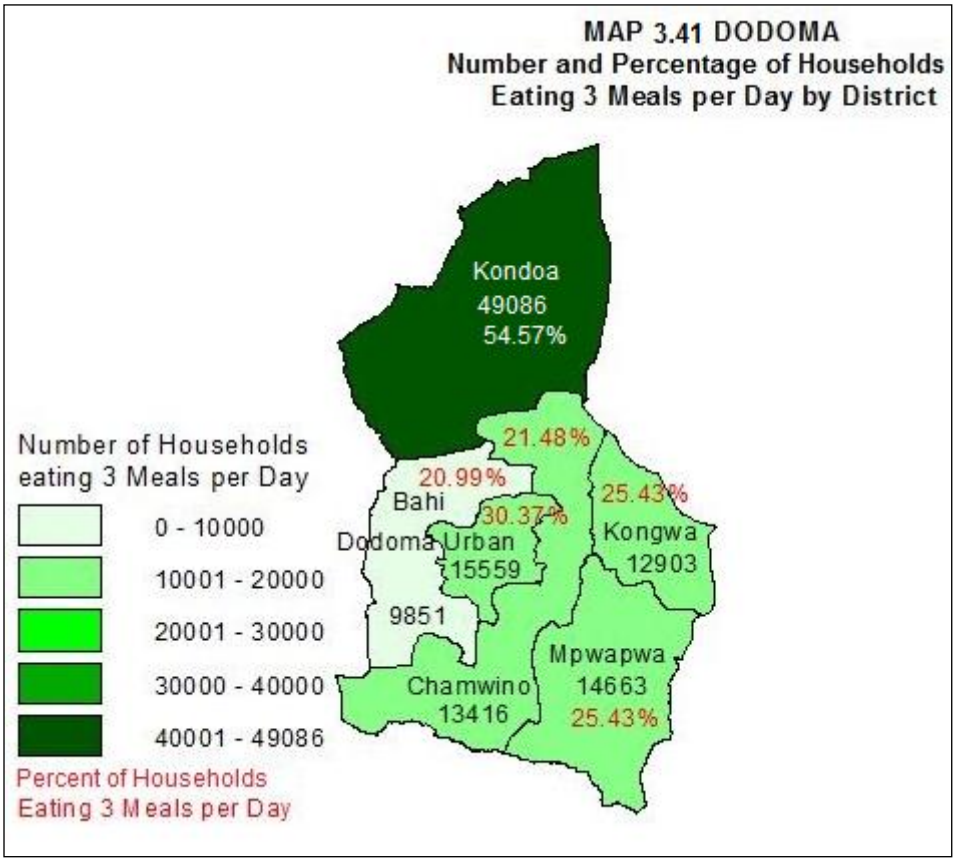
The number of agricultural households in the region that consumed meat during the week preceding the census was 234,435 (70% of the total agricultural household in the region) and 149,392 households (41.6% of those who consumed meat) consuming meat only once during the respective week followed by those which had meat twice (59,106 households; 16.5%) and three times (18,746 households;

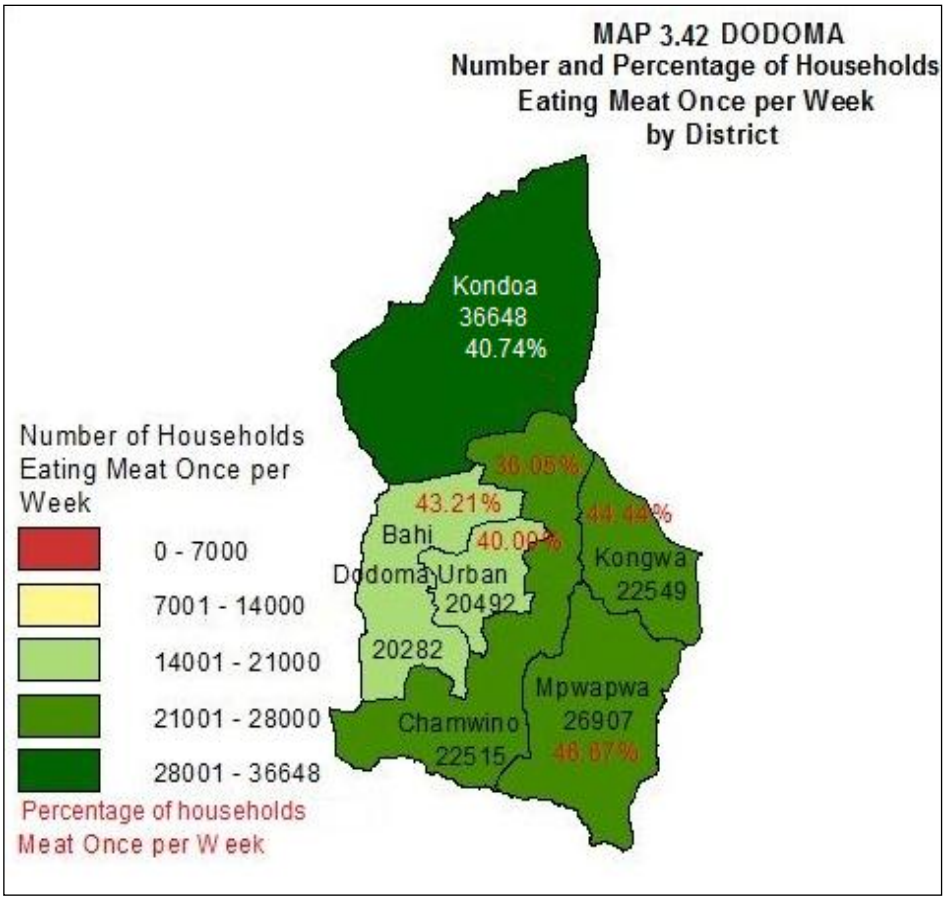


5.2%). Very few households had meat more than three times (2%) during the respective week (Chart 3. 85, Map 3.42).

3.12.3.3 Fish Consumption Frequencies

The number of agricultural households that had consumed fish during the week preceding the census was 174,378 (49% of the total agricultural household in the region) and 114,858 households (32 % of those who consumed fish) consuming fish once during the respective week followed by those which had fish twice during that week (38,856 household; 10.8%) and three times (13,435 households; 3.7%). In general, the percentage of households that consumed fish more than three times during the preceding week, was relatively small (2%), (Chart 3.85, Map 3.43).


MAP 3.41 DODOMA
Number and Percentage of Households
Eating 3 Meals per Day by District
Kondoa
49086
54.57%
21.48%
20.99%
Bahi
25.43%
30.37%
Kongwa
12903
Dodoma Urban
15559
9851
Mpwapwa
14663
25.43%
Chamwino
13416
Number of Households
eating 3 Meals per Day
0 - 10000
10001 - 20000
20001 - 30000
30000 - 40000
40001 - 49086
Percent of Households
Eating 3 Meals per Day


MAP 3.42 DODOMA
Number and Percentage of Households
Eating Meat Once per Week
by District
Kondoa
36648
40.74%
43.21%
Bahi
40.00%
Kongwa
22549
Dodoma Urban
20492
20282
Mpwapwa
26907
Chamwino
22515
Number of Households
Eating Meat Once per
Week
0 - 7000
7001 - 14000
14001 - 21000
21001 - 28000
28001 - 36648
Percentage of households
Meat Once per Week

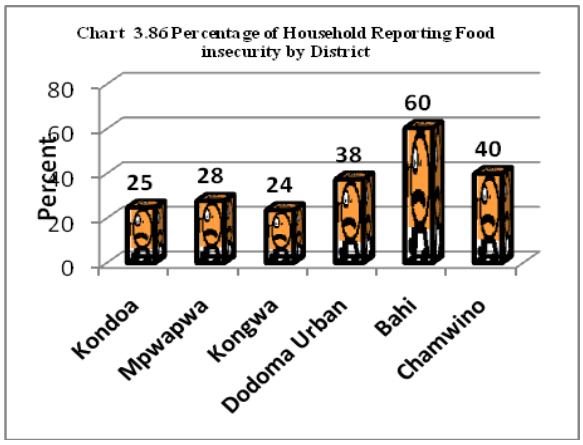
3.12.4 Food Security

In the region, 135,340 households (37.7% of the total agricultural households in the region) said they rarely experienced problems in satisfying the household food requirements. However, 34,793 households (9.7%) said they sometimes experienced problems, while 55,069 (15.3%) often had problems and 33,288 households (9.3%) always had problems in satisfying the household food requirement. About 28 percent of the agricultural households said they were food secured (Table 3.18).

Table 3.18: Number of Agricultural Household Reporting Status of Food Satisfaction

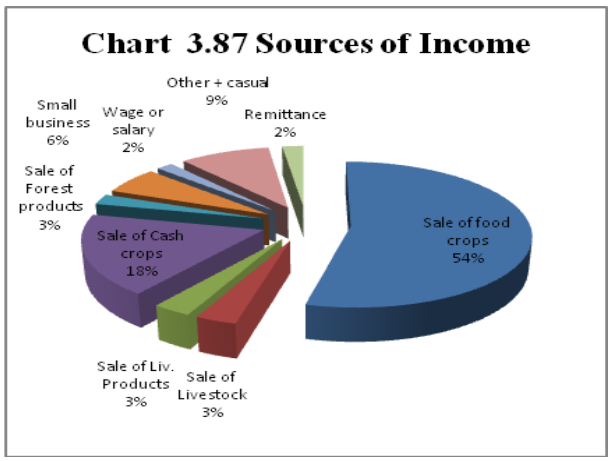
District	Never	Seldom	Sometimes	Often	Always	Total
	Number	Number	Number	Number	Number	Number
Kondoa	25,987	41,534	4,664	9,995	7,774	89,954
Mpwapwa	16,941	24,629	5,979	4,983	5,125	57,657
Kongwa	18,916	19,793	3,883	4,760	3,382	50,735
Dodoma Urban	10,246	21,757	7,843	6,578	4,807	51,230
Bahi	7,417	11,126	4,404	15,646	8,345	46,938
Chamwino	20,972	16,500	8,019	13,108	3,855	62,455
Total	**100,480**	**135,340**	**34,793**	**55,069**	**33,288**	**358,969**
%	**28.0**	**37.7**	**9.7**	**15.3**	**9.3**	**100.0**

Bahi district had the highest percentage of the households that experienced food insecurity in the year preceding the census (60%). followed by Chamwino (40%), Dodoma Urban (38%), Mpwapwa (28%), Kondoa (25% and Kongwa (24%), (Chart 3.86, Map 3.44).



3.12.5 Main Sources of Income

The main source of cash income of the households in Dodoma region was from sale of food crops (187,121 households, 52%), followed by selling of cash crops (62,487 households, 17%), casual labour (6,011 households, 9%), businesses (20,819 households, 6%), sale of livestock (3%). Others were sale of forest products (3%), wages or salaries (2%) and remittance (2%), (Chart 3.87).

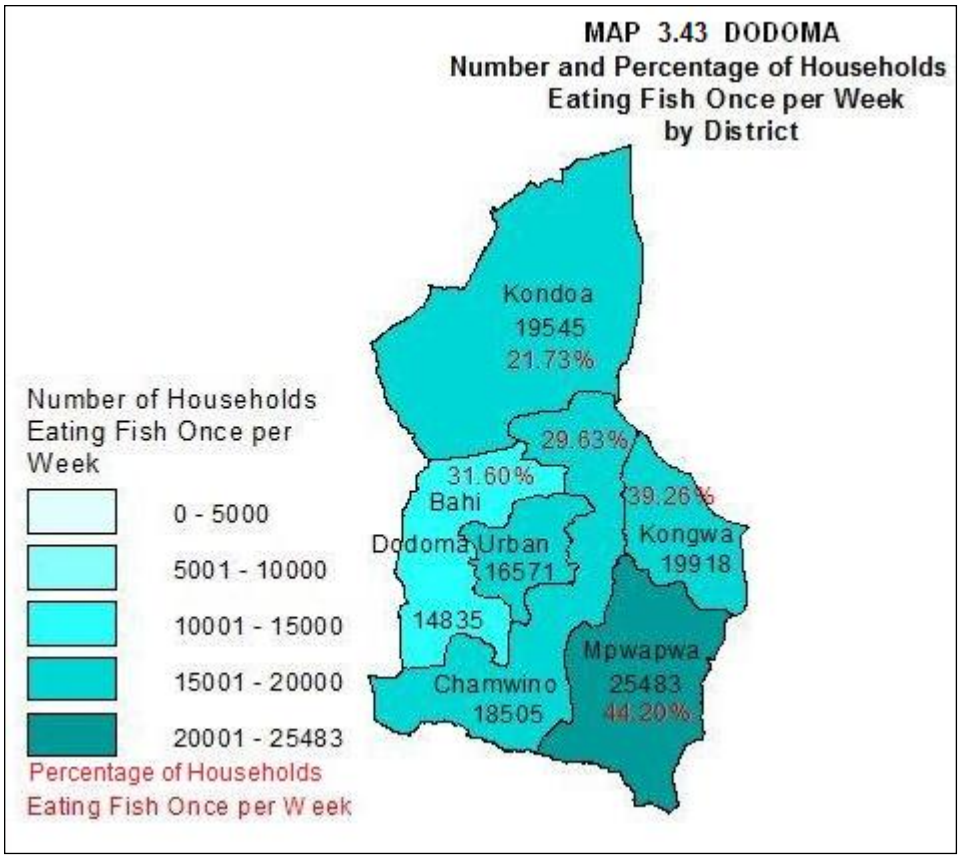


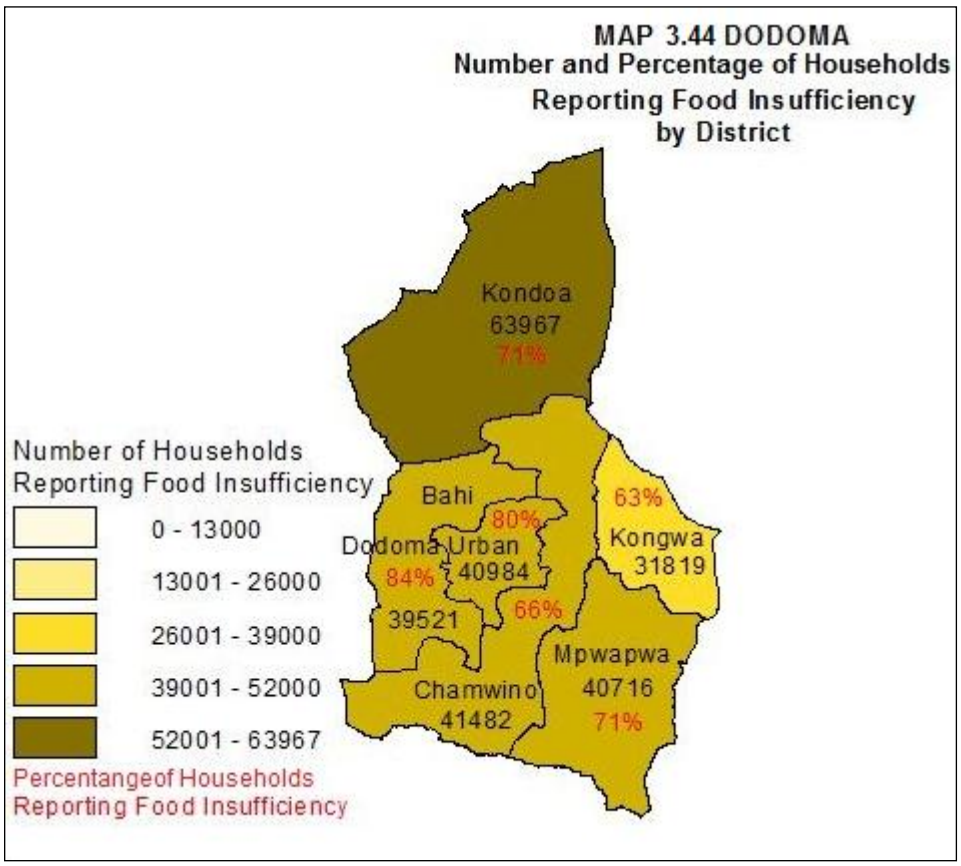
3.12.6 Sources of Energy for lighting

The main source of lighting in the region was wick lamp (259,287 households, 72.2%) followed by hurricane lamp (63,164 households,17.6%), firewood (14,676 households,4.1%), pressure lamp (13,466 households, 3.8%). Others were electricity (1.2%), solar (0.3%), and candles (0.1%). Kondoa had the highest number of household using electricity for lighting, followed by Dodoma Urban and Chamwino. Use of solar was the highest in Kongwa followed by Chamwino, Kondoa and Mpwapwa. Solar power was not used in Bahi and Dodoma Urban, (Table 3.19). In all the districts the main source of energy for cooking was firewood and charcoal. No significance change in the use of source of lighting energy especially electricity from 2002/03 census results to the current2007/08 census results..

Table 3.19: Number of Households by Source of Lighting

District	Electricity	Solar	Hurican Lamp	Pressure Lamp	Wick Lamp	Candles	Fire Wood	Other	Total
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Kondoa	1,555	222	23,766	2,887	59,081	0	2,443	0	89,954
Mpwapwa	0	142	7,972	2,135	41,713	0	4,840	854	57,657
Kongwa	376	376	13,404	752	35,327	125	376	0	50,735
Dodoma Urban	1,138	0	5,945	2,909	39,466	0	1,771	0	51,230
Bahi	116	0	4,984	927	38,825	0	1,391	695	46,938
Chamwino	1,079	308	7,094	3,855	44,875	308	3,855	1,079	62,455
Total	**4,264**	**1,049**	**63,164**	**13,466**	**259,287**	**434**	**14,676**	**2,629**	**358,969**
%	**1.2**	**0.3**	**17.6**	**3.8**	**72.2**	**0.1**	**4.1**	**0.7**	**100.0**


MAP 3.43 DODOMA
Number and Percentage of Households
Eating Fish Once per Week
by District
Kondoa
19545
21.73%
29.63%
31.60%
Bahi
39.26%
Kongwa
19918
Dodoma Urban
16571
14835
Mpwapwa
25483
44.20%
Chamwino
18505
Number of Households
Eating Fish Once per
Week
0 - 5000
5001 - 10000
10001 - 15000
15001 - 20000
20001 - 25483
Percentage of Households
Eating Fish Once per Week


MAP 3.44 DODOMA
Number and Percentage of Households
Reporting Food Insufficiency
by District
Kondoa
63967
71%
Bahi
80%
63%
Kongwa
31819
Dodoma Urban
84%
40984
39521
66%
Mpwapwa
40716
71%
Chamwino
41482
Number of Households
Reporting Food Insufficiency
0 - 13000
13001 - 26000
26001 - 39000
39001 - 52000
52001 - 63967
Percentangeof Households
Reporting Food Insufficiency

4 CONCLUSION

4.1 DODOMA REGIONAL PROFILE

Dodoma is the fourth region with largest land area under cultivation (825,722 ha) with over two thirds area under annual crops and most of the remaining under annual mixed crops. Very little permanent crops were grown by smallholders in the region. Almost all the land area allocated to smallholders in the region was utilized indicating the possibility of land pressure and 73 percent of the smallholders reported that they had insufficient land. Whilst Dodoma does not have a dry season, it had the second largest planted area of maize in the country and one of the largest areas planted per household, however, the yield during the census year was amongst the lowest in the country. It had the third largest planted area of sorghum in the country.

The region as a whole is not important for cassava or bean production however, the households that cultivated cassava and beans grew more than the households in most other regions. Dodoma had the third largest planted area and one of the highest productions of groundnuts in the country. The region was not important for smallholder vegetable production and annual cash crops; however it had the third largest planted area of pigeon peas in the country. Dodoma was among the regions with the smallest areas of irrigation in the country. Compared to other regions, it had the second largest area without fertiliser in the country. Approximately, one sixth of the planted area was applied with farm yard manure. Chemical inputs were used in very small quantities. Approximately, 70 percent of the households stored crops in sacks or open drums, with the remainder in traditional cribs.Smallholders in Dodoma hade above the average of access to extension advice. The most common implement used was the hand hoe although some oxen and other implements were also used. Dodoma had a comparatively moderate amount of erosion control facilities.

4.2 DISTRICT PROFILES

The following district profiles highlight the characteristics of each district and compare them in relation to population, main crop and livestock production and productivity, access to services and resources and levels of poverty.

4.2.1 Kondoa

Kondoa district was the first with the largest number of agricultural households (89,954 hh, 25%) activities in the region. Most of the smallholders were involved in crop only followed by crop and livestock production. Some households were involved in fish farming. The most important livelihood activity for smallholder households in the district was annual crop farming, followed by off farm income and forestry products. Kondoa had the highest literacy rate among the smallholder households (76%) and this is reflected by the concomitant relatively high level of school attendance in the district. The district also has the highest literacy rate for the male heads of household in the region, but was the least for female headed households. It had the largest utilized land area per household (2.9 ha) though it ranked the lowest in terms of percentage utilization. The district was the second largest maize producer in the region with a planted area of 91,522 ha and the planted area per household was the fourth largest in the region.

The district ranked second from bottom in terms of area planted with sorghum, also had the lowest area planted with cassava and was second best in area planted and yield of sweet potatoes. The production of beans in Kondoa was the second highest after Mpwapwa with a planted area of 4,189 ha. Oilseed crops were not important and had the least area planted with groundnuts in the region. Vegetable production was also minimal. It had the largest planted area with permanent crops which was dominated by pigeon peas (12,618 ha). Other permanent crops were grown in very small quantities. Use of draught animals was moderate.

Likewise the use of inputs such as improved seeds was low. However, the district had the largest area planted with fertilizers (19,043 ha) and also ranked the first in terms of fungicides use. More households in the district storesdtheir crops in traditional structures, and the district ranked the highest in the number of households selling crops. Access to credit in the district was moderate and the main sources of credit in the district were family, friends and relatives religious, SACCOS and cooperatives. The district had the highest proportion of households receiving crop extension services in the region and almost all of it was from the government.

More households had irrigation control or water harvesting facilities than in any other district. The district had the largest number of cattle, goats and chicken in the region and a all were almost indigenous, however, it had the second smallest sheep populationand had the smallest number of pigs in the region. Furthermore, the district had the largest number of households reporting tsetse

and tick problems and it ranked the second number of households which de-wormed cattle and moderately small which for those dewormed sheep and goats.

Kondoa district had the lowest percentage of households with no toilet facilities. It had the second highest proportion of households accessing water in a distance less than 100 meters. The district also has the highest number of household eating three meals per day but ranked the second from bottom in terms of number of households experiencing food insecurity. The district had the highest number of households using electricity as a source of lighting.

4.2.2 Mpwapwa

Mpwapwa was the third district with the largest number of agricultural households in the region. Most of the smallholders were involved in crop production and livestock keeping. The most important livelihood activity for smallholder households in Mpwapwa district was annual crop farming, followed by off farm income. Mpwapwa had the third highest literacy rate (66.6%) among the smallholders. The literacy rate for the heads of household was about 50 percent. It ranked third in terms of percentage of household members who were attending school.

Total planted area was moderate, though the district had the second highest land utilization rate (90%), indicating an impending high level of land pressure. The utilized land area per household was about 2.8 ha. Maize production in the district was moderate compared to other districts in the region with a planted area of 50,212 ha. The district had the highest sorghum planted are (31,390 ha), and had the second highest planted area per household (1.1 ha). Area planted with cassava was 1,095 ha (95% of total area planted with cassava in the region) and the district had the highest area planted with sweet potatoes (288 ha. 33%), though the yield per hectare was the lowest. Mpwapwa district had the largest beans and groundnut planted areas with area planted per beans and groundnut growing household of 769 ha and 22,160 ha respectively. Vegetable production was moderately important in the district. It ranked the highest in terms of onion production (52% of the total area), and was the least in tomato production. Compared to other districts in the region, Mpwapwa had very small area planted with permanent crops.

The use of inputs in the region was very small, however, the district ranked the second highest in terms of number of households using improved seeds. The district had small areaplanted with fertilizers (Farm yard manure, compost and inorganic fertilizers)., Compared to other districts in the region, Mpwapwa district had low level of insecticide use. It had the second largest area with

irrigation compared to other districts with 1,621 ha of irrigated land. The most common source of water for irrigation was from rivers using gravity. The most common methods of crop storage in the district were sacks and/or open drum and locally made traditional structures. Selling of crops was moderate and was comparable to other districts, except Kondoa. Access to credit in the district was relatively small (12% of the total households) and the main sources were family, friends and relatives (80%) and SACCOS (20%).

The proportion of households that received extension services in Mpwapwa district was more than 85 percent mostly from the government. Mpwapwa district had the second highest proportion of erosion control and water harvesting structures, mostly dams, erosion control bunds and tree belts; however it also had a number of water harvesting bunds and drainage ditches. The district had the second lowest numbers of cattle in the region mostly of which were indigenous. However, it ranked the second in the number of improved dairy cattle. Goat and Sheep production was moderate compared to other districts in the region. It had the second largest number of pigs in the region and the fourth in terms of number of chicken. Some ducks and donkeys were also in the district. A number of households reported tsetse and tick problems in the district and it had the third largest proportion of households which de-warmed livestock.

The district had moderate number of households using draft animals in the region, mainly oxen. The percentage of households without toilet facility in Mpwapwa district was 8%, which is the second highest in the region. The most common source of energy for lighting was the wick lamp and practically almost all the household's use firewood for cooking. The most common source of drinking water was piped water followed by unprotected wells. It had the largest number of households accessing drinking water in a distance less than 100 m. It ranked the second in terms of number of households having one or two meals per day, and had the third lowest number of households with food insecurity in the region.

4.2.3 Kongwa

Kongwa district ranked 5th with the largest number of agricultural households in the region. Most of the smallholders were involved in crop production by more than 70 percent followed by crops and livestock production. The most important livelihood activity for smallholder households in Kongwa district was Annual crop farming, followed by off-farm income activities. Kongwa had a comparatively low literacy rate among the smallholder households (63%) However, it compares well with other districts in terms of literacy levels of household heads. It had the second highest

planted area and highest land utilization in the region (90%). The average area utilized per household was 3.9 ha.

The district was leading in maize production in the region with a planted area of about 108,568 ha. The highest maize production in the district could be attributed by the highest area planted per maize growing household (2.4ha) in the region. Bulrush millet and sorghum production were moderate, with 17,503 ha planted with sorghum. The district had the second largest area planted with cassava accounting for 4.4 percent of the total cassava planted area in the regionSweet potato and bean production were much lower than in other districts in the region. Oilseed crops were moderately important and the district produced 8,994 tons of groundnuts (20% of the regional total). The district ranked the highest in terms of tomato production (70%), while onion production was moderately low.

Permanent crops were of moderate importance in Kongwa district and only 370 ha of pigeon peas were planted in 2007/08 agricultural year while in 2002/03 the area under this crop was 2,468 ha. Other permanent crops were either not grown or were grown in very small quantities. The use of inputs in the region was very small, however district differences existed. Kongwa has the highest planted area with improved seeds in the region but, was the lowest in terms of total area planted with fertilizers. Use of fungicide, herbicides and insecticides were moderately high in the region. It had the smallest area with irrigation compared to other districts with only 591 ha of irrigated land. The only source of water for irrigation available in the district was from rivers while bucket/watering was the only means of irrigation water application. The percentage of households storing crops in Kongwa district was low and only a moderate number of household sold crops. The district had the lowest percentage of households which received agricultural credits in the region and it was mainly from cooperatives, family and friends and commercial banks. The number of households receiving extension services in Kongwa district did not differ much from other districts other than Kondoa and most of the services were from the government. The district had the fourth highest proportion of erosion control and water harvesting structures in the region, mostly erosion control bunds. The district had a moderate number of cattle in the region as compared to other districts but ranked the highest in the number of pigs (56,498). It ranked the third in the number of goats and had a moderate number of sheep and chicken.

Numbers of households reporting tsetse and tick problems in Kongwa district were comparable to most other districts. The use of draft animals in the district was moderate. There was no fish

farming in the district.The district hads the second smallest percentage of households with no toilet facilities (5%). The most common source of energy for lighting was the wick lamp and a large proportion of the households (96%) used firewood for cooking. The most common source of drinking water was from piped water. Most of the households (72%) had two meals per day and ranked the lowest in the number of household reporting food insecurity.

4.2.4 Dodoma Urban

Dodoma Urban district had the second lowest number of agricultural households in the region. The most important livelihood activity for the smallholder households in Dodoma Urban district was annual crop farming, followed by off - farm income, livestock keeping/herding and remittances. The literacy rate among the smallholder households in the district was among the highest (second best after Kondoa). It had the highest proportion of person over 5 years who have completed school. It had lower usable area, but high percentage of land utilization (91%). Area utilized per household was only 1.8 ha and was the lowest in the region.

The district had a small area planted with maize (20,316 ha) and the planted area per household was the second smallest in the region (0.56 ha). Sorghum production was of moderate importance in the region with a planted area of 6,769 hectares. Finger millet, bulrush millet were produced in small quantities. This District had 30% of the total area planted with cassava which was the second largest. Sweet potatoes was also grown but in small quantities. Likewise,the area under beans was among the lowest in the region. It ranked the fourth in terms of groundnut production and the area under groundnuts accounted for 13.7% of the total area in the region. However, the yield per hectare was the lowest. Vegetable production wasimportant in the district, and the district ranked the second and accounted for about 30 percent of tomato production in the region. Onions and other vegetables were produced in small quantities. Compared to other districts in the region, Dodoma Urban had moderate planted area with permanent crop (10% of the regional total) with an average of 0.6 ha per household. The most common permanent crop was pigeon pea.

The use of inputs in the region was very small, however district differences existed. Dodoma Urban had the lowest proportion of the planted area with improved seeds in the region (10,867 ha). However, it ranked the third in the use of fertilizer mostly farm yard manure and compost. It had a relatively small area planted with inorganic fertilizers. Compared to other districts in the region, Dodoma Urban district had the smallest percentage of the planted area in the district with

fungicides application and herbicides. Applications of insecticides were moderate with only 501 ha applied with insecticides (equivalent to 61 percent of total planted area).

It had the smallest area under irrigation; with a planted area of only 1,119 ha (15%) and the main method of irrigation was hand bucket. The proportion of households storing crops in the Urban district was the highest in Dodoma region (about 90% of the agricultural households) and the most common method of crop storage was in sacks/open drums and locally made traditional cribs. The district had a moderate percentage of the households selling processed crops mostly to secondary markets (68%). It had the largest number of agricultural households which received agricultural credits in the region (26%). Most of the credits were from saving and credit societies (42%), family/relatives and friends (44%) and NGO/development organizatio (9%).

A comparatively high proportion of the households received extension services in Dodoma Urban (88% of the households) mostly from the government. It had the third highest proportion of erosion control and water harvesting structures which were mostly, erosion control bunds, tree belts, and terraces. The district had the fourth largest number of cattle in the region dominated by indigenous breed and also had the highest number of improved beef cattle. It had the fourth highest number of goats, but ranked the lowest in the number of sheep and with a moderate number of pigs. The number of chicken was comparably the higher than other districts except Kondoa which had the highest and Bahi with the lowest. The district had a moderate number of households reporting tick problems and had the second lowest incidences of Tsetse infestations. The numbers of households de-worming livestock was comparable to other districts.

Despite being proximal to urban centre, the district had the highest proportion of the households with no toilet facilities in the region (9%). It had the smallest proportion of the households that spent less than 10 minutes to the source of drinking water. It had a higher number of households eating one meal per day but a moderate number of those households reporting two or three meals per day. However, about 38 percent of the households reported to be food insecure, the third position in the region. It had a small proportion of the households using electricity and solar power as sources of energy for lighting. The most common source of energy for lighting was the wick lamp and almost all the households used firewood for cooking.

4.2.5 Bahi

Bahi district had the smallest number of agricultural households in the region. Most of the smallholders were involved in crop farming, livestock production and fish production. Bahi had the third lowest literacy rate among the smallholder households (66.2%) reflected by the relatively high level of those attending school in the region. The literacy rate for the heads of household is comparable to other districts in the region. About 42 percent of the household members had completed school, while 27 percent were attending school.

It had the smallest land area available for agriculture and had the second lowest percentage of land utilization (83%). The average land area per household was 1.8 ha. The total planted area was the smallest compared to other districts in the region. The district had the smallest area planted with maize and smallest area planted per maize growing household in the region. Sorghum production was moderately low with an average of 0.6 ha per household. Other cereals include bulrush millet and finger millets. Cassava was not among the crops reported to be grown. The production of sweet potatoes was also low. No beans were grown in Bahi district. Other pulses produced in the district were of minor importance. It had the third highest area planted with groundnuts (10,110 ha; 12.7% of total area in the region planted with groundnuts). Simsim and sunflower were grown in small quantities.

The district had the largest area planted with fruits and vegetables in the region mostly dominated by tomatoes (41 %). Other fruits and vegetables were grown in small quantities. Compared to other districts in the region, it had a moderate high percentage of the households using oxen for farm operations. The use of inputs in the region was moderate and had the highest percentage (32%) of the households using improved seeds. The area planted with fertilizer was 9,425 ha, equivalent to 19% of the total planted area. It had the smallest area planted with herbicides, fungicides and insecticides in the region. However, it had the highest area under irrigation with 1,197 ha of irrigated land. Hand bucket and gravity were the most common methods of obtaining water for irrigation. Very few households stored crops (2%) and the most common method of crop storage was in locally made traditional cribs and sacks/open drums. However, the district had the second highest proportion of the households which sold crops (78.6%). There was little access to credits in the district which mostly came from friends, family, relatives and cooperatives. Few households received credits from banks and SACCOS. A comparatively high number of households received crop extension services in Bahi district and a large percentage of this was from the government. It

had the least number of households with erosion control and water harvesting structures mostly water harvesting bunds and erosion control bunds.

The district had the second highest number of cattle in the region (242,455 heads) dominated by indigenous breed with very few beef and dairy breeds. Chicken production was moderately low. Incidences of ticks and tsetse fly were low. Almost 100 percent of fish farming in the region was done in Bahi district. About 5 percent of the households had no toilet. The most common source of energy for lighting was the wick lamp and hurricane lamp and most of the households use firewood for cooking. It had the highest number of households which could access drinking water within less than ten 10 minutes. However, the district recorded the highest proportion of the households with food insecurity (60%).

4.2.6 Chamwino

Chamwino district had the second largest number of agricultural households in the region (46,571 hh, 13%). Like other districts most of the smallholders were involved in crop production followed by crop and livestock production. The most important livelihood activity for the smallholder households in Chamwino district was annual crop farming, followed by off-farm income activities. Chamwino had the lowest literacy rate among the smallholder households (61.9%). However, it compares well with other districts in terms of literacy levels of the household heads, but had a smaller number of members of households attending school. It had the fourth highest planted area and moderate land utilization in the region (87%). The average area utilized per household was 2.4 ha. The district ranked the second in area planted with maize per household (1.4 ha). It had the second largest area planted with sorghum (19,539 ha) with an average planted area per household being 0.73 ha. Bulrush millet and finger millets were grown in small areas. Cassava production was moderate with 4% of the roots and tuber production, whilst the district had the largest area planted with sweet potatoes in the district (493 ha). Bean production was not important in the district. Oilseed crops were moderately important and Chamwino produced about 9,864 tons of groundnuts (22% of the regional total). Vegetables were produced in small amounts and few permanent crops were grown. The use of draught animals was relatively high and 81 percent of the households used oxen and 6 percent used donkeys. Use of other inputs in the region was moderate. Chamwino had the second lowest planted area with improved seeds in the region and ranked the fourth in the use of fertilizers. Fungicides were not used, while herbicides and insecticides were used in small quantity. Very few households (less than 5%) stored crops and about 70 percent sold their crops. The district had the second largest number of households which received agricultural credits in the

region and mainly from family and friends and SACCOS. However, the district had the lowest number of households which received crop extension advices (78.8%) and most of the services were from the government. It ranked from the firfth in terms of number of erosion control and water harvesting structures in the region, mostly terraces, erosion control bunds, tree belts and water harvesting bunds. The district had the third highest number of cattle in the region, with a moderate number of sheep, but was the least in the number of goats. Pig and chicken production was moderate. The numbers of households reporting tsetse and tick problems in Chamwino district were comparable to most other districts. Chamwino district had the smallest percentage of the households with no toilet facilities (4%). The most common source of energy for lighting was the wick lamp and a large proportion of the households (96%) used firewood for cooking. The most common source of drinking water was from piped water. Most of the households (75%) had two meals per day and the district ranked the second in the number of household's which reported food insecurity (40%).

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TYPE OF AGRICULTURE HOUSEHOLDS

Appendix II: Tables

2.1: 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	%			
Kondoa	50,418	56	222	0	0	0	39,313	44	89,954	89,732	39,535
Mpwapwa	42,851	74	0	0	0	0	14,806	26	57,657	57,657	14,806
Kongwa	37,582	74	125	0	0	0	13,028	26	50,735	50,610	13,154
Dodoma Urban	39,972	78	0	0	0	0	11,258	22	51,230	51,230	11,258
Bahi	38,709	82	116	0	0	0	8,113	17	46,938	46,822	8,229
Chamwino	46,571	75	0	0	0	0	15,884	25	62,455	62,455	15,884
Total	256,105	71	463	0	0	0	102,402	29	358,970	358,506	102,865

2.2`: Number of Households by type of Household and District during 2007/08 Agriculture year

District	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
Kondoa	89,954	99.2	763	0.8	90,717	90.6	9,389	9.38	100,105
Mpwapwa	57,657	98.3	984	1.7	58,641	88.9	7,350	11.14	65,991
Kongwa	50,735	99.0	520	1.0	51,255	87.0	7,632	12.96	58,888
Dodoma Urban	51,230	98.1	971	1.9	52,201	50.8	50,460	49.15	102,662
Bahi	46,938	98.7	616	1.3	47,554	94.2	2,928	5.80	50,482
Chamwino	62,455	98.5	965	1.5	63,420	93.4	4,449	6.56	67869
Total	358,969	98.7	4,819	1.3	363,788	81.6	82,208	18.43	445,997

2.3: Number of Agriculture Households By Type and Size of Holding, 2007/08 Agricultural Year - DODOMA 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	24,753	89	463	2	0	0	2,483	9	27,699	100
0.51 - 1.00	47,549	87	0	0	0	0	7,062	13	54,611	100
1.01 - 1.50	46,305	79	0	0	0	0	12,221	21	58,526	100
1.51 - 2.00	34,023	75	0	0	0	0	11,232	25	45,254	100
2.01 - 2.50	43,939	69	0	0	0	0	19,999	31	63,938	100
2.51 - 3.00	10,893	60	0	0	0	0	7,203	40	18,096	100
3.01 - 3.50	9,612	56	0	0	0	0	7,579	44	17,191	100
3.51 - 4.00	4,925	62	0	0	0	0	2,978	38	7,903	100
4.01 -4.50	16,083	62	0	0	0	0	9,734	38	25,817	100
4.51 -5.00	3,071	53	0	0	0	0	2,761	47	5,832	100
Above 5	14,953	44	0	0	0	0	19,150	56	34,102	100
Total	256,105	71	463	0	0	0	102,402	29	358,969	100

2.4: Number of Agriculture Households By Type and Size of Holding, 2007/08 Agricultural Year - DODOMA 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	24,753	10	463	0	0	0	2,483	2	27,699	8
0.51 - 1.00	47,549	19	0	0	0	0	7,062	7	54,611	15
1.01 - 1.50	46,305	18	0	0	0	0	12,221	12	58,526	16
1.51 - 2.00	34,023	13	0	0	0	0	11,232	11	45,254	13
2.01 - 2.50	43,939	17	0	0	0	0	19,999	20	63,938	18
2.51 - 3.00	10,893	4	0	0	0	0	7,203	7	18,096	5
3.01 - 3.50	9,612	4	0	0	0	0	7,579	7	17,191	5
3.51 - 4.00	4,925	2	0	0	0	0	2,978	3	7,903	2
4.01 -4.50	16,083	6	0	0	0	0	9,734	10	25,817	7
4.51 -5.00	3,071	1	0	0	0	0	2,761	3	5,832	2
Above 5	14,953	6	0	0	0	0	19,150	19	34,102	10
Total	256,105	100	463	0	0	0	102,402	100	358,969	100

HOUSEHOLD DEMOGRAPHICS

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
Kondoa	71,297	79	18,657	21	89,954
Mpwapwa	42,282	73	15,375	27	57,657
Kongwa	35,953	71	14,782	29	50,735
Dodoma Urban	38,328	75	12,902	25	51,230
Bahi	30,597	65	16,341	35	46,938
Chamwino	44,258	71	18,197	29	62,455
Total	262,714	73	96,255	27	358,969

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

	Male		Female		
District	Number	Percent	Number	Percent	Total
Kondoa	242,986	52	222,996	48	465,982
Mpwapwa	135,245	50	134,249	50	269,494
Kongwa	123,894	48	134,292	52	258,187
Dodoma Urban	107,520	48	118,778	52	226,299
Bahi	97,817	50	96,078	50	193,895
Chamwino	131,849	48	140,331	52	272,180
Total	839,312	50	846,724	50	1,686,036

3.3: Number of Agricultural Household Members By Sex and Age Group, 2007/08 Agricultural Year, Dodoma Region

	Sex					
	Male		Female		Total	
Age Group	Number	%	Number	%	Number	%
Less than 4	117,411	52	107,707	48	225,118	100
5 - 9	147,303	53	131,135	47	278,438	100
10 - 14	121,479	51	116,532	49	238,012	100
15 - 19	101,946	51	97,672	49	199,618	100
20 - 24	59,193	47	66,830	53	126,023	100
25 - 29	50,738	44	64,207	56	114,945	100
30 - 34	41,200	43	54,071	57	95,271	100
35 - 39	40,843	45	50,028	55	90,871	100
40 - 44	32,211	47	36,939	53	69,150	100
45 - 49	32,593	49	34,391	51	66,983	100
50 - 54	24,537	53	22,186	47	46,723	100
55 - 59	20,287	57	15,527	43	35,813	100
60 - 64	16,025	53	14,092	47	30,117	100
65 - 69	9,826	49	10,128	51	19,954	100
70 - 74	8,910	47	10,104	53	19,014	100
75 - 79	7,551	63	4,506	37	12,057	100
80 - 84	3,329	38	5,524	62	8,852	100
Above 85	3,932	43	5,144	57	9,076	100
Total	839,312	50	846,724	50	1,686,036	100

3.4 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	
Kondoa	65,078	94	4,220	6	69,298	100	1,555	50	1,555	50	3,110	100
Mpwapwa	37,442	84	6,976	16	44,417	100	1,566	58	1,139	42	2,705	100
Kongwa	34,074	91	3,257	9	37,331	100	376	13	2,505	87	2,881	100
Dodoma Urban	33,142	91	3,162	9	36,304	100	885	47	1,012	53	1,897	100
Bahi	26,888	88	3,825	12	30,713	100	1,043	41	1,507	59	2,550	100
Chamwino	37,010	89	4,626	11	41,637	100	1,079	47	1,234	53	2,313	100
Total	233,633	90	26,066	10	259,699	100	6,505	42	8,951	58	15,456	100

Cont. 3.4 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	
Kondoa	0	0	222	100	222	100	2,221	34	4,220	66	6,441	100
Mpwapwa	0	0	569	100	569	100	2,563	49	2,705	51	5,267	100
Kongwa	0	0	1,002	100	1,002	100	501	17	2,505	83	3,007	100
Dodoma Urban	3,036	96	126	4	3,162	100	1,012	26	2,909	74	3,921	100
Bahi	927	89	116	11	1,043	100	1,159	22	4,172	78	5,331	100
Chamwino	4,009	90	463	10	4,472	100	1,542	31	3,393	69	4,935	100
Total	7,972	76	2,499	24	10,471	100	8,998	31	19,905	69	28,902	100

Cont. 3.4 Number of Heads of Agricultural Households by Marital Status, sex of head and Region, 2007/08 Agricultural Year

District	Widowed						Total					
	Male		Female		Total		Male		Female		Total	
Kondoa	2,443	22	8,440	78	10,883	100	71,297	79	18,657	21	89,954	100
Mpwapwa	712	15	3,986	85	4,698	100	42,282	73	15,375	27	57,657	100
Kongwa	1,002	15	5,512	85	6,514	100	35,953	71	14,782	29	50,735	100
Dodoma Urban	253	4	5,692	96	5,945	100	38,328	75	12,902	25	51,230	100
Bahi	579	8	6,722	92	7,301	100	30,597	65	16,341	35	46,938	100
Chamwino	617	7	8,482	93	9,098	100	44,258	71	18,197	29	62,455	100
Total	5,606	13	38,834	87	44,441	100	262,714	73	96,255	27	358,969	100

3.5 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	
Kondoa	34,205	89	4,442	11	38,647	100	36,870	73	13,771	27	50,641	100
Mpwapwa	22,351	79	6,122	22	28,473	100	19,504	68	9,254	32	28,757	100
Kongwa	19,167	77	5,763	23	24,929	100	16,787	66	8,769	34	25,556	100
Dodoma Urban	19,480	81	4,554	19	24,034	100	18,721	69	8,222	31	26,943	100
Bahi	17,616	72	6,838	28	24,454	100	12,980	58	9,272	42	22,252	100
Chamwino	23,748	79	6,477	21	30,225	100	20,510	64	11,566	36	32,076	100
Total	136,567	80	34,195	20	170,762	100	125,372	67	60,853	33	186,225	100

Cont. 3.5 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	
Kondoa	222	33	444	67	666	100	71,297	79	18,657	21	89,954	100
Mpwapwa	427	100	0	0	427	100	42,282	73	15,375	27	57,657	100
Kongwa	0	0	251	100	251	100	35,953	71	14,782	29	50,735	100
Dodoma Urban	126	50	126	50	253	100	38,328	75	12,902	25	51,230	100
Bahi	0	0	232	100	232	100	30,597	65	16,341	35	46,938	100
Chamwino	0	0	154	100	154	100	44,258	71	18,197	29	62,455	100
Total	776	39	1,207	61	1,983	100	262,714	73	96,255	27	358,969	100

3.6 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	%
Kondoa	42,645	81	9,773	19	52,417	100	28,430	76	8,884	24	37,314	100
Mpwapwa	28,473	78	8,115	22	36,587	100	13,809	66	7,118	34	20,927	100
Kongwa	25,180	74	8,644	26	33,824	100	10,773	64	6,138	36	16,912	100
Dodoma Urban	25,172	78	7,210	22	32,383	100	13,155	70	5,692	30	18,848	100
Bahi	24,338	74	8,345	26	32,683	100	6,258	44	7,881	56	14,139	100
Chamwino	31,921	73	11,566	27	43,487	100	12,337	65	6,631	35	18,968	100
Total	177,729	77	53,652	23	231,381	100	84,763	67	42,345	33	127,108	100

Cont. 3.6 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	%
Kondoa	222	100	0	0	222	100	71,297	79	18,657	21	89,954	100
Mpwapwa	0	0	142	100	142	100	42,282	73	15,375	27	57,657	100
Kongwa	0	0	0	0	0	0	35,953	71	14,782	29	50,735	100
Dodoma Urban	0	0	0	0	0	0	38,328	75	12,902	25	51,230	100
Bahi	0	0	116	100	116	100	30,597	65	16,341	35	46,938	100
Chamwino	0	0	0	0	0	0	44,258	71	18,197	29	62,455	100
Total	222	100	258	0	480	100	262,714	80	96,255	20	358,969	100

3 .7: 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	%	
Kondoa	260,310	64.5	47,753	11.8	222	0.1	95,506	23.7	403,792
Mpwapwa	137,381	60.6	13,667	6.0	0	0.0	75,595	33.4	226,643
Kongwa	130,910	59.7	7,892	3.6	0	0.0	80,425	36.7	219,227
Dodoma Urban	113,845	57.3	26,690	13.4	1,138	0.6	57,176	28.8	198,850
Bahi	107,088	61.6	7,417	4.3	579	0.3	58,759	33.8	173,845
Chamwino	137,092	57.5	9,407	3.9	1,079	0.5	90,984	38.1	238,562
Total	886,627	60.7	112,827	7.7	3,020	0.2	458,445	31.4	1,460,918

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

District	Swahili						Swahili & English					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Kondoa	51,529	88	7,107	12	58,636	100	6,885	96	1,111	4	7,996	100
Mpwapwa	29,327	80	7,118	20	36,445	100	3,417	93	285	7	3,701	100
Kongwa	23,301	77	7,141	23	30,441	100	752	91	125	9	877	100
Dodoma Urban	24,793	83	5,186	17	29,979	100	4,301	100	759	0	5,060	100
Bahi	22,484	75	7,417	25	29,901	100	1,159	91	116	9	1,275	100
Chamwino	28,066	77	8,327	23	36,393	100	1,696	93	617	7	2,313	100
Total	179,500	81	42,297	19	221,797	100	18,210	90	3,012	10	21,222	100

Cont. 3.8 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					
Region	**Male**	**%**	**Female**	**%**	**Total**	**%**	**Male**	**%**	**Female**	**%**	**Total**	**%**
Kondoa	222	100	0	0	222	100	12,660	55	10,439	45	23,099	100
Mpwapwa	0	0	0	0	0	0	9,538	54	7,972	46	17,511	100
Kongwa	0	0	0	0	0	0	11,901	61	7,516	39	19,417	100
Dodoma Urban	126	100	0	0	126	100	9,108	57	6,957	43	16,065	100
Bahi	0	0	0	0	0	0	6,954	44	8,808	56	15,762	100
Chamwino	154	100	0	0	154	100	14,341	61	9,253	39	23,594	100
Total	503	61	0	39	503	100	64,502	62	50,946	38	115,448	100

Cont. 3.8 Number of Heads of Agricultural Households By Status of writing and reading Languages, sex of head and Region,2007/08 Agricultural Year

	Total					
Region	**Male**	**%**	**Female**	**%**	**Total**	**%**
Kondoa	71,297	79	18,657	21	89,954	100
Mpwapwa	42,282	73	15,375	27	57,657	100
Kongwa	35,953	71	14,782	29	50,735	100
Dodoma Urban	38,328	75	12,902	25	51,230	100
Bahi	30,597	65	16,341	35	46,938	100
Chamwino	44,258	71	18,197	29	62,455	100
Total	262,714	80	96,255	20	358,969	100

3.9 Number of Agricultural Household Members reporting Literacy levels by Sex of Member Five years 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	%
Kondoa	166,803	80	40,424	20	207,227	100	141,483	72	55,083	28	196,565	100	308,286	76	95,506	24	403,792	100
Mpwapwa	77,731	69	34,879	31	112,610	100	73,317	64	40,716	36	114,033	100	151,048	67	75,595	33	226,643	100
Kongwa	67,772	65	37,081	35	104,853	100	71,029	62	43,344	38	114,374	100	138,802	63	80,425	37	219,227	100
Dodoma Urban	71,975	75	24,160	25	96,136	100	69,699	68	33,015	32	102,714	100	141,674	71	57,176	29	198,850	100
Bahi	60,962	70	25,845	30	86,806	100	54,124	62	32,915	38	87,038	100	115,085	66	58,759	34	173,845	100
Chamwino	73,558	64	40,711	36	114,269	100	74,021	60	50,272	40	124,293	100	147,578	62	90,984	38	238,562	100
Total	518,801	72	203,100	28	721,901	100	483,672	65	255,345	35	739,017	100	1,002,473	69	458,445	31	1,460,918	100

3.10 Number of heads of Agricultural households reporting Literacy levels by Sex of Member Five years 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	%
Kondoa	58,636	82	12,660	18	71,297	100	8,218	44	10,439	56	18,657	100	66,854	74	23,099	26	89,954	100
Mpwapwa	32,744	77	9,538	23	42,282	100	7,403	48	7,972	52	15,375	100	40,147	70	17,511	30	57,657	100
Kongwa	24,052	67	11,901	33	35,953	100	7,266	49	7,516	51	14,782	100	31,318	62	19,417	38	50,735	100
Dodoma Urban	29,220	76	9,108	24	38,328	100	5,945	46	6,957	54	12,902	100	35,165	69	16,065	31	51,230	100
Bahi	23,643	77	6,954	23	30,597	100	7,533	46	8,808	54	16,341	100	31,176	66	15,762	34	46,938	100
Chamwino	29,917	68	14,341	32	44,258	100	8,944	49	9,253	51	18,197	100	38,861	62	23,594	38	62,455	100
Total	198,212	75	64,502	25	262,714	100	45,309	47	50,946	53	96,255	100	243,522	68	115,448	32	358,969	100

3 .11: Number of Household Members Five yearsby Education Status and District

District	Attending School	%	Completed	%	Never Attended to School	%	Total
Kondoa	158,363	34	159,918	28	85,511	20	403,792
Mpwapwa	72,321	15	82,001	14	72,321	17	226,643
Kongwa	64,515	14	81,051	14	73,660	17	219,227
Dodoma Urban	61,603	13	85,384	15	51,863	12	198,850
Bahi	46,474	10	72,203	13	55,167	13	173,845
Chamwino	64,614	14	88,825	16	85,124	20	238,562
Total	467,890	100	569,382	100	423,646	100	1,460,918

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

	Attending School						Completed					
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	666	75	222	25	888	100	57,748	88	7,996	12	65,744	100
Mpwapwa	569	80	142	20	712	100	32,032	82	7,261	18	39,292	100
Kongwa	501	80	125	20	626	100	23,676	77	6,890	23	30,566	100
Dodoma Urban	759	67	379	33	1,138	100	28,841	84	5,566	16	34,407	100
Bahi	579	100	0	0	579	100	22,832	75	7,533	25	30,365	100
Chamwino	925	75	308	25	1,234	100	28,066	77	8,482	23	36,548	100
Total	4,001	77	1,178	23	5,178	100	193,195	82	43,727	18	236,922	100

3.13: 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	%
Kondoa	222	0.1	2,665	1.7	2,443	1.5	1,777	1.1	10,439	6.5	2,443	1.5
Mpwapwa	142	0.2	1,139	1.4	2,278	2.8	2,278	2.8	8,542	10.4	1,708	2.1
Kongwa	251	0.3	626	0.8	1,879	2.3	2,255	2.8	5,261	6.5	2,255	2.8
Dodoma Urban	0	0	632	0.7	1,012	1.2	1,644	1.9	9,614	11.3	632	0.7
Bahi	116	0.2	811	1.1	579	0.8	695	1	3,129	4.3	695	1
Chamwino	154	0.2	463	0.5	1,234	1.4	925	1	6,631	7.5	1,079	1.2
Total	885	0.2	6,337	1.1	9,425	1.7	9,575	1.7	43,616	7.7	8,814	1.5

cont 3.13: Number of Agricultural Household Members By Level of Formal Education Completion and District, 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	%
Kondoa	1,999	1.3	127,712	79.9	888	0.6	666	0.4	0	0	666	0.4
Mpwapwa	1,139	1.4	57,230	69.8	854	1	285	0.3	142	0.2	142	0.2
Kongwa	752	0.9	60,632	74.8	251	0.3	626	0.8	0	0	251	0.3
Dodoma Urban	1,138	1.3	65,271	76.4	253	0.3	506	0.6	126	0.1	126	0.1
Bahi	1,043	1.4	62,932	87.2	0	0	0	0	0	0	116	0.2
Chamwino	1,079	1.2	72,324	81.4	617	0.7	154	0.2	308	0.3	0	0
Total	7,150	1.3	446,101	78.3	2,863	0.5	2,238	0.4	577	0.1	1,302	0.2

cont 3.13: Number of Agricultural Household Members By Level of Formal Education Completion and District, 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	%
Kondoa	222	0.1	444	0.3	3,776	2.4	222	0.1	222	0.1	0	0
Mpwapwa	142	0.2	285	0.3	1,424	1.7	142	0.2	142	0.2	0	0
Kongwa	1,253	1.5	125	0.2	752	0.9	0	0	251	0.3	0	0
Dodoma Urban	1,012	1.2	506	0.6	1,518	1.8	126	0.1	253	0.3	0	0
Bahi	579	0.8	116	0.2	811	1.1	0	0	0	0	116	0.2
Chamwino	154	0.2	0	0	2,313	2.6	0	0	0	0	0	0
Total	3,363	0.6	1,476	0.3	10,593	1.9	491	0.1	868	0.2	116	0

cont 3.13: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2007/08 Agricultural Year

	Education Level							
	University & Other Tertiary Education		Adult Education		Not applicable		Total	
District	Number	%	Number	%	Number	%	Number	%
Kondoa	0	0.0	3,110	1.9	0	0.0	159,918	100
Mpwapwa	0	0.0	3,701	4.5	285	0.3	82,001	100
Kongwa	0	0.0	3,508	4.3	125	0.2	81,051	100
Dodoma Urban	0	0.0	759	0.9	253	0.3	85,384	100
Bahi	116	0.2	464	0.6	0	0.0	72,203	100
Chamwino	0	0.0	925	1.0	463	0.5	88,825	100
Total	116	0.0	12,466	2.2	1,126	0.2	569,382	100

3.14: 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	%
Kondoa	177,464	44	10,439	3	95,951	24	119,938	30	403,792	100
Mpwapwa	117,308	52	2,278	1	46,695	21	60,362	27	226,643	100
Kongwa	121,013	55	6,138	3	34,951	16	57,124	26	219,227	100
Dodoma Urban	102,334	51	7,969	4	43,261	22	45,285	23	198,850	100
Bahi	100,946	58	3,129	2	27,931	16	41,839	24	173,845	100
Chamwino	136,013	57	10,640	4	40,866	17	51,043	21	238,562	100
Total	755,078	52	40,594	3	289,655	20	375,592	26	1,460,918	100

LAND OWNERSHIP AND LAND USE

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

District	Land ownership/tenure														Total Number of Households
	Leased / Certificate of Ownership		Owned under Customary Law		Bought		Rented		Borrowed		Households with area Share - cropped		Households with area under Other forms of Tenure		
	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	No of Households	%	
Kondoa	3,998	4.4	76,183	84.7	17,991	20.0	7,107	7.9	4,886	5.4	222	0.2	3,776	4.2	89,954
Mpwapwa	854	1.5	45,841	79.5	6,833	11.9	7,261	12.6	3,417	5.9	854	1.5	1,708	3.0	57,657
Kongwa	251	0.5	41,841	82.5	3,633	7.2	11,776	23.2	1,754	3.5	251	0.5	0	0.0	50,735
Dodoma Urban	9,614	18.8	42,123	82.2	3,795	7.4	1,771	3.5	2,150	4.2	379	0.7	126	0.2	51,230
Bahi	1,738	3.7	41,375	88.1	1,854	4.0	811	1.7	2,202	4.7	116	0.2	3,129	6.7	46,938
Chamwino	8,173	13.1	51,352	82.2	6,631	10.6	2,159	3.5	2,005	3.2	0	0.0	771	1.2	62,455
Total	24,628	6.9	298,715	83.2	40,737	11.3	30,885	8.6	16,414	4.6	1,822	0.5	9,511	2.6	358,970

4.2: 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
Kondoa	11,802	191,822	39,907	9,577	9,037	270	7,374	269,789
Mpwapwa	1,383	109,885	14,559	11,297	7,752	2,190	4,899	151,966
Kongwa	406	124,627	38,672	32,903	2,409	355	.	199,372
Dodoma Urban	12,957	75,833	4,007	1,229	2,817	205	51	97,099
Bahi	1,548	74,514	2,534	680	1,947	94	3,636	84,954
Chamwino	26,818	97,960	13,298	2,435	2,154	.	1,498	144,164
Total	54,915	674,642	112,978	58,121	26,116	3,114	17,459	947,344

4.3 : 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
Kondoa	71,074	56	18,879	44	89,954
Mpwapwa	42,994	79	14,663	21	57,657
Kongwa	40,714	68	10,022	32	50,735
Dodoma Urban	37,442	45	13,788	55	51,230
Bahi	34,189	52	12,749	48	46,938
Chamwino	46,109	90	16,346	10	62,455
Total	272,522	60	86,447	40	358,969

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

District	Do any Female Members of the Hh own or have customary right to Land				
	Yes	%	No	%	Total
Kondoa	36,426	40	53,528	60	89,954
Mpwapwa	28,615	50	29,042	50	57,657
Kongwa	14,406	28	36,329	72	50,735
Dodoma Urban	32,889	64	18,342	36	51,230
Bahi	21,325	45	25,613	55	46,938
Chamwino	30,071	48	32,384	52	62,455
Total	163,731	46	195,238	54	358,969

4.5: 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 you Consider that you have sufficient land for the Hh?				
	Yes	%	No	%	Total
Kondoa	21,100	23	68,853	77	89,954
Mpwapwa	17,795	31	39,862	69	57,657
Kongwa	11,525	23	39,210	77	50,735
Dodoma Urban	15,685	31	35,545	69	51,230
Bahi	17,153	37	29,785	63	46,938
Chamwino	13,725	22	48,730	78	62,455
Total	96,983	27	261,986	73	358,969

4.6: 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)
Kondoa	90,109	109,210	2,125	1,016	2,068	2,608	31,225	7,239	22	2,450	4,046	17,670	269,789
Mpwapwa	106,332	27,709	144	115	144	2,853	9,654	317	.	1,470	576	2,651	151,966
Kongwa	148,907	21,075	786	51	241	3,373	5,782	.	.	12,071	355	6,733	199,372
Dodoma Urban	76,204	8,962	538	77	551	435	5,608	973	102	487	973	2,189	97,099
Bahi	62,900	4,704	.	.	164	1,067	8,681	610	.	938	1,959	3,931	84,954
Chamwino	112,339	9,224	499	.	281	406	12,284	125	16	1,686	1,374	5,931	144,164
Total	596,791	180,884	4,092	1,259	3,449	10,742	73,233	9,264	141	19,102	9,283	39,105	947,344

5.1: Planted Area by Crop and Sex of Household members owning most of the crop for the agriculture year 2007/08 Short and Long Season- Kondoa

Crop	SHORT RAINY SEASON				LONG RAINY SEASON			
	Male		Female		Male		Female	
	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area
Maize	0	.	0	.	63,523	76,513	17,547	15,009
Paddy	0	.	0	.	666	360	222	22
Sorghum	0	.	0	.	10,217	6,635	2,665	980
Bulrush Millet	0	.	0	.	17,991	16,111	7,996	5,753
Finger Millet	0	.	0	.	11,550	8,435	1,333	724
CEREALS	0	.	0	.	103,946	108,054	29,762	22,489
Cassava	0	.	0	.	222	2	0	.
Sweet Potato	222	13	0	.	666	125	444	90
Yams	0	.	0	.	0	.	0	.
ROOTS & TUBERS	222	13	0	.	888	127	444	90
Mung Bean	0	.	0	.	0	.	0	.
Beans	0	.	0	.	7,774	2,780	3,110	1,409
Cowpeas	0	.	0	.	5,108	1,764	3,776	1,216
Green gram	0	.	0	.	888	527	222	216
Bambaranuts	0	.	0	.	444	67	888	265
Field Peas	0	.	0	.	0	.	0	.
PULSES	0	.	0	.	14,215	5,139	7,996	3,106
Sunflower	0	.	0	.	38,647	28,990	10,217	6,046
Simsim	0	.	0	.	4,220	3,222	0	.
Groundnut	0	.	0	.	4,664	1,924	3,776	2,684
Soya Beans	0	.	0	.	0	.	0	.
OIL SEEDS & OIL NUTS	0	.	0	.	47,531	34,136	13,993	8,731
Okra	0	.	0	.	222	45	222	22
Radish	0	.	0	.	222	135	0	.
Turmeric	0	.	0	.	222	180	0	.
Bitteer Aubergine	0	.	0	.	222	45	222	22
Onion	222	90	0	.	0	.	0	.
Cabbage	0	.	0	.	222	13	0	.
Tomatoes	222	34	0	.	0	.	0	.
Spinach	222	16	0	.	0	.	0	.
Chillies	0	.	0	.	0	.	0	.
Amaranths	222	27	0	.	222	13	0	.
Water Mellon	0	.	0	.	0	.	0	.
FRUITS & VEGETABLES	888	167	0	.	1,333	432	444	45
Total	1,111	180	0	.	167,913	147,888	52,640	34,460

5.2: Planted Area by Crop and Sex of Household members owning most of the crop for the agriculture year 2007/08 Short and Long Season-Mpwapwa

Crop	SHORT RAINY SEASON				LONG RAINY SEASON			
	Male		Female		Male		Female	
	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area
Maize	0	.	0	.	31,889	41,962	9,823	8,251
Paddy	0	.	0	.	142	58	142	58
Sorghum	0	.	142	115	20,358	23,923	7,972	7,352
Bulrush Millet	0	.	0	.	854	720	569	576
Finger Millet	0	.	0	.	142	29	142	69
CEREALS	0	.	142	115	53,386	66,691	18,650	16,306
Cassava	0	.	0	.	569	1,095	0	.
Sweet Potato	0	.	0	.	142	173	142	115
Yams	0	.	0	.	0	.	0	.
ROOTS & TUBERS	0	.	0	.	712	1,268	142	115
Mung Bean	0	.	0	.	142	58	0	.
Beans	0	.	0	.	7,403	4,583	712	187
Cowpeas	0	.	0	.	1,851	1,657	569	1,311
Green gram	0	.	0	.	0	.	0	.
Bambaranuts	0	.	0	.	0	.	0	.
Field Peas	0	.	0	.	142	29	142	346
PULSES	0	.	0	.	9,538	6,326	1,424	1,844
Sunflower	0	.	142	173	9,538	8,599	2,420	1,320
Simsim	0	.	0	.	2,420	3,510	1,566	939
Groundnut	0	.	142	346	15,375	16,210	6,833	5,604
Soya Beans	0	.	0	.	142	58	0	.
OIL SEEDS & OIL NUTS	0	.	285	519	27,476	28,378	10,820	7,863
Okra	0	.	0	.	427	317	0	.
Radish	0	.	0	.	285	464	0	.
Turmeric	0	.	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	142	288	0	.
Onion	0	.	0	.	569	231	0	.
Cabbage	0	.	0	.	0	.	0	.
Tomatoes	0	.	0	.	0	.	0	.
Spinach	0	.	0	.	0	.	0	.
Chillies	0	.	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	0	.	1,424	1,300	0	.
Total	0	.	427	634	92,536	103,963	31,035	26,128

5.3: Planted Area by Crop and Sex of Household members owning most of the crop for the agriculture year 2007/08 Short and Long Rainy Season-Kongwa

	SHORT RAINY SEASON				LONG RAINY SEASON			
	Male		Female		Male		Female	
Crop	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area
Maize	0	.	0	.	32,446	88,521	12,653	20,046
Paddy	0	.	0	.	125	91	0	.
Sorghum	0	.	0	.	10,147	14,340	4,009	3,162
Bulrush Millet	0	.	0	.	2,380	2,955	1,253	794
Finger Millet	0	.	0	.	0	.	0	.
CEREALS	0	.	0	.	45,098	105,908	17,914	24,002
Cassava	0	.	0	.	125	51	0	.
Sweet Potato	0	.	0	.	125	25	0	.
Yams	0	.	0	.	0	.	0	.
ROOTS & TUBERS	0	.	0	.	251	76	0	.
Mung Bean	0	.	0	.	0	.	0	.
Beans	0	.	0	.	877	581	251	76
Cowpeas	0	.	0	.	251	101	0	.
Green gram	0	.	0	.	0	.	0	.
Bambaranuts	0	.	0	.	752	634	376	89
Field Peas	0	.	0	.	125	152	0	.
PULSES	0	.	0	.	2,004	1,468	626	165
Sunflower	0	.	0	.	10,523	15,198	3,132	1,965
Simsim	0	.	0	.	752	515	125	51
Groundnut	0	.	0	.	10,899	12,711	4,134	3,106
Soya Beans	0	.	0	.	0	.	0	.
OIL SEEDS & OIL NUTS	0	.	0	.	22,173	28,424	7,391	5,122
Okra	0	.	0	.	0	.	0	.
Radish	0	.	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	0	.	0	.
Onion	0	.	0	.	251	101	0	.
Cabbage	0	.	0	.	0	.	0	.
Tomatoes	0	.	0	.	1,378	464	251	89
Spinach	0	.	0	.	0	.	0	.
Chillies	0	.	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	0	.	1,629	566	251	89
Total	0	.	0	.	71,155	136,442	26,182	29,378

5.4: Planted Area by Crop and Sex of Household members owning most of the crop for the agriculture year 2007/08 Short and Long Season-Dodoma Urban

Crop	SHORT RAINY SEASON				LONG RAINY SEASON			
	Male		Female		Male		Female	
	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area
Maize	0	.	0	.	22,769	15,935	8,475	4,381
Paddy	0	.	0	.	379	128	0	.
Sorghum	0	.	0	.	8,981	5,752	2,530	1,017
Bulrush Millet	0	.	0	.	26,817	23,028	11,385	8,232
Finger Millet	0	.	0	.	126	154	0	.
CEREALS	0	.	0	.	59,073	44,997	22,390	13,630
Cassava	0	.	0	.	0	.	0	.
Sweet Potato	0	.	0	.	0	.	126	15
Yams	0	.	0	.	0	.	126	26
ROOTS & TUBERS	0	.	0	.	0	.	253	40
Mung Bean	0	.	0	.	0	.	0	.
Beans	0	.	0	.	126	51	0	.
Cowpeas	0	.	0	.	0	.	379	61
Green gram	0	.	0	.	126	38	0	.
Bambaranuts	0	.	0	.	4,427	1,220	5,819	1,775
Field Peas	0	.	0	.	0	.	0	.
PULSES	0	.	0	.	4,680	1,310	6,198	1,836
Sunflower	0	.	0	.	9,361	5,331	2,656	906
Simsim	0	.	0	.	3,542	3,183	759	166
Groundnut	0	.	0	.	13,914	6,731	11,764	4,094
Soya Beans	0	.	0	.	0	.	0	.
OIL SEEDS & OIL NUTS	0	.	0	.	26,817	15,245	15,179	5,167
Okra	0	.	0	.	253	102	0	.
Radish	0	.	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	0	.	0	.
Onion	0	.	0	.	0	.	0	.
Cabbage	0	.	0	.	0	.	0	.
Tomatoes	0	.	0	.	1,518	424	0	.
Spinach	0	.	0	.	1,012	99	253	14
Chillies	0	.	0	.	253	16	0	.
Amaranths	0	.	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.	126	13
FRUITS & VEGETABLES	0	.	0	.	3,036	642	379	27
Total	**0**	**.**	**0**	**.**	**93,606**	**62,193**	**44,400**	**20,701**

5.6: Planted Area by Crop and Sex of Household members owning most of the crop for the agriculture year 2007/08 Short and Long Season-Bahi

Crop	SHORT RAINY SEASON				LONG RAINY SEASON			
	Male		Female		Male		Female	
	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area
Maize	0	.	0	.	16,225	11,440	5,215	1,884
Paddy	0	.	0	.	2,086	1,185	1,507	730
Sorghum	0	.	0	.	14,603	10,012	7,533	3,320
Bulrush Millet	0	.	0	.	10,778	7,355	8,692	4,575
Finger Millet	0	.	0	.	0	.	0	.
CEREALS	0	.	0	.	43,693	29,991	22,947	10,508
Cassava	0	.	0	.	0	.	0	.
Sweet Potato	0	.	0	.	232	70	0	.
Yams	0	.	0	.	0	.	0	.
ROOTS & TUBERS	0	.	0	.	232	70	0	.
Mung Bean	0	.	0	.	0	.	0	.
Beans	0	.	0	.	0	.	0	.
Cowpeas	0	.	0	.	464	117	464	43
Green gram	0	.	0	.	116	23	0	.
Bambaranuts	0	.	0	.	4,520	1,736	3,129	762
Field Peas	0	.	0	.	0	.	0	.
PULSES	0	.	0	.	5,099	1,877	3,593	806
Sunflower	0	.	0	.	7,070	4,739	1,275	446
Simsim	0	.	0	.	9,388	7,226	2,086	915
Groundnut	0	.	0	.	14,719	6,947	9,040	3,163
Soya Beans	0	.	0	.	0	.	0	.
OIL SEEDS & OIL NUTS	0	.	0	.	31,176	18,912	12,401	4,524
Okra	0	.	0	.	116	47	0	.
Radish	0	.	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	116	47	0	.
Onion	0	.	0	.	116	23	0	.
Cabbage	0	.	0	.	0	.	0	.
Tomatoes	0	.	0	.	116	23	0	.
Spinach	0	.	0	.	0	.	0	.
Chillies	0	.	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	0	.	464	141	0	.
Total	0	.	0	.	80,664	50,991	38,941	15,837

5.7: Planted Area by Crop and Sex of Household members owning most of the crop for the agriculture year 2007/08 Short and Long Season-Chamwino

Crop	SHORT RAINY SEASON				LONG RAINY SEASON			
	Male		Female		Male		Female	
	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area	No. of Hholds	Planted Area
Maize	0	.	0	.	27,141	45,420	12,337	9,480
Paddy	0	.	0	.	308	187	0	.
Sorghum	0	.	0	.	15,421	12,502	11,257	7,037
Bulrush Millet	0	.	0	.	10,949	6,846	6,785	4,009
Finger Millet	0	.	0	.	154	250	0	.
CEREALS	0	.	0	.	53,973	65,206	30,379	20,527
Cassava	0	.	0	.	0	.	0	.
Sweet Potato	0	.	0	.	154	250	0	.
Yams	0	.	0	.	0	.	0	.
ROOTS & TUBERS	0	.	0	.	154	250	0	.
Mung Bean	0	.	0	.	0	.	0	.
Beans	0	.	0	.	154	31	0	.
Cowpeas	0	.	0	.	0	.	1,079	125
Green gram	0	.	0	.	0	.	0	.
Bambaranuts	0	.	0	.	1,388	359	1,851	473
Field Peas	0	.	0	.	0	.	0	.
PULSES	0	.	0	.	1,542	390	2,930	598
Sunflower	0	.	0	.	10,178	8,007	3,547	1,664
Simsim	0	.	0	.	8,173	5,291	3,547	1,598
Groundnut	0	.	0	.	17,734	11,476	10,795	4,026
Soya Beans	0	.	0	.	0	.	0	.
OIL SEEDS & OIL NUTS	0	.	0	.	36,085	24,775	17,888	7,288
Okra	0	.	0	.	0	.	0	.
Radish	0	.	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	0	.	0	.
Onion	0	.	0	.	0	.	0	.
Cabbage	0	.	0	.	0	.	0	.
Tomatoes	0	.	0	.	0	.	0	.
Spinach	0	.	0	.	0	.	0	.
Chillies	0	.	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	0	.	0	.	0	.
Total	**0**	**.**	**0**	**.**	**91,755**	**90,620**	**51,198**	**28,413**

CROP PRODUCTION BY DISTRICT

5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

District	Maize				Paddy				Sorghum				Bulrush Millet			
	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	81,069	91,522	98,507.24	1.08	888	382	432.00	1.13	12,882	7,616	6,200.14	0.81	25,987	21,865	13,238.51	0.61
Mpwapwa	41,713	50,212	57,417.82	1.14	285	115	71.18	0.62	28,473	31,390	23,967.35	0.76	1,424	1,297	572.30	0.44
Kongwa	45,098	108,568	112,239.12	1.03	125	91	75.16	0.82	14,156	17,503	10,810.01	0.62	3,633	3,749	1,919.05	0.51
Dodoma Urban	31,244	20,316	19,932.64	0.98	379	128	18.97	0.15	11,511	6,769	4,784.66	0.71	38,201	31,260	19,567.83	0.63
Bahi	21,441	13,324	13,521.17	1.01	3,593	1,914	1,211.12	0.63	22,136	13,331	9,658.23	0.72	19,471	11,930	6,532.50	0.55
Chamwino	39,478	54,900	49,360.92	0.90	308	187	174.26	0.93	26,678	19,539	13,319.08	0.68	17,734	10,856	5,907.61	0.54
Total	260,043	338,843	350,978.92	1.04	5,579	2,818	1,982.69	0.70	115,836	96,147	68,739.46	0.71	106,449	80,956	47,737.81	0.59

Cont 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

	Finger Millet				Mung Bean				PULSES				Okra			
District	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	12,882	9,159	6,111.07	0.67	0	.	.	.	0	.	.	.	444	67	142.15	2.11
Mpwapwa	285	98	51.82	0.53	142	58	64.06	1.11	142	58	64.06	1.11	427	317	222.09	0.70
Kongwa	0	.	.	.	0	.	.	.	0	.	.	.	0	.	.	.
Dodoma Urban	126	154	37.95	0.25	0	.	.	.	0	.	.	.	253	102	25.30	0.25
Bahi	0	.	.	.	0	.	.	.	0	.	.	.	116	47	12.52	0.27
Chamwino	154	250	30.84	0.12	0	.	.	.	0	.	.	.	0	.	.	.
Total	13,448	9,660	6,231.68	0.65	142	58	64.06	1.11	142	58	64.06	1.11	1,240	534	402.05	0.75

Cont 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

	Radish				Turmeric				Bitteer Aubergine			
District	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	222	135	533.06	3.95	222	180	88.84	0.49	444	67	222.11	3.29
Mpwapwa	285	464	128.13	0.28	0	.	.	.	142	288	284.73	0.99
Kongwa	0	.	.	.	0	.	.	.	0	.	.	.
Dodoma Urban	0	.	.	.	0	.	.	.	0	.	.	.
Bahi	0	.	.	.	0	.	.	.	116	47	55.63	1.19
Chamwino	0	.	.	.	0	.	.	.	0	.	.	.
Total	507	599	661.19	1.10	222	180	88.84	0.49	702	403	562.47	1.40

Cont Table 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

	Cassava				Sweet Potato				Yams				Onion			
District	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	1,333	555	736	1.3	**1,333**	**228**	**336.49**	**1.48**	**0**	**.**	**.**	**.**	**222**	**90**	**337.60**	**3.75**
Mpwapwa	1,424	1,587	967	0.6	**285**	**288**	**13.52**	**0.05**	**0**	**.**	**.**	**.**	**569**	**231**	**1,381.21**	**5.99**
Kongwa	501	273	278	1.0	**125**	**25**	**33.82**	**1.33**	**0**	**.**	**.**	**.**	**251**	**101**	**275.60**	**2.72**
Dodoma	2,656	1,127	1,498	1.3	**126**	**15**	**31.62**	**2.13**	**126**	**26**	**115.24**	**4.50**	**0**	**.**	**.**	**.**
Urban Bahi	0	0	0	0.0	**232**	**70**	**9.27**	**0.13**	**0**	**.**	**.**	**.**	**116**	**23**	**33.38**	**1.42**
Chamwino	463	152	463	3.0	**154**	**250**	**493.47**	**1.98**	**0**	**.**	**.**	**.**	**0**	**.**	**.**	**.**
Total	**6,376**	**3,694**	**3,941**	1.1	**2,255**	**876**	**918.21**	**1.05**	**126**	**26**	**115.24**	**4.50**	**1,158**	**445**	**2,027.79**	**4.55**

Cont 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

	Beans				Cowpeas				Green gram				Bambaranuts			
District	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	10,883	4,189	1,648.04	0.39	8,884	2,980	1,333.31	0.45	1,111	743	148.81	0.20	1,333	333	255.42	0.77
Mpwapwa	8,115	4,769	4,636.78	0.97	2,420	2,968	490.30	0.17	0	.	.	.	0	.	.	.
Kongwa	1,127	657	520.63	0.79	251	101	40.09	0.40	0	.	.	.	1,127	723	223.74	0.31
Dodoma Urban	126	51	22.77	0.44	379	61	48.07	0.78	126	38	37.95	0.99	10,246	2,995	1,065.21	0.36
Bahi	0	.	.	.	927	160	60.61	0.38	116	23	.00	-	7,649	2,499	1,697.65	0.68
Chamwino	154	31	2.31	0.07	1,079	125	78.80	0.63	0	.	.	.	3,238	832	275.42	0.33
Total	20,406	9,698	6,830.54	0.70	13,941	6,397	2,051.18	0.32	1,353	805	186.76	0.23	23,594	7,381	3,517.44	0.48

Cont 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

District	Field Peas				Sunflower				Simsim				Groundnut			
	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	0	.	.	.	48,864	35,036	23,819.28	0.68	4,220	3,222	1,270.68	0.39	8,440	4,609	3,281.86	0.71
Mpwapwa	285	375	19.93	0.05	12,101	10,092	5,148.87	0.51	3,986	4,450	1,128.09	0.25	22,351	22,160	10,659.91	0.48
Kongwa	125	152	52.61	0.35	13,655	17,163	11,370.23	0.66	877	566	116.50	0.21	15,033	15,818	8,993.81	0.57
Dodoma Urban	0	.	.	.	12,017	6,238	3,996.60	0.64	4,301	3,349	970.85	0.29	25,678	10,825	5,629.14	0.52
Bahi	0	.	.	.	8,345	5,185	4,604.80	0.89	11,474	8,141	3,865.49	0.47	23,759	10,110	6,477.68	0.64
Chamwino	0	.	.	.	13,725	9,671	7,128.64	0.74	11,720	6,889	2,036.80	0.30	28,529	15,502	9,863.86	0.64
Total	410	527	72.55	0.14	108,705	83,385	56,068.41	0.67	36,578	26,617	9,388.41	0.35	123,790	79,024	44,906.26	0.57

Cont 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

District	Cabbage				Tomatoes				Spinach				Chillies			
	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	222	13	44.42	3.29	222	34	106.61	3.12	222	16	100.84	6.23	0	.	.	.
Kongwa	0	.	.	.	1,629	553	7,844.56	14.19	0	.	.	.	0	.	.	.
Dodoma Urban	0	.	.	.	1,518	424	3,223.71	7.60	1,265	113	859.28	7.63	253	16	50.60	3.09
Bahi	0	.	.	.	116	23	74.41	3.17	0	.	.	.	0	.	.	.
Total	222	13	44.42	3.29	3,484	1,034	11,249.29	10.87	1,487	129	960.11	7.45	253	16	50.60	3.09

Cont 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

District	Amaranths				Water Mellon			
	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Kondoa	444	40	94.40	2.33	0	.	.	.
Dodoma Urban	0	.	.	.	126	13	126.49	9.88
Total	444	40	94.40	2.33	126	13	126.49	9.88

Cont 5.8: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (tonnes) during Short and Long Rainy SEASON Agricultural Year 2007/08

District	Soya Beans			
	No of Hholds	Actual Planted Area (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Mpwapwa	142	58	42.71	0.74
Total	142	58	42.71	0.74

CROP PRODUCTION GENERAL

5.9: 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)		
Kondoa	222	180	89,732	182,348	182,528	24
Mpwapwa	142	634	57,515	130,091	130,725	17
Kongwa	0	.	50,485	165,820	165,820	22
Dodoma Urban	0	.	51,230	82,894	82,894	11
Bahi	0	.	46,706	66,829	66,829	9
Chamwino	0	.	62,301	119,033	119,033	16
Total	364	814	357,968	747,014	747,828	100

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

District	SHORT RAINY SEASON		LONG RAINY SEASON		
	Number of households Growing Crops	Number of households NOT Growing Crops	Number of households Growing Crops	Number of households NOT Growing Crops	Total Number of Crop Growing households
Kondoa	222	89,732	89,732	222	89,954
Mpwapwa	142	57,515	57,515	142	57,657
Kongwa	0	50,735	50,485	251	50,735
Dodoma Urban	0	51,230	51,230	0	51,230
Bahi	0	46,938	46,706	232	46,938
Chamwino	0	62,455	62,301	154	62,455
Total	364	358,605	357,968	1,001	358,969

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

Crop	SHORT RAINY SEASON		LONG RAINY SEASON		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	0	.	81,069	91,522	81,069	91,522
Paddy	0	.	888	382	888	382
Sorghum	0	.	12,882	7,616	12,882	7,616
Bulrush Millet	0	.	25,987	21,865	25,987	21,865
Finger Millet	0	.	12,882	9,159	12,882	9,159
CEREALS	0	.	133,709	130,543	133,709	130,543
Cassava	0	.	222	2	222	2
Sweet Potato	222	13	1,111	215	1,333	228
Yams	0	.	0	.	0	.
ROOTS & TUBERS		13		217		229
Mung Bean	0	.	0	.	0	.
Beans	0	.	10,883	4,189	10,883	4,189
Cowpeas	0	.	8,884	2,980	8,884	2,980
Green gram	0	.	1,111	743	1,111	743
Bambaranuts	0	.	1,333	333	1,333	333
Field Peas	0	.	0	.	0	.
PULSES		222		222		8,245
Sunflower	0	.	48,864	35,036	48,864	35,036
Simsim	0	.	4,220	3,222	4,220	3,222
Groundnut	0	.	8,440	4,609	8,440	4,609
Soya Beans	0	.	0	.	0	.
OIL SEEDS & OIL NUTS		222		222		42,867
Okra	0	.	444	67	444	67
Radish	0	.	222	135	222	135
Turmeric	0	.	222	180	222	180
Bitteer Aubergine	0	.	444	67	444	67
Onion	222	90	0	.	222	90
Cabbage	0	.	222	13	222	13
Tomatoes	222	34	0	.	222	34
Spinach	222	16	0	.	222	16
Chillies	0	.	0	.	0	.
Amaranths	222	27	222	13	444	40
Water Mellon	0	.	0	.	0	.
FRUITS & VEGETABLES	222	167	222	222	2,665	644
Total		180		182,348		182,528

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

Crop	SHORT RAINY SEASON		LONG RAINY SEASON		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	0	.	41,713	50,212	41,713	50,212
Paddy	0	.	285	115	285	115
Sorghum	142	115.2742148	28,330	31,274	28,473	31,390
Bulrush Millet	0	.	1,424	1,297	1,424	1,297
Finger Millet	0	.	285	98	285	98
CEREALS	142	115.2742148	72,036	82,997	72,178	83,112
Cassava	0	.	569	1,095	569	1,095
Sweet Potato	0	.	285	288	285	288
Yams	0	.	0	.	0	.
ROOTS & TUBERS		.		1,383		1,383
Mung Bean	0	.	142	57.63710738	142	57.63710738
Beans	0	.	8,115	4,769	8,115	4,769
Cowpeas	0	.	2,420	2,968	2,420	2,968
Green gram	0	.	0	.	0	.
Bambaranuts	0	.	0	.	0	.
Field Peas	0	.	285	374.641198	285	374.641198
PULSES		.		8,170		8,170
Sunflower	142	172.9113222	11,959	9,919	12,101	10,092
Simsim	0	.	3,986	4,450	3,986	4,450
Groundnut	142	345.8226443	22,209	21,814	22,351	22,160
Soya Beans	0	.	142	57.63710738	142	57.63710738
OIL SEEDS & OIL NUTS		519		36,241		36,760
Okra	0	.	427	317	427	317
Radish	0	.	285	464	285	464
Turmeric	0	.	0	.	0	.
Bitteer Aubergine	0	.	142	288	142	288
Onion	0	.	569	230.5484295	569	231
Cabbage	0	.	0	.	0	.
Tomatoes	0	.	0	.	0	.
Spinach	0	.	0	.	0	.
Chillies	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	1,424	1,300	1,424	1,300
Total		634		130,091		130,725

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

Crop	SHORT RAINY SEASON		LONG RAINY SEASON		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	0	.	45,098	108,568	45,098	108,568
Paddy	0	.	125	91	125	91
Sorghum	0	.	14,156	17,503	14,156	17,503
Bulrush Millet	0	.	3,633	3,749	3,633	3,749
Finger Millet	0	.	0	.	0	.
CEREALS	0	.	63,012	129,911	63,012	129,911
Cassava	0	.	125	51	125	51
Sweet Potato	0	.	125	25	125	25
Yams	0	.	0	.	0	.
ROOTS & TUBERS		.		76		76
Mung Bean	0	.	0	.	0	.
Beans	0	.	1,127	657	1,127	657
Cowpeas	0	.	251	101	251	101
Green gram	0	.	0	.	0	.
Bambaranuts	0	.	1,127	723	1,127	723
Field Peas	0	.	125	152.1527978	125	152.1527978
PULSES		.		1,633		1,633
Sunflower	0	.	13,655	17,163	13,655	17,163
Simsim	0	.	877	566	877	566
Groundnut	0	.	15,033	15,818	15,033	15,818
Soya Beans	0	.	0	.	0	.
OIL SEEDS & OIL NUTS		.		33,546		33,546
Okra	0	.	0	.	0	.
Radish	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	0	.
Onion	0	.	251	101.4351985	251	101
Cabbage	0	.	0	.	0	.
Tomatoes	0	.	1,629	552.8218321	1,629	553
Spinach	0	.	0	.	0	.
Chillies	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	1,879	654	1,879	654
Total		.		165,820		165,820

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

Crop	SHORT RAINY SEASON		LONG RAINY SEASON		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	0	.	31,244	20,316	31,244	20,316
Paddy	0	.	379	128	379	128
Sorghum	0	.	11,511	6,769	11,511	6,769
Bulrush Millet	0	.	38,201	31,260	38,201	31,260
Finger Millet	0	.	126	154	126	154
CEREALS	0	.	81,463	58,627	81,463	58,627
Cassava	0	.	0	.	0	.
Sweet Potato	0	.	126	15	126	15
Yams	0	.	126	25.60619475	126	25.60619475
ROOTS & TUBERS		.		40		40
Mung Bean	0	.	0	.	0	.
Beans	0	.	126	51	126	51
Cowpeas	0	.	379	61	379	61
Green gram	0	.	126	38	126	38
Bambaranuts	0	.	10,246	2,995	10,246	2,995
Field Peas	0	.	0	.	0	.
PULSES		.		3,146		3,146
Sunflower	0	.	12,017	6,238	12,017	6,238
Simsim	0	.	4,301	3,349	4,301	3,349
Groundnut	0	.	25,678	10,825	25,678	10,825
Soya Beans	0	.	0	.	0	.
OIL SEEDS & OIL NUTS		.		20,412		20,412
Okra	0	.	253	102	253	102
Radish	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	0	.
Onion	0	.	0	.	0	.
Cabbage	0	.	0	.	0	.
Tomatoes	0	.	1,518	424.0385851	1,518	424
Spinach	0	.	1,265	112.6672569	1,265	113
Chillies	0	.	253	16.38796464	253	16.38796464
Amaranths	0	.	0	.	0	.
Water Mellon	0	.	126	12.80309738	126	12.80309738
FRUITS & VEGETABLES	0	.	3,415	668	3,415	668
Total		.		82,894		82,894

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

Crop	SHORT RAINY SEASON		LONG RAINY SEASON		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	0	.	21,441	13,324	21,441	13,324
Paddy	0	.	3,593	1,914	3,593	1,914
Sorghum	0	.	22,136	13,331	22,136	13,331
Bulrush Millet	0	.	19,471	11,930	19,471	11,930
Finger Millet	0	.	0	.	0	.
CEREALS	0	.	66,640	40,499	66,640	40,499
Cassava	0	.	0	.	0	.
Sweet Potato	0	.	232	70	232	70
Yams	0	.	0	.	0	.
ROOTS & TUBERS		.		70		70
Mung Bean	0	.	0	.	0	.
Beans	0	.	0	.	0	.
Cowpeas	0	.	927	160	927	160
Green gram	0	.	116	23	116	23
Bambaranuts	0	.	7,649	2,499	7,649	2,499
Field Peas	0	.	0	.	0	.
PULSES		.		2,683		2,683
Sunflower	0	.	8,345	5,185	8,345	5,185
Simsim	0	.	11,474	8,141	11,474	8,141
Groundnut	0	.	23,759	10,110	23,759	10,110
Soya Beans	0	.	0	.	0	.
OIL SEEDS & OIL NUTS		.		23,435		23,435
Okra	0	.	116	47	116	47
Radish	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.
Bitteer Aubergine	0	.	116	47	116	47
Onion	0	.	116	23.46081323	116	23
Cabbage	0	.	0	.	0	.
Tomatoes	0	.	116	23.46081323	116	23
Spinach	0	.	0	.	0	.
Chillies	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	464	141	464	141
Total		.		66,829		66,829

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

Crop	SHORT RAINY SEASON		LONG RAINY SEASON		SHORT & LONG SEASON	
	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)	Number of Household	Planted Area (hectare)
Maize	0	.	39,478	54,900	39,478	54,900
Paddy	0	.	308	187	308	187
Sorghum	0	.	26,678	19,539	26,678	19,539
Bulrush Millet	0	.	17,734	10,856	17,734	10,856
Finger Millet	0	.	154	250	154	250
CEREALS	0	.	84,353	85,732	84,353	85,732
Cassava	0	.	0	.	0	.
Sweet Potato	0	.	154	250	154	250
Yams	0	.	0	.	0	.
ROOTS & TUBERS		.		250		250
Mung Bean	0	.	0	.	0	.
Beans	0	.	154	31	154	31
Cowpeas	0	.	1,079	125	1,079	125
Green gram	0	.	0	.	0	.
Bambaranuts	0	.	3,238	832	3,238	832
Field Peas	0	.	0	.	0	.
PULSES		.		988		988
Sunflower	0	.	13,725	9,671	13,725	9,671
Simsim	0	.	11,720	6,889	11,720	6,889
Groundnut	0	.	28,529	15,502	28,529	15,502
Soya Beans	0	.	0	.	0	.
OIL SEEDS & OIL NUTS		.		32,062		32,062
Okra	0	.	0	.	0	.
Radish	0	.	0	.	0	.
Turmeric	0	.	0	.	0	.
Bitteer Aubergine	0	.	0	.	0	.
Onion	0	.	0	.	0	.
Cabbage	0	.	0	.	0	.
Tomatoes	0	.	0	.	0	.
Spinach	0	.	0	.	0	.
Chillies	0	.	0	.	0	.
Amaranths	0	.	0	.	0	.
Water Mellon	0	.	0	.	0	.
FRUITS & VEGETABLES	0	.	0	.	0	.
Total		.		119,033		119,033

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

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			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	.	.	.	91,522	98,507	1.08	91,522	98,507	1.08
Paddy	.	.	.	382	432	1.13	382	432	1.13
Sorghum	.	.	.	7,616	6,200	0.81	7,616	6,200	0.81
Bulrush Millet	.	.	.	21,865	13,239	0.61	21,865	13,239	0.61
Finger Millet	.	.	.	9,159	6,111	0.67	9,159	6,111	0.67
CEREALS	.	.	.	130,543	124,489	0.95	130,543	124,489	0.95
Cassava	.	.	.	2	3	1.85	2	3	1.85
Sweet Potato	13	3	0.26	215	333	1.55	228	336	1.48
Yams	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	13	3	0.26	217	336	1.55	229	340	1.48
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	.	.	.	4,189	1,648	0.39	4,189	1,648	0.39
Cowpeas	.	.	.	2,980	1,333	0.45	2,980	1,333	0.45
Green gram	.	.	.	743	149	0.20	743	149	0.20
Bambaranuts	.	.	.	333	255	0.77	333	255	0.77
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	.	.	.	8,245	3,386	0.41	8,245	3,386	0.41
Sunflower	.	.	.	35,036	23,819	0.68	35,036	23,819	0.68
Simsim	.	.	.	3,222	1,271	0.39	3,222	1,271	0.39
Groundnut	.	.	.	4,609	3,282	0.71	4,609	3,282	0.71
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	.	.	.	42,867	28,372	0.66	42,867	28,372	0.66
Okra	.	.	.	67	142	2.11	67	142	2.11
Radish	.	.	.	135	533	3.95	135	533	3.95
Turmeric	.	.	.	180	89	0.49	180	89	0.49
Bitteer Aubergine	.	.	.	67	222	3.29	67	222	3.29
Onion	90	338	3.75	.	.	.	90	338	3.75
Cabbage	.	.	.	13	44	3.29	13	44	3.29
Tomatoes	34	107	3.12	.	.	.	34	107	3.12
Spinach	16	101	6.23	.	.	.	16	101	6.23
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	27	6	0.21	13	89	6.59	40	94	2.33
Water Mellon	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	167	551	3.29	477	1,119	2.35	644	1,670	2.59
Total	180	554	3.08	182,348	157,702	0.86	182,528	158,256	0.87

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

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			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	.	.	.	50,212	57,418	1.14	50,212	57,418	1.14
Paddy	.	.	.	115	71	0.62	115	71	0.62
Sorghum	115.27421	57.65728	0.50	31,274	23,910	0.76	31,390	23,967	0.76
Bulrush Millet	.	.	.	1,297	572	0.44	1,297	572	0.44
Finger Millet	.	.	.	98	52	0.53	98	52	0.53
CEREALS	115.27421	57.65728	0.50	82,997	82,023	0.99	83,112	82,080	0.99
Cassava	.	.	.	1,095	1,082	0.99	1,095	1,082	0.99
Sweet Potato	.	.	.	288	14	0.05	288	14	0.05
Yams	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	.	.	.	1,383	1,095	0.79	1,383	1,095	0.79
Mung Bean	.	.	.	57.637107	64.063645	1.11	57.637107	64.063645	1.11
Beans	.	.	.	4,769	4,637	0.97	4,769	4,637	0.97
Cowpeas	.	.	.	2,968	490	0.17	2,968	490	0.17
Green gram	.	.	.	.	.	.	.	.	.
Bambaranuts	.	.	.	.	.	.	.	.	.
Field Peas	.	.	.	374.6412	19.930912	0.05	374.6412	19.930912	0.05
PULSES	.	.	.	8,170	5,211	0.64	8,170	5,211	0.64
Sunflower	172.91132	51.962734	0.30	9,919	5,097	0.51	10,092	5,149	0.51
Simsim	.	.	.	4,450	1,128	0.25	4,450	1,128	0.25
Groundnut	345.82264	207.56621	0.60	21,814	10,452	0.48	22,160	10,660	0.48
Soya Beans	.	.	.	57.637107	42.709097	0.74	57.637107	42.709097	0.74
OIL SEEDS & OIL NUTS	518.73397	259.52894	0.50	36,241	16,720	0.46	36,760	16,980	0.46
Okra	.	.	.	317	222	0.70	317	222	0.70
Radish	.	.	.	464	128	0.28	464	128	0.28
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer	.	.	.	288	285	0.99	288	285	0.99
Aubergine									
Onion	.	.	.	230.54843	1381.2122	5.99	231	1,381	5.99
Cabbage	.	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	.	.	.	.	.	.
Spinach	.	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	.	.	.	1,300	2,016	1.55	1,300	2,016	1.55
Total	634	317	0.50	130,091	107,066	0.82	130,725	107,383	0.82

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

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			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	.	.	.	108,568	112,239	1.03	108,568	112,239	1.03
Paddy	.	.	.	91	75	0.82	91	75	0.82
Sorghum	.	.	.	17,503	10,810	0.62	17,503	10,810	0.62
Bulrush Millet	.	.	.	3,749	1,919	0.51	3,749	1,919	0.51
Finger Millet	.	.	.	.	.	.	.	.	.
CEREALS	.	.	.	129,911	125,043	0.96	129,911	125,043	0.96
Cassava	.	.	.	51	114	2.25	51	114	2.25
Sweet Potato	.	.	.	25	34	1.33	25	34	1.33
Yams	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	.	.	.	76	148	1.95	76	148	1.95
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	.	.	.	657	521	0.79	657	521	0.79
Cowpeas	.	.	.	101	40	0.40	101	40	0.40
Green gram	.	.	.	.	.	.	.	.	.
Bambaranuts	.	.	.	723	224	0.31	723	224	0.31
Field Peas	.	.	.	152.1528	52.614437	0.35	152.1528	52.614437	0.35
PULSES	.	.	.	1,633	837	0.51	1,633	837	0.51
Sunflower	.	.	.	17,163	11,370	0.66	17,163	11,370	0.66
Simsim	.	.	.	566	117	0.21	566	117	0.21
Groundnut	.	.	.	15,818	8,994	0.57	15,818	8,994	0.57
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	.	.	.	33,546	20,481	0.61	33,546	20,481	0.61
Okra	.	.	.	.	.	.	.	.	.
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer	.	.	.	.	.	.	.	.	.
Aubergine									
Onion	.	.	.	101.4352	275.59943	2.72	101	276	2.72
Cabbage	.	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	552.82183	7844.5621	14.19	553	7,845	14.19
Spinach	.	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	.	.	.	654	8,120	12.41	654	8,120	12.41
Total	.	.	.	165,820	154,629	0.93	165,820	154,629	0.93

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

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			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	.	.	.	**20,316**	**19,933**	**0.98**	**20,316**	**19,933**	**0.98**
Paddy	.	.	.	**128**	**19**	**0.15**	**128**	**19**	**0.15**
Sorghum	.	.	.	**6,769**	**4,785**	**0.71**	**6,769**	**4,785**	**0.71**
Bulrush Millet	.	.	.	**31,260**	**19,568**	**0.63**	**31,260**	**19,568**	**0.63**
Finger Millet	.	.	.	**154**	**38**	**0.25**	**154**	**38**	**0.25**
CEREALS	.	.	.	58,627	44,342	0.76	58,627	44,342	0.76
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	**15**	**32**	**2.13**	**15**	**32**	**2.13**
Yams	.	.	.	**25.606195**	**115.23658**	**4.50**	**25.606195**	**115.23658**	**4.50**
ROOTS & TUBERS	.	.	.	40	147	3.63	40	147	3.63
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	.	.	.	**51**	**23**	**0.44**	**51**	**23**	**0.44**
Cowpeas	.	.	.	**61**	**48**	**0.78**	**61**	**48**	**0.78**
Green gram	.	.	.	**38**	**38**	**0.99**	**38**	**38**	**0.99**
Bambaranuts	.	.	.	**2,995**	**1,065**	**0.36**	**2,995**	**1,065**	**0.36**
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	.	.	.	3,146	1,174	0.37	3,146	1,174	0.37
Sunflower	.	.	.	**6,238**	**3,997**	**0.64**	**6,238**	**3,997**	**0.64**
Simsim	.	.	.	**3,349**	**971**	**0.29**	**3,349**	**971**	**0.29**
Groundnut	.	.	.	**10,825**	**5,629**	**0.52**	**10,825**	**5,629**	**0.52**
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	.	.	.	20,412	10,597	0.52	20,412	10,597	0.52
Okra	.	.	.	**102**	**25**	**0.25**	**102**	**25**	**0.25**
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer Aubergine	.	.	.	.	.	.	.	.	.
Onion	.	.	.	.	.	.	.	.	.
Cabbage	.	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	**424.03859**	**3223.7149**	**7.60**	**424**	**3,224**	**7.60**
Spinach	.	.	.	**112.66726**	**859.27783**	**7.63**	**113**	**859**	**7.63**
Chillies	.	.	.	**16.387965**	**50.597841**	**3.09**	**16.387965**	**50.597841**	**3.09**
Amaranths	.	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	**12.803097**	**126.4946**	**9.88**	**12.803097**	**126.4946**	**9.88**
FRUITS & VEGETABLES	.	.	.	668	4,285	6.41	668	4,285	6.41
Total	.	.	.	82,894	60,545	0.73	82,894	60,545	0.73

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

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			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	.	.	.	**13,324**	**13,521**	**1.01**	**13,324**	**13,521**	**1.01**
Paddy	.	.	.	**1,914**	**1,211**	**0.63**	**1,914**	**1,211**	**0.63**
Sorghum	.	.	.	**13,331**	**9,658**	**0.72**	**13,331**	**9,658**	**0.72**
Bulrush Millet	.	.	.	**11,930**	**6,533**	**0.55**	**11,930**	**6,533**	**0.55**
Finger Millet	.	.	.	.	.	.	.	.	.
CEREALS	.	.	.	40,499	30,923	0.76	40,499	30,923	0.76
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	**70**	**9**	**0.13**	**70**	**9**	**0.13**
Yams	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	.	.	.	70	9	0.13	70	9	0.13
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	.	.	.	.	.	.	.	.	.
Cowpeas	.	.	.	**160**	**61**	**0.38**	**160**	**61**	**0.38**
Green gram	.	.	.	**23**	**0**	**-**	**23**	**0**	**-**
Bambaranuts	.	.	.	**2,499**	**1,698**	**0.68**	**2,499**	**1,698**	**0.68**
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	.	.	.	2,683	1,758	0.66	2,683	1,758	0.66
Sunflower	.	.	.	**5,185**	**4,605**	**0.89**	**5,185**	**4,605**	**0.89**
Simsim	.	.	.	**8,141**	**3,865**	**0.47**	**8,141**	**3,865**	**0.47**
Groundnut	.	.	.	**10,110**	**6,478**	**0.64**	**10,110**	**6,478**	**0.64**
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	.	.	.	23,435	14,948	0.64	23,435	14,948	0.64
Okra	.	.	.	**47**	**13**	**0.27**	**47**	**13**	**0.27**
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer									
Aubergine	.	.	.	**47**	**56**	**1.19**	**47**	**56**	**1.19**
Onion	.	.	.	**23.460813**	**33.378168**	**1.42**	**23**	**33**	**1.42**
Cabbage	.	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	**23.460813**	**74.4055**	**3.17**	**23**	**74**	**3.17**
Spinach	.	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	.	.	.	141	176	1.25	141	176	1.25
Total	.	.	.	66,829	47,814	0.72	66,829	47,814	0.72

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

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			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	.	.	.	**54,900**	**49,361**	**0.90**	**54,900**	**49,361**	**0.90**
Paddy	.	.	.	**187**	**174**	**0.93**	**187**	**174**	**0.93**
Sorghum	.	.	.	**19,539**	**13,319**	**0.68**	**19,539**	**13,319**	**0.68**
Bulrush Millet	.	.	.	**10,856**	**5,908**	**0.54**	**10,856**	**5,908**	**0.54**
Finger Millet	.	.	.	**250**	**31**	**0.12**	**250**	**31**	**0.12**
CEREALS	.	.	.	85,732	68,793	0.80	85,732	68,793	0.80
Cassava	.	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	**250**	**493**	**1.98**	**250**	**493**	**1.98**
Yams	.	.	.	.	.	.	.	.	.
ROOTS & TUBERS	.	.	.	250	493	1.98	250	493	1.98
Mung Bean	.	.	.	.	.	.	.	.	.
Beans	.	.	.	**31**	**2**	**0.07**	**31**	**2**	**0.07**
Cowpeas	.	.	.	**125**	**79**	**0.63**	**125**	**79**	**0.63**
Green gram	.	.	.	.	.	.	.	.	.
Bambaranuts	.	.	.	**832**	**275**	**0.33**	**832**	**275**	**0.33**
Field Peas	.	.	.	.	.	.	.	.	.
PULSES	.	.	.	988	357	0.36	988	357	0.36
Sunflower	.	.	.	**9,671**	**7,129**	**0.74**	**9,671**	**7,129**	**0.74**
Simsim	.	.	.	**6,889**	**2,037**	**0.30**	**6,889**	**2,037**	**0.30**
Groundnut	.	.	.	**15,502**	**9,864**	**0.64**	**15,502**	**9,864**	**0.64**
Soya Beans	.	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS	.	.	.	32,062	19,029	0.59	32,062	19,029	0.59
Okra	.	.	.	.	.	.	.	.	.
Radish	.	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.	.
Bitteer									
Aubergine	.	.	.	.	.	.	.	.	.
Onion	.	.	.	.	.	.	.	.	.
Cabbage	.	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	.	.	.	.	.	.
Spinach	.	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES	.	.	.	.	.	.	.	.	.
Total	.	.	.	119,033	88,672	0.74	119,033	88,672	0.74

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

Crop	SHORT RAINY SEASON			LONG RAINY SEASON			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	.	.	.	338,843	350,979	1.04	338,843	350,979	1.04
Paddy	.	.	.	2,818	1,983	0.70	2,818	1,983	0.70
Sorghum	115.27421	57.65728	0.50	96,032	68,682	0.72	96,147	68,739	0.71
Bulrush Millet	.	.	.	80,956	47,738	0.59	80,956	47,738	0.59
Finger Millet	.	.	.	9,660	6,232	0.65	9,660	6,232	0.65
CEREALS	115.27421	57.65728	0.50	528,309	475,613	0.90	528,424	475,671	0.90
Cassava	.	.	.	1,148	1,200	1.05	1,148	1,200	1.05
Sweet Potato	13	3	0.26	863	915	1.06	876	918	1.05
Yams	.	.	.	25.606195	115.23658	4.50	25.606195	115.23658	4.50
ROOTS & TUBERS	13	3	0.26	2,037	2,230	1.09	2,049	2,233	1.09
Mung Bean	.	.	.	57.637107	64.063645	1.11	57.637107	64.063645	1.11
Beans	.	.	.	9,698	6,831	0.70	9,698	6,831	0.70
Cowpeas	.	.	.	6,397	2,051	0.32	6,397	2,051	0.32
Green gram	.	.	.	805	187	0.23	805	187	0.23
Bambaranuts	.	.	.	7,381	3,517	0.48	7,381	3,517	0.48
Field Peas	.	.	.	526.794	72.545349	0.14	526.794	72.545349	0.14
PULSES	.	.	.	24,865	12,723	0.51	24,865	12,723	0.51
Sunflower	172.91132	51.962734	0.30	83,212	56,016	0.67	83,385	56,068	0.67
Simsim	.	.	.	26,617	9,388	0.35	26,617	9,388	0.35
Groundnut	345.82264	207.56621	0.60	78,678	44,699	0.57	79,024	44,906	0.57
Soya Beans	.	.	.	57.637107	42.709097	0.74	57.637107	42.709097	0.74
OIL SEEDS & OIL NUTS	518.73397	259.52894	0.50	188,564	110,146	0.58	189,083	110,406	0.58
Okra	.	.	.	534	402	0.75	534	402	0.75
Radish	.	.	.	599	661	1.10	599	661	1.10
Turmeric	.	.	.	180	89	0.49	180	89	0.49
Bitteer									
Aubergine	.	.	.	403	562	1.40	403	562	1.40
Onion	90	338	3.75	355.44444	1690.1898	4.76	445	2,028	4.55
Cabbage	.	.	.	13	44	3.29	13	44	3.29
Tomatoes	34	107	3.12	1000.3212	11142.683	11.14	1,034	11,249	10.87
Spinach	16	101	6.23	112.66726	859.27783	7.63	129	960	7.45
Chillies	.	.	.	16.387965	50.597841	3.09	16.387965	50.597841	3.09
Amaranths	27	6	0.21	13	89	6.59	40	94	2.33
Water Mellon	.	.	.	12.803097	126.4946	9.88	12.803097	126.4946	9.88
FRUITS & VEGETABLES	167	551	3.29	3,240	15,717	4.85	3,407	16,268	4.77
Total	814	871	1.07	747,014	616,428	0.83	747,828	617,300	0.83

INPUT USE BY DISTRICT

5.24 : 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	
Kondoa	0	.	222	180	222	180	.
Mpwapwa	0	.	142	634	142	634	.
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	0	.	364	814	364	814	.

5.25 : 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	
Kondoa	15,992	18,115	73,740	164,233	89,732	182,348	9.9
Mpwapwa	3,132	3,501	54,383	126,590	57,515	130,091	2.7
Kongwa	1,754	3,690	48,731	162,130	50,485	165,820	2.2
Dodoma Urban	9,867	8,820	41,364	74,073	51,230	82,894	10.6
Bahi	8,692	9,425	38,014	57,403	46,706	66,829	14.1
Chamwino	4,009	5,291	58,291	113,742	62,301	119,033	4.4
Total	43,446	48,843	314,523	698,172	357,968	747,014	6.5

5.26: 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	
Kondoa	222	167	0	13	222	180	93.0
Mpwapwa	142	0	0	634	142	634	0.0
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	364	167	0	647	364	814	20.6

5.27: Number of Households and Planted Area by Inorganic Fertiliser Use and District - 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	
Kondoa	89,732	762	0	181,586	89,732	182,348	0.4
Mpwapwa	57,515	173	0	129,918	57,515	130,091	0.1
Kongwa	50,485	0	0	165,820	50,485	165,820	0.0
Dodoma Urban	51,230	77	0	82,817	51,230	82,894	0.1
Bahi	46,706	0	0	66,829	46,706	66,829	0.0
Chamwino	62,301	0	0	119,033	62,301	119,033	0.0
Total	357,968	1,011	0	746,003	357,968	747,014	0.1

5.28: 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 Fungicide	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Kondoa	222	34	0	146	222	180	19.0
Mpwapwa	0	.	142	634	142	634	.
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	222	34	142	780	364	814	4.2

5.29: 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	
Kondoa	1,111	2,421	88,621	179,927	89,732	182,348	1.3
Mpwapwa	1,139	3,314	56,376	126,777	57,515	130,091	2.5
Kongwa	877	2,238	49,608	163,582	50,485	165,820	1.3
Dodoma Urban	1,012	323	50,218	82,571	51,230	82,894	0.4
Bahi	116	94	46,590	66,735	46,706	66,829	0.1
Chamwino	308	133	61,992	118,900	62,301	119,033	0.1
Total	4,563	8,522	353,406	738,492	357,968	747,014	1.1

5.30: 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	
Kondoa	222	106	0	74	222	180	59.0
Mpwapwa	0	.	142	634	142	634	.
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	222	106	142	708	364	814	13.0

5.31: 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	
Kondoa	0	.	89,732	182,348	89,732	182,348	.
Mpwapwa	854	2,731	56,661	127,360	57,515	130,091	2.1
Kongwa	125	3,043	50,360	162,777	50,485	165,820	1.8
Dodoma Urban	126	1	51,104	82,893	51,230	82,894	0.0
Bahi	116	12	46,590	66,817	46,706	66,829	0.0
Chamwino	0	.	62,301	119,033	62,301	119,033	.
Total	1,222	5,787	356,747	741,228	357,968	747,014	0.8

5.32: 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	
Kondoa	222	140	0	40	222	180	78.0
Mpwapwa	0	.	142	634	142	634	.
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	222	140	142	674	364	814	17.2

5.33: 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	
Kondoa	10,439	14,143	79,292	168,205	89,732	182,348	7.8
Mpwapwa	19,219	24,202	38,296	105,889	57,515	130,091	18.6
Kongwa	7,642	27,007	42,843	138,813	50,485	165,820	16.3
Dodoma Urban	13,914	10,867	37,316	72,027	51,230	82,894	13.1
Bahi	14,719	20,191	31,987	46,638	46,706	66,829	30.2
Chamwino	11,412	11,774	50,889	107,259	62,301	119,033	9.9
Total	77,345	108,183	280,624	638,831	357,968	747,014	14.5

5.34: 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)	
Kondoa	222	40	0	140	222	180	22.0
Mpwapwa	142	634	0	.	142	634	100.0
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	364	674	0	140	364	814	82.8

5.35: 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)	
Kondoa	85,956	165,751	3,776	17,109	89,732	182,860	90.6
Mpwapwa	52,247	104,618	5,267	25,473	57,515	130,091	80.4
Kongwa	47,478	126,321	3,007	39,500	50,485	165,820	76.2
Dodoma Urban	48,321	71,020	2,909	11,874	51,230	82,894	85.7
Bahi	39,405	43,719	7,301	23,180	46,706	66,899	65.4
Chamwino	59,062	105,019	3,238	14,013	62,301	119,033	88.2
Total	332,469	616,448	25,499	131,150	357,968	747,597	82.5

5.36: 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	
Kondoa	222	50	0	129	222	180	28.0
Mpwapwa	0	.	142	634	142	634	.
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	222	50	142	763	364	814	6.2

5.37: 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	
Kondoa	1,111	1,027	88,621	181,320	89,732	182,348	0.6
Mpwapwa	854	692	56,661	129,399	57,515	130,091	0.5
Kongwa	1,629	1,052	48,856	164,768	50,485	165,820	0.6
Dodoma Urban	2,277	501	48,953	82,393	51,230	82,894	0.6
Bahi	232	147	46,474	66,682	46,706	66,829	0.2
Chamwino	154	187	62,146	118,846	62,301	119,033	0.2
Total	6,256	3,607	351,712	743,408	357,968	747,014	0.5

5.38: 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	
Kondoa	222	164	0	16	222	180	91.0
Mpwapwa	0	.	142	634	142	634	.
Kongwa	0	.	0	.	0	.	.
Dodoma Urban	0	.	0	.	0	.	.
Bahi	0	.	0	.	0	.	.
Chamwino	0	.	0	.	0	.	.
Total	222	164	142	650	364	814	20.1

5.39: 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	
Kondoa	4,442	3,456	85,289	178,891	89,732	182,348	1.9
Mpwapwa	1,281	756	56,234	129,334	57,515	130,091	0.6
Kongwa	1,503	591	48,982	165,229	50,485	165,820	0.4
Dodoma Urban	2,656	1,119	48,574	81,775	51,230	82,894	1.3
Bahi	2,086	1,197	44,620	65,632	46,706	66,829	1.8
Chamwino	463	273	61,838	118,760	62,301	119,033	0.2
Total	12,432	7,392	345,537	739,622	357,968	747,014	1.0

MARKETING

5.40: Number of Crop Producing households reporting selling agricultural produce during 2007/08 by District and Season

	SHORT RAINY SEASON						LONG RAINY SEASON				
District	**Number of households that sold**	**%**	**Number of households that did not sold**	**%**	**Total number of households**		**Number of households that sold**	**%**	**Number of households that did not sold**	**%**	**Total number of households**
Kondoa	222	222	0	0	222		68,409	76	21,544	24	89,954
Mpwapwa	142	142	0	0	142		39,435	68	18,223	32	57,657
Kongwa	0	0	0	0	0		42,092	83	8,393	17	50,485
Dodoma Urban	0	0	0	0	0		34,913	68	16,318	32	51,230
Bahi	0	0	0	0	0		36,739	79	9,967	21	46,706
Chamwino	0	0	0	0	0		43,333	70	18,968	30	62,301
Total	364	364	0	0	364		264,920	74	93,413	26	358,333

INPUT USE LONG RAINY SEASON

5.41: Planted Area & Number of Households by Insecticide Use by Crop during 2007/08 agriculture year - LONG RAINY SEASON - KONDOA

Crop	Insecticide							% of area planted Insecticide
	Number of Households using Insecticide	Planted Area Insecticide Used	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Insecticide not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Maize	666	533	999,485	80,847	90,989	81,069	91,522	0.58
Paddy	.	.	.	888	382	888	.	.
Sorghum	.	.	.	12,882	7,616	12,882	.	.
Bulrush Millet	.	.	.	25,987	21,865	25,987	.	.
Finger Millet	.	.	.	12,882	9,159	12,882	.	.
CEREALS		533	999,485		130,010		130,543	0.41
Cassava	.	.	.	222	2	222	.	.
Sweet Potato	.	.	.	1,111	215	1,111	.	.
Yams	.	.	.	.	.	.	.	.
ROOTS & TUBERS		.	.		217		.	.
Mung Bean	.	.	.	.	.	.	.	.
Beans	444	495	1,998,970	10,439	3,695	10,883	4,189	11.81
Cowpeas	.	.	.	8,884	2,980	8,884	.	.
Green gram	.	.	.	1,111	743	1,111	.	.
Bambaranuts	.	.	.	1,333	333	1,333	.	.
Field Peas	.	.	.	.	.	.	.	.
PULSES		495	1,998,970		7,750		8,245	6.00
Sunflower	.	.	.	48,864	35,036	48,864	.	.
Simsim	.	.	.	4,220	3,222	4,220	.	.
Groundnut	.	.	.	8,440	4,609	8,440	.	.
Soya Beans	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS		.	.		42,867		.	.
Okra	.	.	.	444	67	444	.	.
Radish	.	.	.	222	135	222	.	.
Turmeric	.	.	.	222	180	222	.	.
Bitteer Aubergine	.	.	.	444	67	444	.	.
Onion	.	.	.	.	.	.	.	.
Cabbage	.	.	.	222	13	222	.	.
Tomatoes	.	.	.	.	.	.	.	.
Spinach	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.
Amaranths	.	.	.	222	13	222	.	.
Water Mellon	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES		.	.		477		.	.
Total	1,111	1,027	2,998,455	219,887	181,320	220,553	182,348	0.56

5.42: Planted Area & Number of Households by Insecticide Use by Crop during 2007/08 agriculture year - LONG RAINY SEASON - MPWAPWA

Crop	Insecticide							% of area planted Insecticide
	Number of Households using Insecticide	Planted Area Insecticide Used	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Insecticide not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Maize	285	346	7,830,001	41,428	49,866	41,713	50,212	0.69
Paddy	.	.	.	285	115	285	.	.
Sorghum	.	.	.	28,330	31,274	28,330	.	.
Bulrush Millet	.	.	.	1,424	1,297	1,424	.	.
Finger Millet	.	.	.	285	98	285	.	.
CEREALS		346	7,830,001		82,651		82,997	0.42
Cassava	.	.	.	569	1,095	569	.	.
Sweet Potato	.	.	.	285	288	285	.	.
Yams	.	.	.	.	.	.	.	.
ROOTS & TUBERS		.	.		1,383		.	.
Mung Bean	142	58	3,416,728	.	.	142	.	100.00
Beans	142	58	2,562,546	7,972	4,712	8,115	4,769	1.21
Cowpeas	.	.	.	2,420	2,968	2,420	.	.
Green gram	.	.	.	.	.	.	.	.
Bambaranuts	.	.	.	.	.	.	.	.
Field Peas	.	.	.	285	375	285	.	.
PULSES		115	5,979,274		8,055		8,170	1.41
Sunflower	.	.	.	11,959	9,919	11,959	.	.
Simsim	.	.	.	3,986	4,450	3,986	.	.
Groundnut	.	.	.	22,209	21,814	22,209	.	.
Soya Beans	.	.	.	142	58	142	.	.
OIL SEEDS & OIL NUTS		.	.		36,241		.	.
Okra	.	.	.	427	317	427	.	.
Radish	.	.	.	285	464	285	.	.
Turmeric	.	.	.	.	.	.	.	.
Bitteer	.	.	.	142	288	142	.	.
Aubergine								
Onion	569	231	17,083,639	.	.	569	.	100.00
Cabbage	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	.	.	.	.	.
Spinach	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES		231	17,083,639		1,069		1,300	17.74
Total	1,139	692	30,892,913	122,433	129,399	123,572	130,091	0.53

5.43: Planted Area & Number of Households by Insecticide Use by Crop during 2007/08 agriculture year - LONG RAINY SEASON - KONGWA

Crop	Insecticide							% of area planted Insecticide
	Number of Households using Insecticide	Planted Area Insecticide Used	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Insecticide not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Maize	1,503	888	25,492,948	45,098	107,680	45,098	108,568	0.82
Paddy	.	.	.	125	91	125	.	.
Sorghum	.	.	.	14,156	17,503	14,156	.	.
Bulrush Millet	.	.	.	3,633	3,749	3,633	.	.
Finger Millet	.	.	.	.	.	.	.	.
CEREALS		888	25,492,948		129,023		129,911	0.68
Cassava	.	.	.	125	51	125	.	.
Sweet Potato	.	.	.	125	25	125	.	.
Yams	.	.	.	.	.	.	.	.
ROOTS & TUBERS		.	.		76		.	.
Mung Bean	.	.	.	.	.	.	.	.
Beans	.	.	.	1,127	657	1,127	.	.
Cowpeas	.	.	.	251	101	251	.	.
Green gram	.	.	.	.	.	.	.	.
Bambaranuts	.	.	.	1,127	723	1,127	.	.
Field Peas	.	.	.	125	152	125	.	.
PULSES		.	.		1,633		.	.
Sunflower	125	63	751,635	13,655	17,099	13,655	17,163	0.37
Simsim	.	.	.	877	566	877	.	.
Groundnut	.	.	.	15,033	15,818	15,033	.	.
Soya Beans	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS		63	751,635		33,483		33,546	0.19
Okra	.	.	.	.	.	.	.	.
Radish	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.
Bitteer	.	.	.	.	.	.	.	.
Aubergine							.	.
Onion	.	.	.	251	101	251	.	.
Cabbage	.	.	.	.	.	.	.	.
Tomatoes	376	101	5,637,261	1,253	451	1,629	553	18.35
Spinach	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES		101	5,637,261		553		654	15.50
Total	2,004	1,052	31,881,844	96,961	164,768	97,337	165,820	0.63

5.44: Planted Area & Number of Households by Insecticide Use by Crop during 2007/08 agriculture year - LONG RAINY SEASON - DODOMA URBAN

Crop	Insecticide							% of area planted Insecticide
	Number of Households using Insecticide	Planted Area Insecticide Used	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Insecticide not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Maize	.	.	.	31,244	20,316	31,244	.	.
Paddy	.	.	.	379	128	379	.	.
Sorghum	.	.	.	11,511	6,769	11,511	.	.
Bulrush Millet	.	.	.	38,201	31,260	38,201	.	.
Finger Millet	.	.	.	126	154	126	.	.
CEREALS		.	.		58,627		.	.
Cassava	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	126	15	126	.	.
Yams	.	.	.	126	26	126	.	.
ROOTS & TUBERS		.	.		40		.	.
Mung Bean	.	.	.	.	.	.	.	.
Beans	.	.	.	126	51	126	.	.
Cowpeas	.	.	.	379	61	379	.	.
Green gram	.	.	.	126	38	126	.	.
Bambaranuts	126	2	.	10,246	2,993	10,246	2,995	0.05
Field Peas	.	.	.	.	.	.	.	.
PULSES		2	.		3,144		3,146	0.05
Sunflower	.	.	.	12,017	6,238	12,017	.	.
Simsim	.	.	.	4,301	3,349	4,301	.	.
Groundnut	126	51	632,473	25,552	10,774	25,678	10,825	0.47
Soya Beans	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS		51	632,473		20,361		20,412	0.25
Okra	126	26	1,264,946	126	77	253	102	25.00
Radish	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.
Bitteer								
Aubergine	.	.	.	.	.	.	.	.
Onion	.	.	.	.	.	.	.	.
Cabbage	.	.	.	.	.	.	.	.
Tomatoes	1,265	383	26,121,135	253	41	1,518	424	90.34
Spinach	506	36	2,333,825	885	76	1,265	113	32.16
Chillies	126	4	569,226	126	13	253	16	21.88
Amaranths	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	126	13	126	.	.
FRUITS & VEGETABLES		448	30,289,132		220		668	67.11
Total	2,277	501	30,921,605	135,982	82,393	138,006	82,894	0.60

5.45: Planted Area & Number of Households by Insecticide Use by Crop during 2007/08 agriculture year - LONG RAINY SEASON - BAHI

Crop	Insecticide							% of area planted Insecticide
	Number of Households using Insecticide	Planted Area Insecticide Used	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Insecticide not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Maize	116	47	927,171	21,325	13,277	21,441	13,324	0.35
Paddy	.	.	.	3,593	1,914	3,593	.	.
Sorghum	116	6	.	22,136	13,326	22,136	13,331	0.04
Bulrush Millet	.	.	.	19,471	11,930	19,471	.	.
Finger Millet	.	.	.	.	.	.	.	.
CEREALS		53	927,171		40,447		40,499	0.13
Cassava	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	232	70	232	.	.
Yams	.	.	.	.	.	.	.	.
ROOTS & TUBERS		.	.		70		.	.
Mung Bean	.	.	.	.	.	.	.	.
Beans	.	.	.	.	.	.	.	.
Cowpeas	.	.	.	927	160	927	.	.
Green gram	.	.	.	116	23	116	.	.
Bambaranuts	.	.	.	7,649	2,499	7,649	.	.
Field Peas	.	.	.	.	.	.	.	.
PULSES		.	.		2,683		.	.
Sunflower	116	47	927,171	8,229	5,138	8,345	5,185	0.90
Simsim	116	47	927,171	11,358	8,094	11,474	8,141	0.58
Groundnut	.	.	.	23,759	10,110	23,759	.	.
Soya Beans	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS		94	1,854,343		23,342		23,435	0.40
Okra	.	.	.	116	47	116	.	.
Radish	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.
Bitteer Aubergine	.	.	.	116	47	116	.	.
Onion	.	.	.	116	23	116	.	.
Cabbage	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	116	23	116	.	.
Spinach	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES		.	.		141		.	.
Total	464	147	2,781,514	119,257	66,682	119,605	66,829	0.22

5.46: Planted Area & Number of Households by Insecticide Use by Crop during 2007/08 agriculture year - LONG RAINY SEASON - CHAMWINO

Crop	Insecticides							% of area planted Insecticide
	Number of Households using Insecticide	Planted Area Insecticide Used	Cost of Insecticide	Number of Households NOT using Insecticide	Planted Area Insecticide not Used	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Maize	154	187	4,626,285	39,323	54,713	39,478	54,900	0.34
Paddy	.	.	.	308	187	308	.	.
Sorghum	.	.	.	26,678	19,539	26,678	.	.
Bulrush Millet	.	.	.	17,734	10,856	17,734	.	.
Finger Millet	.	.	.	154	250	154	.	.
CEREALS		187	4,626,285		85,545		85,732	0.22
Cassava	.	.	.	.	.	.	.	.
Sweet Potato	.	.	.	154	250	154	.	.
Yams	.	.	.	.	.	.	.	.
ROOTS & TUBERS		.	.		250		.	.
Mung Bean	.	.	.	.	.	.	.	.
Beans	.	.	.	154	31	154	.	.
Cowpeas	.	.	.	1,079	125	1,079	.	.
Green gram	.	.	.	.	.	.	.	.
Bambaranuts	.	.	.	3,238	832	3,238	.	.
Field Peas	.	.	.	.	.	.	.	.
PULSES		.	.		988		.	.
Sunflower	.	.	.	13,725	9,671	13,725	.	.
Simsim	.	.	.	11,720	6,889	11,720	.	.
Groundnut	.	.	.	28,529	15,502	28,529	.	.
Soya Beans	.	.	.	.	.	.	.	.
OIL SEEDS & OIL NUTS		.	.		32,062		.	.
Okra	.	.	.	.	.	.	.	.
Radish	.	.	.	.	.	.	.	.
Turmeric	.	.	.	.	.	.	.	.
Bitteer Aubergine	.	.	.	.	.	.	.	.
Onion	.	.	.	.	.	.	.	.
Cabbage	.	.	.	.	.	.	.	.
Tomatoes	.	.	.	.	.	.	.	.
Spinach	.	.	.	.	.	.	.	.
Chillies	.	.	.	.	.	.	.	.
Amaranths	.	.	.	.	.	.	.	.
Water Mellon	.	.	.	.	.	.	.	.
FRUITS & VEGETABLES		.	.		.		.	.
Total	154	187	4,626,285	142,798	118,846	142,952	119,033	0.16

PERMANENT CROPS

5.47: Number of Households Planting Permanent Crops by District, 2007/08 Agriculture Year - Dodoma

District	Have Crops/Fruit Trees		Does Not Have Crops/Fruit Trees		Total	
	Number	%	Number	%	Number	%
Kondoa	**27,986**	**31.1**	**61,968**	**68.9**	**89,954**	**100.0**
Mpwapwa	**1,566**	**2.7**	**56,091**	**97.3**	**57,657**	**100.0**
Kongwa	**1,503**	**3.0**	**49,232**	**97.0**	**50,735**	**100.0**
Dodoma Urban	**3,668**	**7.2**	**47,562**	**92.8**	**51,230**	**100.0**
Bahi	**579**	**1.2**	**46,359**	**98.8**	**46,938**	**100.0**
Chamwino	**925**	**1.5**	**61,530**	**98.5**	**62,455**	**100.0**
Total	36,228	10.1	322,742	89.9	358,969	100.0

5.48: Planted Area and Area Harvested by Type of Planting and District

District	Area of Permenent Monocrop (ha)		Area of Permenent Mixed Crop (ha)		Total Area Planted Mono + Mixed (ha)		Area Harvested (ha)
	Number of households	Area	Number of households	Area	Number of households	Area	
Kondoa	**24,210**	**11,696**	**4,664**	**3,059**	**27,986**	**14,755**	**14,474**
Mpwapwa	**854**	**673**	**712**	**192**	**1,566**	**864**	**855**
Kongwa	**1,503**	**838**	**0**	**.**	**1,503**	**838**	**567**
Dodoma Urban	**2,656**	**1,469**	**1,518**	**1,873**	**3,668**	**3,343**	**3,001**
Bahi	**348**	**92**	**464**	**14**	**579**	**106**	**94**
Chamwino	**771**	**379**	**154**	**30**	**925**	**410**	**410**
Total	30,342	15,147	7,512	5,169	36,228	20,316	19,401

5.49: Area Planted, Area harvested, Quantity Harvested and Yield by Type of Permanent Crop - Dodoma

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					
Cashew nut	**232**	**55**	**46**	**37**	**37,087**	**0.81**	**813**
Banana	**2,044**	**500**	**402**	**3,513**	**3,512,719**	**8.73**	**8,732**
Mango	**2,023**	**284**	**226**	**896**	**896,230**	**3.97**	**3,971**
Pigeon pea	**24,329**	**13,156**	**13,156**	**5,994**	**5,993,713**	**0.46**	**456**
Coconut	**116**	**24**	**24**	**0**	**-**	**0.00**	**0**
Orange	**666**	**137**	**133**	**837**	837,346	6.32	6,319
Sugar cane	**3037**	**874**	**729**	**13167**			

5.50: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Dodoma

Districts	Cashewnut								Banana							
	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)	Quantity harvested (tons)	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)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Kondoa	0	.	0	.	0	.	.	.	888	271	444	99	1,333	370	272	2,573
Mpwapwa	0	.	0	.	0	.	.	.	142	14	569	116	712	130	130	940
Kongwa	0	.	0	.	0	.	.	.								
Dodoma Urban	0	.	0	.	0	.	.	.								
Bahi	116	46	116	9	116	55	46	37								
Chamwino	0	.	0	.	0	.	.	.								
Total	116	46	116	9	116	55	46	37	1,031	285	1,014	215	2,044	500	402	3,513

Cont. 5.50: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Dodoma

Districts	Mango								Pigeon pea							
	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)**	**Quantity harvested (tons)**	**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)**	**Quantity harvested (tons)**
	Number of households	**Area**	**Number of households**	**Area**	**Number of households**	**Area**	**Area**	**tons**	**Number of households**	**Area**	**Number of households**	**Area**	**Number of households**	**Area**	**Area**	**tons**
Kondoa	**0**	**.**	**888**	**31**	**888**	**31**	**.**	**328**	**21,322**	**10,056**	**2,443**	**2,562**	**23,543**	**12,618**	**12,618**	**5,782**
Mpwapwa									**285**	**168**	**0**	**.**	**285**	**168**	**168**	**129**
Kongwa									**501**	**370**	**0**	**.**	**501**	**370**	**370**	**83**
Dodoma Urban	**506**	**100**	**379**	**111**	**632**	**210**	**186**	**152**								
Bahi	**116**	**23**	**348**	**4**	**348**	**27**	**24**	**116**								
Chamwino	**154**	**15**	**0**	**.**	**154**	**15**	**15**	**301**								
Total	776	138	1,616	146	2,023	284	226	896	22,108	10,594	2,443	2,562	24,329	13,156	13,156	5,994

Cont. 5.50: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District - Dodoma

Districts	Orange								Sugar cane							
	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)	Quantity harvested (tons)	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)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Kondoa	**222**	**44**	**444**	**93**	**666**	**137**	**133**	**837**	**1,777**	**516**	**222**	**70.83**	**1,999**	**587**	**516**	**5,242**
Mpwapwa									**142**	**14**	**142**	**14**	**285**	**28**	**28**	**171**
Kongwa									**626**	**247**	**0**	**.**	**626**	**247**	**173**	**7,678**
Dodoma Urban									**126**	**12**	**0**	**.**	**126**	**12**	**12**	**76**
Bahi																
Chamwino																
Total	222	44	444	93	666	137	133	837	2,672	789	364	85	3,037	874	729	13,167

ACCESS TO EQUIPMENTS

6.1: 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	%	
Kondoa	81,291	30.7	88,399	33.4	5,775	2.2	1,333	.5	19,323	7.3	1,333	.5	197,454
Mpwapwa	49,827	35.6	55,807	39.9	2,563	1.8	427	.3	8,257	5.9	427	.3	117,308
Kongwa	48,731	37.0	49,984	38.0	2,130	1.6	125	.1	7,767	5.9	251	.2	108,987
Dodoma Urban	47,562	37.9	50,977	40.6	2,150	1.7	126	.1	3,668	2.9	506	.4	104,991
Bahi	43,461	39.5	46,127	41.9	1,043	.9	232	.2	4,056	3.7	232	.2	95,151
Chamwino	55,515	36.6	60,759	40.1	463	.3	154	.1	7,710	5.1	308	.2	124,910
Total	326,388	43.6	352,052	47.0	14,123	1.9	2,398	0.3	50,783	6.8	3,056	0.4	748,800

Cont…

Cont. 6.1: 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		Tractor		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Kondoa	3,110	1.2	444	.2	444	.2	2,221	.8	16,880	6.4	19,101	7.2	42,200
Mpwapwa	1,139	.8	0	.0	142	.1	427	.3	6,691	4.8	5,410	3.9	13,809
Kongwa	7,015	5.3	501	.4	376	.3	501	.4	7,015	5.3	2,631	2.0	18,039
Dodoma Urban	2,909	2.3	379	.3	126	.1	759	.6	6,072	4.8	4,680	3.7	14,926
Bahi	927	.8	116	.1	464	.4	348	.3	4,520	4.1	3,477	3.2	9,851
Chamwino	3,393	2.2	154	.1	0	.0	617	.4	8,944	5.9	5,089	3.4	18,197
Total	18,493	15.8	1,595	1.4	1,552	1.3	4,873	4.2	50,122	42.8	40,388	34.5	117,023

Cont. 6.1: 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	%	
Kondoa	15,103	5.7	8,884	3.4	444	.2	444	.2	222	.1	25,098
Mpwapwa	5,125	3.7	2,705	1.9	427	.3	142	.1	427	.3	8,827
Kongwa	3,382	2.6	877	.7	251	.2	0	.0	0	.0	4,510
Dodoma Urban	4,807	3.8	253	.2	126	.1	253	.2	126	.1	5,566
Bahi	3,129	2.8	811	.7	811	.7	116	.1	116	.1	4,984
Chamwino	6,477	4.3	1,388	.9	154	.1	308	.2	154	.1	8,482
Total	38,024	66.2	14,918	26.0	2,214	3.9	1,264	2.2	1,046	1.8	57,465

6.2: 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	%
Kondoa	132,598	20.8	275,192	43.2	11,994	1.9	8,218	1.3	22,655	3.6	1,555	.2
Mpwapwa	103,214	25.2	157,454	38.4	8,684	2.1	12,813	3.1	12,813	3.1	4,556	1.1
Kongwa	94,831	27.9	144,314	42.4	2,255	.7	3,758	1.1	15,534	4.6	376	.1
Dodoma Urban	99,931	28.0	147,493	41.3	3,036	.8	126	.0	5,060	1.4	506	.1
Bahi	83,909	24.2	135,135	39.0	3,940	1.1	348	.1	6,143	1.8	1,159	.3
Chamwino	109,951	23.1	170,247	35.8	617	.1	771	.2	22,669	4.8	617	.1
Total	624,434	24.3	1,029,835	40.1	30,526	1.2	26,034	1.0	84,873	3.3	8,768	.3

cont 6.2: Number of Agricultural Equipment/Asset owned by type and District for 2007/08 agriculture year

District	Equipment/Asset Name											
	Ox cart		Trekta		Tractor plough		Tractor Harrow		Castrated bulls		Uncastrated bulls	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	3,554	.6	444	.1	2,665	.4	6,219	1.0	43,533	6.8	49,530	7.8
Mpwapwa	4,129	1.0	.	.	3,132	.8	1,993	.5	24,202	5.9	17,938	4.4
Kongwa	9,521	2.8	6,514	1.9	501	.1	3,758	1.1	25,556	7.5	5,261	1.5
Dodoma Urban	3,036	.8	632	.2	126	.0	1,897	.5	25,805	7.2	18,721	5.2
Bahi	927	.3	2,550	.7	3,361	1.0	1,391	.4	20,514	5.9	24,686	7.1
Chamwino	3,393	.7	308	.1	.	.	5,397	1.1	46,571	9.8	25,445	5.4
Total	24,559	100.0	10,449	100.0	9,786	100.0	20,656	100.0	186,180	100.0	141,581	100.0

cont 6.2: Number of Agricultural Equipment/Asset owned by type and District for 2007/08 agriculture year

District	Equipment/Asset Name									
	Cow		Donkey		Thrasher		Power tiller		Rigder	
	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	53,084	8.3	23,543	3.7	888	.1	1,777	.3	222	.0
Mpwapwa	36,445	8.9	15,233	3.7	3,274	.8	3,132	.8	569	.1
Kongwa	24,679	7.3	2,881	.8	251	.1	.	.	.	.
Dodoma Urban	46,171	12.9	506	.1	2,403	.7	1,644	.5	126	.0
Bahi	47,633	13.7	9,388	2.7	3,013	.9	116	.0	2,318	.7
Chamwino	72,941	15.3	5,089	1.1	4,626	1.0	6,477	1.4	463	.1
Total	280,953	100.0	56,640	100.0	14,456	100.0	13,146	100.0	3,699	100.0

6.3: 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	%
Kondoa	37,980	47.2	24,210	30.1	1,555	1.9	5,997	7.5	9,551	11.9	1,111	1.4
Mpwapwa	18,223	81.0	1,281	5.7	569	2.5	2,278	10.1	0	.0	142	.6
Kongwa	17,288	66.7	877	3.4	125	.5	1,503	5.8	6,013	23.2	125	.5
Dodoma Urban	9,108	84.7	1,012	9.4	126	1.2	0	.0	379	3.5	126	1.2
Bahi	7,070	87.1	579	7.1	0	.0	232	2.9	0	.0	232	2.9
Chamwino	16,963	93.2	925	5.1	154	.8	0	.0	154	.8	0	.0
Total	106,631	64.3	28,885	17.4	2,530	1.5	10,010	6.0	16,097	9.7	1,736	1.0

6.4: 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	%
Kondoa	44,644	35.8	32,428	26.0	30,873	24.8	13,771	11.1	444	.4	2,443	2.0
Mpwapwa	24,202	42.5	6,833	12.0	18,223	32.0	7,545	13.3	.	.	142	.3
Kongwa	20,545	47.7	4,259	9.9	14,782	34.3	2,881	6.7	626	1.5	.	.
Dodoma Urban	24,793	37.0	9,867	14.7	31,371	46.8	506	.8	253	.4	253	.4
Bahi	13,560	22.8	8,692	14.6	30,597	51.5	6,606	11.1	.	.	.	.
Chamwino	40,249	44.7	15,267	17.0	34,080	37.8	308	.3	154	.2	.	.
Total	167,992	38.1	77,346	17.5	159,925	36.2	31,618	7.2	1,478	.3	2,839	.6

IRRIGATION

6.5 : 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	%
Kondoa	1,555	1.7	88,399	98.3	89,954	100.0
Mpwapwa	997	1.7	56,661	98.3	57,657	100.0
Kongwa	1,503	3.0	49,232	97.0	50,735	100.0
Dodoma Urban	2,656	5.2	48,574	94.8	51,230	100.0
Bahi	1,391	3.0	45,547	97.0	46,938	100.0
Chamwino	0	.0	62,455	100.0	62,455	100.0
Total	8,102	2.3	350,868	97.7	358,969	100.0

6.6: Number of Agriculture Households using irrigation by Source of Irrigation Water and District during the 2007/08 agricultural Year

District	**Main Source of Irrigation Water**							
	River	**Borehole**	**Lake**	**Canal**	**Dam**	**Tap Water**	**Well**	**Total**
Kondoa	222	0	0	0	0	1,111	0	1,396
Mpwapwa	712	0	0	0	0	0	0	1,621
Kongwa	1,378	0	0	0	0	125	0	1,020
Dodoma Urban	253	0	0	2,403	0	0	0	392
Bahi	232	0	0	348	0	579	0	1,803
Total	2,797	0	0	2,751	0	1,815	0	8,344

6.7: Number of Agriculture Households by method of used to obtain water and region during 2007/08 agriculture year

District	**Main method of Obtaining Water**					
	Gravity	**Hand bucket**	**Hand pump**	**motor pump**	**Other**	**Total**
Kondoa	1,333	0	0	0	0	1,333
Mpwapwa	712	0	0	0	0	712
Kongwa	1,378	125	0	0	0	1,503
Dodoma Urban	126	2,403	0	0	126	2,656
Bahi	811	232	116	0	0	1,159
Total	4,360	2,760	116	0	126	7,363

EROSION CONTROL

6.8: 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	%
Kondoa	**35,981**	**40.0**	**53,972**	**60.0**	**89,954**	**100.0**
Mpwapwa	**16,941**	**29.4**	**40,716**	**70.6**	**57,657**	**100.0**
Kongwa	**11,525**	**22.7**	**39,210**	**77.3**	**50,735**	**100.0**
Dodoma Urban	**9,361**	**18.3**	**41,870**	**81.7**	**51,230**	**100.0**
Bahi	**2,434**	**5.2**	**44,504**	**94.8**	**46,938**	**100.0**
Chamwino	**8,636**	**13.8**	**53,819**	**86.2**	**62,455**	**100.0**
Total	84,878	23.6	274,092	76.4	358,969	100.0

6.9: Number of Households with Erosion Control/Water Harvesting Facilities on their Land By District

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	
	Number	%	Number	%	Number	%
Kondoa	**31,539**	**35.1**	**58,414**	**64.9**	**89,954**	**100.0**
Mpwapwa	**10,535**	**18.3**	**47,122**	**81.7**	**57,657**	**100.0**
Kongwa	**5,261**	**10.4**	**45,474**	**89.6**	**50,735**	**100.0**
Dodoma Urban	**5,566**	**10.9**	**45,665**	**89.1**	**51,230**	**100.0**
Bahi	**579**	**1.2**	**46,359**	**98.8**	**46,938**	**100.0**
Chamwino	**3,547**	**5.7**	**58,908**	**94.3**	**62,455**	**100.0**
Total	57,028	15.9	301,942	84.1	358,969	100.0

6.10: 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
Kondoa	**38,647**	**63,523**	**9,106**	**24,210**	**444**	**24,654**	**7,774**	**1,111**
Mpwapwa	**9,681**	**147,631**	**13,809**	**3,559**	**1,993**	**19,789**	**142**	**427**
Kongwa	**5,387**	**11,776**	**752**	**2,631**	**6,138**	**626**	**125**	**0**
Dodoma Urban	**7,463**	**14,167**	**1,771**	**2,403**	**10,626**	**1,644**	**885**	**379**
Bahi	**0**	**927**	**0**	**0**	**0**	**1,623**	**0**	**116**
Chamwino	**6,939**	**2,776**	**0**	**0**	**3,238**	**1,079**	**0**	**9,098**
Total	68,117	240,800	25,438	32,803	22,440	49,415	8,927	11,131

AGRICULTURE CREDIT

7.1: 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	%
Kondoa	1,333	1.5	88,621	98.5	89,954	100.0
Mpwapwa	712	1.2	56,945	98.8	57,657	100.0
Kongwa	501	1.0	50,234	99.0	50,735	100.0
Dodoma Urban	1,518	3.0	49,712	97.0	51,230	100.0
Bahi	348	.7	46,590	99.3	46,938	100.0
Chamwino	1,542	2.5	60,913	97.5	62,455	100.0
Total	5,953	1.7	353,016	98.3	358,969	100

7.2: Number of Credits by sex of the household Member receiving credit from source B and District During the 2007/08 Agriculture Year

District	Male		Female		Total	
	Number	%	Number	%	Number	%
Kondoa	1,111	83.3	222	16.7	1,333	100
Mpwapwa	712	100.0	0	.0	712	100
Kongwa	376	75.0	125	25.0	501	100
Dodoma Urban	1,391	91.7	126	8.3	1,518	100
Bahi	232	66.7	116	33.3	348	100
Chamwino	771	50.0	771	50.0	1,542	100
Total	4,592	77.1	1,361	22.9	5,953	100

7.3: 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		Trader/trade store		Private individual		NGO/Development project		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	444	33.3	0	0.0	444	33.3	444	33.3	0	0.0	0	0.0	0	0.0	1,333	100
Mpwapwa	569	80.0	0	0.0	0	0.0	0	0.0	142	20.0	0	0.0	0	0.0	712	100
Kongwa	125	25.0	125	25.0	0	0.0	251	50.0	0	0.0	0	0.0	0	0.0	501	100
Dodoma Urban	506	33.3	0	0.0	0	0.0	632	41.7	0	0.0	0	0.0	379	25.0	1,518	100
Bahi	232	66.7	0	0.0	0	0.0	116	33.3	0	0.0	0	0.0	0	0.0	348	100
Chamwino	771	50.0	0	0.0	308	20.0	0	0.0	308	20.0	0	0.0	154	10.0	1,542	100
Total	2,648	44.5	125	2.1	753	12.6	1,443	24.2	451	7.6	0	0.0	534	9.0	5,953	100

7.4: Number of Households Reporting the Main reasons for Not Using Credit by District During the 2007/08 Agriculture Year

District	Not needed		Not available		Did not want to go into debt		Interest rate/cost too high		Did not know how to get credit	
	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	3,110	3.5	9,773	11.0	15,103	17.0	3,554	4.0	33,316	37.6
Mpwapwa	6,122	10.8	20,216	35.5	4,556	8.0	997	1.8	14,806	26.0
Kongwa	3,758	7.5	9,521	19.0	9,145	18.2	2,881	5.7	15,158	30.2
Dodoma Urban	7,843	15.8	6,451	13.0	8,222	16.5	1,897	3.8	11,764	23.7
Bahi	2,318	5.0	5,795	12.4	5,099	10.9	3,129	6.7	15,414	33.1
Chamwino	3,084	5.1	11,412	18.7	13,879	22.8	3,393	5.6	15,267	25.1
Total	26,234	7.4	63,167	17.9	56,004	15.9	15,851	4.5	105,725	29.9

Cont 7.4: Number of Households Reporting the Main reasons for Not Using Credit by District During the 2007/08 Agriculture Year

District	Difficult bureaucratic procedure		Credit granted too late		Other (specify)		Dont know about credit		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	7107.449	8.02	1110.539	1.253	0	0	15547.54	17.54	88621	100
Mpwapwa	569.4546	1	1850.728	3.25	0	0	7830.001	13.75	56945.46	100
Kongwa	2505.449	4.988	1002.18	1.995	375.8174	0.748	5887.806	11.72	50234.26	100
Dodoma Urban	1644.43	3.308	1391.441	2.799	379.4838	0.763	10119.57	20.36	49712.38	100
Bahi	1390.757	2.985	695.3785	1.493	347.6893	0.746	12400.92	26.62	46590.36	100
Chamwino	3238.4	5.316	1387.886	2.278	308.419	0.506	8944.151	14.68	60912.75	100
Total	16455.94	4.662	7438.151	2.107	1411.409	0.4	60729.99	17.2	353016.2	100

7.5 AGRICULTURE CREDIT: Number of Households receiving Credits by Main Source of credit B and region During the 2007/08 Agriculture Year

District	Family, friend or relative		Bank		Cooperative		Savings & credit Soc		Trader/trade store		Private individual		NGO/Development project		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	222	33.3	0	0.0	0	0.0	222	33.3	0	0.0	0	0.0	222	33.3	666	100
Mpwapwa	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Kongwa	125	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	125	100
Dodoma Urban	0	0.0	0	0.0	0	0.0	126	49.8	0	0.0	126	49.8	0	0.0	253	100
Bahi	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Chamwino	308	100.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	308	100
Total	656	48.5	0	0.0	0	0.0	348	25.7	0	0.0	126	9.3	222	16.4	1,353	100

7.6: Number of Households receiving Credits by Main Source of credit C and region During the 2007/08 Agriculture Year

District	Family, friend or relative		Bank		Cooperative		Savings & credit Soc		Trader/trade store		Private individual		NGO/Development project		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	222	33.3	0	0.0	0	0.0	222	33.3	0	0.0	0	0.0	222	33.3	666	100
Mpwapwa	0	0.0	142	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	142	100
Kongwa	125	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	125	100
Dodoma Urban	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Bahi	116	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	116	100
Chamwino	154	50.0	0	0.0	0	0.0	0	0.0	154	50.0	0	0.0	0	0.0	308	100
Total	617	45.5	142	10.5	0	0.0	222	16.4	154	11.4	0	0.0	222	16.4	1,358	100

7.7: Provision of credit A by sex and region During the 2007/08 Agriculture Year

Region	Male		Female		Total	
	Number	%	Number	%	Number	%
Kondoa	1,111	83.3	222	16.7	1,333	100.0
Mpwapwa	712	100.0	0	.0	712	100.0
Kongwa	376	75.0	125	25.0	501	100.0
Dodoma Urban	1,391	91.7	126	8.3	1,518	100.0
Bahi	232	66.7	116	33.3	348	100.0
Chamwino	771	50.0	771	50.0	1,542	100.0
Total	4,592	77.1	1,361	22.9	5,953	100.0

7.8 : Provision of credit B by sex and region During the 2007/08 Agriculture Year

Region	Male		Female		Total	
	Number	%	Number	%	Number	%
Kondoa	666	100.0	0	.0	666	100.0
Kongwa	125	50.0	125	50.0	251	100.0
Dodoma Urban	253	100.0	0	.0	253	100.0
Chamwino	0	.0	308	100.0	308	100.0
Total	1,045	70.7	434	29.3	1,478	100.0

7.9 : Provision of credit C by sex and region During the 2007/08 Agriculture Year

Region	Male		Female		Total	
	Number	%	Number	%	Number	%
Kondoa	**666**	**100.0**	**0**	**.0**	**666**	**100.0**
Kongwa	**0**	**.0**	**125**	**100.0**	**125**	**100.0**
Chamwino	**0**	**.0**	**308**	**100.0**	**308**	**100.0**
Total	666	60.6	434	39.4	1,100	100.0

CROP EXTENSION

8.1 : 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	%	
Kondoa	86,400	96.3	3,332	3.7	89,732
Mpwapwa	52,817	91.6	4,840	8.4	57,657
Kongwa	49,858	98.5	752	1.5	50,610
Dodoma Urban	44,906	87.7	6,325	12.3	51,230
Bahi	44,272	94.6	2,550	5.4	46,822
Chamwino	49,193	78.8	13,262	21.2	62,455
Total	327,446	91.3	31,060	8.7	358,506

8.2 : Number of Agriculture Households Participated in Out Grower Agreement During the 2007/08 Agriculture Year

District	Number of Households Participated in Out Grower Agreement		Number of Households NOT Participated in Out GrowerAgreement		Total Number of Households	
	Number	%	Number	%	Number	%
Kondoa	**1,111**	**1.2**	**88,843**	**98.8**	**89,954**	**100.0**
Mpwapwa	**427**	**.7**	**57,230**	**99.3**	**57,657**	**100.0**
Kongwa	**251**	**.5**	**50,485**	**99.5**	**50,735**	**100.0**
Dodoma Urban	**632**	**1.2**	**50,598**	**98.8**	**51,230**	**100.0**
Bahi	**811**	**1.7**	**46,127**	**98.3**	**46,938**	**100.0**
Chamwino	**771**	**1.2**	**61,684**	**98.8**	**62,455**	**100.0**
Total	4,003	1.1	354,967	98.9	358,969	100.0

8.3 : 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	%
Kondoa	**0**	**.0**	**89,954**	**100.0**	**89,954**	**100.0**
Mpwapwa	**142**	**.2**	**57,515**	**99.8**	**57,657**	**100.0**
Kongwa	**0**	**.0**	**50,735**	**100.0**	**50,735**	**100.0**
Dodoma Urban	**253**	**.5**	**50,977**	**99.5**	**51,230**	**100.0**
Bahi	**116**	**.2**	**46,822**	**99.8**	**46,938**	**100.0**
Chamwino	**1,388**	**2.2**	**61,067**	**97.8**	**62,455**	**100.0**
Total	1,899	.5	357,070	99.5	358,969	100.0

8.4: Number of Agriculture Households By Source of Extension Messages and 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	%	
Kondoa	79,515	92.0	4,442	5.1	444	0.5	1,999	2.3	28,208	32.6	23,988	27.8	1,777	2.1	86,400
Mpwapwa	48,119	91.1	4,413	8.4	854	1.6	2,563	4.9	14,521	27.5	14,806	28.0	1,566	3.0	52,817
Kongwa	49,733	99.7	8,017	16.1	251	0.5	5,763	11.6	13,404	26.9	12,026	24.1	251	0.5	49,858
Dodoma Urban	41,996	93.5	2,530	5.6	253	0.6	1,265	2.8	3,795	8.5	11,005	24.5	506	1.1	44,906
Bahi	41,027	92.7	12,980	29.3	695	1.6	1,507	3.4	6,606	14.9	5,215	11.8	116	0.3	44,272
Chamwino	48,113	97.8	4,164	8.5	154	0.3	617	1.3	3,393	6.9	1,234	2.5	0	0.0	49,193
Total	308,504	94.2	36,547	11.2	2,652	0.8	13,712	4.2	69,926	21.4	68,274	20.9	4,215	1.3	327,446

8.5 : Number of households receiving extension advice on use of 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	%	
Kondoa	62,412	83.1	666	.9	0	.0	666	.9	7,330	9.8	3,554	4.7	444	.6	75,072
Mpwapwa	41,428	88.7	569	1.2	0	.0	0	.0	2,705	5.8	1,851	4.0	142	.3	46,695
Kongwa	48,982	99.2	0	.0	125	.3	125	.3	125	.3	0	.0	0	.0	49,357
Dodoma Urban	34,154	88.5	253	.7	126	.3	126	.3	1,518	3.9	2,403	6.2	0	.0	38,581
Bahi	36,276	86.5	2,782	6.6	116	.3	232	.6	927	2.2	1,623	3.9	0	.0	41,955
Chamwino	47,497	98.1	308	.6	0	.0	0	.0	617	1.3	0	.0	0	.0	48,422
Total	270,747	90.2	4,579	1.5	368	.1	1,150	.4	13,222	4.4	9,430	3.1	587	.2	300,082

8.6 : Number of households receiving extension advice on use ofAgrochemicals 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	%	
Kondoa	36,204	80.3	444	1.0	0	.0	0	.0	5,108	11.3	3,332	7.4	0	.0	45,088
Mpwapwa	17,653	72.9	0	.0	0	.0	0	.0	4,556	18.8	1,993	8.2	0	.0	24,202
Kongwa	33,824	87.7	1,503	3.9	0	.0	501	1.3	1,879	4.9	752	1.9	125	.3	38,584
Dodoma Urban	18,848	90.9	126	.6	126	.6	379	1.8	379	1.8	885	4.3	0	.0	20,745
Bahi	16,573	76.1	3,825	17.6	232	1.1	0	.0	811	3.7	348	1.6	0	.0	21,789
Chamwino	24,674	92.5	308	1.2	0	.0	0	.0	1,696	6.4	0	.0	0	.0	26,678
Total	147,775	83.4	6,207	3.5	358	.2	881	.5	14,430	8.1	7,309	4.1	125	.1	177,086

8.7: Number of households receiving extension advice 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	%	
Kondoa	42,200	78.2	444	.8	0	.0	222	.4	5,553	10.3	5,553	10.3	0	.0	53,972
Mpwapwa	21,497	81.2	569	2.2	0	.0	0	.0	2,563	9.7	1,566	5.9	285	1.1	26,480
Kongwa	25,931	77.8	3,883	11.7	0	.0	877	2.6	1,378	4.1	1,127	3.4	125	.4	33,322
Dodoma Urban	17,962	89.9	126	.6	0	.0	0	.0	632	3.2	1,138	5.7	126	.6	19,986
Bahi	17,384	81.1	2,550	11.9	0	.0	0	.0	1,043	4.9	464	2.2	0	.0	21,441
Chamwino	31,613	93.6	617	1.8	0	.0	154	.5	1,079	3.2	308	.9	0	.0	33,772
Total	156,588	82.9	8,190	4.3	0	.0	1,253	.7	12,248	6.5	10,157	5.4	536	.3	188,973

8.8: Number of households receiving extensionadvice on Organic Fertilizeer 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	%	
Kondoa	52,417	81.7	444	.7	222	.3	0	.0	5,553	8.7	4,886	7.6	666	1.0	64,189
Mpwapwa	28,615	88.2	285	.9	0	.0	142	.4	1,424	4.4	1,566	4.8	427	1.3	32,459
Kongwa	39,085	86.2	1,253	2.8	125	.3	2,380	5.2	501	1.1	2,004	4.4	0	.0	45,349
Dodoma Urban	25,805	82.6	0	.0	126	.4	379	1.2	1,138	3.6	3,668	11.7	126	.4	31,244
Bahi	33,030	89.3	3,129	8.5	0	.0	116	.3	464	1.3	232	.6	0	.0	36,971
Chamwino	41,637	97.5	154	.4	0	.0	0	.0	771	1.8	154	.4	0	.0	42,716
Total	220,589	87.2	5,265	2.1	474	.2	3,018	1.2	9,851	3.9	12,511	4.9	1,220	.5	252,928

8.9: Number of households receiving extensionadvice on Inorganic Fertilizeer 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	%	
Kondoa	22,433	71.6	1,111	3.5	222	.7	0	.0	5,997	19.1	1,333	4.3	222	.7	31,317
Mpwapwa	11,674	65.6	712	4.0	0	.0	142	.8	4,556	25.6	569	3.2	142	.8	17,795
Kongwa	10,773	65.2	626	3.8	0	.0	251	1.5	4,385	26.5	376	2.3	125	.8	16,536
Dodoma Urban	10,752	89.5	0	.0	0	.0	0	.0	0	.0	1,265	10.5	0	.0	12,017
Bahi	11,358	76.6	1,623	10.9	0	.0	116	.8	1,623	10.9	116	.8	0	.0	14,835
Chamwino	18,505	88.2	771	3.7	154	.7	0	.0	1,388	6.6	154	.7	0	.0	20,972
Total	85,495	75.3	4,842	4.3	376	.3	509	.4	17,948	15.8	3,813	3.4	490	.4	113,473

8.10 : 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	%	
Kondoa	50,641	84.8	444	.7	0	.0	0	.0	6,663	11.2	1,999	3.3	0	.0	59,747
Mpwapwa	37,157	90.3	142	.3	285	.7	142	.3	2,990	7.3	285	.7	142	.3	41,143
Kongwa	38,333	91.1	376	.9	0	.0	501	1.2	2,380	5.7	376	.9	125	.3	42,092
Dodoma Urban	26,437	91.3	253	.9	0	.0	126	.4	379	1.3	1,644	5.7	126	.4	28,967
Bahi	34,421	88.4	2,202	5.7	0	.0	232	.6	927	2.4	1,159	3.0	0	.0	38,941
Chamwino	40,557	96.3	617	1.5	0	.0	154	.4	617	1.5	154	.4	0	.0	42,099
Total	227,547	89.9	4,034	1.6	285	.1	1,156	.5	13,957	5.5	5,617	2.2	394	.2	252,989

8.11: Number of households receiving extension advice on Mechanisation/LST 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	%	
Kondoa	53,306	77.2	1,555	2.3	0	.0	222	.3	8,440	12.2	5,331	7.7	222	.3	69,076
Mpwapwa	30,466	80.1	427	1.1	142	.4	997	2.6	3,701	9.7	2,278	6.0	0	.0	38,011
Kongwa	42,342	90.4	1,378	2.9	0	.0	1,253	2.7	626	1.3	1,253	2.7	0	.0	46,852
Dodoma Urban	26,184	86.6	759	2.5	0	.0	0	.0	759	2.5	2,530	8.4	0	.0	30,232
Bahi	28,047	81.2	4,520	13.1	116	.3	0	.0	1,275	3.7	579	1.7	0	.0	34,537
Chamwino	40,249	95.6	154	.4	0	.0	463	1.1	771	1.8	463	1.1	0	.0	42,099
Total	220,594	84.6	8,793	3.4	258	.1	2,934	1.1	15,573	6.0	12,433	4.8	222	.1	260,807

8.12 : Number of households receiving extension advice on Irrigation Technology 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	%	
Kondoa	24,876	71.8	666	1.9	0	.0	444	1.3	5,331	15.4	3,332	9.6	0	.0	34,649
Mpwapwa	10,820	62.8	712	4.1	0	.0	285	1.7	3,274	19.0	1,851	10.7	285	1.7	17,226
Kongwa	9,771	63.4	3,633	23.6	0	.0	501	3.3	1,253	8.1	251	1.6	0	.0	15,409
Dodoma Urban	10,373	70.7	379	2.6	0	.0	0	.0	253	1.7	3,668	25.0	0	.0	14,673
Bahi	15,298	83.0	2,202	11.9	0	.0	0	.0	579	3.1	348	1.9	0	.0	18,428
Chamwino	18,968	92.5	154	.8	0	.0	154	.8	1,234	6.0	0	.0	0	.0	20,510
Total	90,106	74.5	7,747	6.4	0	.0	1,384	1.1	11,924	9.9	9,449	7.8	285	.2	120,894

8.13: Number of households receiving extension advice on Crop Storage 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	%	
Kondoa	42,645	79.7	222	.4	0	.0	444	.8	6,219	11.6	3,776	7.1	222	.4	53,528
Mpwapwa	26,907	77.1	1,424	4.1	285	.8	712	2.0	2,135	6.1	2,705	7.8	712	2.0	34,879
Kongwa	31,694	81.4	1,754	4.5	0	.0	251	.6	1,503	3.9	3,633	9.3	125	.3	38,960
Dodoma Urban	22,516	84.0	126	.5	0	.0	379	1.4	759	2.8	3,036	11.3	0	.0	26,817
Bahi	32,799	89.0	1,854	5.0	232	.6	811	2.2	348	.9	811	2.2	0	.0	36,855
Chamwino	34,543	92.6	1,851	5.0	0	.0	0	.0	771	2.1	154	.4	0	.0	37,319
Total	191,103	83.7	7,231	3.2	517	.2	2,597	1.1	11,735	5.1	14,115	6.2	1,059	.5	228,357

8.14: 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	%	
Kondoa	39,091	75.2	0	.0	0	.0	0	.0	5,553	10.7	6,885	13.2	444	.9	51,973
Mpwapwa	15,945	61.2	854	3.3	0	.0	285	1.1	2,278	8.7	6,406	24.6	285	1.1	26,053
Kongwa	23,050	71.6	752	2.3	0	.0	626	1.9	2,130	6.6	5,637	17.5	0	.0	32,195
Dodoma Urban	19,101	92.1	379	1.8	0	.0	126	.6	379	1.8	759	3.7	0	.0	20,745
Bahi	27,352	92.9	1,159	3.9	0	.0	232	.8	232	.8	464	1.6	0	.0	29,438
Chamwino	27,449	96.7	154	.5	0	.0	0	.0	771	2.7	0	.0	0	.0	28,375
Total	151,987	80.5	3,298	1.7	0	.0	1,269	.7	11,342	6.0	20,152	10.7	729	.4	188,778

AGRICULTURE CONSTRAINTS

CATTLE PRODUCTION

9.1: 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	%		
Kondoa	32,872	37	57,082	63	89,954	39,535
Mpwapwa	9,538	17	48,119	83	57,657	14,806
Kongwa	8,143	16	42,593	84	50,735	13,154
Dodoma Urban	8,349	16	42,882	84	51,230	11,258
Bahi	5,215	11	41,723	89	46,938	8,229
Chamwino	12,028	19	50,427	81	62,455	15,884
Total	76,145	21.2	282,824	78.8	358,969	102,865

9. 2: Number of Cattle by Breed and Economic Function and Districts as of 1st October 2008

District	Indigeneous			Beef			Improved Diary			Total		
	Number of Households	Number of Cattle	%	Number of Households		%	Number of Households	Number of Cattle	%	Number of Households rearing cattle	Number of Cattle	%
Kondoa	32,872	300,734	99.6	222	444	0.1	444	888	0.3	32,872	302,067	100
Mpwapwa	9,396	154,465	99	285	712	0.5	285	854	0.5	9,538	156,031	100
Kongwa	8,017	114,624	99.6	0	0	0	376	501	0.4	8,143	115,125	100
Dodoma Urban	8,349	161,407	91.8	253	14,041	8	126	379	0.2	8,349	175,827	100
Bahi	5,215	241,644	99.7	116	116	0	232	695	0.3	5,215	242,455	100
Chamwino	12,028	193,841	99.9	0	0	0	154	154	0.1	12,028	193,996	100
Total	75,878	1,166,715	98.4	876	15,313	1.3	1,617	3,473	0.3	76,145	1,185,501	100

9.3: Number of Households rearing cattle, Herd of Cattle and Average Herd per Household by Herd size During the 2007/08 Agricultural Year - Dodoma

Herd size	Cattle Rearing Households	%	Number of Cattle	Average Per Houseold
1 - 5	31,329	41	98,112	3
6 - 10	18,600	24	141,837	8
11 - 15	7,385	10	98,307	13
16 - 20	5,965	8	109,578	18
21 - 30	5,059	7	126,885	25
31 - 40	2,180	3	74,455	34
41 - 50	1,560	2	72,744	47
51 - 60	1,642	2	90,312	55
61 -100	1,181	2	87,925	74
101 -150	886	1	111,863	126
151+	358	0	173,484	484
Total	76,145	100	1,185,501	16

9.4: Total Number of Cattle by Cattle Types and Category, 2007/08 Agricultural Year- Dodoma

Cattle Types	Indigeneous	Improved		Total Cattle	%
		Beef	Diary		
Castrated Bulls (Oxen)	219,068	569	126	221,409	19
Uncastrated Bulls	148,583	702	598	151,528	13
Cows	403,894	.	1,697	407,235	34
Steers	37,570	1,644	.	39,215	3
Heifers	145,191	.	.	146,836	12
Male Calves	95,099	.	.	99,273	8
Female Calves	117,310	.	1,051	120,006	10
Total	1,166,715	2,916	3,473	1,185,501	100

9.5: Total Number of indigenous 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	%
Kondoa	49,086	16	51,751	20	96,395	23	8,662	3	36,648	11	28,430	13	29,762	14	300,734	100
Mpwapwa	30,608	23	14,663	17	54,098	21	4,271	3	17,938	9	13,952	13	18,934	14	154,465	100
Kongwa	29,063	27	9,270	14	42,718	19	3,132	5	10,648	10	8,644	12	11,149	13	114,624	100
Dodoma Urban	28,208	20	14,926	14	51,104	20	4,554	3	22,010	13	20,113	14	20,492	16	161,407	100
Bahi	30,597	22	32,219	19	98,512	20	13,096	4	38,825	9	9,619	12	18,775	13	241,644	100
Chamwino	51,506	27	25,753	17	61,067	19	3,855	3	19,122	10	14,341	11	18,197	13	193,841	100
Total	219,068	21	148,583	18	403,894	21	37,570	3	145,191	10	95,099	13	117,310	14	1,166,715	100

9.6: Total Number of Beef 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	%
Kondoa	.	0	444	100	.	0	.	0	.	0	.	0	.	0	444	100
Mpwapwa	569	50	142	50	.	0	.	0	.	0	.	0	.	0	712	100
Kongwa	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dodoma Urban	.	0	.	0	.	0	1,644	100	.	0	.	0	.	0	1,644	100
Bahi	.	0	116	100	.	0	.	0	.	0	.	0	.	0	116	100
Chamwino	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	569	19	702	64	.	0	1,644	17	.	0	.	0	.	0	2,916	100

9.7: Total Number of 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	%
Kondoa	0	0	222	50	0	0	0	0	0	0	0	0	666	50	888	100
Mpwapwa	0	0	0	0	712	67	0	0	0	0	0	0	142	33	854	100
Kongwa	0	0	376	67	125	33	0	0	0	0	0	0	0	0	501	100
Dodoma Urban	126	33	0	0	126	33	0	0	0	0	0	0	126	33	379	100
Bahi	0	0	0	0	579	67	0	0	0	0	0	0	116	33	695	100
Chamwino	0	0	0	0	154	100	0	0	0	0	0	0	0	0	154	100
Total	126	6	598	22	1,697	43	0	0	0	0	0	0	1,051	29	3,473	100

9.8: 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	%
Kondoa	14,215	43	1,555	5	6,885	21	7,996	24	0	0	2,221	7	32,872	100
Mpwapwa	854	9	427	4	7,261	76	997	10	0	0	0	0	9,538	100
Kongwa	1,503	18	125	2	5,512	68	877	11	125	2	0	0	8,143	100
Dodoma Urban	253	3	253	3	6,957	83	506	6	126	2	253	3	8,349	100
Bahi	1,159	22	232	4	3,361	64	348	7	0	0	116	2	5,215	100
Chamwino	2,467	21	154	1	7,402	62	771	6	0	0	1,234	10	12,028	100
Total	20,452	27	2,746	4	37,378	49	11,494	15	252	0	3,824	5	76,145	100

CATTLE MILK

9.9: Number of Milked Diary Cows by Breed, Season and District During the 2007/08 Agricultural Year

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
	Number	Number	Number	Number	Number	Number
Kondoa	1,111	66,410	67,521	1,111	59,525	60,635
Mpwapwa	712	27,049	27,761	712	21,212	21,924
Kongwa	125	18,415	18,540	125	9,395	9,521
Dodoma Urban	126	32,130	32,256	126	18,595	18,721
Bahi	232	48,908	49,140	232	39,868	40,100
Chamwino	463	23,748	24,211	308	16,963	17,271
Total	2,769	216,661	219,429	2,614	165,559	168,173

9.10: Average Milk Production per Cow per Day by Breed, Season and District During the 2007/08 Agricultural Year

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
Kondoa	8	2	2	5	1	1
Mpwapwa	13	2	3	4	1	1
Kongwa	10	3	3	5	1	2
Dodoma Urban	3	2	2	2	1	1
Bahi	5	3	3	4	1	2
Chamwino	7	2	2	2	1	1
Total	8	2	3	4	1	1

9.11: Average number of days for cows on milk, by Breed, Season and District, During the 2007/08 Agricultural Year

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
Kondoa	150	141	141	150	119	120
Mpwapwa	189	149	151	186	137	141
Kongwa	265	188	191	90	155	152
Dodoma Urban	200	124	126	180	114	117
Bahi	75	99	97	93	92	92
Chamwino	120	147	144	60	120	115
Total	150	142	142	125	121	122

9.12 : Average Price per Litre of Milk per season by Breed and District, During the 2007/08 Agricultural Year (Tshs.)

District	Wet Season			Dry Season		
	Improved Breed	Indigenous	Total	Improved Breed	Indigenous	Total
Kondoa	200	248	247	225	271	270
Mpwapwa	350	277	281	265	308	305
Kongwa	375	247	255	500	312	320
Dodoma Urban	408	332	339	300	342	341
Bahi	300	231	236	250	316	311
Chamwino	313	328	326	335	361	357
Total	317	266	269	292	295	295

9.13.: Number of Milked Cows, Average Milk Produced per Cow per Day, Average Number of Days for Cows on Milk and Average Price per Litre per Season and District During the 2007/2008 Agriculture Year

District	Number of milked cows		Average milk production per cow per day(lts)		Average number of days for cows 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
Kondoa	67,521	60,635	2	1	141	120	247	270
Mpwapwa	27,761	21,924	3	1	151	141	281	305
Kongwa	18,540	9,521	3	2	191	152	255	320
Dodoma Urban	32,256	18,721	2	1	126	117	339	341
Bahi	49,140	40,100	3	2	97	92	236	311
Chamwino	24,211	17,271	2	1	144	115	326	357
Total	219,429	168,173	3	1	142	122	269	295

GOAT PRODUCTION

9.14 : Number of Agriculture Households Rearing Goats by District during the 2007/08 Agricultural Year

District	Households rearing Goat		Households NOT rearing Goat		Total	Total livestock keeping households
	No of households	%	No of households	%		
Kondoa	29,318	33	60,635	67	89,954	39,535
Mpwapwa	10,962	19	46,695	81	57,657	14,806
Kongwa	7,892	16	42,843	84	50,735	13,154
Dodoma Urban	8,602	17	42,629	83	51,230	11,258
Bahi	6,374	14	40,564	86	46,938	8,229
Chamwino	8,019	13	54,436	87	62,455	15,884
Total	71,167	20	287,802	80	358,969	102,865

9.15: Number of Goats by Type and District as of 1st October 2008

District	Indigenous			Improved for Meat			Improved Dairy			Number of Goats
	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats	%	
Kondoa	28,874	258,311	99.3	0	0	0.0	444	1,777	0.7	260,088
Mpwapwa	10,535	173,257	96.6	427	4,556	2.5	285	1,566	0.9	179,378
Kongwa	7,892	105,730	100.0	0	0	0.0	0	0	0.0	105,730
Dodoma Urban	8,475	102,967	99.3	253	759	0.7	0	0	0.0	103,726
Bahi	6,374	148,232	99.8	116	232	0.2	0	0	0.0	148,463
Chamwino	8,019	117,970	100.0	0	0	0.0	0	0	0.0	117,970
Total	70,169	906,466	99.0	796	5,546	0.6	729	3,343	0.4	915,356

9.16.: Number of Households rearing Goat, Head of Goat and Average Head per Household by Herd size During the 2007/08 Agricultural Year

Herd Size	Goat rearing households		Herd of Goats		Average Goats per household
	Number	%	Number	%	
1 - 4	19,045	26.8	56,346	6.2	3
5 - 9	22,731	31.9	151,861	16.6	7
10 - 14	11,559	16.2	130,052	14.2	11
15 - 19	6,123	8.6	102,365	11.2	17
20 - 24	5,683	8.0	119,913	13.1	21
25 - 29	1,681	2.4	44,654	4.9	27
30 - 34	1,306	1.8	40,136	4.4	31
35 - 39	504	0.7	18,503	2.0	37
40+	2,537	3.6	251,525	27.5	99
Total	71,167	100	915,356	100	13

9.17 : Total Number of Goats by Category and Type of Goat as of 1st October 2008 - Dodoma

Category	Indigenous		Improved Meat		Improved Dairy		Total	
	Number	%	Number	%	Number	%	Number	%
Billy Goats	150,499	98.4	1,977	1.3	444	0.3	152,921	100.0
She Goats	83,516	99.0	822	1.0	0	0.0	84,339	100.0
Castrated Goat	422,463	99.1	1,750	0.4	1,885	0.4	426,098	100.0
Male Kid	121,584	99.3	285	0.2	587	0.5	122,455	100.0
She Kid	128,404	99.1	712	0.5	427	0.3	129,542	100.0
Total	906,466	99.0	5,546	0.6	3,343	0.4	915,356	100

SHEEP PRODUCTION

9.18: 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
Kondoa	8,218	9.1	81,736	90.9	89,954	39,535
Mpwapwa	5,552	9.6	52,105	90.4	57,657	14,806
Kongwa	4,510	8.9	46,226	91.1	50,735	13,154
Dodoma Urban	3,162	6.2	48,068	93.8	51,230	11,258
Bahi	3,129	6.7	43,809	93.3	46,938	8,229
Chamwino	4,935	7.9	57,520	92.1	62,455	15,884
Total	29,506	8.2	329,463	91.8	358,969	102,865

9.19: Number of Households Rearing Sheep and Number of Sheep by District during the 2007/08 Agriculture Year

District	Number of households raising or managing sheep	%	Total Sheep	%
Kondoa	**8,218**	**28**	**48,642**	**18**
Mpwapwa	**5,552**	**19**	**45,556**	**17**
Kongwa	**4,510**	**15**	**30,692**	**11**
Dodoma Urban	**3,162**	**11**	**25,299**	**9**
Bahi	**3,129**	**11**	**84,025**	**31**
Chamwino	**4,935**	**17**	**36,085**	**13**
Total	29,506	100	270,299	100

9.20: Total Number of Indigenous Sheep by Category of Sheep and District as of 1st October 2008

District	Sheep Flock Structure											
	Rams		Castrated Sheep		She Sheep		Male Lamb		She Lamb		Total	
	Total Sheep	%	Total Sheep	%	Total Sheep	%	Total Sheep	%	Total Sheep	%	Total Sheep	%
Kondoa	8,440	26	3,110	8	23,543	37	7,774	16	5,775	13	48,642	100
Mpwapwa	8,115	27	2,135	6	22,636	35	5,695	17	6,976	16	45,556	100
Kongwa	3,508	21	2,255	11	18,666	35	3,132	16	3,132	16	30,692	100
Dodoma Urban	4,933	29	126	1	14,041	36	2,530	16	3,668	17	25,299	100
Bahi	15,414	27	11,937	5	36,739	34	8,576	18	11,358	16	84,025	100
Chamwino	6,785	24	3,547	11	16,500	31	4,009	16	5,243	18	36,085	100
Total	47,195	26	23,111	8	132,125	35	31,716	16	36,152	16	270,299	100

9.21: Number of Households rearing Sheep, Head of Sheep and Average Head per Household by Herd size During the 2007/08 Agricultural Year - Dodoma

Herd size	Sheep Rearing Households	%	Herd of sheep	Average Per Houseold
1 - 4	68,405	87	125,767	2
5 - 9	7,239	9	44,284	6
10 - 14	1,663	2	17,785	11
15 - 19	538	1	8,350	16
20 - 24	270	0	5,402	20
25 - 29	116	0	3,245	28
40+	705	1	65,465	93
Total	78,936	100	270,299	3

9.22: Number of Sheep by Breed as of 1st October 2008

Sheep Structure	Number of Indigeneous	%	Number of Improved Beef	%	Total Sheep	%
Rams	47,195	17	.	.	47,195	17
Castrated Sheep	23,111	9	.	.	23,111	9
She Sheep	132,125	49	.	.	132,125	49
Male Lamb	31,716	12	.	.	31,716	12
She Lamb	36,152	13	.	.	36,152	13
Total	270,299	100	.	.	270,299	100

PIG PRODUCTION

9.23: Number of Households Raising Pigs by District during 2007/08 Agriculture Year

District	During the 2007/2008 Agriculture Year					
	rearing Pigs		Not rearing pigs		Total	
	No of households	%	No of households	%	No of households	%
Kondoa	666	1	89,287	99	89,954	100
Mpwapwa	12,101	21	45,556	79	57,657	100
Kongwa	10,523	21	40,212	79	50,735	100
Dodoma Urban	3,289	6	47,941	94	51,230	100
Bahi	579	1	46,359	99	46,938	100
Chamwino	4,472	7	57,983	93	62,455	100
Total	31,631	9	327,339	91	358,969	100

9.24: Number of Households rearing Pig, Head of Pig and Average Number of Pigs per Household by Herd size During the 2007/08 Agricultural Year - Dodoma

Flock Size	Pig rearing households		Herd of pigs		Average Number of Pigs Per Household
	Number	%	Number	%	
1 - 4	**25,627**	**81**	**49,015**	**42**	**2**
5 - 9	**3,001**	**9**	**20,070**	**17**	**7**
10 - 14	**1,731**	**5**	**20,255**	**17**	**12**
15 - 19	**770**	**2**	**13,107**	**11**	**17**
20 - 24	**376**	**1**	**8,143**	**7**	**22**
40+	**125**	**0**	**6,264**	**5**	**50**
Total	31,631	100	116,854	**100**	4

9.25: Total Number of Pig by Herd Structure During 2007/08 Agricultural Year - Dodoma

District	Number of Households Rearing Pig	Total Number of Pig	Average per household
Kondoa	**666**	**1,555**	**2**
Mpwapwa	**12,101**	**37,015**	**3**
Kongwa	**10,523**	**56,498**	**5**
Dodoma Urban	**3,289**	**10,373**	**3**
Bahi	**579**	**1,391**	**2**
Chamwino	**4,472**	**10,024**	**2**
Total	31,631	116,854	**4**

9.26: Total Number of PIG by Type and Region, 2007/08 Agricultural Year

Pig Structure	Total Number of Pigs
Boar	19,259
Castrated Male	19,091
Sow/Gilt	42,700
Male Piglet	16,664
She Piglet	19,141
Total	116,854

9.27: Total Number of Indigenous Pig by Herd Structure and District During the 2007/08 Agricultural Year

District	Pig Herd Structure					
	Boar	Castrated Male	Sow/Gilt	Male Piglet	She Piglet	Total
	Number	Number	Number	Number	Number	Number
Kondoa	888	0	222	0	444	1,555
Mpwapwa	6,549	6,833	12,955	3,559	7,118	37,015
Kongwa	7,391	12,026	18,039	10,523	8,519	56,498
Dodoma Urban	2,656	0	5,313	885	1,518	10,373
Bahi	232	232	927	0	0	1,391
Chamwino	1,542	0	5,243	1,696	1,542	10,024
Total	19,259	19,091	42,700	16,664	19,141	116,854

9.28: Number of Pigs per Household by District as of 1st October 2008

District	Number of Households Rearing Pig	Numbers of Pigs	Average per Household
Kondoa	666	1,555	2
Mpwapwa	12,101	37,015	3
Kongwa	10,523	56,498	5
Dodoma Urban	3,289	10,373	3
Bahi	579	1,391	2
Chamwino	4,472	10,024	2
Total	31,631	116,854	4

CHICKEN AND OTHER LIVESTOCK

9.29: Number of Households Rearing Chicken by District during the 2007/08 Agriculture Year

District	Raising chicken		Not raising chicken		Total	%
	Number of households	%	Number of households	%		
Kondoa	57,748	30	32,206	36	89,954	100
Mpwapwa	27,191	14	30,466	53	57,657	100
Kongwa	29,188	15	21,547	42	50,735	100
Dodoma Urban	28,967	15	22,263	43	51,230	100
Bahi	22,020	11	24,918	53	46,938	100
Chamwino	28,837	15	33,618	54	62,455	100
Total	193,953	54	165,017	46	358,969	100

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

District	Indigenous chicken			Layers			Broilers			Total	
	Number of Households	Number of Indigineous Chicken	%	Number of Households	Number of Layers	%	Number of Households	Number of Broilers	%	Households rearing chicken	Number of Chicken
Kondoa	57,748	511,736	100	0	0	0.0	0	0	0.0	57,748	511,736
Mpwapwa	27,191	308,929	100	0	0	0.0	0	0	0.0	27,191	308,929
Kongwa	29,188	308,296	98.7	125	3,758	1.2	125	376	0.1	29,188	312,430
Dodoma Urban	28,967	323,447	99.9	126	253	0.1	0	0	0.0	28,967	323,700
Bahi	22,020	199,110	97.7	232	1,738	0.9	232	3,013	1.5	22,020	203,862
Chamwino	28,683	275,264	96.1	308	11,103	3.9	0	0	0.0	28,837	286,367
Total	193,799	1,926,782	99.0	792	16,853	0.9	357	3,389	0.2	193,953	1,947,024

9.31 : Number of Households Keeping Chickens and Average Number of Chickens per Household by Flock Size as of 1st October 2008 - Dodoma

Flock size	Indigenous chicken				Layers				Broilers				Total			
	Number of Households	Number of Chicken	%	Number of Chicken Per Household	Number of Households	Number of Chicken	%	Number of Chicken Per Household	Number of Households	Number of Chicken	%	Number of Chicken Per Household	Number of Households	Number of Chicken	%	Number of Chicken Per Household
1-49	**192,370**	**1,823,955**	**99.5**	**9**	**638**	**6,058**	**0.3**	**9**	**357**	**3,389**	**0.2**	**9**	**193,365**	**1,833,402**	**100.0**	**9**
50-99	**1,302**	**80,057**	**88.1**	**61**	**154**	**10,795**	**11.9**	**70**	**0**	**0**	**0.0**	**0**	**1,456**	**90,852**	**100.0**	**62**
100-299	**126**	**22,769**	**100.0**	**180**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0.0**	**0**	**126**	**22,769**	**100.0**	**180**
300-499	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
500-699	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
700+	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	193,799	1,926,782	99.0	251	792	16,853	0.9	79	357	3,389	0.2	9	194,948	1,947,024	100	10

9.32: Number of Other Livestock by Type of livestock and District as of 1st October 2008

District	Ducks	Guine pigs	Turkeys	Rabbits	Donkeys	Horses	Dogs
Kondoa	9,773	0	0	0	7,552	0	13,326
Mpwapwa	4,271	0	0	0	10,250	0	8,542
Kongwa	4,510	251	626	0	125	0	4,635
Dodoma Urban	1,012	0	1,265	0	253	0	2,909
Bahi	4,172	695	0	1,275	232	0	1,623
Chamwino	2,005	0	0	0	925	0	4,164
Total	25,742	946	1,891	1,275	19,337	0	35,199

9.33 : Total Number of Chicken and Other Livestock by Type as of 1st October 2008

Type	Chicken		Others	
	Number	%	Type	Number
Indigenous Chicken	1,926,782	99.0	Ducks	25,742
Layer	16,853	0.9	Guinea pigs	946
Broiler	3,389	0.2	Turkeys	1,891
			Rabbits	1,275
			Donkey	19,337
			Horses	0
			Dogs	35,199
TOTAL	1,947,024	100		**84,391**

PESTS AND PARASITES

9.34: 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	%
Kondoa	25,987	38	41,534	62	67,521	100
Mpwapwa	13,382	38	21,639	62	35,021	100
Kongwa	14,907	44	19,041	56	33,949	100
Dodoma Urban	8,602	26	23,907	74	32,509	100
Bahi	5,447	21	19,934	79	25,381	100
Chamwino	8,019	23	26,678	77	34,697	100
Total	76,344	33	152,735	67	229,079	100

9.35: Number of Livestock Rearing households that dewormed Livestock by type of livestock and District, 2007/08 Agricultural Year

District	Cattle				Goat/Sheep				Pig				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
Kondoa	**18,879**	**1,555**	**5,331**	**25,765**	**13,326**	**5,553**	**6,663**	**25,542**	**666**	**3,998**	**20,878**	**25,542**	**5,553**	**9,551**	**10,439**	**25,542**
Mpwapwa	**4,840**	**1,993**	**6,833**	**13,667**	**5,267**	**1,281**	**6,833**	**13,382**	**6,976**	**1,566**	**4,840**	**13,382**	**3,701**	**5,267**	**4,413**	**13,382**
Kongwa	**4,510**	**2,505**	**8,393**	**15,409**	**4,009**	**2,881**	**8,017**	**14,907**	**6,514**	**1,629**	**6,765**	**14,907**	**4,385**	**6,138**	**4,385**	**14,907**
Dodoma Urban	**3,542**	**885**	**4,427**	**8,855**	**2,656**	**1,771**	**4,048**	**8,475**	**1,644**	**885**	**5,819**	**8,349**	**4,301**	**2,656**	**1,518**	**8,475**
Bahi	**2,666**	**579**	**2,550**	**5,795**	**2,434**	**464**	**2,550**	**5,447**	**348**	**811**	**4,288**	**5,447**	**3,245**	**1,275**	**927**	**5,447**
Chamwino	**5,706**	**1,388**	**1,851**	**8,944**	**3,393**	**1,234**	**3,393**	**8,019**	**2,159**	**771**	**5,089**	**8,019**	**925**	**4,318**	**2,776**	**8,019**
Total	40,143	8,906	29,385	78,434	31,085	13,183	31,504	75,773	18,307	9,660	47,679	75,647	22,110	29,206	24,458	75,773

9.36: 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	%
Kondoa	**34,427**	**51**	**8,218**	**12**	**24,876**	**37**	**67,521**	**100**
Mpwapwa	**11,104**	**34**	**10,677**	**32**	**11,247**	**34**	**33,028**	**100**
Kongwa	**9,897**	**29**	**8,143**	**24**	**15,659**	**46**	**33,698**	**100**
Dodoma Urban	**9,108**	**28**	**3,036**	**9**	**19,986**	**62**	**32,130**	**100**
Bahi	**6,606**	**26**	**2,782**	**11**	**15,994**	**63**	**25,381**	**100**
Chamwino	**11,720**	**34**	**4,472**	**13**	**18,505**	**53**	**34,697**	**100**
Total	82,861	37	37,327	16	106,267	47	226,456	100

9.37: 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	%
Kondoa	3,776	5.6	27,097	40.1	3,998	5.9	31,539	46.7	1,111	1.6	67,521	100
Mpwapwa	4,698	14.2	6,264	19.0	1,566	4.7	19,646	59.5	854	2.6	33,028	100
Kongwa	5,136	15.6	4,385	13.3	501	1.5	22,298	67.7	626	1.9	32,947	100
Dodoma Urban	5,819	18.1	4,680	14.6	3,795	11.8	17,836	55.5	0	0.0	32,130	100
Bahi	1,738	6.8	4,288	16.9	1,738	6.8	17,500	68.9	116	0.5	25,381	100
Chamwino	4,626	13.3	6,785	19.6	1,079	3.1	21,898	63.1	308	0.9	34,697	100
Total	**25,793**	**11.4**	**53,499**	**23.7**	**12,678**	**5.6**	**130,718**	**57.9**	**3,015**	**1.3**	**225,704**	**100**

9.38: Number of Livestock Rearing Households Normally Encountering Tsetse Flies Problems by District during 2007/08 Agriculture Year

District	Yes		No		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Kondoa	**21,544**	**32**	**19,768**	**29**	**26,209**	**39**	**67,521**	**100**
Mpwapwa	**2,563**	**8**	**15,802**	**48**	**14,663**	**44**	**33,028**	**100**
Kongwa	**125**	**0**	**15,158**	**45**	**18,415**	**55**	**33,698**	**100**
Dodoma Urban	**885**	**3**	**10,626**	**33**	**20,619**	**64**	**32,130**	**100**
Bahi	**2,897**	**11**	**5,563**	**22**	**16,921**	**67**	**25,381**	**100**
Chamwino	**1,234**	**4**	**14,650**	**42**	**18,814**	**54**	**34,697**	**100**
Total	29,249	13	81,566	36	115,640	51	226,456	100

9.39: Number of Livestock Rearing Households by Method of Tsetse Flies Control and District during 2007/08 Agriculture Year

District	Dipping		Spraying		Trappig		None		Others		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	**3,554**	**5**	**10,883**	**16**	**3,998**	**6**	**42,423**	**63**	**6,663**	**10**	**67,521**	**100**
Mpwapwa	**1,851**	**6**	**2,563**	**8**	**569**	**2**	**26,764**	**81**	**1,281**	**4**	**33,028**	**100**
Kongwa	**626**	**2**	**626**	**2**	**877**	**3**	**28,938**	**88**	**1,879**	**6**	**32,947**	**100**
Dodoma Urban	**632**	**2**	**3,542**	**11**	**2,403**	**7**	**25,552**	**80**	**0**	**0**	**32,130**	**100**
Bahi	**1,854**	**7**	**2,782**	**11**	**1,043**	**4**	**19,586**	**77**	**116**	**0**	**25,381**	**100**
Chamwino	**617**	**2**	**2,467**	**7**	**1,542**	**4**	**30,071**	**87**	**0**	**0**	**34,697**	**100**
Total	9,134	4	22,863	10	10,433	5	173,334	77	9,939	4	225,704	100

9.40: Number of Livestock Rearing Households Normally Encountering Newcastle Disease Problems by District during 2007/08 Agriculture Year

District	Yes		No		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Kondoa	**44,644**	**66**	**14,881**	**22**	**7,996**	**12**	**67,521**	**100**
Mpwapwa	**19,219**	**58**	**8,827**	**27**	**4,983**	**15**	**33,028**	**100**
Kongwa	**24,178**	**72**	**5,512**	**16**	**4,009**	**12**	**33,698**	**100**
Dodoma Urban	**22,896**	**71**	**6,704**	**21**	**2,530**	**8**	**32,130**	**100**
Bahi	**16,341**	**64**	**5,563**	**22**	**3,477**	**14**	**25,381**	**100**
Chamwino	**22,977**	**66**	**5,552**	**16**	**6,168**	**18**	**34,697**	**100**
Total	150,254	66	47,039	21	29,162	13	226,456	100

9.41: 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	%
Kondoa	**6,885**	**10**	**25,320**	**38**	**35,315**	**52**	**67,521**	**100**
Mpwapwa	**8,399**	**25**	**10,677**	**32**	**13,952**	**42**	**33,028**	**100**
Kongwa	**14,782**	**44**	**4,009**	**12**	**14,907**	**44**	**33,698**	**100**
Dodoma Urban	**9,614**	**30**	**11,132**	**35**	**11,385**	**35**	**32,130**	**100**
Bahi	**9,851**	**39**	**6,143**	**24**	**9,388**	**37**	**25,381**	**100**
Chamwino	**5,089**	**15**	**8,636**	**25**	**20,972**	**60**	**34,697**	**100**
Total	54,621	24	65,916	29	105,919	47	226,456	100

9.42: Number of Livestock Rearing Households normally Encountering Fowl Typhoid Disease Problems by District during 2007/08 Agriculture Year

District	Yes		No		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Kondoa	18,213	27	37,758	56	11,550	17	67,521	100
Mpwapwa	7,688	23	20,216	61	5,125	16	33,028	100
Kongwa	4,760	14	24,052	71	4,886	14	33,698	100
Dodoma Urban	7,716	24	20,745	65	3,668	11	32,130	100
Bahi	10,547	42	10,894	43	3,940	16	25,381	100
Chamwino	7,556	22	20,356	59	6,785	20	34,697	100
Total	56,480	25	134,021	59	35,954	16	226,456	100

9.43: Number of Livestock Rearing Households Normally Encountering Foot and Mouth Disease Problems by District during 2007/08 Agriculture Year

District	Yes		No		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Kondoa	7,107	10	25,987	38	34,649	51	67,743	100
Mpwapwa	1,424	4	9,254	28	22,778	68	33,455	100
Kongwa	626	2	9,020	27	24,052	71	33,698	100
Dodoma Urban	1,012	3	8,349	26	22,769	71	32,130	100
Bahi	1,623	6	4,404	17	19,471	76	25,497	100
Chamwino	308	1	11,720	34	22,669	65	34,697	100
Total	12,100	5	68,732	30	146,388	64	227,221	100

9.44: Number of Livestock Rearing Households normally Encountering Lympyskin Disease Problems by District during 2007/08 Agriculture Year

District	Yes		No		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Kondoa	5,997	9	27,541	41	34,205	50	67,743	100
Mpwapwa	569	2	10,108	30	22,493	68	33,171	100
Kongwa	501	1	9,395	28	23,802	71	33,698	100
Dodoma Urban	126	0	9,361	29	22,769	71	32,256	100
Bahi	1,391	5	4,636	18	19,586	76	25,613	100
Chamwino	925	3	11,412	33	22,360	64	34,697	100
Total	9,510	4	72,453	32	145,216	64	227,178	100

LIVESTOCK EXTENSION

4.2.7 9.45: Number of households receiving extension advice by District during the 2007/08 agriculture year

District	Receiving Livestock services		Not Receiving Livestock Extension services		Total
	Number	%	Number	%	
Kondoa	41,756	63	24,210	37	65,966
Mpwapwa	21,924	67	10,677	33	32,601
Kongwa	29,188	87	4,259	13	33,448
Dodoma Urban	22,769	72	8,981	28	31,750
Bahi	16,805	67	8,113	33	24,918
Chamwino	19,430	56	15,267	44	34,697
Total	151,873	68	71,507	32	223,380

4.2.8 9.46: Number of Households receiving Livestock advice (overall) By Source of Extension and District during the 2007/08 agriculture year

District	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	%	
Kondoa	36,870	88.3	1,555	3.7	0	0.0	1,999	4.8	14,659	35.1	4,664	11.2	41,756
Mpwapwa	19,219	87.7	1,851	8.4	142	0.6	569	2.6	4,983	22.7	4,271	19.5	21,924
Kongwa	29,063	99.6	3,758	12.9	2,631	9.0	1,503	5.2	8,143	27.9	5,011	17.2	29,188
Dodoma Urban	21,757	95.6	2,530	11.1	506	2.2	253	1.1	1,391	6.1	1,391	6.1	22,769
Bahi	15,646	93.1	4,868	29.0	1,738	10.3	348	2.1	2,897	17.2	927	5.5	16,805
Chamwino	19,122	98.4	2,467	12.7	0	0.0	463	2.4	2,313	11.9	925	4.8	19,430
Total	141,677	93.3	17,029	11.2	5,018	3.3	5,135	3.4	34,387	22.6	17,190	11.3	151,873

4.2.9 9.47: Number of Agriculture Households Receiving Advice on Feeds and ProperFeeding by Source and District During 2007/08griculture Year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		Total Number of households
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Kondoa	11,105	72.5	222	1.4	0	0	222	1.4	2,665	17.4	1,111	7.2	0	0	15,325
Mpwapwa	10,535	87.1	0	0	0	0	285	2.4	712	5.9	569	4.7	0	0	12,101
Kongwa	17,538	94	376	2	0	0	125	0.7	501	2.7	125	0.7	0	0	18,666
Dodoma Urban	8,602	88.3	506	5.2	0	0	0	0	253	2.6	379	3.9	0	0	9,740
Bahi	10,547	88.3	1,159	9.7	0	0	0	0	116	1	116	1	0	0	11,937
Chamwino	11,412	94.9	463	3.8	0	0	0	0	154	1.3	0	0	0	0	12,028
Total	69,738	87.4	2,725	3.4	0	0	632	0.8	4,401	5.5	2,301	2.9	0	0	79,798

4.2.10 9.48: Number of households receiving extension advice on Proper Livestock Housing by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		Total Number of households
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	
Kondoa	21,322	78	888	3.3	0	0	888	3.3	3,332	12.2	888	3.3	0	0	27,319
Mpwapwa	10,962	75.5	0	0	0	0	142	1	1,424	9.8	1,993	13.7	0	0	14,521
Kongwa	22,424	93.7	501	2.1	0	0	125	0.5	376	1.6	376	1.6	125	0.5	23,927
Dodoma Urban	12,776	91.8	253	1.8	0	0	0	0	379	2.7	506	3.6	0	0	13,914
Bahi	11,706	84.2	1,391	10	0	0	116	0.8	232	1.7	464	3.3	0	0	13,908
Chamwino	10,486	95.8	308	2.8	0	0	0	0	154	1.4	0	0	0	0	10,949
Total	89,676	85.8	3,342	3.2	0	0	1,272	1.2	5,897	5.6	4,227	4	125	0.1	104,538

4.2.11 9.49: Number of households receiving extension advice on Proper Milking and Milk Hygene 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)	%	
Kondoa	9,773	79	0	0	0	0	222	2	1,555	13	888	7	0	0	12,438
Mpwapwa	6,406	74	142	2	0	0	0	0	1,424	16	712	8	0	0	8,684
Kongwa	5,261	61	877	10	0	0	0	0	1,754	20	752	9	0	0	8,644
Dodoma Urban	4,807	84	506	9	0	0	0	0	253	4	126	2	0	0	5,692
Bahi	3,709	82	695	15	0	0	0	0	116	3	0	0	0	0	4,520
Chamwino	6,785	88	617	8	0	0	154	2	154	2	0	0	0	0	7,710
Total	36,741	77	2,837	6	0	0	376	1	5,255	11	2,478	5	0	0	47,689

9.50: Number of households receiving extension advice on Livestock fattening 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)	%	
Kondoa	**8,218**	**71.2**	**444**	**3.8**	**0**	**0**	**0**	**0**	**2,443**	**21.2**	**444**	**3.8**	**0**	**0**	**11,550**
Mpwapwa	**4,983**	**70**	**0**	**0**	**0**	**0**	**0**	**0**	**1,566**	**22**	**569**	**8**	**0**	**0**	**7,118**
Kongwa	**3,508**	**49.1**	**626**	**8.8**	**0**	**0**	**376**	**5.3**	**1,879**	**26.3**	**752**	**10.5**	**0**	**0**	**7,141**
Dodoma Urban	**3,289**	**78.8**	**253**	**6.1**	**0**	**0**	**126**	**3**	**379**	**9.1**	**126**	**3**	**0**	**0**	**4,174**
Bahi	**2,666**	**62.2**	**1,159**	**27**	**0**	**0**	**116**	**2.7**	**348**	**8.1**	**0**	**0**	**0**	**0**	**4,288**
Chamwino	**7,710**	**87.7**	**463**	**5.3**	**0**	**0**	**154**	**1.8**	**463**	**5.3**	**0**	**0**	**0**	**0**	**8,790**
Total	30,373	70.5	2,945	6.8	0	0	772	1.8	7,078	16.4	1,892	4.4	0	0	43,061

4.2.12 9.51: Number of households receiving extension advice on Disease control (dipping/spraying) by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	Total Number of households
Kondoa	25,987	80.1	444	1.4	0	0	222	0.7	4,442	13.7	1,333	4.1	0	0	32,428
Mpwapwa	16,087	89	142	0.8	0	0	142	0.8	1,139	6.3	427	2.4	142	0.8	18,080
Kongwa	26,307	98.1	125	0.5	0	0	0	0	125	0.5	125	0.5	125	0.5	26,808
Dodoma Urban	15,053	93.7	379	2.4	0	0	0	0	126	0.8	506	3.1	0	0	16,065
Bahi	11,706	87.1	1,275	9.5	0	0	0	0	464	3.4	0	0	0	0	13,444
Chamwino	13,416	93.5	154	1.1	0	0	154	1.1	463	3.2	154	1.1	0	0	14,341
Total	108,556	89.6	2,520	2.1	0	0	519	0.4	6,759	5.6	2,545	2.1	268	0.2	121,167

9.52: Number of households receiving extension advice on Herd/Flock size and selection by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	Total Number of households
Kondoa	13,326	82.2	666	4.1	0	0	0	0	2,221	13.7	0	0	0	0	16,214
Mpwapwa	7,972	81.2	0	0	0	0	0	0	712	7.2	854	8.7	285	2.9	9,823
Kongwa	13,529	78.8	501	2.9	125	0.7	0	0	2,130	12.4	877	5.1	0	0	17,162
Dodoma Urban	6,325	92.6	253	3.7	126	1.9	126	1.9	0	0	0	0	0	0	6,831
Bahi	4,752	75.9	695	11.1	116	1.9	0	0	579	9.3	116	1.9	0	0	6,258
Chamwino	8,944	84.1	463	4.3	0	0	154	1.4	771	7.2	308	2.9	0	0	10,640
Total	54,849	82	2,578	3.9	368	0.5	281	0.4	6,413	9.6	2,155	3.2	285	0.4	66,929

9.53: Number of households receiving extension advice on Pasture Establishment by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	Total Number of households
Kondoa	5,108	67.6	444	5.9	0	0	444	5.9	1,555	20.6	0	0	0	0	7,552
Mpwapwa	6,122	79.6	427	5.6	0	0	142	1.9	997	13	0	0	0	0	7,688
Kongwa	9,145	70.2	1,127	8.7	0	0	251	1.9	2,130	16.3	376	2.9	0	0	13,028
Dodoma Urban	4,048	91.4	126	2.9	253	5.7	0	0	0	0	0	0	0	0	4,427
Bahi	3,361	64.4	1,043	20	0	0	0	0	695	13.3	116	2.2	0	0	5,215
Chamwino	6,323	89.1	0	0	0	0	308	4.3	308	4.3	154	2.2	0	0	7,094
Total	34,106	75.8	3,168	7	253	0.6	1,146	2.5	5,685	12.6	646	1.4	0	0	45,004

9.54: Number of households receiving extension advice on Group formation by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	Total Number of households
Kondoa	20,656	78.2	444	1.7	0	0	0	0	5,108	19.3	222	0.8	0	0	26,431
Mpwapwa	9,111	91.4	427	4.3	0	0	0	0	427	4.3	0	0	0	0	9,965
Kongwa	18,916	80.3	1,253	5.3	2,380	10.1	0	0	376	1.6	501	2.1	125	0.5	23,551
Dodoma Urban	8,222	80.2	1,518	14.8	126	1.2	0	0	253	2.5	0	0	126	1.2	10,246
Bahi	9,619	81.4	464	3.9	1,507	12.7	0	0	116	1	116	1	0	0	11,821
Chamwino	10,332	88.2	771	6.6	0	0	308	2.6	308	2.6	0	0	0	0	11,720
Total	76,857	82	4,877	5.2	4,013	4.3	308	0.3	6,589	7	839	0.9	252	0.3	93,735

9.55: Number of households receiving extension advice on Calf Rearing by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	Total Number of households
Kondoa	11,105	71.4	0	0	0	0	666	4.3	2,887	18.6	888	5.7	0	0	15,548
Mpwapwa	4,271	69.8	285	4.7	142	2.3	0	0	569	9.3	854	14	0	0	6,122
Kongwa	3,633	50	501	6.9	125	1.7	501	6.9	752	10.3	1,754	24.1	0	0	7,266
Dodoma Urban	4,174	94.3	0	0	0	0	0	0	0	0	126	2.9	126	2.9	4,427
Bahi	3,709	76.2	811	16.7	0	0	0	0	348	7.1	0	0	0	0	4,868
Chamwino	6,631	86	154	2	0	0	154	2	463	6	308	4	0	0	7,710
Total	33,523	73	1,751	3.8	268	0.6	1,322	2.9	5,019	10.9	3,931	8.6	126	0.3	45,940

9.56: Number of households receiving extension advice on Use of improved Bulls by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	Total Number of households
Kondoa	6,885	73.8	0	0	0	0	0	0	2,443	26.2	0	0	0	0	9,329
Mpwapwa	5,267	78.7	285	4.3	0	0	0	0	1,139	17	0	0	0	0	6,691
Kongwa	5,011	67.8	0	0	125	1.7	125	1.7	1,503	20.3	626	8.5	0	0	7,391
Dodoma Urban	5,060	95.2	126	2.4	0	0	0	0	126	2.4	0	0	0	0	5,313
Bahi	3,825	71.7	927	17.4	0	0	0	0	579	10.9	0	0	0	0	5,331
Chamwino	6,014	90.7	308	4.7	0	0	154	2.3	154	2.3	0	0	0	0	6,631
Total	32,062	78.8	1,647	4	125	0.3	279	0.7	5,946	14.6	626	1.5	0	0	40,686

9.57: Number of households receiving extension advice on Livestock Feeds processing by District during the 2007/08 agriculture year

	Source of Livestock Extension														
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/TV/Newspapers		Neighbour		Other		
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Other (Specify)	%	Total Number of households
Kondoa	6,885	60.8	666	5.9	0	0	222	2	3,110	27.5	444	3.9	0	0	11,327
Mpwapwa	6,833	80	569	6.7	0	0	0	0	997	11.7	142	1.7	0	0	8,542
Kongwa	9,521	82.6	626	5.4	0	0	251	2.2	626	5.4	501	4.3	0	0	11,525
Dodoma Urban	5,945	88.7	253	3.8	126	1.9	0	0	126	1.9	253	3.8	0	0	6,704
Bahi	8,460	91.3	232	2.5	0	0	116	1.3	348	3.8	116	1.3	0	0	9,272
Chamwino	7,556	90.7	308	3.7	0	0	154	1.9	308	3.7	0	0	0	0	8,327
Total	45,201	81.2	2,655	4.8	126	0.2	743	1.3	5,515	9.9	1,457	2.6	0	0	55,698

9.58: 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		Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs		Extension Services	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	11,994	13.3	1,333	1.5	32,872	36.5	7,552	8.4	9,106	10.1	0	.0	0	.0	7,330	8.1	1,999	2.2
Mpwapwa	10,250	17.8	2,563	4.4	19,789	34.3	2,847	4.9	3,132	5.4	142	.2	2,278	4.0	1,993	3.5	854	1.5
Kongwa	8,017	15.8	2,255	4.4	10,648	21.0	2,756	5.4	1,629	3.2	125	.2	0	.0	2,380	4.7	376	.7
Dodoma Urban	3,668	7.2	1,012	2.0	16,065	31.4	3,542	6.9	1,897	3.7	759	1.5	379	.7	2,783	5.4	1,518	3.0
Bahi	3,129	6.7	232	.5	14,023	29.9	348	.7	1,391	3.0	0	.0	232	.5	2,666	5.7	927	2.0
Chamwino	4,164	6.7	2,159	3.5	19,430	31.1	3,701	5.9	3,547	5.7	0	.0	463	.7	2,930	4.7	617	1.0
Total	41,223	11.5	9,553	2.7	112,827	31.4	20,745	5.8	20,702	5.8	1,027	.3	3,352	.9	20,081	5.6	6,291	1.8

9.59: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

	Constraint																	
	Access to Forest Resources		Access to Potable Water		Access to Credit		Access to Off Farm Income		Threshing		Crop Storage		Crop Processing		Marketing Information		Higher Transport Costs	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	0	.0	222	.2	2,443	2.7	1,555	1.7	0	.0	0	.0	0	.0	444	.5	0	.0
Mpwapwa	0	.0	569	1.0	3,274	5.7	0	.0	142	.2	0	.0	142	.2	0	.0	142	.2
Kongwa	0	.0	1,879	3.7	2,756	5.4	2,380	4.7	0	.0	0	.0	0	.0	125	.2	0	.0
Dodoma Urban	0	.0	3,036	5.9	1,012	2.0	759	1.5	0	.0	0	.0	126	.2	126	.2	126	.2
Bahi	0	.0	1,970	4.2	1,623	3.5	811	1.7	0	.0	0	.0	0	.0	348	.7	116	.2
Chamwino	154	.2	1,851	3.0	925	1.5	771	1.2	154	.2	463	.7	0	.0	308	.5	308	.5
Total	154	.0	9,527	2.7	12,033	3.4	6,276	1.7	297	.1	463	.1	269	.1	1,352	.4	693	.2

9.60: Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year

District	Constraint													
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation		Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	**1,777**	**2**	**0**	**0**	**3,776**	**4.2**	**0**	**0**	**6,885**	**7.7**	**666**	**0.7**	**89,954**	**100**
Mpwapwa	**427**	**0.7**	**0**	**0**	**1,139**	**2**	**285**	**0.5**	**7,545**	**13.1**	**142**	**0.2**	**57,657**	**100**
Kongwa	**0**	**0**	**1,002**	**2**	**1,503**	**3**	**0**	**0**	**11,275**	**22.2**	**1,629**	**3.2**	**50,735**	**100**
Dodoma Urban	**379**	**0.7**	**1,518**	**3**	**1,897**	**3.7**	**0**	**0**	**10,373**	**20.2**	**253**	**0.5**	**51,230**	**100**
Bahi	**464**	**1**	**116**	**0.2**	**811**	**1.7**	**116**	**0.2**	**17,500**	**37.3**	**116**	**0.2**	**46,938**	**100**
Chamwino	**1,234**	**2**	**925**	**1.5**	**1,388**	**2.2**	**0**	**0**	**16,192**	**25.9**	**771**	**1.2**	**62,455**	**100**
Total	4,281	1.2	3,561	1	10,515	2.9	401	0.1	69,770	19.4	3,577	1	358,969	100

9.61: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year

District	Constraint																	
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility		Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs		Extension Services	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	2,887	3.2	1,999	2.2	17,547	19.5	13,993	15.6	19,545	21.7	0	.0	3,332	3.7	11,994	13.3	2,887	3.2
Mpwapwa	2,135	3.7	1,993	3.5	11,247	19.5	4,556	7.9	10,820	18.8	854	1.5	3,417	5.9	7,403	12.8	1,708	3.0
Kongwa	2,255	4.4	1,253	2.5	10,523	20.7	3,382	6.7	7,516	14.8	376	.7	877	1.7	3,758	7.4	1,002	2.0
Dodoma Urban	1,771	3.5	759	1.5	8,728	17.0	8,222	16.0	3,668	7.2	885	1.7	3,162	6.2	5,945	11.6	1,897	3.7
Bahi	464	1.0	1,391	3.0	9,504	20.2	2,086	4.4	7,070	15.1	464	1.0	1,275	2.7	5,099	10.9	1,738	3.7
Chamwino	1,388	2.2	1,234	2.0	15,884	25.4	10,486	16.8	11,103	17.8	1,542	2.5	2,622	4.2	1,851	3.0	617	1.0
Total	10,900	3.0	8,628	2.4	73,431	20.5	42,725	11.9	59,723	16.6	4,121	1.1	14,684	4.1	36,050	10.0	9,851	2.7

9.62: Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year

	Constraint																	
	Access to Forest Resources		Access to Potable Water		Access to Credit		Access to Off Farm Income		Threshing		Harvesting		Crop Storage		Crop Processing		Marketing Information	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	222	.2	1,555	1.7	4,220	4.7	1,555	1.7	222	.2	0	.0	222	.2	0	.0	444	.5
Mpwapwa	0	.0	427	.7	2,847	4.9	712	1.2	0	.0	0	.0	427	.7	0	.0	285	.5
Kongwa	0	.0	1,378	2.7	3,132	6.2	3,257	6.4	0	.0	0	.0	125	.2	0	.0	752	1.5
Dodoma	0	.0	2,277	4.4	2,909	5.7	1,518	3.0	126	.2	126	.2	126	.2	126	.2	632	1.2
Urban																		
Bahi	0	.0	3,709	7.9	3,013	6.4	1,507	3.2	0	.0	0	.0	116	.2	0	.0	1,043	2.2
Chamwino	0	.0	771	1.2	1,388	2.2	463	.7	154	.2	0	.0	771	1.2	0	.0	1,079	1.7
Total	222	.1	10,116	2.8	17,510	4.9	9,011	2.5	503	.1	126	.0	1,788	.5	126	.0	4,236	1.2

9.63 : Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year

	Constraint															
	Higher Transport Costs		Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation		Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	222	0.2	2,665	3	0	0	1,999	2.2	0	0	2,443	2.7	0	0	89,954	100
Mpwapwa	854	1.5	1,139	2	0	0	4,129	7.2	854	1.5	1,708	3	142	0.2	57,657	100
Kongwa	125	0.2	877	1.7	752	1.5	4,259	8.4	0	0	3,883	7.7	1,253	2.5	50,735	100
Dodoma	126	0.2	632	1.2	759	1.5	2,277	4.4	0	0	4,048	7.9	506	1	51,230	100
Urban																
Bahi	232	0.5	695	1.5	0	0	2,202	4.7	0	0	5,215	11.1	116	0.2	46,938	100
Chamwino	771	1.2	771	1.2	1,234	2	1,542	2.5	0	0	6,477	10.4	308	0.5	62,455	100
Total	2,331	0.6	6,780	1.9	2,744	0.8	16,408	4.6	854	0.2	23,775	6.6	2,325	0.6	358,969	100

9.64: 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		Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs		Extension Services	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	4,886	5.4	444	.5	7,552	8.4	6,441	7.2	17,102	19.0	1,333	1.5	5,553	6.2	11,994	13.3	6,885	7.7
Mpwapwa	427	.7	1,566	2.7	5,695	9.9	2,847	4.9	10,820	18.8	569	1.0	5,125	8.9	7,972	13.8	2,420	4.2
Kongwa	2,130	4.2	376	.7	7,391	14.6	3,883	7.7	7,266	14.3	251	.5	1,503	3.0	6,639	13.1	2,130	4.2
Dodoma Urban	1,518	3.0	632	1.2	6,578	12.8	4,933	9.6	3,921	7.7	1,265	2.5	2,277	4.4	9,234	18.0	2,530	4.9
Bahi	811	1.7	348	.7	5,331	11.4	1,970	4.2	6,954	14.8	232	.5	1,391	3.0	7,765	16.5	2,550	5.4
Chamwino	925	1.5	1,388	2.2	6,323	10.1	8,790	14.1	6,785	10.9	1,696	2.7	3,547	5.7	6,939	11.1	2,622	4.2
Total	10,698	3.0	4,754	1.3	38,869	10.8	28,865	8.0	52,848	14.7	5,346	1.5	19,396	5.4	50,544	14.1	19,136	5.3

9.65: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint																	
	Access to Forest Resources		Hunting and Gathering		Access to Potable Water		Access to Credit		Access to Off Farm Income		Threshing		Crop Storage		Crop Processing		Marketing Information	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	222	.2	0	.0	666	.7	6,441	7.2	1,999	2.2	444	.5	444	.5	666	.7	1,777	2.0
Mpwapwa	0	.0	0	.0	1,139	2.0	6,691	11.6	854	1.5	142	.2	712	1.2	142	.2	427	.7
Kongwa	125	.2	125	.2	2,380	4.7	3,257	6.4	3,257	6.4	125	.2	125	.2	0	.0	501	1.0
Dodoma Urban	0	.0	126	.2	3,162	6.2	3,289	6.4	2,403	4.7	0	.0	379	.7	0	.0	1,138	2.2
Bahi	116	.2	0	.0	3,940	8.4	4,056	8.6	2,550	5.4	116	.2	348	.7	116	.2	348	.7
Chamwino	154	.2	0	.0	2,005	3.2	2,930	4.7	2,622	4.2	154	.2	2,005	3.2	154	.2	1,542	2.5
Total	617	.2	252	.1	13,293	3.7	26,665	7.4	13,685	3.8	982	.3	4,013	1.1	1,079	.3	5,733	1.6

9.66: Number of Agricultural Households Reporting the THIRD most important Constraint by District, 2007/08 Agricultural Year

	Constraint															
	Higher Transport Costs		Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation		Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	222	.2	4,664	5.2	222	.2	3,554	4.0	0	.0	5,553	6.2	888	1.0	89,954	100.0
Mpwapwa	427	.7	1,281	2.2	427	.7	2,278	4.0	285	.5	4,983	8.6	427	.7	57,657	100.0
Kongwa	626	1.2	251	.5	1,754	3.5	3,633	7.2	125	.2	2,380	4.7	501	1.0	50,735	100.0
Dodoma Urban	885	1.7	632	1.2	885	1.7	1,644	3.2	126	.2	3,036	5.9	632	1.2	51,230	100.0
Bahi	348	.7	579	1.2	116	.2	2,434	5.2	0	.0	4,288	9.1	232	.5	46,938	100.0
Chamwino	1,079	1.7	771	1.2	1,542	2.5	3,393	5.4	0	.0	4,472	7.2	617	1.0	62,455	100.0
Total	3,588	1.0	8,179	2.3	4,946	1.4	16,935	4.7	536	.1	24,712	6.9	3,298	.9	358,969	100.0

9.67: Number of Agricultural Households Reporting the FOURTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint																	
	Access to Land		Ownership of Land		Poor Soil Cultivation Equipment		Soil Fertility		Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs		Extension Services	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	2,221	2.5	666	0.7	5,775	6.4	2,665	3	6,441	7.2	0	0	5,775	6.4	10,883	12.1	5,997	6.7
Mpwapwa	1,281	2.2	997	1.7	4,271	7.4	2,278	4	5,695	9.9	712	1.2	3,559	6.2	8,115	14.1	1,566	2.7
Kongwa	1,378	2.7	1,253	2.5	5,387	10.6	3,382	6.7	4,760	9.4	125	0.2	1,127	2.2	5,261	10.4	3,633	7.2
Dodoma Urban	759	1.5	1,012	2	3,795	7.4	2,783	5.4	1,897	3.7	632	1.2	2,150	4.2	5,439	10.6	1,771	3.5
Bahi	464	1	348	0.7	6,374	13.6	1,738	3.7	5,099	10.9	811	1.7	927	2	5,795	12.3	2,666	5.7
Chamwino	925	1.5	1,234	2	5,089	8.1	4,935	7.9	6,631	10.6	617	1	1,542	2.5	4,780	7.7	3,393	5.4
Total	7,028	2	5,509	1.5	30,690	8.6	17,782	5	30,524	8.5	2,898	0.8	15,081	4.2	40,274	11.2	19,025	5.3

9.68: Number of Agricultural Households Reporting the FOURTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint																	
	Access to Forest Resources		Hunting and Gathering		Access to Potable Water		Access to Credit		Access to Off Farm Income		Threshing		Harvesting		Crop Storage		Crop Processing	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	0	0	0	0	3,998	4.5	10,883	12.1	5,108	5.7	666	0.7	0	0	3,776	4.2	1,333	1.5
Mpwapwa	285	0.5	0	0	2,135	3.7	8,969	15.6	1,993	3.5	142	0.2	0	0	1,708	3	285	0.5
Kongwa	0	0	0	0	1,754	3.5	3,883	7.7	5,387	10.6	0	0	125	0.2	251	0.5	0	0
Dodoma Urban	253	0.5	0	0	4,048	7.9	3,795	7.4	3,415	6.7	253	0.5	126	0.2	1,138	2.2	126	0.2
Bahi	0	0	0	0	1,623	3.5	2,897	6.2	2,434	5.2	116	0.2	0	0	927	2	232	0.5
Chamwino	463	0.7	308	0.5	3,238	5.2	3,855	6.2	2,930	4.7	617	1	308	0.5	4,009	6.4	0	0
Total	1,000	0.3	308	0.1	16,796	4.7	34,283	9.6	21,267	5.9	1,794	0.5	560	0.2	11,810	3.3	1,976	0.6

9.69: Number of Agricultural Households Reporting the FOURTH most important Constraint by District, 2007/08 Agricultural Year

District	Constraint																	
	Marketing Information		Higher Transport Costs		Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation		Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	3,332	3.7	888	1	6,663	7.4	888	1	5,108	5.7	222	0.2	4,886	5.4	1,555	1.7	89,732	100
Mpwapwa	427	0.7	1,281	2.2	569	1	712	1.2	3,559	6.2	285	0.5	5,267	9.1	1,566	2.7	57,657	100
Kongwa	1,503	3	877	1.7	877	1.7	1,002	2	4,385	8.7	0	0	3,382	6.7	877	1.7	50,610	100
Dodoma Urban	2,403	4.7	1,138	2.2	1,644	3.2	1,518	3	5,186	10	253	0.5	5,060	9.9	632	1.2	51,230	100
Bahi	1,507	3.2	579	1.2	1,738	3.7	811	1.7	2,782	5.9	232	0.5	6,258	13	579	1.2	46,938	100
Chamwino	2,467	4	2,159	3.5	2,159	3.5	1,234	2	3,238	5.2	925	1.5	4,626	7.4	771	1.2	62,455	100
Total	11,639	3	6,923	2	13,651	4	6,165	2	24,258	6.8	1,917	1	29,481	8.2	5,981	2	358,622	100

9.70: 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		Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs		Extension Services	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	1,999	2.22	1,333	1.48	4,220	4.68	2,221	2.46	3,554	3.94	222	0.25	3,554	3.94	4,220	4.68	4,220	4.68
Mpwapwa	997	1.73	997	1.73	2,847	4.94	1,851	3.21	3,844	6.67	854	1.48	4,840	8.4	3,701	6.42	1,708	2.96
Kongwa	2,255	4.44	1,127	2.22	3,508	6.91	3,257	6.42	2,756	5.43	1,002	1.98	2,756	5.43	6,138	12.1	1,879	3.7
Dodoma Urban	759	1.48	632	1.23	2,403	4.69	3,668	7.16	3,542	6.91	506	0.99	885	1.73	4,048	7.9	1,771	3.46
Bahi	579	1.23	1,391	2.96	3,940	8.4	1,623	3.46	5,447	11.6	1,159	2.47	1,854	3.95	7,417	15.8	2,897	6.17
Chamwino	2,159	3.47	1,388	2.23	2,313	3.71	4,009	6.44	4,009	6.44	617	0.99	3,084	4.95	4,164	6.68	3,238	5.2
Total	8,748	2.44	6,868	1.91	19,232	5.36	16,629	4.63	23,152	6.45	4,360	1.21	16,974	4.73	29,689	8.27	15,714	4.38

9.71: 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		Access to Improved Seed		Irrigation Facilities		Access to Chemical Inputs		Cost of Inputs		Extension Services	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	1,999	2.22	1,333	1.48	4,220	4.68	2,221	2.46	3,554	3.94	222	0.25	3,554	3.94	4,220	4.68	4,220	4.68
Mpwapwa	997	1.73	997	1.73	2,847	4.94	1,851	3.21	3,844	6.67	854	1.48	4,840	8.4	3,701	6.42	1,708	2.96
Kongwa	2,255	4.44	1,127	2.22	3,508	6.91	3,257	6.42	2,756	5.43	1,002	1.98	2,756	5.43	6,138	12.1	1,879	3.7
Dodoma Urban	759	1.48	632	1.23	2,403	4.69	3,668	7.16	3,542	6.91	506	0.99	885	1.73	4,048	7.9	1,771	3.46
Bahi	579	1.23	1,391	2.96	3,940	8.4	1,623	3.46	5,447	11.6	1,159	2.47	1,854	3.95	7,417	15.8	2,897	6.17
Chamwino	2,159	3.47	1,388	2.23	2,313	3.71	4,009	6.44	4,009	6.44	617	0.99	3,084	4.95	4,164	6.68	3,238	5.2
Total	8,748	2.44	6,868	1.91	19,232	5.36	16,629	4.63	23,152	6.45	4,360	1.21	16,974	4.73	29,689	8.27	15,714	4.38

9.72: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint																	
	Access to Forest Resources		Access to Potable Water		Hunting and Gathering		Access to Credit		Access to Off Farm Income		Threshing		Harvesting		Crop Storage		Crop Processing	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%			Number	%	Number	%
Kondoa	0	0.00	1,555	1.72	0	0.00	16,880	18.72	6,219	6.90	222	0.25	222	0.25	5,108	5.67	666	0.74
Mpwapwa	285	0.49	1,566	2.72	0	0.00	9,396	16.30	2,420	4.20	142	0.25	0	0.00	1,851	3.21	285	0.49
Kongwa	0	0.00	1,002	1.98	0	0.00	5,261	10.37	3,257	6.42	251	0.49	0	0.00	626	1.23	0	0.00
Dodoma	506	0.99	2,150	4.20	126	0.25	2,783	5.43	2,403	4.69	506	0.99	126	0.25	2,277	4.44	885	1.73
Urban																		
Bahi	0	0.00	1,623	3.46	0	0.00	3,940	8.40	1,738	3.70	116	0.25	116	0.25	1,043	2.22	116	0.25
Chamwino	308	0.50	3,084	4.95	771	1.24	6,323	10.15	1,696	2.72	154	0.25	617	0.99	4,626	7.43	154	0.25
Total	1,099	0.31	10,980	3.06	898	0.25	44,584	12.42	17,734	4.94	1,391	0.39	1,081	0.30	15,532	4.33	2,107	0.59

9.73: Number of Agricultural Households Reporting the FIFTH most important Constraint by District, 2007/08 Agricultural Year

	Constraint																	
	Marketing Information		Higher Transport Costs		Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation		Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
District	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Kondoa	4,886	5.42	888	0.99	8,440	9.36	2,665	2.96	5,997	6.65	222	0.25	6,663	7.39	3,998	4.43	90,176	100.00
Mpwapwa	854	1.48	2,420	4.20	1,993	3.46	569	0.99	3,417	5.93	285	0.49	8,399	14.57	2,135	3.70	57,657	100.00
Kongwa	1,754	3.46	1,002	1.98	125	0.25	1,754	3.46	3,633	7.16	125	0.25	6,138	12.10	1,127	2.22	50,735	100.00
Dodoma	3,036	5.93	1,012	1.98	1,897	3.70	1,518	2.96	2,783	5.43	126	0.25	9,234	18.02	1,644	3.21	51,230	100.00
Urban																		
Bahi	2,782	5.93	579	1.23	1,854	3.95	464	0.99	2,666	5.68	464	0.99	2,434	5.19	695	1.48	46,938	100.00
Chamwino	3,238	5.20	1,851	2.97	1,696	2.72	1,542	2.48	3,238	5.20	771	1.24	6,323	10.15	925	1.49	62,301	100.00
Total	16,550	4.61	7,753	2.16	16,007	4.46	8,512	2.37	21,733	6.05	1,993	0.56	39,192	10.92	10,526	2.93	359,037	100.00

FISH FARMING

9.74: Number of Agriculture Households Practising Fish Farming by District during the 2007/08 Agriculture Year

District	Number of Agricultural Households Doing Fish Farming		Number of Agricultural Households NOT Doing Fish Farming		Total	
	Number	%	Number	%	Number	%
Kondoa	0	0.0	89,954	100	89,954	100
Mpwapwa	0	0.0	57,657	100	57,657	100
Kongwa	0	0.0	50,735	100	50,735	100
Dodoma Urban	0	0.0	51,230	100	51,230	100
Bahi	116	0.2	46,822	99.8	46,938	100
Chamwino	0	0.0	62,455	100	62,455	100
Total	116	0.0	358,854	100	358,969	100

BEE KEEPING

9.75: 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	%
Kondoa	**11,327**	**12.6**	**78,626**	**87.4**	**89,954**	**100**
Mpwapwa	**2,420**	**4.2**	**55,237**	**95.8**	**57,657**	**100**
Kongwa	**2,130**	**4.2**	**48,606**	**95.8**	**50,735**	**100**
Dodoma Urban	**1,518**	**3**	**49,712**	**97**	**51,230**	**100**
Bahi	**1,738**	**3.7**	**45,200**	**96.3**	**46,938**	**100**
Chamwino	**2,005**	**3.2**	**60,450**	**96.8**	**62,455**	**100**
Total	21,138	5.9	337,831	94.1	358,969	100

9.76: Number of Agricultural Households By Honey Production/Collection and District , 2007/08 Agricultural Year

	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
Kondoa	**1,999**	**8,884**	**10,883**	**222**	**888**	**1,111**	**2,221**	**9,773**	**11,994**
Mpwapwa	**712**	**1,851**	**2,563**	**0**	**0**	**0**	**712**	**1,851**	**2,563**
Kongwa	**626**	**1,629**	**2,255**	**0**	**0**	**0**	**626**	**1,629**	**2,255**
Dodoma Urban	**506**	**885**	**1,391**	**253**	**0**	**253**	**759**	**885**	**1,644**
Bahi	**0**	**1,738**	**1,738**	**0**	**0**	**0**	**0**	**1,738**	**1,738**
Chamwino	**925**	**1,234**	**2,159**	**154**	**0**	**154**	**1,079**	**1,234**	**2,313**
Total	4,768	16,221	20,990	629	888	1,518	5,398	17,110	22,507

9.77: Number of Agricultural Households, Type of Bee Hives and Type of Bees and District , 2007/08 Agricultural Year

District	Number of Improved Bee Hives						Number of Local Bee Hives					
	Stingless Bee		Sting Bee		Total		Stingless Bee		Sting Bee		Total	
	Number of Households	Number of Hives	Number of Households	Number of Hives	Number of Households	Number of Hives	Number of Households	Number of Hives	Number of Households	Number of Hives	Number of Households	Number of Hives
Kondoa	2,221	0	9,773	1,777	11,994	1,777	2,221	33,538	9,773	91,731	11,994	125,269
Mpwapwa	712	1,708	1,851	0	2,563	1,708	712	4,129	1,851	48,546	2,563	52,675
Kongwa	626	0	1,629	0	2,255	0	626	2,255	1,629	14,532	2,255	16,787
Dodoma Urban	759	0	885	885	1,644	885	759	8,728	885	5,313	1,644	14,041
Bahi	0	0	1,738	5,795	1,738	5,795	0	0	1,738	15,646	1,738	15,646
Chamwino	1,079	0	1,234	0	2,313	0	1,079	9,253	1,234	22,977	2,313	32,230
Total	5,398	1,708	17,110	8,457	22,507	10,166	5,398	57,902	17,110	198,744	22,507	256,647

9.78: Quantity of Honey Harvested and Sold by Size of Bees and District during the 2007/08 Agriculture Year

District	Stingless Bee				StingBee				Total	
	Honey Harvested		Honey Sold		Honey Harvested		Honey Sold			
	Quantity (lts)	%	Quantity (lts)	%	Quantity (lts)	%	Quantity (lts)	%	Honey Sold	Honey Harvested
Kondoa	230,326	38	204,339	40	379,804	62	305,398	60	509,737	610,130
Mpwapwa	29,042	-	24,771	-	59,508	67	77,019	76	101,790	88,550
Kongwa	16,285	-	9,771	-	147,446	90	126,901	93	136,672	163,731
Dodoma Urban	55,658	56	36,683	51	43,008	44	35,039	49	71,722	98,666
Bahi	-	-	-	-	296,463	100	271,198	100	271,198	296,463
Chamwino	167,317	-	171,635	-	84,815	-	53,973	-	225,609	252,133
Total	498,628	33	447,200	34	1,011,044	67	869,528	66	1,316,728	1,509,673

9.79: Average price of Honey (Tshs/litre) by Size of Bees and District during the 2007/08 Agriculture Year

District	Stingless Bee (Average Price per Litre)	Sting Bee (Average Price per Litre)	Average price per litre
Kondoa	1,200	1,101	1,119
Mpwapwa	1,300	1,192	1,222
Kongwa	600	1,465	1,225
Dodoma Urban	1,023	1,243	1,142
Bahi	0	1,440	1,440
Chamwino	849	988	923
Total	1048	1179	1148

9.80: 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	Stinglessbee	Sting Bee	Stinglessbee	Sting Bee	Sting Bee	Stinglessbee	Sting Bee	Stinglessbee	Sting Bee	Stinglessbee	Sting Bee	Stinglessbee	Sting Bee
Kondoa	888	3,110	222	444	444	2,221	0	0	222	0	444	666	3,110	222	0	2,221	9,773
Mpwapwa	712	1,139	0	142	0	142	0	0	0	0	0	0	142	285	0	712	1,851
Kongwa	251	1,503	0	0	0	0	0	0	0	0	0	376	125	0	0	626	1,629
Dodoma Urban	506	506	0	126	0	0	0	0	0	126	126	126	126	0	0	759	885
Bahi	0	348	0	0	0	927	0	0	0	0	232	0	232	0	0	0	1,738
Chamwino	1,079	1,234	0	0	0	0	0	0	0	0	0	0	0	0	0	1,079	1,234
Total	3,436	7,839	222	713	444	3,291	0	0	222	126	803	1,169	3,735	507	0	5,398	17,110

POVERTY MODULE

10.1: Number of households reporting average number of rooms and type of building Materials and District, 2007/08 Agricultural Year

District	Number of rooms	Iron Sheets	Tiles	Concrete	Asbestos	Grass/leaves.	Grass & mud.	Other (Specify)	Total
	Mean	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	2	60,191	222	222	222	7,330	21,100	666	89,954
Mpwapwa	3	18,650	142	0	142	3,844	34,879	0	57,657
Kongwa	3	36,454	251	0	251	4,510	9,270	0	50,735
Dodoma Urban	2	22,390	0	0	506	1,138	22,390	4,807	51,230
Bahi	2	7,997	0	0	116	1,507	37,203	116	46,938
Chamwino	2	24,982	0	154	463	2,005	34,851	0	62,455
Total	2	170,663	615	376	1,700	20,333	159,693	5,589	358,969
%		47.5	0.2	0.1	0.5	5.7	44.5	1.6	100.0

10.2:: Number of hoseholds reporting average number of rooms and type of Floor Materials by District2007/08 Agricultural Year

District	Number of rooms	Earth, Sand, Dung	Wood Planks, Bamboo, Palm.	Parquet Or Polished Wood	Ceramic Tiles, Terrazzo	Cement	Other	Total
	Mean	Number	Number	Number	Number	Number	Number	Number
Kondoa	2	76,849	1,333	0	222	11,327	222	89,954
Mpwapwa	3	55,237	285	142	0	1,993	0	57,657
Kongwa	3	43,845	1,002	0	0	5,888	0	50,735
Dodoma Urban	2	44,273	506	0	253	6,072	126	51,230
Bahi	2	43,809	579	116	0	2,434	0	46,938
Chamwino	2	58,908	1,079	0	154	2,313	0	62,455
Total	2	322,922	4,784	258	629	30,027	349	358,969
%		90.0	1.3	0.1	0.2	8.4	0.1	100.0

10.3: Number of households by type of Wall Materials and District, 2007/08 Agricultural Year

District	Number of rooms	Wall Materials								
		Grass	Poles And Mud	Sun-Dried Bricks	Baked Bricks	Wood, Timber	Cement Blocks	Stones	Other (specify)	Total
	Mean	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	2	6,441	9,106	13,326	59,303	222	1,333	0	222	89,954
Mpwapwa	3	4,556	40,858	9,111	2,278	142	142	0	569	57,657
Kongwa	3	3,007	31,819	12,402	3,382	0	125	0	0	50,735
Dodoma Urban	2	1,771	25,425	21,884	632	0	1,391	0	126	51,230
Bahi	2	8,460	23,875	13,560	232	116	464	116	116	46,938
Chamwino	2	7,094	27,912	23,594	2,005	463	1,234	0	154	62,455
Total	2	31,328	158,996	93,877	67,832	943	4,689	116	1,188	358,969
%		8.7	44.3	26.2	18.9	0.3	1.3	0.0	0.3	100.0

10.4: Number of Agricultural Households reporting ownership of Assets by District, 2007/08 Agricultural Year

	Radio			Landline phone			Mobile phone			Iron			Wheelbarrow		
District	**Yes**	**No**	**Total**	**Yes**	**No**	**Total**	**Yes**	**No**	**Total**	**Yes**	**No**	**Total**	**Yes**	**No**	**Total**
Kondoa	61,080	28,874	89,954	1,777	88,177	89,954	24,876	65,078	89,954	19,101	70,852	89,954	5,775	84,179	89,954
Mpwapwa	29,754	27,903	57,657	1,139	56,518	57,657	6,691	50,966	57,657	6,549	51,109	57,657	1,851	55,807	57,657
Kongwa	31,443	19,292	50,735	376	50,360	50,735	12,026	38,709	50,735	9,771	40,964	50,735	5,637	45,098	50,735
Dodoma Urban	25,552	25,678	51,230	759	50,471	51,230	9,614	41,617	51,230	8,349	42,882	51,230	2,403	48,827	51,230
Bahi	24,106	22,832	46,938	1,623	45,315	46,938	4,636	42,302	46,938	3,013	43,925	46,938	1,854	45,084	46,938
Chamwino	26,832	35,622	62,455	1,851	60,604	62,455	7,865	54,590	62,455	5,860	56,595	62,455	4,626	57,829	62,455
Total	**198,768**	**160,202**	**358,969**	**7,524**	**351,446**	**358,969**	**65,707**	**293,262**	**358,969**	**52,643**	**306,326**	**358,969**	**22,147**	**336,823**	**358,969**
%	**55.4**	**44.6**	**100**	**2.1**	**97.9**	**100**	**18.3**	**81.7**	**100**	**14.7**	**85.3**	**100**	**6.2**	**93.8**	**100**

…cont 10.4: 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**
Kondoa	33,760	56,193	89,954	8,440	81,514	89,954	888	89,065	89,954	1,111	88,843	89,954	1,111	88,843	89,954
Mpwapwa	13,667	43,990	57,657	3,844	53,813	57,657	712	56,945	57,657	569	57,088	57,657	427	57,230	57,657
Kongwa	23,426	27,309	50,735	6,890	43,845	50,735	626	50,109	50,735	125	50,610	50,735	1,253	49,483	50,735
Dodoma Urban	19,986	31,244	51,230	4,048	47,182	51,230	1,012	50,218	51,230	253	50,977	51,230	379	50,851	51,230
Bahi	14,487	32,451	46,938	3,825	43,113	46,938	232	46,706	46,938	348	46,590	46,938	348	46,590	46,938
Chamwino	19,739	42,716	62,455	6,785	55,670	62,455	1,388	61,067	62,455	771	61,684	62,455	463	61,992	62,455
Total	**125,065**	**233,904**	**358,969**	**33,832**	**325,138**	**358,969**	**4,858**	**354,111**	**358,969**	**3,177**	**355,792**	**358,969**	**3,980**	**354,989**	**358,969**
%	**34.8**	**65.2**	**100.0**	**9.4**	**90.6**	**100.0**	**1.4**	**98.6**	**100.0**	**0.9**	**99.1**	**100.0**	**1.1**	**98.9**	**100.0**

10.5: Number of Agricultural Households Reporting Main Source of Energy for Lighting by District, 2007/08 Agricultural Year

District	Electricity	Solar	Hurican Lamp	Pressure Lamp	Wick Lamp	Candles	Fire Wood	Other (specify)	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	1,555	222	23,766	2,887	59,081	0	2,443	0	89,954
Mpwapwa	0	142	7,972	2,135	41,713	0	4,840	854	57,657
Kongwa	376	376	13,404	752	35,327	125	376	0	50,735
Dodoma Urban	1,138	0	5,945	2,909	39,466	0	1,771	0	51,230
Bahi	116	0	4,984	927	38,825	0	1,391	695	46,938
Chamwino	1,079	308	7,094	3,855	44,875	308	3,855	1,079	62,455
Total	4,264	1,049	63,164	13,466	259,287	434	14,676	2,629	358,969
%	1.2	0.3	17.6	3.8	72.2	0.1	4.1	0.7	100.0

10.6: Number of Agricultural Households Reporting Main Source of Energy for Cooking by District, 2007/08 Agricultural Year

District	Electricity	Solar	Gas (hh biogas)	Gas(Industrial)	Paraffin/kerocine.	Charcoal	Firewood	Crop Residues	Other (specify)	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	**888**	**0**	**0**	**666**	**0**	**4,442**	**83,513**	**444**	**0**	**89,954**
Mpwapwa	**285**	**0**	**0**	**0**	**0**	**1,281**	**55,807**	**142**	**142**	**57,657**
Kongwa	**251**	**0**	**0**	**0**	**0**	**1,503**	**48,982**	**0**	**0**	**50,735**
Dodoma Urban	**253**	**0**	**0**	**0**	**0**	**1,644**	**48,953**	**126**	**253**	**51,230**
Bahi	**232**	**0**	**0**	**0**	**0**	**464**	**46,127**	**116**	**0**	**46,938**
Chamwino	**154**	**0**	**0**	**154**	**0**	**2,159**	**59,216**	**617**	**154**	**62,455**
Total	2,063	0	0	821	261	11,494	342,597	1,446	550	358,969
%	0.6	0.0	0.0	0.2	0.1	3.2	95.4	0.4	0.2	100

10.7: 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	Tanker Truck	Other	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	19,768	1,777	0	18,435	5,108	27,541	444	11,772	0	0	5,108	89,954
Mpwapwa	25,768	5,979	1,139	11,531	3,274	5,552	0	4,129	0	0	285	57,657
Kongwa	22,925	1,629	0	5,512	1,253	14,156	251	4,886	0	0	125	50,735
Dodoma Urban	8,981	7,084	126	26,943	759	2,024	126	5,186	0	0	0	51,230
Bahi	10,315	4,868	348	19,586	811	5,215	695	4,984	0	0	116	46,938
Chamwino	22,515	9,253	1,234	19,122	3,084	2,467	154	4,472	0	154	0	62,455
Total	110,271	30,589	2,847	101,130	14,290	56,956	1,671	35,428	0	154	5,634	358,969
%	30.7	8.5	0.8	28.2	4	15.9	0.5	9.9	0	0	1.6	100

10.8: Number of Agriculture Households by Distance to Main Source of Drinking Water in wet Season and District during, 2007/08 Agricultural Year

District	Less than100 Metres	100 - 299 m	300 - 499 m	500 - 999 m	1.00- 1.99 Km	2.00 - 2.99 Km	3.00 - 4.99 Km	5.00 - 9.99 Km	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	3,332	13,326	0	16,658	49,974	6,663	0	0	89,954
Mpwapwa	8,542	4,271	0	19,219	23,490	0	2,135	0	57,657
Kongwa	1,879	7,516	5,637	11,275	16,912	3,758	3,758	0	50,735
Dodoma Urban	3,795	11,385	1,897	15,179	15,179	1,897	0	1,897	51,230
Bahi	3,477	1,738	1,738	17,384	20,861	1,738	0	0	46,938
Chamwino	0	4,626	2,313	18,505	32,384	2,313	2,313	0	62,455
Total	21,024	42,863	11,586	98,221	158,801	16,370	8,207	1,897	358,969
%	5.9	11.9	3.2	27.4	44.2	4.6	2.3	0.5	100

10.9: 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 than10 Minutes	10 - 19 Minutes	20 - 29 Minutes	30 - 39 Minutes	40 - 49 Minutes	50 - 59 Minutes	1 Hour and above	Total
	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	9,995	6,663	3,332	33,316	9,995	0	26,653	89,954
Mpwapwa	2,135	6,406	0	14,948	6,406	0	27,761	57,657
Kongwa	1,879	0	0	20,670	1,879	1,879	24,428	50,735
Dodoma Urban	1,897	5,692	1,897	26,564	1,897	3,795	9,487	51,230
Bahi	10,431	0	1,738	15,646	3,477	0	15,646	46,938
Chamwino	2,313	2,313	2,313	20,818	2,313	4,626	27,758	62,455
Total	28,651	21,075	9,281	131,962	25,968	10,300	131,733	358,969
%	8	5.9	2.6	36.8	7.2	2.9	36.7	100

10.10: Number of Agricultural Households Reporting Main Source of Drinking Water during Dry season and 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	Other	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	31,317	2,665	222	16,658	6,663	15,325	222	12,438	0	0	4,442	89,954
Mpwapwa	29,042	6,264	854	14,806	2,990	2,563	142	712	142	142	0	57,657
Kongwa	32,571	5,888	125	5,261	1,503	2,881	0	752	1,503	251	0	50,735
Dodoma Urban	11,005	7,843	126	25,172	1,012	1,138	253	4,680	0	0	0	51,230
Bahi	11,010	5,679	579	22,020	464	3,013	2,434	1,507	0	116	116	46,938
Chamwino	33,309	8,173	771	15,575	1,234	1,388	0	1,851	0	154	0	62,455
Total	148,255	36,512	2,679	99,493	13,865	26,309	3,051	21,939	1,646	663	4,558	358,969
%	41.3	10.2	0.7	27.7	3.9	7.3	0.9	6.1	0.5	0.2	1.3	100

10.11: Number of Agriculture Households Distance by Main by Source of Drinking Water in Dry Season and District during, 2007/08 Agricultural Year

District	Less than100 Metres	100 - 299 m	300 - 499 m	500 - 999 m	1.00- 1.99 Km	2.00 - 2.99 Km	3.00 - 4.99 Km	5.00 - 9.99 Km	10km and above	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	6,663	3,332	6,663	6,663	49,974	3,332	3,332	9,995	0	89,954
Mpwapwa	10,677	2,135	0	17,084	23,490	0	2,135	2,135	0	57,657
Kongwa	3,758	3,758	5,637	7,516	13,154	5,637	5,637	1,879	3,758	50,735
Dodoma Urban	5,692	7,590	1,897	13,282	15,179	1,897	1,897	3,795	0	51,230
Bahi	3,477	1,738	1,738	12,169	19,123	1,738	1,738	5,215	0	46,938
Chamwino	0	4,626	0	13,879	27,758	2,313	2,313	9,253	2,313	62,455
Total	30,268	23,180	15,936	70,593	148,678	14,918	17,053	32,272	6,071	358,969
%	8.4	6.5	4.4	19.7	41.4	4.2	4.8	9	1.7	100

10.12: Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water in Dry season and District , 2007/08 Agricultural Year

District	Less than10 Minutes	10 - 19 Minutes	20 - 29 Minutes	30 - 39 Minutes	40 - 49 Minutes	50 - 59 Minutes	1 Hour and above	Total
	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	**3,332**	**6,663**	**0**	**13,326**	**0**	**6,663**	**59,969**	**89,954**
Mpwapwa	**2,135**	**6,406**	**0**	**10,677**	**6,406**	**0**	**32,032**	**57,657**
Kongwa	**5,637**	**0**	**0**	**9,395**	**1,879**	**0**	**33,824**	**50,735**
Dodoma Urban	**0**	**3,795**	**0**	**7,590**	**7,590**	**1,897**	**30,359**	**51,230**
Bahi	**8,692**	**0**	**1,738**	**5,215**	**1,738**	**1,738**	**27,815**	**46,938**
Chamwino	**0**	**0**	**2,313**	**20,818**	**0**	**2,313**	**37,010**	**62,455**
Total	19,797	16,864	4,052	67,022	17,614	12,612	221,009	358,969
%	5.5	4.7	1.1	18.7	4.9	3.5	61.6	100

10.13: Number of Agricultural Households Reporting type of TOILET the household normally use by District , 2007/08 Agricultural Year

District	No toilet/bush	Flush toilet	Pit latrine - traditional	Improved pit latrine - hh owned	Other type (specify)	Total
	Number	Number	Number	Number	Number	Number
Kondoa	3,554	444	80,403	3,332	2,221	89,954
Mpwapwa	4,556	285	51,963	712	142	57,657
Kongwa	2,631	251	45,724	2,004	125	50,735
Dodoma Urban	4,807	126	42,123	4,048	126	51,230
Bahi	2,318	464	42,302	1,854	0	46,938
Chamwino	2,776	308	47,959	11,257	154	62,455
Total	20,641	1,878	310,474	23,207	2,769	358,969
%	5.7	0.5	86.5	6.5	0.8	100

10.14: Number of Agricultural Households Reporting Number of meals the household normally has per day by District, 2007/08 Agricultural Year

	Number of Meals			
	1	2	3	Total
District	Number	Number	Number	Number
Kondoa	666	40,202	49,086	89,954
Mpwapwa	1,566	41,428	14,663	57,657
Kongwa	1,378	36,454	12,903	50,735
Dodoma Urban	2,150	33,521	15,559	51,230
Bahi	927	36,160	9,851	46,938
Chamwino	2,159	46,880	13,416	62,455
Total	8,847	234,644	115,479	358,969
%	2.5	65.4	32.2	100

10.15: Number of Agricultural Households Reporting Number of days the household Consumed Meat during the Preceeding Week by District, 2007/08 Agricultural Year

	Not Eaten	1	2	3	4	5	6	7	Total
District	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	**34,649**	**36,648**	**12,660**	**5,108**	**444**	**222**	**0**	**222**	**89,954**
Mpwapwa	**11,959**	**26,907**	**12,528**	**5,267**	**427**	**427**	**142**	**0**	**57,657**
Kongwa	**16,035**	**22,549**	**8,769**	**3,007**	**376**	**0**	**0**	**0**	**50,735**
Dodoma Urban	**16,444**	**20,492**	**9,867**	**2,277**	**1,897**	**126**	**0**	**126**	**51,230**
Bahi	**15,994**	**20,282**	**7,417**	**1,391**	**1,275**	**464**	**0**	**116**	**46,938**
Chamwino	**29,454**	**22,515**	**7,865**	**1,696**	**463**	**308**	**0**	**154**	**62,455**
Total	124,534	149,392	59,106	18,746	4,882	1,548	142	619	358,969
%	34.7	41.6	16.5	5.2	1.4	0.4	0	0.2	100

10.16: Number of Agricultural Households Reporting Number of days the household Consumed Fish during the Preceeding Week by District, 2007/08 Agricultural Year

	Not Eaten	1	2	3	4	5	6	7	Total
District	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	62,856	19,545	4,886	2,443	0	222	0	0	89,954
Mpwapwa	14,521	25,483	12,386	3,701	569	427	142	427	57,657
Kongwa	19,167	19,918	8,644	2,505	125	0	0	376	50,735
Dodoma Urban	24,034	16,571	6,072	2,277	1,138	506	126	506	51,230
Bahi	27,467	14,835	3,013	811	348	0	0	464	46,938
Chamwino	36,548	18,505	3,855	1,696	463	463	308	617	62,455
Total	184,593	114,858	38,856	13,435	2,643	1,618	577	2,389	358,969
%	51.4	32	10.8	3.7	0.7	0.5	0.2	0.7	100

10.17: Number of Agricultural Households Reporting the status of food satisfaction of the household during the Preceeding Year by District, 2007/08 Agricultural Year

Never	Seldom	Sometimes	Often	Always	Total
Number	Number	Number	Number	Number	Number
25,987	**41,534**	**4,664**	**9,995**	**7,774**	**89,954**
16,941	**24,629**	**5,979**	**4,983**	**5,125**	**57,657**
18,916	**19,793**	**3,883**	**4,760**	**3,382**	**50,735**
10,246	**21,757**	**7,843**	**6,578**	**4,807**	**51,230**
7,417	**11,126**	**4,404**	**15,646**	**8,345**	**46,938**
20,972	**16,500**	**8,019**	**13,108**	**3,855**	**62,455**
100,480	135,340	34,793	55,069	33,288	358,969
28	37.7	9.7	15.3	9.3	100

10.18: Number of Agricultural Households Reporting Main Source of Income by District , 2007/08 Agricultural Year

District	Sale of food crops	Sale of Livestock	Sale of livestock products	Sale of cash crops	Sale of forest products	Business income	Wages or salaries in cash	Other casual cash earnings	Cash remittances
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Kondoa	36,204	4,220	3,332	31,317	1,111	2,665	1,777	4,886	1,333
Mpwapwa	31,605	2,990	1,566	6,264	427	3,986	285	6,549	854
Kongwa	33,573	1,002	626	2,631	376	2,881	251	5,637	1,879
Dodoma Urban	23,149	1,391	1,012	6,451	4,427	5,692	1,771	5,313	759
Bahi	28,511	811	2,318	8,576	348	1,738	232	1,507	1,043
Chamwino	34,080	771	1,851	7,248	1,388	3,855	1,696	8,327	1,696
Total	187,121	11,186	10,704	62,487	8,076	20,819	6,011	32,219	7,564
%	52.1	3.1	3	17.4	2.2	5.8	1.7	9	2.1

10.19: Number of Agricultural Households Reporting Main Source of Income by District , 2007/08 Agricultural Year

District	Fishing	Other	Not applicable	Total
	Number	Number	Number	Number
Kondoa	222	1,999	888	89,954
Mpwapwa	142	427	2,563	57,657
Kongwa	0	125	1,754	50,735
Dodoma Urban	0	1,012	253	51,230
Bahi	116	348	1,391	46,938
Chamwino	0	925	617	62,455
Total	480	4,836	7,465	358,969

Appendix III: QUESTIONNAIRE

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 / /	*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*
Regional Supervisor	Name	Signature	Date / /	
National Supervisor	Name	Signature	Date / /	

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 / /	*See the back page for details of queries*
Queried	Name	Signature	Date / /	

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 Administration 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

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		Not applicable for children under 5 years					
						Mother	Father	Reard and Write	Education status	Levek of education attained	On farm engagements	Main activity	Off farm income yes=1 no=2
	(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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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 , 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..

5.0 **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	Typep 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 facilitiiies 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.

Questions specific definitions

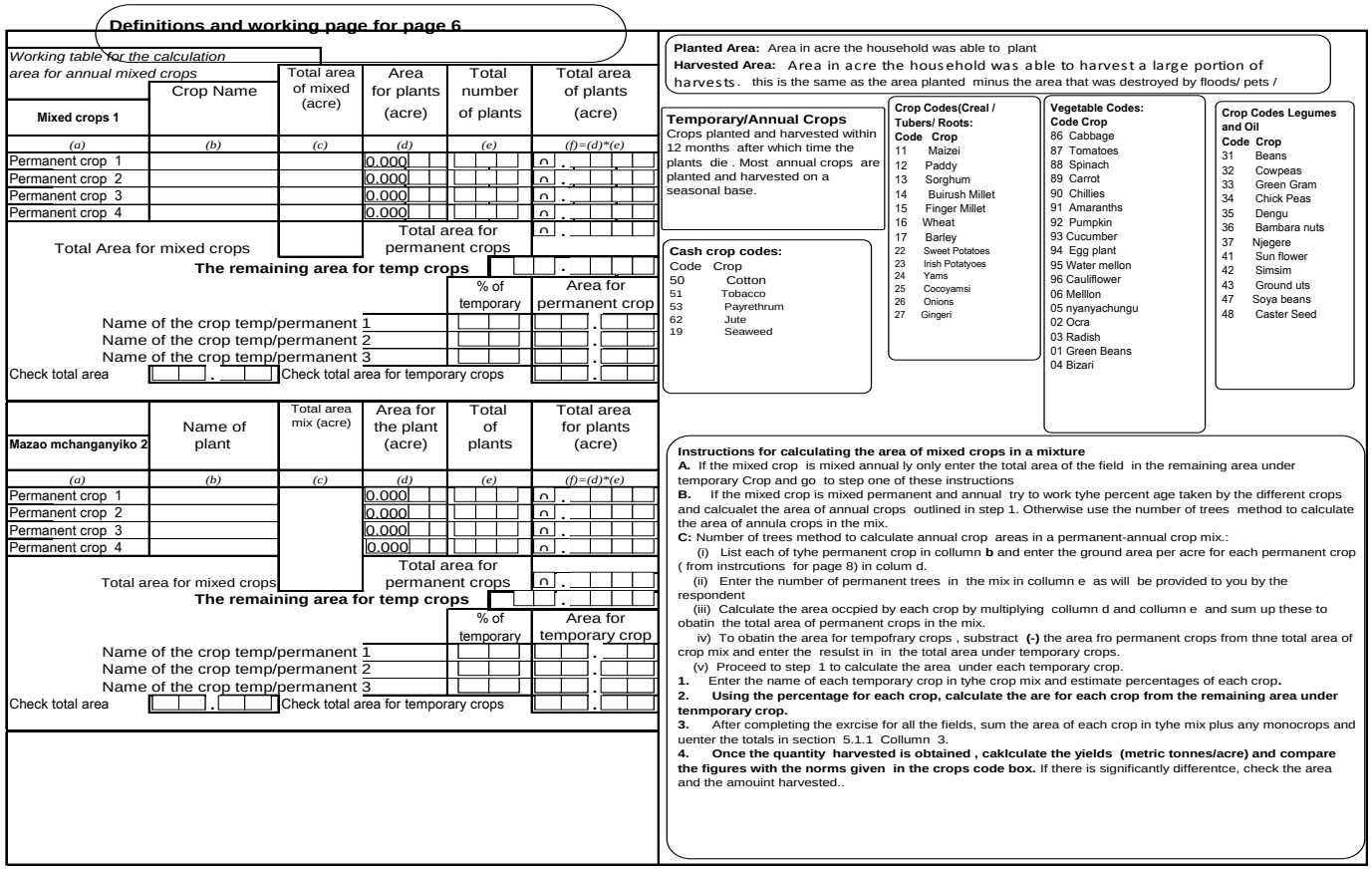
Q 5.1.1. Instructions on crops storage:
1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.

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.

Working area/calculation space



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		0.000
Permanent crop 2			0.000		0.000
Permanent crop 3			0.000		0.000
Permanent crop 4			0.000		0.000
			Total area for permanent crops		0.000
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		0.000
Permanent crop 2			0.000		0.000
Permanent crop 3			0.000		0.000
Permanent crop 4			0.000		0.000
			Total area for permanent crops		0.000
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 culltivated (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.

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.

Working area/calculation space

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

Source of irrigation water (Col 1)
River……1 Wells ……..…..4
Lake ……2 Deep wells…… .5
Dams……..3 Cannals …….. .6
Tape water……..…… …7

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				

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 Businеman/Shop.....5
Cooperative Union.....3 Privіate individuaks.....6 Other.....9

		7.1.1a	7.1.2a	7.1.3a
Source of credit				
Credit provided to		7.1.1b	7.1.2b	7.1.3b
	(Male=1, Female=2)			

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	Jina 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

Number	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	
		Average	Max	Average	Max
11	Maize	1,150	6,250	466	2,530
12	Paddy	700	4,000	283	1,619
13	Sorghum	750	3,500	304	1,417
14	Bulrush Millet	350	3,000	142	1,215
15	Funger Millet	300	2,500	121	1,012
16	Wheat	1,150	4,500	466	1,822
17	Barley	1,400	1,800	567	729
16	Cassava	3,000	7,000	1,215	2,834
17	Sweet potatoes	600	8,000	243	3,239
18	Irish potatoes	750	8,500	304	3,441
19	Yams	4,000	10,000	466	1,822
25	Coco yams	2,500	5,000	567	729
26	Onions	30,000	50,000	1,215	2,834
27	Ginger	20,000	30,000	243	3,239
31	Mahara Beans	400	1,300	304	3,441
32	Cow peas	300	1,750	121	709
33	Green gram	1,500	1,800	1,012	2,024
34	Pigeon peas	600	1,500	243	607
35	Chick peas	500	1,500	202	607
36	Bambara nuts	600	4,000	243	1,619
41	Sun flower	600	1,700	243	688
42	Simsim	300	1,000	121	405
43	Gound nuts	600	4,000	243	1,619
47	Soyabeans	1,300	2,500	526	1,012
48	Caster seeds	300	750	121	304
75	Pineapple	25,000	60,000	10,121	24,291
50	Cotton	300	1,500	121	607
51	Tobacco	500	1,500	202	607
53	Pyrethrum			0	0
62	Jute	800	3,500	324	1,417
44	Palm oil	1,150	5,000	466	2,024
45	Cononut	1,500	8,000	607	3,239
46	Cashw nut	9	60/tree	4	24

	Name of Crop	Kilogram/ha		Kilogram/acre	
		Average	Max	Average	Max
86	Cabbage	20,000	50,000	8,097	20,243
87	Tomatoes	25,000	60,000	10,121	24,291
88	Spinach	15,000	17,000	6,073	6,883
89	Carrot	25,000	30,000	10,121	12,146
90	Pepper	3,500		1,417	0
91	Amaranthus	20,000	40,000	8,097	16,194
92	Pumpkin	35,000	40,000	14,170	16,194
93	Cucumber	5,000	10,000	2,024	4,049
94	Egg plant	30,000	60,000	12,146	24,291
95	Water melon	10,000	20,000	4,049	8,097
96	Caouliflower	17,000	20,000	8,097	16,194
52	Cotton	800	25,000	14,170	16,194
54	Coffee	500	100	2,024	4,049
55	Tea	2,500	10,000	12,146	24,291
56	Cocoa	150	1,000	4,049	8,097
57	Rubber	400	1,400	6,883	8,097
58	Wattle			324	10,121
59	Kapok			0	0
60	Sugar cane	60,000	150,000	24,291	60,729
61	Cardamon	3,000		1,215	0
71	Banana	10,000	50,000	4,049	20,243
72	Avocado			0	0
73	Mango	10,000	25,000	4,049	10,121
74	Pawpaw	50,000	70,000	20,243	28,340
76	Orrage	15,000	40,000	6,073	16,194
77	Grape fruit	30,000	50,000	12,146	20,243
78	Grapes	5,000	30,000	2,024	12,146
79	Mandarin	15,000	40,000	6,073	16,194
80	Quava	7,000	35,000	2,834	14,170
81	Plums			0	0
82	Tufaha		20,000	0	8,097
83	Pea	15,000	27,000	6,073	10,931
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		

4.2.12.1.1...1.1 **Appendix V**

4.2.12.1.1...1.2

4.2.12.1.1...1.3 **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

Region	.....			Ward	
District	.....			Village	

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

Enumerator Name ..... Signature .....

Date of Enumeration

d d / m m / y y y y

Hour	Minutes
Start Time	
End Time	

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 ↓4

4.2.12.1.1...1.4 **Appendix V**
4.2.12.1.1...1.5
4.2.12.1.1...1.6 **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 Form Office Register	After enumeration	Comments
(1)	(2)	(3)	(4)	(5)
☐☐☐		☐☐☐☐	☐☐☐☐	
☐☐☐		☐☐☐☐	☐☐☐☐	
☐☐☐		☐☐☐☐	☐☐☐☐	
☐☐☐		☐☐☐☐	☐☐☐☐	

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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 _____ ☐☐ village _____ code ☐☐ Hatua ☐☐☐
Code ☐☐

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)
☐☐	☐☐☐		☐☐☐☐							
☐☐	☐☐☐		☐☐☐☐							
☐☐	☐☐☐		☐☐☐☐							
☐☐	☐☐☐		☐☐☐☐							

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ACLF 2

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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)