

**THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA CENTRAL
STATISTICAL AGENCY**

**LARGE AND MEDIUM SCALE COMMERCIAL FARMS SAMPLE SURVEY
2017/18(2010E.C)**

RESULTS AT COUNTRY AND REGIONAL LEVEL VOLUME VIII



**STATISTICAL REPORT ON
AREA AND PRODUCTION OF CROPS, AND FARM MANAGEMENT PRACTICES**

**ADDIS ABABA
JULY, 2018**

STATISTICAL BULLETIN

TABLE OF CONTENTS	Page
Table of Contents	I
PART I: BACKGROUND AND OBJECTIVE	
1.1 Background	1
1.2 Objectives of the 2017/18(2010E.C)Commercial Farm Sample Survey	3
PART II :SURVEY METHODOLOGY, OPERATION & DATA PROCESSING	
2.1 Survey Methodology	4
2.2 Scope and Coverage	4
2.3 Sampling Frame	4
2.4 Sample Design	4
2.5 Organization of Field Work	5
2.6 Training	5
2.7 Method of Enumeration	6
2.8 Data Processing	6
2.9 Editing, Coding & Verification	6
2.10 Data Entry, Cleaning and Tabulation	6
2.11 Concepts and Definitions	7
PART III: SUMMARY SURVEY RESULTS	
3.1 Introduction.....	9
3.2 Meher Seasons Total Cropped Area and Production of Temporary Crops	9
3.3 Cropland Area and Production of Permanent Crops.....	12
3.4 Comparison of Grain Crops Yield With Last Year (2012/13).....	15
3.5 Farm Management Practice	15
3.6 Introduction	15
3.7 Cropland Area Under Different Agricultural Input and Farm Management Practices.	15
APPENDIX I: ESTIMATION PROCEDURES	18
APPENDIX II: QUESTIONNAIRE	21
APPENDIX III: NUMBER OF PLANNED AND COVERED SAMPLE.....	24
APPENDIX IV: STATISTICAL TABLE.....	26

PART ONE

1. BACKGROUND

Agriculture is the primary activity in Ethiopia, where about 84 percent of the country's population engaged in various agricultural activities and generates its income for household consumption to sustain its livelihood. Moreover, the country generates the lion share of its foreign currency earnings from the sales/export of agricultural commodities abroad and currently the sector contributes about 42 percent to the country's GDP, and above all, the sector is believed to be the main source of capital to be accumulated for the process of establishing the future industrialized Ethiopia, which again shows the determinant role played by the sector to bring about sustainable economic development for the country in the years to come.

Ethiopian agriculture have suffered for years from the use of traditional farm implements and subsistence farming system as well as limited use of modern farm inputs, that resulted to the sector's poor performance (i.e. low productivity of the sector). However, the surplus production along with productivity increments that have been registered during the last six consecutive years, indicated that the agricultural system as a whole and the crop production sub sector in particular is showing improvement in terms of productivity, the extent and use of modern farm inputs, and modern farming system practices, etc.

Despite those bottlenecks that hampered the sector's productivity, Ethiopian agriculture, as it had been used for centuries in the past and till the present, the sector is believed to continue being the leading and determinant sector of the country's future economic development.

As mentioned earlier, improvements that have been registered in the overall performance of the agricultural sector, during earlier consecutive years, cannot be considered as an end by itself but could be taken as an indicator for the need of much more efforts to be made by the government and the concerned stakeholders to adopt and implement the available modern and improved agricultural technologies that help attain enhanced productivity and maintain sustainable development of the sector. Thus, all efforts required to bring about the desired change/improvements on the overall performance of the agricultural sector as a whole, could only be successful, if and only if policies, strategies, implementation plans and programs and related efforts are geared towards addressing the problems identified in the two agricultural sub- sectors. The two major agricultural sub sectors are:-

- a) **Private agricultural holding:** this sub-sector includes rural-urban small and fragmented privately owned agricultural holdings on which all types of agricultural activities such as crop production, livestock rearing...etc, are performed by the operator/holders to obtain agricultural produce for

self/family consumption and sometimes for sell. However, over 95 % of the annual gross total agricultural output of the country is said to be generated from this sub-sector,

- b) **Commercial Farms**: - this sub-sector refers to the farms that include state and private commercial farms mainly established for the purpose of profit making by selling agricultural products at local market and/or abroad. These farms are commonly owned and operated by government, private companies and non-governmental institutions, such as private individual investors, share holders, religious and non- religious institutions...etc.

The sub-sector is mainly characterized by the use of relatively capital intensive, mechanized and market oriented farming system, with increased use of modern farm management practices and inputs such as, use of high tech-farm machineries and implements, irrigation scheme, use of chemical fertilizers, pesticides and improved seeds.

In Ethiopia, however, due to various reasons, commercial farms are not widely spread, and as a result of which the contribution of these farms to the country's gross total agricultural output is limited only to about 5 percent. According to some written documents, the introduction of Commercial farms in Ethiopia goes back to the Pre-Derg era, where government owned pilot state and research farms on the basis of Yugoslav model [MOSFD 1986-370], which pave the way for the establishment of private commercial, state and institutional farms in Awassa, Arbaminch, Zeway and Shewarobit which latter on transformed into well organized and relatively mechanized large and medium scale state, private and institutional farms that are collectively called 'Commercial Farms' .

Since then, large and medium scale commercial farms in Ethiopia had been forced to be reorganized by undertaking various structural and organizational adjustments with varying legal status including ownership over a number of economic policy changes that took place over the last three decades. Nevertheless, a decade has passed since the existing Commercial farms reorganized on the basis of market oriented economic policy adopted by the existing Federal Democratic Republic Government of Ethiopia.

This report is the eighth of its type, where the first one was published in the 2002/03 (1995 E.C.), presenting the results of the 2001/02 (1994 E.C.) and the second one was published in the 2008/2010(2001 E.C). During the years between 2002/03 (1995 E.C.) and 2008/2010(2001 E.C) Central Statistical Agency had conducted more than Six surveys on Commercial farms but failed to produce the results due to various reasons mainly due to unwillingness of respondents to give accurate information. However, after making a through revisions and improvements on the previously adopted questionnaires, the reports on data collection methodology, related survey documents and results in the years 2010/10 (2002 E.C.) and 2010/11 (2003EC) were also released, CSA conducted Large and Medium Scale Commercial farms sample survey covering the whole country.

This report, therefore, presents quantitative information on total area, volume of production and yield of major crops (temporary and permanent), and total crop area under different farm management practices as obtained and summarized from the results of the 2015/16(2008 E.C.) commercial farms sample survey of the Meher Season.

2. OBJECTIVES OF THE 2017/18(2010E.C)LARGE AND MEDIUM SCALE COMMERCIAL FARMS SURVEY

The major objectives of the 2017/18(2010E.C)commercial farms sample survey is to provide:-

- Statistical data on crop area and volume of production by farm and crop type to fill-in the existing data gap,
- Detail data on various inputs applied for large and medium scale agricultural production mainly quantity of Chemical fertilizers, pesticides, insecticide improved seeds & indigenous seed.

The provision of the above mentioned information are important for planning and policy formulation as well as for promoting the establishment of Commercial farms, and to design and formulate means and ways as how to facilitate the transformation of the existing small and fragmented private peasant agricultural holding to Commercial farms in the long run.

PART II

SURVEY METHODOLOGY, OPERATION AND DATA PROCESSING

2. Survey Methodology

2.1 Scope & Coverage

The 2017/18(2010E.C)large and medium scale commercial farms cover all urban & rural parts of the country. Considering the cost and manageability of field work a sample of 1906 farms were planned and decided to be covered at national level. But the survey succeeded to cover 1641 farms. This sample is allocated to each region based on number of farms each region has. The regional level distribution of the Farms is given in Appendix III.

2.2 Sampling frame

The sampling frame which is list of commercial farms with their cropland area size and livestock number is collected from all part of the country through CSA Branch Statistical Offices. The collected farm list is compiled at the head office and the functional and non functional farms at the time of updating are

identified. Farms which are selected directly and those selected by sample are identified based on this frame. Then the lists of commercial farms to be covered by the survey are distributed back to the Branch Offices for the actual survey.

2.3 Sample design

Two separate sample design is prepared for Commercial farms involved in crop production and livestock. Before the sample selection was done, the cut off point for the farms was decided. The same cut off point for farms involved in crop production and those involved in livestock was set. Farms having total area/number of livestock above the cutoff point are selected with certainty where as farms having area/number of livestock below the cutoff point is sampled using probability proportional to size, size being the total area / number of livestock of the farms. For farms involved in livestock simple random sampling technique is used for selection.

The estimation procedure and measure of their precision are given in Appendix I

3. Organization of Field Work

Field organization is usually used as a means to link the data source with the central office to properly carry on the field data collection operations and for the strict control and supervision of the fieldwork.

Since the Commercial farms sample survey is part and parcel of the 2017/18(2010E.C)annual Agricultural Sample Survey, the field organization setup that has been used for the agricultural sample survey of private agricultural holdings was also used for the enumeration of Commercial farms. Moreover, as it has been planned earlier, the actual field data compilation operation for commercial farms was scheduled to be started at the time the field data collection operation that have been carried out for private agricultural holdings were almost due completion. The field worker who was assigned for Commercial farm enumeration was responsible to cover a minimum of 1 and a maximum of 5 farms depending on the number of sampled farms within the territory of the Branch Statistical Office the enumerator belongs to. Moreover, senior supervisors and statisticians who accomplish their assignment in the private peasant agricultural holdings enumeration were assigned as supervisors for quality control that includes spot check, re-interview, and check the consistence of information in the filled-in questionnaires...etc.

3.1 Training

Country experience indicates that it is essential to provide instruction manual and training for survey enumerators and supervisors in order to standardize procedures, secure common understanding of tasks to be performed and provide a reference guide during enumeration. Good data quality is assured when the training meets its objectives and the enumerators and supervisors show a sense of responsibilities and enthusiasm in the exercise of the survey operations.

However, due to their scattered location, and a number of technical and administrative reasons, the field data collection activities for commercial farms was planned to be carried out by senior supervisors. Accordingly, CSA organized a two stage training program that is a training of trainers and followed by training of supervisors. The first stage training was given at the CSA headquarter in Addis Ababa to the trainers consisting of professional staff from different departments at head office. The second stage training was wider in its scope, focusing on reviewing the details of the prepared survey documents and followed by discussions on the past survey experience that took place in 25 training centers located at CSA Branch Offices .

3.2Method of enumeration

Commercial farms are expected to properly register and document each and every activity carried out in each and every plot of land mainly for administrative purpose. In line with this, the data collection of the year 2017/18(2010E.C)Commercial farms sample survey was performed by interviewing the farm Owners/managers. The areas of these farms are directly measured by GPS except that of state owned farms whose areas are collected by interview.

4. Data processing

4.1 Editing, Coding and Verification

In the 2017/18(2010E.C)Commercial farms sample survey; the filled-in forms retrieved from the Branch Statistical Offices were primarily received and systematically registered at the documentation unit of the CSA head quarters in Addis Ababa. Before launching the actual editing and coding activities, the Agriculture, Natural Resources, and Environment Statistics Directorate staff gave adequate training to 15 editors and coders who latter on carried out the manual editing, coding and verification of the filled-in Commercial farms questionnaires. The manual editing and coding activities of the filled-in forms were done region by region. To ensure the quality of the manual editing and coding work, verification of the completed questionnaires was carried out on 100% basis. For the total country, the editing, coding and verification of the filled-in forms for the commercial farms took 15 editors and about 14 working days.

4.2 Data Entry, Cleaning and Tabulation

About 15 data encoders were assigned to undertake the data entry activity of the 2017/18(2010E.C)filled-in and edited questionnaires of the large and medium scale farms. Before starting the actual data entry operation, data encoders were trained for about a half day using computer programs developed by the Data Processing Department staff. The Programmers prepared the data entry programs using CSPro.

The data entry exercise was carried out using 38 personal computers (PC's), and it was done region by region as in the case of the manual editing, coding and verification. In order to check the quality of the entered data, verification exercises were carried out. To this end verification activity, on 100% basis was carried out through the process of re-entering the data. For the total country, the whole data entry process of the filled-in forms on commercial farms took 38 entry clerks around 14 working days.

Data entered into the computer needs to be checked for completeness, consistency and validity. For this purpose, computer edit programs were prepared. Using printouts from these programs and referring to the original filled-in forms, corrections were made by trained manual data cleaning technicians. Moreover, other data-cleaning computer operators were involved in making the actual corrections of the data on the computer. Additionally, an intermediate set of instructions or programs were made available and applied on the data to prepare information suitable for tabulation. These programs were prepared using CSPro and IMPS software's. Like IMPS Software, CSPro is used as a tool for entering, editing and tabulating data. Data made ready for tabulation through the process of cleaning and intermediate programs was finally used to generate the required tables. This was done using tabulation programs developed by the senior programmers of the Data Processing Department.

5. Concepts and Definitions

Information on all items of agriculture is not useful until the items are distinctly defined and understood. The procedure of stating data items and related terms is a prerequisite for making standards and definitions for collection and compilation of agricultural data. The intent of using standard concepts and definitions is not only to provide quality data but also to ensure that the right items are enumerated and compiled accurately to reflect the agricultural situation. Standard concepts and definitions used in a survey setup provide clear linkages between various tables of the current and previous surveys and maintain consistent enumeration and measurement of variables of interest. To this end, the CSA has put a lot of efforts into communicating concepts and definitions to the survey field staff through training and instruction manuals. The concepts and definitions used in the census were made to conform to the FAO standard with a slight adaptation of a few of them to suit the agricultural situation in Ethiopia. The concepts and definitions used in commercial farms sample survey includes:-

Commercial Farms:- refers to certified (legally established) farms owned/operated by government, private investors, and/or share holders, which are profit oriented large and medium scale farms. These farms relatively use capital intensive, mechanized and market oriented farming system, as well as modern farm management practices and inputs such as irrigation scheme, fertilizers, pesticides . . . etc, to attain high productivity per unit of area.

Agriculture:- The growing of crops and/or raising of livestock for own consumption and/or sale.

Crop:- Includes Cereals, Pulses, Oilseeds, Vegetables, Root Crops, Fruits, Coffee, Inset, Chat, Hops, Sugar cane, Cotton, Tobacco ... etc produced for food, making drinks, stimulation and making fabrics or clothing.

Crop Production:- The processes of growing and harvesting of the above crops for own consumption and/or sale.

Temporary Crops/Annual:- Annual temporary crops are crops which are grown in less than a year's time, sometimes only a few months with an objective to sow or replant again for additional production

following the current harvest. Continuously grown crops planted in rotation are also considered as temporary crops since each is harvested and destroyed by plugging in preparation for each successive crop.

Permanent Crops:- crops which are grown and occupy land for a long period of time, not requiring replanting for several years after each harvest, are considered as permanent crops. All fruit trees (i.e. Oranges, Mandarin, Banana ...etc) and trees for beverages (i.e. Coffee, Tea, Hops...etc.) are considered permanent crops but meadows and pastures are excluded.

Meher (main) Season Crop:- any crop harvested between Meskerem (September) and Yekatit (February) is considered as Meher season crop.

Belg Season Crop:- any crop harvested during the months of March (Megabit) and August (Nehase) is considered to be Belg season crops.

Improved Seed:- is defined as crop variety which gives significantly higher yield, better quality and/or better benefit compared to traditional varieties of seeds and usually produced by the Ethiopian Seed Enterprise (ESE) in Ethiopia.

Fertilizer:- Refers to organic and/or inorganic nutrients to the soil intended to increase the amount of plant nutrients available for crop growth. Usually, fertilizers are divided into two parts, natural and industrial. Examples of natural fertilizers are farmyard manure, wood ashes, etc, while industrial fertilizers are DAP (Di- Ammonium phosphate), UREA (Ammonium Nitrate), etc.

Pesticides:- **Pesticides** are chemicals useful for mitigation, control or elimination of pests which are troublesome or harmful to crops. Insecticides, herbicides and fungicides are all considered as pesticides.

PART III

SUMMARY OF THE 2017/18(2010E.C)LARGE AND MEDIUM SCALE COMMERCIAL FARMS SAMPLE SURVEY RESULTS

3.1 Introduction

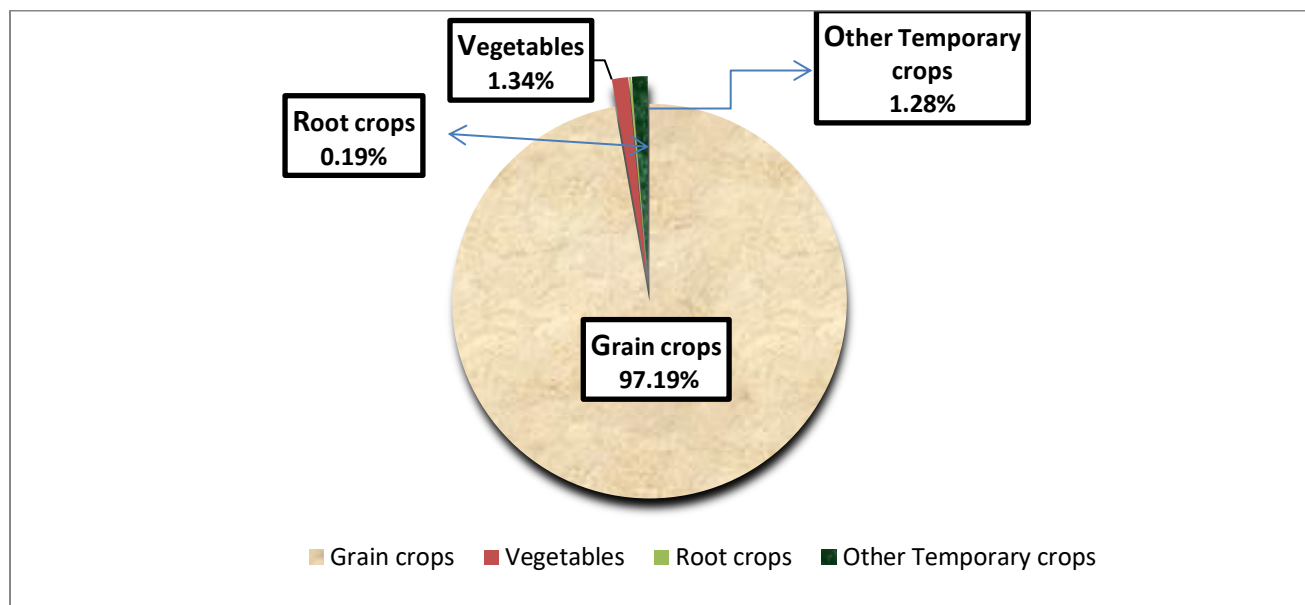
The type of crops on which data were collected during the 2017/18(2010E.C)commercial farms sample survey are those food crops that are used for domestic consumption and for export as well as those crops used as raw material for domestic agro-industries. Based on their biological classifications these crops are categorized into three major groups i.e. grains (which include cereals, pulses and oil crops), vegetables and root crops from the category of temporary crops and three major groups i.e. Fruit crops, Cash crops and industrial crops from the category of permanent crops. In this chapter of the report, discussions on major findings of the survey results on cropped area and production of temporary and permanent crops of Meher Season crops presented in Section 3.2. Likewise, major findings on Farm Management Practices for Temporary and Permanent crops for Meher Season is presented in section 3.5, as obtained and summarized from the results of the 2017/18(2010E.C).

3.2 Meher Season' Total Cropland Area and Production of Temporary Crops

a) Grain Crops

Grain crops refer to the major crop categories that included cereals, pulses and oilseeds, which constituted the major food crops for the majority of the country's population. Besides being staple food crops, the production of grain crops in Ethiopia serves as a source of foreign currency earning that will be used as an input for all efforts being made to bring about sustainable economic growth in the country. In Ethiopia, therefore, the production of grain crops is the most widely spread crop production activity both in terms of the extent of cropped land area and volume of production when compared with crops such as vegetable and root crops.

Fig 1. Percentages Of Total Cropland Area By Major Crop Category Of Meher Season For Commercial Farms: Country Level, 2017/18(2010E.C)

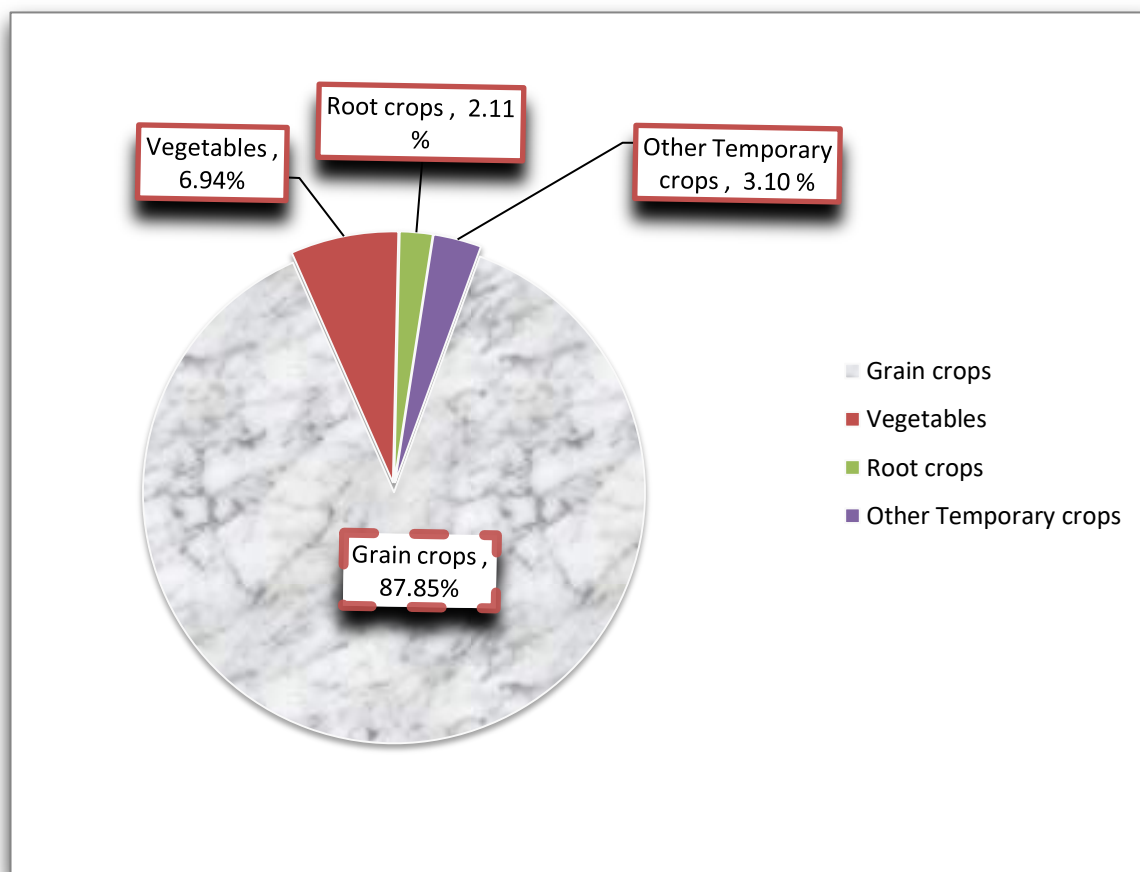


Summary Table 1. Estimates Of Total Cropland Area By Major Crop Category Of Meher Season For Commercial Farms: Country Level, 2017/18(2010E.C)

Crop Type	Area In Hectare	Percentage
Grain Crops	641,786.88	97.19
Vegetables	8,879.19	1.34
Root Crops	1,250.82	0.19
Other Temporary Crops	8,438.66	1.28
All temporary crops	660,355.55	100.00

According to the results of the 2017/18(2010E.C) Large and Medium Scale Commercial Farms sample survey, the total area covered by grain crops was found to be **641,786.88 hectares (97.19%** of the total country level temporary crops covered land area), from which a total of **13243443.61** quintals of production, (87.85% of the total country level production of temporary crops) was obtained during 2017/18(2010 EC) Meher season harvest. The results of this survey indicates that, both the cultivated land area and volume of production of grain crops obtained from crop production activity carried out during the 2017/18(2010E.C) Meher Season, contributed the lion share.

Fig 2. Percentage distribution of Total Production Harvested by Major Crop Category and Meher Season for Commercial Farms: Country Level, 2017/18(2010E.C)



Summary Table 2. Estimates of Total Production Harvested by Major Crop Category and Meher Season for Commercial Farms: Country Level, 2017/18(2010E.C)

Crop Type	Production in quintals	Percentage
Grain crops	13243443.61	87.85
Vegetables	1046769.43	6.94
Root crops	318155.46	2.11
Other Temporary crops	466885.18	3.10
All temporary crops	15075253.68	100.00

Moreover, as it has been mentioned earlier, cereals which are classified within the grain crops category, are also produced in greater volume compared to the other crops by commercial farms because they are the principal staple crops and export commodities. As a matter of fact, cereals are grown in almost all the survey covered commercial farms with notable variation in the extent of area planted and the volume of production obtained across farms. This variation is seemingly caused by a shift in choice of crops, difference in weather conditions and speculated market demand. As indicated in the Appendix iTable 2, cereals covered a total of **296,529.01** hectares of land area, from which a production of

9,702,259.60 was obtained during 2017/18(2010E.C)Meher Season harvest. Similarly, pulses and oilseeds within the grain crops category are rich in their nutrient content and being used as essential part of the dietary requirement for Most Ethiopians. Above all pulses and oil crops form a significant commodity group of export that brings a considerable amount of foreign currency earnings for the country For the reasons mentioned above and a number of others, pulses and oil crops are grown widely by commercial farms in Ethiopia. Nevertheless, the extent of crop land area and volume of pulses and oil crops production in commercial farms show variation from one farm to another for the same reasons mentioned for cereals above. According to the results of the 2017/18(2010E.C)commercial farms sample survey, pulses and oil crops covered a total land area of **58,762.33** and **286,495.54** hectares, from which a total production of **1,111,722.30** and **2,429,461.71** Quintals was obtained during the 2017/18(2010E.C)Maher seasons harvest, respectively (For details see Table 2 in Appendix iv).

b, Vegetables

Vegetables are crops that are rich in vitamins necessary for the healthy growth of humans. Moreover, due to their high nutritional value vegetables do have ever rising demand both in local and foreign markets, and are classified among those export commodities' that generate considerable amount of foreign currency earnings to the country. As a matter of these facts commercial farms in Ethiopia used to grow vegetables over a considerable land area for years.

As indicated in Appendix iv Table 2, vegetables covered a total of **8,879.19** hectares of land from which a total volume of **1,046,769.43** Quintals were obtained in 2017/18(2010E.C)by Meher Season's harvest

c, Root Crops

Production of **318,155.46** quintals was obtained from Meher season's harvest (Tables 1 in Appendix iv).Like that of grain crops the contribution of root crops such as potatoes and sweet potatoes for human consumption as food crops cannot be over emphasized. The majority of the population in Southern and South Western Ethiopia mainly depends on root crops for their daily food consumption. In addition to serving as food crop and staple food at the time of surplus and/or deficit production years, root crops yield industrial and pharmaceutical products. Moreover, it should be noted that root crops are also a good source of cash and foreign exchange. As the survey result indicates, the total area under root crops was found to be **1,250.82** hectares, from which a total Production of **318,155.46** quintals was obtained.

3.3 Cropland Area and Production of Permanent Crops

Permanent crops are long-term crops, which do not have to be replanted for several years after each harvest. These include tree crops such as coffee, enset, chat, oranges, mangoes, bananas, papayas, avocados...etc. It doesn't include cotton. The trees that yield oranges; mangoes, papayas, apples and other are known as fruit trees. Permanent crops are a good source of cash both for the farms and the

country for generating income and foreign exchange. According to the survey result permanent crops covered a total land of **346,506.13** Hectares with a total production of **68,949,718.83** Quintals obtained from commercial farms during the year 2017/18(2010E.C)Meher season harvest. These area and production for permanent crops does not include the values of cotton. For simplicity of description of the statistical tables and comparison purposes permanent crops have been grouped into three categories.

The categories are fruit crops, cash/stimulant crops, industrial and other permanent crops

Summary Table 3.Estimates of total area harvested of Meher Season’s permanent crops by major crop category for commercial farms: National Level 2017/18(2010E.C)

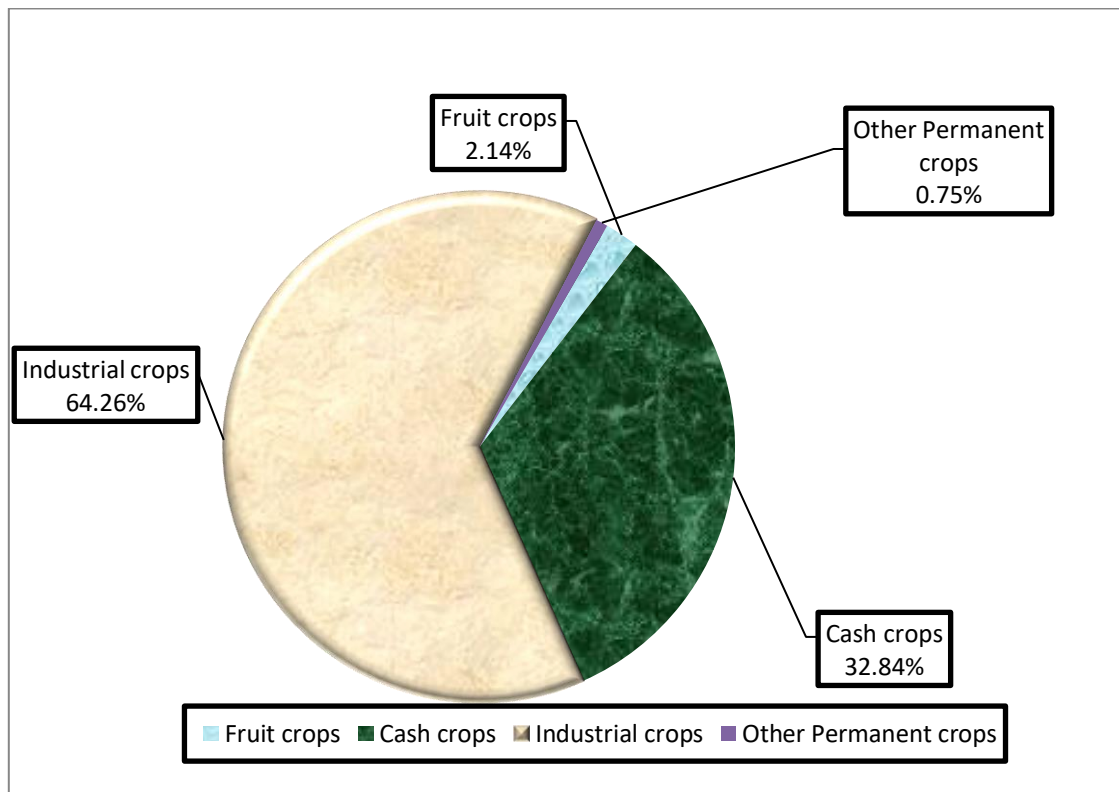
<i>Crop Type</i>	<i>Area in hectare</i>	<i>Percentage</i>
Fruit crops	7,428.64	2.14
Cash crops	113,806.28	32.84
Industrial crops	222,654.97	64.26
Other Permanent crops	2,615.95	0.75
<i>All permanent crops</i>	<i>346,505.84</i>	<i>100.00</i>

A Fruit Crops

Fruit production is relatively new to Ethiopian agricultural system, with commercial fruit production dating back to only about six decades. Therefore, most of the important fruits that are produced in commercial farms are recent introductions into the country. However, various kinds of fruit crops grow in different regions of the country yielding varying quantities of fruits within commercial farms. Summary of total area harvested of Meher Season’s permanent crops by major crop category for commercial farms is illustrated in Summary Table 3 and in Fig 3.

As indicated in Summary Table 3, fruit crops covered a total area of **7,428.64** Hectares (**2.14%** of the total crop land area under permanent crops), with about **986662.59** quintals of production (**1.43 %** of the total permanent crops production), during the 2017/18(2010E.C)Meher Season harvest. Oranges, Mangoes and Bananas took the highest area and production share of fruit crops (See Table 2in Appendix iv).

Fig 3 :-percentage distribution of of area under permanent and industrial of permanent crops by major crop category for commercial farms: National Level 2017/18(2010E.C)



B . Cash/Stimulant crops

Cash/stimulant crops include crops such as tea, coffee and chat considered as easily marketable at local and foreign markets. Commercial farms engaged in growing stimulant crops such as coffee and tea uses larger area with the objective of obtaining larger volume of production so as to earn considerable amount of cash in local and/or foreign currency. As indicated in Table 3 cash/stimulant crops were grown on an estimated total land area of **113,806.28** hectares, with a total production estimated at **1548126.05** quintals of production, contributing about **32.84%** and **2.24 %** to the total cropland area and production of permanent crops, respectively (For details see Summary Table 3).

C Industrial Crops

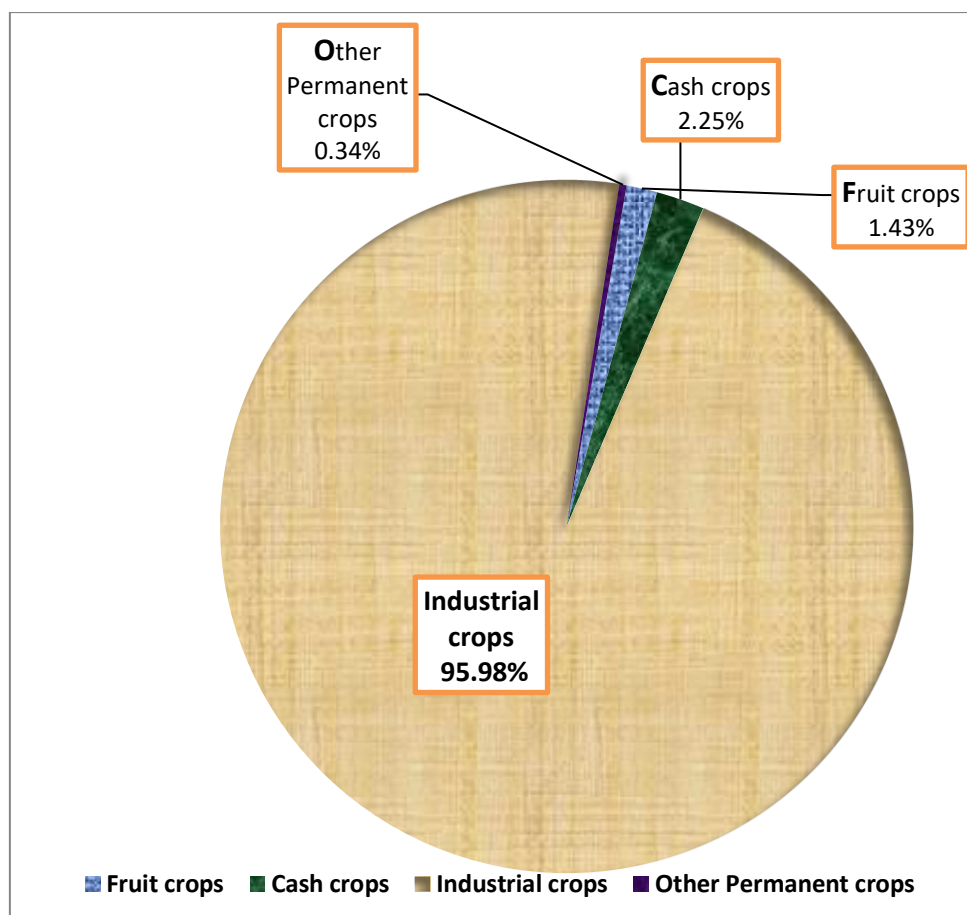
Industrial crops refer to crops commonly used as raw material for domestic agro-industries, which include crops such as **cotton** and **sugarcane**. Industrial crops grown in commercial farms covered a total land area of **222,654.97** hectares (64.26% of the total area under permanent crops), with a total production of **66178668.66** Quintals (**95.98 %** of the total permanent crops production), during the 2017/18

Meher Season harvest.

Summary Table 4. Estimates of total production harvested of Meher Season's permanent crops by major crop category for commercial farms: *National Level 2017/18(2010E.C)*

<i>Crop Type</i>	<i>production in quantals</i>	<i>Percentage</i>
Fruit crops	986662.59	1.43
Cash crops	1548126.05	2.25
Industrial crops	66178668.66	95.98
Other Permanent crops	236261.43	0.34
<i>All permanent crops</i>	68949718.73	100.00

Fig4:- Percentage Distribution Of Of Production Under Permanent And Industrial Of Permanent Crops By Major Crop Category For Commercial Farms: National Level 2017/18(2010E.C)



3.4 Comparison of the current year (2017/18) Grain Crops yield with last

Year (2016/17), estimates.

Table A of the report attempts to compare area covered and total production estimates of selected important food crops obtained from the 2017/18(2010E.C)commercial farms Survey with last year i.e. 2016/17(2010 E.C.) Area and crop production estimates of the same crops.

the estimated cropped land area obtained this year for grain crops shows increased by **0.3%** and grain crops production obtained have decreased by **2.09%** over last year 2016/17estimate.

3.5 Farm Management Practice

3.5.1 Introduction

The overall performance of a country's agriculture, usually affected by quite a number of factors, among which the level and extent of using modern agricultural practices (such as increased use of fertilizer, pesticides, and improved seeds...etc) is the first and the most important factor to be considered. This is merely because increased productivity can only be achieved through the use of the above mentioned farm inputs along with appropriate newly introduced modern farm management practices.

Towards this end, a number of modern techniques and technologies are available to help achieve enhanced crop productivity. The major actors behind achieving high level of productivity include among others, greater and efficient use of fertilizers, pesticides and improved seeds. Thus, during the year 2017/18(2010E.C)commercial farms sample survey, basic data on the agricultural inputs and practices were collected, summarized and the result are presented in this report.

3.5.2 Cropland Area under Different Agricultural Input and Farm Management Practices

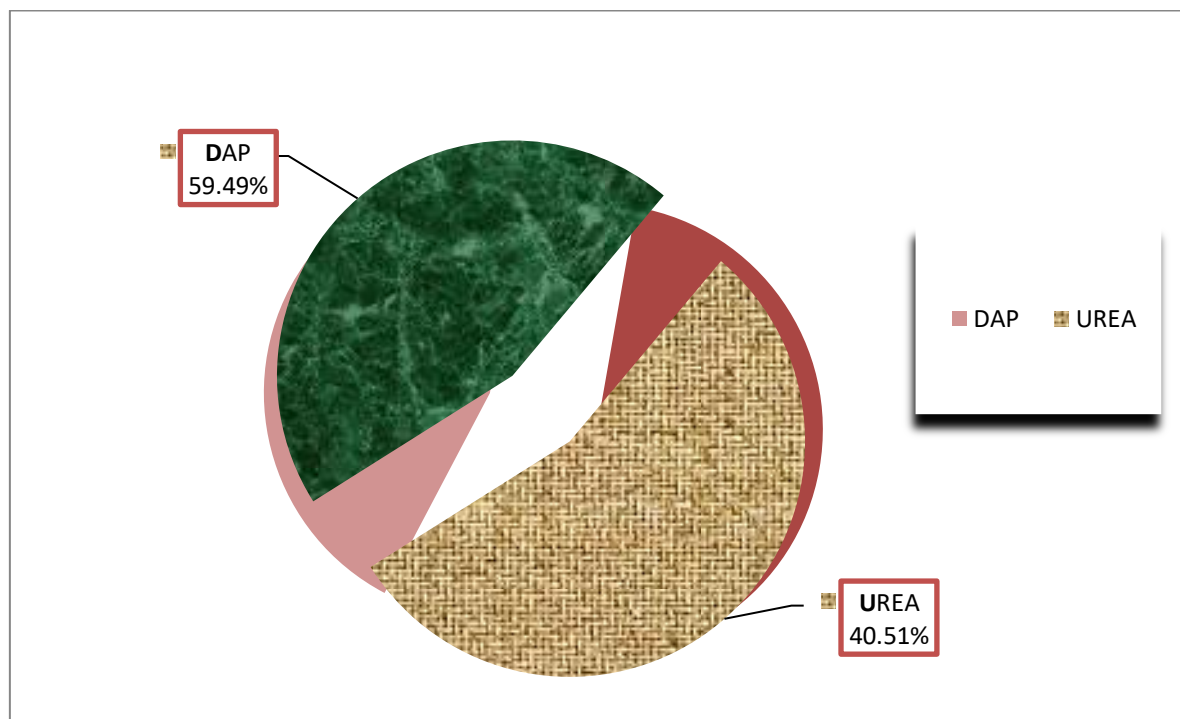
This section of the chapter deals with the agricultural input applied cropland area and quantity of inputs used by commercial farms.

a. Fertilized Cropland Areas and Quantity Applied

Fertilizing materials and mixture are not restricted to inorganic chemical but include organic substances such as crop residues, animal dung ...etc. Therefore, fertilizers refer to organic and/or inorganic materials added to the soil with the intention of increasing the amount of plant nutrients available for crop growth. However, in 2017/18(2010E.C)(2010E.C) commercial farms sample survey; data was collected only on the application of chemical fertilizers. The chemical fertilizers that were covered by the survey consisted of DAP (DI-Ammonium phosphate, and UREA (Ammonium nitrate). The results of the survey indicates that at country level the total UREA and DAP applied cropland area was found to be **463,271.68** and **680,337.63** hectares, which accounted for **40.51%** and **59.49%** of the total cropland area reported for Commercial farms at country level, during the 2017/18 Meher Season harvest. (For details see Table 3 on Appendix iv

)

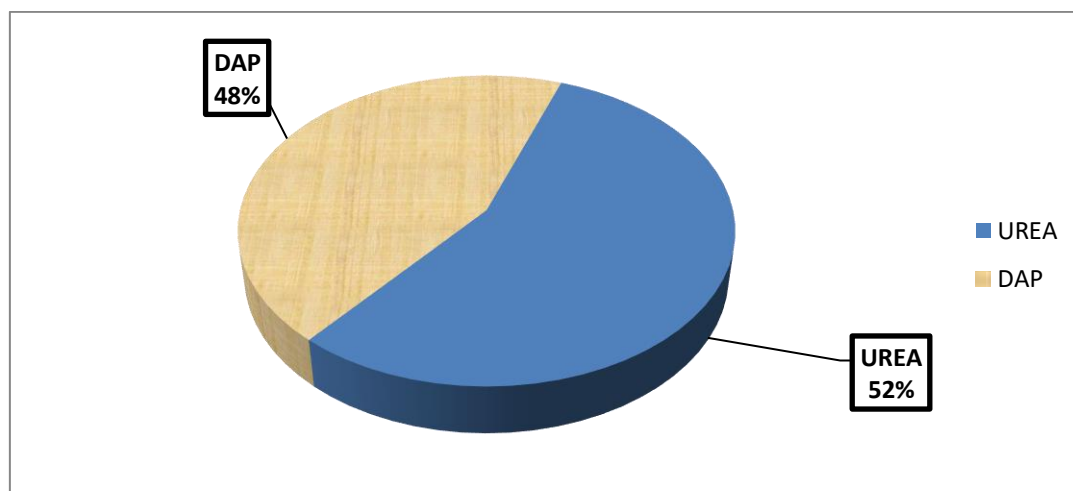
Fig 5. percentage distribution of chemical fertilizers applied crop land area by type of fertilizer for meher season for commercial farms at country level 2010 E.C(2017/18).



b.Quantity of Chemical Fertilizer Applied

According to the results of the survey, the total quantity of chemical fertilizers applied during 2017/18 Meher Season for commercial farms was found to be **1,255,391.04** quintals. Out of which the share of DAP was **48%** while the remaining **52%** share was found to be the contribution of UREA. (For details see Table 3 on appendix and Figure 6).

Fig 6. percentage distribution of Quantity of chemical fertilizers applied by type of fertilizer for meher season for commercial farms at country level 2010 E.C(2017/18)



C. Cropland Areas Treated with Chemicals.

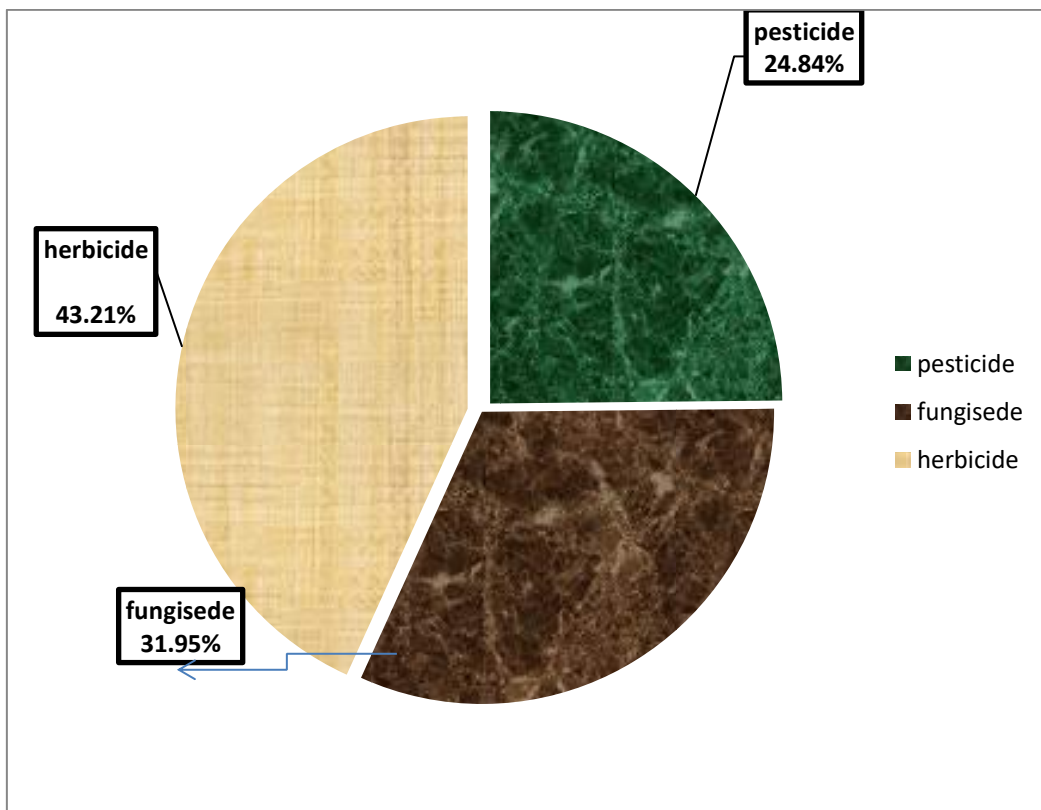
Pesticides, fungicide and herbicides are chemicals that are commonly used for the control of mitigation of elimination of pests that are detrimental to crops growth and productivity

As indicated in statistical For details see Table 3 on appendix, the total cropland area treated with pesticides, fungicides and herbicides in commercial farms was found to be **440,390.15**

Hectares, **566,599.28** Hectares and **766,162.78** hectares of cropland area, respectively. (For details see Table 3 on appendix and Figure 7).

Fig7.percentage distribution of chemicals treated crop land area by type of chemicals used for meher season for commercial farm at country level 2017/18(2010 E.C

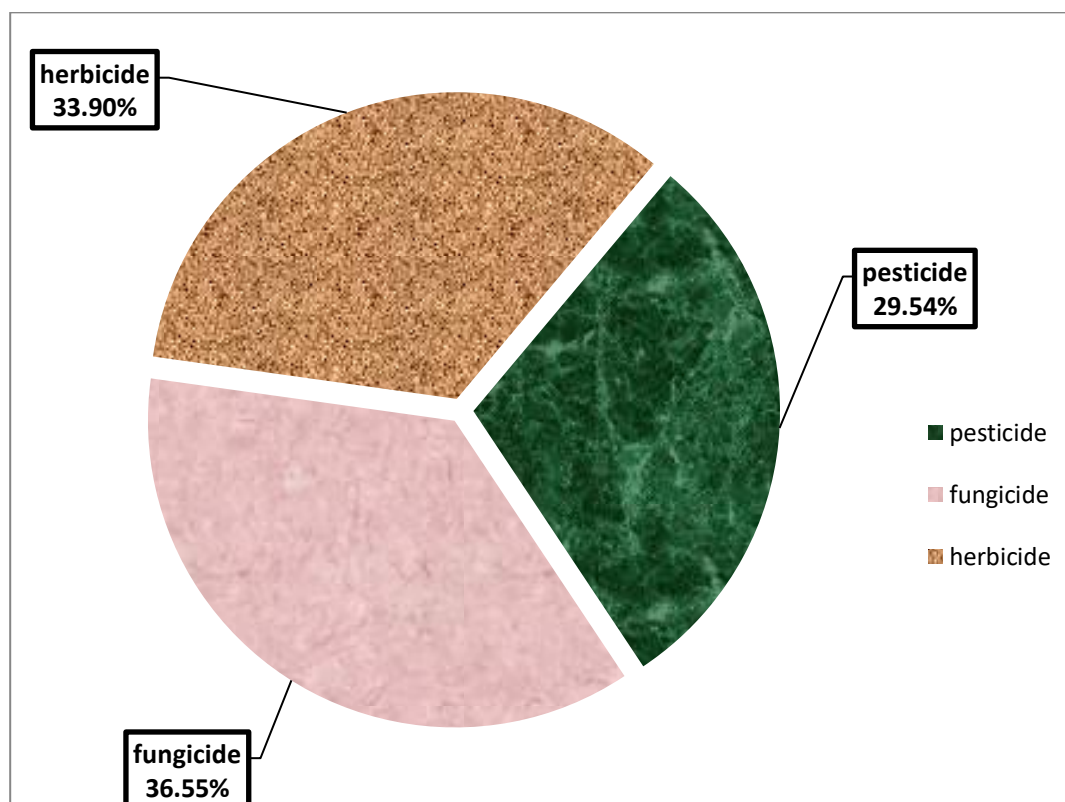
)



d. Quantity of Chemicals used

The total quantity of chemicals used during 2017/18(2010E.C)for commercial farms was found to be **1,650,492.60** Quintals during Meher Season, out of which the share of pesticides and herbicides was **29.54%** and **33.90%** **respectively**. While the remaining **36.55 %**, share was found to be the contribution of fungicides (For details see Table 3 on appendix and Figure 8).

Fig8.percentage distribution of Quantity of chemicals applied by type of chemicals used for meher season for commercial farm at country level 2017/18(2010 E.C)



Appendix I

Estimation Procedures of Tables, Ratios and sampling

Error

Large and medium Scale Commercial Farms

2017/18(2010E.C)

The following formulas are used for estimation.

1. Estimating the total (For crop)

$$Y_h = \sum_{i=1}^{n_h} w_{hi} y_{hi}$$

In which

$$w_{hi} = \frac{M_h}{m_{hi} n_h} \text{ Is the weight}$$

Where $h =$ Represents region $n_h =$ Total
number of farms covered in the region

M_h = Measure of size of h^{th} region which is the total area in that region for those selected with less than 1 probability.

M_{hi} = Total area for farm i in h^{th} region y_{hi} =

Total for the variable in i^{th} farm h^{th} region

2. Estimation for livestock

$$\hat{Y}_h = \sum w_{hi} y_{hi}$$

In which $w_{hi} = \frac{N_h}{n_h}$ Is the weight

Where h = Represents

region N_h = Measure of

size for h^{th} region which

is total number of farms

having livestock in that

region from the frame.

n_h = Total number of farms with livestock covered in that region y_{hi}

= total for the variable in i^{th} farm h^{th} region

3. Estimating sampling variance

Sampling variance & estimate of stratum total are estimated by the

Following formula

$$\text{var}(\hat{Y}_h) = \frac{1}{n_h - 1} \sum_{i=1}^{n_h} Y_{hi}^2 - \frac{1}{n_h} \bar{Y}_h^2$$

4. Estimating coefficient of variation

Coefficient of variation (CV) of estimate of region total is given by $CV(\hat{Y}_h) = \frac{\sqrt{\text{var}(\hat{Y}_h)}}{\hat{Y}_h} \times 100\%$

Appendix II

Questionnaire

Large and medium Scale Commercial Farms

2017/18

Large and Medium Scale Commercial Farm Sample Survey

2017/18(2010E.C)

CF-Form 2008/1. Part 1. Identification Particulars

1	2	3	4	5	6	7	8
Region	Zone	Wereda	Farm name	Kebele	Farm Tenure	Type of Holding	Statistical Branch Office
					State = 1 Priv = 2 Coops = 3 Other = 4	Crop only, 1 Livestock only, 2 Both 1&2, 3	

Season Meher = 1 Belg , 2

Part 2 :- Crop land area and Quantity production of Major crops 2017/18(2010E.C)

1	2	3	4	5	6	7	8	9	10	
Sr. No	Crop Type	Code	Cropped Area		Production	Yield (Qts/Ha)	Crop Damage Yes=1 No=2	Is there Crop Damage?		
			From Interview method (In Hectare)	From GPS Reading (In Hectare)	In Quintals			if Yes Reason	Code	Extent of Damage in Percent
1	Sesame	27								
2	Maize	02								
3	Sorghum	06								
4	Soyabens	12								
5	Nueg	25								
6	Suffflower	28								
7	Linsed	23								
8	Ground NBut	24								
9	Coffee	72								

Part 2:- Crop land area and Quantity production of Major crops 2017/18(2010E.C)

[illegible]

Part 3- Information on Different Agricultural Practices 2017/18(2010E.C)

1	2	3	4	5	6	7	8	9
SR. No.	Type of Farm Input		Farm in put listed in Col. 2 Applied			Type of input Used		Production per Hectare
			Crop Name	Code	Field area in Hectare			
						Unit Kilogram- 1 Litter= 2 Quintal =3 Other = 4	Amount	

Name

Signature

Date

Enumerator

Appendix III

Number of planned and covered

Large and medium Scale Commercial Farms

2017/18

Region	Number of	
	Planned	Covered
Tigray	510	504
Afar	39	32
Amhara	320	224
Oromya	330	323
Somali	34	14
Benishangul-Gumuz	146	137
SNNPR	331	236
Gambella	196	171
Harari	0	0
Addis Ababa	0	0
Dire Dawa	0	0
Total	1906	1641

Appendix IV

Statistical Table for

Large and medium Scale Commercial Farms 2017/18(2010E.C)

Table 1 Estimates of Cropland Area and Production of Crops For Commercial Farms,
2017/18(2010E.C) and 2016/17(2009 E.C)Meher (Main) Season
Country(National

Crop Types	Cropland area in Hectare			Production in Quintals			2010	Crop Productivity/ Yield (QTS/Ha)	
	2010	2009 E.C	% Change	2010	2009 E.C	% Change		2009 E.C	% Change
Total	1,006,861.68	1,006,665.05	0.02	84,024,972.51	84,129,301.39	(0.12)			
Grain crops	641,786.88	639,867.73	0.30	13,243,443.61	13,526,723.00	(2.09)			
Cereals	296,529.01	291,728.06	1.65	9,702,259.60	9,838,567.60	(1.39)			
Tef	6,863.41	6,852.49	0.16	104,157.73	104,384.68	(0.22)	15.18	15.23	(0.33)
Barley	2,822.29	2,575.67	9.57	88,601.14	82,083.13	7.94	31.39	31.87	(1.51)
Wheat	94,631.04	91,062.62	3.92	3,148,323.56	3,017,279.98	4.34	33.27	33.13	0.42
Maize	88,777.83	88,956.17	(0.20)	3,747,248.59	3,750,048.72	(0.07)	42.21	42.16	0.12
Sorghum	99,622.11	98,637.61	1.00	2,499,257.68	2,790,833.38	(10.45)	25.09	28.29	(11.31)
Finger mille.	816.58	486.87	67.72	35,337.87	9,377.42	276.84	43.28	19.26	124.71
Oats / 'Aja'	-	7.32	-	-	147.66	-	-	20.17	-
Rice	2,995.76	3,149.30	(4.88)	79,333.02	84,412.63	(6.02)	26.48	26.80	(1.19)
Pulse	58,762.33	59,995.36	(2.06)	1,111,722.30	1,326,965.47	(16.22)			-
Horse / Faba bean	825.30	810.91	1.77	19,090.67	18,625.26	2.50	23.13	22.97	0.70
Field Peas	144.72	219.30	(34.01)	2,222.43	3,254.46	(31.71)	15.36	14.84	3.50
W/Haricot bean	10,472.03	10,383.35	0.85	229,056.89	224,331.96	2.11	21.87	21.60	1.25
R/Haricot bean	5,252.01	5,236.43	0.30	9,089.68	100,792.05	(90.98)	1.73	19.25	(91.01)
B/Haricot bean	-	-	-	-	-	-	-	-	-
Chick peas	8,206.75	7,951.91	3.20	133,101.69	128,432.33	3.64	16.22	16.15	0.43
Lentils	70.27	61.39	14.46	1,164.70	1,011.76	15.12	16.57	16.48	0.55
Vetch / Grass peas	382.28	1,424.36	(73.16)	6,718.40	25,537.51	(73.69)	17.57	17.93	(2.01)
Soya bean	25,374.64	25,859.83	(1.88)	632,170.74	642,717.34	(1.64)	24.91	24.85	0.24
Fenugreek	551.00	535.89	2.82	7,759.79	7,553.22	2.73	14.08	14.09	(0.07)
Mung bean/"Masho "	7,483.32	7,511.99	(0.38)	71,347.32	174,709.57	(59.16)	9.53	23.26	(59.03)

Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	286,495.54	288,144.31	(0.57)	2,429,461.71	2,361,189.93	2.89			-
Niger seed/neug	845.92	805.27	5.05	11,629.94	12,693.28	(8.38)	13.75	15.76	(12.75)
Linseed	402.46	1,130.88	(64.41)	8,932.93	-	-	22.20	-	-
Groundnuts	1,516.48	1,563.04	(2.98)	24,738.30	28,664.79	(13.70)	16.31	18.34	(11.07)
Safflower	967.22	156.54	517.87	2,525.10	2,717.59	(7.08)	2.61	17.36	(84.97)
Sesame	278,870.17	280,552.56	(0.60)	2,313,201.93	2,247,841.23	2.91	8.29	8.01	3.50
Rape seed	3,893.29	3,936.01	(1.09)	68,433.52	69,273.04	(1.21)	17.58	17.60	(0.11)
Vegetables	8,879.19	7,790.39	13.98	1,046,769.43	959,701.80	9.07			-
Lettuce	230.95	199.06	16.02	68,093.45	58,433.43	16.53	294.84	293.55	0.44
Head cabbage	265.54	241.40	10.00	61,311.86	54,238.10	13.04	230.90	224.68	2.77
Ethiopian cabbage	5.26	5.57	(5.57)	370.20	-	-	70.38	-	-
Tomatoes	1,699.46	1,639.12	3.68	615,756.37	579,788.23	6.20	362.32	353.72	2.43
Green peppers	240.16	217.33	10.50	44,468.13	37,547.65	18.43	185.16	172.77	7.17
Red peppers	6,437.81	5,473.87	17.61	256,769.42	229,161.59	12.05	39.88	41.86	(4.73)
Swiss chard	-	14.04	-	-	532.80	-	-	37.95	-
Root crops	1,250.82	1,449.89	(13.73)	318,155.46	364,741.75	(12.77)			-
Beetroot	3.11	3.29	(5.47)	265.66	277.73	(4.35)	85.42	84.42	1.18
Carrot	11.64	19.07	(38.96)	2,541.17	1,756.08	44.71	218.31	92.09	137.06
Onion	1,086.26	1,034.23	5.03	284,465.76	230,715.25	23.30	261.88	223.08	17.39
Potatoes	140.71	177.96	(20.93)	30,821.38	37,473.90	(17.75)	219.04	210.57	4.02
Garlic	9.10	50.47	(81.97)	61.48	12,242.15	(99.50)	6.76	242.56	(97.21)
Taro 'Godere'	-	-	-	-	-	-	-	-	-
Sweet potatoes	-	164.86	-	-	82,276.64	-	-	499.07	-
Other Temporary crops	8,438.66	8,477.85	(0.46)	466,885.18	53,634.84	770.49			-
Permanent crops	346,506.13	349,079.19	(0.74)	68,949,718.83	69,224,500.00	(0.40)			-
Fruit crops	7,428.64	7,820.28	(5.01)	986,662.59	1,052,751.94	(6.28)			-
Avocado	144.07	160.50	(10.24)	12,081.72	13,094.03	(7.73)	83.86	81.58	2.79
Bananas	2,081.49	2,064.67	0.81	176,348.54	194,662.69	(9.41)	84.72	94.28	(10.14)
Guava	0.76	15.29	(95.03)	30.55	-	-	40.20	-	-
Lemons	22.10	206.90	(89.32)	2,321.61	14,150.25	(83.59)	105.05	68.39	53.60
Mangoes	2,328.27	2,320.52	0.33	196,126.06	196,240.80	(0.06)	84.24	84.57	(0.39)
Oranges	2,246.63	2,319.55	(3.14)	324,959.01	309,931.33	4.85	144.64	133.62	8.25
Papayas	568.04	695.71	(18.35)	274,192.50	324,150.95	(15.41)	482.70	465.93	3.60
Pineapples	37.28	37.15	0.35	602.60	521.89	15.46	16.16	14.05	15.02
Cash crops	336,461.54	338,641.46	(0.64)	67,726,794.81	67,403,358.05	0.48			-
Chat	10.23	11.23	(8.90)	4,188.44	-	-	409.43	-	-
Coffee	106,843.71	107,547.29	(0.65)	794,124.04	804,396.20	(1.28)	7.43	7.48	(0.67)
Tea	6,952.34	5,624.67	23.60	749,813.57	622,618.47	20.43	107.85	110.69	(2.57)
Hops / 'Gesho'	-	8.59	-	-	134.98	-	-	15.71	-
Enset	0.29	2.44	(88.11)	0.11	-	-	0.38	-	-

Sugar cane	51,704.17	51,332.70	0.72	62,836,576.64	62,553,345.78	0.45	##### ##	1,218.59	(0.27)
Cotton	170,950.80	174,114.54	(1.82)	3,342,092.02	3,422,862.62	(2.36)	19.55	19.66	(0.56)
Other Permanent crops	2,615.95	2,617.45	(0.06)	236,261.43	768,390.01	(69.25)	90.32	293.56	(69.23)

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010 E.C. (2017/18) National

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA
Total	1,006,861.68	100.00	84,024,972.51	100.00	
Grains	641,786.88	63.74	13,243,443.61	15.76	
Cereals	296,529.01	29.45	9,702,259.60	11.55	
Teff	6,863.41	0.68	104,157.73	0.12	15.18
Barley	2,822.29	0.28	88,601.14	0.11	31.39
Wheat	94,631.04	9.40	3,148,323.56	3.75	33.27
Maize	88,777.83	8.82	3,747,248.59	4.46	42.21
Sorghum	99,622.11	9.89	2,499,257.68	2.97	25.09
Finger millet	816.58	0.08	35,337.87	0.04	43.28
Oats/'Aja'/	-	-	-	-	-
Rice	2,995.76	0.30	79,333.02	0.09	26.48
Pulse	58,762.33	5.84	1,111,722.30	1.32	
Horse/Faba beans	825.30	0.08	19,090.67	0.02	23.13
Field peas	144.72	0.01	2,222.43	-	15.36
W/Haricot bean	10,472.03	1.04	229,056.89	0.27	21.87
R/Haricot bean	5,252.01	0.52	9,089.68	0.01	1.73
B/Haricot bean	-	-	-	-	-
Chick peas	8,206.75	0.82	133,101.69	0.16	16.22
Lentiles	70.27	0.01	1,164.70	-	16.57
Vetch/Grass peas	382.28	0.04	6,718.40	0.01	17.57
Soya beans	25,374.64	2.52	632,170.74	0.75	24.91
Fenugreek	551.00	0.05	7,759.79	0.01	14.08
Mung bean/"Masho"	7,483.32	0.74	71,347.32	0.08	9.53
Gibto	-	-	-	-	-
Oile seeds	286,495.54	28.45	2,429,461.71	2.89	
Nueg	845.92	0.08	11,629.94	0.01	13.75
Linseed	402.46	0.04	8,932.93	0.01	22.20
Ground nuts	1,516.48	0.15	24,738.30	0.03	16.31
Safflower	967.22	0.10	2,525.10	-	2.61
Sesame	278,870.17	27.70	2,313,201.93	2.75	8.29
Rapeseed	3,893.29	0.39	68,433.52	0.08	17.58
Vegetables	8,879.19	0.88	1,046,769.43	1.25	
Lettuce	230.95	0.02	68,093.45	0.08	294.84
Head Cabbage	265.54	0.03	61,311.86	0.07	230.90

Ethiopian Cabbage	5.26	-	370.20	-	70.38
Tomatoes	1,699.46	0.17	615,756.37	0.73	362.32
Green peppers	240.16	0.02	44,468.13	0.05	185.16
Red papers	6,437.81	0.64	256,769.42	0.31	39.88
Swiss chard	-	-	-	-	-
Root crops	1,250.82	0.12	318,155.46	0.38	
Beet root	3.11	-	265.66	-	85.42
Carrot	11.64	-	2,541.17	-	218.31
Onion	1,086.26	0.11	284,465.76	0.34	261.88
Potatoes	140.71	0.01	30,821.38	0.04	219.04
Garlic	9.10	-	61.48	-	6.76
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	8,438.66	0.84	466,885.18	0.56	
Permanent crops	346,506.13	34.41	68,949,718.83	82.06	
Fruit crops	7,428.64	0.74	986,662.59	1.17	
Avocado	144.07	0.01	12,081.72	0.01	83.86
Bananas	2,081.49	0.21	176,348.54	0.21	84.72
Guava/'Zeytun'/	0.76	-	30.55	-	40.20
Lemons	22.10	-	2,321.61	-	105.05
Mangos	2,328.27	0.23	196,126.06	0.23	84.24
Oranges	2,246.63	0.22	324,959.01	0.39	144.64
Papayas	568.04	0.06	274,192.50	0.33	482.70
Pineapples	37.28	-	602.60	-	16.16
Cash crpops	336,461.54	33.42	67,726,794.81	80.60	
Chat	10.23	-	4,188.44	-	409.43
Coffee	106,843.71	10.61	794,124.04	0.95	7.43
Tea	6,952.34	0.69	749,813.57	0.89	107.85
Hopes/'Gesho'/	-	-	-	-	-
Enset	0.29	-	0.11	-	0.38
Sugar cane	51,704.17	5.14	62,836,576.64	74.78	1,215.31
Cotton	170,950.80	16.98	3,342,092.02	3.98	19.55
Other permanent crops	2,615.95	0.26	236,261.43	0.28	90.32

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010E.C. (2017/18)
National Tigr

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA

Total	205,764.89	100.00	2,770,310.58	100.00	
Grains	191,969.53	93.30	2,518,680.81	90.92	
Cereals	45,161.18	21.95	1,207,071.67	43.57	

Teff	172.29	0.08	2,731.78	0.10	15.86
Barley	1,027.03	0.50	30,711.60	1.11	29.90
Wheat	44.38	0.02	1,968.32	0.07	44.35
Maize	113.94	0.06	3,345.90	0.12	29.37
Sorghum	43,803.53	21.29	1,168,314.07	42.17	26.67
Finger millet	-	-	-	-	-
Oats/'Aja'/'	-	-	-	-	-
Rice	-	-	-	-	-
Pulse	1,798.58	0.87	27,805.44	1.00	
Horse/Faba beans	-	-	-	-	-
Field peas	-	-	-	-	-
W/Haricot bean	-	-	-	-	-
R/Haricot bean	-	-	-	-	-
B/Haricot bean	-	-	-	-	-
Chick peas	2.34	-	41.50	-	17.74
Lentiles	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-
Soya beans	28.31	0.01	444.71	0.02	15.71
Fenugreek	-	-	-	-	-
Mung bean/"Masho"	1,767.93	0.86	27,319.23	0.99	15.45
Gibto	-	-	-	-	-
Oile seeds	145,009.77	70.47	1,283,803.70	46.34	
Nueg	-	-	-	-	-
Linseed	-	-	-	-	-
Ground nuts	-	-	-	-	-
Safflower	82.34	0.04	1,217.52	0.04	14.79
Sesame	144,927.43	70.43	1,282,586.18	46.30	8.85
Rapeseed	-	-	-	-	-
Vegetables	437.22	0.21	83,791.60	3.02	
Lettuce	0.24	-	158.00	0.01	658.33
Head Cabbage	6.52	-	2,502.07	0.09	383.75
Ethiopian Cabbage	0.26	-	25.99	-	99.96
Tomatoes	285.83	0.14	59,945.76	2.16	209.73
Green peppers	68.38	0.03	17,691.89	0.64	258.73
Red papers	76.00	0.04	3,467.88	0.13	45.63
Swiss chard	-	-	-	-	-
Root crops	205.85	0.10	69,613.15	2.51	
Beet root	0.03	-	1.33	-	44.33
Carrot	0.09	-	3.76	-	41.78
Onion		0.10	69,608.06	2.51	338.35

	205.73				
Potatoes	-	-	-	-	-
Garlic	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	8.54	-	2,284.71	0.08	
Permanent crops	13,143.75	6.39	95,940.31	3.46	
Fruit crops	313.16	0.15	15,349.80	0.55	
Avocado	14.73	0.01	565.44	0.02	38.39
Bananas	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-
Lemons	21.43	0.01	2,307.82	0.08	107.69
Mangos	199.88	0.10	8,778.00	0.32	43.92
Oranges	73.83	0.04	3,121.70	0.11	42.28
Papayas	3.29	-	576.84	0.02	175.33
Pineapples	-	-	-	-	-
Cash crops	12,767.97	6.21	68,946.02	2.49	
Chat	0.93	-	81.93	-	88.10
Coffee	-	-	-	-	-
Tea	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-
Enset	-	-	-	-	-
Sugar cane	-	-	-	-	-
Cotton	12,767.05	6.20	68,864.09	2.49	5.39
Other permanent crops	62.62	0.03	11,644.49	0.42	185.95

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010E.C. (2017/18)Afar

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA

Total	69,589.05	100.00	2,001,740.33	100.00	
Grains	3,459.26	4.97	116,786.62	5.83	
Cereals	3,459.26	4.97	116,786.62	5.83	
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	2,424.02	3.48	72,891.90	3.64	30.07
Maize	1,035.24	1.49	43,894.71	2.19	42.40
Sorghum	-	-	-	-	-
Finger millet	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-

Rice	-	-	-	-	-
Pulse	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-
Field peas	-	-	-	-	-
W/Haricot bean	-	-	-	-	-
R/Haricot bean	-	-	-	-	-
B/Haricot bean	-	-	-	-	-
Chick peas	-	-	-	-	-
Lentiles	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-
Soya beans	-	-	-	-	-
Fenugreek	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-
Gibto	-	-	-	-	-
Oile seeds	-	-	-	-	-
Nueg	-	-	-	-	-
Linseed	-	-	-	-	-
Ground nuts	-	-	-	-	-
Safflower	-	-	-	-	-
Sesame	-	-	-	-	-
Rapeseed	-	-	-	-	-
Vegetables	7.30	0.01	4,180.61	0.21	-
Lettuce	-	-	-	-	-
Head Cabbage	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-
Tomatoes	7.30	0.01	4,180.61	0.21	572.69
Green peppers	-	-	-	-	-
Red papers	-	-	-	-	-
Swiss chard	-	-	-	-	-
Root crops	6.61	0.01	1,200.72	0.06	-
Beet root	-	-	-	-	-
Carrot	-	-	-	-	-
Onion	6.61	0.01	1,200.72	0.06	181.65
Potatoes	-	-	-	-	-
Garlic	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	-	-	-	-	-
Permanent crops	66,115.88	95.01	1,879,572.38	93.90	-
Fruit crops	132.53	0.19	11,835.37	0.59	-
Avocado	-	-	-	-	-
Bananas	1.60	-	71.82	-	44.89
Guava/'Zeytun'/	-	-	-	-	-
Lemons	-	-	-	-	-

Mangos	7.62	0.01	205.01	0.01	26.90
Oranges	123.31	0.18	11,558.54	0.58	93.74
Papayas	-	-	-	-	-
Pineapples	-	-	-	-	-
Cash crops	65,975.38	94.81	1,865,717.54	93.20	
Chat	-	-	-	-	-
Coffee	-	-	-	-	-
Tea	-	-	-	-	-
Hopes/'Gesho'/'	-	-	-	-	-
Enset	-	-	-	-	-
Sugar cane	9,406.89	13.52	365,717.32	18.27	38.88
Cotton	56,568.49	81.29	1,500,000.22	74.93	26.52
Other permanent crops	7.97	0.01	2,019.47	0.10	253.38

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010E.C. (2017/18)
Amhara

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA

Total	193,013.19	100.00	3,124,927.68	100.00	
Grains	177,242.16	91.83	2,721,066.53	87.08	
Cereals	55,390.31	28.70	1,735,869.18	55.55	
Teff	2,563.30	1.33	39,532.77	1.27	15.42
Barley	591.11	0.31	20,742.68	0.66	35.09
Wheat	3,245.96	1.68	64,466.32	2.06	19.86
Maize	15,754.48	8.16	807,842.53	25.85	51.28
Sorghum	33,082.24	17.14	800,652.32	25.62	24.20
Finger millet	153.21	0.08	2,632.56	0.08	17.18
Oats/'Aja'/'	-	-	-	-	-
Rice	-	-	-	-	-
Pulse	19,270.67	9.98	257,420.55	8.24	
Horse/Faba beans	-	-	-	-	-
Field peas	-	-	-	-	-
W/Haricot bean	2,435.90	1.26	4,558.18	0.15	1.87
R/Haricot bean	2,697.39	1.40	6,903.73	0.22	2.56
B/Haricot bean	-	-	-	-	-
Chick peas	4,838.29	2.51	85,698.66	2.74	17.71
Lentiles	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-
Soya beans	7,372.26	3.82	157,321.82	5.03	21.34
Fenugreek	-	-	-	-	-
Mung bean/'Masho"	1,926.84	1.00	2,938.16	0.09	1.52
Gibto	-	-	-	-	-

Oile seeds	102,581.18	53.15	727,776.80	23.29	
Nueg	143.10	0.07	1,290.90	0.04	9.02
Linseed	-	-	-	-	-
Ground nuts	108.10	0.06	2,303.03	0.07	21.30
Safflower	64.20	0.03	996.36	0.03	15.52
Sesame	102,265.79	52.98	723,186.51	23.14	7.07
Rapeseed	-	-	-	-	-
Vegetables	1,081.88	0.56	120,090.64	3.84	
Lettuce	-	-	-	-	-
Head Cabbage	124.13	0.06	13,191.59	0.42	106.27
Ethiopian Cabbage	0.95	-	95.76	-	100.80
Tomatoes	66.15	0.03	17,634.43	0.56	266.58
Green peppers	14.63	0.01	1,665.81	0.05	113.86
Red papers	876.01	0.45	87,503.06	2.80	99.89
Swiss chard	-	-	-	-	-
Root crops	110.96	0.06	24,140.18	0.77	
Beet root	2.54	-	105.64	-	41.59
Carrot	-	-	-	-	-
Onion	105.00	0.05	23,307.30	0.75	221.97
Potatoes	3.42	-	727.24	0.02	212.64
Garlic	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	2.51	-	365.98	0.01	
Permanent crops	14,575.68	7.55	259,264.35	8.30	
Fruit crops	808.40	0.42	103,243.68	3.30	
Avocado	5.85	-	304.72	0.01	52.09
Bananas	98.80	0.05	10,761.83	0.34	108.93
Guava/'Zeytun'/	0.76	-	30.55	-	40.20
Lemons	0.06	-	13.79	-	229.83
Mangos	545.30	0.28	52,329.38	1.67	95.96
Oranges	88.98	0.05	13,741.10	0.44	154.43
Papayas	68.65	0.04	26,062.30	0.83	379.64
Pineapples	-	-	-	-	-
Cash crpops	13,720.17	7.11	147,493.28	4.72	
Chat	-	-	-	-	-
Coffee	-	-	-	-	-
Tea	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-
Enset	-	-	-	-	-
Sugar cane	-	-	-	-	-
Cotton	13,720.17	7.11	147,493.28	4.72	10.75
Other permanent crops	47.11	0.02	8,527.39	0.27	181.01

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010 E.C. (2017/18) Oromia

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA

Total	271,176.50	100.00	69,593,715.90	100.00	
Grains	160,206.97	59.08	4,820,856.66	6.93	
Cereals	133,479.02	49.22	4,463,015.79	6.41	
Teff	1,386.65	0.51	26,117.78	0.04	18.84
Barley	985.31	0.36	31,278.29	0.04	31.74
Wheat	86,606.38	31.94	2,852,089.24	4.10	32.93
Maize	35,688.56	13.16	1,182,640.22	1.70	33.14
Sorghum	8,495.97	3.13	363,092.89	0.52	42.74
Finger millet	255.82	0.09	5,171.53	0.01	20.22
Oats/'Aja'	-	-	-	-	-
Rice	60.34	0.02	2,625.84	-	43.52
Pulse	12,203.90	4.50	192,054.89	0.28	
Horse/Faba beans	407.30	0.15	11,031.25	0.02	27.08
Field peas	142.20	0.05	2,083.92	-	14.65
W/Haricot bean	2,445.96	0.90	3,041.67	-	1.24
R/Haricot bean	1,093.54	0.40	260.53	-	0.24
B/Haricot bean	-	-	-	-	-
Chick peas	624.64	0.23	12,523.05	0.02	20.05
Lentiles	61.34	0.02	1,016.50	-	16.57
Vetch/Grass peas	-	-	-	-	-
Soya beans	6,524.52	2.41	154,328.03	0.22	23.65
Fenugreek	551.00	0.20	7,759.79	0.01	14.08
Mung bean/'Masho"	353.40	0.13	10.15	-	0.03
Gibto	-	-	-	-	-
Oile seeds	14,524.05	5.36	165,785.98	0.24	
Nueg	408.79	0.15	4,532.22	0.01	11.09
Linseed	402.46	0.15	8,932.93	0.01	22.20
Ground nuts	831.44	0.31	11,925.88	0.02	14.34
Safflower	24.70	0.01	92.80	-	3.76
Sesame	8,963.38	3.31	71,868.64	0.10	8.02
Rapeseed	3,893.29	1.44	68,433.52	0.10	17.58
Vegetables	5,623.07	2.07	733,975.59	1.05	
Lettuce	230.71	0.09	67,935.45	0.10	294.46
Head Cabbage	108.34	0.04	38,991.95	0.06	359.90
Ethiopian Cabbage	2.75	-	215.38	-	78.32
Tomatoes	1,294.67	0.48	512,229.02	0.74	395.64
Green peppers	69.52	0.03	11,774.15	0.02	169.36
Red papers	3,917.07	1.44	102,829.63	0.15	26.25
Swiss chard	-	-	-	-	-
Root crops	466.87	0.17	119,663.79	0.17	

Beet root	0.54	-	158.69	-	293.87
Carrot	11.55	-	2,537.41	-	219.69
Onion	396.81	0.15	106,000.85	0.15	267.13
Potatoes	49.63	0.02	10,912.50	0.02	219.88
Garlic	8.33	-	54.34	-	6.52
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	6,268.15	2.31	1,923.98	-	
Permanent crops	98,611.44	36.36	63,917,295.88	91.84	
Fruit crops	3,989.61	1.47	650,292.44	0.93	
Avocado	-	-	-	-	-
Bananas	57.91	0.02	4,948.21	0.01	85.45
Guava/'Zeytun'/	-	-	-	-	-
Lemons	0.61	-	-	-	-
Mangos	1,512.73	0.56	118,557.83	0.17	78.37
Oranges	1,928.84	0.71	291,618.57	0.42	151.19
Papayas	489.52	0.18	235,167.83	0.34	480.40
Pineapples	-	-	-	-	-
Cash crops	92,189.83	34.00	63,080,647.60	90.64	
Chat	0.56	-	3,990.00	0.01	7,125.00
Coffee	46,733.79	17.23	395,596.34	0.57	8.46
Tea	1,488.32	0.55	223,576.46	0.32	150.22
Hopes/'Gesho'/	-	-	-	-	-
Enset	-	-	-	-	-
Sugar cane	42,259.28	15.58	62,432,871.86	89.71	1,477.38
Cotton	1,707.88	0.63	24,612.94	0.04	14.41
Other permanent crops	2,432.00	0.90	186,355.84	0.27	76.63

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010E.C. (2017/18)
Somale

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA

Total	398.29	100.00	69,160.00	100.00	
Grains	375.02	94.16	50,160.00	72.53	

Cereals	375.02	94.16	50,160.00	72.53	
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	354.67	89.05	36,860.00	53.30	103.93
Maize	-	-	-	-	-
Sorghum	20.36	5.11	13,300.00	19.23	653.24
Finger millet	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-
Rice	-	-	-	-	-
Pulse	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-
Field peas	-	-	-	-	-
W/Haricot bean	-	-	-	-	-
R/Haricot bean	-	-	-	-	-
B/Haricot bean	-	-	-	-	-
Chick peas	-	-	-	-	-
Lentiles	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-
Soya beans	-	-	-	-	-
Fenugreek	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-
Gibto	-	-	-	-	-
Oile seeds	-	-	-	-	-
Nueg	-	-	-	-	-
Linseed	-	-	-	-	-
Ground nuts	-	-	-	-	-
Safflower	-	-	-	-	-
Sesame	-	-	-	-	-
Rapeseed	-	-	-	-	-
Vegetables	23.27	5.84	19,000.00	27.47	
Lettuce	-	-	-	-	-
Head Cabbage	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-
Tomatoes	23.27	5.84	19,000.00	27.47	816.50
Green peppers	-	-	-	-	-
Red papers	-	-	-	-	-
Swiss chard	-	-	-	-	-
Root crops	-	-	-	-	-
Beet root	-	-	-	-	-
Carrot	-	-	-	-	-
Onion	-	-	-	-	-
Potatoes	-	-	-	-	-
Garlic	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	-	-	-	-	-

Permanent crops	-	-	-	-	-
Fruit crops	-	-	-	-	-
Avocado	-	-	-	-	-
Bananas	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-
Lemons	-	-	-	-	-
Mangos	-	-	-	-	-
Oranges	-	-	-	-	-
Papayas	-	-	-	-	-
Pineapples	-	-	-	-	-
Cash crops	-	-	-	-	-
Chat	-	-	-	-	-
Coffee	-	-	-	-	-
Tea	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-
Enset	-	-	-	-	-
Sugar cane	-	-	-	-	-
Cotton	-	-	-	-	-
Other permanent crops	-	-	-	-	-

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010 E.C. (2017/18)
Benshangul-Gumuz

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA
Total	78,386.24	100.00	1,552,378.05	100.00	
Grains	58,805.20	75.02	1,138,269.06	73.32	
Cereals	22,184.43	28.30	575,504.79	37.07	
Teff	31.65	0.04	190.91	0.01	6.03
Barley	0.95	-	29.03	-	30.56
Wheat	-	-	-	-	-
Maize	8,815.48	11.25	441,524.32	28.44	50.09
Sorghum	12,691.24	16.19	116,804.29	7.52	9.20
Finger millet	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-
Rice	645.12	0.82	16,956.25	1.09	26.28
Pulse	14,185.98	18.10	334,995.46	21.58	

Horse/Faba beans	-	-	-	-	-
Field peas	-	-	-	-	-
W/Haricot bean	1,643.24	2.10	1,610.29	0.10	0.98
R/Haricot bean	96.09	0.12	1,444.19	0.09	15.03
B/Haricot bean	-	-	-	-	-
Chick peas	12.54	0.02	9.20	-	0.73
Lentiles	8.93	0.01	148.20	0.01	16.60
Vetch/Grass peas	-	-	-	-	-
Soya beans	11,399.73	14.54	316,541.98	20.39	27.77
Fenugreek	-	-	-	-	-
Mung bean/"Masho"	1,025.45	1.31	15,241.61	0.98	14.86
Gibto	-	-	-	-	-
Oile seeds	22,434.79	28.62	227,768.81	14.67	
Nueg	254.71	0.32	2,006.82	0.13	7.88
Linseed	-	-	-	-	-
Ground nuts	379.45	0.48	7,362.23	0.47	19.40
Safflower	791.92	1.01	164.92	0.01	0.21
Sesame	21,008.71	26.80	218,234.84	14.06	10.39
Rapeseed	-	-	-	-	-
Vegetables	655.07	0.84	18,030.39	1.16	
Lettuce	-	-	-	-	-
Head Cabbage	-	-	-	-	-
Ethiopian Cabbage	0.76	-	19.76	-	26.00
Tomatoes	-	-	-	-	-
Green peppers	-	-	-	-	-
Red papers	654.31	0.83	18,010.63	1.16	27.53
Swiss chard	-	-	-	-	-
Root crops	11.40	0.01	2,573.17	0.17	
Beet root	-	-	-	-	-
Carrot	-	-	-	-	-
Onion	11.40	0.01	2,573.17	0.17	225.72
Potatoes	-	-	-	-	-
Garlic	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	-	-	-	-	
Permanent crops	18,914.57	24.13	393,505.43	25.35	
Fruit crops	4.94	0.01	185.82	0.01	
Avocado	-	-	-	-	-
Bananas	4.94	0.01	185.82	0.01	37.62
Guava/'Zeytun'/	-	-	-	-	-
Lemons	-	-	-	-	-
Mangos	-	-	-	-	-
Oranges	-	-	-	-	-
Papayas	-	-	-	-	-
Pineapples	-	-	-	-	-

Cash crops	18,909.63	24.12	393,319.61	25.34	
Chat	8.74	0.01	116.51	0.01	13.33
Coffee	-	-	-	-	-
Tea	-	-	-	-	-
Hopes/'Gesho'/'	-	-	-	-	-
Enset	-	-	-	-	-
Sugar cane	-	-	-	-	-
Cotton	18,900.89	24.11	393,203.10	25.33	20.80
Other permanent crops	-	-	-	-	-

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010 E.C. (2017/18)
(S.N.N.P.R)

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA

Total	139,205.43	100.00	3,938,335.28	100.00	
Grains	46,186.57	33.18	1,762,679.21	44.76	
Cereals	34,522.02	24.80	1,474,929.68	37.45	
Teff	2,709.52	1.95	35,584.49	0.90	13.13
Barley	27.89	0.02	853.94	0.02	30.62
Wheat	1,955.63	1.40	120,047.78	3.05	61.39
Maize	26,969.08	19.37	1,249,827.26	31.73	46.34
Sorghum	1,429.35	1.03	33,493.09	0.85	23.43
Finger millet	27.55	0.02	553.77	0.01	20.10
Oats/'Aja'/'	-	-	-	-	-
Rice	1,403.00	1.01	34,569.36	0.88	24.64
Pulse	10,277.67	7.38	275,505.32	7.00	
Horse/Faba beans	418.00	0.30	8,059.42	0.20	19.28
Field peas	2.52	-	138.51	-	54.96
W/Haricot bean	3,946.93	2.84	219,846.76	5.58	55.70
R/Haricot bean	1,365.00	0.98	481.23	0.01	0.35
B/Haricot bean	-	-	-	-	-
Chick peas	2,728.94	1.96	34,829.28	0.88	12.76
Lentiles	-	-	-	-	-
Vetch/Grass peas	382.28	0.27	6,718.40	0.17	17.57
Soya beans	49.82	0.04	3,534.19	0.09	70.94
Fenugreek	-	-	-	-	-
Mung bean/'Masho"	1,384.18	0.99	1,897.53	0.05	1.37
Gibto	-	-	-	-	-
Oile seeds	1,386.88	1.00	12,244.21	0.31	
Nueg	39.33	0.03	3,800.00	0.10	96.62

Linseed	-	-	-	-	-
Ground nuts	4.44	-	142.12	-	32.01
Safflower	-	-	-	-	-
Sesame	1,343.10	0.96	8,302.09	0.21	6.18
Rapeseed	-	-	-	-	-
Vegetables	901.23	0.65	64,933.53	1.65	
Lettuce	-	-	-	-	-
Head Cabbage	26.56	0.02	6,626.25	0.17	249.48
Ethiopian Cabbage	-	-	-	-	-
Tomatoes	16.64	0.01	518.47	0.01	31.16
Green peppers	46.32	0.03	13,295.71	0.34	287.04
Red papers	811.72	0.58	44,493.10	1.13	54.81
Swiss chard	-	-	-	-	-
Root crops	448.14	0.32	100,738.34	2.56	
Beet root	-	-	-	-	-
Carrot	-	-	-	-	-
Onion	359.71	0.26	81,549.56	2.07	226.71
Potatoes	87.66	0.06	19,181.64	0.49	218.82
Garlic	0.77	-	7.14	-	9.27
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	1,382.36	0.99	359,710.51	9.13	
Permanent crops	90,287.13	64.86	1,650,273.69	41.90	
Fruit crops	2,180.01	1.57	205,755.48	5.22	
Avocado	123.50	0.09	11,211.56	0.28	90.78
Bananas	1,918.24	1.38	160,380.86	4.07	83.61
Guava/'Zeytun'/	-	-	-	-	-
Lemons	-	-	-	-	-
Mangos	62.74	0.05	16,255.83	0.41	259.10
Oranges	31.67	0.02	4,919.10	0.12	155.32
Papayas	6.59	-	12,385.53	0.31	1,879.44
Pineapples	37.28	0.03	602.60	0.02	16.16
Cash crops	88,040.87	63.25	1,416,803.97	35.97	
Chat	-	-	-	-	-
Coffee	60,109.92	43.18	398,527.70	10.12	6.63
Tea	5,464.02	3.93	526,237.11	13.36	96.31
Hops/'Gesho'/	-	-	-	-	-
Enset	0.29	-	0.11	-	0.38
Sugar cane	38.00	0.03	37,987.46	0.96	999.67
Cotton	22,428.64	16.11	454,051.59	11.53	20.24
Other permanent crops	66.25	0.05	27,714.24	0.70	418.33

Table 2 Estimate of Cropland Area and Production of Commercial Farms, 2010E.C. (2017/18) Gambela

	Area		Production		Yield
	Hectares	%	Quintals	%	QT/HA

Total	49,328.11	100.00	974,404.70	100.00	
Grains	3,542.16	7.18	114,944.72	11.80	
Cereals	1,957.77	3.97	78,921.86	8.10	
Teff	-	-	-	-	
Barley	190.00	0.39	4,985.60	0.51	26.24
Wheat	-	-	-	-	-
Maize	401.05	0.81	18,173.65	1.87	45.32
Sorghum	99.42	0.20	3,601.03	0.37	36.22
Finger millet	380.00	0.77	26,980.00	2.77	71.00
Oats/'Aja'/'	-	-	-	-	-
Rice	887.30	1.80	25,181.57	2.58	28.38
Pulse	1,025.52	2.08	23,940.65	2.46	
Horse/Faba beans	-	-	-	-	-
Field peas	-	-	-	-	-
W/Haricot bean	-	-	-	-	-
R/Haricot bean	-	-	-	-	-
B/Haricot bean	-	-	-	-	-
Chick peas	-	-	-	-	-
Lentiles	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-
Soya beans	-	-	-	-	-
Fenugreek	-	-	-	-	-
Mung bean/"Masho"	1,025.52	2.08	23,940.65	2.46	23.34
Gibto	-	-	-	-	-
Oile seeds	558.87	1.13	12,082.21	1.24	
Nueg	-	-	-	-	-
Linseed	-	-	-	-	-
Ground nuts	193.04	0.39	3,005.04	0.31	15.57
Safflower	4.07	0.01	53.50	0.01	13.14
Sesame	361.76	0.73	9,023.67	0.93	24.94
Rapeseed	-	-	-	-	-
Vegetables	150.16	0.30	2,767.08	0.28	
Lettuce	-	-	-	-	-
Head Cabbage	-	-	-	-	-
Ethiopian Cabbage	0.54	-	13.30	-	24.63

Tomatoes	5.61	0.01	2,248.08	0.23	400.73
Green peppers	41.30	0.08	40.58	-	0.98
Red papers	102.70	0.21	465.12	0.05	4.53
Swiss chard	-	-	-	-	-
Root crops	1.00	-	226.10	0.02	
Beet root	-	-	-	-	-
Carrot	-	-	-	-	-
Onion	1.00	-	226.10	0.02	226.10
Potatoes	-	-	-	-	-
Garlic	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-
Sweet potatoes	-	-	-	-	-
Other Temporary	777.10	1.58	102,600.00	10.53	
Permanent crops	44,857.69	90.94	753,866.80	77.37	
Fruit crops	-	-	-	-	
Avocado	-	-	-	-	-
Bananas	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-
Lemons	-	-	-	-	-
Mangos	-	-	-	-	-
Oranges	-	-	-	-	-
Papayas	-	-	-	-	-
Pineapples	-	-	-	-	-
Cash crpops	44,857.69	90.94	753,866.80	77.37	
Chat	-	-	-	-	-
Coffee	-	-	-	-	-
Tea	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-
Enset	-	-	-	-	-
Sugar cane	-	-	-	-	-
Cotton	44,857.69	90.94	753,866.80	77.37	16.81
Other permanent crops	-	-	-	-	-

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010 E.C(2017/18) Chemical Fertilizer

Applied IN HECTARES, *National*,

Type of crop	UREA		DAP		Improved Seed		Indigenous Seed	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	463,271.68	652,790.31	680,337.63	602,600.73	321,622.62	299,656.39	685,238.17	457,463.00
Grains	418,858.94	241,496.59	616,960.43	444,142.26	315,762.43	275,203.37	591,651.25	258,251.80
Cereals	400,427.17	223,243.58	568,608.54	276,569.16	249,750.15	263,688.54	415,313.16	105,362.40
Teff	30,580.57	3,951.49	238,510.37	14,895.81	2,217.68	483.16	6,694.24	5,951.80
Barley	443.78	1,244.56	17.62	208.81	1,073.84	3,281.22	13.60	950.00
Wheat	17,694.11	54,421.83	3,833.88	44,873.10	22,035.07	232,893.36	2,672.94	15,058.40

Maize	109,201.95	138,124.05	28,125.70	181,230.14	223,597.64	15,340.92	4,630.98	21,321.70
Sorghum	238,956.56	4,768.63	298,049.12	34,047.75	472.46	1,196.56	372,842.88	55,633.20
Finger millet	15.68	34.77	22.06	187.64	63.54	25.00	129.41	172.50
Oats/'Aja'/	19.20	34.33	-	-	22.62	83.99	-	-
Rice	3,515.32	20,663.92	49.78	1,125.90	267.30	10,384.34	28,329.10	6,274.70
Pulse	3,963.27	6,662.01	3,261.05	24,408.41	62,146.20	9,859.29	35,689.78	98,963.40
Horse/Faba beans	0.60	2.17	-	-	198.45	844.42	29.79	602.30
Field peas	35.56	358.65	95.30	1,744.53	49.02	79.72	43.97	654.60
W/Haricot bean	21.89	121.79	20.90	319.01	338.79	638.32	33.85	480.60
R/Haricot bean	743.79	2,623.29	1,770.58	14,829.50	14,734.31	2,611.29	1,364.92	5,800.50
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	93.32	408.84	274.89	487.88	45,922.22	613.49	567.28	4,038.50
Lentiles	-	-	-	-	-	-	2.56	4.20
Vetch/Grass peas	-	-	-	-	9.45	193.08	7.97	128.70
Soya beans	2,742.07	2,726.39	274.87	2,627.17	348.20	4,040.87	1,598.77	49,824.40
Fenugreek	-	-	-	-	-	-	1.56	5.70
Mung beans/"Masho"/	326.03	420.88	824.50	4,400.32	545.76	838.11	32,039.12	37,423.80
Gibto	-	-	-	-	-	-	-	-
Oile seeds	14,468.50	11,591.00	45,090.84	143,164.69	3,866.08	1,655.54	140,648.31	53,926.00
Nueg	9.35	21.74	50.67	93.82	-	-	47,007.26	955.80
Linseed	-	-	-	-	460.80	416.02	14.70	299.80
Ground nuts	0.73	0.92	10.89	94.02	10.64	95.52	260.84	2,461.10
Safflower	655.55	1,389.77	1,656.27	5,216.79	108.49	283.79	6,151.58	12,259.40
Sesame	13,622.29	9,226.14	43,373.01	137,760.05	2,231.94	205.09	86,451.97	36,274.90
Rapeseed	180.58	952.43	-	-	1,054.23	655.12	761.95	1,675.00
Vegetables	4,169.40	9,473.55	8,637.79	27,453.62	1,864.32	19,636.63	4,315.83	1,676.60
Lettuce	1.08	3.99	0.85	3.98	1.00	0.32	-	-
Head Cabbage	97.32	140.32	107.21	567.81	101.56	0.38	-	-
Ethiopian Cabbage	0.26	2.38	0.17	0.79	0.02	0.78	0.04	0.10
Tomatoes	1,413.08	1,242.46	3,679.75	4,742.56	552.94	19,567.07	9.41	1.10
Green peppers	29.49	183.60	69.20	1,649.10	529.06	10.66	0.83	17.10
Red papers	2,628.18	7,900.80	4,780.61	20,489.39	679.74	57.42	4,305.54	1,658.30
Swiss chard	-	-	-	-	-	-	-	-
Root crops	767.88	3,025.34	134.64	2,350.32	28.88	631.89	19.91	3,612.80
Beet root	0.50	2.36	0.02	0.05	0.23	0.41	-	-
Carrot	4.72	53.19	0.19	0.43	1.51	0.45	-	-
Onion	700.44	1,329.69	134.43	2,349.84	19.80	43.25	17.55	90.00
Potatoes	38.08	280.86	-	-	1.49	531.92	2.25	3,519.90
Garlic	6.53	1,326.60	-	-	5.85	55.86	0.11	2.90
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	17.60	32.64	-	-	-	-	-	-
Other Temporary	402.09	2,144.38	1,046.25	13,097.39	120.69	94.11	30.62	43.80
Permanent crops	39,073.37	396,650.45	53,558.52	115,557.14	3,846.30	4,090.39	89,220.56	193,878.00
Fruit crops	5,476.58	16,710.65	403.83	27,735.58	45.01	0.65	114.91	32.70
Avocado	4,383.98	271.81	-	-	-	-	0.27	-
Bananas	30.77	353.41	-	-	30.64	-	43.48	32.70

Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	6.51	20.00
Soya beans	-	-	-	-	1.87	81.40	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	141.53	23.80	410.98	1,238.50	76.49	106.40	865.54	5,412.70
Gibto	-	-	-	-	-	-	-	-
Oile seeds	5,339.26	5,936.42	17,848.94	114,702.08	2,178.26	167.25	37,216.69	16,857.10
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	84.00	86.98	200.49	2,251.84	19.87	2.66	234.89	659.50
Sesame	5,255.26	5,849.44	17,648.45	112,450.24	2,158.38	164.59	36,981.80	16,197.60
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	1,303.36	246.97	7,022.56	2,674.77	14.05	11.38	1.53	0.50
Lettuce	0.31	0.31	0.85	3.98	0.08	0.22	-	-
Head Cabbage	14.59	0.02	40.53	0.20	4.02	-	-	-
Ethiopian Cabbage	0.06	0.09	0.17	0.79	0.02	0.78	-	-
Tomatoes	1,277.42	120.27	3,552.27	1,295.82	6.30	0.23	1.00	0.20
Green peppers	10.98	126.28	36.60	1,273.77	3.63	10.14	0.52	0.20
Red papers	-	-	3,392.13	100.21	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Root crops	17.00	112.21	40.26	1,110.45	3.30	3.14	0.69	6.20
Beet root	0.01	-	0.02	0.05	-	-	-	-
Carrot	0.07	0.03	0.19	0.43	0.02	0.34	-	-
Onion	16.92	112.17	40.05	1,109.97	3.28	2.81	0.69	6.20
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	1.82	2.95	5.68	45.38	0.50	5.59	-	-
Permanent crops	3,575.73	7,970.63	315.41	3,035.80	16.11	27.67	1,079.09	1,718.40
Fruit crops	49.04	43.54	136.21	563.19	2.86	0.65	58.54	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	4.56	4.37	12.67	56.28	-	-	58.51	-
Mangos	39.86	34.77	110.71	450.38	2.86	0.65	-	-
Oranges	4.56	4.37	12.67	56.28	-	-	0.03	-
Papayas	0.06	0.03	0.16	0.26	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crpops	3,493.79	7,839.17	130.43	1,914.10	13.25	27.02	1,020.55	1,718.40
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	1.11	18.77	-	-	-	-
Tea	-	-	-	-	-	-	75.47	108.70
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-

Sugar cane	-	-	-	-	-	-	-	-
Cotton	3,493.79	7,839.17	129.31	1,895.33	13.25	27.02	945.08	1,609.70
Other permanent crops	32.90	87.92	48.77	558.51	-	-	-	-

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010
E.C(2017/18) Chemical Fertilizer Applied IN HECTARES, Afar

	UREA		DAP		Improved Seed		Indigenous Seed	
Type of crop	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	9,993.12	176,150.72	1,610.31	11,926.57	4,863.74	161,133.32	65,021.17	171,167.30
Grains	-	-	1,610.31	11,926.57	2,614.27	160,866.65	407.97	205.40
Cereals	-	-	1,610.31	11,926.57	2,614.27	160,866.65	407.97	205.40
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	1,610.31	11,926.57	2,568.68	160,866.65	9.09	20.60
Maize	-	-	-	-	43.68	-	382.20	177.20
Sorghum	-	-	-	-	1.91	-	16.68	7.60
Finger millet	-	-	-	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	1.75	4.58	-	-	-	-	7.76	0.30
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-

Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	1.75	4.58	-	-	-	-	7.76	0.30
Green peppers	-	-	-	-	-	-	-	-
Red papers	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Root crops	1.59	4.12	-	-	-	-	7.03	1.80
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	1.59	4.12	-	-	-	-	7.03	1.80
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-
Permanent crops	9,989.78	176,142.02	-	-	2,249.47	266.67	64,598.41	170,959.80
Fruit crops	61.41	269.65	-	-	2.42	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	27.36	89.15	-	-	2.42	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	34.05	180.50	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	9,922.33	175,820.80	-	-	2,247.05	266.67	64,598.41	170,959.80
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	9,812.40	175,585.19	-	-	1,724.17	-	60,230.44	168,814.20
Cotton	109.93	235.60	-	-	522.89	266.67	4,367.97	2,145.50
Other permanent crops	6.04	51.57	-	-	-	-	-	-

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010
E.C(2017/18) Chemical
Fertilizer Applied IN HECTARES, Amhara

Type of crop	UREA		DAP		Improved Seed		Indigenous Seed	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts
Total	48,318.99	59,704.36	302,610.27	81,432.47	16,822.89	15,875.28	176,190.30	78,613.80
Grains	46,441.55	52,813.63	262,788.56	58,275.95	15,474.75	4,808.21	169,712.32	67,407.60
Cereals	35,367.18	46,922.10	251,003.15	32,172.96	15,007.92	3,693.48	157,121.15	18,636.70
Teff	2,296.52	2,168.75	1,548.41	4,192.62	1,699.26	54.32	1,767.03	5,003.50
Barley	23.89	95.68	-	-	-	-	5.16	825.70
Wheat	205.29	995.94	-	-	1.70	79.80	28.32	4,436.90
Maize	23,215.51	43,019.93	416.14	19,130.14	13,273.35	3,490.67	58.19	1,562.60
Sorghum	9,610.29	607.03	249,016.53	8,662.56	32.41	59.99	155,256.82	6,662.40
Finger millet	15.68	34.77	22.06	187.64	1.20	8.70	5.63	145.50
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	2,548.71	2,163.04	299.83	1,735.64	436.54	1,093.63	3,815.57	31,841.80
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	61.81	154.39	2.09	37.51	4.66	9.66	74.41	4,277.20
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	2.47	38.04	432.22	2,075.70
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	2,373.99	1,683.34	-	-	67.85	823.42	344.13	20,593.50
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	112.91	325.30	297.75	1,698.14	361.55	222.51	2,964.81	4,895.40
Gibto	-	-	-	-	-	-	-	-
Oil seeds	8,525.66	3,728.49	11,485.58	24,367.35	30.29	21.10	8,775.60	16,929.10
Nueg	-	-	-	-	-	-	1.60	5.80
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	0.72	16.00
Safflower	571.55	1,302.79	-	-	1.00	1.41	106.77	3,497.40
Sesame	7,954.11	2,425.69	11,485.58	24,367.35	29.29	19.68	8,666.51	13,409.80
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	1,344.50	5,123.33	90.98	4,053.31	1,329.70	10,978.72	4,179.71	1,253.40
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	0.25	0.01	-	-
Ethiopian Cabbage	0.20	2.29	-	-	-	-	-	-
Tomatoes	26.30	16.32	72.93	150.10	156.79	10,946.67	-	-
Green peppers	5.81	10.91	16.14	150.14	518.64	0.06	0.07	0.60
Red papers	1,312.19	5,093.81	1.92	3,753.07	654.02	31.98	4,179.64	1,252.80
Swiss chard	-	-	-	-	-	-	-	-

Root crops	58.07	676.59	13.71	93.82	1.54	1.75	6.71	3,590.60
Beet root	-	-	-	-	0.23	0.41	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	43.03	548.00	13.71	93.82	1.32	1.34	4.46	70.70
Potatoes	15.05	128.59	-	-	-	-	2.25	3,519.90
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	0.04	1.14	-	-	-	-	7.02	43.30
Permanent crops	474.83	1,089.67	39,717.02	19,009.39	16.90	86.60	2,284.54	6,318.90
Fruit crops	76.87	750.36	196.36	6,117.58	-	-	7.67	-
Avocado	-	-	-	-	-	-	0.27	-
Bananas	1.09	2.29	-	-	-	-	0.05	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	71.77	717.63	191.77	6,004.95	-	-	7.30	-
Oranges	-	-	-	-	-	-	-	-
Papayas	4.00	30.44	4.59	112.63	-	-	0.05	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	397.92	337.14	39,515.31	12,741.67	15.38	81.34	2,275.31	6,317.60
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	0.06	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	0.08	-
Cotton	397.92	337.14	39,515.31	12,741.67	15.38	81.34	2,275.17	6,317.60
Other permanent crops	0.04	2.17	5.35	150.14	1.52	5.26	1.56	1.30

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010
E.C(2017/18) Chemical Fertilizer Applied IN HECTARES, Oromia

Type of crop	UREA		DAP		Improved Seed		Indigenous Seed	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	113,724.18	273,054.23	84,134.01	218,624.11	187,304.44	94,937.89	83,951.19	29,353.30
Grains	97,738.10	128,227.97	82,102.85	157,429.49	186,043.60	84,874.65	83,786.24	29,239.00
Cereals	96,650.09	124,559.34	80,825.25	148,545.82	137,323.56	80,820.60	33,498.77	12,045.40
Teff	27,602.06	908.50	76,327.40	4,559.96	447.11	146.95	4,891.28	414.00
Barley	405.13	1,070.59	17.62	208.81	1,072.80	3,253.29	8.44	124.30
Wheat	16,496.37	50,072.70	2,206.34	32,691.33	19,366.02	69,055.61	2,579.50	6,296.60
Maize	51,974.11	71,767.73	1,618.77	103,079.28	116,023.25	7,910.89	474.98	2,909.30

Sorghum	112.44	506.16	605.34	6,880.55	283.43	232.94	25,393.01	1,309.90
Finger millet	-	-	-	-	61.70	14.90	10.10	25.40
Oats/'Aja'/'	19.20	34.33	-	-	22.62	83.99	-	-
Rice	40.76	199.32	49.78	1,125.90	46.64	122.04	141.46	965.90
Pulse	559.87	1,767.52	1,096.72	7,851.59	47,127.91	2,945.13	1,460.77	12,041.20
Horse/Faba beans	-	-	-	-	198.45	844.42	29.79	602.30
Field peas	34.31	347.78	95.30	1,744.53	49.02	79.72	43.97	654.60
W/Haricot bean	8.21	78.28	20.90	319.01	338.79	638.32	26.20	231.70
R/Haricot bean	212.65	657.21	583.13	3,686.30	390.57	684.46	137.60	1,206.30
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	138.98	-	45,899.33	159.60	114.50	806.40
Lentiles	-	-	-	-	-	-	2.43	2.90
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	233.11	612.47	258.40	2,101.74	241.21	527.97	949.40	7,977.70
Fenugreek	-	-	-	-	-	-	1.56	5.70
Mung beans/"Masho"/'	71.59	71.78	-	-	10.55	10.64	155.33	553.70
Gibto	-	-	-	-	-	-	-	-
Oile seeds	528.14	1,901.11	180.88	1,032.08	1,592.13	1,108.92	48,826.70	5,152.40
Nueg	-	-	50.67	93.82	-	-	46,981.23	654.60
Linseed	-	-	-	-	460.80	416.02	9.35	228.00
Ground nuts	-	-	-	-	4.30	10.64	234.95	1,070.50
Safflower	-	-	16.47	150.14	34.45	17.50	6.98	2.30
Sesame	347.56	948.68	113.75	788.12	38.36	9.64	832.23	1,521.90
Rapeseed	180.58	952.43	-	-	1,054.23	655.12	761.95	1,675.00
Vegetables	1,030.82	1,878.48	349.08	5,579.69	200.58	8,620.49	77.53	75.90
Lettuce	0.78	3.69	-	-	0.91	0.10	-	-
Head Cabbage	81.12	131.59	14.49	103.70	95.58	0.02	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	83.78	739.46	50.89	661.94	97.25	8,619.76	-	-
Green peppers	5.58	30.44	-	-	5.23	0.44	-	-
Red papers	859.56	973.31	283.70	4,814.04	1.61	0.17	77.53	75.90
Swiss chard	-	-	-	-	-	-	-	-
Root crops	600.63	1,775.04	5.05	537.79	16.49	56.93	3.50	5.70
Beet root	0.49	2.36	-	-	-	-	-	-
Carrot	4.65	53.16	-	-	1.49	0.12	-	-
Onion	590.05	406.00	5.05	537.79	9.16	0.95	3.50	5.70
Potatoes	-	-	-	-	-	-	-	-
Garlic	5.44	1,313.52	-	-	5.85	55.86	-	-
Taro/'Godere'/'	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	71.85	883.69	163.34	3,802.47	79.15	88.20	-	-
Permanent crops	14,282.78	140,289.05	1,513.69	51,274.67	964.62	1,297.62	83.92	32.70
Fruit crops	863.54	13,076.83	-	-	8.38	-	48.57	32.70
Avocado	6.38	260.95	-	-	-	-	-	-
Bananas	2.32	261.97	-	-	2.26	-	43.31	32.70
Guava/'Zeytun'/'	-	-	-	-	-	-	-	-

Lemons	16.94	89.57	-	-	-	-	-	-
Mangos	151.78	1,784.78	-	-	6.13	-	5.27	-
Oranges	531.36	3,968.34	-	-	-	-	-	-
Papayas	154.77	6,711.22	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	13,160.23	125,581.45	1,513.69	51,274.67	956.24	1,297.62	35.35	-
Chat	-	-	-	-	-	-	-	-
Coffee	652.35	1,765.94	347.33	1,261.83	552.74	1,222.12	35.35	-
Tea	-	-	7.60	225.19	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	11,971.03	71,901.54	1,158.76	49,787.65	-	-	-	-
Cotton	536.85	51,913.97	-	-	403.50	75.51	-	-
Other permanent crops	259.01	1,630.77	-	-	-	-	-	-

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010
E.C(2017/18) Chemical Fertilizer Applied IN HECTARES, Somal

Type of crop	UREA		DAP		Improved Seed		Indigenous Seed	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	-	-	8.87	-	-	-	21.55	85.80
Grains	-	-	6.34	-	-	-	21.55	85.80
Cereals	-	-	6.34	-	-	-	21.55	85.80
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	19.30	77.20
Maize	-	-	6.34	-	-	-	2.25	8.60
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-

Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	-	-	2.53	-	-	-	-	-
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	-	-	2.53	-	-	-	-	-
Green peppers	-	-	-	-	-	-	-	-
Red papers	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Root crops	-	-	-	-	-	-	-	-
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	-	-	-	-	-	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crpops	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-

Sugar cane	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-
Other permanent crops	-	-	-	-	-	-	-	-

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010 E.C(2017/18),
Chemical Fertilizer Applied IN HECTARES Benshangul-Gumu

Type of crop	UREA		DAP		Improved Seed		Indigenous Seed	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	5,981.39	9,526.86	29,291.78	53,275.72	654.54	5,987.55	77,731.67	60,148.50
Grains	5,694.21	8,578.11	28,192.47	41,527.73	229.46	4,662.32	57,078.87	53,666.60
Cereals	5,493.87	8,145.19	13,931.33	40,885.51	171.75	1,862.06	14,508.43	21,248.00
Teff	-	-	-	-	-	-	0.80	22.70
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	0.12	9.10
Maize	5,493.87	8,145.19	13,867.65	40,791.89	134.52	1,122.77	488.45	7,133.60
Sorghum	-	-	63.69	93.62	37.16	737.33	14,018.81	14,079.00
Finger millet	-	-	-	-	-	-	0.15	1.30
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	-	-	-	-	0.07	1.96	0.10	2.30
Pulse	134.98	430.58	135.91	487.88	39.07	2,651.71	444.16	26,673.30
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	0.22	12.80
R/Haricot bean	-	-	-	-	-	-	0.34	7.40
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	135.91	487.88	2.73	59.58	6.32	563.20
Lentiles	-	-	-	-	-	-	0.13	1.40
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	134.98	430.58	-	-	36.34	2,592.12	286.04	21,090.30
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	-	-	-	-	151.11	4,998.20
Gibto	-	-	-	-	-	-	-	-
Oil seeds	65.36	2.34	14,125.23	154.34	18.64	148.55	42,126.28	5,745.30
Nueg	-	-	-	-	-	-	22.97	241.00
Linseed	-	-	-	-	-	-	5.35	71.80
Ground nuts	-	-	-	-	6.17	84.18	23.80	1,358.40
Safflower	-	-	-	-	6.57	53.20	2,192.05	653.20
Sesame	65.36	2.34	14,125.23	154.34	5.90	11.17	39,882.11	3,420.90
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	285.72	946.46	1,095.26	11,728.24	15.25	21.06	42.73	296.50
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-

Ethiopian Cabbage	-	-	-	-	-	-	0.01	-
Tomatoes	-	-	-	-	-	-	-	-
Green peppers	-	-	-	-	-	-	-	-
Red papers	285.72	946.46	1,095.26	11,728.24	15.25	21.06	42.71	296.50
Swiss chard	-	-	-	-	-	-	-	-
Root crops	1.46	2.29	4.05	19.75	0.17	0.31	-	-
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	1.46	2.29	4.05	19.75	0.17	0.31	-	-
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	6.18	-
Permanent crops	-	-	-	-	409.66	1,303.86	20,603.89	6,185.40
Fruit crops	-	-	-	-	0.16	-	0.13	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	0.16	-	0.13	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	-	-	-	-	409.50	1,303.86	20,603.76	6,185.40
Chat	-	-	-	-	0.05	-	0.07	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	409.46	1,303.86	20,603.69	6,185.40
Other permanent crops	-	-	-	-	-	-	-	-

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010
E.C(2017/18) Chemical

Fertilizer Applied IN HECTARES, (S.N.N.P.R

Type of crop	UREA		DAP		Improved Seed		Indigenous Seed	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	41,572.54	93,361.73	187,109.38	91,419.42	109,062.14	9,424.33	30,143.27	18,343.10
Grains	30,568.71	21,830.99	174,073.35	35,963.98	108,626.93	8,303.78	29,870.19	15,393.10
Cereals	29,980.45	19,531.26	172,744.86	22,775.16	94,225.32	5,577.41	28,510.52	11,473.10
Teff	668.19	813.32	160,440.15	3,778.83	52.17	216.51	15.92	125.00
Barley	14.75	78.28	-	-	1.04	27.93	-	-
Wheat	991.46	3,350.90	17.23	255.21	98.40	2,887.31	36.61	4,218.00
Maize	28,231.82	15,156.10	12,216.81	18,228.84	94,066.28	2,426.32	65.09	1,599.10
Sorghum	18.42	86.98	70.68	512.28	6.79	17.94	99.95	1,040.00
Finger millet	-	-	-	-	0.64	1.40	113.54	0.30
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	55.81	45.68	-	-	-	-	28,179.40	4,490.70
Pulse	578.18	2,277.08	1,317.60	13,094.80	14,401.44	2,725.67	1,255.89	2,316.60
Horse/Faba beans	0.60	2.17	-	-	-	-	-	-
Field peas	1.25	10.87	-	-	-	-	-	-
W/Haricot bean	13.68	43.51	-	-	-	-	7.43	236.10
R/Haricot bean	469.34	1,811.69	1,185.36	11,105.69	14,339.08	1,917.17	1,152.56	309.60
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	93.32	408.84	-	-	17.69	356.26	13.09	573.20
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	9.45	193.08	1.46	108.70
Soya beans	-	-	16.47	525.43	0.92	15.96	19.19	163.00
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	115.77	1,463.68	34.29	243.20	62.15	926.00
Gibto	-	-	-	-	-	-	-	-
Oile seeds	10.08	22.65	10.89	94.02	0.17	0.70	103.78	1,603.40
Nueg	9.35	21.74	-	-	-	-	1.46	54.30
Linseed	-	-	-	-	-	-	-	-
Ground nuts	0.73	0.92	10.89	94.02	0.17	0.70	1.18	12.80
Safflower	-	-	-	-	-	-	31.10	257.30
Sesame	-	-	-	-	-	-	70.04	1,279.00
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	203.25	1,273.73	77.38	3,417.61	304.65	4.96	5.70	46.40
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	1.60	8.70	52.19	463.90	1.71	0.36	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	23.83	361.84	1.13	2,634.69	292.52	0.37	-	-
Green peppers	7.11	15.96	16.47	225.19	1.56	0.01	0.24	16.30
Red papers	170.70	887.22	7.60	93.82	8.85	4.21	5.46	30.10
Swiss chard	-	-	-	-	-	-	-	-

Root crops	89.13	455.09	71.57	588.51	7.37	569.76	1.96	8.40
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	47.40	257.11	71.57	588.51	5.88	37.84	1.85	5.50
Potatoes	23.04	152.27	-	-	1.49	531.92	-	-
Garlic	1.09	13.07	-	-	-	-	0.11	2.90
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	17.60	32.64	-	-	-	-	-	-
Other Temporary	328.37	1,256.60	877.23	9,249.54	41.03	0.32	5.35	0.10
Permanent crops	10,383.08	68,545.32	12,009.85	42,199.78	82.16	545.51	260.07	2,895.10
Fruit crops	4,424.80	2,565.91	68.72	21,017.31	31.17	-	-	-
Avocado	4,377.60	10.87	-	-	-	-	-	-
Bananas	-	-	-	-	25.80	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	0.06	-	-	-
Mangos	25.37	2,446.33	68.72	21,017.31	3.24	-	-	-
Oranges	5.69	39.14	-	-	1.66	-	-	-
Papayas	16.14	69.58	-	-	0.41	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	5,939.91	65,913.66	11,929.40	21,169.83	49.21	545.26	259.83	2,892.20
Chat	-	-	-	-	-	-	-	-
Coffee	4,799.91	10,189.89	8,762.73	7,326.97	-	-	-	-
Tea	1,140.00	55,723.77	3,166.67	13,842.87	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	49.21	545.26	259.83	2,892.20
Other permanent crops	18.37	65.75	11.73	12.64	1.78	0.25	0.24	2.90

Table 3 Estimate of farm input applied cropland area and quantity of input used by crop and input types for commercial farms, 2010
E.C(2017/18) Chemical Fertilizer Applied IN HECTARES, Gambela

Type of crop	UREA		DAP		Improved Seed		Indigenous Seed	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts
Total	215,837.59	24,574.74	1,441.84	2,852.32	532.07	11,784.38	48,796.35	50,225.50
Grains	215,470.42	21,960.95	1,439.31	2,814.81	424.64	11,221.90	48,472.73	44,453.60
Cereals	215,470.42	21,960.95	-	-	315.17	10,757.52	17,033.31	16,177.00
Teff	-	-	-	-	-	-	5.39	228.40
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	285.27	28.57	-	-	56.19	389.43	3,141.25	7,724.50
Sorghum	211,766.40	1,513.46	-	-	38.40	107.75	13,878.53	7,408.30
Finger millet	-	-	-	-	-	-	-	-

Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	3,418.74	20,418.92	-	-	220.59	10,260.34	8.14	815.90
Pulse	-	-	-	-	62.88	255.36	27,840.17	20,637.90
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	-	-	62.88	255.36	27,840.17	20,637.90
Gibto	-	-	-	-	-	-	-	-
Oile seeds	-	-	1,439.31	2,814.81	46.59	209.02	3,599.25	7,638.70
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	0.18	3.40
Safflower	-	-	1,439.31	2,814.81	46.59	209.02	3,579.78	7,189.70
Sesame	-	-	-	-	-	-	19.29	445.60
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	0.08	0.03	0.88	3.60
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	0.03	0.10
Tomatoes	-	-	-	-	0.08	0.03	0.65	0.60
Green peppers	-	-	-	-	-	-	-	-
Red papers	-	-	-	-	-	-	0.20	3.00
Swiss chard	-	-	-	-	-	-	-	-
Root crops	-	-	-	-	-	-	0.02	0.10
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	-	-	-	-	-	-	0.02	0.10
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	12.07	0.40
Permanent crops	367.17	2,613.79	2.53	37.51	107.35	562.45	310.65	5,767.80
Fruit crops	0.91	4.37	2.53	37.51	-	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	0.91	4.37	2.53	37.51	-	-	-	-

Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	366.26	2,609.42	-	-	107.35	562.45	310.65	5,767.80
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	366.26	2,609.42	-	-	107.35	562.45	310.65	5,767.80
Other permanent crops	-	-	-	-	-	-	-	-

TABLE 3contd Chemicals ,National

Type of crop	Pesticides		Fungicides		Herbicides		Other	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	440,390.15	487,598.94	566,599.28	603,306.31	766,162.78	559,587.35	445,112.24	292,031.60
Grains	436,399.26	477,423.40	550,426.46	459,028.54	763,916.11	557,754.22	413,080.50	279,588.00
Cereals	114,373.89	196,523.53	123,864.56	437,174.90	751,781.20	469,166.43	400,616.26	219,184.60
Teff	114.31	3,734.87	123.15	777.47	28,199.60	8,856.53	6,058.89	6,601.50
Barley	18.69	66.76	3,912.97	83,536.57	587.78	2,390.38	446.03	5,388.60
Wheat	652.81	1,680.38	96,503.43	290,052.66	11,561.81	22,683.86	10,579.13	86,741.60
Maize	61,431.65	67,973.64	23,308.17	43,117.67	89,976.34	296,754.71	336,546.63	113,642.60
Sorghum	45,989.98	8,818.53	16.83	19,690.53	620,932.02	137,842.86	46,105.16	5,456.10
Finger millet	84.83	274.29	-	-	375.74	68.11	68.68	1,153.30
Oats/'Aja'/	10.32	4.76	-	-	9.14	2.52	9.14	46.70
Rice	6,071.30	113,970.29	-	-	138.76	567.48	802.60	154.00
Pulse	155,335.35	258,591.36	424,994.74	14,045.65	2,863.13	37,151.38	10,012.53	34,587.00
Horse/Faba beans	209.01	360.12	304.67	3,176.19	304.79	1,560.14	201.03	2,058.50
Field peas	88.76	557.76	1,003.96	4,563.25	3.47	4.80	45.76	630.90
W/Haricot bean	380.61	1,882.67	34.20	357.00	130.29	431.65	138.88	1,392.70
R/Haricot bean	1,384.89	3,046.02	422,968.03	1,855.61	345.60	17,644.74	543.18	3,994.20
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	278.40	31,975.10	115.39	634.67	19.15	72.90	52.84	399.00
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	37.65	332.19	-	-	-	-	33.35	133.00

Soya beans	1,307.63	1,646.90	-	-	1,492.88	15,206.08	6,636.10	15,125.40
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	151,648.41	218,790.59	568.48	3,458.93	566.96	2,231.06	2,361.38	10,853.30
Gibto	-	-	-	-	-	-	-	-
Oile seeds	166,690.02	22,308.51	1,567.16	7,807.99	9,271.78	51,436.41	2,451.71	25,816.40
Nueg	-	-	-	-	10.39	17.27	4.45	22.00
Linseed	268.83	650.03	-	-	83.08	234.42	202.30	1,924.70
Ground nuts	2.72	76.57	-	-	35.93	72.13	15.81	423.70
Safflower	10,920.21	12,498.29	14.17	2,126.13	438.30	1,477.87	461.52	3,070.40
Sesame	154,596.90	7,837.79	1,550.33	5,618.39	8,197.97	48,640.78	1,074.28	8,922.20
Rapeseed	901.36	1,245.84	2.66	63.47	506.10	993.95	693.35	11,453.30
Vegetables	3,149.48	7,346.15	12,564.66	89,533.15	2,194.12	945.15	24,006.64	6,937.50
Lettuce	2.67	7.18	1.28	19.83	0.37	3.26	2.51	20.10
Head Cabbage	248.10	174.89	235.94	7,514.23	34.74	0.31	262.59	199.40
Ethiopian Cabbage	0.25	10.67	1.09	811.18	-	-	0.06	0.30
Tomatoes	179.16	6,268.63	1,710.66	54,372.05	2.26	7.00	5,759.12	1,993.50
Green peppers	1,930.18	480.06	126.51	25,039.31	1.52	7.19	29.02	159.70
Red papers	789.12	404.72	10,489.17	1,776.54	2,155.23	927.39	17,953.35	4,564.60
Swiss chard	-	-	-	-	-	-	-	-
Root crops	436.56	1,485.70	2,553.60	28,384.45	27.99	841.71	6,368.85	3,654.40
Beet root	0.79	1.63	0.03	16.66	0.12	1.04	0.71	4.60
Carrot	10.38	228.81	72.48	14,758.78	0.15	1.34	9.68	176.60
Onion	411.54	1,170.69	351.15	6,564.20	20.56	796.16	1,759.52	2,916.90
Potatoes	12.46	79.24	52.78	5,410.53	7.17	43.17	4,596.01	509.50
Garlic	1.39	5.33	2,003.82	1,602.55	-	-	2.94	46.70
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	73.34	31.73	-	-	-	-
Other Temporary	404.85	1,343.69	1,054.56	26,360.17	24.56	46.27	1,656.25	1,851.70
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	1,579.62	112,033.99	2,780.13	359,484.30	13,019.58	1,682.19	1,527.83	9,621.30
Avocado	-	-	26.60	90,440.00	-	-	14.14	480.70
Bananas	0.98	3.05	17.10	90,440.00	13.13	658.00	603.59	509.60
Guava/'Zeytun'/	0.10	0.46	-	-	-	-	-	-
Lemons	27.96	197.59	-	-	12,668.11	121.40	2.87	44.50
Mangos	401.51	11,799.10	1,582.64	165,968.88	330.17	852.83	211.27	1,059.00
Oranges	925.07	98,975.58	-	-	-	-	453.01	5,092.40
Papayas	224.00	1,058.21	1,153.79	12,635.42	8.16	49.96	242.94	2,435.20
Pineapples	-	-	-	-	-	-	-	-
Cash crpops	123,952.77	430,137.28	4,238.10	333,403.78	465,650.09	271,497.17	766,799.50	165,410.10
Chat	-	-	-	-	-	-	0.11	-
Coffee	51.05	302.10	1,144.00	152,320.01	434,912.03	36,990.83	747,028.78	72,261.20
Tea	-	-	-	-	926.11	69,868.14	1,517.54	23,770.10
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	5,425.97	42,671.56	2,598.16	180,211.10	22,741.57	153,155.89	15,544.82	49,974.60
Cotton	118,475.75	387,163.62	495.94	872.67	7,070.38	11,482.30	2,708.25	19,404.20

Other permanent crops	1,871.31	13,571.85	726.94	42,017.89	303,079.16	1,653.10	148,624.90	3,440.90
------------------------------	----------	-----------	--------	-----------	------------	----------	------------	----------

TABLE 3contd, TIGRAY

	Pesticides		Fungicides		Herbicides		Other	
Type of crop	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts
Total	47,732.53	62,973.22	11,024.78	32,653.69	208,092.02	41,687.86	42,867.56	22,472.80
Grains	47,052.20	61,828.76	509.71	2,919.47	208,092.02	41,687.86	38,060.22	22,033.50
Cereals	45,476.58	4,517.15	51.19	476.00	207,879.09	41,134.38	36,068.95	4,357.80
Teff	65.95	3,617.54	51.19	476.00	47.85	55.63	52.09	35.20
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	0.47	0.96	0.47	-
Maize	0.73	0.57	-	-	-	-	32.35	6.80
Sorghum	45,409.90	899.03	-	-	207,830.77	41,077.79	35,984.03	4,315.80
Finger millet	-	-	-	-	-	-	-	-
Oats/'Aja'/'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	238.73	56,531.80	-	-	2.71	1.92	1,051.08	9,730.00
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	2.25	12.19	-	-	-	-	2.00	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	236.48	56,519.61	-	-	2.71	1.92	1,049.08	9,730.00
Gibto	-	-	-	-	-	-	-	-
Oile seeds	1,336.89	779.81	458.52	2,443.47	210.22	551.56	940.19	7,945.70
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	154.49	431.65	34.44	97.70
Sesame	1,336.89	779.81	458.52	2,443.47	55.73	119.90	905.75	7,848.00
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	674.36	1,052.73	10,436.64	26,644.10	-	-	4,793.46	377.10
Lettuce	0.16	2.06	1.28	19.83	-	-	0.29	1.10
Head Cabbage	-	-	60.80	17.85	-	-	13.90	0.10

Ethiopian Cabbage	-	-	0.26	17.85	-	-	0.06	0.30
Tomatoes	9.55	741.34	118.07	4,763.97	-	-	3,023.11	293.50
Green peppers	8.10	297.14	79.84	21,078.87	-	-	11.58	67.30
Red papers	656.54	12.19	10,176.40	745.73	-	-	1,744.53	14.80
Swiss chard	-	-	-	-	-	-	-	-
Root crops	5.43	87.39	70.83	2,951.60	-	-	12.25	51.40
Beet root	-	-	0.03	16.66	-	-	0.01	0.10
Carrot	0.04	1.64	0.28	17.06	-	-	0.06	0.20
Onion	5.39	85.75	70.52	2,917.88	-	-	12.18	51.20
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	0.54	4.34	7.60	138.52	-	-	1.63	10.80
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	26.33	109.71	-	-	-	-	75.97	782.00
Avocado	-	-	-	-	-	-	9.00	208.20
Bananas	-	-	-	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	2.45	18.29	-	-	-	-	2.70	44.50
Mangos	21.43	73.14	-	-	-	-	46.16	-
Oranges	2.45	18.29	-	-	-	-	17.38	529.30
Papayas	-	-	-	-	-	-	0.73	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	385.20	88,462.47	-	-	0.22	5.76	1,295.54	13,670.10
Chat	-	-	-	-	-	-	0.11	-
Coffee	0.22	72.39	-	-	-	-	0.19	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	384.98	88,390.08	-	-	0.22	5.76	1,295.25	13,670.10
Other permanent crops	15.53	128.76	144.10	3,426.01	-	-	28.29	175.80

TABLE 3contd Chemicals, AFAR

	Pesticides		Fungicides		Herbicides		Other	
Type of crop								
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts
	Area in Ha	Amnt in Qts		Area in Ha	Amnt in Qts		Area in Ha	Amnt in Qts

Total	2.65	48.76	-	-	276.05	-	277.64	-
Grains	-	-	-	-	276.05	-	276.05	-
Cereals	-	-	-	-	276.05	-	276.05	-
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	276.05	-	276.05	-
Maize	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	0.94	15.24	-	-	-	-	0.83	-
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	0.94	15.24	-	-	-	-	0.83	-
Green peppers	-	-	-	-	-	-	-	-
Red papers	-	-	-	-	-	-	-	-

Swiss chard	-	-	-	-	-	-	-	-
Root crops	1.71	33.52	-	-	-	-	0.76	-
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	1.71	33.52	-	-	-	-	0.76	-
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	13.41	6.10	-	-	13.03	657.07	101.53	258.70
Avocado	-	-	-	-	-	-	-	-
Bananas	0.98	3.05	-	-	13.03	657.07	39.09	103.90
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	12.42	3.05	-	-	-	-	61.38	154.80
Oranges	-	-	-	-	-	-	1.06	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	3,122.94	32,760.89	-	-	10,082.41	40,922.33	9,889.21	22,995.90
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	937.19	432.76	-	-	10,079.64	40,903.15	9,889.21	22,995.90
Cotton	2,185.75	32,328.13	-	-	2.77	19.18	-	-
Other permanent crops	-	-	-	-	1.87	23.02	7.20	17.90

TABLE 3contd Chemicals , AMARA

	Pesticides		Fungicides		Herbicides		Other	
Type of crop								
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts
Total	20,662.68	23,837.51	424,342.25	108,636.65	388,471.87	260,373.21	66,829.13	63,340.40
Grains	18,694.01	23,389.52	423,983.84	104,712.07	386,289.76	258,612.25	51,081.54	59,429.30
Cereals	15,839.34	16,248.92	309.30	101,998.87	376,592.84	195,768.93	47,028.22	42,210.20
Teff	24.00	32.00	-	-	8,306.05	2,251.61	5,630.63	2,889.80
Barley	-	-	147.06	70,091.00	5.43	14.39	5.43	886.50
Wheat	6.25	22.86	52.44	22,610.00	86.23	517.99	91.76	1,088.30
Maize	15,664.84	15,951.06	93.84	4,775.87	18,122.29	160,131.51	41,244.09	37,023.00
Sorghum	140.92	189.67	15.96	4,522.00	350,065.24	32,833.29	43.44	197.50

Finger millet	3.33	53.33	-	-	7.59	20.14	12.87	125.00
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	1,792.00	3,852.22	422,689.20	872.67	1,367.52	13,814.36	3,574.97	13,999.80
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	359.26	1,796.57	-	-	-	-	-	-
R/Haricot bean	32.17	68.57	422,689.20	872.67	123.36	323.26	52.23	565.70
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	60.47	126.48	-	-	4.66	38.37	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	1,164.52	1,365.00	-	-	1,113.93	13,317.59	2,304.34	12,771.70
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	175.60	495.60	-	-	125.56	135.14	1,218.41	662.30
Gibto	-	-	-	-	-	-	-	-
Oile seeds	1,062.67	3,288.38	985.34	1,840.53	8,329.40	49,028.96	478.35	3,219.30
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	272.17	1,020.32	427.08	2,972.70
Sesame	1,062.67	3,288.38	985.34	1,840.53	8,057.23	48,008.64	51.27	246.60
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	1,950.12	184.61	136.18	1,046.68	2,155.23	927.39	15,724.60	3,211.90
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	6.76	15.87	-	-	-	-
Ethiopian Cabbage	-	-	0.84	793.33	-	-	-	-
Tomatoes	18.46	8.46	47.69	71.40	-	-	-	-
Green peppers	1,906.58	4.57	-	-	-	-	0.22	2.30
Red papers	25.08	171.58	80.89	166.08	2,155.23	927.39	15,724.39	3,209.60
Swiss chard	-	-	-	-	-	-	-	-
Root crops	18.55	263.38	222.23	2,877.90	26.88	833.57	22.99	699.20
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	15.67	232.90	221.68	2,084.56	19.71	790.41	15.83	567.30
Potatoes	2.88	30.48	0.54	793.33	7.17	43.17	7.17	131.90
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	84.66	648.17	447.72	14,772.67	-	-	7.67	8.70
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava/'Zeytun'/	0.10	0.46	-	-	-	-	-	-
Lemons	0.32	4.36	-	-	-	-	-	-

Mangos	82.89	626.29	429.40	9,694.55	-	-	7.67	8.70
Oranges	1.35	17.07	-	-	-	-	-	-
Papayas	-	-	18.32	5,078.13	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	792.43	84,634.64	108.34	793.33	6,816.71	8,154.72	-	-
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/'	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	792.43	84,634.64	108.34	793.33	6,816.71	8,154.72	-	-
Other permanent crops	0.24	0.30	-	-	-	-	-	-

TABLE 3contd Chemicals OROMIA

	Pesticides		Fungicides		Herbicides		Other	
Type of crop								
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	37,947.13	21,498.82	106,009.31	385,192.20	76,808.32	161,781.28	74,361.08	170,352.90
Grains	36,955.17	15,594.93	101,376.40	290,135.80	76,749.91	161,715.15	71,819.23	164,349.50
Cereals	35,378.84	12,123.88	99,548.32	279,261.90	75,222.26	156,214.94	66,019.64	142,408.40
Teff	16.18	50.29	-	-	13,428.95	5,838.92	265.80	2,681.30
Barley	14.35	42.38	3,765.91	13,445.57	578.52	2,360.64	433.57	4,386.60
Wheat	122.25	318.10	95,292.83	263,983.73	10,510.35	20,628.08	7,595.41	76,565.10
Maize	35,183.05	11,371.30	489.58	1,832.60	50,426.16	126,143.04	47,567.57	56,736.20
Sorghum	32.68	337.07	-	-	167.81	864.18	10,068.93	854.20
Finger millet	-	-	-	-	21.28	47.00	55.81	1,028.30
Oats/'Aja'/'	10.32	4.76	-	-	9.14	2.52	9.14	46.70
Rice	-	-	-	-	80.05	330.55	23.41	110.00
Pulse	395.03	1,555.38	1,708.84	9,460.18	850.12	3,943.60	4,780.99	7,670.90
Horse/Faba beans	209.01	360.12	295.15	3,080.99	304.79	1,560.14	200.21	2,042.90
Field peas	88.76	557.76	1,003.96	4,563.25	3.47	4.80	45.17	619.90
W/Haricot bean	6.62	20.57	34.20	357.00	130.29	431.65	138.88	1,392.70
R/Haricot bean	5.88	4.88	260.15	824.27	79.82	483.45	114.21	1,135.20
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	82.30	609.01	115.39	634.67	5.87	23.02	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	2.45	3.05	-	-	322.44	1,435.73	4,279.09	2,258.70

Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	-	-	3.43	4.80	3.43	221.50
Gibto	-	-	-	-	-	-	-	-
Oile seeds	1,181.30	1,915.67	119.24	1,413.72	677.53	1,556.61	1,018.60	14,270.20
Nueg	-	-	-	-	10.39	17.27	-	-
Linseed	268.83	650.03	-	-	83.08	234.42	202.30	1,924.70
Ground nuts	-	-	-	-	28.58	72.13	7.73	69.20
Safflower	1.30	1.52	10.11	15.87	11.64	25.90	-	-
Sesame	9.81	18.29	106.48	1,334.39	37.74	212.95	115.22	823.10
Rapeseed	901.36	1,245.84	2.66	63.47	506.10	993.95	693.35	11,453.30
Vegetables	392.35	4,248.34	1,858.49	60,448.01	37.07	16.52	684.40	2,049.10
Lettuce	2.50	5.12	-	-	0.37	3.26	2.21	19.00
Head Cabbage	248.10	174.89	151.13	7,369.45	34.74	0.31	220.44	174.40
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	130.01	3,953.94	1,544.64	48,697.66	0.43	5.76	89.47	1,461.60
Green peppers	8.54	105.24	46.67	3,960.44	1.52	7.19	6.49	72.80
Red papers	3.20	9.14	116.04	420.47	-	-	365.78	321.20
Swiss chard	-	-	-	-	-	-	-	-
Root crops	381.93	859.66	2,150.46	17,615.19	1.12	8.13	1,682.49	2,358.00
Beet root	0.79	1.63	-	-	0.12	1.04	0.70	4.60
Carrot	10.35	227.17	72.20	14,741.72	0.15	1.34	9.62	176.40
Onion	369.60	628.57	27.55	1,175.72	0.85	5.76	1,664.23	2,052.80
Potatoes	-	-	46.89	95.20	-	-	5.36	79.80
Garlic	1.20	2.29	2,003.82	1,602.55	-	-	2.59	44.50
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	217.68	795.89	623.96	16,993.20	20.22	41.48	174.96	1,596.30
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	1,442.32	106,103.13	2,268.49	315,862.49	12,763.75	712.79	718.28	8,230.80
Avocado	-	-	26.60	90,440.00	-	-	3.04	266.00
Bananas	-	-	8.74	90,440.00	0.10	0.92	1.62	271.70
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	25.19	174.95	-	-	12,668.11	121.40	-	-
Mangos	277.60	5,997.39	1,097.67	127,425.20	87.36	540.51	74.25	877.40
Oranges	915.53	98,872.57	-	-	-	-	423.87	4,531.50
Papayas	224.00	1,058.21	1,135.48	7,557.29	8.16	49.96	215.50	2,284.20
Pineapples	-	-	-	-	-	-	-	-
Cash crpops	5,022.45	48,523.17	3,206.16	330,944.45	14,154.62	125,411.88	7,433.68	61,159.20
Chat	-	-	-	-	-	-	-	-
Coffee	1.81	1.14	608.00	150,733.35	1,465.98	10,789.84	1,258.67	21,695.70
Tea	-	-	-	-	26.71	2,369.30	263.75	7,761.10
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	4,488.78	42,238.80	2,598.16	180,211.10	12,661.93	112,252.74	5,655.62	26,978.60
Cotton	531.87	6,283.23	-	-	-	-	255.64	4,723.80
Other permanent crops	1,849.60	13,341.45	582.85	38,591.88	6,659.92	955.62	368.28	2,545.70

TABLE 3contd Chemicals, SOMALE

Type of crop	Pesticides		Fungicides		Herbicides		Other	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	-	-	-	-	3.31	10.79	1,600.15	215.20
Grains	-	-	-	-	3.31	10.79	1,600.15	215.20
Cereals	-	-	-	-	3.31	10.79	1,600.15	215.20
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	3.31	10.79	1,600.15	215.20
Maize	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/'Aja'/'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-	-
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	-	-	-	-	-	-	-	-
Green peppers	-	-	-	-	-	-	-	-

Red papers	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Root crops	-	-	-	-	-	-	-	-
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	-	-	-	-	-	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Geshe'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-
Other permanent crops	-	-	-	-	-	-	-	-

TABLE 3contd Chemicals, BENESHANGUL

Type of crop	Pesticides		Fungicides		Herbicides		Other	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	164,254.59	41,881.97	542.95	2,824.27	64,942.21	26,362.81	374.12	3,373.30
Grains	164,159.70	41,715.87	430.62	2,380.00	64,942.21	26,362.81	346.25	3,371.70
Cereals	900.57	6,126.12	430.62	2,380.00	64,809.75	25,379.60	286.58	2,922.20
Teff	3.49	10.67	-	-	3.09	6.71	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-

Maize	621.67	3,729.17	430.62	2,380.00	2,400.92	6,858.53	286.58	2,922.20
Sorghum	275.41	2,386.29	-	-	62,405.74	18,514.36	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	423.36	31,934.44	-	-	77.84	683.93	52.68	95.00
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	26.43	30,697.14	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	140.66	278.86	-	-	53.68	451.80	52.68	95.00
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	256.27	958.45	-	-	24.16	232.13	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	162,835.77	3,655.31	-	-	54.62	299.28	6.99	354.50
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	2.33	76.19	-	-	7.36	-	6.99	354.50
Safflower	10,811.61	100.57	-	-	-	-	-	-
Sesame	152,021.82	3,478.55	-	-	47.26	299.28	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	62.65	79.24	106.25	428.40	-	-	-	-
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	-	-	-	-	-	-	-	-
Green peppers	-	-	-	-	-	-	-	-
Red papers	62.65	79.24	106.25	428.40	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Root crops	0.78	3.05	6.08	15.87	-	-	-	-
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	0.78	3.05	6.08	15.87	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/'	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	31.46	83.81	-	-	-	-	27.87	1.60
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	-	-	-	-	-	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-

Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crops	106,275.22	25,424.60	-	-	173.46	808.63	-	-
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	106,275.22	25,424.60	-	-	173.46	808.63	-	-
Other permanent crops	-	-	-	-	-	-	-	-

TABLE 3contd Chemicals, S.N.N.P

Type of crop	Pesticides		Fungicides		Herbicides		Other	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts
Total	10,832.04	79,577.58	20,607.31	20,957.24	26,757.33	23,154.63	256,668.92	31,603.70
Grains	10,684.45	77,235.13	20,053.20	5,838.93	26,751.17	23,148.58	247,763.41	29,515.40
Cereals	8,820.54	24,984.48	19,977.11	5,378.80	26,554.92	6,250.12	247,203.02	26,397.50
Teff	4.69	24.38	71.95	301.47	6,413.66	703.65	110.37	995.30
Barley	4.33	24.38	-	-	3.84	15.35	7.02	115.50
Wheat	524.31	1,339.43	1,158.16	3,458.93	685.40	1,526.04	1,015.27	8,873.00
Maize	8,230.57	23,473.62	18,747.00	1,618.40	18,902.77	3,466.24	246,060.72	16,322.80
Sorghum	32.52	84.57	-	-	143.68	300.96	8.77	88.50
Finger millet	-	-	-	-	346.86	0.96	-	-
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	24.12	38.10	-	-	58.70	236.93	0.87	2.30
Pulse	1,755.65	49,845.70	76.09	460.13	196.25	16,898.46	552.81	3,091.30
Horse/Faba beans	-	-	9.52	95.20	-	-	0.83	15.60
Field peas	-	-	-	-	-	-	0.60	11.00
W/Haricot bean	14.73	65.52	-	-	-	-	-	-
R/Haricot bean	1,346.84	2,972.58	18.69	158.67	142.41	16,838.03	376.74	2,293.30

B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	106.94	530.29	-	-	8.62	11.51	50.84	399.00
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	37.65	332.19	-	-	-	-	33.35	133.00
Soya beans	-	-	-	-	2.82	0.96	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	249.48	45,945.13	47.88	206.27	42.39	47.96	90.46	239.40
Gibto	-	-	-	-	-	-	-	-
Oile seeds	108.26	2,404.95	-	-	-	-	7.58	26.60
Nueg	-	-	-	-	-	-	4.45	22.00
Linseed	-	-	-	-	-	-	-	-
Ground nuts	0.39	0.38	-	-	-	-	1.09	-
Safflower	107.28	2,400.00	-	-	-	-	-	-
Sesame	0.59	4.57	-	-	-	-	2.04	4.60
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	65.00	1,709.62	27.11	965.96	1.82	1.25	2,803.35	1,299.40
Lettuce	-	-	-	-	-	-	-	-
Head Cabbage	-	-	17.25	111.07	-	-	28.26	24.90
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes	16.38	1,503.95	0.26	839.03	1.82	1.25	2,645.71	238.30
Green peppers	6.96	73.10	-	-	-	-	10.73	17.30
Red papers	41.65	132.57	9.59	15.87	-	-	118.65	1,018.90
Swiss chard	-	-	-	-	-	-	-	-
Root crops	28.01	228.04	104.00	4,923.90	-	-	4,650.36	545.80
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	18.24	176.23	25.32	370.17	-	-	66.53	245.60
Potatoes	9.58	48.76	5.35	4,522.00	-	-	4,583.48	297.80
Garlic	0.20	3.05	-	-	-	-	0.35	2.30
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	73.34	31.73	-	-	-	-
Other Temporary	54.58	404.79	423.00	9,228.45	4.34	4.80	1,451.80	243.10
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	12.91	5,166.89	63.93	28,849.13	242.80	312.33	624.38	341.00
Avocado	-	-	-	-	-	-	2.10	6.50
Bananas	-	-	8.36	-	-	-	562.88	133.90
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	0.17	-
Mangos	7.17	5,099.23	55.57	28,849.13	242.80	312.33	21.82	18.10
Oranges	5.74	67.66	-	-	-	-	10.69	31.50
Papayas	-	-	-	-	-	-	26.71	151.00
Pineapples	-	-	-	-	-	-	-	-
Cash crpops	1,157.67	35,905.60	536.00	1,586.67	434,345.46	93,699.84	748,142.10	67,582.90
Chat	-	-	-	-	-	-	-	-
Coffee	49.03	228.57	536.00	1,586.67	433,446.05	26,201.00	745,769.92	50,565.50
Tea	-	-	-	-	899.41	67,498.84	1,253.78	16,009.00

Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	1,108.64	35,677.03	-	-	-	-	1,118.39	1,008.40
Other permanent crops	5.93	101.33	-	-	296,417.37	674.46	148,221.13	701.60

TABLE 3contd Chemicals ,GAMBELA

Type of crop	Pesticides		Fungicides		Herbicides		Other	
	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts	Area in Ha	Amnt in Qts

Total	158,958.53	257,781.08	4,072.68	53,042.27	811.68	46,216.78	2,133.65	673.40
Grains	158,853.73	257,659.17	4,072.68	53,042.27	811.68	46,216.78	2,133.65	673.40
Cereals	7,958.01	132,522.98	3,548.02	47,679.33	442.98	44,407.67	2,133.65	673.40
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	1,730.79	13,447.93	3,547.15	32,510.80	124.20	155.40	1,355.32	631.60
Sorghum	98.55	4,921.91	0.87	15,168.53	318.78	44,252.27	-	-
Finger millet	81.50	220.95	-	-	-	-	-	-
Oats/'Aja'/	-	-	-	-	-	-	-	-
Rice	6,047.18	113,932.19	-	-	-	-	778.33	41.80
Pulse	150,730.59	114,871.81	520.60	3,252.67	368.70	1,809.11	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
W/Haricot bean	-	-	-	-	-	-	-	-
R/Haricot bean	-	-	-	-	-	-	-	-
B/Haricot bean	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung beans/"Masho"/	150,730.59	114,871.81	520.60	3,252.67	368.70	1,809.11	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	165.13	10,264.38	4.06	2,110.27	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	0.01	9,996.19	4.06	2,110.27	-	-	-	-
Sesame	165.12	268.19	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables	4.07	56.38	-	-	-	-	-	-
Lettuce	-	-	-	-	-	-	-	-

Head Cabbage	-	-	-	-	-	-	-	-
Ethiopian Cabbage	0.25	10.67	-	-	-	-	-	-
Tomatoes	3.82	45.71	-	-	-	-	-	-
Green peppers	-	-	-	-	-	-	-	-
Red papers	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Root crops	0.15	10.67	-	-	-	-	-	-
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onion	0.15	10.67	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro/'Godere'/	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Other Temporary	100.58	54.86	-	-	-	-	-	-
Permanent crops	-	-	-	-	-	-	-	-
Fruit crops	-	-	-	-	-	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava/'Zeytun'/	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangos	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Cash crpops	7,196.87	114,425.91	387.60	79.33	77.21	2,494.00	38.97	1.90
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Tea	-	-	-	-	-	-	-	-
Hopes/'Gesho'/	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-
Cotton	7,196.87	114,425.91	387.60	79.33	77.21	2,494.00	38.97	1.90
Other permanent crops	-	-	-	-	-	-	-	-