

THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
CENTRAL STATISTICAL AGENCY
AGRICULTURAL SAMPLE SURVEY
2017/18 (2010 E.C.)

VOLUME I
REPORT ON
AREA AND PRODUCTION OF MAJOR
CROPS
(PRIVATE PEASANT HOLDINGS, MEHER SEASON)



ADDIS ABABA
April, 2018

586 STATISTICAL BULLETIN 586

ABBREVIATIONS:

CV – Coefficient of variation

E.C. - Ethiopian calendar

S.N.N.P.R. – South nations, Nationalities and Peoples Region

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PART I

INTRODUCTION AND OBJECTIVES OF THE SURVEY

1.1. INTRODUCTION

The sound performance of agriculture warrants the availability of food crops. This accomplishment in agriculture does not only signify the adequate acquisition of food crops to attain food security, but also heralds a positive aspect of the economy. In regard to this, collective efforts are being geared to securing agricultural outputs of the desired level so that self reliance in food supply can be achieved and disaster caused food shortages be contained in the shortest possible time in Ethiopia.

The prime role that agriculture plays in a country's political, economic and social stability makes measures of agricultural productions extremely sensitive. Statistics collected on agricultural productions are, therefore, fraught with questions of reliability by data users. To tackle these questions convincingly and dissipate the misgivings of users, information on agriculture has to be collected using standard procedures of data collection.

Upholding this principle, the Central Statistical Agency (CSA) has been furnishing statistical information on the country's agriculture since 1980/81 to alert policy interventionists on the changes taking place in the agricultural sector. As part of this task, the 2017/18 (2010 E.C.) Agricultural Sample Survey (AgSS) was conducted to provide data on cropped area and production of crops within the private peasant holdings for Meher Season of the specified year. The survey results are presented in this bulletin and other electronic media for data users.

The report comprises three parts. Part I contains the objectives of this annual survey. Part II deals with coverage of the survey, sample design, field organization and method of data collection and Part III includes the survey results. Estimation procedures and formulation of estimates of totals, ratios and variance are presented in Appendix I. Estimates of the standard errors with the corresponding coefficients of variations for area and production of crops are presented in Appendix II. The numbers of agricultural households covered, number of parcels and fields measured are presented in appendix III and the survey questionnaires in Appendix IV.

1.2. OBJECTIVES OF THE SURVEY

The general objective of CSA's Agricultural Sample Survey (AgSS) is to collect basic quantitative information on the country's agriculture that is essential for planning, policy

formulation, monitoring and evaluation of mainly food security and other agricultural activities. The AgSS is composed of four components: Crop Production Forecast Survey, Meher Season Post Harvest Survey (Area and production, land use, farm management and crop utilization), Livestock Survey and Belg Season Survey.

The specific objectives of Meher Season Post Harvest Survey are to estimate the total crop area, volume of crop production and yield of crops for Meher Season agriculture in Ethiopia. The report is based on private peasant holdings in rural sedentary areas of the country and part of companion reports on the performance of agriculture in the country. The report is compiled at regional level.

PART II

SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

2.1. SCOPE AND COVERAGE OF THE SURVEY

The range of data items that the 2017/18 (2010 E.C.) Annual Agricultural Sample Survey (Meher Season) dealt with includes all cereals, pulses and oilseeds and the most commonly grown vegetables, root crops and permanent (perennial) crops. Holders growing at least one or more of these and/ or other crops are enumerated and data on crop area and yield condition recorded, hence data on production of these crops acquired.

The 2017/18 (2010 E.C.) Annual Agricultural Sample Survey (Meher season) covered the entire rural parts of the country except the non-sedentary population of three zones of Afar & six zones of Somali regions.

To be covered by the survey, a total of **1,600** Enumeration Areas (EAs) were selected. However, due to various reasons that are beyond control, in 17 EAs the survey could not be successful and hence interrupted. Thus, all in all the survey succeeded to cover **1,583** EAs (98.94%) throughout the regions. The Annual Agricultural Sample survey (Meher season) was conducted on the basis of 15 agricultural households selected from each EA. Regarding the ultimate sampling units, it was intended to cover a total of 24,000 agricultural households, however, 23,263 (96.93%) were actually covered by the survey.

2.2 SAMPLING FRAME

The list containing EAs of all regions and their respective households obtained from the 1999 E.C cartographic census frame was used as the sampling frame in order to select the primary sampling units (EAs). Consequently, all sample EAs were selected from this frame based on the design proposed for the survey. The second stage sampling units, households, were selected from a fresh list of households that were prepared for each EA at the beginning of the survey.

2.3. SAMPLE DESIGN

In order to select the sample, a stratified two-stage cluster sample design was implemented. Enumeration areas (EAs) were taken to be the primary sampling units (PSUs) and the secondary sampling units (SSUs) were agricultural households. The sample size for the 2017/18 (2010 E.C.) agricultural sample survey was determined by taking into account both the required level of precision for the most important estimates within each domain and the

amount of resources allocated to the survey. In order to reduce non-sampling errors, manageability of the survey in terms of quality and operational control was also considered.

All regions were taken to be the domain of estimation for which major findings of the survey are reported.

2.4. SELECTION SCHEME

Enumeration areas from each stratum were selected systematically using probability proportional to size sampling technique; size being number of agricultural households. The sizes for EAs were obtained from the 2007 Population and Housing census frame. From the fresh list of households prepared at the beginning of the survey, 15 agricultural households within each sample EA were selected systematically.

Estimation procedure of totals, ratios, sampling error and the measurement of precision of estimates (CV) are given in Appendix-I and II respectively. Distribution of sampling units (sampled and covered EAs and households) by stratum is also presented in Appendix-III.

2.5. ORGANIZATION OF FIELD WORK

The conduct of a survey cannot be executed without the arrangement of fieldwork. In recognition of this, the organization of fieldwork has been entrusted to the Desks that liaises between the Head Office and the 24 Branch Statistical Offices spread across the regions. All Branch Offices took part in the survey execution especially in recruiting the enumerators, organizing the 2nd stage training, assigning the field staff to their sites of enumeration, supervising the data collection and retrieving completed questionnaires and submitting them to the Head Office for data processing.

The Branch Offices were also responsible for administering the financial and logistic aspects of the survey within their areas of operation. A total of 1,680 enumerators, 534 field supervisors and 204 statisticians were involved in the data collection where on the average one supervisor was assigned to three enumeration areas for supervision of data collection. All the enumerators were supplied with the necessary survey equipment after the completion of the training to ensure the smooth operation of the survey. To facilitate the data collection activities, a total of 180 four-wheel drive vehicles were used.

2.6. TRAINING OF FIELD STAFF

The execution of a survey and quality of data acquired from the survey highly depend on the type of training given to the enumerators and supervisors and the consequent understanding of the tasks to be performed and the standard procedures to be followed by the enumerators

and supervisors in the survey undertaking. The quality and completeness of data are ensured when the training meets its objective of producing responsible and fervent enumerators and supervisors.

In light of this point, the training was given to the field staff in two stages. The first stage training, which took place at Adama and lasted for 6 days targeted staff from the Head Office, statisticians and senior field supervisors from Branch Statistical Offices. The staff that took part in the first stage training was then assigned to conduct similar training for the enumerators and other supervisors for 14 days in all the twenty- four Branch Statistical Offices distributed across the country.

In the training the field staff was given detailed classroom instruction on how to collect data, method of area measurement, interviewing procedures, etc. The training also included field practice to reinforce the understanding of concepts, definitions and theories discussed in the classroom with regard to field measurement, crop cutting, GPS reading and interviewing methods.

2.7. METHOD OF DATA COLLECTION

The agricultural data for the year 2017/18 (2010 E.C.) was collected from sedentary rural peasant households by interviewing the selected agricultural holders and physically measuring their fields to obtain data on crop yields and other items of interest.

The data obtained were recorded in various forms designed for this purpose. Instruments like measuring tape; compass, kitchen balance, scientific calculators, GPS (Oromiya region only) and others were used during data collection for a timely and smooth acquisition of accurate data. The procedures for measuring area under crop and area of non - crop fields operated by the holders were performed for the 15 selected households from each sampled E.A. using measuring tapes, compasses as well as GPS.

2.8. DATA PROCESSING

a) Editing, Coding and Verification

Statistical data editing plays an important role in ensuring the quality of the collected survey data. It minimizes the effects of errors introduced while collecting data in the field, hence the need for data editing, coding and verification. Although coding and editing are done by the enumerators and supervisors in the field, respectively, verification of this task is done at the Head Office.

Editing, coding and verification instruction manual was prepared and reproduced for this purpose. Then 34 editors-coders and verifiers were trained for two days in editing, coding and verification using the aforementioned manual as a reference and teaching aid. The completed questionnaires were edited, coded and later verified on a 100% basis before the questionnaires were passed over to the data entry unit. The editing, coding and verification exercise of all questionnaires took 20 days.

b) Data Entry, Cleaning and Tabulation

Before data entry, the Agriculture, Natural Resources and Environment Statistics Directorate of the CSA prepared edit specification for the survey for use on personal computers for data consistency checking purposes. The data on the edited and coded questionnaires were then entered into personal computers. The data were then checked and cleaned using the edit specifications prepared earlier for this purpose. The data entry operation involved about 65 data encoders, 5 data encoder supervisors, 14 data cleaning operators and 70 personal computers. The data entered into the computers using the entry module of the CSPRO (Census and Survey Processing System) software, which is a software package developed by the United States Bureau of the Census. Following the data entry operations, the data was further reviewed for data inconsistencies, missing data ... etc. by the regular professional staff from Agriculture, Natural Resources and Environment Statistics Directorate. The final stage of the data processing was to summarizing the cleaned data and produce statistical tables that present the results of the survey using the tabulation component of the PC based CSPRO software produced by professional staff from Agriculture, Natural Resources and Environment Statistics Directorate.

2.9. CONCEPTS AND DEFINITIONS

Data items of agriculture have to be distinctly defined and identified, so that the information about the items becomes useful. The correct way of stating data items and related terms is a prerequisite for making standards and definitions for the collection and compilation of agricultural data. The purpose of using standard concepts and definitions is not only to provide quality data but also to ensure that the right items are enumerated and measured accurately to reflect the agricultural situation.

Standard concepts and definitions used in the survey help to maintain consistent enumeration and measurement of variables of interest. To achieve this, CSA communicates concepts and definitions to the field staff through training and instruction manuals. The concepts and definitions used in the survey included the following.

Enumeration Area (E.A): an enumeration area in the rural parts of the country is a locality that is, in most of the cases less than, and only in some cases equal to a farmers' association in geographical area and usually consists of 150-200 households.

Household: a household may be either:

- a) a one person household, that is a person who makes provisions for his own living without combining with any other person to form part of a multi- person household or
- b) a multi-person household, that is, a group of two or more persons who live together and make common provisions for food and other essentials of living. The persons in the group may pool their incomes and have a common budget to a greater or lesser extent. They may be related or unrelated persons or a combination of both. These persons are taken as members of the household.

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

Agricultural Household: - a household is considered an agricultural household when at least one member of the household is engaged in growing crops and/or raising livestock in private or in combination with others.

Holding: - a holding is all the land and /or livestock kept, which is used wholly or partly for agricultural production and is operated as one legal entity by one person alone, or with others with out regard to management, organization, size or location.

Holder: - a holder is a person who exercises management control over the operation of the agricultural holding and makes the major decision regarding the utilization of the available resources. He/she has primary technical and economic responsibility for the holding. He/she may operate the holding directly as an owner or a manager. Under conditions of traditional agricultural holding the holder may be regarded as the person, who with or without the help of others, operates land and/or raises livestock in his/ her own right, i.e. the person who decides on which, where, when, and how to grow crops or raise livestock or both and has the right to determine the utilization of the products.

Parcel: - a parcel of holding is any piece of land entirely surrounded by land and/or water and/or road and/or forest etc., which is not part of the holding. It may consist of one or more cadastral units, plots or fields adjacent to each other.

Field: - a field is defined as any plot of land which is a parcel or part of a parcel under the same or mixed crops or any other form of land use (private holding).

Crop: includes cereals, pulses, oilseeds, vegetables, root crops, fruits, coffee, Enset, Chat, hops, sugarcane, cotton, tobacco, etc produced for food, making drinks, stimulation and making fabrics or clothing.

Crop production: - the process of growing and harvesting of the above crops for own consumption and/or sale.

Temporary/Annual Crops: - 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 ploughing in preparation for each successive crop.

Permanent (Perennial) 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, bananas, etc) and trees for beverages (i.e. coffee, tea, hops (Gesho), etc) are considered permanent crops but meadows and pastures are excluded.

Meher (Main) Season Crop: - any temporary crop harvested between the months of Meskerm (September) and Yekatit (February) is considered as meher season crop.

Belg Season Crop: - any temporary crop harvested between the months of Megabit (March) and Pagume (August) is considered to be Belg Season Crop.

Note:-

1. If in some tables figures do not add up to total, it is due to rounding
2. Those area and production designated by “*” in all tables could not be reported because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.
3. In all tables “-” indicates not reported.

PART III

SUMMARY OF SURVEY RESULTS

3.1. INTRODUCTION

By and large, agriculture in Ethiopia is subsistence. This is particularly true to the major food crops grown in the country and covered in the survey. The major food crops are produced in almost all regions of the country in spite of the variation in volume of production across the regions. The variation may be attributed to the extent of area devoted to each crop type, weather change and a shift in preference for the crops grown.

The food crops on which data is collected are the ones that are commonly grown by the majority of peasant holders. In the statistical tables these crops have been categorized into eight groups for simplicity of description and comparison purposes. The groups are cereals, pulses, oilseeds, vegetables, root crops, fruit crops, stimulant crops and sugar cane. Stimulant crops consist of Chat, coffee and hops.

Crop yield per area (amount of crop harvested per amount of land cultivated) is the most commonly used impact indicator for agricultural productivity activities. Crop yields are inevitably affected by many factors, these are weather, input price, changes in farming practices, amounts of fertilizer used, quality of seed varieties, and use of irrigation.

3.2 Major Findings of the Year 2017/18 (2010 E.C.) Post-Harvest Crop Production Survey, Meher Season

The results of the year 2017/18 (2010 E.C.), Meher Season Post-harvest Crop Production Survey has been summarized and quantitative information with regard to farm management practice, land use and Utilization of agricultural produce will be made available at national and regional reporting levels, consecutively, following this report. This report, however, presents quantitative information on cropped land area and production of both temporary and permanent crops at Country and Regional reporting levels.

In this section of the report, therefore, brief discussions on the major findings of the Survey are presented as follows.

3.2.1 Grain Crops

Grain crops - refers to the major crop category that included cereals, pulses and oilseeds, which not only constituted the major food crops for the majority of the country's population

but also served as a source of income at household level and a contributor for the country's foreign currency earnings, among others.

The results of the year 2017/18 (2010 E.C.), Meher Season Post-harvest Crop Production Survey indicate that a total land area of about 12,677,882.27 hectares are covered by grain crops i.e. cereals, pulses and oilseeds, from which a total volume of about 306,126,383.06 quintals of grains are obtained, from private peasant holdings (See Table 1 below).

Table 1. Total Area and Production of Grain Crops for Private peasant holdings, 2017/18 (2010 E.C.), Meher Season

<i>Crop Category</i>	<i>Total Area in Hectares</i>	<i>%</i>	<i>Total Production in Quintals</i>	<i>%</i>
<i>Cereals.....</i>	10,232,582.23	80.71	267,789,764.02	87.48
<i>Pulses.....</i>	1,598,806.51	12.61	29,785,880.89	9.73
<i>Oil Seeds</i>	846,493.53	6.68	8,550,738.16	2.79
<i>Grain Crops</i>	12,677,882.27	100.00	306,126,383.06	100.00

Within the category of Grain crops, Cereals are the major food crops both in terms of the area they are planted and volume of production obtained. They are produced in larger volume compared with other crops because they are the principal staple crops. Cereals are grown in all the regions with varying quantity as shown in the survey results. The data in Table 2 well underpin this finding of the survey.

Out of the total grain crop area, 80.71% (10,232,582.23 hectares) was under cereals. Teff, maize, sorghum and wheat took up 23.85% (about 3,023,283.50 hectares), 16.79% (about 2,128,948.91 hectares), 14.96% (1,896,389.29 hectares) and 13.38% (1,696,907.05 hectares) of the grain crop area, respectively. As to production, the tables paint similar picture as that of the area. Cereals contributed 87.48% (about 267,789,764.02 quintals) of the grain production. Maize, teff, wheat and sorghum made up 27.43% (83,958,872.44 quintals), 17.26% (52,834,011.56 quintals), 15.17% (46,429,657.12 quintals) and 16.89% (51,692,525.40 quintals) of the grain production, in the same order.

The survey results show that the private peasant holders grow various crops for own consumption and/ or economic benefits. Pulses are also among the various crops produced in all the regions of the country after cereals. Pulses are grown in different volumes across the country as indicated in Table 2.

Pulses grown in 2017/18 (2010 E.C.) covered 12.61% (1,598,806.51 hectares) of the grain crop area and 9.73% (about 29,785,880.89 quintals) of the grain production was drawn from the same crops. Faba beans, haricot beans (white), haricot beans (red), and chick peas were

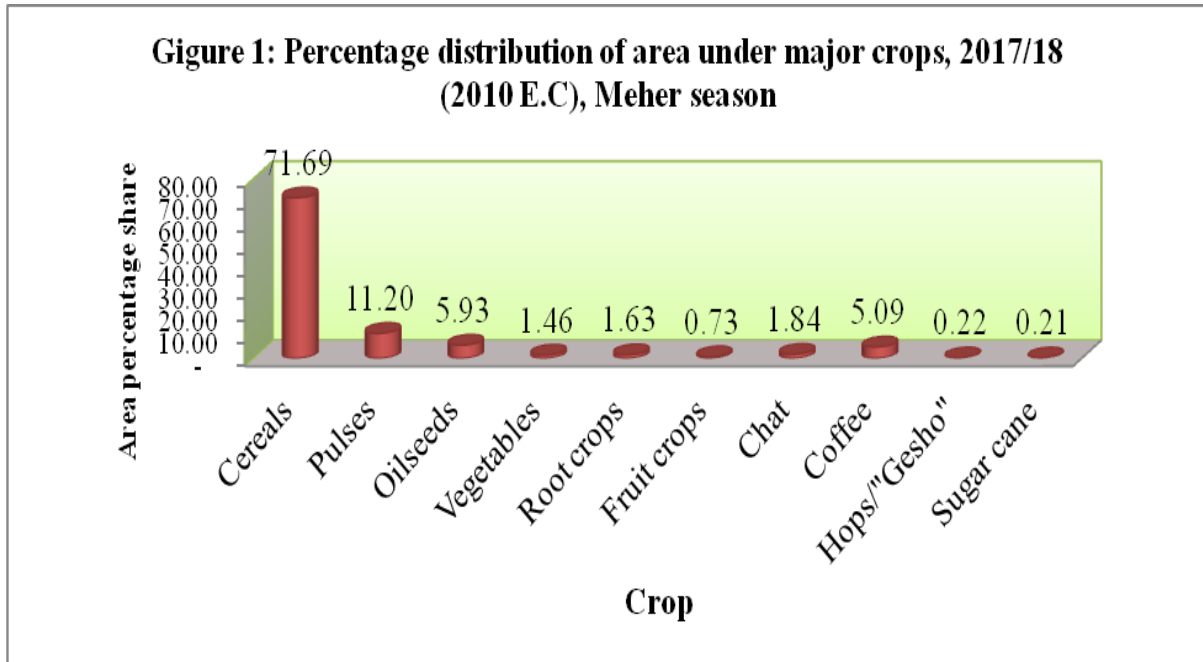
planted to 3.45% (about 437,106.04 hectares), 0.71% (about 89,382.68 hectares), 1.71% (about 216,803.91 hectares) and 1.91% (about 242,703.73 hectares) of the grain crop area. The production obtained from faba beans, haricot beans(white) haricot beans (red) and chick peas was 3.01% (about 9,217,615.35 quintals), 0.48% (about 1,482,128.42 quintals), 1.22% (3,727,664.85 quintals) and 1.63% (4,994,255.50 quintals) of the grain production, in that order.

Oilseeds refer to crops which are also classified within grain crops category, nonetheless, oilseeds are grown to flavour the food consumed at home and earn some cash for peasant holders in the country. Various oil crops are produced in all the regions with differing quantity as illustrated in the survey results. Table 2 underscores this point in detail.

Oil seeds added 6.68% (about 846,493.53 hectares) of the grain crop area and 2.79% (about 8,550,738.16 quintals) of the production to the national grain total. Neug, sesame and linseed covered 2.29% (about 290,494.94 hectares), 2.92% (about 370,141.06 hectares) and 0.62% (about 79,044.51 hectares) of the grain crop area and 1.06% (about 3,233,448.82 quintals), 0.84% (about 2,559,034.30 quintals) and 0.29% (about 882,096.51 quintals) of the grain production, respectively.

3.2.2 Vegetables

Vegetables - holders living near to urban centres largely practice vegetable farming. Most vegetables are not commonly practiced by the rural private peasant holders, hence the small volume of production recorded as well evidenced by the survey results. Figure 1 underlines this more in the report. Vegetables took up about 1.46% of the area under all crops at national level. However, of the total estimated area under vegetables, the lion share which is about 73.09% and 16.33% was under Red peppers and Ethiopian Cabbage, respectively (See Statistical Table 2). Production of vegetables contribute 1.91% of the total crops production, conversely, of the total production of vegetables, the above mentioned crops have the lions share, i.e. about 40.35.81% and 46.67%, in that order.



3.2.3 Root Crops

Root Crops - Some root crops like onion and garlic are indispensable to improve the taste and scent of the food we eat. Others like potatoes, sweet potatoes and taro/ Godere are among the list of major food crops that are consumed across the country. These and other economic importances prompt the peasant holders to grow many of the root crops as shown in the survey results. Table 2 substantiates this point in more details.

3.2.4 Fruit Crops

Fruit Crops – The survey results show that fruit crops grown by the private peasant holders cover only a small token area and production in the country. The number of holders practicing fruit farming is much less than that of grains or cereals as indicated in the tables.

About 104,421.81 hectares of land is under fruit crops in Ethiopia. Bananas contributed about 56.79% of the fruit crop area followed by avocados that contributed 17.26% of the area. More than 7,774,306.92 quintals of fruits was produced in the country. Bananas, Mangoes Avocados, Papayas, and Oranges took up 63.49%, 13.50%, 10.47% , 6.99% and 3.93% of the fruit production, respectively, as shown in Table 2.

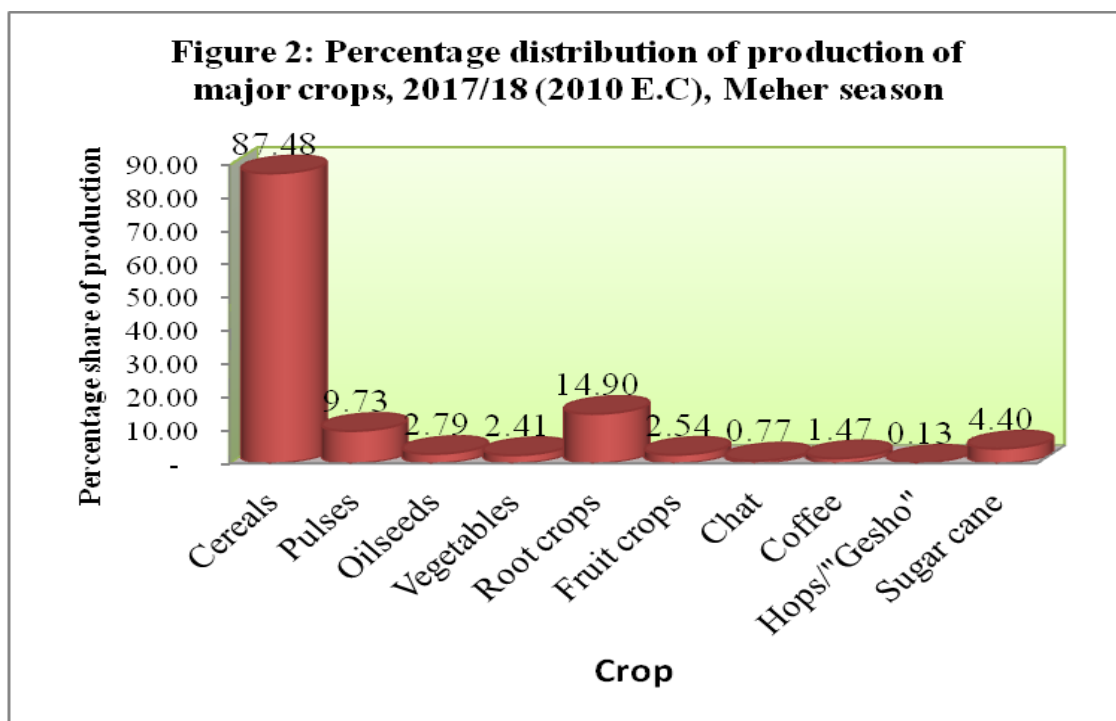
**Table 2: Area, Production and Yield of Crops For Private Peasant Holdings
For Meher Season 2017/18 (2010 E.C)**

Ethiopia

Crop	Number of Holders	Area in Hectares	% Distribution	Production in Quintals		Yield (Qt/Ha)	
					% Distribution		
Grain Crops	15,670,567.00	12,677,882.27	100.00	306,126,383.06	100.00		
Cereals	15,051,667.00	10,232,582.23	80.71	267,789,764.02	87.48		
Teff	6,771,977.00	3,023,283.50	23.85	52,834,011.56	17.26	17.48	
Barley	3,505,609.00	951,993.15	7.51	20,529,963.72	6.71	21.57	
Wheat	4,212,518.00	1,696,907.05	13.38	46,429,657.12	15.17	27.36	
Maize	10,573,934.00	2,128,948.91	16.79	83,958,872.44	27.43	39.44	
Sorghum	5,368,096.00	1,896,389.29	14.96	51,692,525.40	16.89	27.26	
Finger millet	1,765,407.00	456,057.31	3.60	10,308,231.53	3.37	22.60	
Oats/'Aja'	205,700.00	25,896.22	0.20	526,318.93	0.17	20.32	
Rice	161,376.00	53,106.79	0.42	1,510,183.30	0.49	28.44	
Pulses	8,320,621.00	1,598,806.51	12.61	29,785,880.89	9.73		
Faba beans	3,682,512.00	437,106.04	3.45	9,217,615.35	3.01	21.09	
Field peas	1,806,392.00	220,508.39	1.74	3,685,190.65	1.20	16.71	
White Haricot beans	1,011,195.00	89,382.68	0.71	1,482,128.42	0.48	16.58	
Red Haricot beans	2,611,135.00	216,803.91	1.71	3,727,664.85	1.22	17.19	
Chick-peas	683,814.00	242,703.73	1.91	4,994,255.50	1.63	20.58	
Lentils	873,225.00	119,046.04	0.94	1,751,435.58	0.57	14.71	
Grass peas	465,366.00	143,085.60	1.13	2,866,016.31	0.94	20.03	
Soya beans	146,264.00	38,072.70	0.30	864,678.69	0.28	22.71	
Fenugreek	638,174.00	32,587.00	0.26	436,373.92	0.14	13.39	
Mung bean/'Masho'	325,788.00	41,633.20	0.33	514,227.41	0.17	12.35	
Gibbo	48,961.00	17,877.23	0.14	246,294.20	0.08	13.78	
Oilseeds	3,350,070.00	846,493.53	6.68	8,550,738.16	2.79		
Neug	958,213.00	290,494.94	2.29	3,233,448.82	1.06	11.13	
Linseed	863,946.00	79,044.51	0.62	882,096.51	0.29	11.16	
Groundnuts	521,326.00	80,841.57	0.64	1,451,728.20	0.47	17.96	
Sunflower	241,074.00	7,966.73	0.06	95,768.76	0.03	12.02	
Sesame	736,165.00	370,141.06	2.92	2,559,034.30	0.84	6.91	
Rapeseed	687,173.00	18,004.73	0.14	328,661.57	0.11	18.25	
Vegetables	6,671,187.00	208,985.91	100.00	7,391,544.84	100.00		
Lettuce	38,622.00	145.19	0.07	1,529.96	0.02	10.54	
Head Cabbage	533,067.00	6,006.97	2.87	365,129.00	4.94	60.78	
Ethiopian Cabbage	3,315,410.00	34,127.53	16.33	3,449,918.26	46.67	101.09	
Tomatoes	270,577.00	5,235.19	2.51	277,745.38	3.76	53.05	
Green peppers	1,659,364.00	10,207.26	4.88	632,404.53	8.56	61.96	
Red peppers	2,297,063.00	152,752.94	73.09	2,647,225.30	35.81	17.33	
Swiss chard	116,102.00	*	0.24	17,592.41	0.24	34.44	
Root Crops	6,208,185.00	233,290.13	100.00	45,609,822.12	100.00		
Beetroot	492,937.00	2,890.07	1.24	256,385.13	0.56	88.71	
Carrot	204,439.00	4,902.90	2.10	173,334.27	0.38	35.35	
Onion	880,638.00	31,673.21	13.58	2,938,875.85	6.44	92.79	
Potatoes	1,127,467.00	69,610.81	29.84	9,689,696.44	21.24	139.20	
Yam/'Boye'	343,589.00	5,356.14	2.30	487,404.77	1.07	91.00	
Garlic	2,255,598.00	19,412.49	8.32	1,782,218.93	3.91	91.81	
Taro/'Godere'	1,855,532.00	45,995.28	19.72	11,797,769.33	25.87	256.50	
Sweet potatoes	1,404,043.00	53,449.23	22.91	18,484,137.40	40.53	345.83	
Fruit Crops	4,777,677.00	104,421.80	100.00	7,774,306.92	100.00		
Avocados	1,811,458.00	18,021.13	17.26	814,317.63	10.47	45.19	
Bananas	2,837,235.00	59,298.19	56.79	4,936,022.34	63.49	83.24	
Guavas	402,092.00	2,469.91	2.37	31,998.44	0.41	12.96	
Lemons	304,793.00	1,459.78	1.40	79,250.22	1.02	54.29	
Mangoes	1,754,294.00	15,373.04	14.72	1,049,807.79	13.50	68.29	
Oranges	713,418.00	3,705.50	3.55	305,614.80	3.93	82.48	
Papayas	890,270.00	3,484.46	3.34	543,550.24	6.99	155.99	
Pineapples	55,365.00	609.80	0.58	13,745.47	0.18	22.54	
Chat	2,892,146.00	262,071.88		2,354,538.01		8.98	
Coffee	5,019,513.00	725,961.24		4,492,298.08		6.19	
Hops	2,608,663.00	31,196.08		396,479.32		12.71	
Sugar Cane	1,090,575.00	29,536.49		13,470,350.06		456.06	
Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	127,235,588.00	29,307,635.04	34,782,944.88	1,017,821.63	0.23	0.27	0.01

3.2.5 Stimulant crops

Stimulant crops – Farmers engaged in growing and producing stimulant crops such as coffee and Chat are greater in number than those growing fruits. The area and production of these crops are also larger than that of fruits since they earn a considerable amount of cash for the holders. Table 2 shows Chat and Coffee shared 1.84% and 5.09% of the area under all crops in the country and 2,354,538.01 and 4,692,298.08 quintals of produce was obtained from these crops in the same agricultural year respectively.



3.2.6 Sugar Cane

Sugar Cane - is grown in small areas in some parts of the country within the private peasant holdings. About 29,536.49 hectares of land was under sugar cane in the country, yielding an estimated total of 13,470,350.06 quintals of produce by the peasant holders. But the production is not usually used for industrial purposes. It is noticeably used up in household consumption.

3.2.7 Enset

Enset - is grown in south-western part of the country and covers considerable land area within the private holdings. The number of Enset trees to be harvested, in the current agricultural year, from all over the country is estimated to be 127,235,588.00 Thus, the total produce in the form of Amicho, Kocho, and Bula is 29,307,635.04 quinals, 34,782,944.88 quintals and 1,017,821.63 quintals respectively (see Table 4).

3.3 Comparison of the current year 2017/18 (2010 E.C.) Post - Harvest Crop yield with 2016/17 (2009 E.C), estimates.

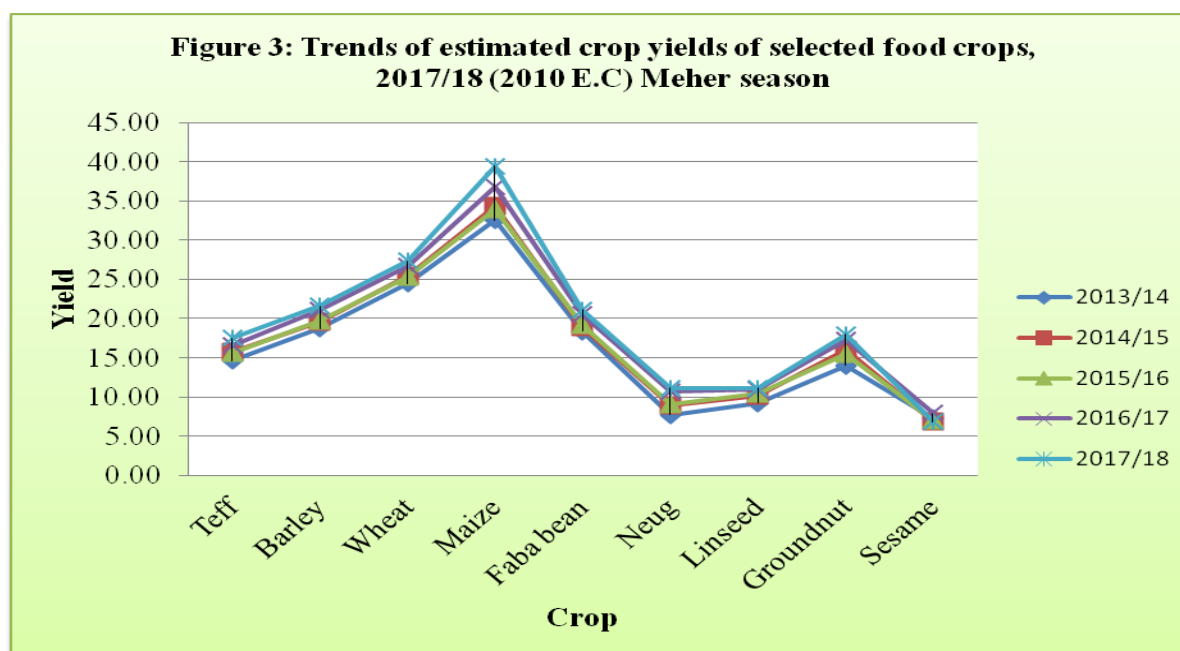
In this section of the report an attempt has been made to compare the post-harvest crop productivity estimates of selected important food crops obtained from the 2017/18 (2010 E.C.) Agricultural Sample Survey with last year i.e. 2016/17 (2009 E.C) crop yield estimates of the same crops.

The presentation of such comparisons are believed to give a bird's eye view whether or not the current year estimated increase in the volume of production over the last year estimate, is effected from increased cropped area or due to the attainment of enhanced crop yield or the contribution of both have brought the increment of the current year production, contributed but enhanced crop yield taken up the lion share, so as one can generally indicate the direction, the rate of change and the level of steps the agriculture sector taking up on the ladder of transformation to commercialized agriculture from its initial subsistence and back ward starting point. Of course, it should be noted that, except for the progress made during the the last two and half decades, the agricultural sector in Ethiopia had remained stagnant for centuries with limited progress in few specific areas.

Consequently, the outcome of such comparisons are believed to serve as problem area indicators for concerned stakeholders to develop and implement corrective measures, that could help to accelerate the speed of transforming the existing agriculture into commercial agriculture. Thus, to meet the objectives mentioned so far, the following brief discussions on the results of crop productivity comparisons was made for selected important food crops at country level as follows:

Since the rain fall was normal and adequate in the current crop-growing season, the 2017/18 (2010 E.C.) main season crop production has shown significant increament both in the estimated cropped land area and volume of grain crops production. As indicated in Table 3, the 2017/18 (2010 E.C.) estimated cropped area and volume of production have increased by about 0.83 % and 5.42% over last year 2016/17 (2009 E.C) post harvest estimate.

Conversely, with regard to estimated crop yield, crops such as maze, teff, and wheat within the category of cereals have shown an increment, that ranges from 7.32 Qt/Ha to 28.93 Qt/Ha for Maize; from 5.05 Qt/Ha to 26.76 Qt/Ha for Teff; and from 2.28 to 29.67 Qt/Ha for Wheat over the last five years (2012/13 - 2017/18) Post-harvest estimates. Similarly crops such as faba beans and linseed have shown an increment that ranges from 2.73 to 28.28 Qt/Ha for faba beans and from 2.01 to 16.98 Qt/Ha for linseed over 2012/13 and 2016/17 estimates. (See Figure 3).



Following the same Pattern, the results of the 2017/18 (2010 E.C.), Post-harvest agricultural Sample Survey, indicates that both the largest grain cropped land area and the highest volume of production obtained in the current Meher season is reported for Oromia, Amhara, SNNP, Tigray and Benshangul-Gumuz Regions.

Table 3 - Estimate of Area and Production of Grain Crops for 2016/17 and 2017/18, Meher Season

Region	Area in Hectares			Production in Quintals		
	2016/17	2017/18	% Change	2016/17	2017/18	% Change
TIGRAY	936,908.37	941,091.28	0.45	18,448,000.20	18,589,665.02	0.77
AFAR	8,215.27	9,062.46	10.31	183744.90	207,924.28	13.16
AMHARA	4,443,390.47	4,479,345.02	0.81	95,282,955.56	100,520,273.48	5.50
OROMIA	5,712,960.48	5,757,293.43	0.78	143,893,653.61	151,080,010.79	4.99
SOMALI	75,905.80	73,933.86	-2.60	1,453,702.76	1,665,620.52	14.58
BENISHANGUL-GUMUZ	250,336.78	253,409.72	1.23	5,409,168.11	5,818,801.22	7.57
S.N.N.P.R	1,116,029.05	1,133,354.78	1.55	25,134,237.79	27,640,228.02	9.97
GAMBELA	7,272.50	6,795.66	-6.56	157,977.08	168,776.68	6.84
HARARI	11,487.15	11,570.41	0.72	195,291.12	206,235.11	5.60
DIRE DAWA	11,601.45	12,025.66	3.66	226,862.08	228,847.96	0.88
ALL REGIONS	12,574,107.33	12,677,882.27	0.83	290,385,593.21	306,126,383.06	5.42

Accordingly, the total grain cropped area reported for Oromia, Amhara, S.N.N.P.R, Tigray and Benshangul-Gumuz Regions have increased by about 0.78%, 0.81%, 1.55%, 0.45% and 1.23% over last year 2016/17 (2009 E.C) post harvest estimate respectively. Following the same pattern the current year harvested volume of production reported for the above mentioned regions have increased by about 4.99%, 5.50%, 9.97%, 0.77% and 7.57% over last year's 2016/17 (2009 E.C) post harvest estimate of the regions, in that order (For details see Table .3)

National and Regional Statistical tables

Table 4 - Estimate of Area, Production and Yield of Crops for 2016/17 (2009 E.C) and 2017/18 (2010 E.C), Meher Season

Ethiopia

Crop	Area in Hectares			Production in Quintals			Yield(Quintals/Hectare)		
	2016/17	2017/18	% Change	2016/17	2017/18	% Change	2016/17	2017/18	% Change
Grain Crops.	12,574,107.33	12,677,882.27	0.83	290,385,593.21	306,126,383.06	5.42			
Cereals.....	10,219,443.46	10,232,582.23	0.13	253,847,239.63	267,789,764.02	5.49			
Teff.....	3,017,914.36	3,023,283.50	0.18	50,204,400.47	52,834,011.56	5.24	16.64	17.48	5.05
Barley.....	959,273.36	951,993.15	-0.76	20,249,216.76	20,529,963.72	1.39	21.11	21.57	2.18
Wheat.....	1,696,082.59	1,696,907.05	0.05	45,378,523.39	46,429,657.12	2.32	26.75	27.36	2.28
Maize.....	2,135,571.85	2,128,948.91	-0.31	78,471,746.57	83,958,872.44	6.99	36.75	39.44	7.32
Sorghum.....	1,881,970.73	1,896,389.29	0.77	47,520,956.04	51,692,525.40	8.78	25.25	27.26	7.96
Finger millet.....	456,171.54	456,057.31	-0.03	10,170,592.71	10,308,231.53	1.35	22.30	22.60	1.35
Oats/'Aja'.....	24,040.94	25,896.22	7.72	491,796.43	526,318.93	7.02	20.46	20.32	-0.68
Rice.....	48,418.09	53,106.79	9.68	1,360,007.26	1,510,183.30	11.04	28.09	28.44	1.25
Pulses.....	1,549,911.86	1,598,806.51	3.15	28,146,331.73	29,785,880.89	5.83			
Faba beans.....	427,696.80	437,106.04	2.20	8,780,108.79	9,217,615.35	4.98	20.53	21.09	2.73
Field peas.....	212,530.56	220,508.39	3.75	3,481,446.31	3,685,190.65	5.85	16.38	16.71	2.01
White Haricot beans	78,910.13	89,382.68	13.27	1,259,801.75	1,482,128.42	17.65	15.97	16.58	3.82
Red Haricot beans.	211,292.30	216,803.91	2.61	3,579,424.75	3,727,664.85	4.14	16.94	17.19	1.48
Chick-peas.....	225,607.53	242,703.73	7.58	4,441,459.26	4,994,255.50	12.45	19.69	20.58	4.52
Lentils.....	113,684.63	119,046.04	4.72	1,662,742.20	1,751,435.58	5.33	14.63	14.71	0.55
Grass peas.....	151,268.58	143,085.60	-5.41	2,970,972.08	2,866,016.31	-3.53	19.64	20.03	1.99
Soya beans.....	36,635.79	38,072.70	3.92	812,346.59	864,678.69	6.44	22.17	22.71	2.44
Fenugreek.....	34,603.35	32,587.00	-5.83	454,807.61	436,373.92	-4.05	13.14	13.39	1.90
Mung bean/'Masho"	37,774.30	41,633.20	10.22	429,155.55	514,227.41	19.82	11.36	12.35	8.71
Gibto.....	19,907.89	17,877.23	-10.20	274,066.82	246,294.20	-10.13	13.77	13.78	0.07
Oilseeds.....	804,752.00	846,493.53	5.19	8,392,021.85	8,550,738.16	1.89			
Neug.....	281,206.42	290,494.94	3.30	3,024,319.84	3,233,448.82	6.91	10.75	11.13	3.53
Linseed.....	80,353.74	79,044.51	-1.63	879,116.55	882,096.51	0.34	10.94	11.16	2.01
Groundnuts.....	74,861.37	80,841.57	7.99	1,296,364.18	1,451,728.20	11.98	17.32	17.96	3.70
Sunflower.....	6,738.00	7,966.73	18.24	79,537.15	95,768.76	20.41	11.80	12.02	1.86
Sesame.....	337,926.82	370,141.06	9.53	2,678,665.46	2,559,034.30	-4.47	7.93	6.91	-12.86
Rapeseed.....	23,665.65	18,004.73	-23.92	434,018.68	328,661.57	-24.27	18.34	18.25	-0.49
Vegetables.....	239,609.76	208,985.91	-12.78	8,126,248.75	7,391,544.84	-9.04			
Lettuce.....	117.14	145.19	23.95	*	*	*	*	*	*
Head Cabbage.....	6,188.56	6,006.97	-2.93	386,814.48	365,129.00	-5.61	62.50	60.78	-2.75
Ethiopian Cabbage	36,090.31	34,127.53	-5.44	3,528,964.26	3,449,918.26	-2.24	97.78	101.09	3.39
Tomatoes.....	6,298.63	5,235.19	-16.88	283,648.27	277,745.38	-2.08	45.03	53.05	17.81
Green peppers.....	9,832.28	10,207.26	3.81	617,943.29	632,404.53	2.34	62.85	61.96	-1.42
Red peppers.....	180,701.46	152,752.94	-15.47	3,298,042.90	2,647,225.30	-19.73	18.25	17.33	-5.04
Swiss chard.....	*	*	*	*	*	*	*	*	*
Root Crops.....	229,079.34	233,290.13	1.84	46,305,689.75	45,609,822.12	-1.50			
Beetroot.....	2,886.07	2,890.07	0.14	253,503.34	256,385.13	1.14	87.84	88.71	0.99
Carrot.....	2,578.13	4,902.90	90.17	90,339.27	173,334.27	91.87	35.04	35.35	0.88
Onion.....	33,603.39	31,673.21	-5.74	3,274,752.45	2,938,875.85	-10.26	97.45	92.79	-4.78
Potatoes.....	66,923.33	69,610.81	4.02	9,214,031.85	9,689,696.44	5.16	137.68	139.20	1.10
Yam/'Boye'.....	5,603.38	5,356.14	-4.41	509,643.44	487,404.77	-4.36	90.95	91.00	0.05
Garlic.....	15,381.01	19,412.49	26.21	1,386,643.07	1,782,218.93	28.53	90.15	91.81	1.84
Taro/'Godere'.....	48,087.35	45,995.28	-4.35	12,179,164.45	11,797,769.33	-3.13	253.27	256.50	1.28
Sweet potatoes.....	54,016.67	53,449.23	-1.05	19,397,611.90	18,484,137.40	-4.71	359.10	345.83	-3.70
Fruit Crops.....	107,890.60	104,421.80	-3.22	7,923,665.02	7,774,306.92	-1.88			
Avocados.....	17,834.58	18,021.13	1.05	649,821.04	814,317.63	25.31	36.44	45.19	24.01
Bananas.....	63,212.97	59,298.19	-6.19	5,383,023.41	4,936,022.34	-8.30	85.16	83.24	-2.25
Guavas.....	3,248.59	2,469.91	-23.97	43,265.32	31,998.44	-26.04	13.32	12.96	-2.70
Lemons.....	1,426.25	1,459.78	2.35	77,814.52	79,250.22	1.85	54.56	54.29	-0.49
Mangoes.....	15,413.76	15,373.04	-0.26	1,046,461.25	1,049,807.79	0.32	67.89	68.29	0.59
Oranges.....	2,619.80	3,705.50	41.44	206,559.48	305,614.80	47.95	78.85	82.48	4.60
Papayas.....	3,489.47	3,484.46	-0.14	503,961.70	543,550.24	7.86	144.42	155.99	8.01
Pineapples.....	645.19	609.80	-5.49	12,758.30	13,745.47	7.74	19.77	22.54	14.01
Chat.....	255,401.68	262,071.88	2.61	2,201,860.32	2,354,538.01	6.93	8.62	8.98	4.18
Coffee.....	700,474.69	725,961.24	3.64	4,690,911.24	4,492,298.08	-4.23	6.70	6.19	-7.61
Hops.....	31,366.71	31,196.08	-0.54	400,736.11	396,479.32	-1.06	12.78	12.71	-0.55
Sugar Cane.....	31,236.81	29,536.49	-5.44	14,103,115.39	13,470,350.06	-4.49	451.49	456.06	1.01

**Table 4 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Tigray Region

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops	951,628.00	941,091.28	18,589,665.02	
Cereals.....	941,117.00	769,670.80	17,135,451.73	
Teff.....	449,049.00	167,748.72	2,579,060.58	15.37
Barley.....	330,376.00	94,725.02	1,694,179.80	17.89
Wheat.....	312,708.00	107,929.86	2,140,031.44	19.83
Maize.....	662,135.00	62,161.78	1,590,561.25	25.59
Sorghum.....	510,856.00	254,655.92	7,262,717.79	28.52
Finger millet.....	272,864.00	82,021.79	1,858,265.11	22.66
Oats/'Aja'.....	*	*	*	*
Rice.....	*	*	*	*
Pulses.....	333,704.00	37,230.62	567,697.57	
Faba beans.....	191,365.00	10,525.93	173,354.45	16.47
Field peas.....	52,918.00	5,307.74	80,649.35	15.19
Haricot beans white.....	25,238.00	2,103.97	*	*
Haricot beans red.....	9,839.00	1,227.66	15,956.60	13.00
Chick-peas.....	39,454.00	6,845.93	111,612.30	16.30
Lentils.....	61,411.00	5,689.89	70,124.06	12.32
Grass peas.....	30,984.00	5,129.55	84,969.94	16.56
Soya beans.....	*	*	*	*
Fenugreek.....	25,802.00	367.63	*	8.43
Mung bean /"Masho".....	-	-	-	-
Gibto.....	-	-	-	-
Oilseeds.....	248,406.00	134,189.86	886,515.71	
Neug.....	64,339.00	5,697.38	78,310.09	13.74
Linseed.....	52,244.00	5,198.69	52,630.67	10.12
Groundnuts.....	*	*	*	*
Safflower.....	*	*	*	*
Sesame.....	145,847.00	122,325.34	746,142.63	6.10
Rape seed.....	*	*	*	*
Vegetables.....	283,465.00	3,207.95	116,893.85	
Lettuce.....	5,769.00	*	*	*
Head Cabbage.....	5,341.00	*	*	*
Ethiopian Cabbage.....	5,367.00	12.68	*	*
Tomatoes.....	43,871.00	769.42	*	*
Green peppers.....	62,514.00	689.28	40,571.18	58.86
Red peppers.....	200,969.00	1,623.18	29,095.34	17.92
Swiss chard.....	10,874.00	16.24	*	*
Root Crops.....	137,240.00	1,645.98	111,912.62	
Beetroot.....	*	*	*	*
Carrot.....	*	*	*	*
Onion.....	18,135.00	*	*	*
Potatoes.....	23,574.00	547.25	42,352.98	77.39
Yam/'Boye'.....	-	-	-	-
Garlic.....	114,433.00	540.97	39,128.26	72.33
Taro/'Godere'.....	-	-	-	-
Sweet potatoes.....	-	-	-	-
Fruit Crops.....	80,212.00	*	*	
Avocados.....	3,832.00	*	*	*
Bananas.....	8,202.00	*	*	*
Guavas.....	31,401.00	402.31	*	*
Lemons.....	20,633.00	120.20	*	33.12
Mangoes.....	21,039.00	*	*	*
Oranges.....	21,646.00	*	*	*
Papayas.....	17,092.00	*	*	*
Pineapples.....	-	-	-	-
Chat.....	10,797.00	*	*	*
Coffee.....	20,320.00	*	*	*
Hops.....	229,502.00	2,385.14	95,166.40	39.90
Sugar Cane.....	*	*	*	*

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	-	-	-	-	-	-	-

**Table 5 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Afar Region

<i>Crop</i>	<i>Number of Holders</i>	<i>Area In Hectares</i>	<i>Production In Quintals</i>	<i>Yield (Qt/Ha)</i>
Grain Crops.	8,350.00	9,062.46	207,924.28	
Cereals.....	8,350.00	6,961.79	188,989.33	
Teff.....	*	*	*	*
Barley.....	*	*	*	*
Wheat.....	-	-	-	-
Maize.....	6,057.00	4,308.23	138,009.12	32.03
Sorghum.....	*	*	*	*
Finger millet.....	-	-	-	-
Oats/'Aja'.....	-	-	-	-
Rice.....	-	-	-	-
Pulses.....	*	*	*	
Faba beans.....	-	-	-	-
Field peas.....	-	-	-	-
Haricot beans white.....	*	*	*	*
Haricot beans red.....	*	*	*	*
Chick-peas.....	-	-	-	-
Lentils.....	-	-	-	-
Grass peas.....	-	-	-	-
Soya beans.....	-	-	-	-
Fenugreek.....	-	-	-	-
Mung bean /'Masho'.....	*	*	*	*
Gibto.....	-	-	-	-
Oilseeds.....	*	*	*	
Neug.....	-	-	-	-
Linseed.....	-	-	-	-
Groundnuts.....	-	-	-	-
Safflower.....	*	*	*	*
Sesame.....	*	*	*	*
Rape seed.....	-	-	-	-
Vegetables.....	1,483.00	*	*	
Lettuce.....	-	-	-	-
Head Cabbage.....	-	-	-	-
Ethiopian Cabbage.....	-	-	-	-
Tomatoes.....	877.00	*	*	*
Green peppers.....	*	*	*	*
Red peppers.....	*	*	*	*
Swiss chard.....	-	-	-	-
Root Crops.....	818.00	*	*	
Beetroot.....	-	-	-	-
Carrot.....	-	-	-	-
Onion.....	*	*	*	*
Potatoes.....	-	-	-	-
Yam/'Boye'.....	-	-	-	-
Garlic.....	-	-	-	-
Taro/'Godere'.....	-	-	-	-
Sweet potatoes.....	*	*	*	*
Fruit Crops.....	721.00	7.83	-	
Avocados.....	-	-	-	-
Bananas.....	*	*	*	*
Guavas.....	*	*	*	*
Lemons.....	*	*	*	*
Mangoes.....	*	*	*	*
Oranges.....	-	-	-	-
Papayas.....	*	*	*	*
Pineapples.....	-	-	-	-
Chat.....	-	-	-	-
Coffee.....	-	-	-	-
Hops.....	-	-	-	-
Sugar Cane.....	-	-	-	-

<i>Crop</i>	<i>Number of Trees Harvested</i>	<i>Production In Quintals</i>			<i>Yield (Quintals/Tree)</i>		
		<i>Amicho</i>	<i>Kocho</i>	<i>Bula</i>	<i>Amicho</i>	<i>Kocho</i>	<i>Bula</i>
Enset	-	-	-	-	-	-	-

**Table 6 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Amhara Region

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops.	4,763,137.00	4,479,345.02	100,520,273.48	
Cereals.....	4,668,203.00	3,499,684.34	86,213,639.35	
Teff.....	2,539,035.00	1,138,030.51	20,394,482.71	17.92
Barley.....	1,311,155.00	323,936.38	6,394,523.75	19.74
Wheat.....	1,645,423.00	554,661.74	14,047,074.81	25.33
Maize.....	3,042,018.00	520,116.84	20,718,657.58	39.83
Sorghum.....	1,716,440.00	672,491.78	17,812,032.42	26.49
Finger millet.....	727,346.00	246,522.71	5,604,665.08	22.73
Oats/'Aja'.....	54,969.00	4,094.80	61,893.57	15.12
Rice.....	104,975.00	39,829.58	1,180,309.43	29.63
Pulses.....	2,600,538.00	677,843.42	11,755,650.21	
Faba beans.....	1,258,303.00	150,934.92	2,836,912.59	18.80
Field peas.....	726,021.00	81,168.14	1,252,803.22	15.43
Haricot beans white.....	265,497.00	38,040.90	608,848.25	16.01
Haricot beans red.....	294,458.00	29,608.63	520,910.56	17.59
Chick-peas.....	403,631.00	132,280.55	2,512,880.40	19.00
Lentils.....	511,218.00	69,987.52	969,027.77	13.85
Grass peas.....	303,185.00	97,272.53	1,848,867.92	19.01
Soya beans.....	58,688.00	*	340,412.03	*
Fenugreek.....	290,478.00	15,669.26	217,414.14	13.88
Mung bean /"Masho".....	254,768.00	31,670.70	403,014.67	12.73
Gibto.....	43,931.00	17,135.36	244,558.66	14.27
Oilseeds.....	1,377,215.00	301,817.26	2,550,983.92	
Neug.....	349,631.00	79,509.08	730,103.29	9.18
Linseed.....	476,698.00	25,745.93	183,756.17	7.14
Groundnuts.....	74,477.00	6,011.59	*	*
Safflower.....	168,498.00	6,695.80	77,826.78	11.62
Sesame.....	341,299.00	171,878.62	1,237,277.84	7.20
Rape seed.....	244,945.00	11,976.25	219,044.83	18.29
Vegetables.....	1,742,193.00	63,097.55	1,308,808.08	
Lettuce.....	12,178.00	42.41	*	*
Head Cabbage.....	120,825.00	893.40	65,220.93	73.00
Ethiopian Cabbage.....	329,383.00	861.23	69,754.87	80.99
Tomatoes.....	76,048.00	1,078.23	89,804.71	83.29
Green peppers.....	337,941.00	1,832.15	108,407.75	59.17
Red peppers.....	1,067,968.00	58,304.54	973,547.06	16.70
Swiss chard.....	31,990.00	*	2,072.76	*
Root Crops.....	1,667,752.00	41,742.26	5,357,986.90	
Beetroot.....	60,422.00	248.82	15,906.40	63.93
Carrot.....	29,244.00	*	*	*
Onion.....	319,580.00	*	*	*
Potatoes.....	507,565.00	19,199.47	2,878,019.20	149.90
Yam/'Boye'.....	*	*	-	-
Garlic.....	1,142,924.00	9,027.64	752,017.17	83.30
Taro/'Godere'.....	-	-	-	-
Sweet potatoes.....	43,228.00	*	*	*
Fruit Crops.....	665,229.00	5,367.19	309,857.66	
Avocados.....	46,415.00	90.13	*	*
Bananas.....	182,991.00	1,099.80	25,742.09	23.41
Guavas.....	91,190.00	403.82	6,917.49	17.13
Lemons.....	103,678.00	444.77	42,141.03	94.75
Mangoes.....	276,886.00	1,349.15	70,156.32	52.00
Oranges.....	197,436.00	1,266.54	94,141.54	74.33
Papayas.....	187,832.00	712.99	70,759.19	99.24
Pineapples.....	*	*	*	*
Chat.....	341,374.00	12,234.87	78,578.79	6.42
Coffee.....	495,568.00	9,961.18	30,067.93	3.02
Hops.....	1,535,100.00	22,689.82	206,233.78	9.09
Sugar Cane.....	72,961.00	5,305.60	1,816,134.75	342.31

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	-	-	-	-	-	-	-

**Table 7 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Oromia Region

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops.	6,644,409.00	5,757,293.43	151,080,010.79	
Cereals.....	6,480,761.00	4,797,159.00	133,797,762.19	
Teff.....	2,765,117.00	1,443,847.96	25,814,577.48	17.88
Barley.....	1,302,927.00	451,279.26	10,884,876.60	24.12
Wheat.....	1,713,504.00	898,682.57	26,699,177.73	29.71
Maize.....	4,915,896.00	1,146,899.78	46,767,440.66	40.78
Sorghum.....	2,117,336.00	735,263.79	20,810,667.34	28.30
Finger millet.....	633,184.00	93,831.88	2,195,373.97	23.40
Oats/'Aja'.....	138,421.00	21,253.56	459,136.99	21.60
Rice.....	*	*	*	*
Pulses.....	3,327,591.00	622,144.90	13,022,349.31	
Faba beans.....	1,477,285.00	204,387.86	4,832,016.57	23.64
Field peas.....	593,351.00	83,683.51	1,578,701.92	18.87
Haricot beans white.....	613,765.00	41,834.37	717,879.69	17.16
Haricot beans red.....	1,075,638.00	84,060.21	1,597,865.00	19.01
Chick-peas.....	209,092.00	92,829.49	2,165,837.23	23.33
Lentils.....	264,559.00	42,743.74	706,006.25	16.52
Grass peas.....	128,076.00	40,148.65	922,906.03	22.99
Soya beans.....	50,677.00	9,611.04	223,006.99	23.20
Fenugreek.....	298,286.00	16,418.43	214,598.86	13.07
Mung bean /"Masho".....	38,583.00	5,813.65	*	*
Gibto.....	*	*	*	*
Oilseeds.....	1,421,659.00	337,989.53	4,259,899.29	
Neug.....	505,687.00	193,670.58	2,338,153.43	12.07
Linseed.....	277,922.00	46,443.46	635,444.41	13.68
Groundnuts.....	328,283.00	47,825.62	830,153.10	17.36
Safflower.....	51,978.00	*	*	*
Sesame.....	176,710.00	44,425.24	*	*
Rape seed.....	374,684.00	4,969.56	98,580.10	19.84
Vegetables.....	2,675,678.00	85,314.02	2,734,435.16	
Lettuce.....	12,798.00	*	*	*
Head Cabbage.....	313,745.00	3,323.75	188,788.31	56.80
Ethiopian Cabbage.....	1,273,949.00	9,237.60	912,285.59	98.76
Tomatoes.....	80,960.00	1,752.16	118,771.96	67.79
Green peppers.....	945,674.00	5,610.76	359,944.11	64.15
Red peppers.....	798,443.00	65,023.54	1,137,755.88	17.50
Swiss chard.....	51,708.00	*	*	*
Root Crops.....	2,418,668.00	91,088.15	18,613,781.70	
Beetroot.....	331,630.00	2,098.26	196,182.24	93.50
Carrot.....	107,374.00	*	*	*
Onion.....	392,952.00	15,388.77	1,049,812.52	68.22
Potatoes.....	361,103.00	38,925.67	4,848,311.61	124.55
Yam/'Boye'.....	21,521.00	*	*	*
Garlic.....	837,277.00	8,754.33	870,684.72	99.46
Taro/'Godere'.....	528,714.00	5,371.59	1,170,873.84	217.98
Sweet potatoes.....	647,775.00	16,795.75	10,355,295.09	616.54
Fruit Crops.....	1,862,794.00	26,944.20	1,693,666.28	
Avocados.....	585,668.00	4,369.54	209,753.25	48.00
Bananas.....	1,228,662.00	13,156.60	881,327.17	66.99
Guavas.....	174,670.00	1,173.33	15,017.79	12.80
Lemons.....	55,869.00	176.55	8,393.35	47.54
Mangoes.....	731,928.00	6,595.69	418,067.37	63.38
Oranges.....	245,886.00	689.49	41,918.21	60.80
Papayas.....	300,463.00	780.47	119,181.68	152.71
Pineapples.....	8,405.00	*	*	*
Chat.....	1,770,128.00	162,330.32	1,291,717.97	7.96
Coffee.....	2,294,288.00	489,799.36	3,101,927.33	6.33
Hops.....	563,350.00	3,838.95	89,451.86	23.30
Sugar Cane.....	324,526.00	7,077.96	3,162,239.03	446.77

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	45,678,924.00	10,070,812.56	11,868,963.27	680,644.22	0.22	0.26	0.01

**Table 8 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Somali Region

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops.	111,424.00	73,933.86	1,665,620.52	
Cereals.....	110,375.00	71,019.56	1,616,664.88	
Teff.....	*	*	*	*
Barley.....	*	*	*	*
Wheat.....	*	*	*	*
Maize.....	65,032.00	23,792.38	574,831.11	24.16
Sorghum.....	79,036.00	41,271.04	950,832.54	23.04
Finger millet.....	-	-	-	-
Oats/'Aja'.....	-	-	-	-
Rice.....	-	-	-	-
Pulses.....	*	*	*	
Faba beans.....	-	-	-	-
Field peas.....	-	-	-	-
Haricot beans white.....	-	-	-	-
Haricot beans red.....	*	*	*	*
Chick-peas.....	-	-	-	-
Lentils.....	-	-	-	-
Grass peas.....	-	-	-	-
Soya beans.....	-	-	-	-
Fenugreek.....	-	-	-	-
Mung bean /"Masho".....	-	-	-	-
Gibto.....	-	-	-	-
Oilseeds.....	*	*	*	
Neug.....	-	-	-	-
Linseed.....	-	-	-	-
Groundnuts.....	*	*	*	*
Safflower.....	-	-	-	-
Sesame.....	*	*	*	*
Rape seed.....	-	-	-	-
Vegetables.....	10,632.00	*	4,867.30	
Lettuce.....	-	-	-	-
Head Cabbage.....	-	-	-	-
Ethiopian Cabbage.....	-	-	-	-
Tomatoes.....	6,753.00	324.69	*	*
Green peppers.....	*	*	*	*
Red peppers.....	-	-	-	-
Swiss chard.....	-	-	-	-
Root Crops.....	15,764.00	*	*	
Beetroot.....	-	-	-	-
Carrot.....	-	-	-	-
Onion.....	13,295.00	*	*	*
Potatoes.....	-	-	-	-
Yam/'Boye'.....	-	-	-	-
Garlic.....	*	*	*	*
Taro/'Godere'.....	-	-	-	-
Sweet potatoes.....	*	*	*	*
Fruit Crops.....	35,634.00	1,644.69	167,579.99	
Avocados.....	-	-	-	-
Bananas.....	7,816.00	*	*	*
Guavas.....	*	*	*	*
Lemons.....	17,306.00	*	*	*
Mangoes.....	*	*	*	*
Oranges.....	29,012.00	467.64	72,648.28	155.35
Papayas.....	*	*	*	*
Pineapples.....	-	-	-	-
Chat.....	40,324.00	10,438.54	47,333.50	4.53
Coffee.....	*	*	*	*
Hops.....	-	-	-	-
Sugar Cane.....	-	-	-	-

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	-	-	-	-	-	-	-

**Table 9 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Benishangul-Gumuz Region

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops.	238,239.00	253,409.72	5,818,801.22	
Cereals.....	234,922.00	169,256.31	4,648,687.75	
Teff.....	42,791.00	24,529.72	328,696.77	13.40
Barley.....	4,928.00	729.21	10,641.21	14.59
Wheat.....	8,455.00	2,455.71	59,083.57	24.06
Maize.....	214,502.00	50,681.11	2,033,750.51	40.13
Sorghum.....	123,440.00	58,946.39	1,580,028.44	26.80
Finger millet.....	48,144.00	29,167.48	577,713.03	19.81
Oats/'Aja'.....	*	*	*	*
Rice.....	*	*	*	*
Pulses.....	113,906.00	22,791.67	445,232.52	
Faba beans.....	9,705.00	878.29	16,835.16	19.17
Field peas.....	4,654.00	686.47	10,576.05	15.41
Haricot beans white.....	19,168.00	2,046.19	38,435.61	18.78
Haricot beans red.....	61,267.00	3,154.72	54,889.24	17.40
Chick-peas.....	1,404.00	423.60	3,948.45	9.32
Lentils.....	*	*	*	*
Grass peas.....	-	-	-	-
Soya beans.....	26,931.00	14,076.52	300,939.73	21.38
Fenugreek.....	*	*	*	*
Mung bean /"Masho".....	10,612.00	1,427.64	18,540.93	12.99
Gibto.....	*	*	*	*
Oilseeds.....	134,242.00	61,361.73	724,880.95	
Neug.....	36,605.00	11,053.55	86,882.01	7.86
Linseed.....	12,357.00	*	4,843.58	*
Groundnuts.....	72,593.00	20,073.96	412,099.63	20.53
Safflower.....	2,630.00	*	*	*
Sesame.....	56,921.00	29,033.19	213,686.50	7.36
Rape seed.....	5,014.00	135.94	*	*
Vegetables.....	64,702.00	5,120.87	54,470.84	
Lettuce.....	*	*	*	*
Head Cabbage.....	5,866.00	*	*	*
Ethiopian Cabbage.....	15,154.00	162.47	3,347.38	20.60
Tomatoes.....	8,734.00	49.57	1,040.75	21.00
Green peppers.....	10,060.00	47.98	892.55	18.60
Red peppers.....	38,346.00	4,786.23	46,087.09	9.63
Swiss chard.....	*	*	*	*
Root Crops.....	89,616.00	1,599.99	229,097.39	
Beetroot.....	3,641.00	*	*	*
Carrot.....	*	*	*	*
Onion.....	14,851.00	279.88	18,945.81	67.69
Potatoes.....	3,534.00	*	*	*
Yam/'Boye'.....	*	*	*	*
Garlic.....	14,534.00	94.47	*	*
Taro/'Godere'.....	14,718.00	62.14	23,441.13	377.23
Sweet potatoes.....	66,103.00	979.86	157,876.65	161.12
Fruit Crops.....	117,993.00	2,369.48	142,137.03	
Avocados.....	5,434.00	8.41	*	*
Bananas.....	49,283.00	795.23	60,120.00	75.60
Guavas.....	13,597.00	121.71	*	*
Lemons.....	9,948.00	33.27	1,205.18	36.22
Mangoes.....	76,928.00	1,165.84	68,007.71	58.33
Oranges.....	19,080.00	120.31	3,641.95	30.27
Papayas.....	34,917.00	124.71	9,162.18	73.47
Pineapples.....	-	-	-	-
Chat.....	20,631.00	1,400.83	29,382.17	20.97
Coffee.....	30,237.00	1,863.04	6,220.87	3.34
Hops.....	9,805.00	*	*	*
Sugar Cane.....	2,198.00	*	*	*

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	*	*	*	*	*	*	

**Table 10 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

S.N.N.P. Region

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops.	2,858,438.00	1,133,354.78	27,640,228.02	
Cereals.....	2,513,815.00	892,133.80	23,631,256.61	
Teff.....	973,880.00	248,124.17	3,704,149.19	14.93
Barley.....	554,571.00	81,161.32	1,545,047.18	19.04
Wheat.....	525,386.00	127,246.59	3,391,959.51	26.66
Maize.....	1,614,320.00	314,535.17	11,969,670.78	38.06
Sorghum.....	751,309.00	112,193.73	2,852,640.82	25.43
Finger millet.....	83,616.00	4,485.63	72,050.19	16.06
Oats/'Aja'.....	10,822.00	337.60	5,018.64	14.87
Rice.....	16,494.00	*	*	*
Pulses.....	1,925,661.00	235,795.37	3,965,849.40	
Faba beans.....	745,749.00	70,378.58	1,358,496.58	19.30
Field peas.....	429,448.00	49,662.53	762,460.11	15.35
Haricot beans white.....	81,800.00	5,142.25	86,186.97	16.76
Haricot beans red.....	1,159,608.00	97,694.18	1,529,627.02	15.66
Chick-peas.....	29,848.00	*	*	*
Lentils.....	35,043.00	603.32	6,184.01	10.25
Grass peas.....	*	*	*	*
Soya beans.....	9,050.00	*	*	*
Fenugreek.....	22,759.00	122.14	1,150.63	9.42
Mung bean /"Masho".....	18,536.00	*	*	*
Gibto.....	*	*	*	*
Oilseeds.....	139,015.00	5,425.60	43,122.00	
Neug.....	*	*	*	*
Linseed.....	44,725.00	852.98	5,421.68	6.36
Groundnuts.....	17,065.00	1,045.16	14,980.64	14.33
Safflower.....	15,809.00	308.54	3,982.26	12.91
Sesame.....	*	*	*	*
Rape seed.....	55,791.00	860.47	8,850.50	10.29
Vegetables.....	1,881,106.00	51,222.99	3,160,434.06	
Lettuce.....	6,940.00	16.89	*	*
Head Cabbage.....	86,860.00	1,639.36	101,416.34	61.86
Ethiopian Cabbage.....	1,687,381.00	23,817.24	2,464,530.42	103.48
Tomatoes.....	49,012.00	1,091.32	11,978.66	10.98
Green peppers.....	293,780.00	1,612.24	121,768.70	75.53
Red peppers.....	188,886.00	22,940.78	460,739.93	20.08
Swiss chard.....	20,631.00	*	*	*
Root Crops.....	1,865,515.00	95,015.32	21,159,844.26	
Beetroot.....	96,278.00	524.32	43,052.23	82.11
Carrot.....	65,082.00	*	*	*
Onion.....	120,013.00	1,297.61	132,966.68	102.47
Potatoes.....	231,004.00	10,771.22	1,893,783.89	175.82
Yam/'Boye'.....	311,789.00	5,211.87	487,404.77	93.52
Garlic.....	145,758.00	983.87	*	*
Taro/'Godere'.....	1,309,051.00	40,543.04	10,603,454.35	261.54
Sweet potatoes.....	635,529.00	34,868.49	7,846,769.27	225.04
Fruit Crops.....	1,970,651.00	65,351.74	5,417,841.31	
Avocados.....	1,164,875.00	13,382.17	604,564.38	45.18
Bananas.....	1,346,023.00	43,346.45	3,927,211.89	90.60
Guavas.....	78,678.00	269.59	2,938.81	10.90
Lemons.....	89,473.00	218.96	14,785.16	67.52
Mangoes.....	610,525.00	5,187.78	443,490.79	85.49
Oranges.....	198,933.00	862.73	85,550.08	99.16
Papayas.....	331,797.00	1,480.40	325,562.19	219.92
Pineapples.....	43,234.00	603.65	13,738.00	22.76
Chat.....	659,630.00	66,068.99	764,614.13	11.57
Coffee.....	2,157,557.00	217,080.29	1,353,831.54	6.24
Hops.....	268,667.00	2,148.28	5,627.27	2.62
Sugar Cane.....	680,678.00	16,383.65	8,462,112.03	516.50

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	81,433,287.00	19,236,822.48	22,913,981.61	337,177.40	0.24	0.28	*

**Table 11 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Gambela Region

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops.	31,437.00	6,795.66	168,776.68	
Cereals.....	30,749.00	6,745.96	168,517.25	
Teff.....	*	*	*	*
Barley.....	*	*	*	*
Wheat.....	-	-	-	-
Maize.....	24,029.00	4,751.79	125,827.55	26.48
Sorghum.....	7,164.00	1,704.10	37,929.99	22.26
Finger millet.....	*	*	*	*
Oats/'Aja'.....	*	*	*	*
Rice.....	*	*	*	*
Pulses.....	2,906.00	*	*	
Faba beans.....	-	-	-	-
Field peas.....	-	-	-	-
Haricot beans white.....	1,029.00	3.28	*	*
Haricot beans red.....	1,623.00	7.89	131.91	16.72
Chick-peas.....	*	*	*	*
Lentils.....	-	-	-	-
Grass peas.....	-	-	-	-
Soya beans.....	-	-	-	-
Fenugreek.....	-	-	-	-
Mung bean /"Masho".....	*	*	*	*
Gibto.....	-	-	-	-
Oilseeds.....	*	*	*	
Neug.....	-	-	-	-
Linseed.....	-	-	-	-
Groundnuts.....	*	*	*	*
Safflower.....	-	-	-	-
Sesame.....	-	-	-	-
Rape seed.....	-	-	-	-
Vegetables.....	6,337.00	100.99	*	
Lettuce.....	-	-	-	-
Head Cabbage.....	-	-	-	-
Ethiopian Cabbage.....	4,039.00	35.47	*	*
Tomatoes.....	597.00	*	*	*
Green peppers.....	1,100.00	*	*	*
Red peppers.....	1,447.00	*	*	*
Swiss chard.....	-	-	-	-
Root Crops.....	6,137.00	110.96	*	
Beetroot.....	-	-	-	-
Carrot.....	-	-	-	-
Onion.....	*	*	*	*
Potatoes.....	-	-	-	-
Yam/'Boye'.....	1,136.00	4.81	*	*
Garlic.....	*	*	*	*
Taro/'Godere'.....	3,048.00	18.51	*	*
Sweet potatoes.....	2,978.00	79.83	*	*
Fruit Crops.....	14,130.00	546.00	*	
Avocados.....	4,757.00	150.00	*	*
Bananas.....	6,790.00	286.78	*	*
Guavas.....	666.00	*	-	-
Lemons.....	1,329.00	3.16	*	*
Mangoes.....	6,297.00	52.88	*	*
Oranges.....	571.00	4.61	*	*
Papayas.....	6,872.00	43.49	*	*
Pineapples.....	*	*	*	*
Chat.....	1,566.00	99.20	*	*
Coffee.....	8,504.00	6,414.62	*	*
Hops.....	2,061.00	*	*	*
Sugar Cane.....	3,980.00	35.07	*	*

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	*	*	*	*	*	*	

**Table 12 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Harari

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops	37,426.00	11,570.41	206,235.11	
Cereals	37,295.00	8,825.77	173,698.68	
Teff.....	-	-	-	-
Barley.....	*	*	*	*
Wheat.....	3,405.00	*	*	*
Maize.....	23,741.00	1,397.66	33,827.52	24.20
Sorghum.....	33,620.00	7,316.23	138,376.75	18.91
Finger millet.....	-	-	-	-
Oats/'Aja'.....	-	-	-	-
Rice.....	-	-	-	-
Pulses	1,188.00	22.69	120.64	
Faba beans.....	*	*	*	*
Field peas.....	-	-	-	-
Haricot beans white.....	*	*	*	*
Haricot beans red.....	*	*	*	*
Chick-peas.....	*	*	*	*
Lentils.....	*	*	*	*
Grass peas.....	-	-	-	-
Soya beans.....	-	-	-	-
Fenugreek.....	-	-	-	-
Mung bean /"Masho".....	-	-	-	-
Gibto.....	-	-	-	-
Oilseeds	14,631.00	2,721.95	32,415.78	
Neug.....	-	-	-	-
Linseed.....	-	-	-	-
Groundnuts.....	14,517.00	2,658.52	32,058.60	12.06
Safflower.....	-	-	-	-
Sesame.....	1,448.00	*	*	*
Rape seed.....	-	-	-	-
Vegetables	*	*	*	
Lettuce.....	-	-	-	-
Head Cabbage.....	*	*	*	*
Ethiopian Cabbage.....	-	-	-	-
Tomatoes.....	*	*	*	*
Green peppers.....	*	*	*	*
Red peppers.....	-	-	-	-
Swiss chard.....	*	*	*	*
Root Crops	3,730.00	92.40	13,799.93	
Beetroot.....	-	-	-	-
Carrot.....	-	-	-	-
Onion.....	-	-	-	-
Potatoes.....	*	*	*	*
Yam/'Boye'.....	-	-	-	-
Garlic.....	-	-	-	-
Taro/'Godere'.....	-	-	-	-
Sweet potatoes.....	3,202.00	75.77	13,799.93	182.13
Fruit Crops	22,644.00	680.66	9,237.32	
Avocados.....	*	*	*	*
Bananas.....	6,902.00	*	*	*
Guavas.....	7,632.00	58.66	*	*
Lemons.....	5,722.00	*	*	*
Mangoes.....	15,300.00	397.45	286.60	0.72
Oranges.....	*	*	*	*
Papayas.....	4,337.00	*	*	*
Pineapples.....	-	-	-	-
Chat	35,696.00	6,871.65	139,884.30	20.36
Coffee.....	3,394.00	*	*	*
Hops.....	*	*	*	*
Sugar Cane.....	*	*	*	*

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	-	-	-	-	-	-	-

**Table 13 - Area, Production and Yield of Crops for Private Peasant Holdings
for 2017/18 (2010 E.C) Meher Season**

Dire Dawa

Crop	Number of Holders	Area In Hectares	Production In Quintals	Yield (Qt/Ha)
Grain Crops.	26,079.00	12,025.66	228,847.96	
Cereals.....	26,079.00	11,124.90	215,096.23	
Teff.....	-	-	-	-
Barley.....	-	-	-	-
Wheat.....	-	-	-	-
Maize.....	6,204.00	304.17	6,296.35	20.70
Sorghum.....	25,800.00	10,820.72	208,799.88	19.30
Finger millet.....	-	-	-	-
Oats/'Aja'.....	-	-	-	-
Rice.....	-	-	-	-
Pulses.....	10,934.00	525.91	8,810.82	
Faba beans.....	-	-	-	-
Field peas.....	-	-	-	-
Haricot beans white.....	4,274.00	206.48	3,097.87	15.00
Haricot beans red.....	7,154.00	319.43	5,712.96	17.88
Chick-peas.....	-	-	-	-
Lentils.....	-	-	-	-
Grass peas.....	-	-	-	-
Soya beans.....	-	-	-	-
Fenugreek.....	-	-	-	-
Mung bean /"Masho".....	-	-	-	-
Gibto.....	-	-	-	-
Oilseeds.....	6,127.00	*	*	
Neug.....	-	-	-	-
Linseed.....	-	-	-	-
Groundnuts.....	*	*	*	*
Safflower.....	-	-	-	-
Sesame.....	3,021.00	102.98	1,074.33	10.43
Rape seed.....	-	-	-	-
Vegetables.....	4,051.00	101.34	*	
Lettuce.....	-	-	-	-
Head Cabbage.....	-	-	-	-
Ethiopian Cabbage.....	*	*	*	*
Tomatoes.....	2,976.00	*	*	*
Green peppers.....	1286.00	15.62	*	*
Red peppers.....	*	*	*	*
Swiss chard.....	-	-	-	-
Root Crops.....	2,945.00	70.19	*	
Beetroot.....	-	-	-	-
Carrot.....	-	-	-	-
Onion.....	*	*	*	*
Potatoes.....	-	-	-	-
Yam/'Boye'.....	-	-	-	-
Garlic.....	*	*	*	*
Taro/'Godere'.....	-	-	-	-
Sweet potatoes.....	1,730.00	27.04	*	*
Fruit Crops.....	7,670.00	97.00	*	
Avocados.....	-	-	-	-
Bananas.....	*	*	*	*
Guavas.....	2,194.00	8.63	*	*
Lemons.....	592.00	0.78	*	*
Mangoes.....	2,586.00	14.25	*	*
Oranges.....	*	*	*	*
Papayas.....	2,842.00	*	*	*
Pineapples.....	-	-	-	-
Chat.....	12,000.00	1,139.59	3,027.15	2.66
Coffee.....	2,629.00	*	*	*
Hops.....	-	-	-	-
Sugar Cane.....	-	-	-	-

Crop	Number of Trees Harvested	Production In Quintals			Yield (Quintals/Tree)		
		Amicho	Kocho	Bula	Amicho	Kocho	Bula
Enset	-	-	-	-	-	-	-

APPENDIX I - ESTIMATION PROCEDURES OF TOTAL, RATIO
AND
SAMPLING ERRORS

APPENDIX I

Estimation Procedures of Totals, Ratios and Sampling Errors

The following formulas were used to estimate total area of land under specific crop, production and yield of specific crop in a stratum.

1. For estimating Total Area of Land under Specific Crop:

$$\hat{A}_h = \sum_{i=1}^{n_h} W_{hi} \sum_{j=1}^{h_{hi}} a_{hij} = \sum_{i=1}^{n_h} W_{hi} a_{hi}$$

in which, $W_{hi} = \frac{M_h H_{hi}}{n_h m_{hi} h_{hi}}$ is the basic weight.

Where:

- h represents the stratum
- n_h is the total number of sample EAs successfully covered in the h^{th} stratum.
- M_h is the measure of size of the h^{th} stratum as obtained from the sampling frame.
- m_{hi} is the measure of size of the i^{th} sample EA in the h^{th} stratum obtained from the sampling frame.
- H_{hi} is the total number of agricultural households of the i^{th} sample EA in the h^{th} stratum.
- h_{hi} is the number of sample agricultural households successfully covered in the i^{th} sample EA in the h^{th} stratum.
- a_{hij} is the value of area for agricultural household j , in the i^{th} EA in the h^{th} stratum under a specific crop.
- a_{hi} is the sample total area under specific crop for EA i in stratum h
- \hat{A}_h estimate of total area under specific crop in stratum h

2. For estimating Total Production under Specific Crop:

$$\hat{P}_h = \sum_{i=1}^{n_h} W_{hi} P_{hi}$$

in which, $P_{hi} = a_{hi} * \bar{Y}_{hi}$

Where, $\bar{Y}_{hi} = \frac{Y_{hi}}{4C_{hi}}$ is average yield per square meter of a specific crop in the i^{th} EA in the h^{th} stratum.

\hat{P}_h is estimate of total quantity of production of a specific crop in the h^{th} stratum.

Y_{hi} is sample total quantity of production of a specific crop from defined area of land for crop cutting

of a crop in the i^{th} EA in the h^{th} stratum.

P_{hi} is estimate of total quantity of production under specific crop for EA i in stratum h .

C_{hi} is the number of crop cutting of a specific crop in the i^{th} EA in the h^{th} stratum.

3. For estimating yield of a specific crop in stratum h :

$$\hat{Y}_h = \frac{\hat{P}_h}{\hat{A}_h}$$

4. Sampling Variance of Estimates:

Sampling variance for the estimate of stratum total of area, production and yield for a specific crop are estimated by the following formulas.

$$Var(\hat{A}_h) = (1 - f_h) \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{A}_{hi} - \frac{\hat{A}_h}{n_h} \right)^2 + f_h \sum_{i=1}^{n_h} (1 - f_{hi}) \left(\frac{h_{hi}}{h_{hi} - 1} \right) \sum_{j=1}^{h_{hi}} \left(\hat{A}_{hij} - \frac{\hat{A}_{hi}}{h_{hi}} \right)^2$$

$$Var(\hat{P}_h) = (1 - f_h) \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{P}_{hi} - \frac{\hat{P}_h}{n_h} \right)^2 + f_h \sum_{i=1}^{n_h} (1 - f_{hi}) \left(\frac{h_{hi}}{h_{hi} - 1} \right) \sum_{j=1}^{h_{hi}} \left(\hat{P}_{hij} - \frac{\hat{P}_{hi}}{h_{hi}} \right)^2$$

$$Var(\hat{Y}_h) = \frac{1}{\hat{A}_h^2} \left[Var(\hat{P}_h) + \hat{Y}_h^2 Var(\hat{A}_h) - 2\hat{Y}_h Cov(\hat{P}_h, \hat{A}_h) \right]$$

Where,

$$Cov(\hat{P}_h, \hat{A}_h) = (1 - f_h) \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{A}_{hi} - \frac{\hat{A}_h}{n_h} \right) \left(\hat{P}_{hi} - \frac{\hat{P}_h}{n_h} \right) + f_h \sum_{i=1}^{n_h} (1 - f_{hi}) \left(\frac{h_{hi}}{h_{hi} - 1} \right) \sum_{j=1}^{h_{hi}} \left(\hat{A}_{hij} - \frac{\hat{A}_{hi}}{h_{hi}} \right) \left(\hat{P}_{hij} - \frac{\hat{P}_{hi}}{h_{hi}} \right)$$

f_h = average first stage probability of selection of EAs within stratum h .

$f_{hi} = \frac{h_{hi}}{H_{hi}}$ = average second stage probability of selection within the i^{th} sample EA in

stratum h .

$\hat{A}_{hi}, \hat{P}_{hi}$ are weighted total area and production, respectively, of a specific crop in the i^{th} EA and h^{th}

stratum.

$\hat{A}_{hij}, \hat{P}_{hij}$ are weighted values of area and production, respectively, from j^{th} agricultural household in the

i^{th} EA and h^{th} stratum under a specific crop.

Since all strata are independent, the total variance at regional and country level is computed by aggregating the result obtained at Zone/Special Wereda level, i.e.

$$Var(\hat{A}) = \sum_h^L Var(\hat{A}_h), Var(\hat{P}) = \sum_h^L Var(\hat{P}_h) \text{ and } Var(\hat{Y}) = \sum_h^L Var(\hat{Y}_h)$$

Where, L is the number of strata (Zone/Special Wereda).

In estimating the sampling variance by the above formula, selection of EAs within a stratum is assumed to be with replacement. By so doing the variance estimate may be slightly over estimated but it greatly simplifies the estimation procedure.

5. Coefficient of Variation (CV) of Estimates:

Coefficient of Variation (CV) in percentage of estimate of stratum total of area, production and yield for a specific crop are given by:

$$CV(\hat{A}_h) = \frac{\sqrt{Var(\hat{A}_h)}}{\hat{A}_h} * 100, CV(\hat{P}_h) = \frac{\sqrt{Var(\hat{P}_h)}}{\hat{P}_h} * 100, CV(\hat{Y}_h) = \frac{\sqrt{Var(\hat{Y}_h)}}{\hat{Y}_h} * 100$$

6. Ninety-five percent confidence interval (CI) of stratum total of area:

$$\hat{A}_h \pm 1.96 * SE(\hat{A}_h) \quad ,$$

Where $SE(\hat{A}_h) = \sqrt{Var(\hat{A}_h)}$ is standard error of the estimate of the stratum total of area.

Estimates of standard error and confidence interval for the other estimates can also be calculated by adopting the above formulas.

APPENDIX II
STANDARD ERRORS AND COEFFICIENTS OF VARIATION OF
ESTIMATES

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Ethiopia

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	12,677,882.27	241,254.60	1.90	306,126,383.06	7,444,645.74	2.43
Cereals.....	10,232,582.23	191,183.57	1.87	267,789,764.02	6,687,626.89	2.50
<i>Teff.....</i>	3,023,283.50	107,632.05	3.56	52,834,011.56	2,218,190.06	4.20
<i>Barley.....</i>	951,993.15	59,416.21	6.24	20,529,963.72	1,624,606.53	7.91
<i>Wheat.....</i>	1,696,907.05	88,392.62	5.21	46,429,657.12	3,168,648.74	6.82
<i>Maize.....</i>	2,128,948.91	74,998.01	3.52	83,958,872.44	3,533,341.15	4.21
<i>Sorghum.....</i>	1,896,389.29	88,875.10	4.69	51,692,525.40	3,010,791.98	5.82
<i>Finger Millet.....</i>	456,057.31	31,857.44	6.99	10,308,231.53	805,019.88	7.81
<i>Oats/'Aja'.....</i>	25,896.22	5,917.62	22.85	526,318.93	130,604.20	24.81
<i>Rice.....</i>	53,106.79	17,927.05	33.76	1,510,183.30	540,793.11	35.81
Pulses.....	1,598,806.51	60,290.56	3.77	29,785,880.89	1,350,258.76	4.53
<i>Faba Beans.....</i>	437,106.04	21,701.74	4.96	9,217,615.35	571,993.67	6.21
<i>Field Pease.....</i>	220,508.39	14,217.72	6.45	3,685,190.65	309,764.83	8.41
<i>Whight Haricot beans....</i>	89,382.68	12,721.07	14.23	1,482,128.42	217,532.57	14.68
<i>Red Haricot beans.....</i>	216,803.91	20,686.23	9.54	3,727,664.85	423,060.95	11.35
<i>Chick-Peas.....</i>	242,703.73	29,104.47	11.99	4,994,255.50	693,330.96	13.88
<i>Lentils.....</i>	119,046.04	14,911.65	12.53	1,751,435.58	229,321.84	13.09
<i>Grass Peas.....</i>	143,085.60	17,113.01	11.96	2,866,016.31	403,512.28	14.08
<i>Soya Beans.....</i>	38,072.70	9,088.78	23.87	864,678.69	215,923.43	24.97
<i>Fenugreek.....</i>	32,587.00	9,338.40	28.66	436,373.92	108,541.88	24.87
<i>Mung bean "Masho"....</i>	41,633.20	7,230.16	17.37	514,227.41	99,197.41	19.29
<i>Gibto.....</i>	17,877.23	6,130.53	34.29	246,294.20	85,439.91	34.69
Oilseeds.....	846,493.53	70,043.04	8.27	8,550,738.16	681,294.10	7.97
<i>Neug.....</i>	290,494.94	30,456.65	10.48	3,233,448.82	361,317.83	11.17
<i>Linseed.....</i>	79,044.51	11,116.73	14.06	882,096.51	156,269.01	17.72
<i>Groundnut.....</i>	80,841.57	13,770.49	17.03	1,451,728.20	275,921.17	19.01
<i>Sufflower.....</i>	7,966.73	1,645.83	20.66	95,768.76	18,958.48	19.80
<i>Sesame.....</i>	370,141.06	59,540.41	16.09	2,559,034.30	408,580.51	15.97
<i>Rapeseed.....</i>	18,004.73	2,562.35	14.23	328,661.57	64,982.55	19.77

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Tigray

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	941,091.28	44,356.34	4.71	18,589,665.02	959,468.62	5.16
Cereals.....	769,670.80	35,072.94	4.56	17,135,451.73	874,820.26	5.11
<i>Teff.....</i>	167,748.72	14,489.80	8.64	2,579,060.58	270,193.00	10.48
<i>Barley.....</i>	94,725.02	10,313.46	10.89	1,694,179.80	215,081.71	12.70
<i>Wheat.....</i>	107,929.86	13,157.18	12.19	2,140,031.44	245,827.65	11.49
<i>Maize.....</i>	62,161.78	5,127.41	8.25	1,590,561.25	149,588.65	9.40
<i>Sorghum.....</i>	254,655.92	20,453.36	8.03	7,262,717.79	692,360.86	9.53
<i>Finger Millet.....</i>	82,021.79	11,575.86	14.11	1,858,265.11	305,955.04	16.46
<i>Oats/'Aja'.....</i>	13.03	9.35	71.77	269.74	193.59	71.77
<i>Rice.....</i>	414.68	414.32	99.91	10,366.03	10,356.88	99.91
Pulses.....	37,230.62	4,036.33	10.84	567,697.57	61,615.47	10.85
<i>Faba Beans.....</i>	10,525.93	1,528.05	14.52	173,354.45	31,356.21	18.09
<i>Field Pease.....</i>	5,307.74	1,566.53	29.51	80,649.35	22,975.70	28.49
<i>Whight Haricot beans....</i>	2,103.97	963.99	45.82	27,613.26	15,006.24	54.34
<i>Red Haricot beans.....</i>	1,227.66	555.65	45.26	15,956.60	7,338.61	45.99
<i>Chick-Peas.....</i>	6,845.93	2,305.10	33.67	111,612.30	29,374.55	26.32
<i>Lentils.....</i>	5,689.89	1,572.66	27.64	70,124.06	21,117.28	30.11
<i>Grass Peas.....</i>	5,129.55	1,434.57	27.97	84,969.94	24,223.55	28.51
<i>Soya Beans.....</i>	32.32	26.68	82.56	319.94	264.15	82.56
<i>Fenugreek.....</i>	367.63	138.48	37.67	3,097.66	1,211.48	39.11
<i>Mung bean "Masho" ...</i>	-	-	-	-	-	-
<i>Gibto.....</i>	-	-	-	-	-	-
Oilseeds.....	134,189.86	19,381.00	14.44	886,515.71	139,396.33	15.72
<i>Neug.....</i>	5,697.38	1,453.50	25.51	78,310.09	21,622.12	27.61
<i>Linseed.....</i>	5,198.69	1,134.15	21.82	52,630.67	12,354.29	23.47
<i>Groundnut.....</i>	872.09	684.04	78.44	9,156.71	7,182.26	78.44
<i>Sufflower.....</i>	33.86	23.39	69.08	275.62	191.66	69.54
<i>Sesame.....</i>	122,325.34	19,793.63	16.18	746,142.63	142,736.36	19.13
<i>Rapeseed.....</i>	62.51	50.62	80.98	-	-	-

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Afar

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	9,062.46	3,467.15	38.26	207,924.28		31.45
Cereals.....	6,961.79	2,316.37	33.27	188,989.33	57,928.40	30.65
<i>Teff.....</i>	919.72	751.21	81.68	12,480.76	10,194.12	81.68
<i>Barley.....</i>	8.26	8.08	97.89	-	-	-
<i>Wheat.....</i>	-	-	-	-	-	-
<i>Maize.....</i>	4,308.23	1,489.20	34.57	138,009.12	48,837.57	35.39
<i>Sorghum.....</i>	1,725.58	1,121.29	64.98	38,499.44	25,017.15	64.98
<i>Finger Millet.....</i>	-	-	-	-	-	-
<i>Oats/'Aja'.....</i>	-	-	-	-	-	-
<i>Rice.....</i>	-	-	-	-	-	-
Pulses.....	1,683.12	1,092.45	64.91	17,393.28	11,338.70	65.19
<i>Faba Beans.....</i>	-	-	-	-	-	-
<i>Field Pease.....</i>	-	-	-	-	-	-
<i>Whight Haricot beans.....</i>	0.14	0.14	99.54	-	-	-
<i>Red Haricot beans.....</i>	7.35	7.50	102.01	-	-	-
<i>Chick-Peas.....</i>	-	-	-	-	-	-
<i>Lentils.....</i>	-	-	-	-	-	-
<i>Grass Peas.....</i>	-	-	-	-	-	-
<i>Soya Beans.....</i>	-	-	-	-	-	-
<i>Fenugreek.....</i>	-	-	-	-	-	-
<i>Mung bean "Masho".....</i>	1,675.63	1,092.34	65.19	17,393.28	11,338.70	65.19
<i>Gibto.....</i>	-	-	-	-	-	-
Oilseeds.....	417.56	269.06	64.44	1,541.67	1,000.46	64.89
<i>Neug.....</i>	-	-	-	-	-	-
<i>Linseed.....</i>	-	-	-	-	-	-
<i>Groundnut.....</i>	-	-	-	-	-	-
<i>Sufflower.....</i>	11.81	11.76	99.54	-	-	-
<i>Sesame.....</i>	405.74	263.31	64.89	1,541.67	1,000.46	64.89
<i>Rapeseed.....</i>	-	-	-	-	-	-

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Amhara

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	4,479,345.02	136,443.30	3.05	100,520,273.48	3,492,731.27	3.47
Cereals.....	3,499,684.34	107,574.69	3.07	86,213,639.35	3,176,182.70	3.68
<i>Teff.....</i>	1,138,030.51	69,903.86	6.14	20,394,482.71	1,438,472.32	7.05
<i>Barley.....</i>	323,936.38	34,701.06	10.71	6,394,523.75	816,054.02	12.76
<i>Wheat.....</i>	554,661.74	42,995.44	7.75	14,047,074.81	1,157,033.27	8.24
<i>Maize.....</i>	520,116.84	29,283.70	5.63	20,718,657.58	1,536,420.95	7.42
<i>Sorghum.....</i>	672,491.78	52,153.27	7.76	17,812,032.42	1,674,603.42	9.40
<i>Finger Millet.....</i>	246,522.71	27,002.69	10.95	5,604,665.08	665,037.02	11.87
<i>Oats/'Aja'.....</i>	4,094.80	1,493.18	36.47	61,893.57	24,078.54	38.90
<i>Rice.....</i>	39,829.58	17,095.18	42.92	1,180,309.43	523,326.18	44.34
Pulses.....	677,843.42	39,508.06	5.83	11,755,650.21	815,890.97	6.94
<i>Faba Beans.....</i>	150,934.92	12,288.95	8.14	2,836,912.59	271,234.14	9.56
<i>Field Pease.....</i>	81,168.14	8,021.62	9.88	1,252,803.22	143,180.61	11.43
<i>Whight Haricot beans....</i>	38,040.90	8,396.66	22.07	608,848.25	140,611.14	23.09
<i>Red Haricot beans.....</i>	29,608.63	5,843.50	19.74	520,910.56	118,060.90	22.66
<i>Chick-Peas.....</i>	132,280.55	19,899.02	15.04	2,512,880.40	461,751.06	18.38
<i>Lentils.....</i>	69,987.52	12,043.81	17.21	969,027.77	172,293.72	17.78
<i>Grass Peas.....</i>	97,272.53	14,458.43	14.86	1,848,867.92	340,474.79	18.42
<i>Soya Beans.....</i>	14,074.91	7,279.03	51.72	340,412.03	170,141.32	49.98
<i>Fenugreek.....</i>	15,669.26	5,743.87	36.66	217,414.14	61,340.41	28.21
<i>Mung bean "Masho"....</i>	31,670.70	6,576.37	20.76	403,014.67	92,634.63	22.99
<i>Gibto.....</i>	17,135.36	6,099.36	35.60	244,558.66	85,433.59	34.93
Oilseeds.....	301,817.26	52,631.97	17.44	2,550,983.92	364,390.80	14.28
<i>Neug.....</i>	79,509.08	13,583.96	17.08	730,103.29	127,424.53	17.45
<i>Linseed.....</i>	25,745.93	3,819.53	14.84	183,756.17	32,786.15	17.84
<i>Groundnut.....</i>	6,011.59	2,973.43	49.46	102,975.01	52,902.06	51.37
<i>Sufflower.....</i>	6,695.80	1,541.75	23.03	77,826.78	17,399.80	22.36
<i>Sesame.....</i>	171,878.62	51,476.57	29.95	1,237,277.84	334,550.86	27.04
<i>Rapeseed.....</i>	11,976.25	2,091.94	17.47	219,044.83	55,440.68	25.31

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Oromia

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	5,757,293.43	184,502.46	3.20	151,080,010.79	6,270,500.74	4.15
Cereals.....	4,797,159.00	146,129.19	3.05	133,797,762.19	5,605,952.28	4.19
<i>Teff.....</i>	1,443,847.96	77,606.63	5.37	25,814,577.48	1,614,688.89	6.25
<i>Barley.....</i>	451,279.26	46,391.31	10.28	10,884,876.60	1,377,810.99	12.66
<i>Wheat.....</i>	898,682.57	74,544.78	8.29	26,699,177.73	2,905,442.33	10.88
<i>Maize.....</i>	1,146,899.78	64,812.83	5.65	46,767,440.66	2,999,753.50	6.41
<i>Sorghum.....</i>	735,263.79	66,662.95	9.07	20,810,667.34	2,352,518.66	11.30
<i>Finger Millet.....</i>	93,831.88	10,865.12	11.58	2,195,373.97	305,796.70	13.93
<i>Oats/'Aja'.....</i>	21,253.56	5,720.96	26.92	459,136.99	128,348.39	27.95
<i>Rice.....</i>	6,100.19	3,569.19	58.51	166,511.44	98,654.04	59.25
Pulses.....	622,144.90	42,578.18	6.84	13,022,349.31	1,025,779.32	7.88
<i>Faba Beans.....</i>	204,387.86	16,874.60	8.26	4,832,016.57	488,630.27	10.11
<i>Field Pease.....</i>	83,683.51	10,546.89	12.60	1,578,701.92	258,835.76	16.40
<i>Whight Haricot beans....</i>	41,834.37	9,381.06	22.42	717,879.69	163,188.24	22.73
<i>Red Haricot beans.....</i>	84,060.21	16,586.02	19.73	1,597,865.00	342,383.37	21.43
<i>Chick-Peas.....</i>	92,829.49	20,371.06	21.94	2,165,837.23	502,742.21	23.21
<i>Lentils.....</i>	42,743.74	8,649.04	20.23	706,006.25	149,843.15	21.22
<i>Grass Peas.....</i>	40,148.65	9,029.67	22.49	922,906.03	215,086.04	23.31
<i>Soya Beans.....</i>	9,611.04	3,838.17	39.93	223,006.99	99,805.05	44.75
<i>Fenugreek.....</i>	16,418.43	7,361.58	44.84	214,598.86	89,537.48	41.72
<i>Mung bean "Masho"....</i>	5,813.65	2,661.35	45.78	63,530.77	31,994.09	50.36
<i>Gibto.....</i>	613.94	612.17	99.71	-	-	-
Oilseeds.....	337,989.53	40,687.79	12.04	4,259,899.29	544,505.04	12.78
<i>Neug.....</i>	193,670.58	26,995.22	13.94	2,338,153.43	336,664.66	14.40
<i>Linseed.....</i>	46,443.46	10,366.35	22.32	635,444.41	152,265.77	23.96
<i>Groundnut.....</i>	47,825.62	12,528.30	26.20	830,153.10	248,678.73	29.96
<i>Sufflower.....</i>	655.07	520.19	79.41	8,501.02	6,139.23	72.22
<i>Sesame.....</i>	44,425.24	21,600.16	48.62	349,067.23	181,896.30	52.11
<i>Rapeseed.....</i>	4,969.56	1,459.90	29.38	98,580.10	33,680.12	34.17

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Somali

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	73,933.86	10,382.85	14.04	1,665,620.52	229,290.64	13.77
Cereals.....	71,019.56	10,386.29	14.62	1,616,664.88	229,315.81	14.18
<i>Teff.....</i>	13.92	13.92	99.99	-	-	-
<i>Barley.....</i>	100.21	80.85	80.68	-	-	-
<i>Wheat.....</i>	5,842.01	5,663.16	96.94	91,001.22	88,453.09	97.20
<i>Maize.....</i>	23,792.38	4,035.52	16.96	574,831.11	97,016.79	16.88
<i>Sorghum.....</i>	41,271.04	7,613.96	18.45	950,832.54	177,398.12	18.66
<i>Finger Millet.....</i>	-	-	-	-	-	-
<i>Oats/'Aja'.....</i>	-	-	-	-	-	-
<i>Rice.....</i>	-	-	-	-	-	-
Pulses.....	719.34	470.39	65.39	2,517.70	1,646.37	65.39
<i>Faba Beans.....</i>	-	-	-	-	-	-
<i>Field Pease.....</i>	-	-	-	-	-	-
<i>Whight Haricot beans....</i>	-	-	-	-	-	-
<i>Red Haricot beans.....</i>	719.34	470.39	65.39	2,517.70	1,646.37	65.39
<i>Chick-Peas.....</i>	-	-	-	-	-	-
<i>Lentils.....</i>	-	-	-	-	-	-
<i>Grass Peas.....</i>	-	-	-	-	-	-
<i>Soya Beans.....</i>	-	-	-	-	-	-
<i>Fenugreek.....</i>	-	-	-	-	-	-
<i>Mung bean "Masho"...</i>	-	-	-	-	-	-
<i>Gibto.....</i>	-	-	-	-	-	-
Oilseeds.....	2,194.95	1,959.57	89.28	46,437.94	43,661.39	94.02
<i>Neug.....</i>	-	-	-	-	-	-
<i>Linseed.....</i>	-	-	-	-	-	-
<i>Groundnut.....</i>	2,082.53	1,958.01	94.02	46,437.94	43,661.39	94.02
<i>Sufflower.....</i>	-	-	-	-	-	-
<i>Sesame.....</i>	112.43	68.10	60.57	-	-	-
<i>Rapeseed.....</i>	-	-	-	-	-	-

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Benishangul-Gumuz

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	253,409.72	20,701.95	8.17	5,818,801.22	514,213.36	8.84
Cereals.....	169,256.31	12,717.63	7.51	4,648,687.75	442,951.45	9.53
<i>Teff.....</i>	24,529.72	4,056.08	16.54	328,696.77	59,582.54	18.13
<i>Barley.....</i>	729.21	357.77	49.06	10,641.21	5,319.66	49.99
<i>Wheat.....</i>	2,455.71	790.46	32.19	59,083.57	20,352.62	34.45
<i>Maize.....</i>	50,681.11	5,151.55	10.16	2,033,750.51	264,795.84	13.02
<i>Sorghum.....</i>	58,946.39	7,657.12	12.99	1,580,028.44	231,879.57	14.68
<i>Finger Millet.....</i>	29,167.48	5,759.72	19.75	577,713.03	135,260.46	23.41
<i>Oats/'Aja'.....</i>	190.25	187.35	98.48	-	-	-
<i>Rice.....</i>	2,556.45	2,323.08	90.87	58,774.23	53,409.09	90.87
Pulses.....	22,791.67	3,722.16	16.33	445,232.52	84,255.62	18.92
<i>Faba Beans.....</i>	878.29	403.92	45.99	16,835.16	7,622.80	45.28
<i>Field Pease.....</i>	686.47	320.76	46.73	10,576.05	4,539.50	42.92
<i>Whight Haricot beans....</i>	2,046.19	665.02	32.50	38,435.61	15,014.42	39.06
<i>Red Haricot beans.....</i>	3,154.72	713.23	22.61	54,889.24	11,659.04	21.24
<i>Chick-Peas.....</i>	423.60	178.19	42.07	3,948.45	1,687.15	42.73
<i>Lentils.....</i>	18.70	12.56	67.19	93.48	62.81	67.19
<i>Grass Peas.....</i>	-	-	-	-	-	-
<i>Soya Beans.....</i>	14,076.52	3,851.05	27.36	300,939.73	87,827.89	29.18
<i>Fenugreek.....</i>	9.54	6.54	68.60	112.62	77.26	68.60
<i>Mung bean "Masho"....</i>	1,427.64	676.73	47.40	18,540.93	7,178.64	38.72
<i>Gibto.....</i>	70.03	69.89	99.81	861.26	859.62	99.81
Oilseeds.....	61,361.73	9,839.40	16.04	724,880.95	115,245.22	15.90
<i>Neug.....</i>	11,053.55	3,476.00	31.45	86,882.01	22,426.66	25.81
<i>Linseed.....</i>	803.45	412.73	51.37	4,843.58	2,398.97	49.53
<i>Groundnut.....</i>	20,073.96	4,297.19	21.41	412,099.63	96,742.82	23.48
<i>Sufflower.....</i>	261.64	205.72	78.62	5,183.09	4,075.19	78.62
<i>Sesame.....</i>	29,033.19	5,837.14	20.11	213,686.50	38,334.93	17.94
<i>Rapeseed.....</i>	135.94	61.13	44.97	2,186.14	1,183.01	54.11

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops **2017/18 (2010 E.C.)**

S.N.N.P.R

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	1,133,354.78	54,980.57	4.85	27,640,228.02	1,630,802.74	5.90
Cereals.....	892,133.80	45,995.65	5.16	23,631,256.61	1,479,733.59	6.26
<i>Teff.....</i>	248,124.17	21,174.13	8.53	3,704,149.19	409,005.78	11.04
<i>Barley.....</i>	81,161.32	8,213.78	10.12	1,545,047.18	169,559.25	10.97
<i>Wheat.....</i>	127,246.59	14,209.62	11.17	3,391,959.51	437,428.56	12.90
<i>Maize.....</i>	314,535.17	22,235.35	7.07	11,969,670.78	1,010,145.95	8.44
<i>Sorghum.....</i>	112,193.73	13,966.76	12.45	2,852,640.82	399,231.55	14.00
<i>Finger Millet.....</i>	4,485.63	724.32	16.15	72,050.19	19,163.84	26.60
<i>Oats/'Aja'.....</i>	337.60	154.88	45.88	5,018.64	2,082.00	41.49
<i>Rice.....</i>	4,049.58	3,288.25	81.20	90,720.31	76,730.03	84.58
Pulses.....	235,795.37	15,151.90	6.43	3,965,849.40	307,026.12	7.74
<i>Faba Beans.....</i>	70,378.58	5,718.14	8.12	1,358,496.58	117,507.17	8.65
<i>Field Pease.....</i>	49,662.53	4,899.31	9.87	762,460.11	88,933.24	11.66
<i>Whight Haricot beans....</i>	5,142.25	1,391.50	27.06	86,186.97	21,577.54	25.04
<i>Red Haricot beans.....</i>	97,694.18	10,845.40	11.10	1,529,627.02	218,217.43	14.27
<i>Chick-Peas.....</i>	10,287.67	5,547.35	53.92	199,977.13	117,806.32	58.91
<i>Lentils.....</i>	603.32	156.25	25.90	6,184.01	2,112.56	34.16
<i>Grass Peas.....</i>	534.87	464.83	86.91	9,272.42	7,091.76	76.48
<i>Soya Beans.....</i>	277.92	242.54	87.27	-	-	-
<i>Fenugreek.....</i>	122.14	39.18	32.08	1,150.63	509.46	44.28
<i>Mung bean "Masho"...</i>	1,034.00	540.69	52.29	11,620.24	7,430.54	63.94
<i>Gibto.....</i>	57.90	38.71	66.85	874.29	584.46	66.85
Oilseeds.....	5,425.60	1,785.01	32.90	43,122.00	11,781.03	27.32
<i>Neug.....</i>	564.36	382.36	67.75	-	-	-
<i>Linseed.....</i>	852.98	273.90	32.11	5,421.68	1,350.53	24.91
<i>Groundnut.....</i>	1,045.16	490.84	46.96	14,980.64	6,539.81	43.66
<i>Sufflower.....</i>	308.54	134.68	43.65	3,982.26	1,528.69	38.39
<i>Sesame.....</i>	1,794.09	1,648.63	91.89	9,886.93	9,114.22	92.18
<i>Rapeseed.....</i>	860.47	227.68	26.46	8,850.50	3,648.74	41.23

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Gambella

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
<i>Total Grains.....</i>	6,795.66	880.65	12.96	168,776.68	26,939.46	15.96
<i>Cereals.....</i>	6,745.96	874.23	12.96	168,517.25	26,870.06	15.94
<i>Teff.....</i>	68.79	68.65	99.80	564.06	562.94	99.80
<i>Barley.....</i>	30.17	30.11	99.80	529.63	528.58	99.80
<i>Wheat.....</i>	-	-	-	-	-	-
<i>Maize.....</i>	4,751.79	799.48	16.82	125,827.55	25,478.42	20.25
<i>Sorghum.....</i>	1,704.10	321.21	18.85	37,929.99	7,538.41	19.87
<i>Finger Millet.....</i>	27.82	27.77	99.80	164.16	163.84	99.80
<i>Oats/'Aja'.....</i>	6.98	6.87	98.47	-	-	-
<i>Rice.....</i>	156.31	118.03	75.51	3,501.87	2,644.33	75.51
<i>Pulses.....</i>	49.47	28.75	58.13	259.42	142.40	54.89
<i>Faba Beans.....</i>	-	-	-	-	-	-
<i>Field Pease.....</i>	-	-	-	-	-	-
<i>Whight Haricot beans.....</i>	3.28	1.54	47.07	-	-	-
<i>Red Haricot beans.....</i>	7.89	3.39	42.93	131.91	64.11	48.60
<i>Chick-Peas.....</i>	26.70	26.64	99.80	-	-	-
<i>Lentils.....</i>	-	-	-	-	-	-
<i>Grass Peas.....</i>	-	-	-	-	-	-
<i>Soya Beans.....</i>	-	-	-	-	-	-
<i>Fenugreek.....</i>	-	-	-	-	-	-
<i>Mung bean "Masho".....</i>	11.60	11.76	101.42	127.51	129.33	101.42
<i>Gibto.....</i>	-	-	-	-	-	-
<i>Oilseeds.....</i>	0.23	0.22	92.89	-	-	-
<i>Neug.....</i>	-	-	-	-	-	-
<i>Linseed.....</i>	-	-	-	-	-	-
<i>Groundnut.....</i>	0.23	0.22	92.89	-	-	-
<i>Sufflower.....</i>	-	-	-	-	-	-
<i>Sesame.....</i>	-	-	-	-	-	-
<i>Rapeseed.....</i>	-	-	-	-	-	-

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Harari

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	11,570.41	2,093.47	18.09	206,235.11	36,962.25	17.92
Cereals.....	8,825.77	1,353.15	15.33	173,698.68	28,345.38	16.32
<i>Teff.....</i>	-	-	-	-	-	-
<i>Barley.....</i>	23.32	23.25	99.70	165.57	165.08	99.70
<i>Wheat.....</i>	88.56	50.31	56.81	1,328.85	751.11	56.52
<i>Maize.....</i>	1,397.66	267.10	19.11	33,827.52	7,071.51	20.90
<i>Sorghum.....</i>	7,316.23	1,235.21	16.88	138,376.75	23,944.32	17.30
<i>Finger Millet.....</i>	-	-	-	-	-	-
<i>Oats/'Aja'.....</i>	-	-	-	-	-	-
<i>Rice.....</i>	-	-	-	-	-	-
Pulses.....	22.69	10.32	45.47	120.64	56.71	47.01
<i>Faba Beans.....</i>	0.45	0.46	101.19	-	-	-
<i>Field Pease.....</i>	-	-	-	-	-	-
<i>Whight Haricot beans....</i>	5.09	3.84	75.40	66.78	50.35	75.40
<i>Red Haricot beans.....</i>	4.49	2.74	61.10	53.87	32.92	61.10
<i>Chick-Peas.....</i>	9.78	9.80	100.18	-	-	-
<i>Lentils.....</i>	2.88	2.89	100.39	-	-	-
<i>Grass Peas.....</i>	-	-	-	-	-	-
<i>Soya Beans.....</i>	-	-	-	-	-	-
<i>Fenugreek.....</i>	-	-	-	-	-	-
<i>Mung bean "Masho" ...</i>	-	-	-	-	-	-
<i>Gibto.....</i>	-	-	-	-	-	-
Oilseeds.....	2,721.95	912.01	33.51	32,415.78	11,305.09	34.88
<i>Neug.....</i>	-	-	-	-	-	-
<i>Linseed.....</i>	-	-	-	-	-	-
<i>Groundnut.....</i>	2,658.52	881.56	33.16	32,058.60	11,138.08	34.74
<i>Sufflower.....</i>	-	-	-	-	-	-
<i>Sesame.....</i>	63.43	46.83	73.84	357.18	242.28	67.83
<i>Rapeseed.....</i>	-	-	-	-	-	-

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations
For Crops 2017/18 (2010 E.C.)

Dire Dawa

<i>Crop</i>	<i>Area</i>	<i>Standard Error</i>	<i>CV (%)</i>	<i>Production</i>	<i>Standard Error</i>	<i>CV (%)</i>
Total Grains.....	12,025.66	1,394.92	11.60	228,847.96	30,735.59	13.43
Cereals.....	11,124.90	1,348.66	12.12	215,096.23	30,348.21	14.11
<i>Teff.....</i>	-	-	-	-	-	-
<i>Barley.....</i>	-	-	-	-	-	-
<i>Wheat.....</i>	-	-	-	-	-	-
<i>Maize.....</i>	304.17	97.33	32.00	6,296.35	2,083.41	33.09
<i>Sorghum.....</i>	10,820.72	1,403.91	12.97	208,799.88	31,370.14	15.02
<i>Finger Millet.....</i>	-	-	-	-	-	-
<i>Oats/'Aja'.....</i>	-	-	-	-	-	-
<i>Rice.....</i>	-	-	-	-	-	-
Pulses.....	525.91	146.77	27.91	8,810.82	2,369.30	26.89
<i>Faba Beans.....</i>	-	-	-	-	-	-
<i>Field Pease.....</i>	-	-	-	-	-	-
<i>Whight Haricot beans....</i>	206.48	97.08	47.02	3,097.87	1,520.02	49.07
<i>Red Haricot beans.....</i>	319.43	127.18	39.81	5,712.96	2,114.80	37.02
<i>Chick-Peas.....</i>	-	-	-	-	-	-
<i>Lentils.....</i>	-	-	-	-	-	-
<i>Grass Peas.....</i>	-	-	-	-	-	-
<i>Soya Beans.....</i>	-	-	-	-	-	-
<i>Fenugreek.....</i>	-	-	-	-	-	-
<i>Mung bean "Masho" ...</i>	-	-	-	-	-	-
<i>Gibto.....</i>	-	-	-	-	-	-
Oilseeds.....	374.85	198.65	52.99	4,940.91	2,924.29	59.19
<i>Neug.....</i>	-	-	-	-	-	-
<i>Linseed.....</i>	-	-	-	-	-	-
<i>Groundnut.....</i>	271.87	202.84	74.61	3,866.57	2,974.80	76.94
<i>Sufflower.....</i>	-	-	-	-	-	-
<i>Sesame.....</i>	102.98	34.45	33.45	1,074.33	362.27	33.72
<i>Rapeseed.....</i>	-	-	-	-	-	-

APPENDIX III - Number of EAs and Households Planned and Actually Covered

Region	Enumeration Areas		Households	
	Planned	Covered	Planned	Covered
Tigray	131	131	1,965	1,965
Afar	35	35	525	525
Amhara	317	304	4,755	4,553
Oromia	499	498	7,485	7,431
Somali	21	41	315	615
Benishangul-Gumuz	54	67	810	1,004
S.N.N.P	437	416	6,555	6,224
Gambella	39	57	585	436
Harari	36	17	540	255
Dire Dawa	31	17	465	255
COUNTRY TOTAL	1,600	1,583	24,000	23,263

APPENDIX IV - QUESTIONNAIRE

CENTRAL STATISTICAL AGENCY
ETHIOPIAN AGRICULTURAL SAMPLE SURVEY, 2017/18 (2010 E.C.)

PART I: – IDENTIFICATION PARTICULARS

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Region	Zone	Wereda	KEBELE	EA	HH ID	HH head sex 1 = M 2 = F	Holder ID	Holder's			Highest grade Completed	Holder's HH size	Holding type Crop = 1 Livestock = 2 Both = 3
								Name	Age	Sex M = 1 F = 2			

PART II: – CROP FIELD / OTHER LAND USE

15	16						17												
SER. NO.	QUESTIONS FOR THE HOLDER						PARCEL NO.		FIELD NO.										
							Is the field pure stand =1 Mixed crop =2 other land use=3						Crop/other name		Crop name		Crop name		
							Code		Code		Code								
0	1	Land Ownership Owned = 1 Rented in = 2 Other = 3																	
0	2	Is the field under Extension Program? Yes =1 No = 2																	
0	3	Was this field Irrigated? Yes =1 No = 2																	
0	4	If the field was irrigated, source of water River = 1 Lake = 2 Pond =3 Harvested water = 4 other = 5																	
0	5	Is the Field Protected from Erosion? Yes = 1 No = 2																	
0	6	If yes for Q5, common way of protection (protection facility) Terracing = 1 Water catchments = 2 A forestation = 3 Plough along the contour = 4 Other = 5																	
0	7	How did you seed this field? (only for temporary crops) In a random fashion = 1 In rows = 2																	
0	8	Percent share of area covered (for mixed crops)																	
0	9	Number of Trees (for permanent crops, excluding chat, pineapple, sugarcane) Number of matured Trees (from the ones counted in Q9, (excluding chat, pineapple, sugarcane)																	
1	1	Out of the total cropped area, Percent share of area covered by matured trees (excluding chat, pineapple, sugarcane)																	
1	2	Number of Enset trees harvested/to be harvested in this main season																	
1	3	Seed / Seedling Type Improved Seed = 1 Indigenous seed = 2																	
1	4	Quantity of improved seeds used (For only Cereals, Pulses & Oilseeds) (If code <1> is filled in Q13)						Kilo	Gram	Kilo	Gram	Kilo	Gram						
1	5	Price of improved seeds used (For only Cereals, Pulses & Oilseeds) (If code <1> is filled in Q13)						Birr	Cents	Birr	Cents	Birr	Cents						
1	6	Quantity of indigenous seeds used (For only Cereals, Pulses & Oilseeds) (If code <2> is filled for Q13)						Kilo	Gram	Kilo	Gram	Kilo	Gram						
1	7	Was there crop damage? Yes = 1 No = 2																	
1	8	If yes for question number 17, Cause of damage Code																	
1	9	Percent damaged (If code <1> is filled in Q17)																	
2	0	Was prevention/precautionary measure taken to protect crop from damage? Yes =1 No = 2																	
2	1	Type of measure, if any Chemical = 1 Non – chemical = 2 Both = 3																	
2	2	Chemical type used (if code <1> is filled in Q20) Pesticide =1 herbicide = 2 Fungicide = 3 1&2 = 4 1 & 3 = 5 2 & 3 = 6 All type = 7																	
2	3	Was fertilizer (chemical/natural) applied on this field Yes =1 No = 2																	
2	4	Type of fertilizer used, if any Natural = 1 Chemical = 2 Both = 3																	
2	5	If chemical fertilizer(s) was/were used : 25.1 Type : UREA = 1 DAP = 2 UREA and DAP = 3 NPS = 4 UREA and NPS = 5 25.2 Quantity of UREA (if only UREA was used)						UREA in KG		DAP in KG		NPS in KG							
		25.3 Quantity of DAP (if only DAP was used)																	
		25.4 Quantity of UREA and DAP (if both UREA and DAP used)																	
		25.5 Quantity of NPS (if only NPS was used)																	
		25.6 Quantity of UREA and NPS (if both UREA and NPS used)																	
2	6	If natural fertilizer (s) was/were used (if code <1> or <3> is filled in Q24) , type Manure = 1 Compost = 2 Organic = 3 1 & 2 = 4 1 & 3 = 5 2 & 3 = 6 All = 7 Others = 8																	
2	7	For how many times was this field cropped with in this Meher (main) season? (only for temporary crops)																	
2	8	If cropped twice, name of crop (s) other than the one currently on the field						Crop name	code	Crop name	code	Crop name	code						
2	9	What was this field before this main season? Fallow =1 Owned cropped field =2 Grazing land/swampy land/ land owned by nobody =3 Other owner's cropped field = 4 other =5																	

Q18A. The field was measured by: GPS = 1 Compass-rope = 2 Not measured = 3 →

PART 3A:- RESULTS OF AREA MEASUREMENTS USING GPS

19	20	21	22	23	24	25	26
	Area of field		Field status		Field covered/ protected Not protected = 1 With plants / permanent crops = 2 With house = 3 Partially covered = 4 Others = 5	Code	Comments
	Area in square meters (Clockwise)	Area in square meters (Anti-Clockwise)	Flat = 1 Partially Sloppy = 2 Sloppy = 3				
<i>Field measured with GPS</i>			<i>Date</i>		<i>Month</i>		

PART 3B: – RESULTS OF AREA MEASUREMENT USING COMPASS-ROPE

19	20	21	22	23	24	25	26	27
Side ID	1 - 2	2 - 3	3 -	4 -	5 -	6 -	7 -	8 -
Bearing (0)								
Length								
Side ID	9 -	10 -	11 -	12 -	13 -	14 -	15 -	16 -
Bearing (0)								
Length								
Side ID	17 -	18 -	19 -	20 -	21 -	22 -	23 -	24 -
Bearing (0)								
Length								
Side ID	25 -	26 -	27 -	28 -	29 -	30 -	31 -	32 -
Bearing (0)								
Length								
Field Measurement	Date	Month	Closure error		Area in square meters			

28. If field is not measured, one major reason (Code) →

28	Field Area	In Hectare	In Local Unit		
			Unit Name	Unit Code	Area

	Name	Signature	Date
Data collector			
Field Supervisor			

CENTRAL STATISTICAL AGENCY
ETHIOPIAN AGRICULTURAL SAMPLE SURVEY 2017/18 (2010 E.C.)

Part I – Identification Particular

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Region	Zone	Wereda	Farmers' Association	E.A	Household ID	Household Head Sex M = 1 F = 2	Holder ID	Holder's			Educational Level Highest grade Completed	Household Size	Holding type Crop = 1 Livestock = 2 Both = 3
								Name	Age	Sex M = 1 F = 2			

Part II – Temporary Crop Cutting Results

15	16	17	18	19	20	21	22	23	24	25	26	27	28		
Parcel No.	Field No.	Crop name	Crop cutting	Fresh Weight Of the harvest	Dry Weighing	Dry Weight	Was the Crop used before harvest Yes = 1 No = 2	Was there any crop damage?					Crop Stand Pure stand = 1 Mixed = 2		
								Yes = 1 No = 2	If yes Cause of damage	Percent of crop damaged					
			code	day	month	Kilo	Gram	Day	Month	Kilo	Gram	code	Code	Code	code