

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

**AGRICULTURAL SAMPLE SURVEY  
2005 / 2006 (1998 E.C.)**

**(September 2005 – February 2006)**

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**REPORT ON**

**AREA AND PRODUCTION OF CROPS**

**(PRIVATE PEASANT HOLDINGS, MEHER SEASON)**

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## CONTENTS

PAGE

### **PART I INTRODUCTION AND OBJECTIVES OF THE SURVEY.....1**

1.1 INTRODUCTION.....	1
1.2 OBJECTIVES OF THE SURVEY.....	2

### **PART II SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING.3**

2.1 SCOPE AND COVERAGE OF THE SURVEY.....	3
2.2 SAMPLING FRAME.....	3
2.3 SAMPLE DESIGN.....	4
2.4 SELECTION SCHEME.....	5
2.4 ORGANIZATION OF FIELD WORK.....	5
2.5 TRAINING OF FIELD STAFF.....	6
2.6 METHOD OF DATA COLLECTION.....	6
2.7 DATA PROCESSING.....	7
a) Editing, Coding and Verification.....	7
b) Data Entry, Cleaning and Tabulation.....	8
2.8 CONCEPTS AND DEFINITIONS.....	8

### **PART III SUMMARY OF SURVEY RESULTS.....11**

AREA & PRODUCTION.....	11
APPENDIX I ESTIMATION PROCEDURES OF TOTALS, RATIOS AND SAMPLING ERRORS	91
APPENDIX II STANDARD ERRORS AND COEFFICIENTS OF VARIATION.....	97
APPENDIX III NUMBER OF PLANNED AND ACTUALLY COVERED SAMPLING UNITS.....	111
APPENDIX IV QUESTIONNAIRES.....	118

ABBREVIATIONS: CV – COEFFICIENT OF VARIATION

E.C. – ETHIOPIAN CALENDAR

S.N.N.P.R. – SOUTHERN NATIONS, NATIONALITIES AND PEOPLES' REGION

## **PART I**

### **INTRODUCTION AND OBJECTIVES OF THE SURVEY**

#### **1.1. INTRODUCTION**

The production and utilization of food crops is a necessity to humanity. Agriculture, as a primary activity directly connected to food availability, plays a crucial role in responding to this necessity. Agriculture is presumed to be the engine for economic development in developing countries and more oriented to rural development to ensure the wellbeing of the population. Consequently the efforts of government and non – government organizations have been poured on to it besides the farmers' to realize food security.

Adverse conditions emanating from natural disasters and man made problems such as the over exploitation of land generate shocks to agriculture that instigate crises related to food availability. These and other effects necessitate a priority in scrutinizing the performance of agriculture in order to combat food crises. Accurate and timely statistics are a requisite to check, appraise and gauge the agricultural situation. They are used to inform data users of the nature of agriculture and changes taking place in it and trigger policy intervention.

To this end, the Central Statistical Agency (CSA) has been furnishing statistical information on the country's agriculture since 1980/81. As part of this task the 2005/06 (1998 E.C) Agricultural Sample Survey was conducted to provide data on crop area and production of crops within the private peasant holdings for Meher Season of the cited 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 findings. 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 and number of crop-cuttings performed 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, Livestock Survey and Belg Season Survey.

The specific objectives of Meher Season Post Harvest Survey are to estimate the total cultivated area, production and yield of crops and provide estimates of land use area and quantity of agricultural inputs for Meher Season agriculture in companion reports published separately. All reports are based on the private peasant holdings in sedentary rural areas of the country, further subdivided by regions and zones.

## **PART II**

### **SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING**

#### **2.1. SCOPE AND COVERAGE OF THE SURVEY**

The range of data items that the 2005/06 (1998 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 crops are enumerated and data on crop area and yield recorded, hence data on production of these crops acquired. This years Annual Agricultural Sample Survey (Meher season) covered the entire rural parts of the country except all zones of Gambella Region, and the non-sedentary population of three zones of Afar & six zones of Somali regions. Accordingly the survey took into account of all parts of Harari, Addis Ababa, Dire Dawa, and 58 additional Zones / Special weredas (that are treated as zones) of other regions.

To be covered by the survey, a total of 2,024 enumeration areas (EAs) and 250 resettlement localities were selected. However, due to various reasons that are beyond control, in 12 EAs and 1 resettlement locality the survey could not be successful and hence interrupted. Thus, all in all the survey succeeded to cover 2,012 EAs and 249 resettlement localities (99.43%) throughout the regions. The Annual Agricultural Sample survey (Meher season) was conducted on the basis of 30 agricultural households selected from each EA/resettlement locality. Regarding the ultimate sampling units, it was intended to cover a total of 68,220 agricultural households, however, 67,669 (99.12%) were actually covered by the survey.

#### **2.2 SAMPLING FRAME**

The list containing EAs of all regions and their respective agricultural households obtained from the 2001/02 Ethiopian Agricultural Sample Enumeration (EASE) 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. Resettlement localities, on the other hand, are sub-samples of

the list of all resettlements localities obtained from each region. The second stage sampling units, households, were selected from a fresh list of households that were prepared for each EA/ resettlement localities 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) /resettlement locality were taken to be the primary sampling units (PSUs) and the secondary sampling units (SSUs) were agricultural households.

In 2005/6, unlike the years before, in order to obtain a fairly representative number of extension program participant households the CSA categorized the listed agricultural households in each EAs/resettlement area into two strata, i.e. households that are and that are not participants of extension program. The stratification was done on the basis of the six major crops where by the extension program is mostly exercised in the country. The crops are maize, teff, wheat, barley, sorghum and finger millet.

The sample size for the 2005/06 agricultural sample survey was determined by taking into account of 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 in addition considered.

Except Harari, Addis Ababa and Dire Dawa, where each region as a whole was taken to be the domain of estimation; each zone of a region / special wereda was adopted as a stratum for which major findings of the survey are reported.

Moreover, values about the 2005/06 cultivated areas of crops and the expected amount of production for Gambella region is also provided. However, it is important to note that the values are not obtained from the survey but they are projections from the results of the 2003/04 annual Crop Production Forecast Sample Survey.

## **2.4 SELECTION SCHEME**

Enumeration areas/resettlement localities 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 1994 Population & Housing Census and adjusted for the sub-sampling effect. Sizes for resettlement localities on the other hand were obtained from the 2004 listings of resettlement localities. From the fresh list of households prepared at the beginning of the survey 30 agricultural households within each sample EA/resettlement locality were selected systematically. Twenty of the households were selected from non extension participant agricultural households while the rest 10 households were selected from extension participant agricultural households.

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 resettlement localities) 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 Department of Field Operations that liaises between the Head Office and the 25 Branch Statistical Offices spread across the regions. All Branch Offices took part in the survey execution especially in recruiting the enumerators, organizing the 2<sup>nd</sup> 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 in administering the financial and logistic aspects of the survey within their areas of operation. A total of 2388 enumerators, 455 field supervisors, 25 coordinators and 50 statisticians were involved in the data collection where on the average one supervisor was assigned to five 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 205 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 is 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 the Head Quarters of CSA and lasted 10 days targeted staff from the Head Office, 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 fifteen days in all the twenty- five 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, method of crop cutting, 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 and interviewing methods.

## **2.7. METHOD OF DATA COLLECTION**

The agricultural data for the year 2005/06(1998 E.C) was collected from sedentary rural peasant households by interviewing the selected agricultural holders and physically measuring their fields and performing crop cutting procedures to gather 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 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 25 selected households from each sampled E.A. using measuring tapes and compasses. All fields under major temporary crops of each holder of the fifteen randomly selected households of the 25 sample households were classified by crop type and a crop field was randomly selected from each crop type for crop cutting to be performed. The crop cutting procedure consists of demarcation of a four meter by four meter plot randomly located in the selected field where the crop in the demarcated plot is to be harvested.

Following the enumerator's harvest of the crop demarcated and threshing, the crop is kept in bags with identification information (i.e. holder's number, parcel and field numbers). The crop stored in the bag is weighed immediately (green weight) after threshing and weighed again after two weeks of drying to simulate normal holder harvesting and drying practices. Both the green and dry weights are recorded on the respective forms.

## **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. An editing, coding and verification instruction manual was prepared and reproduced for this purpose. Then 55 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 25 days.

#### b) Data Entry, Cleaning and Tabulation

Before data entry, the Natural Resources and Agricultural Statistics Department 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 80 data encoders and it took 60 days to finish the job. Finally, summarization of the data was done on personal computers to produce statistical tables as per the tabulation plan.

### **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 with out 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 with out 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 Nehase (August) is considered to be Belg Season Crop.

## **PART III**

### **SUMMARY OF SURVEY RESULTS**

#### **3.1 AREA & PRODUCTION**

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.

3.1.1 Cereals: - these are the major food crops both in terms of the area they are planted to 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. Data on the yields of six cereal crops (teff, barley, wheat, maize, sorghum and finger millet) with extension package have been collected to draw an analogy with similar crops that are without extension package. The data in Table 1 well underpin this finding of the survey.

Out of the total grain crop area, 79.46% (8.1million hectares) was under cereals. Teff, maize, sorghum and wheat took up 22.08% (2.2 million hectares), 15.00% (1.5 million hectares), 14.43% (nearly 1.5 million hectares) and 14.35% (nearly 1.5 million hectares) of the grain crop area, respectively. As to production, the tables paint similar

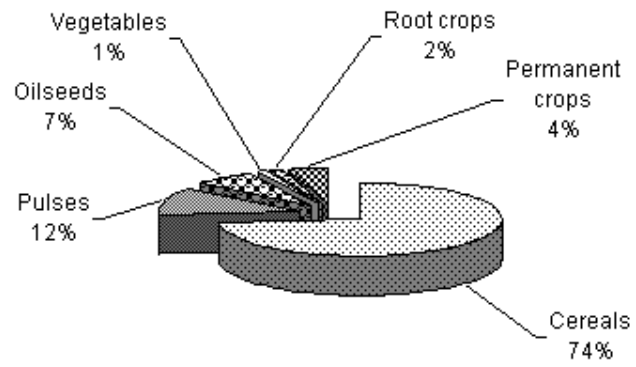
picture as that of the area. Cereals contributed 86.86% (more than 116.2 million quintals) of the grain production. Maize, wheat, Teff and sorghum made up 24.93% ( 33.4 million quintals), 16.58% ( 22.2million quintals), 16.26% ( 21.8 million quintals) and 16.24% ( 21.7 million quintals) of the grain production in the same order.

**Note** *The estimates for Gambela are that of the forecast for 2002/03 for the same region and agricultural survey has not been conducted in Gambela since then.*

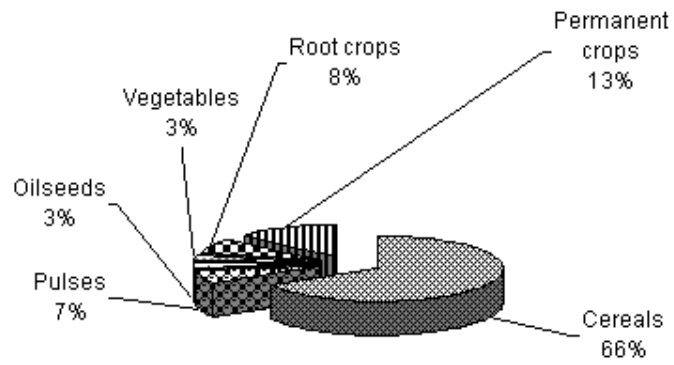
Table 1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Ethiopia</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt/ha)	Non - extension Yield (qt/ha)	Extension Yield (qt/ha)
<b>Grain</b>	10,959,023	10,170,911.43	133,821,275.15			
<u>Cereals</u>	10,610,876	8,081,400.75	116,242,707.10			
Teff	5,177,125	2,246,016.59	21,755,976.79	9.69	9.41	10.88
Barley	3,784,238	997,867.91	12,706,797.96	12.73	12.36	18.09
Wheat	4,109,464	1,459,540.33	22,190,753.88	15.20	14.32	18.99
Maize	6,846,410	1,526,124.75	33,367,951.92	21.87	19.33	28.85
Sorghum	4,161,526	1,468,070.37	21,735,986.82	14.81	14.65	18.56
Finger millet	1,232,912	333,029.19	3,970,016.91	11.92	12.01	15.34
Oats / 'Aja'	341,612	44,401.47	401,633.70	9.05		
Rice	22,496	6,241.16	112,443.11	18.02		
<u>Pulses</u>	5,878,705	1,292,170.45	12,712,468.68			
Faba beans	3,271,878	456,919.00	5,127,970.06	11.22		
Field peas	1,477,302	233,087.24	1,822,675.89	7.82		
Haricot beans	1,730,256	163,687.60	1,384,215.84	8.46		
Chick-peas	832,623	201,009.53	2,105,851.43	10.48		
Lentils	648,995	84,895.43	576,032.60	6.79		
Grass peas	586,787	123,463.75	1,459,447.67	11.82		
Soya beans	29,923	3,326.52	38,118.89	11.46		
Fenugreek	340,860	11,844.65	74,838.63	6.32		
Gibto	88,358	13,935.74	123,317.66	8.85		
<u>Oilseeds</u>	3,032,377	797,341.24	4,866,099.38			
Neug	1,026,396	306,877.40	1,471,286.02	4.79		
Linseed	1,165,022	215,106.81	1,259,071.89	5.85		
Groundnuts	208,203	35,468.34	341,501.19	9.65		
Safflower	170,349	8,867.49	59,571.93	6.72		
Sesame	601,229	205,152.68	1,488,610.16	7.26		
Rape seed	487,561	25,000.52	243,512.20	9.74		
<u>Vegetables</u>	4,555,959	117,650.09	4,501,995.52			
Lettuce	32,207	267.86	19,348.89	72.24		
Head cabbage	198,351	1,653.37	128,823.47	77.92		
Ethiopian cabbage	2,403,950	23,019.49	1,808,432.73	78.64		
Tomatoes	140,085	4,788.27	354,073.04	74.13		
Green peppers	823,375	6,257.85	401,034.41	64.20		
Red peppers	1,746,710	81,544.31	1,790,282.97	21.96		
Swiss chard	58,302	116.94	*	*		
<u>Root crops</u>	4,478,415	169,343.21	13,374,683.83			
Beetroot	250,996	1,506.35	162,911.11	108.15		
Carrot	134,358	1,071.19	68,815.05	64.24		
Onion	711,292	16,578.72	1,759,192.55	106.11		
Potatoes	1,104,431	61,812.05	4,499,957.70	72.80		
Garlic	1,743,868	12,481.22	1,071,719.01	85.87		
Taro / 'Godere'	856,667	25,552.98	1,724,127.55	68.50		
Sweet potatoes	1,141,024	50,312.70	4,087,960.87	81.40		
<u>Fruit crops</u>	2,285,289	45,042.69	4,283,011.83			
Avocados	530,415	3,596.20	283,476.83	78.98		
Bananas	1,425,197	28,102.49	2,114,498.71	75.74		
Guavas	188,935	802.44	14,293.91	17.81		
Lemons	152,363	569.44	41,950.29	74.19		
Mangoes	463,868	5,400.31	547,291.24	104.06		
Oranges	350,200	2,760.72	506,573.48	184.36		
Papayas	488,261	2,894.51	710,925.44	249.93		
Pineapples	21,777	*	*	*		
Chat	1,877,748	136,189.22	1,196,603.45	8.79		
Coffee	2,699,477	261,175.22	1,716,310.54	6.63		
Hops	1,513,284	22,891.08	227,801.54	9.95		
Sugar cane	858,546	18,857.12	16,050,251.75	855.51		

**Fig. 2 Area Under Crops, 2005/06 (1998 E.C)**



**Fig. 3 Production of Crops, 2005/06 (1998 E.C)**





3.1.2 Pulses: - 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 1.

Pulses grown in 2005 / 06 (1998 E.C) covered 12.70% (nearly 1.3 million hectares) of the grain crop area and 9.50% (more than 12.7 million quintals) of the grain production was drawn from the same crops. Faba beans, field peas and chick-peas were planted to 4.49% (nearly 457 thousand hectares), 2.29% (233 thousand hectares) and 1.98% (201 thousand hectares) of the grain crop area. The production obtained from the same crops was 3.83% (5.1 million quintals), 1.36% (1.8 million) and 1.57% (2.1 million) of the grain production, in that order.

3.1.3 Oilseeds: - these are crops 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 1 underscores this point in detail.

Oilseeds added 7.84% (more than 797 thousand hectares) of the grain crop area and 3.64% (4.9 million quintals) of the production to the national grain total. Neug, linseed and sesame covered 3.02% (about 307 thousand hectares), 2.11% (more than 215 thousand hectares) and 2.02% (more than 205 thousand hectares) of the grain crop area and 1.10% (1.5 million quintals), 0.94% (1.3 million quintals) and 1.11% (1.5 million quintals) of the grain production.

3.1.4 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. Statistical Table 1 underlines this more in the report.

Vegetables took up 1.08% of the area under all crops at national level. Of all the area under vegetables 69.31% and 19.57% was under red peppers and Ethiopian Cabbage, respectively. As to production of vegetables, 39.77% and 40.17% was that of the same crops, in that order.

3.1.5 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 1 substantiates this point in more details.

Root crops covered more than 1.55% of the area under all crops in the country. Potatoes, sweet potatoes and taro ('Godere') added 36.50%, 29.71% and 15.09% of the area to the root crop total. The same crops and onion contributed 33.65%, 30.56%, 12.89% and 13.15% to the root crop production total in the same order.

3.1.6 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.

More than 45 thousand hectares of land is under fruit crops in Ethiopia. Bananas contributed about 62.39% of the fruit crop area followed by mangoes that contributed 11.99% of the area. Nearly 4.3 million quintals of fruits was produced in the country. Bananas, Papayas, mangoes and oranges took up 49.37%, 16.60%, 12.78% and 11.83% of the fruit production, respectively, as shown in Table 1.

3.1.7 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 1 shows Chat and coffee shared 1.24% and 2.39% of the area under all crops in the country and 1.2 and 1.7 million quintals of produce was obtained from these crops in the same agricultural year respectively.

3.1.8 Sugar Cane- is grown in small areas in some parts of the country within the private peasant holdings. Its volume of production is also small. The survey data substantiates these points as shown in Table 1. About 19 thousand hectares of land was under sugar cane in the country, yielding 16.1 million quintals of produce by the peasant holders.

Table 2 - Estimate of Area and Production of Grain Crops for 2004/2005 (1997 E.C) and 2005/2006 (1998 E.C), Meher Season

Region	Area in hectare			Production in quintal		
	2004 / 05 (1997 E.C)	2005 / 06 (1998 E.C)	% Change	2004 / 05 (1997 E.C)	2005 / 06 (1998 E.C)	% Change
TIGRAY	674,551	708,350	5.01	6,316,303	8,587,980	35.97
AFAR	12,311	19,088	55.05	167,503	376,330	124.67
AMHARA	3,374,253	3,570,812	5.83	37,623,470	43,854,714	16.56
OROMIA	4,574,889	4,720,123	3.17	62,321,656	67,727,141	8.67
SOMALI	72,130	67,290	-6.71	446,486	378,094	-15.32
BENISHANGUL-GUMUZ	166,285	171,876	3.36	1,698,970	2,085,802	22.77
S.N.N.P.R.	913,209	876,693	-4.00	10,271,639	10,359,040	0.85
GAMBELA	-	9,890	-	-	171,067	-
HARARI	7,594	8,807	15.98	45,689	78,154	71.06
ADDIS ABABA	8,211	10,094	22.93	126,179	124,037	-1.70
DIRE DAWA	7,638	7,888	3.28	50,206	78,917	57.19
ALL	9,838,763	10,170,911	3.38	119,343,715	133,821,275	12.13

Fig.1 - Area and Production of Grain Crops by Region, 2005/06 (1998 E.C)

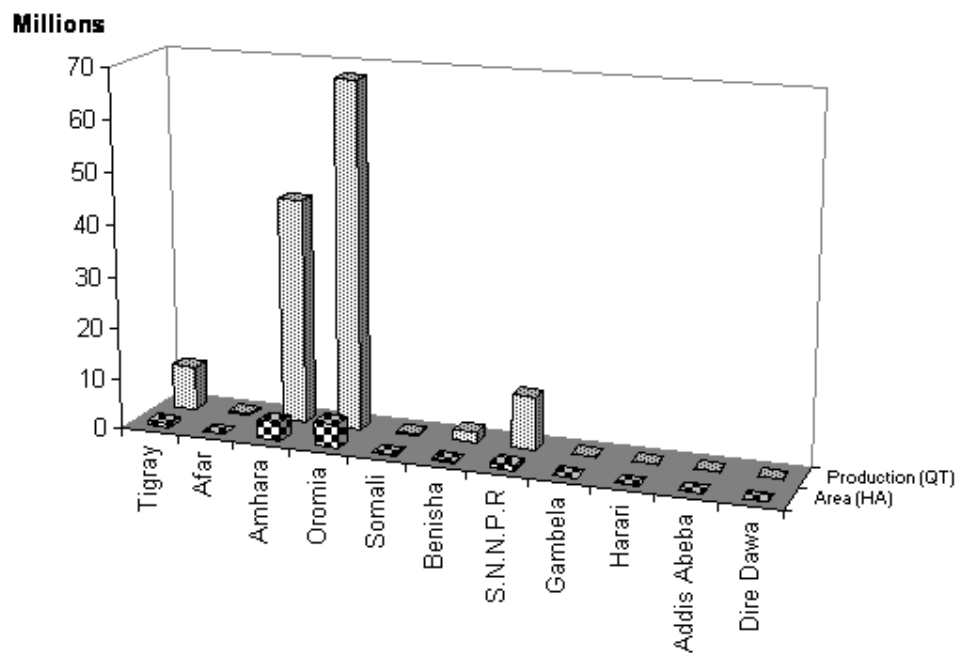


Table 3 - Estimate of Area, Production and Yield of Crops for  
2004/2005 (1997 E.C) and 2005/2006 (1998 E.C), Meher Season

**Ethiopia**

Crop	Area in hectare			Production in quintal			Yield (quintal / hectare)		
	2004 / 05 (1997 E.C)	2005 / 06 (1998 E.C)	% Change	2004 / 05 (1997E.C)	2005 / 06 (1998E.C)	% Change	2004 / 05 (1997 E.C)	2005 / 06 (1998E.C)	% Change
<b>Grain crops</b>	9,811,070	10,170,911	3.67	119,068,102	133,821,275	12.39			
<b>Cereals</b>	7,637,524	8,081,401	5.81	100,308,355	116,242,707	15.89			
Teff	2,135,553	2,246,017	5.17	20,255,214	21,755,977	7.41	9.48	9.69	2.22
Barley	1,095,436	997,868	-8.91	13,280,520	12,706,798	-4.32	12.12	12.73	5.03
Wheat	1,398,215	1,459,540	4.39	21,766,030	22,190,754	1.95	15.57	15.20	-2.38
Maize	1,392,916	1,526,125	9.56	23,941,622	33,367,952	39.37	17.19	21.87	27.23
Sorghum	1,253,620	1,468,070	17.11	17,159,543	21,735,987	26.67	13.69	14.81	8.18
Finger millet	312,931	333,029	6.42	3,328,038	3,970,017	19.29	10.64	11.92	12.03
Oats / 'Aja'	45,131	44,401	-1.62	566,754	401,634	-29.13	12.56	9.05	-27.95
Rice	*	6,241	*	*	112,443	*	*	18.02	*
<b>Pulses</b>	1,349,116	1,292,170	-4.22	13,495,792	12,712,469	-5.80			
Faba beans	463,174	456,919	-1.35	5,519,838	5,127,970	-7.10	11.92	11.22	-5.87
Field peas	254,365	233,087	-8.37	2,283,354	1,822,676	-20.18	8.98	7.82	-12.92
Haricot beans	245,597	163,688	-33.35	2,113,471	1,384,216	-34.51	8.61	8.46	-1.74
Chick-peas	167,569	201,010	19.96	1,615,951	2,105,851	30.32	9.64	10.48	8.71
Lentils	76,642	84,895	10.77	545,550	576,033	5.59	7.12	6.79	-4.63
Grass peas	112,425	123,464	9.82	1,250,284	1,459,448	16.73	11.12	11.82	6.29
Soya beans	2,606	3,327	27.65	8,335	38,119	357.34	3.20	11.46	258.13
Fenugreek	16,325	11,845	-27.44	115,803	74,839	-35.37	7.09	6.32	-10.86
Gibto	10,413	13,936	33.83	43,205	123,318	185.42	4.15	8.85	113.25
<b>Oilseeds</b>	824,430	797,341	-3.29	5,263,955	4,866,099	-7.56			
Neug	358,828	306,877	-14.48	1,872,135	1,471,286	-21.41	5.22	4.79	-8.24
Linseed	250,702	215,107	-14.20	1,518,640	1,259,072	-17.09	6.06	5.85	-3.47
Groundnuts	27,084	35,468	30.96	290,532	341,501	17.54	10.73	9.65	-10.07
Safflower	9,715	8,867	-8.72	70,392	59,572	-15.37	7.25	6.72	-7.31
Sesame	136,220	205,153	50.60	1,153,882	1,488,610	29.01	8.47	7.26	-14.29
Rape seed	41,881	25,001	-40.31	358,375	243,512	-32.05	8.56	9.74	13.79
<b>Vegetables</b>	94,334	117,650	24.72	4,320,041	4,501,996	4.21			
Lettuce	235	268	13.98	*	19,349	*	*	72.24	*
Head cabbage	2,120	1,653	-22.01	152,082	128,823	-15.29	71.73	77.92	8.63
Eth. Cabbage	27,143	23,019	-15.19	2,624,554	1,808,433	-31.10	96.69	78.64	-18.67
Tomatoes	2,919	4,788	64.04	361,549	354,073	-2.07	123.85	74.13	-40.15
Green peppers	4,783	6,258	30.84	442,729	401,034	-9.42	92.56	64.20	-30.64
Red peppers	56,991	81,544	43.08	724,655	1,790,283	147.05	12.72	21.96	72.64
Swiss chard	142	117	-17.65	6,801	*	*	47.77	*	*
<b>Root crops</b>	156,205	169,343	8.41	16,152,041	13,374,684	-17.20			
Beetroot	1,486	1,506	1.37	164,801	162,911	-1.15	110.91	108.15	-2.49
Carrot	1,741	1,071	-38.47	178,954	68,815	-61.55	102.79	64.24	-37.50
Onion	17,980	16,579	-7.79	2,296,776	1,759,193	-23.41	127.74	106.11	-16.93
Potatoes	51,698	61,812	19.56	5,097,155	4,499,958	-11.72	98.60	72.80	-26.17
Garlic	13,657	12,481	-8.61	1,967,414	1,071,719	-45.53	144.06	85.87	-40.39
Taro / 'Godere'	24,169	25,553	5.73	1,926,110	1,724,128	-10.49	79.69	68.50	-14.04
Sweet potatoes	45,474	50,313	10.64	4,520,833	4,087,961	-9.58	99.42	81.40	-18.13
<b>Fruit crops</b>	46,464	45,043	-3.06	2,634,023	4,283,012	62.60			
Avocados	3,248	3,596	10.72	167,398	283,477	69.34	51.54	78.98	53.24
Bananas	28,695	28,102	-2.06	1,818,293	2,114,499	16.29	63.37	75.74	19.52
Guavas	1,055	802	-23.94	11,762	14,294	21.53	11.15	17.81	59.73
Lemons	851	569	-33.09	10,087	41,950	315.88	11.85	74.19	526.08
Mangoes	5,814	5,400	-7.12	301,715	547,291	81.39	51.89	104.06	100.54
Oranges	3,098	2,761	-10.89	173,748	506,573	191.56	56.08	184.36	228.74
Papayas	2,714	2,895	6.65	150,878	710,925	371.19	55.58	249.93	349.68
Pineapples	*	*	*	*	*	*	*	*	*
<b>Chat</b>	120,304	136,189	13.20	975,207	1,196,603	22.70	8.11	8.79	8.38
<b>Coffee</b>	260,201	261,175	0.37	1,561,707	1,716,311	9.90	6.00	6.63	10.50
<b>Hops</b>	21,943	22,891	4.32	260,495	227,802	-12.55	11.87	9.95	-16.18
<b>Sugar cane</b>	18,601	18,857	1.38	1,274,281	16,050,252	1159.55	68.51	855.51	1148.74

Table 4 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Tigray**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	719,770	708,350.16	8,587,979.61			
<u>Cereals</u>	713,853	585,847.06	7,568,135.30			
Teff	430,239	138,346.23	1,244,212.56	8.99	7.92	11.76
Barley	353,478	79,107.68	877,473.33	11.09	10.53	15.01
Wheat	295,435	76,775.57	1,006,984.81	13.12	11.81	15.83
Maize	428,015	46,192.02	803,328.81	17.39	17.15	23.38
Sorghum	392,418	184,010.83	2,934,832.63	15.95	15.69	17.36
Finger millet	254,189	60,736.95	695,630.27	11.45	10.80	12.88
Oats / 'Aja'	3,603	677.77	5,672.89	8.37		
Rice	*	*	*	*		
<u>Pulses</u>	300,035	46,337.50	434,530.97			
Faba beans	176,301	14,615.78	173,610.66	11.88		
Field peas	48,511	5,239.86	49,484.09	9.44		
Haricot beans	19,526	3,308.21	15,077.35	4.56		
Chick-peas	51,827	11,701.51	96,647.68	8.26		
Lentils	35,385	4,060.29	29,290.84	7.21		
Grass peas	35,594	6,974.79	68,497.02	9.82		
Soya beans	907	21.36	200.76	9.40		
Fenugreek	15,783	415.69	1,722.57	4.14		
Gibto	*	*	*	*		
<u>Oilseeds</u>	205,735	76,165.60	585,313.34			
Neug	44,128	6,490.83	44,567.94	6.87		
Linseed	78,632	9,189.63	47,649.77	5.19		
Groundnuts	962	16.03	110.14	6.87		
Safflower	7,140	306.89	831.93	2.71		
Sesame	104,680	60,148.25	492,153.56	8.18		
Rape seed	2,465	13.98	*	*		
<u>Vegetables</u>	179,504	2,089.03	60,891.17			
Lettuce	4,243	34.11	849.93	24.92		
Head cabbage	6,115	30.40	920.24	30.27		
Ethiopian cabbage	1,159	11.85	48.77	4.12		
Tomatoes	23,316	430.68	23,471.24	54.50		
Green peppers	44,203	353.73	21,158.11	59.81		
Red peppers	119,700	1,205.38	14,442.89	11.98		
Swiss chard	8,070	22.87	*	*		
<u>Root crops</u>	95,959	1,647.91	184,747.65			
Beetroot	1,458	1.41	5.35	3.79		
Carrot	5,523	110.06	10,326.21	93.82		
Onion	40,255	590.01	59,493.96	100.84		
Potatoes	17,339	402.78	42,402.87	105.28		
Garlic	56,506	538.30	72,441.47	134.57		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	1,443	5.35	77.79	14.54		
<u>Fruit crops</u>	22,142	190.66	2,607.03			
Avocados	800	2.18	*	*		
Bananas	2,844	22.97	74.23	3.23		
Guavas	7,463	62.49	265.70	4.25		
Lemons	7,804	29.66	1,217.08	41.03		
Mangoes	802	4.35	*	*		
Oranges	5,683	24.04	376.91	15.68		
Papayas	8,485	44.97	673.11	14.97		
Pineapples	*	*	*	*		
Chat	3,432	296.71	*	*		
Coffee	4,676	29.31	*	*		
Hops	84,343	1,117.89	18,304.59	16.37		
Sugar cane	637	1.94	*	*		

Table 4.1. - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**North West Tigray**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	129,365	167,244.39	2,084,631.63			
<u>Cereals</u>	129,104	142,960.86	1,904,113.02			
Teff	83,326	31,962.65	294,254.54	9.21	7.49	11.87
Barley	9,806	587.58	5,000.41	8.51	6.27	12.50
Wheat	588	14.45	156.87	10.86	10.83	-
Maize	109,493	17,063.93	320,066.85	18.76	18.96	23.61
Sorghum	100,309	58,735.34	895,585.42	15.25	14.90	16.49
Finger millet	99,218	34,578.52	389,048.93	11.25	10.09	12.57
Oats / 'Aja'	134	18.39	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	43,640	6,423.95	55,020.63			
Faba beans	18,934	1,372.67	14,435.60	10.52		
Field peas	4,544	629.80	5,074.84	8.06		
Haricot beans	5,272	561.82	2,896.11	5.15		
Chick-peas	19,868	3,730.46	32,017.57	8.58		
Lentils	776	22.65	58.69	2.59		
Grass peas	618	28.09	337.06	12.00		
Soya beans	636	21.36	200.76	9.40		
Fenugreek	863	57.11	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	64,838	17,859.58	125,497.98			
Neug	22,039	3,002.22	20,844.36	6.94		
Linseed	13,537	1,052.99	5,136.55	4.88		
Groundnuts	715	8.25	57.73	7.00		
Safflower	*	*	*	*		
Sesame	39,618	13,787.28	99,459.35	7.21		
Rape seed	424	8.83	*	*		
<u>Vegetables</u>	86,237	788.66	8,382.21			
Lettuce	497	1.46	*	*		
Head cabbage	268	0.59	*	*		
Ethiopian cabbage	*	*	*	*		
Tomatoes	2,485	34.57	518.53	15.00		
Green peppers	7,086	36.35	*	*		
Red peppers	78,956	714.87	7,863.68	11.00		
Swiss chard	228	0.81	*	*		
<u>Root crops</u>	7,494	168.38	8,071.89			
Beetroot	268	0.18	5.35	29.72		
Carrot	480	4.24	*	*		
Onion	5,413	130.04	5,695.81	43.80		
Potatoes	191	7.50	*	*		
Garlic	1,793	25.27	2,370.74	93.82		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	221	1.15	*	*		
<u>Fruit crops</u>	4,623	48.97	1,380.50			
Avocados	*	*	*	*		
Bananas	1,130	4.47	74.23	16.61		
Guavas	873	6.04	*	*		
Lemons	2,751	19.51	1,059.55	54.31		
Mangoes	*	*	*	*		
Oranges	825	1.81	*	*		
Papayas	2,117	17.13	246.72	14.40		
Pineapples	*	*	*	*		
Chat	*	*	*	*		
Coffee	418	9.19	*	*		
Hops	10,569	133.36	2,507.13	18.80		
Sugar cane	*	*	*	*		

Table 4.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Central Tigray**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	211,384	154,123.97	1,794,755.28			
<u>Cereals</u>	211,384	141,193.46	1,678,349.05			
Teff	169,093	47,224.71	410,927.99	8.70	7.38	11.20
Barley	107,185	12,527.34	127,043.31	10.14	9.35	13.49
Wheat	71,720	10,967.72	131,733.04	12.01	11.64	12.63
Maize	149,651	14,939.73	252,288.45	16.89	16.33	21.53
Sorghum	124,223	43,061.79	641,578.76	14.90	14.24	19.30
Finger millet	90,043	12,472.16	114,777.50	9.20	8.63	12.95
Oats / 'Aja'	*	*	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	91,210	10,000.36	97,899.82			
Faba beans	73,260	5,138.29	58,436.39	11.37		
Field peas	8,742	556.15	5,229.61	9.40		
Haricot beans	7,187	810.07	2,847.79	3.52		
Chick-peas	5,431	808.06	7,627.49	9.44		
Lentils	11,429	896.27	8,298.03	9.26		
Grass peas	9,038	1,591.67	14,220.59	8.93		
Soya beans	271	*	*	*		
Fenugreek	6,056	199.86	1,239.93	6.20		
Gibto	*	*	*	*		
<u>Oilseeds</u>	30,013	2,930.15	18,506.41			
Neug	4,880	375.17	1,920.25	5.12		
Linseed	18,322	1,537.09	8,223.26	5.35		
Groundnuts	192	4.08	30.17	7.39		
Safflower	663	1.65	*	*		
Sesame	7,802	1,008.75	8,332.73	8.26		
Rape seed	1,282	3.40	*	*		
<u>Vegetables</u>	30,748	247.97	12,726.24			
Lettuce	1,488	5.62	573.97	102.13		
Head cabbage	230	0.72	146.25	203.13		
Ethiopian cabbage	734	8.69	*	*		
Tomatoes	2,634	7.70	295.70	38.40		
Green peppers	14,969	111.43	10,418.92	93.50		
Red peppers	13,600	104.99	1,291.39	12.30		
Swiss chard	2,253	8.82	*	*		
<u>Root crops</u>	33,454	445.88	57,220.85			
Beetroot	666	0.64	*	*		
Carrot	1,750	10.30	1,059.95	102.91		
Onion	13,258	156.23	20,965.64	134.20		
Potatoes	3,867	21.99	2,841.13	129.20		
Garlic	25,977	254.29	32,320.06	127.10		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	774	2.43	34.07	14.02		
<u>Fruit crops</u>	6,248	45.85	*	*		
Avocados	582	1.79	*	*		
Bananas	1,271	11.41	*	*		
Guavas	1,229	4.70	*	*		
Lemons	1,804	2.02	*	*		
Mangoes	*	*	*	*		
Oranges	1,743	6.71	*	*		
Papayas	3,508	19.22	*	*		
Pineapples	*	*	*	*		
Chat	245	2.36	*	*		
Coffee	1,555	2.53	*	*		
Hops	23,761	545.58	8,020.03	14.70		
Sugar cane	291	1.40	*	*		

Table 4.3 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**East Tigray**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	113,169	68,357.31	779,931.37			
<u>Cereals</u>	112,577	59,264.14	707,199.48			
Teff	45,193	9,130.42	72,191.03	7.91	6.91	11.94
Barley	100,309	19,683.44	237,314.78	12.06	11.18	17.53
Wheat	84,244	16,855.09	202,347.88	12.01	10.48	16.44
Maize	53,941	5,524.27	89,033.16	16.12	15.00	27.70
Sorghum	28,467	4,627.13	68,128.05	14.72	14.44	21.75
Finger millet	24,637	3,155.90	36,075.86	11.43	11.27	14.40
Oats / 'Aja'	1,785	287.88	2,108.73	7.33		
Rice	*	*	*	*		
<u>Pulses</u>	57,529	7,200.21	64,350.50			
Faba beans	31,172	1,532.98	17,990.73	11.74		
Field peas	15,252	897.30	8,647.78	9.64		
Haricot beans	202	4.26	*	*		
Chick-peas	5,847	1,189.21	8,687.13	7.30		
Lentils	5,172	452.54	2,769.30	6.12		
Grass peas	15,259	3,099.57	26,182.16	8.45		
Soya beans	*	*	*	*		
Fenugreek	2,671	24.35	73.40	3.01		
Gibto	*	*	*	*		
<u>Oilseeds</u>	19,791	1,892.96	8,381.39			
Neug	825	26.51	43.36	1.64		
Linseed	18,026	1,845.19	8,305.38	4.50		
Groundnuts	*	*	*	*		
Safflower	1,032	19.52	32.65	1.67		
Sesame	*	*	*	*		
Rape seed	759	1.74	*	*		
<u>Vegetables</u>	21,839	293.37	9,272.92			
Lettuce	1,714	3.47	266.89	76.91		
Head cabbage	2,303	18.92	529.89	28.01		
Ethiopian cabbage	188	0.73	*	*		
Tomatoes	12,354	162.45	2,436.85	15.00		
Green peppers	13,915	76.33	3,236.29	42.40		
Red peppers	622	21.40	2,803.00	130.98		
Swiss chard	3,368	10.07	*	*		
<u>Root crops</u>	12,403	358.01	39,489.86			
Beetroot	413	0.30	*	*		
Carrot	192	0.09	8.62	95.78		
Onion	6,177	82.48	3,711.48	45.00		
Potatoes	6,247	264.48	34,171.39	129.20		
Garlic	2,392	10.66	1,598.37	149.94		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	*	*	*	*		
<u>Fruit crops</u>	3,099	56.32	428.12			
Avocados	218	0.39	*	*		
Bananas	*	*	*	*		
Guavas	2,156	45.03	265.70	5.90		
Lemons	*	*	*	*		
Mangoes	415	3.08	*	*		
Oranges	1,890	7.52	162.41	21.60		
Papayas	218	0.30	*	*		
Pineapples	*	*	*	*		
Chat	703	4.23	*	*		
Coffee	703	3.40	*	*		
Hops	18,921	145.02	3,089.00	21.30		
Sugar cane	*	*	*	*		



Table 4.4 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**South Tigray**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	197,512	209,178.79	2,643,007.04			
<u>Cereals</u>	196,637	183,230.25	2,415,860.31			
Teff	105,879	40,211.47	363,349.19	9.04	8.71	11.80
Barley	130,758	45,199.89	494,197.52	10.93	10.57	15.70
Wheat	133,610	47,741.30	649,578.09	13.61	12.36	17.21
Maize	69,365	5,730.85	99,090.18	17.29	17.65	18.80
Sorghum	79,472	41,933.05	783,721.60	18.69	18.82	20.97
Finger millet	12,820	2,042.19	22,359.58	10.95	10.38	18.20
Oats / 'Aja'	1,685	371.50	3,564.16	9.59		
Rice	*	*	*	*		
<u>Pulses</u>	91,095	20,723.53	200,337.49			
Faba beans	40,734	5,699.70	71,830.05	12.60		
Field peas	17,551	2,987.52	29,015.18	9.71		
Haricot beans	6,119	1,889.85	8,822.01	4.67		
Chick-peas	16,682	5,082.99	44,443.28	8.74		
Lentils	17,572	2,673.64	18,060.52	6.76		
Grass peas	10,679	2,255.46	27,757.21	12.31		
Soya beans	*	*	*	*		
Fenugreek	6,192	134.37	409.24	3.05		
Gibto	*	*	*	*		
<u>Oilseeds</u>	31,074	5,225.01	26,809.24			
Neug	2,228	122.76	1,991.66	16.22		
Linseed	25,121	4,373.04	22,440.67	5.13		
Groundnuts	*	*	*	*		
Safflower	5,446	285.71	799.27	2.80		
Sesame	2,420	443.49	1,577.64	3.56		
Rape seed	*	*	*	*		
<u>Vegetables</u>	22,023	367.53	14,843.64			
Lettuce	233	0.90	*	*		
Head cabbage	3,315	10.17	244.10	24.00		
Ethiopian cabbage	205	1.88	*	*		
Tomatoes	5,344	106.53	6,700.51	62.90		
Green peppers	6,739	113.51	7,502.89	66.10		
Red peppers	9,280	132.04	396.13	3.00		
Swiss chard	1,908	2.51	*	*		
<u>Root crops</u>	36,729	644.30	76,340.68			
Beetroot	*	*	*	*		
Carrot	3,101	95.44	9,257.64	97.00		
Onion	14,868	219.40	28,961.43	132.00		
Potatoes	6,933	105.67	5,389.10	51.00		
Garlic	20,773	222.37	32,732.50	147.20		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	372	1.42	*	*		
<u>Fruit crops</u>	3,793	13.48	*	*		
Avocados	*	*	*	*		
Bananas	*	*	*	*		
Guavas	2,760	5.91	*	*		
Lemons	226	0.37	*	*		
Mangoes	372	0.28	*	*		
Oranges	545	3.64	*	*		
Papayas	714	3.29	*	*		
Pineapples	*	*	*	*		
Chat	2,484	290.12	*	*		
Coffee	951	1.98	*	*		
Hops	17,703	105.84	719.71	6.80		
Sugar cane	244	0.02	*	*		

Table 4.5 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Western Tigray</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	68,339	109,445.70	1,285,654.30			
<u>Cereals</u>	64,150	59,198.35	862,613.44			
Teff	26,747	9,816.98	103,489.81	10.54	7.73	12.55
Barley	5,419	1,109.42	13,917.31	12.54	11.57	14.26
Wheat	5,273	1,197.02	23,168.94	19.36	11.01	21.94
Maize	45,565	2,933.24	42,850.18	14.61	14.72	15.35
Sorghum	59,947	35,653.52	545,818.81	15.31	14.75	15.51
Finger millet	27,472	8,488.18	133,368.40	15.71	15.69	17.98
Oats / 'Aja'	*	*	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	16,561	1,989.44	16,922.54			
Faba beans	12,201	872.14	10,917.90	12.52		
Field peas	2,422	169.09	1,516.68	8.97		
Haricot beans	746	42.21	511.44	12.12		
Chick-peas	3,999	890.80	3,872.20	4.35		
Lentils	438	15.20	104.31	6.86		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	60,019	48,257.91	406,118.32			
Neug	14,156	2,964.16	19,768.31	6.67		
Linseed	3,627	381.32	3,543.93	9.29		
Groundnuts	54	3.71	22.25	6.00		
Safflower	*	*	*	*		
Sesame	54,841	44,908.73	382,783.84	8.52		
Rape seed	*	*	*	*		
<u>Vegetables</u>	18,657	391.50	15,666.16			
Lettuce	312	22.66	9.07	0.40		
Head cabbage	*	*	*	*		
Ethiopian cabbage	32	0.55	48.77	88.67		
Tomatoes	500	119.43	13,519.64	113.20		
Green peppers	1,494	16.11	*	*		
Red peppers	17,242	232.08	2,088.69	9.00		
Swiss chard	314	0.67	*	*		
<u>Root crops</u>	5,879	31.35	3,624.37			
Beetroot	110	0.29	*	*		
Carrot	*	*	*	*		
Onion	539	1.86	159.60	85.81		
Potatoes	102	3.14	1.25	0.40		
Garlic	5,570	25.71	3,419.80	133.01		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	76	0.35	43.72	124.91		
<u>Fruit crops</u>	4,379	26.04	798.42			
Avocados	*	*	*	*		
Bananas	443	7.08	*	*		
Guavas	445	0.81	*	*		
Lemons	3,022	7.76	157.53	20.30		
Mangoes	14	1.00	*	*		
Oranges	680	4.36	214.49	49.19		
Papayas	1,928	5.03	426.40	84.77		
Pineapples	*	*	*	*		
Chat	*	*	*	*		
Coffee	1,047	12.20	*	*		
Hops	13,389	188.09	3,968.72	21.10		
Sugar cane	103	0.52	*	*		

Table 5 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Afar Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt/ha)	Non - extension yield (qt/ha)	Extension yield (qt/ha)
Grain	16,901	19,088.15	376,329.99			
<u>Cereals</u>	15,840	17,357.52	370,345.66			
Teff	3,602	1,784.32	8,176.83	4.58	4.20	5.01
Barley	796	501.93	226.97	0.45	0.45	-
Wheat	367	29.62	145.34	4.91	4.91	-
Maize	14,157	12,776.38	347,277.56	27.18	27.18	-
Sorghum	3,997	2,265.28	14,518.98	6.41	6.39	7.51
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	1,805	196.93	760.17			
Faba beans	*	*	*	*	*	-
Field peas	*	*	*	*	*	-
Haricot beans	1,444	110.51	472.72	4.28		
Chick-peas	548	83.51	287.45	3.44		
Lentils	37	2.82	*	*	*	-
Grass peas	*	*	*	*	*	-
Soya beans	*	*	*	*	*	-
Fenugreek	37	0.08	*	*	*	-
Gibto	*	*	*	*	*	-
<u>Oilseeds</u>	4,293	1,533.70	5,224.16			
Neug	106	2.03	*	*	*	-
Linseed	101	2.03	*	*	*	-
Groundnuts	27	1.28	*	*	*	-
Safflower	1,902	140.67	835.78	5.94		
Sesame	3,639	1,387.69	4,388.38	3.16		
Rape seed	*	*	*	*	*	-
<u>Vegetables</u>	2,406	49.23	*			
Lettuce	*	*	*	*	*	-
Head cabbage	37	0.01	*	*	*	-
Ethiopian cabbage	70	0.07	*	*	*	-
Tomatoes	147	19.50	*	*	*	-
Green peppers	121	0.58	*	*	*	-
Red peppers	2,139	29.07	*	*	*	-
Swiss chard	*	*	*	*	*	-
<u>Root crops</u>	1,222	261.59	15,222.57			
Beetroot	*	*	*	*	*	-
Carrot	*	*	*	*	*	-
Onion	1,103	260.21	15,222.57	58.50		
Potatoes	*	*	*	*	*	-
Garlic	32	0.48	*	*	*	-
Taro / 'Godere'	*	*	*	*	*	-
Sweet potatoes	161	0.89	*	*	*	-
<u>Fruit crops</u>	1,636	421.09	43,505.94			
Avocados	35	0.10	*	*	*	-
Bananas	761	414.47	42,315.47	102.10		
Guavas	50	0.22	*	*	*	-
Lemons	521	1.92	37.02	19.28		
Mangoes	85	1.11	*	*	*	-
Oranges	148	0.71	*	*	*	-
Papayas	856	2.56	1,153.46	450.57		
Pineapples	*	*	*	*	*	-
Chat	74	0.06	*	*	*	-
Coffee	407	2.41	*	*	*	-
Hops	472	2.61	60.84	23.31		
Sugar cane	248	2.98	*	*	*	-

Table 5.1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Zone 1**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	10,821	13,486.53	340,270.86			
<u>Cereals</u>	9,798	12,530.91	337,885.01			
Teff	*	*	*	*	*	-
Barley	237	470.39	*	*	*	-
Wheat	*	*	*	*	*	-
Maize	9,539	11,985.14	336,347.44	28.06	28.07	-
Sorghum	90	75.37	1,537.58	20.40	20.40	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	*	*	*	*	*	-
Faba beans	*	*	*	*	*	-
Field peas	*	*	*	*	*	-
Haricot beans	*	*	*	*	*	-
Chick-peas	*	*	*	*	*	-
Lentils	*	*	*	*	*	-
Grass peas	*	*	*	*	*	-
Soya beans	*	*	*	*	*	-
Fenugreek	*	*	*	*	*	-
Gibto	*	*	*	*	*	-
<u>Oilseeds</u>	1,051	955.62	2,385.85			
Neug	*	*	*	*	*	-
Linseed	*	*	*	*	*	-
Groundnuts	27	1.28	*	*	*	-
Safflower	*	*	*	*	*	-
Sesame	1,024	954.34	2,385.85	2.50		
Rape seed	*	*	*	*	*	-
<u>Vegetables</u>	61	8.88	*	*	*	-
Lettuce	*	*	*	*	*	-
Head cabbage	*	*	*	*	*	-
Ethiopian cabbage	*	*	*	*	*	-
Tomatoes	61	8.88	*	*	*	-
Green peppers	*	*	*	*	*	-
Red peppers	*	*	*	*	*	-
Swiss chard	*	*	*	*	*	-
<u>Root crops</u>	32	0.48	*	*	*	-
Beetroot	*	*	*	*	*	-
Carrot	*	*	*	*	*	-
Onion	*	*	*	*	*	-
Potatoes	*	*	*	*	*	-
Garlic	32	0.48	*	*	*	-
Taro / 'Godere'	*	*	*	*	*	-
Sweet potatoes	*	*	*	*	*	-
<u>Fruit crops</u>	35	0.33	*	*	*	-
Avocados	35	0.10	*	*	*	-
Bananas	35	0.02	*	*	*	-
Guavas	*	*	*	*	*	-
Lemons	*	*	*	*	*	-
Mangoes	35	0.22	*	*	*	-
Oranges	*	*	*	*	*	-
Papayas	*	*	*	*	*	-
Pineapples	*	*	*	*	*	-
Chat	*	*	*	*	*	-
Coffee	*	*	*	*	*	-
Hops	*	*	*	*	*	-
Sugar cane	*	*	*	*	*	-

Table 5.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Zone 3**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	6,079	5,601.62	36,059.13			
<u>Cereals</u>	6,042	4,826.61	32,460.65			
Teff	3,602	1,784.32	8,176.83	4.58	4.20	5.01
Barley	559	31.54	226.97	7.20	7.20	-
Wheat	367	29.62	145.34	4.91	4.91	-
Maize	4,618	791.23	10,930.12	13.81	13.81	-
Sorghum	3,907	2,189.90	12,981.40	5.93	5.90	7.51
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	1,805	196.93	760.17			
Faba beans	*	*	*	*		
Field peas	*	*	*	*		
Haricot beans	1,444	110.51	472.72	4.28		
Chick-peas	548	83.51	287.45	3.44		
Lentils	37	2.82	*	*		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	37	0.08	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	3,242	578.08	2,838.31			
Neug	106	2.03	*	*		
Linseed	101	2.03	*	*		
Groundnuts	*	*	*	*		
Safflower	1,902	140.67	835.78	5.94		
Sesame	2,615	433.35	2,002.53	4.62		
Rape seed	*	*	*	*		
<u>Vegetables</u>	2,345	40.34	*			
Lettuce	*	*	*	*		
Head cabbage	37	0.01	*	*		
Ethiopian cabbage	70	0.07	*	*		
Tomatoes	86	10.62	*	*		
Green peppers	121	0.58	*	*		
Red peppers	2,139	29.07	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	1,190	261.11	15,222.57			
Beetroot	*	*	*	*		
Carrot	*	*	*	*		
Onion	1,103	260.21	15,222.57	58.50		
Potatoes	*	*	*	*		
Garlic	*	*	*	*		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	161	0.89	*	*		
<u>Fruit crops</u>	1,601	420.75	43,505.94			
Avocados	*	*	*	*		
Bananas	726	414.45	42,315.47	102.10		
Guavas	50	0.22	*	*		
Lemons	521	1.92	37.02	19.28		
Mangoes	50	0.89	*	*		
Oranges	148	0.71	*	*		
Papayas	856	2.56	1,153.46	450.57		
Pineapples	*	*	*	*		
Chat	74	0.06	*	*		
Coffee	407	2.41	*	*		
Hops	472	2.61	60.84	23.31		
Sugar cane	248	2.98	*	*		

Table 6 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Amhara Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt/ha)	Non - extension yield (qt/ha)	Extension yield (qt/ha)
Grain	3,141,387	3,570,811.94	43,854,714.07			
<u>Cereals</u>	3,097,075	2,714,488.71	36,498,651.38			
Teff	1,974,238	907,057.42	8,658,240.40	9.55	9.09	10.46
Barley	1,285,198	318,420.29	3,964,681.84	12.45	12.47	16.75
Wheat	1,329,834	431,486.33	6,074,887.94	14.08	12.88	17.91
Maize	1,967,462	341,083.52	7,256,801.51	21.28	17.61	27.38
Sorghum	1,162,957	537,623.62	8,515,402.11	15.84	15.76	24.05
Finger millet	491,322	164,648.78	1,846,795.30	11.22	11.34	15.79
Oats / 'Aja'	95,319	8,300.75	74,017.25	8.92		
Rice	18,493	5,867.99	107,825.03	18.38		
<u>Pulses</u>	1,979,270	585,171.26	5,828,794.45			
Faba beans	1,285,212	210,055.02	2,387,015.50	11.36		
Field peas	569,358	85,904.85	690,690.35	8.04		
Haricot beans	208,485	25,307.58	175,232.90	6.92		
Chick-peas	503,604	122,966.82	1,271,272.00	10.34		
Lentils	349,324	50,798.50	332,464.59	6.54		
Grass peas	330,884	69,287.93	801,509.82	11.57		
Soya beans	1,286	130.83	329.88	2.52		
Fenugreek	137,774	6,785.17	46,964.03	6.92		
Gibto	88,245	13,934.55	123,315.39	8.85		
<u>Oilseeds</u>	1,272,736	271,151.98	1,527,268.23			
Neug	518,209	139,551.82	604,629.39	4.33		
Linseed	427,600	45,309.94	193,651.11	4.27		
Groundnuts	8,537	1,075.58	13,545.28	12.59		
Safflower	121,498	6,052.71	45,392.31	7.50		
Sesame	210,344	62,278.99	489,698.10	7.86		
Rape seed	324,687	16,882.94	180,352.05	10.68		
<u>Vegetables</u>	1,137,992	31,107.37	634,773.82			
Lettuce	5,303	8.32	1.26	0.15		
Head cabbage	32,120	176.34	9,240.48	52.40		
Ethiopian cabbage	147,463	618.36	49,160.25	79.50		
Tomatoes	34,512	319.35	22,740.42	71.21		
Green peppers	129,765	837.21	62,366.43	74.49		
Red peppers	872,744	29,111.86	491,264.97	16.88		
Swiss chard	15,490	35.93	*	*		
<u>Root crops</u>	1,311,495	38,701.53	2,877,658.58			
Beetroot	27,710	98.47	3,343.90	33.96		
Carrot	24,776	135.17	3,739.72	27.67		
Onion	233,266	5,338.72	706,526.86	132.34		
Potatoes	457,974	26,511.98	1,815,827.13	68.49		
Garlic	934,944	6,353.21	341,477.06	53.75		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	29,530	263.98	6,743.91	25.55		
<u>Fruit crops</u>	201,940	1,784.09	182,753.36	102.44		
Avocados	5,928	41.85	2,055.44	49.11		
Bananas	59,780	495.30	18,912.97	38.18		
Guavas	31,970	112.07	2,922.68	26.08		
Lemons	56,652	172.29	25,314.54	146.93		
Mangoes	17,861	89.90	2,995.48	33.32		
Oranges	68,776	521.03	86,794.41	166.58		
Papayas	62,371	351.07	43,757.85	124.64		
Pineapples	242	0.56	*	*		
Chat	106,707	3,449.56	37,945.93	11.00		
Coffee	246,863	5,331.37	27,162.83	5.09		
Hops	787,369	14,451.97	127,825.14	8.84		
Sugar cane	54,100	1,627.81	1,166,665.58	716.71		

Table 6.1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**North Gondar**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	463,277	620,636.43	7,486,564.22			
<u>Cereals</u>	453,293	444,543.18	5,987,469.82			
Teff	244,295	125,348.00	1,074,415.83	8.57	7.70	10.14
Barley	149,183	43,281.75	542,574.00	12.54	12.56	15.60
Wheat	99,839	31,658.36	418,662.09	13.22	11.11	15.54
Maize	315,390	48,214.61	964,984.29	20.01	16.74	30.20
Sorghum	278,946	165,569.17	2,572,696.73	15.54	15.35	20.88
Finger millet	106,067	28,401.42	397,581.88	14.00	14.05	-
Oats / 'Aja'	15,737	1,979.17	15,378.75	7.77		
Rice	876	90.70	1,176.25	12.97		
<u>Pulses</u>	241,255	98,976.61	986,875.26			
Faba beans	152,594	29,967.42	338,116.66	11.28		
Field peas	69,797	11,443.83	78,037.25	6.82		
Haricot beans	23,983	2,769.29	10,293.58	3.72		
Chick-peas	111,014	42,950.23	473,919.30	11.03		
Lentils	24,184	2,895.59	19,350.92	6.68		
Grass peas	37,131	7,000.04	52,183.91	7.45		
Soya beans	447	101.05	131.13	1.30		
Fenugreek	24,000	1,849.17	14,842.51	8.03		
Gibto	*	*	*	*		
<u>Oilseeds</u>	253,470	77,116.64	512,219.14			
Neug	82,352	19,596.77	91,128.30	4.65		
Linseed	67,649	6,198.18	27,889.19	4.50		
Groundnuts	573	4.17	*	*		
Safflower	42,369	2,761.35	22,602.32	8.19		
Sesame	91,368	47,722.46	362,198.63	7.59		
Rape seed	31,062	833.70	8,400.70	10.08		
<u>Vegetables</u>	198,958	7,903.95	147,616.99			
Lettuce	1,686	5.14	*	*		
Head cabbage	4,616	32.55	130.21	4.00		
Ethiopian cabbage	27,329	152.53	7,702.67	50.50		
Tomatoes	5,094	46.37	157.67	3.40		
Green peppers	29,536	297.72	25,425.31	85.40		
Red peppers	141,151	7,367.81	114,201.13	15.50		
Swiss chard	1,032	1.82	*	*		
<u>Root crops</u>	152,324	4,606.11	387,314.90			
Beetroot	1,678	1.23	8.64	7.02		
Carrot	646	0.32	30.73	96.03		
Onion	9,425	136.63	18,445.22	135.00		
Potatoes	83,548	2,956.97	254,299.19	86.00		
Garlic	95,241	1,510.96	114,531.12	75.80		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	*	*	*	*		
<u>Fruit crops</u>	15,411	82.72	6,628.63			
Avocados	*	*	*	*		
Bananas	4,081	51.08	633.35	12.40		
Guavas	*	*	*	*		
Lemons	5,215	15.06	3,600.34	239.07		
Mangoes	573	0.17	*	*		
Oranges	*	*	*	*		
Papayas	7,439	16.40	2,394.94	146.03		
Pineapples	*	*	*	*		
Chat	573	6.45	*	*		
Coffee	28,224	618.42	3,710.50	6.00		
Hops	80,292	3,609.78	33,570.94	9.30		
Sugar cane	*	*	*	*		

Table 6.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**South Gondar**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	393,311	464,254.35	4,566,307.73			
<u>Cereals</u>	390,546	347,270.55	3,633,335.66			
Teff	284,563	123,555.29	1,087,161.05	8.80	8.11	9.84
Barley	193,606	47,535.97	466,820.53	9.82	9.71	13.85
Wheat	195,146	69,224.95	680,604.18	9.83	9.40	13.10
Maize	273,249	39,053.03	590,839.49	15.13	13.44	23.97
Sorghum	118,488	31,158.04	366,371.77	11.76	11.72	17.50
Finger millet	110,934	30,287.68	328,617.21	10.85	9.73	16.97
Oats / 'Aja'	6,852	678.28	6,272.66	9.25		
Rice	17,617	5,777.30	106,648.78	18.46		
<u>Pulses</u>	273,499	79,300.18	736,708.31			
Faba beans	157,900	22,952.37	267,320.39	11.65		
Field peas	52,799	8,895.55	62,734.31	7.05		
Haricot beans	28,140	7,449.66	34,006.35	4.56		
Chick-peas	59,735	15,747.65	134,944.80	8.57		
Lentils	26,706	3,291.71	20,405.63	6.20		
Grass peas	56,834	16,666.79	178,107.31	10.69		
Soya beans	*	*	*	*		
Fenugreek	4,549	73.86	241.74	3.27		
Gibto	29,386	4,222.59	38,947.78	9.22		
<u>Oilseeds</u>	178,675	37,683.63	196,263.76			
Neug	95,214	26,542.59	156,551.92	5.90		
Linseed	72,040	8,658.64	25,400.32	2.93		
Groundnuts	*	*	*	*		
Safflower	11,343	640.54	2,016.92	3.15		
Sesame	*	*	*	*		
Rape seed	49,391	1,841.86	12,294.59	6.68		
<u>Vegetables</u>	107,987	3,737.01	25,274.12			
Lettuce	435	0.26	*	*		
Head cabbage	2,433	9.33	*	*		
Ethiopian cabbage	6,205	22.43	*	*		
Tomatoes	1,739	9.79	*	*		
Green peppers	6,821	21.97	1,089.79	49.60		
Red peppers	93,719	3,664.30	24,184.33	6.60		
Swiss chard	1,212	8.94	*	*		
<u>Root crops</u>	230,519	10,295.75	477,659.76			
Beetroot	*	*	*	*		
Carrot	1,318	0.93	15.88	17.08		
Onion	11,878	164.95	21,938.85	133.00		
Potatoes	112,433	9,334.97	398,603.04	42.70		
Garlic	181,729	786.45	57,096.06	72.60		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	1,493	8.45	5.92	0.70		
<u>Fruit crops</u>	7,527	22.99	1,700.18			
Avocados	*	*	*	*		
Bananas	2,173	11.04	114.79	10.40		
Guavas	924	1.49	42.26	28.36		
Lemons	2,226	2.55	81.46	31.95		
Mangoes	879	1.93	231.79	120.10		
Oranges	1,306	2.00	262.74	131.37		
Papayas	2,221	3.99	967.14	242.39		
Pineapples	*	*	*	*		
Chat	2,567	6.74	52.57	7.80		
Coffee	12,384	80.04	160.09	2.00		
Hops	102,265	1,243.00	7,209.42	5.80		
Sugar cane	2,751	638.69	440,054.71	689.00		



Table 6.3 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**North Wolo**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	310,562	232,674.35	2,706,402.62			
<u>Cereals</u>	307,874	185,321.80	2,262,789.89			
Teff	177,469	58,382.00	496,942.21	8.51	8.49	12.87
Barley	165,534	29,753.93	425,565.33	14.30	14.35	17.50
Wheat	138,244	27,053.48	333,142.31	12.31	10.96	17.05
Maize	132,978	6,268.33	82,664.98	13.19	13.17	-
Sorghum	164,397	60,065.43	881,507.10	14.68	14.67	18.10
Finger millet	19,781	2,155.09	26,343.03	12.22	12.22	-
Oats / 'Aja'	19,433	1,643.53	16,624.93	10.12		
Rice	*	*	*	*		
<u>Pulses</u>	203,922	41,617.24	412,635.51			
Faba beans	117,557	12,295.90	133,390.53	10.85		
Field peas	81,545	7,973.98	79,924.71	10.02		
Haricot beans	11,865	858.70	1,523.19	1.77		
Chick-peas	50,978	8,620.37	91,920.19	10.66		
Lentils	63,580	8,699.60	68,204.41	7.84		
Grass peas	18,089	2,345.78	31,245.31	13.32		
Soya beans	336	25.32	194.94	7.70		
Fenugreek	19,774	797.60	6,232.22	7.81		
Gibto	*	*	*	*		
<u>Oilseeds</u>	82,719	5,735.30	30,977.22			
Neug	13,401	967.40	1,979.83	2.05		
Linseed	59,334	3,711.35	20,529.35	5.53		
Groundnuts	*	*	*	*		
Safflower	8,014	264.48	1,559.36	5.90		
Sesame	12,900	776.98	6,908.68	8.89		
Rape seed	3,506	15.09	*	*		
<u>Vegetables</u>	91,340	1,050.05	33,336.70			
Lettuce	338	0.22	*	*		
Head cabbage	1,811	3.13	*	*		
Ethiopian cabbage	33,043	233.30	22,163.59	95.00		
Tomatoes	2,718	7.34	*	*		
Green peppers	12,519	75.09	*	*		
Red peppers	48,163	725.53	11,173.11	15.40		
Swiss chard	2,480	5.45	*	*		
<u>Root crops</u>	96,233	1,871.98	111,974.15			
Beetroot	2,221	2.51	*	*		
Carrot	2,603	9.04	*	*		
Onion	15,632	469.51	62,445.35	133.00		
Potatoes	24,885	551.55	32,596.42	59.10		
Garlic	81,708	828.20	16,563.90	20.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	1,960	11.17	368.48	32.99		
<u>Fruit crops</u>	22,257	119.23	25,870.19	216.98		
Avocados	*	*	*	*		
Bananas	7,944	17.51	1,008.67	57.61		
Guavas	5,344	17.00	482.94	28.41		
Lemons	2,384	4.86	242.45	49.89		
Mangoes	711	0.50	*	*		
Oranges	9,911	76.49	23,704.67	309.91		
Papayas	2,687	2.86	431.46	150.86		
Pineapples	*	*	*	*		
Chat	5,434	56.52	531.26	9.40		
Coffee	30,078	540.47	2,594.29	4.80		
Hops	65,198	770.51	12,482.26	16.20		
Sugar cane	3,236	54.45	17,370.66	319.02		

Table 6.4 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**South Wolo**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	499,102	394,130.37	4,761,207.60			
<u>Cereals</u>	494,674	289,738.23	3,798,347.37			
Teff	280,788	74,483.92	758,323.57	10.18	9.67	14.13
Barley	218,398	35,735.42	448,555.23	12.55	12.57	15.60
Wheat	281,177	84,666.82	1,046,327.57	12.36	11.28	16.00
Maize	216,694	10,579.45	170,373.18	16.10	16.09	-
Sorghum	231,480	78,161.27	1,304,602.48	16.69	16.67	19.32
Finger millet	32,432	3,000.98	35,554.68	11.85	11.85	-
Oats / 'Aja'	49,386	3,110.36	34,610.66	11.13		
Rice	*	*	*	*		
<u>Pulses</u>	373,686	94,797.64	917,467.22			
Faba beans	232,190	28,314.82	318,430.58	11.25		
Field peas	135,487	16,781.70	144,116.91	8.59		
Haricot beans	56,952	4,867.75	57,266.55	11.76		
Chick-peas	107,109	13,521.56	159,969.56	11.83		
Lentils	121,927	20,901.18	129,370.53	6.19		
Grass peas	62,553	7,540.75	90,446.85	11.99		
Soya beans	*	*	*	*		
Fenugreek	41,982	2,869.88	17,866.25	6.23		
Gibto	*	*	*	*		
<u>Oilseeds</u>	116,759	9,594.50	45,393.00			
Neug	46,065	2,960.50	13,116.98	4.43		
Linseed	69,344	5,797.62	27,172.93	4.69		
Groundnuts	519	0.57	*	*		
Safflower	14,615	577.21	3,289.99	5.70		
Sesame	3,596	224.16	1,728.99	7.71		
Rape seed	4,388	34.46	84.11	2.44		
<u>Vegetables</u>	129,922	1,407.19	38,727.87			
Lettuce	963	0.79	*	*		
Head cabbage	7,565	32.35	2,976.11	92.00		
Ethiopian cabbage	20,518	49.78	4,729.02	95.00		
Tomatoes	7,718	152.28	10,004.78	65.70		
Green peppers	20,267	158.95	14,829.84	93.30		
Red peppers	83,651	998.08	6,188.12	6.20		
Swiss chard	6,602	14.95	*	*		
<u>Root crops</u>	130,223	1,167.89	67,615.51			
Beetroot	4,926	59.36	1,721.43	29.00		
Carrot	10,299	107.86	3,235.86	30.00		
Onion	20,019	242.98	26,193.78	107.80		
Potatoes	16,066	201.12	23,530.89	117.00		
Garlic	102,648	538.90	12,933.54	24.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	5,296	17.66	*	*		
<u>Fruit crops</u>	28,394	169.79	28,340.89			
Avocados	*	*	*	*		
Bananas	4,477	31.48	557.22	17.70		
Guavas	11,343	30.02	852.64	28.40		
Lemons	5,054	6.99	336.91	48.20		
Mangoes	1,636	2.37	*	*		
Oranges	15,828	80.89	24,922.15	308.10		
Papayas	5,191	18.04	1,671.96	92.68		
Pineapples	*	*	*	*		
Chat	49,157	2,165.59	27,069.97	12.50		
Coffee	35,714	668.43	3,342.29	5.00		
Hops	42,842	317.92	3,751.39	11.80		
Sugar cane	6,052	44.47	22,769.15	512.01		

Table 6.5 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**North Shewa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	368,438	454,884.42	6,909,933.60			
<u>Cereals</u>	349,811	339,161.76	5,837,828.70			
Teff	227,354	100,589.42	1,404,604.01	13.96	13.67	14.91
Barley	146,847	52,073.27	896,830.09	17.22	16.73	19.63
Wheat	187,721	73,724.59	1,540,367.13	20.89	22.54	25.00
Maize	138,955	5,652.36	105,627.06	18.69	18.73	28.10
Sorghum	176,690	106,432.56	1,890,074.10	17.76	17.69	25.79
Finger millet	*	*	*	*	*	14.91
Oats / 'Aja'	1,461	689.55	326.33	0.47		
Rice	*	*	*	*		
<u>Pulses</u>	273,005	102,505.90	998,238.94			
Faba beans	204,698	46,936.18	535,295.41	11.40		
Field peas	78,098	15,098.60	105,397.64	6.98		
Haricot beans	31,568	2,767.46	15,191.33	5.49		
Chick-peas	88,046	21,244.48	210,884.59	9.93		
Lentils	81,242	10,555.11	66,032.21	6.26		
Grass peas	35,020	4,930.77	58,834.09	11.93		
Soya beans	*	*	*	*		
Fenugreek	28,206	973.30	6,603.67	6.78		
Gibto	*	*	*	*		
<u>Oilseeds</u>	130,142	13,216.76	73,865.96			
Neug	23,131	934.85	3,101.40	3.32		
Linseed	51,791	7,762.24	37,319.45	4.81		
Groundnuts	*	*	*	*		
Safflower	17,099	731.13	5,089.31	6.96		
Sesame	44,571	3,625.26	26,699.66	7.36		
Rape seed	11,820	163.28	1,656.14	10.14		
<u>Vegetables</u>	138,242	1,529.94	102,716.78			
Lettuce	405	0.13	1.26	9.69		
Head cabbage	5,202	42.98	*	*		
Ethiopian cabbage	42,522	78.87	7,887.05	100.00		
Tomatoes	3,581	12.74	535.16	42.01		
Green peppers	17,295	86.38	8,802.36	101.90		
Red peppers	91,961	1,307.20	85,490.94	65.40		
Swiss chard	2,452	1.64	*	*		
<u>Root crops</u>	188,590	3,376.24	394,563.28			
Beetroot	3,836	4.63	134.32	29.01		
Carrot	5,253	5.67	170.06	29.99		
Onion	106,975	2,463.25	367,516.39	149.20		
Potatoes	14,316	51.82	5,388.86	103.99		
Garlic	128,085	838.44	20,122.62	24.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	5,444	12.43	1,231.03	99.04		
<u>Fruit crops</u>	39,013	293.46	40,631.13			
Avocados	1,568	2.54	*	*		
Bananas	15,390	102.02	3,540.05	34.70		
Guavas	1,848	4.69	*	*		
Lemons	14,119	52.00	5,880.95	113.10		
Mangoes	442	0.39	41.94	107.54		
Oranges	17,280	83.51	25,095.80	300.51		
Papayas	10,387	48.31	6,072.39	125.70		
Pineapples	*	*	*	*		
Chat	9,387	35.88	157.85	4.40		
Coffee	55,344	779.01	2,259.13	2.90		
Hops	140,306	3,173.15	9,836.75	3.10		
Sugar cane	14,931	125.11	30,901.10	246.99		

Table 6.6 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**East Gojjam**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	390,960	484,575.53	5,629,883.78			
<u>Cereals</u>	388,777	382,664.40	4,690,850.81			
Teff	282,724	181,273.44	1,815,308.49	10.01	9.48	10.26
Barley	169,332	45,247.82	460,494.27	10.18	10.55	17.96
Wheat	239,798	88,241.60	1,206,708.73	13.68	11.59	15.64
Maize	261,354	37,760.48	676,908.74	17.93	16.26	19.79
Sorghum	61,175	29,681.59	529,006.20	17.82	17.81	-
Finger millet	3,385	459.48	2,424.38	5.28	11.11	-
Oats / 'Aja'	*	*	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	264,815	70,381.57	778,211.25			
Faba beans	215,629	32,627.96	382,591.13	11.73		
Field peas	69,421	10,374.81	82,238.13	7.93		
Haricot beans	8,278	474.39	5,310.18	11.19		
Chick-peas	35,719	6,453.66	61,045.87	9.46		
Lentils	11,150	1,761.28	9,765.05	5.54		
Grass peas	68,707	17,958.07	231,648.59	12.90		
Soya beans	*	*	*	*		
Fenugreek	6,015	115.07	581.13	5.05		
Gibto	8,028	616.34	5,031.18	8.16		
<u>Oilseeds</u>	140,574	31,529.55	160,821.72			
Neug	80,513	20,295.21	77,525.41	3.82		
Linseed	33,019	5,917.45	22,815.36	3.86		
Groundnuts	*	*	*	*		
Safflower	1,066	33.58	199.86	5.95		
Sesame	14,695	2,812.00	32,128.30	11.43		
Rape seed	56,305	2,471.31	28,152.80	11.39		
<u>Vegetables</u>	100,682	1,149.55	90,557.29			
Lettuce	354	0.60	*	*		
Head cabbage	3,712	11.89	1,415.00	119.01		
Ethiopian cabbage	7,913	33.97	2,686.64	79.09		
Tomatoes	1,661	2.43	*	*		
Green peppers	24,874	69.67	7,273.80	104.40		
Red peppers	67,137	1,028.33	79,181.85	77.00		
Swiss chard	1,309	2.66	*	*		
<u>Root crops</u>	180,939	6,989.45	815,337.34			
Beetroot	9,014	11.07	321.00	29.00		
Carrot	1,731	2.54	118.56	46.68		
Onion	30,680	655.06	60,593.08	92.50		
Potatoes	69,790	5,596.01	670,961.07	119.90		
Garlic	127,793	724.52	83,320.71	115.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	385	0.25	22.92	91.68		
<u>Fruit crops</u>	8,324	36.47	24.61			
Avocados	*	*	*	*		
Bananas	2,607	11.30	*	*		
Guavas	445	0.11	*	*		
Lemons	3,963	5.31	*	*		
Mangoes	1,302	1.23	*	*		
Oranges	4,389	10.25	24.61	2.40		
Papayas	3,514	8.26	*	*		
Pineapples	*	*	*	*		
Chat	4,376	14.74	*	*		
Coffee	8,163	47.10	*	*		
Hops	132,023	1,967.33	20,657.06	10.50		
Sugar cane	4,746	77.24	*	*		

Table 6.7 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**West Gojjam**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	396,200	514,987.92	6,970,770.46			
<u>Cereals</u>	394,820	388,192.95	5,952,305.49			
Teff	277,372	133,209.29	1,124,255.76	8.44	7.29	9.16
Barley	128,786	31,792.65	402,950.82	12.67	13.29	16.33
Wheat	116,414	37,229.40	643,836.05	17.29	11.47	19.96
Maize	375,057	133,775.50	3,235,130.79	24.18	21.34	27.40
Sorghum	10,323	2,398.48	37,489.77	15.63	15.63	-
Finger millet	138,240	49,772.21	508,516.22	10.22	10.16	15.60
Oats / 'Aja'	812	15.42	126.07	8.18		
Rice	*	*	*	*		
<u>Pulses</u>	226,751	67,364.74	711,193.97			
Faba beans	149,028	26,175.15	289,877.53	11.07		
Field peas	54,194	10,742.77	97,390.18	9.07		
Haricot beans	16,502	1,533.75	12,463.79	8.13		
Chick-peas	41,793	11,957.98	119,091.82	9.96		
Lentils	2,222	230.98	*	*		
Grass peas	50,517	12,202.82	152,732.66	12.52		
Soya beans	*	*	*	*		
Fenugreek	4,982	58.29	317.77	5.45		
Gibto	32,106	4,463.01	39,320.20	8.81		
<u>Oilseeds</u>	222,693	59,430.23	307,271.01			
Neug	118,706	44,237.78	172,502.92	3.90		
Linseed	40,188	4,711.85	21,407.10	4.54		
Groundnuts	*	*	*	*		
Safflower	3,756	50.92	107.58	2.11		
Sesame	4,206	830.46	3,535.71	4.26		
Rape seed	138,339	9,599.22	109,717.70	11.43		
<u>Vegetables</u>	250,431	9,593.27	122,011.60			
Lettuce	856	1.10	*	*		
Head cabbage	3,791	11.22	1,031.99	91.98		
Ethiopian cabbage	*	*	*	*		
Tomatoes	5,221	19.22	1,648.99	85.80		
Green peppers	8,774	21.43	1,984.81	92.62		
Red peppers	242,527	9,540.31	117,345.81	12.30		
Swiss chard	*	*	*	*		
<u>Root crops</u>	231,586	5,713.77	585,710.98			
Beetroot	4,225	17.79	1,099.35	61.80		
Carrot	1,629	6.12	117.44	19.19		
Onion	26,448	883.91	146,198.59	165.40		
Potatoes	78,200	3,866.55	417,587.90	108.00		
Garlic	166,662	838.42	20,122.01	24.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	6,456	100.98	585.68	5.80		
<u>Fruit crops</u>	27,020	435.02	44,513.65			
Avocados	2,594	2.68	*	*		
Bananas	8,216	138.80	8,244.65	59.40		
Guavas	3,841	25.35	697.21	27.50		
Lemons	11,032	45.66	8,592.96	188.19		
Mangoes	3,418	24.00	2,721.75	113.41		
Oranges	3,339	22.65	3,732.21	164.78		
Papayas	10,153	175.88	20,524.88	116.70		
Pineapples	*	*	*	*		
Chat	18,818	269.30	2,262.09	8.40		
Coffee	38,621	1,785.81	12,679.23	7.10		
Hops	155,320	2,525.93	34,100.04	13.50		
Sugar cane	7,107	433.09	436,817.24	1,008.61		

Table 9.8 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Waghemra**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	77,637	96,342.82	1,117,813.48			
<u>Cereals</u>	76,326	78,160.49	931,633.55			
Teff	56,572	23,864.71	232,596.08	9.75	9.49	15.96
Barley	51,716	16,395.11	187,726.86	11.45	11.45	-
Wheat	32,677	8,336.65	95,899.00	11.50	11.00	17.77
Maize	49,560	2,172.96	24,490.02	11.27	11.27	-
Sorghum	51,217	26,813.10	386,360.72	14.41	14.41	-
Finger millet	3,497	495.56	4,560.87	9.20	9.20	-
Oats / 'Aja'	163	82.40	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	52,948	14,886.16	159,064.56			
Faba beans	34,672	7,819.49	92,170.51	11.79		
Field peas	14,405	2,579.28	28,262.95	10.96		
Haricot beans	11,838	1,381.88	12,522.58	9.06		
Chick-peas	3,209	687.48	7,007.84	10.19		
Lentils	16,229	2,398.18	18,943.91	7.90		
Grass peas	164	0.55	*	*		
Soya beans	*	*	*	*		
Fenugreek	2,575	19.30	156.77	8.12		
Gibto	*	*	*	*		
<u>Oilseeds</u>	34,344	3,296.17	27,115.36			
Neug	4,673	314.10	1,749.60	5.57		
Linseed	24,627	1,692.24	9,268.60	5.48		
Groundnuts	*	*	*	*		
Safflower	13,858	727.97	7,711.19	10.59		
Sesame	3,013	558.27	8,378.86	15.01		
Rape seed	573	3.59	7.11	1.98		
<u>Vegetables</u>	4,487	49.86	1,129.21			
Lettuce	*	*	*	*		
Head cabbage	727	1.94	231.26	119.21		
Ethiopian cabbage	126	0.20	*	*		
Tomatoes	1,163	3.24	437.58	135.06		
Green peppers	1,129	9.43	460.38	48.82		
Red peppers	2,943	34.74	*	*		
Swiss chard	154	0.29	*	*		
<u>Root crops</u>	12,827	108.83	8,339.89			
Beetroot	280	0.21	6.74	32.10		
Carrot	*	*	*	*		
Onion	863	8.83	1,093.60	123.85		
Potatoes	6,015	61.93	*	*		
Garlic	9,110	32.00	3,792.32	118.51		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	161	5.86	3,447.22	588.26		
<u>Fruit crops</u>	2,662	15.46	1,211.55			
Avocados	*	*	*	*		
Bananas	1,948	10.15	1,026.79	101.16		
Guavas	272	0.71	19.20	27.04		
Lemons	156	0.28	5.73	20.46		
Mangoes	156	0.15	*	*		
Oranges	126	0.35	*	*		
Papayas	988	3.82	159.82	41.84		
Pineapples	*	*	*	*		
Chat	*	*	*	*		
Coffee	890	1.33	2.25	1.69		
Hops	4,025	14.31	67.24	4.70		
Sugar cane	277	7.89	*	*		

Table 6.9 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Aw**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	166,358	254,105.20	2,942,547.26			
<u>Cereals</u>	165,992	211,562.39	2,706,035.49			
Teff	117,802	79,654.59	584,563.04	7.34	7.12	10.90
Barley	55,946	16,258.11	129,259.66	7.95	8.13	9.91
Wheat	38,063	11,308.49	109,133.26	9.65	9.86	13.26
Maize	154,535	52,687.55	1,322,867.62	25.11	20.09	32.11
Sorghum	5,018	1,744.86	18,562.82	10.64	10.54	-
Finger millet	74,057	49,821.20	541,088.55	10.86	9.84	15.90
Oats / 'Aja'	1,195	87.58	560.54	6.40		
Rice	*	*	*	*		
<u>Pulses</u>	48,757	13,250.08	105,796.74			
Faba beans	18,967	2,759.18	26,600.58	9.64		
Field peas	10,015	1,671.58	8,718.41	5.22		
Haricot beans	5,519	2,218.58	16,630.65	7.50		
Chick-peas	3,184	1,293.60	7,394.00	5.72		
Lentils	*	*	*	*		
Grass peas	1,871	642.37	6,311.09	9.82		
Soya beans	503	4.46	3.81	0.85		
Fenugreek	5,271	27.71	121.97	4.40		
Gibto	18,725	4,632.60	40,016.23	8.64		
<u>Oilseeds</u>	77,369	29,292.74	130,715.03			
Neug	49,852	23,476.41	85,427.64	3.64		
Linseed	6,344	804.67	1,750.73	2.18		
Groundnuts	6,596	1,036.29	13,396.68	12.93		
Safflower	558	13.32	*	*		
Sesame	6,557	2,124.58	10,329.74	4.86		
Rape seed	27,800	1,837.48	19,810.25	10.78		
<u>Vegetables</u>	83,340	3,637.99	48,001.03			
Lettuce	266	0.08	*	*		
Head cabbage	2,113	30.86	3,455.92	111.99		
Ethiopian cabbage	8,471	37.92	3,223.45	85.01		
Tomatoes	4,835	51.84	8,091.74	156.09		
Green peppers	4,682	35.10	1,891.73	53.90		
Red peppers	72,764	3,482.02	31,338.20	9.00		
Swiss chard	249	0.18	*	*		
<u>Root crops</u>	85,118	4,544.32	27,418.32			
Beetroot	1,530	1.67	52.43	31.40		
Carrot	1,297	2.69	51.17	19.02		
Onion	9,686	301.33	1,808.01	6.00		
Potatoes	52,565	3,890.70	12,839.30	3.30		
Garlic	40,292	243.54	11,957.64	49.10		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	8,084	104.38	709.77	6.80		
<u>Fruit crops</u>	28,082	408.73	24,181.65			
Avocados	1,304	26.08	2,055.44	78.81		
Bananas	9,858	74.02	1,976.43	26.70		
Guavas	713	3.32	*	*		
Lemons	7,563	25.12	5,383.72	214.32		
Mangoes	5,680	38.39	*	*		
Oranges	13,381	217.27	6,887.38	31.70		
Papayas	7,006	23.95	7,878.67	328.96		
Pineapples	242	0.56	*	*		
Chat	2,536	9.84	*	*		
Coffee	28,255	559.67	1,511.12	2.70		
Hops	64,642	828.30	6,129.37	7.40		
Sugar cane	13,658	215.94	189,661.55	878.31		

Table 6.10 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Oromia Zone**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	75,541	54,220.56	763,283.32			
<u>Cereals</u>	74,962	47,872.97	698,054.59			
Teff	25,300	6,696.76	80,070.37	11.96	11.70	13.63
Barley	5,849	346.25	3,905.05	11.28	11.28	-
Wheat	756	42.00	207.62	4.94	4.94	-
Maize	49,692	4,919.24	82,915.33	16.86	16.86	-
Sorghum	65,222	35,599.11	528,730.42	14.85	14.85	-
Finger millet	2,929	255.16	2,108.48	8.26	8.26	-
Oats / 'Aja'	282	14.44	117.32	8.12		
Rice	*	*	*	*		
<u>Pulses</u>	20,631	2,091.14	22,602.70			
Faba beans	1,977	206.55	3,222.18	15.60		
Field peas	3,597	342.76	3,869.86	11.29		
Haricot beans	13,839	986.14	10,024.71	10.17		
Chick-peas	2,819	489.81	5,094.02	10.40		
Lentils	2,084	64.88	391.93	6.04		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	421	1.00	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	35,990	4,256.45	42,626.03			
Neug	4,303	226.20	1,545.39	6.83		
Linseed	3,263	55.71	98.09	1.76		
Groundnuts	849	34.55	148.60	4.30		
Safflower	8,819	252.21	2,815.78	11.16		
Sesame	29,438	3,604.84	37,789.53	10.48		
Rape seed	1,503	82.95	228.64	2.76		
<u>Vegetables</u>	32,604	1,048.55	25,402.22			
Lettuce	*	*	*	*		
Head cabbage	152	0.09	*	*		
Ethiopian cabbage	1,335	9.36	767.83	82.03		
Tomatoes	781	14.10	1,864.50	132.23		
Green peppers	3,870	61.46	608.42	9.90		
Red peppers	28,727	963.54	22,161.47	23.00		
Swiss chard	*	*	*	*		
<u>Root crops</u>	3,136	27.20	1,724.45			
Beetroot	*	*	*	*		
Carrot	*	*	*	*		
Onion	1,660	12.25	293.97	24.00		
Potatoes	157	0.37	20.46	55.30		
Garlic	1,676	11.79	1,037.14	87.97		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	251	2.80	372.88	133.17		
<u>Fruit crops</u>	23,250	200.22	9,650.87			
Avocados	462	10.54	*	*		
Bananas	3,087	47.91	1,811.01	37.80		
Guavas	7,242	29.38	828.42	28.20		
Lemons	4,940	14.46	1,190.01	82.30		
Mangoes	3,065	20.77	*	*		
Oranges	3,217	27.61	2,164.85	78.41		
Papayas	12,785	49.55	3,656.58	73.80		
Pineapples	*	*	*	*		
Chat	13,858	884.51	7,872.18	8.90		
Coffee	9,190	251.09	903.92	3.60		
Hops	457	1.75	20.67	11.81		
Sugar cane	1,343	30.93	29,091.18	940.55		



Table 7 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Oromia Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	4,627,073	4,720,122.67	67,727,140.70			
<u>Cereals</u>	4,536,344	3,835,234.80	60,285,657.13			
Teff	1,966,059	985,665.52	10,224,519.76	10.37	10.25	12.01
Barley	1,499,084	514,377.35	6,929,575.11	13.47	12.91	18.87
Wheat	1,829,680	816,572.28	13,177,060.79	16.14	15.54	20.15
Maize	3,186,353	858,096.17	20,317,484.29	23.68	21.07	31.40
Sorghum	1,832,137	542,045.77	8,176,428.91	15.08	14.90	17.31
Finger millet	395,500	83,577.50	1,141,465.24	13.66	13.42	18.04
Oats / 'Aja'	222,903	34,794.57	317,983.37	9.14		
Rice	1,518	105.64	1,139.65	10.79		
<u>Pulses</u>	2,239,888	487,974.92	5,010,422.88			
Faba beans	1,125,775	170,873.42	1,995,774.01	11.68		
Field peas	485,674	92,857.59	711,166.29	7.66		
Haricot beans	854,800	85,169.69	783,903.40	9.20		
Chick-peas	224,880	59,060.11	689,229.47	11.67		
Lentils	235,235	28,583.71	207,208.30	7.25		
Grass peas	206,156	44,582.26	563,321.55	12.64		
Soya beans	18,141	2,509.52	34,542.77	13.76		
Fenugreek	162,962	4,338.62	25,277.08	5.83		
Gibto	*	*	*	*		
<u>Oilseeds</u>	1,314,382	396,912.95	2,431,060.70			
Neug	417,364	144,965.17	737,942.38	5.09		
Linseed	584,097	157,345.16	1,001,867.08	6.37		
Groundnuts	152,536	27,588.37	251,902.66	9.13		
Safflower	25,907	1,834.84	8,999.51	4.90		
Sesame	210,010	57,744.67	369,979.19	6.41		
Rape seed	134,160	7,434.74	60,369.88	8.12		
<u>Vegetables</u>	1,782,045	51,858.21	1,777,206.64			
Lettuce	15,636	214.55	18,497.70	86.22		
Head cabbage	101,236	990.07	90,678.08	91.59		
Ethiopian cabbage	960,502	8,492.80	641,818.84	75.57		
Tomatoes	50,860	3,657.05	282,481.25	77.24		
Green peppers	499,553	4,386.35	257,910.17	58.80		
Red peppers	517,258	34,085.92	485,820.59	14.25		
Swiss chard	16,105	31.47	*	*		
<u>Root crops</u>	1,735,247	66,173.60	4,808,571.96			
Beetroot	145,819	1,193.04	144,165.08	120.84		
Carrot	58,527	511.89	45,795.10	89.46		
Onion	324,107	9,452.26	871,696.87	92.22		
Potatoes	336,323	24,924.27	1,874,780.11	75.22		
Garlic	664,207	5,193.16	627,462.40	120.82		
Taro / 'Godere'	260,949	6,730.31	388,722.10	57.76		
Sweet potatoes	489,101	18,168.67	855,950.31	47.11		
<u>Fruit crops</u>	892,729	14,575.50	1,556,114.79			
Avocados	79,556	664.25	51,184.64	77.06		
Bananas	574,704	8,339.41	642,393.26	77.03		
Guavas	100,327	456.66	8,936.68	19.57		
Lemons	34,392	96.96	5,673.84	58.52		
Mangoes	235,299	2,347.11	237,921.44	101.37		
Oranges	140,874	1,206.59	227,991.41	188.96		
Papayas	177,682	1,438.54	380,353.01	264.40		
Pineapples	5,028	*	*	*		
Chat	1,142,617	96,754.06	915,146.80	9.46		
Coffee	1,098,476	164,651.99	1,152,631.76	7.00		
Hops	428,372	4,769.98	49,374.24	10.35		
Sugar cane	264,675	6,301.35	3,824,613.91	606.95		

Table 7.1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**West Welega**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	397,176	345,066.60	5,534,826.86			
<u>Cereals</u>	394,203	280,000.62	5,101,664.58			
Teff	144,897	40,854.37	364,532.57	8.92	9.05	13.80
Barley	79,595	4,844.59	43,713.32	9.02	9.02	-
Wheat	86,924	12,203.99	153,980.38	12.62	12.65	-
Maize	370,400	111,729.01	2,792,725.20	25.00	21.79	34.58
Sorghum	286,746	68,616.63	1,145,952.04	16.70	16.56	-
Finger millet	191,185	41,710.16	600,317.14	14.39	14.08	19.32
Oats / 'Aja'	2,859	41.82	443.95	10.62		
Rice	19	0.05	*	*		
<u>Pulses</u>	223,047	27,100.56	263,558.75			
Faba beans	98,072	9,769.89	122,939.31	12.58		
Field peas	47,995	3,634.63	27,080.75	7.45		
Haricot beans	164,933	10,345.50	89,589.96	8.66		
Chick-peas	25,085	2,838.84	20,867.05	7.35		
Lentils	1,856	86.87	529.89	6.10		
Grass peas	9,788	181.27	1,177.28	6.49		
Soya beans	1,635	42.87	492.41	11.49		
Fenugreek	15,020	200.70	882.11	4.40		
Gibto	*	*	*	*		
<u>Oilseeds</u>	162,456	37,965.42	169,603.54			
Neug	97,491	23,504.88	110,732.92	4.71		
Linseed	16,453	344.79	744.44	2.16		
Groundnuts	6,645	147.42	1,444.78	9.80		
Safflower	2,383	133.01	*	*		
Sesame	59,477	13,067.49	51,057.48	3.91		
Rape seed	17,675	767.83	5,623.92	7.32		
<u>Vegetables</u>	157,360	2,839.57	33,189.81			
Lettuce	683	2.08	*	*		
Head cabbage	8,641	31.41	3,737.22	118.98		
Ethiopian cabbage	25,924	126.90	7,525.37	59.30		
Tomatoes	958	3.33	36.66	11.01		
Green peppers	35,078	365.37	1,096.14	3.00		
Red peppers	107,628	2,310.48	20,794.41	9.00		
Swiss chard	342	*	*	*		
<u>Root crops</u>	161,856	3,493.66	203,906.09			
Beetroot	6,360	16.95	2,203.52	130.00		
Carrot	7,864	18.78	1,443.83	76.88		
Onion	1,641	9.06	679.73	75.03		
Potatoes	8,772	295.58	16,167.98	54.70		
Garlic	32,286	92.31	6,664.95	72.20		
Taro / 'Godere'	26,125	184.01	16,211.00	88.10		
Sweet potatoes	114,150	2,876.97	160,535.09	55.80		
<u>Fruit crops</u>	180,297	3,384.96	354,422.73			
Avocados	18,587	181.14	15,813.79	87.30		
Bananas	145,906	2,110.19	195,192.38	92.50		
Guavas	2,122	11.57	242.90	20.99		
Lemons	1,027	6.43	612.16	95.20		
Mangoes	58,135	704.32	89,378.23	126.90		
Oranges	24,904	305.48	38,338.04	125.50		
Papayas	12,205	65.83	14,845.23	225.51		
Pineapples	*	*	*	*		
Chat	59,003	2,038.80	17,125.95	8.40		
Coffee	261,629	54,786.63	345,155.66	6.30		
Hops	40,878	315.54	3,407.84	10.80		
Sugar cane	9,976	317.93	181,921.18	572.21		

Table 7.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**East Welega**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	306,785	443,508.16	6,378,748.13			
<u>Cereals</u>	302,420	322,748.78	5,644,599.32			
Teff	166,367	101,731.44	979,065.67	9.62	9.29	12.25
Barley	66,996	16,682.52	188,036.84	11.27	11.30	16.91
Wheat	110,896	38,473.42	637,646.17	16.57	15.98	19.89
Maize	274,592	109,482.61	2,906,448.11	26.55	21.55	37.49
Sorghum	110,566	34,322.94	672,551.43	19.59	18.57	-
Finger millet	66,612	21,801.78	259,295.60	11.89	11.64	16.48
Oats / 'Aja'	5,287	202.19	1,120.64	5.54		
Rice	719	51.88	434.85	8.38		
<u>Pulses</u>	127,502	21,328.24	202,855.04			
Faba beans	99,529	13,560.99	130,469.46	9.62		
Field peas	31,824	5,401.46	48,067.45	8.90		
Haricot beans	14,334	1,368.69	13,625.06	9.95		
Chick-peas	2,619	182.94	376.91	2.06		
Lentils	1,196	44.51	208.72	4.69		
Grass peas	19	0.70	*	*		
Soya beans	1,004	584.79	9,797.86	16.75		
Fenugreek	15,566	184.15	309.60	1.68		
Gibto	*	*	*	*		
<u>Oilseeds</u>	195,865	99,431.15	531,293.76			
Neug	140,211	68,760.07	312,047.75	4.54		
Linseed	7,928	642.66	1,809.43	2.82		
Groundnuts	15,899	2,469.87	29,425.48	11.91		
Safflower	4,451	324.77	1,534.76	4.73		
Sesame	59,467	26,498.92	182,532.30	6.89		
Rape seed	14,420	734.85	3,944.04	5.37		
<u>Vegetables</u>	114,155	2,094.28	55,170.88			
Lettuce	69	0.11	*	*		
Head cabbage	4,008	13.40	*	*		
Ethiopian cabbage	5,896	55.99	5,755.44	102.79		
Tomatoes	278	0.25	*	*		
Green peppers	47,037	325.65	34,127.72	104.80		
Red peppers	63,303	1,698.63	15,287.71	9.00		
Swiss chard	78	0.26	*	*		
<u>Root crops</u>	118,490	1,292.18	122,420.22			
Beetroot	17,503	45.43	3,357.10	73.90		
Carrot	8,270	17.38	2,102.70	120.98		
Onion	19,771	97.32	9,030.86	92.80		
Potatoes	13,194	538.83	31,306.08	58.10		
Garlic	88,293	388.87	57,007.83	146.60		
Taro / 'Godere'	1,909	7.97	427.73	53.67		
Sweet potatoes	12,514	196.40	19,187.93	97.70		
<u>Fruit crops</u>	54,883	810.39	76,527.65			
Avocados	21	*	*	*		
Bananas	32,564	300.56	11,962.43	39.80		
Guavas	*	*	*	*		
Lemons	3,130	6.22	771.32	124.01		
Mangoes	24,361	478.25	54,950.94	114.90		
Oranges	1,006	10.59	2,504.54	236.50		
Papayas	5,129	14.78	6,338.42	428.85		
Pineapples	*	*	*	*		
Chat	29,628	1,428.69	17,715.80	12.40		
Coffee	31,089	2,017.88	11,905.47	5.90		
Hops	70,348	908.70	16,174.84	17.80		
Sugar cane	3,525	151.01	*	*		

Table 7.3 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Illubabor</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	252,548	235,947.52	3,214,780.03			
<u>Cereals</u>	251,313	199,591.25	2,954,324.39			
Teff	142,252	65,253.10	616,168.16	9.44	9.28	12.80
Barley	45,839	5,511.96	44,077.84	8.00	8.01	-
Wheat	55,277	11,452.38	65,019.38	5.68	5.93	24.99
Maize	219,517	70,124.19	1,455,320.37	20.75	19.06	26.85
Sorghum	154,531	38,792.03	633,157.94	16.32	15.83	-
Finger millet	45,659	8,380.34	139,837.07	16.69	16.71	-
Oats / 'Aja'	1,216	23.54	38.84	1.65		
Rice	781	53.71	704.80	13.12		
<u>Pulses</u>	138,037	18,778.61	148,070.81			
Faba beans	60,560	6,275.26	53,987.94	8.60		
Field peas	29,051	5,175.36	34,028.89	6.58		
Haricot beans	81,098	4,053.82	28,934.88	7.14		
Chick-peas	13,582	2,316.45	25,633.83	11.07		
Lentils	753	48.52	*	*		
Grass peas	811	71.84	611.36	8.51		
Soya beans	8,697	547.68	4,027.16	7.35		
Fenugreek	13,451	289.68	846.77	2.92		
Gibto	*	*	*	*		
<u>Oilseeds</u>	68,559	17,577.66	112,384.84			
Neug	28,945	6,064.94	30,358.93	5.01		
Linseed	13,018	706.52	2,561.96	3.63		
Groundnuts	8,635	274.12	4,294.92	15.67		
Safflower	814	3.45	2.39	0.69		
Sesame	30,666	10,464.67	75,005.26	7.17		
Rape seed	2,420	63.97	161.38	2.52		
<u>Vegetables</u>	138,577	2,973.72	102,319.03			
Lettuce	33	0.05	1.80	36.00		
Head cabbage	13,402	28.98	2,692.67	92.91		
Ethiopian cabbage	58,282	251.08	22,270.61	88.70		
Tomatoes	1,231	3.58	82.27	22.98		
Green peppers	49,342	309.13	21,082.35	68.20		
Red peppers	68,216	2,380.90	56,189.32	23.60		
Swiss chard	*	*	*	*		
<u>Root crops</u>	102,249	1,613.96	120,124.83			
Beetroot	19,044	37.35	3,070.53	82.21		
Carrot	7,051	16.28	1,074.72	66.01		
Onion	23,220	285.66	22,681.06	79.40		
Potatoes	3,215	30.03	1,636.47	54.49		
Garlic	29,096	112.54	9,340.73	83.00		
Taro / 'Godere'	30,962	247.29	21,711.78	87.80		
Sweet potatoes	36,417	884.81	60,609.54	68.50		
<u>Fruit crops</u>	83,667	879.83	107,386.10			
Avocados	6,520	33.22	1,405.31	42.30		
Bananas	51,955	538.77	31,302.35	58.10		
Guavas	2,366	7.43	204.39	27.51		
Lemons	2,295	17.73	1,898.45	107.08		
Mangoes	21,428	112.63	14,404.95	127.90		
Oranges	13,474	82.00	10,881.06	132.70		
Papayas	22,055	88.05	47,289.60	537.08		
Pineapples	16	0.02	*	*		
Chat	74,322	2,356.52	20,030.47	8.50		
Coffee	109,094	20,879.00	135,713.51	6.50		
Hops	19,491	246.32	3,152.94	12.80		
Sugar cane	29,107	254.33	166,712.46	655.50		

Table 7.4 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Jimma</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	498,756	434,109.28	5,567,016.00			
<u>Cereals</u>	495,276	375,262.35	5,107,618.52			
Teff	370,721	144,926.61	1,135,188.17	7.83	7.96	10.40
Barley	154,659	21,117.92	164,080.72	7.77	7.78	10.73
Wheat	158,410	32,883.77	357,686.91	10.88	10.90	25.00
Maize	347,715	110,206.20	2,586,777.68	23.47	21.72	25.90
Sorghum	263,069	58,842.16	785,161.29	13.34	13.32	17.50
Finger millet	32,863	5,979.42	65,307.16	10.92	10.92	-
Oats / 'Aja'	18,871	1,306.27	13,416.58	10.27		
Rice	*	*	*	*		
<u>Pulses</u>	208,822	35,436.26	312,329.21			
Faba beans	143,053	18,335.89	174,582.77	9.52		
Field peas	72,451	14,369.65	123,355.28	8.58		
Haricot beans	40,291	973.18	5,511.12	5.66		
Chick-peas	15,000	972.23	5,988.60	6.16		
Lentils	19,140	624.95	2,064.28	3.30		
Grass peas	*	*	*	*		
Soya beans	2,383	74.66	827.16	11.08		
Fenugreek	3,230	85.70	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	127,597	23,410.66	147,068.27			
Neug	51,895	18,398.40	121,052.07	6.58		
Linseed	72,676	2,891.11	9,276.09	3.21		
Groundnuts	4,270	170.48	3,221.68	18.90		
Safflower	27	0.04	*	*		
Sesame	8,983	1,722.09	13,183.12	7.66		
Rape seed	8,721	228.55	335.32	1.47		
<u>Vegetables</u>	361,187	5,329.49	356,351.99			
Lettuce	448	0.13	*	*		
Head cabbage	24,536	86.61	10,047.19	116.00		
Ethiopian cabbage	304,023	2,307.55	264,906.41	114.80		
Tomatoes	7,040	30.82	308.22	10.00		
Green peppers	99,332	461.76	27,151.20	58.80		
Red peppers	53,971	2,440.68	53,938.95	22.10		
Swiss chard	924	1.95	*	*		
<u>Root crops</u>	261,020	8,093.46	466,532.36			
Beetroot	20,344	119.19	15,376.10	129.00		
Carrot	3,186	6.88	440.13	63.97		
Onion	9,146	79.52	6,599.86	83.00		
Potatoes	23,104	1,275.30	82,002.05	64.30		
Garlic	53,139	164.04	13,795.65	84.10		
Taro / 'Godere'	191,007	6,253.48	348,318.57	55.70		
Sweet potatoes	25,358	195.05	*	*		
<u>Fruit crops</u>	233,515	3,421.09	403,202.63			
Avocados	22,337	136.09	12,779.24	93.90		
Bananas	168,650	2,107.34	185,867.18	88.20		
Guavas	25,070	142.70	2,625.61	18.40		
Lemons	6,094	11.17	107.20	9.60		
Mangoes	65,970	315.19	37,822.87	120.00		
Oranges	66,122	512.70	123,099.06	240.10		
Papayas	62,309	174.17	39,240.96	225.30		
Pineapples	4,621	21.73	1,660.50	76.42		
Chat	273,153	8,516.22	103,898.00	12.20		
Coffee	274,914	36,098.48	238,249.97	6.60		
Hops	10,475	55.33	680.62	12.30		
Sugar cane	129,733	1,363.28	1,174,465.55	861.50		

Table 7.5 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**West Shewa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	423,025	550,621.49	9,348,759.33			
<u>Cereals</u>	418,824	462,195.38	8,333,550.99			
Teff	201,692	117,680.56	1,581,343.64	13.44	13.27	14.11
Barley	186,251	86,761.68	1,390,139.66	16.02	15.08	16.16
Wheat	264,200	145,596.31	2,804,757.57	19.26	19.36	23.28
Maize	249,559	58,105.47	1,603,274.96	27.59	24.41	33.57
Sorghum	123,829	47,779.68	889,582.91	18.62	18.60	19.00
Finger millet	411	10.69	103.93	9.72	10.10	-
Oats / 'Aja'	35,648	6,260.97	64,348.31	10.28		
Rice	*	*	*	*		
<u>Pulses</u>	198,417	48,706.48	711,855.40			
Faba beans	157,895	26,861.15	402,034.92	14.97		
Field peas	42,878	8,294.71	114,188.03	13.77		
Haricot beans	8,925	93.78	964.01	10.28		
Chick-peas	14,876	3,579.24	56,928.39	15.91		
Lentils	18,878	2,043.96	18,709.46	9.15		
Grass peas	25,443	6,484.19	98,438.16	15.18		
Soya beans	3,519	1,226.69	19,136.39	15.60		
Fenugreek	8,230	122.77	1,456.04	11.86		
Gibto	*	*	*	*		
<u>Oilseeds</u>	124,865	39,719.63	303,352.94			
Neug	38,151	13,248.36	92,487.83	6.98		
Linseed	77,537	22,881.55	180,362.37	7.88		
Groundnuts	411	0.32	0.07	0.22		
Safflower	1,662	44.60	450.75	10.11		
Sesame	5,410	2,356.89	18,613.43	7.90		
Rape seed	23,093	1,187.91	11,438.49	9.63		
<u>Vegetables</u>	190,478	3,425.97	100,065.62			
Lettuce	4,664	18.61	*	*		
Head cabbage	12,799	67.36	7,072.60	105.00		
Ethiopian cabbage	94,728	745.42	49,197.93	66.00		
Tomatoes	787	52.39	4,107.18	78.40		
Green peppers	71,949	753.09	39,687.91	52.70		
Red peppers	49,990	1,781.55	*	*		
Swiss chard	4,575	7.55	*	*		
<u>Root crops</u>	206,263	4,413.44	323,853.98			
Beetroot	18,101	60.41	7,793.48	129.01		
Carrot	6,923	13.41	2,328.16	173.61		
Onion	53,283	238.71	17,354.21	72.70		
Potatoes	48,666	2,763.17	177,948.33	64.40		
Garlic	171,003	1,034.32	118,429.80	114.50		
Taro / 'Godere'	1,227	2.11	*	*		
Sweet potatoes	10,333	301.30	*	*		
<u>Fruit crops</u>	24,378	235.21	*	*		
Avocados	706	1.79	*	*		
Bananas	10,121	115.43	*	*		
Guavas	1,593	7.83	*	*		
Lemons	4,824	10.98	*	*		
Mangoes	11,252	86.65	*	*		
Oranges	4,466	10.61	*	*		
Papayas	1,972	1.91	*	*		
Pineapples	*	*	*	*		
Chat	17,155	453.79	*	*		
Coffee	18,359	157.48	*	*		
Hops	124,784	885.56	6,995.96	7.90		
Sugar cane	10,808	325.42	*	*		

Table 7.6 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**North Shewa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	268,907	370,740.53	4,023,975.56			
<u>Cereals</u>	265,121	291,966.86	3,367,414.18			
Teff	165,220	95,414.57	892,180.50	9.35	9.24	13.40
Barley	116,917	81,061.61	884,305.50	10.91	10.65	15.48
Wheat	139,553	55,242.06	724,023.45	13.11	11.29	14.83
Maize	89,790	5,870.05	61,962.31	10.56	10.56	-
Sorghum	84,507	53,299.86	795,121.43	14.92	14.92	-
Finger millet	354	61.94	*	*	9.24	-
Oats / 'Aja'	9,428	1,016.78	9,821.00	9.66		
Rice	*	*	*	*		
<u>Pulses</u>	156,608	66,837.01	602,002.01			
Faba beans	117,939	35,380.29	340,934.67	9.64		
Field peas	41,380	6,467.80	42,483.17	6.57		
Haricot beans	1,907	73.00	544.48	7.46		
Chick-peas	15,937	5,136.11	47,677.69	9.28		
Lentils	46,130	9,514.62	43,276.58	4.55		
Grass peas	39,578	9,793.61	125,430.04	12.81		
Soya beans	*	*	*	*		
Fenugreek	5,299	471.59	1,655.36	3.51		
Gibto	*	*	*	*		
<u>Oilseeds</u>	62,601	11,936.66	54,559.37			
Neug	16,308	2,688.07	10,615.33	3.95		
Linseed	35,936	7,957.28	36,815.95	4.63		
Groundnuts	*	*	*	*		
Safflower	7,461	1,170.58	6,530.71	5.58		
Sesame	615	69.36	363.03	5.23		
Rape seed	5,911	51.36	234.34	4.56		
<u>Vegetables</u>	75,829	446.41	40,314.55			
Lettuce	332	0.14	*	*		
Head cabbage	759	0.37	*	*		
Ethiopian cabbage	41,766	147.94	14,498.09	98.00		
Tomatoes	359	0.38	*	*		
Green peppers	28,653	224.51	22,451.38	100.00		
Red peppers	5,171	70.40	3,365.07	47.80		
Swiss chard	4,387	2.66	*	*		
<u>Root crops</u>	101,378	895.46	115,270.66			
Beetroot	5,634	21.15	2,707.54	128.02		
Carrot	2,219	31.38	*	*		
Onion	6,772	212.81	28,516.97	134.00		
Potatoes	3,231	54.31	*	*		
Garlic	96,087	571.74	84,046.15	147.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	807	4.06	*	*		
<u>Fruit crops</u>	9,440	515.95	6,707.48			
Avocados	*	*	*	*		
Bananas	5,338	157.24	3,931.04	25.00		
Guavas	*	*	*	*		
Lemons	662	0.41	19.10	46.59		
Mangoes	347	0.21	*	*		
Oranges	*	*	*	*		
Papayas	5,323	358.10	2,757.34	7.70		
Pineapples	*	*	*	*		
Chat	9,578	2,753.85	34,147.69	12.40		
Coffee	3,752	69.40	562.14	8.10		
Hops	30,041	181.55	2,142.26	11.80		
Sugar cane	1,187	44.82	5,790.26	129.19		

Table 7.7 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**East Shewa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	399,055	495,951.36	9,062,147.21			
<u>Cereals</u>	391,062	416,683.12	8,315,908.81			
Teff	206,916	151,470.50	2,078,206.08	13.72	13.48	16.29
Barley	83,036	18,079.49	295,093.70	16.32	16.65	19.70
Wheat	159,626	88,265.30	1,748,304.72	19.81	19.21	24.85
Maize	287,205	139,373.25	3,894,270.28	27.94	26.23	31.30
Sorghum	84,694	13,626.49	236,875.02	17.38	17.42	-
Finger millet	35,435	3,897.63	61,130.58	15.68	15.57	16.34
Oats / 'Aja'	11,087	1,970.45	2,028.42	1.03		
Rice	*	*	*	*		
<u>Pulses</u>	213,601	77,451.82	739,050.78			
Faba beans	58,194	7,766.99	74,868.14	9.64		
Field peas	39,610	10,865.52	50,143.32	4.61		
Haricot beans	133,155	28,861.14	274,671.63	9.52		
Chick-peas	38,474	15,722.91	177,613.35	11.30		
Lentils	30,509	7,883.93	88,147.18	11.18		
Grass peas	35,069	6,165.32	73,284.72	11.89		
Soya beans	*	*	*	*		
Fenugreek	6,384	186.01	322.43	1.73		
Gibto	*	*	*	*		
<u>Oilseeds</u>	34,225	1,816.42	7,187.62			
Neug	1,000	9.44	*	*		
Linseed	9,244	642.56	2,268.22	3.53		
Groundnuts	*	*	*	*		
Safflower	2,659	66.52	*	*		
Sesame	11,830	827.82	3,999.11	4.83		
Rape seed	11,166	270.09	920.28	3.41		
<u>Vegetables</u>	105,199	3,149.98	281,242.58			
Lettuce	769	0.94	*	*		
Head cabbage	4,031	133.92	15,935.92	119.00		
Ethiopian cabbage	68,383	862.93	84,049.78	97.40		
Tomatoes	8,217	609.96	54,408.57	89.20		
Green peppers	35,747	521.38	47,081.03	90.30		
Red peppers	17,741	1,014.85	79,767.28	78.60		
Swiss chard	1,248	5.99	*	*		
<u>Root crops</u>	74,517	8,469.83	727,879.42			
Beetroot	5,509	219.67	28,557.64	130.00		
Carrot	3,908	116.18	14,173.60	122.00		
Onion	24,536	556.31	74,545.65	134.00		
Potatoes	35,977	7,226.65	569,460.14	78.80		
Garlic	22,350	174.28	21,435.94	123.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	2,784	176.74	19,706.45	111.50		
<u>Fruit crops</u>	9,944	271.70	15,404.99			
Avocados	785	2.23	106.54	47.78		
Bananas	5,624	231.94	13,313.15	57.40		
Guavas	1,993	4.95	13.36	2.70		
Lemons	1,077	2.10	2.52	1.20		
Mangoes	2,006	7.62	*	*		
Oranges	538	1.84	297.97	161.94		
Papayas	4,234	21.02	1,671.45	79.52		
Pineapples	*	*	*	*		
Chat	5,633	243.09	2,552.44	10.50		
Coffee	3,105	367.69	*	*		
Hops	30,676	867.31	5,117.11	5.90		
Sugar cane	4,949	993.42	431,839.69	434.70		



Table 7.8 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Arsi**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	539,478	603,343.29	8,676,457.54			
<u>Cereals</u>	523,145	480,609.99	7,651,424.34			
Teff	200,060	90,846.13	711,722.06	7.83	7.64	9.35
Barley	264,409	92,983.72	1,352,027.71	14.54	13.28	18.49
Wheat	325,234	190,525.58	3,330,402.92	17.48	16.28	19.36
Maize	312,499	72,312.66	1,673,434.85	23.14	20.67	31.71
Sorghum	110,852	30,020.76	539,070.54	17.96	17.94	30.60
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	40,400	3,921.14	44,766.27	11.42		
Rice	*	*	*	*		
<u>Pulses</u>	265,274	51,525.25	549,614.58			
Faba beans	160,514	24,668.48	342,815.56	13.90		
Field peas	72,257	13,573.99	105,510.71	7.77		
Haricot beans	72,244	6,303.56	54,005.16	8.57		
Chick-peas	6,554	758.19	7,205.78	9.50		
Lentils	36,116	2,316.20	10,021.78	4.33		
Grass peas	22,538	2,967.77	23,434.78	7.90		
Soya beans	540	25.25	171.71	6.80		
Fenugreek	14,106	911.82	6,449.11	7.07		
Gibto	*	*	*	*		
<u>Oilseeds</u>	195,962	71,208.05	475,418.61			
Neug	17,838	4,928.97	21,975.32	4.46		
Linseed	157,966	62,154.73	415,435.51	6.68		
Groundnuts	3,947	353.85	1,804.65	5.10		
Safflower	2,601	42.33	418.10	9.88		
Sesame	*	*	*	*		
Rape seed	37,257	3,728.16	35,785.03	9.60		
<u>Vegetables</u>	167,652	8,349.25	333,806.18			
Lettuce	2,615	4.08	*	*		
Head cabbage	8,737	94.45	*	*		
Ethiopian cabbage	72,826	799.09	22,374.58	28.00		
Tomatoes	13,721	2,709.35	211,329.63	78.00		
Green peppers	37,692	455.25	24,264.98	53.30		
Red peppers	49,323	4,284.57	75,836.98	17.70		
Swiss chard	1,618	2.45	*	*		
<u>Root crops</u>	183,974	12,025.84	963,790.57			
Beetroot	22,804	270.45	33,806.94	125.00		
Carrot	9,005	154.70	9,808.09	63.40		
Onion	70,923	4,768.47	393,399.28	82.50		
Potatoes	70,867	5,402.67	377,106.29	69.80		
Garlic	74,905	844.20	122,071.06	144.60		
Taro / 'Godere'	3,024	9.16	*	*		
Sweet potatoes	11,223	576.18	27,598.90	47.90		
<u>Fruit crops</u>	38,408	540.62	135,604.02			
Avocados	1,012	3.31	*	*		
Bananas	19,745	157.27	6,636.78	42.20		
Guavas	6,393	15.03	*	*		
Lemons	3,289	5.06	*	*		
Mangoes	3,849	48.21	*	*		
Oranges	10,233	45.31	7,901.64	174.39		
Papayas	14,919	266.43	121,065.60	454.40		
Pineapples	*	*	*	*		
Chat	51,013	3,903.36	53,866.36	13.80		
Coffee	48,488	5,735.23	41,867.14	7.30		
Hops	41,098	636.38	4,072.86	6.40		
Sugar cane	12,985	1,075.09	217,704.86	202.50		

Table 7.9 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**West Harerge**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	304,944	197,010.35	2,584,152.00			
<u>Cereals</u>	302,500	165,624.17	2,276,969.48			
Teff	58,664	11,662.99	114,335.05	9.80	9.93	10.37
Barley	67,202	5,762.56	52,335.08	9.08	9.31	10.24
Wheat	50,999	5,879.93	79,052.47	13.44	12.29	15.16
Maize	233,106	44,046.47	743,178.64	16.87	16.15	23.45
Sorghum	235,816	96,086.19	1,266,795.54	13.18	12.94	18.07
Finger millet	21,322	1,680.43	15,473.76	9.21	9.61	14.10
Oats / 'Aja'	11,068	505.60	5,798.93	11.47		
Rice	*	*	*	*		
<u>Pulses</u>	147,837	17,822.84	213,850.60			
Faba beans	17,679	2,027.71	34,858.39	17.19		
Field peas	2,855	301.69	2,325.17	7.71		
Haricot beans	120,288	13,066.76	155,074.62	11.87		
Chick-peas	13,146	1,323.83	16,468.63	12.44		
Lentils	9,544	507.67	1,892.20	3.73		
Grass peas	375	26.09	*	*		
Soya beans	*	*	*	*		
Fenugreek	21,788	569.09	3,231.60	5.68		
Gibto	*	*	*	*		
<u>Oilseeds</u>	86,362	13,563.35	93,331.92			
Neug	*	*	*	*		
Linseed	32,490	1,295.82	5,800.12	4.48		
Groundnuts	46,807	9,667.00	63,848.68	6.60		
Safflower	2,125	23.26	9.67	0.42		
Sesame	25,298	2,433.80	23,460.83	9.64		
Rape seed	2,816	143.47	212.63	1.48		
<u>Vegetables</u>	66,517	4,818.50	112,081.02			
Lettuce	*	*	*	*		
Head cabbage	1,446	15.53	1,847.74	118.98		
Ethiopian cabbage	769	5.02	502.10	100.02		
Tomatoes	3,326	72.03	*	*		
Green peppers	13,125	192.78	11,817.18	61.30		
Red peppers	51,265	4,533.06	97,914.01	21.60		
Swiss chard	335	0.08	*	*		
<u>Root crops</u>	97,637	4,633.95	215,513.95			
Beetroot	2,437	13.60	435.34	32.01		
Carrot	1,389	12.29	*	*		
Onion	36,328	1,331.67	179,774.90	135.00		
Potatoes	4,995	58.56	3,941.04	67.30		
Garlic	2,631	24.56	1,984.53	80.80		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	70,645	3,193.28	29,378.14	9.20		
<u>Fruit crops</u>	66,253	903.44	120,403.86			
Avocados	981	12.68	329.61	25.99		
Bananas	28,094	545.08	51,183.30	93.90		
Guavas	25,425	118.54	3,307.16	27.90		
Lemons	5,541	9.61	638.79	66.47		
Mangoes	11,236	69.61	8,332.89	119.71		
Oranges	9,577	26.77	4,382.54	163.71		
Papayas	19,175	121.15	52,229.57	431.11		
Pineapples	*	*	*	*		
Chat	199,693	26,262.70	212,727.88	8.10		
Coffee	123,332	14,361.85	136,437.65	9.50		
Hops	5,078	39.00	206.68	5.30		
Sugar cane	12,042	246.93	311,353.13	1,260.90		

Table 7.10 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**East Harerge**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	442,913	256,518.26	2,942,400.69			
<u>Cereals</u>	440,806	212,721.98	2,566,291.23			
Teff	41,672	3,198.01	24,462.55	7.65	7.86	10.90
Barley	78,590	10,900.50	114,170.92	10.47	10.21	11.89
Wheat	126,517	44,864.42	240,171.89	5.35	10.82	28.77
Maize	370,596	56,910.85	1,075,239.57	18.89	16.94	26.66
Sorghum	329,713	92,382.20	1,104,634.22	11.96	11.75	16.52
Finger millet	484	5.92	*	*	*	-
Oats / 'Aja'	27,564	4,460.08	7,612.08	1.71		
Rice	*	*	*	*		
<u>Pulses</u>	188,269	21,093.29	216,551.39			
Faba beans	37,172	5,122.68	74,099.92	14.47		
Field peas	22,385	4,738.58	13,825.34	2.92		
Haricot beans	115,099	7,651.01	111,138.03	14.53		
Chick-peas	6,445	203.60	1,219.70	5.99		
Lentils	30,392	1,212.94	8,324.39	6.86		
Grass peas	7,702	1,207.03	*	*		
Soya beans	*	*	*	*		
Fenugreek	46,804	957.44	7,944.01	8.30		
Gibto	*	*	*	*		
<u>Oilseeds</u>	121,651	22,702.99	159,558.06			
Neug	2,983	170.69	*	*		
Linseed	56,027	7,726.11	9,953.94	1.29		
Groundnuts	65,916	14,505.28	147,862.41	10.19		
Safflower	*	*	*	*		
Sesame	7,960	297.47	1,741.71	5.86		
Rape seed	584	3.44	*	*		
<u>Vegetables</u>	50,949	1,109.43	88,958.86			
Lettuce	4,697	184.96	18,495.90	100.00		
Head cabbage	9,639	336.45	39,700.86	118.00		
Ethiopian cabbage	3,646	20.77	270.05	13.00		
Tomatoes	9,607	142.32	11,854.91	83.30		
Green peppers	22,939	345.63	18,076.67	52.30		
Red peppers	10,773	75.74	560.47	7.40		
Swiss chard	536	3.56	*	*		
<u>Root crops</u>	235,552	14,161.09	1,150,630.99			
Beetroot	6,709	326.51	42,119.87	129.00		
Carrot	1,711	106.71	13,008.33	121.90		
Onion	39,863	1,105.51	106,460.78	96.30		
Potatoes	60,817	3,806.47	399,679.41	105.00		
Garlic	28,576	831.27	123,859.93	149.00		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	165,044	7,984.61	465,502.66	58.30		
<u>Fruit crops</u>	92,002	700.96	72,271.29			
Avocados	3,901	12.72	*	*		
Bananas	37,332	197.87	13,573.63	68.60		
Guavas	26,822	86.37	1,839.78	21.30		
Lemons	4,096	19.67	1,128.88	57.39		
Mangoes	31,638	286.71	33,029.48	115.20		
Oranges	1,813	3.65	768.17	210.46		
Papayas	12,111	93.96	21,931.35	233.41		
Pineapples	*	*	*	*		
Chat	358,496	42,666.81	396,801.29	9.30		
Coffee	74,027	2,783.71	19,207.65	6.90		
Hops	4,310	40.51	*	*		
Sugar cane	6,389	71.21	94,962.95	1,333.56		

Table 7.11 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Bale</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	302,579	388,385.49	5,297,378.01			
<u>Cereals</u>	294,632	311,877.80	4,717,701.94			
Teff	46,953	18,658.33	119,650.11	6.41	5.64	8.51
Barley	198,314	131,014.68	1,986,947.70	15.17	15.78	20.19
Wheat	165,639	123,035.28	1,985,516.27	16.14	13.95	18.07
Maize	134,061	24,058.04	457,609.80	19.02	18.31	22.09
Sorghum	1,022	145.71	227.58	1.56	*	-
Finger millet	719	4.01	*	*	*	-
Oats / 'Aja'	56,069	14,961.75	167,750.46	11.21		
Rice	*	*	*	*		
<u>Pulses</u>	99,333	29,671.39	265,051.30			
Faba beans	64,282	10,083.60	112,577.25	11.16		
Field peas	36,144	12,092.80	78,448.94	6.49		
Haricot beans	3,099	125.38	526.94	4.20		
Chick-peas	2,551	252.34	327.64	1.30		
Lentils	14,943	741.44	3,736.89	5.04		
Grass peas	13,297	6,198.24	68,065.95	10.98		
Soya beans	*	*	*	*		
Fenugreek	6,687	177.58	1,367.68	7.70		
Gibto	*	*	*	*		
<u>Oilseeds</u>	89,847	46,836.29	314,624.77			
Neug	2,350	623.85	1,365.17	2.19		
Linseed	86,251	46,188.24	313,206.49	6.78		
Groundnuts	7	0.02	*	*		
Safflower	719	12.95	53.12	4.10		
Sesame	3	0.43	*	*		
Rape seed	1,438	10.79	*	*		
<u>Vegetables</u>	111,298	10,248.96	137,945.02			
Lettuce	*	*	*	*		
Head cabbage	4,683	131.46	8,268.51	62.90		
Ethiopian cabbage	74,344	599.29	42,909.36	71.60		
Tomatoes	116	0.55	43.30	78.73		
Green peppers	4,310	73.83	4,562.50	61.80		
Red peppers	31,020	9,443.83	82,161.35	8.70		
Swiss chard	*	*	*	*		
<u>Root crops</u>	84,513	4,358.83	283,941.03			
Beetroot	7,615	33.81	2,451.24	72.50		
Carrot	3,348	9.54	678.22	71.09		
Onion	26,906	412.97	28,907.88	70.00		
Potatoes	47,201	3,060.48	186,995.36	61.10		
Garlic	25,872	769.79	60,813.57	79.00		
Taro / 'Godere'	806	2.13	288.02	135.22		
Sweet potatoes	674	70.11	3,806.74	54.30		
<u>Fruit crops</u>	9,019	312.06	100,330.57			
Avocados	*	*	*	*		
Bananas	1,686	22.30	2,312.71	103.71		
Guavas	719	0.46	11.75	25.54		
Lemons	*	*	*	*		
Mangoes	3	0.05	2.08	41.60		
Oranges	3,228	106.72	34,886.38	326.90		
Papayas	5,894	182.53	63,117.66	345.79		
Pineapples	*	*	*	*		
Chat	13,576	2,830.11	21,508.85	7.60		
Coffee	14,234	3,097.65	20,754.25	6.70		
Hops	5,764	34.62	321.99	9.30		
Sugar cane	1,570	16.79	10,651.62	634.40		

Table 7.12 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Borena**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	108,630	33,138.24	280,280.42			
<u>Cereals</u>	87,279	23,427.98	243,137.15			
Teff	18,721	4,185.86	14,059.55	3.36	3.39	7.80
Barley	29,192	4,203.28	9,616.66	2.29	2.29	-
Wheat	7,665	700.93	4,560.81	6.51	6.51	-
Maize	75,453	13,426.78	212,519.94	15.83	13.11	27.62
Sorghum	4,075	911.14	2,380.18	2.61	2.61	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	66,913	9,575.20	37,077.94			
Faba beans	7,105	281.82	2,326.34	8.25		
Field peas	2,749	125.79	121.82	0.97		
Haricot beans	60,781	9,087.88	34,184.04	3.76		
Chick-peas	1,254	65.16	355.64	5.46		
Lentils	337	6.97	*	*		
Grass peas	*	*	*	*		
Soya beans	362	7.57	90.10	11.90		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	2,253	135.05	65.34			
Neug	*	*	*	*		
Linseed	1,134	102.84	17.44	0.17		
Groundnuts	*	*	*	*		
Safflower	355	2.61	*	*		
Sesame	*	*	*	*		
Rape seed	765	29.60	47.89	1.62		
<u>Vegetables</u>	48,763	701.19	69,114.28			
Lettuce	*	*	*	*		
Head cabbage	*	*	*	*		
Ethiopian cabbage	45,765	625.51	62,550.69	100.00		
Tomatoes	1,513	2.64	47.45	17.97		
Green peppers	8,459	72.59	6,511.11	89.70		
Red peppers	199	0.46	5.03	10.93		
Swiss chard	*	*	*	*		
<u>Root crops</u>	25,643	845.71	82,100.64			
Beetroot	1,805	4.11	*	*		
Carrot	*	*	*	*		
Onion	170	0.03	3.52	117.33		
Potatoes	2,092	101.99	9,648.42	94.60		
Garlic	1,586	7.06	1,058.84	149.98		
Taro / 'Godere'	4,078	22.06	1,764.99	80.01		
Sweet potatoes	18,815	710.46	69,624.87	98.00		
<u>Fruit crops</u>	35,426	946.95	49,169.99			
Avocados	12,302	100.20	9,167.92	91.50		
Bananas	26,320	725.22	32,272.50	44.50		
Guavas	1,748	6.93	49.91	7.20		
Lemons	*	*	*	*		
Mangoes	1,190	50.45	*	*		
Oranges	1,484	41.73	4,932.00	118.19		
Papayas	3,940	18.20	2,747.66	150.97		
Pineapples	391	4.23	*	*		
Chat	13,493	1,233.39	10,113.77	8.20		
Coffee	60,114	10,552.71	102,361.30	9.70		
Hops	5,328	29.02	348.26	12.00		
Sugar cane	14,343	633.97	718,222.23	1,132.90		

Table 7.13 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**South West Shewa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	215,339	281,993.31	3,866,083.17			
<u>Cereals</u>	209,918	217,771.98	3,120,553.27			
Teff	160,628	125,651.92	1,497,527.87	11.92	11.68	12.93
Barley	45,403	9,104.11	128,270.23	14.09	14.06	17.80
Wheat	135,439	53,833.76	910,461.11	16.91	15.23	20.53
Maize	120,724	21,823.89	478,537.47	21.93	19.50	29.35
Sorghum	41,117	7,189.16	104,918.70	14.59	14.60	-
Finger millet	455	45.18	*	*	*	-
Oats / 'Aja'	3,407	123.96	837.89	6.76		
Rice	*	*	*	*		
<u>Pulses</u>	139,746	53,646.52	682,991.69			
Faba beans	65,104	7,699.26	104,410.47	13.56		
Field peas	18,700	3,272.11	40,100.20	12.26		
Haricot beans	17,658	1,851.81	6,535.29	3.53		
Chick-peas	67,963	25,607.24	327,960.23	12.81		
Lentils	25,438	3,551.07	30,296.92	8.53		
Grass peas	51,537	11,486.21	172,879.26	15.05		
Soya beans	*	*	*	*		
Fenugreek	6,088	178.83	809.31	4.53		
Gibto	*	*	*	*		
<u>Oilseeds</u>	40,484	10,574.81	62,538.21			
Neug	20,191	6,567.50	37,307.06	5.68		
Linseed	16,579	3,784.16	23,594.06	6.23		
Groundnuts	*	*	*	*		
Safflower	652	10.70	*	*		
Sesame	301	5.73	22.94	4.00		
Rape seed	7,099	206.71	1,614.16	7.81		
<u>Vegetables</u>	93,920	4,667.38	66,631.15			
Lettuce	1,085	2.60	*	*		
Head cabbage	7,346	41.68	1,375.36	33.00		
Ethiopian cabbage	65,792	363.18	65,008.43	179.00		
Tomatoes	3,129	27.48	247.37	9.00		
Green peppers	39,306	178.18	*	*		
Red peppers	8,033	4,047.29	*	*		
Swiss chard	2,063	6.97	*	*		
<u>Root crops</u>	62,499	1,354.51	15,659.74			
Beetroot	10,496	18.29	2,285.76	124.97		
Carrot	3,018	6.76	737.33	109.07		
Onion	10,358	311.85	3,742.16	12.00		
Potatoes	8,900	117.64	1,941.05	16.50		
Garlic	37,240	173.40	6,953.43	40.10		
Taro / 'Godere'	1,813	2.11	*	*		
Sweet potatoes	7,858	724.46	*	*		
<u>Fruit crops</u>	25,501	678.97	20,639.91			
Avocados	4,827	56.86	*	*		
Bananas	17,530	327.08	16,059.68	49.10		
Guavas	3,698	21.07	*	*		
Lemons	1,815	5.43	435.29	80.16		
Mangoes	3,883	187.21	*	*		
Oranges	3,422	58.43	*	*		
Papayas	6,472	22.89	4,144.93	181.08		
Pineapples	*	*	*	*		
Chat	33,314	1,860.53	23,070.63	12.40		
Coffee	23,041	3,227.10	22,589.69	7.00		
Hops	37,778	470.20	6,159.55	13.10		
Sugar cane	13,068	164.30	72,618.51	441.99		

Table 7.14 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Guji**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	166,938	83,788.78	950,135.76			
<u>Cereals</u>	159,844	74,752.54	884,498.94			
Teff	41,297	14,131.14	96,077.78	6.80	6.79	-
Barley	82,682	26,348.73	276,759.22	10.50	10.48	16.90
Wheat	43,302	13,615.16	135,476.74	9.95	9.27	13.63
Maize	101,137	20,626.69	376,185.10	18.24	15.49	34.74
Sorghum	1,602	30.82	0.09	*	*	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	66,484	9,001.44	65,563.38			
Faba beans	38,676	3,039.41	24,868.87	8.18		
Field peas	25,396	4,543.52	31,487.22	6.93		
Haricot beans	20,988	1,314.18	8,598.17	6.54		
Chick-peas	1,396	101.02	606.04	6.00		
Lentils	2	0.06	*	*		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	310	3.25	3.08	0.95		
Gibto	*	*	*	*		
<u>Oilseeds</u>	1,655	34.80	73.44			
Neug	*	*	*	*		
Linseed	859	26.79	21.06	0.79		
Groundnuts	*	*	*	*		
Safflower	*	*	*	*		
Sesame	*	*	*	*		
Rape seed	795	8.01	52.38	6.54		
<u>Vegetables</u>	100,160	1,704.09	15.68			
Lettuce	242	0.85	*	*		
Head cabbage	1,210	8.47	*	*		
Ethiopian cabbage	98,357	1,582.12	*	*		
Tomatoes	576	1.96	15.68	8.00		
Green peppers	6,585	107.21	*	*		
Red peppers	624	3.48	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	19,657	521.69	16,947.48			
Beetroot	1,459	6.09	*	*		
Carrot	636	1.60	*	*		
Onion	1,189	42.38	*	*		
Potatoes	5,293	192.59	16,947.48	88.00		
Garlic	1,144	4.78	*	*		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	12,480	274.25	*	*		
<u>Fruit crops</u>	29,998	973.36	94,043.57			
Avocados	7,577	124.01	11,582.23	93.40		
Bananas	23,840	803.12	78,786.13	98.10		
Guavas	2,378	33.78	641.83	19.00		
Lemons	542	2.17	60.14	27.71		
Mangoes	*	*	*	*		
Oranges	605	0.76	*	*		
Papayas	1,942	9.51	2,973.23	312.64		
Pineapples	*	*	*	*		
Chat	4,562	206.19	1,587.68	7.70		
Coffee	53,296	10,517.21	77,827.34	7.40		
Hops	2,323	59.93	593.33	9.90		
Sugar cane	14,991	642.87	438,371.46	681.90		

Table 8 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Somali Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	81,247	67,289.50	378,094.17			
<u>Cereals</u>	81,108	65,914.66	376,438.90			
Teff	179	8.78	*	*	*	-
Barley	11,134	2,531.83	11,240.23	4.44	4.44	-
Wheat	24,461	9,671.83	47,166.14	4.88	4.88	-
Maize	64,055	22,965.34	137,198.92	5.97	5.98	-
Sorghum	58,955	30,475.03	180,018.72	5.91	5.97	25.00
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	2,628	258.29	802.11	3.11		
Rice	609	3.55	12.80	3.61		
<u>Pulses</u>	7,875	1,173.40	1,466.95			
Faba beans	*	*	*	*		
Field peas	544	7.79	9.74	1.25		
Haricot beans	4,684	650.79	327.97	0.50		
Chick-peas	1,841	456.19	1,017.96	2.23		
Lentils	208	9.89	24.73	2.50		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	925	48.73	86.55	1.78		
Gibto	*	*	*	*		
<u>Oilseeds</u>	3,669	201.44	188.32			
Neug	*	*	*	*		
Linseed	3,567	195.02	186.18	0.95		
Groundnuts	13	0.15	*	*		
Safflower	*	*	*	*		
Sesame	89	6.27	2.14	0.34		
Rape seed	*	*	*	*		
<u>Vegetables</u>	2,954	68.68	731.10			
Lettuce	*	*	*	*		
Head cabbage	544	13.80	*	*		
Ethiopian cabbage	136	2.07	*	*		
Tomatoes	2,107	40.44	479.41	11.85		
Green peppers	844	12.37	251.68	20.35		
Red peppers	*	*	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	5,532	296.54	15,781.73			
Beetroot	*	*	*	*		
Carrot	*	*	*	*		
Onion	1,962	72.15	6,718.49	93.12		
Potatoes	1,527	36.29	*	*		
Garlic	771	42.94	6,805.20	158.48		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	2,793	145.17	2,258.04	15.55		
<u>Fruit crops</u>	3,744	355.96	8,204.03			
Avocados	*	*	*	*		
Bananas	1,015	65.55	*	*		
Guavas	707	13.08	5.92	0.45		
Lemons	1,565	92.35	1,058.98	11.47		
Mangoes	2,110	73.32	6,962.78	94.96		
Oranges	1,250	110.48	*	*		
Papayas	549	1.18	176.34	149.44		
Pineapples	*	*	*	*		
Chat	23,328	6,916.72	17,219.98	2.49		
Coffee	2,623	97.11	*	*		
Hops	*	*	*	*		
Sugar cane	65	1.86	*	*		



Table 8.1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Shinele**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	3,056	892.13	7,532.03			
<u>Cereals</u>	3,056	891.39	7,529.62			
Teff	*	*	*	*	*	-
Barley	*	*	*	*	*	-
Wheat	*	*	*	*	*	-
Maize	912	67.83	793.62	11.70	11.69	-
Sorghum	2,818	823.55	6,736.00	8.18	8.18	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	31	0.07	0.27			
Faba beans	*	*	*	*	*	
Field peas	11	*	*	*	*	
Haricot beans	20	0.07	0.27	3.86	*	
Chick-peas	*	*	*	*	*	
Lentils	*	*	*	*	*	
Grass peas	*	*	*	*	*	
Soya beans	*	*	*	*	*	
Fenugreek	*	*	*	*	*	
Gibto	*	*	*	*	*	
<u>Oilseeds</u>	60	0.68	2.14			
Neug	*	*	*	*	*	
Linseed	*	*	*	*	*	
Groundnuts	13	0.15	*	*	*	
Safflower	*	*	*	*	*	
Sesame	48	0.53	2.14	4.04	*	
Rape seed	*	*	*	*	*	
<u>Vegetables</u>	273	9.20	729.52			
Lettuce	*	*	*	*	*	
Head cabbage	*	*	*	*	*	
Ethiopian cabbage	*	*	*	*	*	
Tomatoes	225	5.76	477.84	82.96	*	
Green peppers	103	3.45	251.68	72.95	*	
Red peppers	*	*	*	*	*	
Swiss chard	*	*	*	*	*	
<u>Root crops</u>	646	40.70	2,649.62			
Beetroot	*	*	*	*	*	
Carrot	*	*	*	*	*	
Onion	88	4.08	391.58	95.98	*	
Potatoes	*	*	*	*	*	
Garlic	22	0.08	*	*	*	
Taro / 'Godere'	*	*	*	*	*	
Sweet potatoes	570	36.54	2,258.04	61.80	*	
<u>Fruit crops</u>	1,825	275.34	4,457.03			
Avocados	*	*	*	*	*	
Bananas	667	41.61	*	*	*	
Guavas	217	1.42	*	*	*	
Lemons	1,535	91.94	983.79	10.70	*	
Mangoes	909	29.51	3,473.24	117.70	*	
Oranges	1,250	110.48	*	*	*	
Papayas	148	0.38	*	*	*	
Pineapples	*	*	*	*	*	
Chat	1,039	129.14	929.79	7.20	*	
Coffee	320	10.42	*	*	*	
Hops	*	*	*	*	*	
Sugar cane	65	1.86	*	*	*	

Table 8.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Jijiga**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	71,500	62,808.60	370,400.57			
<u>Cereals</u>	71,500	62,035.50	368,747.71			
Teff	136	8.78	*	*	*	-
Barley	11,134	2,531.83	11,240.23	4.44	4.44	-
Wheat	24,375	9,616.53	47,166.14	4.90	4.90	-
Maize	56,662	20,011.91	136,405.30	6.82	6.82	-
Sorghum	55,865	29,604.61	173,121.14	5.85	5.91	25.00
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	2,628	258.29	802.11	3.11		
Rice	609	3.55	12.80	3.61		
<u>Pulses</u>	4,842	578.08	1,466.68			
Faba beans	*	*	*	*		
Field peas	533	7.79	9.74	1.25		
Haricot beans	1,662	55.47	327.70	5.91		
Chick-peas	1,841	456.19	1,017.96	2.23		
Lentils	208	9.89	24.73	2.50		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	925	48.73	86.55	1.78		
Gibto	*	*	*	*		
<u>Oilseeds</u>	3,567	195.02	186.18			
Neug	*	*	*	*		
Linseed	3,567	195.02	186.18	0.95		
Groundnuts	*	*	*	*		
Safflower	*	*	*	*		
Sesame	*	*	*	*		
Rape seed	*	*	*	*		
<u>Vegetables</u>	2,651	58.74	*	*		
Lettuce	*	*	*	*		
Head cabbage	544	13.80	*	*		
Ethiopian cabbage	136	2.07	*	*		
Tomatoes	1,852	34.22	*	*		
Green peppers	712	8.65	*	*		
Red peppers	*	*	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	4,838	253.57	13,121.89			
Beetroot	*	*	*	*		
Carrot	*	*	*	*		
Onion	1,826	65.80	6,316.70	96.00		
Potatoes	1,527	36.29	*	*		
Garlic	749	42.85	6,805.20	158.81		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	2,223	108.63	*	*		
<u>Fruit crops</u>	744	26.51	*	*		
Avocados	*	*	*	*		
Bananas	177	0.83	*	*		
Guavas	455	11.44	*	*		
Lemons	*	*	*	*		
Mangoes	567	14.24	*	*		
Oranges	*	*	*	*		
Papayas	*	*	*	*		
Pineapples	*	*	*	*		
Chat	22,289	6,787.58	16,290.19	2.40		
Coffee	2,303	86.69	*	*		
Hops	*	*	*	*		
Sugar cane	*	*	*	*		

Table 8.3 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Liben**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	6,691	3,588.76	161.57			
<u>Cereals</u>	6,552	2,987.77	161.57			
Teff	43	*	*	*	*	-
Barley	*	*	*	*	*	-
Wheat	85	55.31	*	*	*	-
Maize	6,482	2,885.60	*	*	*	-
Sorghum	273	46.87	161.57	3.45	3.63	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	3,001	595.25	*			
Faba beans	*	*	*	*	*	
Field peas	*	*	*	*	*	
Haricot beans	3,001	595.25	*	*	*	
Chick-peas	*	*	*	*	*	
Lentils	*	*	*	*	*	
Grass peas	*	*	*	*	*	
Soya beans	*	*	*	*	*	
Fenugreek	*	*	*	*	*	
Gibto	*	*	*	*	*	
<u>Oilseeds</u>	41	5.74	*			
Neug	*	*	*	*	*	
Linseed	*	*	*	*	*	
Groundnuts	*	*	*	*	*	
Safflower	*	*	*	*	*	
Sesame	41	5.74	*	*	*	
Rape seed	*	*	*	*	*	
<u>Vegetables</u>	30	0.74	1.58			
Lettuce	*	*	*	*	*	
Head cabbage	*	*	*	*	*	
Ethiopian cabbage	*	*	*	*	*	
Tomatoes	30	0.46	1.58	3.43	*	
Green peppers	30	0.27	*	*	*	
Red peppers	*	*	*	*	*	
Swiss chard	*	*	*	*	*	
<u>Root crops</u>	48	2.27	10.21			
Beetroot	*	*	*	*	*	
Carrot	*	*	*	*	*	
Onion	48	2.27	10.21	4.50	*	
Potatoes	*	*	*	*	*	
Garlic	*	*	*	*	*	
Taro / 'Godere'	*	*	*	*	*	
Sweet potatoes	*	*	*	*	*	
<u>Fruit crops</u>	1,175	54.11	3,747.00	69.25		
Avocados	*	*	*	*	*	
Bananas	170	23.11	*	*	*	
Guavas	34	0.22	5.92	26.91	*	
Lemons	30	0.41	75.19	183.39	*	
Mangoes	635	29.57	3,489.54	118.01	*	
Oranges	*	*	*	*	*	
Papayas	400	0.80	176.34	220.43	*	
Pineapples	*	*	*	*	*	
Chat	*	*	*	*	*	
Coffee	*	*	*	*	*	
Hops	*	*	*	*	*	
Sugar cane	*	*	*	*	*	

Table 9 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Benishangul-Gumuz Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	139,086	171,876.48	2,085,801.89			
<u>Cereals</u>	137,630	124,182.37	1,770,205.57			
Teff	29,883	16,654.32	133,509.15	8.02	7.30	10.26
Barley	4,969	1,107.79	11,528.14	10.41	11.20	14.10
Wheat	5,392	2,047.65	28,936.19	14.13	13.24	16.93
Maize	124,195	31,720.76	626,628.19	19.75	18.62	26.57
Sorghum	93,032	52,886.98	723,156.89	13.67	13.67	17.50
Finger millet	36,673	19,485.45	242,916.13	12.47	12.39	15.06
Oats / 'Aja'	645	37.07	373.32	10.07		
Rice	1,037	242.35	3,157.56	13.03		
<u>Pulses</u>	50,814	6,595.70	50,345.23			
Faba beans	6,562	611.34	6,693.42	10.95		
Field peas	4,787	926.66	5,832.17	6.29		
Haricot beans	34,431	3,907.19	31,913.69	8.17		
Chick-peas	3,993	484.68	2,764.49	5.70		
Lentils	888	38.69	237.52	6.14		
Grass peas	*	*	*	*		
Soya beans	5,872	624.44	2,901.67	4.65		
Fenugreek	504	1.50	*	*		
Gibto	113	1.20	2.27	1.89		
<u>Oilseeds</u>	97,736	41,098.41	265,251.09			
Neug	34,163	13,075.67	73,033.07	5.59		
Linseed	5,658	286.01	977.58	3.42		
Groundnuts	27,358	4,186.33	58,978.39	14.09		
Safflower	1,931	137.32	313.59	2.28		
Sesame	66,446	23,280.48	131,312.04	5.64		
Rape seed	3,670	132.59	636.42	4.80		
<u>Vegetables</u>	38,532	1,002.20	23,975.96			
Lettuce	*	*	*	*		
Head cabbage	1,516	10.49	1,249.60	119.12		
Ethiopian cabbage	3,692	68.96	550.71	7.99		
Tomatoes	1,686	17.41	*	*		
Green peppers	3,603	29.03	1,031.58	35.53		
Red peppers	32,386	876.16	21,144.07	24.13		
Swiss chard	106	0.15	*	*		
<u>Root crops</u>	32,222	698.30	78,733.86			
Beetroot	784	1.43	103.57	72.43		
Carrot	717	3.28	441.49	134.60		
Onion	5,959	87.99	13,255.79	150.65		
Potatoes	3,029	192.55	20,217.66	105.00		
Garlic	10,478	82.69	12,124.47	146.63		
Taro / 'Godere'	303	11.13	86.76	7.80		
Sweet potatoes	19,093	319.25	32,504.12	101.81		
<u>Fruit crops</u>	42,294	922.65	85,456.54			
Avocados	676	6.95	*	*		
Bananas	16,142	313.93	15,426.78	49.14		
Guavas	2,438	21.28	416.18	19.56		
Lemons	4,422	13.00	627.87	48.30		
Mangoes	29,270	516.65	57,597.74	111.48		
Oranges	5,024	24.28	4,836.56	199.20		
Papayas	7,516	26.57	6,551.41	246.57		
Pineapples	*	*	*	*		
Chat	7,153	174.53	1,917.16	10.98		
Coffee	14,292	991.42	808.16	0.82		
Hops	9,767	113.56	944.89	8.32		
Sugar cane	947	12.75	3,075.08	241.18		

Table 9.1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Metekel**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	50,744	79,410.17	1,031,073.33			
<u>Cereals</u>	50,344	58,058.59	840,944.35			
Teff	13,805	11,267.50	106,981.10	9.49	9.24	10.26
Barley	4,929	1,107.22	11,528.14	10.41	11.20	14.10
Wheat	5,175	2,036.25	28,884.03	14.18	13.32	16.93
Maize	45,449	11,606.19	255,237.25	21.99	19.76	26.81
Sorghum	19,538	14,512.02	210,519.66	14.51	14.51	17.50
Finger millet	24,479	17,263.74	224,343.60	13.00	12.99	15.10
Oats / 'Aja'	339	23.31	293.02	12.57		
Rice	1,037	242.35	3,157.56	13.03		
<u>Pulses</u>	17,297	3,060.80	27,077.23			
Faba beans	6,372	608.16	6,693.42	11.01		
Field peas	4,681	925.17	5,832.17	6.30		
Haricot beans	7,823	1,151.16	11,976.14	10.40		
Chick-peas	1,249	267.86	2,086.43	7.79		
Lentils	888	38.69	237.52	6.14		
Grass peas	*	*	*	*		
Soya beans	198	67.37	249.28	3.70		
Fenugreek	395	1.19	*	*		
Gibto	113	1.20	2.27	1.89		
<u>Oilseeds</u>	33,020	18,290.78	163,051.75			
Neug	10,416	6,189.16	53,203.38	8.60		
Linseed	1,748	170.67	758.84	4.45		
Groundnuts	12,662	3,360.34	53,614.74	15.96		
Safflower	861	108.35	242.38	2.24		
Sesame	20,096	8,377.51	54,674.38	6.53		
Rape seed	3,136	84.75	558.04	6.58		
<u>Vegetables</u>	18,132	332.74	*			
Lettuce	*	*	*	*		
Head cabbage	*	*	*	*		
Ethiopian cabbage	2,523	54.29	*	*		
Tomatoes	742	1.34	*	*		
Green peppers	2,218	17.44	*	*		
Red peppers	15,005	259.66	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	12,104	299.85	33,984.76			
Beetroot	114	0.15	*	*		
Carrot	*	*	*	*		
Onion	2,535	14.57	1,952.48	134.01		
Potatoes	3,029	192.55	20,217.66	105.00		
Garlic	9,318	79.29	11,814.62	149.01		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	1,689	13.29	*	*		
<u>Fruit crops</u>	7,349	94.27	*			
Avocados	340	1.51	*	*		
Bananas	2,909	20.45	*	*		
Guavas	495	5.09	*	*		
Lemons	1,425	2.98	*	*		
Mangoes	4,028	50.70	*	*		
Oranges	1,773	3.79	*	*		
Papayas	2,255	9.76	*	*		
Pineapples	*	*	*	*		
Chat	1,400	6.39	*	*		
Coffee	4,191	817.00	*	*		
Hops	6,821	97.91	793.08	8.10		
Sugar cane	555	8.62	*	*		

Table 9.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

Asosa						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	66,322	57,610.83	554,412.29			
<u>Cereals</u>	65,670	40,804.64	480,070.81			
Teff	12,907	3,013.19	9,691.27	3.22	3.22	-
Barley	*	*	*	*	*	-
Wheat	217	11.40	52.16	4.58	4.50	-
Maize	59,001	11,530.55	185,190.25	16.06	16.22	17.38
Sorghum	56,852	24,861.52	275,070.18	11.06	11.06	-
Finger millet	9,488	1,383.46	10,066.94	7.28	7.20	-
Oats / 'Aja'	111	4.53	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	27,239	2,722.30	17,029.89			
Faba beans	190	3.18	*	*		
Field peas	106	1.49	*	*		
Haricot beans	20,331	1,945.31	13,715.04	7.05		
Chick-peas	2,744	216.82	678.06	3.13		
Lentils	*	*	*	*		
Grass peas	*	*	*	*		
Soya beans	5,625	555.19	2,636.78	4.75		
Fenugreek	109	0.30	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	47,201	14,083.89	57,311.60			
Neug	21,928	6,632.97	18,897.69	2.85		
Linseed	3,688	111.33	218.74	1.96		
Groundnuts	13,347	797.99	5,177.78	6.49		
Safflower	1,070	28.97	71.21	2.46		
Sesame	29,564	6,470.59	32,939.75	5.09		
Rape seed	197	42.05	6.43	0.15		
<u>Vegetables</u>	16,586	616.22	23,464.27			
Lettuce	*	*	*	*		
Head cabbage	1,445	10.40	1,249.60	120.15		
Ethiopian cabbage	1,096	12.81	550.71	42.99		
Tomatoes	855	10.23	*	*		
Green peppers	412	3.35	519.89	155.19		
Red peppers	14,601	579.29	21,144.07	36.50		
Swiss chard	106	0.15	*	*		
<u>Root crops</u>	16,264	348.89	40,093.17			
Beetroot	572	0.70	103.57	147.96		
Carrot	627	3.26	441.49	135.43		
Onion	3,374	73.40	11,303.32	154.00		
Potatoes	*	*	*	*		
Garlic	852	2.67	265.47	99.43		
Taro / 'Godere'	252	10.04	*	*		
Sweet potatoes	13,806	258.83	27,979.32	108.10		
<u>Fruit crops</u>	31,513	652.61	65,409.13	100.23		
Avocados	286	5.34	*	*		
Bananas	11,496	267.26	13,256.18	49.60		
Guavas	1,943	16.19	416.18	25.71		
Lemons	2,827	9.31	551.28	59.21		
Mangoes	23,137	319.05	40,072.37	125.60		
Oranges	3,185	19.32	4,836.56	250.34		
Papayas	5,054	16.14	6,276.57	388.88		
Pineapples	*	*	*	*		
Chat	5,652	163.86	1,917.16	11.70		
Coffee	9,718	166.66	749.99	4.50		
Hops	2,946	15.65	151.81	9.70		
Sugar cane	259	3.20	3,075.08	960.96		

Table 9.3 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Kemashi**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	22,020	34,855.48	500,316.27			
<u>Cereals</u>	21,616	25,319.14	449,190.41			
Teff	3,171	2,373.63	16,836.79	7.09	7.09	-
Barley	40	0.57	*	*	*	-
Wheat	*	*	*	*	*	-
Maize	19,745	8,584.02	186,200.68	21.69	21.13	25.13
Sorghum	16,642	13,513.45	237,567.05	17.58	17.58	-
Finger millet	2,706	838.25	8,505.59	10.15	10.15	-
Oats / 'Aja'	194	9.23	80.30	8.70		
Rice	*	*	*	*		
<u>Pulses</u>	6,278	812.59	6,238.12			
Faba beans	*	*	*	*		
Field peas	*	*	*	*		
Haricot beans	6,278	810.71	6,222.51	7.68		
Chick-peas	*	*	*	*		
Lentils	*	*	*	*		
Grass peas	*	*	*	*		
Soya beans	49	1.88	15.61	8.30		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	17,515	8,723.74	44,887.74			
Neug	1,818	253.54	932.01	3.68		
Linseed	222	4.01	*	*		
Groundnuts	1,348	28.00	185.88	6.64		
Safflower	*	*	*	*		
Sesame	16,787	8,432.39	43,697.91	5.18		
Rape seed	337	5.80	71.94	12.40		
<u>Vegetables</u>	3,814	53.24	511.69			
Lettuce	*	*	*	*		
Head cabbage	71	0.09	*	*		
Ethiopian cabbage	72	1.86	*	*		
Tomatoes	88	5.84	*	*		
Green peppers	973	8.24	511.69	62.10		
Red peppers	2,780	37.21	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	3,853	49.56	4,655.93			
Beetroot	98	0.58	*	*		
Carrot	90	0.02	*	*		
Onion	50	0.02	*	*		
Potatoes	*	*	*	*		
Garlic	308	0.73	44.37	60.78		
Taro / 'Godere'	51	1.08	86.76	80.33		
Sweet potatoes	3,598	47.13	4,524.80	96.01		
<u>Fruit crops</u>	3,432	175.76	20,047.40	114.06		
Avocados	50	0.10	*	*		
Bananas	1,737	26.21	2,170.60	82.82		
Guavas	*	*	*	*		
Lemons	169	0.70	76.59	109.41		
Mangoes	2,105	146.90	17,525.37	119.30		
Oranges	67	1.17	*	*		
Papayas	207	0.66	274.85	416.44		
Pineapples	*	*	*	*		
Chat	101	4.28	*	*		
Coffee	383	7.76	58.17	7.50		
Hops	*	*	*	*		
Sugar cane	133	0.93	*	*		

Table 10 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**S.N.N.P. Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	2,164,944	876,692.79	10,359,039.70			
<u>Cereals</u>	1,962,699	708,276.48	8,977,393.13			
Teff	768,942	193,193.16	1,454,742.77	7.53	7.34	11.87
Barley	627,888	81,505.59	909,393.20	11.16	11.11	15.37
Wheat	619,299	119,118.32	1,799,320.70	15.11	14.28	20.99
Maize	1,023,024	206,397.39	3,740,158.90	18.12	16.27	26.01
Sorghum	573,233	103,150.03	1,027,684.11	9.96	9.95	10.82
Finger millet	55,200	4,575.07	43,209.97	9.44	9.47	-
Oats / 'Aja'	16,279	315.30	2,575.41	8.17		
Rice	840	21.62	308.08	14.25		
<u>Pulses</u>	1,283,085	161,547.41	1,349,346.46			
Faba beans	675,923	60,484.91	562,796.50	9.30		
Field peas	367,828	48,057.87	365,089.98	7.60		
Haricot beans	595,553	44,766.54	373,781.45	8.35		
Chick-peas	43,509	5,229.55	29,812.10	5.70		
Lentils	25,975	968.32	3,431.42	3.54		
Grass peas	11,273	1,809.98	13,892.23	7.68		
Soya beans	3,717	40.37	143.81	3.56		
Fenugreek	22,037	189.87	398.97	2.10		
Gibto	*	*	*	*		
<u>Oilseeds</u>	117,162	6,868.89	32,300.11			
Neug	12,425	2,791.89	11,113.24	3.98		
Linseed	65,290	2,769.60	14,727.34	5.32		
Groundnuts	5,416	195.25	726.20	3.72		
Safflower	11,955	395.00	3,198.82	8.10		
Sesame	3,594	181.94	382.96	2.10		
Rape seed	22,359	535.22	2,151.54	4.02		
<u>Vegetables</u>	1,402,510	31,328.85	2,004,083.69			
Lettuce	6,887	10.55	*	*		
Head cabbage	56,619	429.51	26,735.06	62.25		
Ethiopian cabbage	1,286,718	13,794.05	1,116,854.17	80.97		
Tomatoes	23,747	236.71	24,661.16	104.18		
Green peppers	143,494	622.37	58,230.56	93.56		
Red peppers	201,035	16,210.82	777,602.74	47.97		
Swiss chard	18,267	24.84	*	*		
<u>Root crops</u>	1,277,086	60,717.04	5,385,819.88			
Beetroot	74,891	204.87	15,293.21	74.65		
Carrot	44,026	252.46	8,512.53	33.72		
Onion	103,370	740.94	86,211.37	116.35		
Potatoes	285,332	9,657.85	746,000.18	77.24		
Garlic	74,034	262.82	11,408.41	43.41		
Taro / 'Godere'	587,828	18,426.73	1,335,318.70	72.47		
Sweet potatoes	590,045	31,171.37	3,183,075.48	102.12		
<u>Fruit crops</u>	1,091,712	26,172.75	2,402,908.01	91.81		
Avocados	441,642	2,872.35	230,236.76	80.16		
Bananas	759,689	18,254.65	1,395,375.99	76.44		
Guavas	40,624	106.08	1,746.74	16.47		
Lemons	45,149	154.91	8,020.97	51.78		
Mangoes	163,029	2,110.67	241,813.81	114.57		
Oranges	126,575	858.63	186,574.20	217.29		
Papayas	216,213	931.44	276,798.13	297.17		
Pineapples	*	*	*	*		
Chat	568,744	25,060.47	216,193.08	8.63		
Coffee	1,319,380	87,619.31	535,707.79	6.11		
Hops	201,172	2,416.33	31,232.79	12.93		
Sugar cane	531,684	10,787.37	11,055,897.18	1,024.89		



Table 10.1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Gurage**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	216,847	87,600.96	1,188,169.33			
<u>Cereals</u>	210,636	74,419.28	1,061,938.98			
Teff	67,549	27,670.33	214,299.43	7.74	8.02	11.27
Barley	103,558	13,158.62	220,023.64	16.72	16.69	18.35
Wheat	104,197	12,533.00	218,927.72	17.47	16.63	20.07
Maize	85,996	15,446.75	343,842.08	22.26	21.04	27.34
Sorghum	38,872	5,500.43	63,684.59	11.58	11.49	17.15
Finger millet	373	1.54	*	*	*	-
Oats / 'Aja'	8,392	108.61	1,161.52	10.69		
Rice	*	*	*	*		
<u>Pulses</u>	113,415	10,390.17	115,145.27			
Faba beans	84,999	3,858.52	47,047.16	12.19		
Field peas	25,137	3,039.62	42,873.02	14.10		
Haricot beans	24,689	763.99	5,985.56	7.83		
Chick-peas	10,360	1,461.98	11,183.54	7.65		
Lentils	1,758	112.42	132.83	1.18		
Grass peas	4,006	1,137.17	7,923.17	6.97		
Soya beans	4	0.01	*	*		
Fenugreek	1,883	16.46	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	20,282	2,791.51	11,085.08			
Neug	11,554	2,707.09	10,903.26	4.03		
Linseed	2,772	56.54	172.35	3.05		
Groundnuts	687	10.01	*	*		
Safflower	369	0.44	*	*		
Sesame	*	*	*	*		
Rape seed	5,273	17.44	9.47	0.54		
<u>Vegetables</u>	174,812	3,673.36	235,146.90			
Lettuce	3,518	2.30	*	*		
Head cabbage	18,108	43.95	2,373.20	54.00		
Ethiopian cabbage	160,515	1,215.08	66,343.34	54.60		
Tomatoes	1,972	14.88	*	*		
Green peppers	16,076	29.88	528.80	17.70		
Red peppers	24,520	2,359.91	165,901.56	70.30		
Swiss chard	7,590	7.38	*	*		
<u>Root crops</u>	119,248	2,410.75	203,656.12			
Beetroot	18,999	17.88	1,087.12	60.80		
Carrot	18,354	43.82	5,258.46	120.00		
Onion	14,952	18.12	110.50	6.10		
Potatoes	65,464	1,316.74	142,207.78	108.00		
Garlic	12,324	26.43	*	*		
Taro / 'Godere'	40,937	916.54	54,992.26	60.00		
Sweet potatoes	8,848	71.23	*	*		
<u>Fruit crops</u>	85,868	1,115.26	166,030.58			
Avocados	28,480	79.61	6,392.39	80.30		
Bananas	49,261	379.16	15,735.26	41.50		
Guavas	4,808	17.48	422.94	24.20		
Lemons	8,627	31.01	536.50	17.30		
Mangoes	9,879	23.58	622.50	26.40		
Oranges	41,095	506.79	113,267.52	223.50		
Papayas	28,312	77.50	29,053.46	374.88		
Pineapples	330	0.13	*	*		
Chat	101,110	4,471.30	35,770.45	8.00		
Coffee	94,912	2,900.33	4,640.54	1.60		
Hops	61,953	990.63	7,132.51	7.20		
Sugar cane	24,788	445.25	466,533.01	1,047.80		

Table 10.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Hadiya**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	194,756	111,807.27	1,567,711.84			
<u>Cereals</u>	189,028	98,827.82	1,440,614.84			
Teff	112,716	29,086.26	240,549.24	8.27	8.39	11.70
Barley	54,940	4,422.64	51,102.64	11.55	11.51	18.80
Wheat	114,047	35,958.82	663,197.00	18.44	17.37	24.99
Maize	112,192	20,713.95	375,474.92	18.13	17.47	20.96
Sorghum	78,512	8,070.78	106,923.68	13.25	13.26	20.80
Finger millet	8,961	531.49	3,126.52	5.88	5.95	-
Oats / 'Aja'	881	43.88	240.84	5.49		
Rice	*	*	*	*		
<u>Pulses</u>	94,617	11,050.72	114,191.05			
Faba beans	51,254	5,531.38	67,716.69	12.24		
Field peas	24,938	3,724.09	27,618.54	7.42		
Haricot beans	42,849	1,625.50	17,900.06	11.01		
Chick-peas	1,461	24.66	217.31	8.81		
Lentils	5,689	122.10	738.45	6.05		
Grass peas	*	*	*	*		
Soya beans	892	8.92	*	*		
Fenugreek	952	14.07	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	24,114	1,928.73	12,905.95			
Neug	295	0.14	*	*		
Linseed	15,399	1,502.24	10,918.59	7.27		
Groundnuts	*	*	*	*		
Safflower	*	*	*	*		
Sesame	297	6.00	33.62	5.60		
Rape seed	9,880	420.35	1,953.74	4.65		
<u>Vegetables</u>	170,991	3,745.52	244,129.17			
Lettuce	288	0.04	*	*		
Head cabbage	8,266	18.88	1,036.24	54.89		
Ethiopian cabbage	160,057	1,729.59	208,415.14	120.50		
Tomatoes	5,143	51.70	7,754.32	149.99		
Green peppers	17,870	83.96	6,465.13	77.00		
Red peppers	37,747	1,859.85	20,458.34	11.00		
Swiss chard	2,402	1.52	*	*		
<u>Root crops</u>	103,568	3,021.58	301,333.38			
Beetroot	24,582	47.60	6,140.82	129.01		
Carrot	2,543	1.94	234.38	120.81		
Onion	15,401	27.87	3,762.18	134.99		
Potatoes	38,058	806.98	23,402.41	29.00		
Garlic	3,582	15.51	2,280.61	147.04		
Taro / 'Godere'	24,207	338.09	27,047.60	80.00		
Sweet potatoes	37,102	1,783.59	238,465.38	133.70		
<u>Fruit crops</u>	119,334	1,854.92	159,468.06			
Avocados	60,347	279.24	21,278.43	76.20		
Bananas	97,998	1,432.33	124,899.56	87.20		
Guavas	4,624	8.53	*	*		
Lemons	2,574	23.53	*	*		
Mangoes	9,627	42.98	4,169.33	97.01		
Oranges	9,809	29.30	5,168.62	176.40		
Papayas	15,381	38.78	3,952.11	101.91		
Pineapples	265	0.21	*	*		
Chat	54,618	1,440.41	7,634.16	5.30		
Coffee	106,230	4,848.57	25,212.53	5.20		
Hops	28,855	119.47	1,469.44	12.30		
Sugar cane	70,017	1,450.86	1,975,202.15	1,361.40		

Table 10.3 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Kembata - Tembaro**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	95,148	26,835.00	339,636.62			
<u>Cereals</u>	88,982	22,812.62	304,142.56			
Teff	43,850	7,101.51	50,504.31	7.11	6.73	14.78
Barley	18,824	1,280.20	15,565.83	12.16	12.10	15.45
Wheat	49,808	9,720.47	173,981.39	17.90	16.83	22.99
Maize	12,048	2,473.49	46,209.48	18.68	18.68	-
Sorghum	27,577	2,129.78	17,243.35	8.10	8.10	-
Finger millet	4,319	104.93	638.20	6.08	6.08	-
Oats / 'Aja'	173	2.23	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	60,512	3,906.01	35,008.67			
Faba beans	43,478	2,370.83	22,825.12	9.63		
Field peas	17,674	769.24	5,310.82	6.90		
Haricot beans	24,784	746.39	6,847.39	9.17		
Chick-peas	869	19.49	25.34	1.30		
Lentils	*	*	*	*		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	159	0.06	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	2,704	116.36	485.40			
Neug	*	*	*	*		
Linseed	2,361	106.47	483.63	4.54		
Groundnuts	*	*	*	*		
Safflower	*	*	*	*		
Sesame	*	*	*	*		
Rape seed	694	9.90	1.77	0.18		
<u>Vegetables</u>	81,632	1,083.25	90,755.19			
Lettuce	167	0.05	*	*		
Head cabbage	9,372	141.27	7,755.50	54.90		
Ethiopian cabbage	79,635	871.28	73,187.51	84.00		
Tomatoes	3,575	45.28	6,746.13	148.99		
Green peppers	5,029	19.69	3,008.63	152.80		
Red peppers	3,372	3.83	57.43	14.99		
Swiss chard	1,198	1.86	*	*		
<u>Root crops</u>	92,243	5,243.37	470,936.45			
Beetroot	7,621	66.39	5,019.14	75.60		
Carrot	7,915	115.59	*	*		
Onion	9,858	184.48	24,720.95	134.00		
Potatoes	39,831	1,949.98	113,878.93	58.40		
Garlic	4,875	19.14	2,736.68	142.98		
Taro / 'Godere'	31,385	702.10	83,058.35	118.30		
Sweet potatoes	49,178	2,205.68	241,522.41	109.50		
<u>Fruit crops</u>	79,722	1,552.78	141,729.98			
Avocados	56,925	339.50	14,768.07	43.50		
Bananas	62,861	1,060.98	104,506.58	98.50		
Guavas	2,581	5.62	142.67	25.39		
Lemons	4,589	14.71	404.62	27.51		
Mangoes	15,158	61.35	7,073.70	115.30		
Oranges	9,049	39.76	1,550.79	39.00		
Papayas	9,020	30.86	13,283.56	430.45		
Pineapples	*	*	*	*		
Chat	15,033	455.65	3,690.74	8.10		
Coffee	70,477	2,948.18	8,254.92	2.80		
Hops	19,035	91.45	1,051.72	11.50		
Sugar cane	39,410	923.61	616,137.85	667.10		

Table 10.4 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Sidama</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	380,160	85,174.94	1,264,706.11			
<u>Cereals</u>	306,666	63,668.83	1,070,379.49			
Teff	40,014	4,999.32	30,731.76	6.15	4.83	9.35
Barley	87,844	12,936.21	125,703.42	9.72	9.76	11.05
Wheat	38,100	5,435.89	66,004.79	12.14	12.65	15.90
Maize	248,749	40,046.62	846,513.06	21.14	18.52	25.72
Sorghum	6,678	204.89	1,239.62	6.05	7.90	-
Finger millet	2,376	31.80	180.73	5.68	5.68	9.35
Oats / 'Aja'	1,350	12.52	6.12	0.49		
Rice	555	1.59	*	*		
<u>Pulses</u>	198,813	21,457.49	194,158.59			
Faba beans	81,311	4,523.88	43,282.88	9.57		
Field peas	31,594	3,170.66	18,743.51	5.91		
Haricot beans	109,548	13,737.63	132,076.51	9.61		
Chick-peas	*	*	*	*		
Lentils	532	9.60	55.69	5.80		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	1,145	15.73	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	6,215	48.62	168.02			
Neug	*	*	*	*		
Linseed	4,398	45.25	162.44	3.59		
Groundnuts	*	*	*	*		
Safflower	*	*	*	*		
Sesame	613	0.44	*	*		
Rape seed	1,205	2.94	5.58	1.90		
<u>Vegetables</u>	280,142	3,525.91	260,824.57			
Lettuce	1,163	5.61	*	*		
Head cabbage	2,590	8.16	*	*		
Ethiopian cabbage	261,346	2,814.07	236,382.08	84.00		
Tomatoes	1,807	10.27	1,530.87	149.06		
Green peppers	33,856	159.77	22,911.61	143.40		
Red peppers	21,519	525.82	*	*		
Swiss chard	571	2.19	*	*		
<u>Root crops</u>	125,737	3,874.61	349,017.92			
Beetroot	2,326	1.24	160.70	129.60		
Carrot	4,189	11.49	1,401.78	122.00		
Onion	3,845	31.25	4,218.25	134.98		
Potatoes	13,117	320.52	*	*		
Garlic	12,651	68.00	*	*		
Taro / 'Godere'	9,783	48.76	3,901.03	80.00		
Sweet potatoes	88,732	3,393.36	339,336.15	100.00		
<u>Fruit crops</u>	173,416	3,446.61	325,803.94			
Avocados	84,881	730.90	70,385.35	96.30		
Bananas	129,668	1,758.87	175,535.25	99.80		
Guavas	7,174	14.65	347.26	23.70		
Lemons	1,709	5.34	313.68	58.74		
Mangoes	4,036	36.20	4,739.18	130.92		
Oranges	10,888	24.59	4,500.48	183.02		
Papayas	5,016	16.98	8,300.81	488.86		
Pineapples	12,979	859.08	61,681.93	71.80		
Chat	226,502	13,077.30	124,234.44	9.50		
Coffee	296,045	27,944.45	162,077.83	5.80		
Hops	22,953	668.76	14,311.52	21.40		
Sugar cane	126,868	4,007.57	4,836,733.82	1,206.90		

Table 10.5 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Gedio</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	78,998	13,833.30	195,071.34			
<u>Cereals</u>	66,012	10,825.75	171,095.95			
Teff	1,223	38.08	57.25	1.50	1.50	-
Barley	28,025	4,127.16	45,298.88	10.98	10.70	19.65
Wheat	1,719	282.79	2,590.80	9.16	*	12.50
Maize	53,255	6,361.65	123,069.24	19.35	15.93	29.23
Sorghum	594	12.87	79.77	6.20	6.20	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	241	3.20	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	40,347	2,986.22	23,954.07			
Faba beans	26,431	1,930.22	17,860.29	9.25		
Field peas	5,166	735.02	5,299.37	7.21		
Haricot beans	16,053	312.27	786.72	2.52		
Chick-peas	274	8.54	7.69	0.90		
Lentils	146	0.17	*	*		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	1,627	21.34	21.32			
Neug	*	*	*	*		
Linseed	807	5.55	21.32	3.84		
Groundnuts	242	14.90	*	*		
Safflower	398	0.38	*	*		
Sesame	*	*	*	*		
Rape seed	179	0.52	*	*		
<u>Vegetables</u>	97,341	1,327.89	104,301.95			
Lettuce	251	0.59	*	*		
Head cabbage	722	4.54	*	*		
Ethiopian cabbage	95,595	1,286.17	101,479.00	78.90		
Tomatoes	1,383	0.75	90.59	120.79		
Green peppers	12,381	34.46	2,732.37	79.29		
Red peppers	1,459	1.15	*	*		
Swiss chard	197	0.22	*	*		
<u>Root crops</u>	33,844	724.41	75,839.32			
Beetroot	976	2.55	*	*		
Carrot	1,014	5.84	*	*		
Onion	991	2.57	347.02	135.03		
Potatoes	736	26.05	2,709.12	104.00		
Garlic	661	0.92	*	*		
Taro / 'Godere'	16,130	218.82	36,586.54	167.20		
Sweet potatoes	17,943	467.66	36,196.63	77.40		
<u>Fruit crops</u>	52,227	1,126.67	102,441.46			
Avocados	37,243	382.33	33,263.02	87.00		
Bananas	24,870	580.08	46,000.04	79.30		
Guavas	183	1.67	43.63	26.13		
Lemons	*	*	*	*		
Mangoes	1,921	54.52	4,721.19	86.60		
Oranges	971	32.69	10,969.02	335.55		
Papayas	581	74.83	7,400.45	98.90		
Pineapples	179	0.56	44.12	78.79		
Chat	8,455	687.48	3,437.44	5.00		
Coffee	118,391	16,281.88	94,434.88	5.80		
Hops	10,479	166.75	2,918.08	17.50		
Sugar cane	26,517	589.76	513,330.91	870.41		

Table 10.6 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Wolayita</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	221,956	51,975.34	585,580.29			
<u>Cereals</u>	187,377	40,559.57	506,050.04			
Teff	102,538	18,294.51	154,307.55	8.43	7.21	14.04
Barley	20,353	637.49	4,878.61	7.65	7.90	14.19
Wheat	57,136	4,965.01	69,421.72	13.98	14.06	16.90
Maize	67,455	13,408.37	253,648.68	18.92	16.65	24.04
Sorghum	51,016	3,243.54	23,793.48	7.34	7.34	-
Finger millet	348	6.48	*	*	*	-
Oats / 'Aja'	655	4.17	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	150,187	11,347.87	79,484.10			
Faba beans	44,320	1,658.26	13,253.66	7.99		
Field peas	45,346	2,168.56	14,689.55	6.77		
Haricot beans	91,449	6,361.95	47,178.48	7.42		
Chick-peas	10,615	1,153.69	4,350.39	3.77		
Lentils	1,029	3.94	12.02	3.05		
Grass peas	*	*	*	*		
Soya beans	305	1.48	*	*		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	2,606	67.89	46.15			
Neug	*	*	*	*		
Linseed	1,307	11.15	*	*		
Groundnuts	358	8.93	4.47	0.50		
Safflower	923	22.19	41.69	1.88		
Sesame	331	25.63	*	*		
Rape seed	*	*	*	*		
<u>Vegetables</u>	98,637	1,313.53	37,572.39			
Lettuce	305	0.19	*	*		
Head cabbage	4,214	124.84	13,607.06	109.00		
Ethiopian cabbage	85,782	516.84	11,370.38	22.00		
Tomatoes	675	1.86	*	*		
Green peppers	7,954	42.98	3,988.17	92.79		
Red peppers	17,849	623.68	8,606.77	13.80		
Swiss chard	1,602	3.16	*	*		
<u>Root crops</u>	232,211	20,049.72	1,907,856.05			
Beetroot	3,851	31.70	*	*		
Carrot	2,557	62.45	1,580.04	25.30		
Onion	5,177	43.68	5,678.24	130.00		
Potatoes	30,809	1,013.89	54,344.57	53.60		
Garlic	348	4.10	*	*		
Taro / 'Godere'	107,170	2,765.16	233,379.21	84.40		
Sweet potatoes	215,183	16,128.74	1,612,874.00	100.00		
<u>Fruit crops</u>	172,094	2,532.33	287,376.76			
Avocados	117,016	742.75	69,447.05	93.50		
Bananas	96,601	1,234.48	114,807.26	93.00		
Guavas	6,607	16.75	395.36	23.60		
Lemons	3,927	10.10	628.50	62.23		
Mangoes	34,393	385.35	45,894.66	119.10		
Oranges	15,367	62.04	14,064.83	226.71		
Papayas	23,445	75.65	41,965.05	554.73		
Pineapples	934	5.20	174.06	33.47		
Chat	6,649	91.29	*	*		
Coffee	192,438	5,969.75	48,355.00	8.10		
Hops	4,682	8.73	113.55	13.01		
Sugar cane	72,922	886.51	1,320,993.77	1,490.11		

Table 10.7 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**South Omo**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	69,465	33,526.38	279,970.76			
<u>Cereals</u>	67,273	27,497.53	236,481.47			
Teff	8,928	2,094.73	15,949.61	7.61	7.90	-
Barley	16,907	4,389.66	31,754.63	7.23	7.23	-
Wheat	7,253	1,340.29	15,560.67	11.61	11.61	-
Maize	41,742	9,578.11	94,279.03	9.84	9.45	14.17
Sorghum	26,856	10,060.18	78,847.85	7.84	7.94	-
Finger millet	767	24.65	51.01	2.07	0.33	-
Oats / 'Aja'	159	9.91	38.67	3.90		
Rice	*	*	*	*		
<u>Pulses</u>	44,947	5,519.93	40,178.99			
Faba beans	17,278	2,044.54	19,993.84	9.78		
Field peas	9,495	1,367.67	10,107.82	7.39		
Haricot beans	29,141	2,106.44	10,075.72	4.78		
Chick-peas	15	1.15	1.61	1.40		
Lentils	*	*	*	*		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	257	0.13	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	11,604	508.92	3,310.30			
Neug	*	*	*	*		
Linseed	2,951	64.86	241.32	3.72		
Groundnuts	628	52.85	43.92	0.83		
Safflower	7,291	333.80	2,953.27	8.85		
Sesame	1,016	57.41	71.80	1.25		
Rape seed	*	*	*	*		
<u>Vegetables</u>	22,094	215.82	16,467.59			
Lettuce	*	*	*	*		
Head cabbage	931	13.62	*	*		
Ethiopian cabbage	20,206	180.10	15,128.07	84.00		
Tomatoes	954	1.18	*	*		
Green peppers	2,768	17.63	1,339.52	75.98		
Red peppers	289	1.47	*	*		
Swiss chard	132	1.83	*	*		
<u>Root crops</u>	39,921	1,287.61	78,476.46			
Beetroot	84	*	*	*		
Carrot	134	0.15	*	*		
Onion	6,263	86.93	11,649.26	134.01		
Potatoes	2,065	93.38	8,170.51	87.50		
Garlic	3,330	11.59	*	*		
Taro / 'Godere'	24,892	841.42	15,986.95	19.00		
Sweet potatoes	12,817	254.14	42,669.75	167.90		
<u>Fruit crops</u>	32,282	749.96	84,220.21			
Avocados	3,351	31.07	*	*		
Bananas	27,117	605.18	61,667.76	101.90		
Guavas	123	0.84	*	*		
Lemons	241	0.29	17.18	59.24		
Mangoes	11,017	85.89	10,556.16	122.90		
Oranges	904	2.18	458.34	210.25		
Papayas	8,808	20.07	11,079.47	552.04		
Pineapples	370	4.44	441.31	99.39		
Chat	1,496	17.68	111.39	6.30		
Coffee	38,147	2,880.81	10,947.10	3.80		
Hops	3,740	28.70	315.66	11.00		
Sugar cane	10,896	220.23	74,306.83	337.41		

Table 10.8 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Sheka**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	26,899	10,604.67	149,625.76			
<u>Cereals</u>	23,771	7,978.56	133,514.03			
Teff	3,486	379.46	2,475.35	6.52	6.52	-
Barley	2,724	200.24	1,518.28	7.58	7.58	-
Wheat	1,394	161.46	1,018.15	6.31	6.31	-
Maize	10,755	1,869.73	39,604.71	21.18	15.76	40.48
Sorghum	16,624	5,312.71	88,095.58	16.58	16.59	-
Finger millet	191	47.51	652.88	13.74	13.74	-
Oats / 'Aja'	*	*	*	*		
Rice	170	7.45	149.08	20.01		
<u>Pulses</u>	11,931	2,621.62	16,108.87			
Faba beans	5,789	1,026.03	6,131.18	5.98		
Field peas	5,053	1,423.93	7,762.10	5.45		
Haricot beans	5,779	171.41	2,215.59	12.93		
Chick-peas	*	*	*	*		
Lentils	*	*	*	*		
Grass peas	*	*	*	*		
Soya beans	140	0.20	*	*		
Fenugreek	91	0.05	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	438	4.48	2.86			
Neug	*	*	*	*		
Linseed	91	0.40	*	*		
Groundnuts	59	0.10	*	*		
Safflower	55	0.05	*	*		
Sesame	60	1.26	0.63	0.50		
Rape seed	173	2.68	2.23	0.83		
<u>Vegetables</u>	14,414	176.91	10,177.48			
Lettuce	*	*	*	*		
Head cabbage	284	2.46	102.94	41.85		
Ethiopian cabbage	10,645	97.02	6,704.00	69.10		
Tomatoes	302	1.31	8.11	6.19		
Green peppers	2,741	13.92	687.55	49.39		
Red peppers	3,211	62.21	2,674.88	43.00		
Swiss chard	*	*	*	*		
<u>Root crops</u>	17,907	422.05	34,500.31			
Beetroot	*	*	*	*		
Carrot	*	*	*	*		
Onion	1,852	21.85	1,310.79	59.99		
Potatoes	526	9.01	937.16	104.01		
Garlic	2,522	5.70	607.90	106.65		
Taro / 'Godere'	15,131	373.82	29,905.61	80.00		
Sweet potatoes	1,140	11.67	1,738.85	149.00		
<u>Fruit crops</u>	17,284	304.48	48,086.59			
Avocados	2,751	11.01	512.09	46.51		
Bananas	7,226	101.64	7,206.42	70.90		
Guavas	379	0.51	*	*		
Lemons	517	0.92	103.96	113.00		
Mangoes	10,111	101.27	12,526.77	123.70		
Oranges	4,686	33.65	11,171.18	331.98		
Papayas	9,119	41.65	16,566.18	397.75		
Pineapples	859	13.83	*	*		
Chat	3,901	118.63	1,115.09	9.40		
Coffee	22,184	6,512.29	55,354.46	8.50		
Hops	2,944	27.96	550.84	19.70		
Sugar cane	10,602	192.69	121,988.92	633.08		



Table 10.9 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Keffa</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	157,923	106,747.52	1,200,801.62			
<u>Cereals</u>	148,435	70,948.59	916,617.12			
Teff	111,451	25,663.81	213,287.94	8.31	8.08	11.90
Barley	63,114	11,384.88	119,053.29	10.46	10.38	16.24
Wheat	45,794	9,043.21	109,235.83	12.08	11.19	15.98
Maize	36,149	13,030.88	308,081.32	23.64	19.60	39.53
Sorghum	50,527	11,036.28	156,633.88	14.19	14.22	-
Finger millet	4,109	764.79	10,110.12	13.22	13.35	-
Oats / 'Aja'	1,338	24.74	214.75	8.68		
Rice	*	*	*	*		
<u>Pulses</u>	128,311	35,631.32	283,586.29			
Faba beans	91,845	18,716.72	157,553.65	8.42		
Field peas	59,137	13,630.10	102,208.09	7.50		
Haricot beans	47,292	3,274.05	23,821.11	7.28		
Chick-peas	18	0.34	2.23	6.56		
Lentils	10	0.09	*	*		
Grass peas	459	3.60	*	*		
Soya beans	530	6.36	1.21	0.19		
Fenugreek	11	0.06	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	9,367	167.60	598.22			
Neug	20	2.42	9.21	3.81		
Linseed	8,034	104.91	327.34	3.12		
Groundnuts	591	16.65	97.01	5.83		
Safflower	154	3.25	*	*		
Sesame	586	38.70	164.42	4.25		
Rape seed	240	1.67	0.23	0.14		
<u>Vegetables</u>	108,259	1,855.48	112,812.58			
Lettuce	6	0.02	*	*		
Head cabbage	2,073	25.19	*	*		
Ethiopian cabbage	95,468	660.25	84,776.37	128.40		
Tomatoes	500	0.88	*	*		
Green peppers	18,346	66.63	3,671.27	55.10		
Red peppers	9,158	1,102.49	24,364.94	22.10		
Swiss chard	20	0.02	*	*		
<u>Root crops</u>	95,243	2,490.46	134,122.88			
Beetroot	3,867	13.41	1,743.09	129.98		
Carrot	939	2.73	*	*		
Onion	6,016	42.20	5,654.55	133.99		
Potatoes	1,596	22.83	3,560.89	155.97		
Garlic	13,287	54.33	4,080.06	75.10		
Taro / 'Godere'	81,717	2,228.06	100,262.98	45.00		
Sweet potatoes	8,307	126.91	18,821.32	148.30		
<u>Fruit crops</u>	55,106	998.28	28,071.91			
Avocados	4,592	34.08	2,606.79	76.49		
Bananas	51,879	888.40	17,590.39	19.80		
Guavas	1,118	1.91	48.45	25.37		
Lemons	183	0.07	7.13	101.86		
Mangoes	1,261	11.62	1,043.75	89.82		
Oranges	2,010	4.55	300.88	66.13		
Papayas	9,110	57.65	6,474.52	112.31		
Pineapples	*	*	*	*		
Chat	8,081	87.42	996.61	11.40		
Coffee	64,744	4,187.55	37,688.03	9.00		
Hops	9,985	120.48	1,590.33	13.20		
Sugar cane	49,333	708.68	363,128.28	512.40		

Table 10.10 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Gamo Gofa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	255,529	97,031.47	889,934.20			
<u>Cereals</u>	243,524	82,454.59	774,090.49			
Teff	80,117	25,730.54	182,148.93	7.08	7.05	9.80
Barley	112,738	16,784.94	169,706.95	10.11	10.14	13.64
Wheat	80,350	12,751.29	134,791.42	10.57	10.26	17.88
Maize	89,469	16,988.65	215,988.46	12.71	13.61	16.79
Sorghum	49,994	10,180.05	71,448.29	7.02	7.02	-
Finger millet	694	18.59	6.44	0.35	*	9.80
Oats / 'Aja'	458	0.52	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	146,500	14,355.98	115,277.13			
Faba beans	79,384	5,287.97	47,849.56	9.05		
Field peas	58,313	4,175.12	30,277.26	7.25		
Haricot beans	64,288	4,409.12	34,830.90	7.90		
Chick-peas	3,379	308.25	1,459.27	4.73		
Lentils	2,940	139.89	680.07	4.86		
Grass peas	6	0.91	*	*		
Soya beans	*	*	*	*		
Fenugreek	10,529	34.72	180.08	5.19		
Gibto	*	*	*	*		
<u>Oilseeds</u>	9,262	220.91	566.58			
Neug	23	6.11	15.89	2.60		
Linseed	6,276	145.19	242.20	1.67		
Groundnuts	1,481	60.87	306.96	5.04		
Safflower	1,463	7.03	0.21	0.03		
Sesame	39	1.70	1.32	0.78		
Rape seed	*	*	*	*		
<u>Vegetables</u>	76,255	895.18	18,480.95			
Lettuce	245	0.42	*	*		
Head cabbage	2,021	18.08	992.77	54.91		
Ethiopian cabbage	64,432	726.03	3,267.19	4.50		
Tomatoes	1,994	81.83	8,370.77	102.29		
Green peppers	9,797	36.31	5,850.22	161.12		
Red peppers	2,572	28.22	*	*		
Swiss chard	2,969	4.29	*	*		
<u>Root crops</u>	194,384	11,995.62	1,170,897.89			
Beetroot	3,100	5.02	60.28	12.01		
Carrot	1,171	1.15	37.86	32.92		
Onion	21,617	146.00	19,563.75	134.00		
Potatoes	71,539	3,760.14	394,815.31	105.00		
Garlic	8,486	15.06	*	*		
Taro / 'Godere'	76,455	2,400.16	189,612.94	79.00		
Sweet potatoes	112,735	5,668.08	566,807.75	100.00		
<u>Fruit crops</u>	103,479	9,779.01	888,127.62	90.82		
Avocados	11,493	71.29	1,012.30	14.20		
Bananas	77,341	8,217.09	645,041.43	78.50		
Guavas	1,512	6.07	*	*		
Lemons	12,901	38.09	3,903.75	102.49		
Mangoes	43,697	1,219.15	140,933.87	115.60		
Oranges	9,879	44.38	13,827.29	311.57		
Papayas	35,710	182.95	83,408.98	455.91		
Pineapples	*	*	*	*		
Chat	6,272	83.08	*	*		
Coffee	93,140	2,199.71	6,819.11	3.10		
Hops	13,447	60.00	450.02	7.50		
Sugar cane	22,766	268.24	114,323.02	426.20		

Table 10.11 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Benchi - Maji**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	95,878	29,274.67	371,345.65			
<u>Cereals</u>	84,850	22,215.78	314,955.61			
Teff	31,049	5,760.28	46,534.52	8.08	7.18	11.16
Barley	9,180	1,093.24	9,998.84	9.15	8.72	10.30
Wheat	1,646	292.95	1,079.81	3.69	4.27	9.70
Maize	48,753	9,789.35	188,788.52	19.29	17.55	22.68
Sorghum	28,265	5,220.83	67,497.29	12.93	12.97	-
Finger millet	378	46.55	897.64	19.28	20.40	-
Oats / 'Aja'	*	*	*	*		
Rice	115	12.58	159.00	12.64		
<u>Pulses</u>	47,677	6,992.04	56,273.83			
Faba beans	21,865	2,531.44	18,954.21	7.49		
Field peas	16,165	2,995.10	22,611.09	7.55		
Haricot beans	25,066	1,460.66	14,708.53	10.07		
Chick-peas	*	*	*	*		
Lentils	125	3.59	*	*		
Grass peas	*	*	*	*		
Soya beans	272	1.09	*	*		
Fenugreek	10	0.17	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	1,550	66.84	116.21			
Neug	3	0.22	*	*		
Linseed	664	17.69	8.19	0.46		
Groundnuts	82	2.85	14.23	4.99		
Safflower	206	0.55	*	*		
Sesame	220	32.75	73.33	2.24		
Rape seed	428	12.79	20.46	1.60		
<u>Vegetables</u>	50,820	429.06	38,571.72			
Lettuce	*	*	*	*		
Head cabbage	138	1.12	*	*		
Ethiopian cabbage	44,806	295.89	29,589.37	100.00		
Tomatoes	982	9.62	*	*		
Green peppers	7,743	45.14	4,468.57	98.99		
Red peppers	3,720	77.29	4,513.77	58.40		
Swiss chard	*	*	*	*		
<u>Root crops</u>	88,594	3,939.47	161,994.65			
Beetroot	360	4.94	*	*		
Carrot	*	*	*	*		
Onion	1,113	8.44	1,130.92	134.00		
Potatoes	894	15.75	*	*		
Garlic	1,098	7.79	1,105.85	141.96		
Taro / 'Godere'	86,932	3,887.42	159,384.20	41.00		
Sweet potatoes	1,685	15.13	373.68	24.70		
<u>Fruit crops</u>	58,125	1,158.10	55,581.29			
Avocados	6,889	52.16	4,783.01	91.70		
Bananas	40,132	907.30	31,029.66	34.20		
Guavas	366	0.51	13.30	26.08		
Lemons	432	0.29	*	*		
Mangoes	11,430	61.24	7,269.56	118.71		
Oranges	3,243	11.28	2,798.40	248.09		
Papayas	22,861	125.32	9,687.36	77.30		
Pineapples	*	*	*	*		
Chat	25,411	913.04	8,765.24	9.60		
Coffee	80,163	6,450.24	62,567.36	9.70		
Hops	8,743	51.29	723.11	14.10		
Sugar cane	25,638	462.21	331,682.01	717.60		

Table 10.12 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Yem Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	15,084	15,311.96	158,523.25			
<u>Cereals</u>	14,898	12,551.60	140,486.22			
Teff	11,011	4,918.26	41,017.25	8.34	7.91	11.86
Barley	7,839	910.95	7,287.82	8.00	7.83	16.41
Wheat	11,166	3,716.23	43,955.53	11.83	10.98	17.29
Maize	10,682	2,025.40	39,390.71	19.45	13.82	29.03
Sorghum	5,684	963.73	8,702.00	9.03	9.03	-
Finger millet	42	1.90	1.52	0.80	0.80	-
Oats / 'Aja'	554	15.13	131.38	8.68		
Rice	*	*	*	*		
<u>Pulses</u>	10,811	2,500.74	17,282.41			
Faba beans	8,549	1,242.12	9,352.73	7.53		
Field peas	5,348	1,166.36	7,407.06	6.35		
Haricot beans	675	12.46	172.92	13.88		
Chick-peas	314	15.48	90.85	5.87		
Lentils	1,394	58.00	231.82	4.00		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	1,285	6.32	27.03	4.28		
Gibto	*	*	*	*		
<u>Oilseeds</u>	2,558	259.63	754.62			
Neug	178	43.52	94.76	2.18		
Linseed	1,960	205.64	642.59	3.12		
Groundnuts	*	*	*	*		
Safflower	*	*	*	*		
Sesame	*	*	*	*		
Rape seed	685	10.48	17.26	1.65		
<u>Vegetables</u>	11,047	78.85	11,211.01			
Lettuce	*	*	*	*		
Head cabbage	604	4.41	*	*		
Ethiopian cabbage	10,746	69.11	10,697.65	154.79		
Tomatoes	284	0.80	*	*		
Green peppers	1,125	2.77	393.11	141.92		
Red peppers	77	1.74	120.26	69.11		
Swiss chard	32	0.03	*	*		
<u>Root crops</u>	8,137	256.89	16,187.72			
Beetroot	658	1.43	*	*		
Carrot	394	1.09	*	*		
Onion	478	0.98	*	*		
Potatoes	1,117	10.45	*	*		
Garlic	1,258	2.61	*	*		
Taro / 'Godere'	5,038	152.93	7,447.50	48.70		
Sweet potatoes	3,302	87.40	8,740.21	100.00		
<u>Fruit crops</u>	4,054	58.92	1,869.17			
Avocados	474	3.82	*	*		
Bananas	3,014	39.62	1,204.40	30.40		
Guavas	913	5.01	134.17	26.78		
Lemons	79	0.10	*	*		
Mangoes	551	1.68	114.65	68.24		
Oranges	1,180	6.29	337.51	53.66		
Papayas	589	1.90	78.44	41.28		
Pineapples	117	0.51	*	*		
Chat	6,742	183.82	1,911.69	10.40		
Coffee	7,258	224.39	987.32	4.40		
Hops	946	5.09	82.90	16.29		
Sugar cane	4,636	100.61	52,870.27	525.50		

Table 10.13 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Amaro Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	23,761	8,828.39	51,152.88			
<u>Cereals</u>	21,426	6,874.60	42,033.29			
Teff	10,389	3,386.96	19,919.95	5.88	5.44	12.71
Barley	9,079	873.51	4,841.26	5.54	5.54	-
Wheat	4,187	1,024.41	5,181.37	5.06	5.00	7.49
Maize	8,761	1,346.75	10,858.77	8.06	7.50	15.70
Sorghum	1,943	218.89	1,231.95	5.63	4.91	19.74
Finger millet	58	24.09	*	*	*	-
Oats / 'Aja'	*	*	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	17,403	1,914.31	9,029.48			
Faba beans	6,536	269.53	1,344.96	4.99		
Field peas	5,085	443.45	1,748.90	3.94		
Haricot beans	8,493	710.80	3,809.63	5.36		
Chick-peas	1,952	394.97	1,775.33	4.49		
Lentils	1,625	75.67	280.87	3.71		
Grass peas	*	*	*	*		
Soya beans	157	4.90	33.80	6.90		
Fenugreek	122	14.99	35.98	2.40		
Gibto	*	*	*	*		
<u>Oilseeds</u>	382	39.48	90.11			
Neug	122	30.04	90.11	3.00		
Linseed	77	2.09	*	*		
Groundnuts	122	0.59	*	*		
Safflower	61	4.86	*	*		
Sesame	61	1.90	*	*		
Rape seed	*	*	*	*		
<u>Vegetables</u>	10,641	197.81	17,241.95			
Lettuce	*	*	*	*		
Head cabbage	114	0.08	*	*		
Ethiopian cabbage	10,146	172.26	17,226.32	100.00		
Tomatoes	58	0.29	15.63	53.90		
Green peppers	323	24.80	*	*		
Red peppers	61	0.38	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	4,253	88.85	6,222.15			
Beetroot	50	0.02	*	*		
Carrot	61	*	*	*		
Onion	879	7.10	*	*		
Potatoes	*	*	*	*		
Garlic	937	2.19	*	*		
Taro / 'Godere'	206	1.19	95.44	80.20		
Sweet potatoes	2,222	78.35	6,126.72	78.20		
<u>Fruit crops</u>	9,440	229.35	31,775.33			
Avocados	3,603	42.01	4,125.64	98.21		
Bananas	6,158	127.96	10,991.36	85.90		
Guavas	230	0.97	18.56	19.13		
Lemons	1,150	18.64	1,841.40	98.79		
Mangoes	976	4.90	569.18	116.16		
Oranges	1,099	7.65	*	*		
Papayas	2,815	27.21	14,229.19	522.94		
Pineapples	*	*	*	*		
Chat	1,855	54.81	*	*		
Coffee	13,957	1,851.10	9,810.84	5.30		
Hops	61	0.05	*	*		
Sugar cane	4,601	142.56	138,056.75	968.41		

Table 10.14 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Burji Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	8,116	6,510.45	28,644.39			
<u>Cereals</u>	7,400	3,866.17	18,425.08			
Teff	4,210	1,367.67	7,059.85	5.16	5.16	-
Barley	4,358	309.40	1,028.52	3.32	3.32	-
Wheat	4,122	471.79	1,580.82	3.35	3.35	-
Maize	4,113	1,129.11	6,475.60	5.74	5.74	-
Sorghum	3,207	588.20	2,280.30	3.88	3.88	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	7,203	2,634.31	10,208.96			
Faba beans	469	19.23	78.48	4.08		
Field peas	772	67.05	240.27	3.58		
Haricot beans	6,406	1,735.62	6,896.67	3.97		
Chick-peas	2,836	742.03	2,837.31	3.82		
Lentils	613	37.31	107.76	2.89		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	640	33.06	48.46	1.47		
Gibto	*	*	*	*		
<u>Oilseeds</u>	349	9.97	10.35			
Neug	*	*	*	*		
Linseed	284	7.85	9.23	1.18		
Groundnuts	*	*	*	*		
Safflower	65	2.11	1.12	0.53		
Sesame	*	*	*	*		
Rape seed	*	*	*	*		
<u>Vegetables</u>	2,181	25.00	2,186.84			
Lettuce	*	*	*	*		
Head cabbage	50	0.13	*	*		
Ethiopian cabbage	1,773	21.52	2,152.28	100.01		
Tomatoes	135	0.65	34.56	53.17		
Green peppers	323	2.11	*	*		
Red peppers	103	0.47	*	*		
Swiss chard	62	0.11	*	*		
<u>Root crops</u>	1,061	13.83	1,480.43			
Beetroot	70	0.12	*	*		
Carrot	27	0.03	*	*		
Onion	349	4.11	554.87	135.00		
Potatoes	89	0.62	39.67	63.98		
Garlic	23	0.04	5.31	132.75		
Taro / 'Godere'	22	0.11	*	*		
Sweet potatoes	612	8.81	880.58	99.95		
<u>Fruit crops</u>	3,610	34.06	1,105.72			
Avocados	498	2.90	*	*		
Bananas	2,265	15.84	1,105.72	69.81		
Guavas	971	8.09	*	*		
Lemons	315	0.46	*	*		
Mangoes	20	0.02	*	*		
Oranges	192	0.94	*	*		
Papayas	1,941	5.80	*	*		
Pineapples	*	*	*	*		
Chat	212	1.06	8.91	8.41		
Coffee	2,537	64.18	295.24	4.60		
Hops	62	1.06	*	*		
Sugar cane	1,679	33.92	8,820.09	260.03		

Table 10.15 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Konso Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	34,907	21,878.86	102,985.84			
<u>Cereals</u>	34,907	19,507.93	90,476.04			
Teff	9,295	2,783.97	11,251.31	4.04	4.04	-
Barley	2,195	160.67	774.82	4.82	4.82	-
Wheat	602	64.49	451.74	7.00	7.01	-
Maize	22,162	5,410.98	35,498.04	6.56	6.56	-
Sorghum	30,411	11,087.82	42,500.13	3.83	3.83	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	15,099	2,366.19	12,499.00			
Faba beans	99	1.35	3.50	2.59		
Field peas	198	15.68	56.44	3.60		
Haricot beans	15,099	2,089.16	10,771.53	5.16		
Chick-peas	1,514	234.66	1,577.63	6.72		
Lentils	644	25.35	89.91	3.55		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	444	4.73	10.79			
Neug	*	*	*	*		
Linseed	168	2.78	2.78	1.00		
Groundnuts	*	*	*	*		
Safflower	277	1.95	8.01	4.11		
Sesame	*	*	*	*		
Rape seed	*	*	*	*		
<u>Vegetables</u>	650	2.63	166.57			
Lettuce	*	*	*	*		
Head cabbage	94	0.08	*	*		
Ethiopian cabbage	368	1.25	166.57	133.26		
Tomatoes	94	0.47	*	*		
Green peppers	375	0.76	*	*		
Red peppers	*	*	*	*		
Swiss chard	94	0.07	*	*		
<u>Root crops</u>	2,579	25.31	2,766.53			
Beetroot	178	1.07	*	*		
Carrot	94	0.05	*	*		
Onion	513	4.51	888.47	197.00		
Potatoes	281	3.03	436.72	144.13		
Garlic	84	0.57	*	*		
Taro / 'Godere'	94	1.52	*	*		
Sweet potatoes	1,700	14.56	1,441.34	98.99		
<u>Fruit crops</u>	14,069	211.04	20,353.07			
Avocados	*	*	*	*		
Bananas	5,353	161.08	6,249.94	38.80		
Guavas	2,233	5.09	*	*		
Lemons	1,248	2.27	*	*		
Mangoes	1,358	1.70	*	*		
Oranges	683	12.53	*	*		
Papayas	8,841	28.37	14,103.13	497.11		
Pineapples	*	*	*	*		
Chat	1,095	9.50	*	*		
Coffee	9,926	189.82	265.76	1.40		
Hops	2,257	19.47	93.45	4.80		
Sugar cane	927	17.88	5,554.27	310.64		

Table 10.16 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Derashe Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	23,484	14,961.15	135,142.15			
<u>Cereals</u>	23,022	13,439.69	123,926.40			
Teff	8,134	1,790.50	15,235.18	8.51	8.51	-
Barley	5,416	475.90	4,104.26	8.62	8.62	-
Wheat	1,299	141.43	1,335.66	9.44	9.44	-
Maize	15,605	3,938.52	35,338.39	8.97	8.98	-
Sorghum	14,277	7,093.33	67,912.90	9.57	9.57	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	13,789	1,509.55	11,076.13			
Faba beans	2,372	58.99	329.84	5.59		
Field peas	1,439	81.22	460.29	5.67		
Haricot beans	11,677	1,036.53	7,321.03	7.06		
Chick-peas	2,196	320.42	2,846.74	8.88		
Lentils	365	12.21	117.99	9.66		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	64	0.18	0.23	1.28		
Gibto	*	*	*	*		
<u>Oilseeds</u>	352	11.91	139.62			
Neug	*	*	*	*		
Linseed	45	0.20	*	*		
Groundnuts	64	0.38	*	*		
Safflower	187	10.99	137.44	12.51		
Sesame	57	0.34	2.19	6.44		
Rape seed	*	*	*	*		
<u>Vegetables</u>	5,883	67.54	5,500.23			
Lettuce	*	*	*	*		
Head cabbage	129	0.78	*	*		
Ethiopian cabbage	5,611	58.76	5,500.23	93.61		
Tomatoes	*	*	*	*		
Green peppers	387	1.18	*	*		
Red peppers	272	6.81	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	4,157	78.22	6,207.61			
Beetroot	138	0.47	*	*		
Carrot	*	*	*	*		
Onion	1,966	45.98	6,207.61	135.01		
Potatoes	366	5.57	*	*		
Garlic	126	2.41	*	*		
Taro / 'Godere'	939	6.52	*	*		
Sweet potatoes	994	17.26	*	*		
<u>Fruit crops</u>	5,696	63.31	456.58			
Avocados	66	0.46	*	*		
Bananas	3,633	57.94	*	*		
Guavas	365	0.38	7.26	19.11		
Lemons	933	1.43	85.67	59.91		
Mangoes	58	0.05	*	*		
Oranges	279	0.26	56.89	218.81		
Papayas	1,543	2.79	306.76	109.95		
Pineapples	*	*	*	*		
Chat	1,500	31.75	228.61	7.20		
Coffee	10,531	239.32	1,053.03	4.40		
Hops	1,980	21.99	129.77	5.90		
Sugar cane	2,818	42.54	*	*		



Table 10.17 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Dawro**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	66,397	25,506.97	210,135.00			
<u>Cereals</u>	51,039	12,932.40	101,373.54			
Teff	34,284	6,897.19	41,180.43	5.97	5.97	-
Barley	8,185	1,028.57	7,900.23	7.68	7.69	-
Wheat	7,221	908.07	7,923.43	8.73	8.79	-
Maize	6,761	1,678.21	24,323.70	14.49	14.60	-
Sorghum	16,454	2,381.62	19,878.23	8.35	8.35	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	1,017	38.74	167.53	4.32		
Rice	*	*	*	*		
<u>Pulses</u>	45,995	12,434.93	108,155.37			
Faba beans	25,719	4,646.17	45,972.43	9.89		
Field peas	21,530	6,284.83	45,655.45	7.26		
Haricot beans	13,399	1,280.29	15,856.51	12.39		
Chick-peas	19	0.24	0.92	3.83		
Lentils	4,365	211.61	593.01	2.80		
Grass peas	*	*	*	*		
Soya beans	1,019	11.79	77.06	6.54		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	6,796	139.64	606.09			
Neug	223	2.32	*	*		
Linseed	6,072	115.47	366.22	3.17		
Groundnuts	488	21.83	239.87	10.99		
Safflower	*	*	*	*		
Sesame	14	0.02	*	*		
Rape seed	*	*	*	*		
<u>Vegetables</u>	40,856	389.94	29,008.50			
Lettuce	*	*	*	*		
Head cabbage	108	0.07	*	*		
Ethiopian cabbage	38,238	275.26	27,525.82	100.00		
Tomatoes	134	0.51	*	*		
Green peppers	2,387	9.30	855.46	91.98		
Red peppers	2,995	104.54	627.22	6.00		
Swiss chard	233	0.28	*	*		
<u>Root crops</u>	54,545	2,527.21	211,003.78			
Beetroot	239	0.67	*	*		
Carrot	111	0.06	*	*		
Onion	1,495	3.57	414.02	115.97		
Potatoes	1,249	6.86	720.79	105.07		
Garlic	1,070	4.14	592.01	143.00		
Taro / 'Godere'	47,660	2,095.66	167,653.04	80.00		
Sweet potatoes	14,638	416.24	41,623.93	100.00		
<u>Fruit crops</u>	35,218	400.24	22,318.11			
Avocados	7,096	34.28	*	*		
Bananas	28,093	279.56	8,833.96	31.60		
Guavas	719	1.40	35.70	25.50		
Lemons	719	1.76	139.18	79.08		
Mangoes	1,338	1.79	*	*		
Oranges	3,288	14.46	3,547.43	245.33		
Papayas	12,785	67.00	9,761.82	145.70		
Pineapples	*	*	*	*		
Chat	1,161	7.80	*	*		
Coffee	33,777	712.69	5,487.75	7.70		
Hops	4,261	13.04	86.09	6.60		
Sugar cane	15,649	86.93	70,585.19	811.98		

Table 10.18 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Basketo Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	10,523	3,923.47	38,830.27			
<u>Cereals</u>	10,263	3,545.43	36,086.40			
Teff	6,169	1,859.82	11,504.10	6.19	5.93	8.19
Barley	2,017	403.72	2,675.50	6.63	6.62	-
Wheat	95	8.49	79.34	9.35	2.60	-
Maize	7,207	811.77	16,642.00	20.50	13.17	27.88
Sorghum	4,477	461.60	5,185.46	11.23	11.74	-
Finger millet	*	*	*	*	5.93	-
Oats / 'Aja'	30	0.03	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	6,988	361.15	2,663.68			
Faba beans	342	4.70	11.46	2.44		
Field peas	2,077	90.31	555.99	6.16		
Haricot beans	6,061	249.74	2,028.20	8.12		
Chick-peas	91	14.40	60.43	4.20		
Lentils	*	*	*	*		
Grass peas	29	1.31	7.60	5.80		
Soya beans	*	*	*	*		
Fenugreek	58	0.69	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	715	16.89	80.20			
Neug	*	*	*	*		
Linseed	39	2.64	3.38	1.28		
Groundnuts	210	1.91	4.36	2.28		
Safflower	398	7.15	55.93	7.82		
Sesame	131	5.19	16.53	3.18		
Rape seed	*	*	*	*		
<u>Vegetables</u>	2,374	11.12	679.16			
Lettuce	*	*	*	*		
Head cabbage	58	0.07	6.73	96.14		
Ethiopian cabbage	1,748	6.79	672.42	99.03		
Tomatoes	18	0.05	*	*		
Green peppers	198	1.34	*	*		
Red peppers	451	2.86	*	*		
Swiss chard	*	*	*	*		
<u>Root crops</u>	9,343	447.72	22,488.48			
Beetroot	19	0.01	*	*		
Carrot	*	*	*	*		
Onion	904	3.18	*	*		
Potatoes	433	5.43	295.98	54.51		
Garlic	122	0.36	*	*		
Taro / 'Godere'	5,373	95.17	4,120.85	43.30		
Sweet potatoes	7,513	343.57	18,071.66	52.60		
<u>Fruit crops</u>	7,036	95.93	9,779.23			
Avocados	1,401	6.66	*	*		
Bananas	6,229	76.14	8,436.81	110.81		
Guavas	26	0.02	*	*		
Lemons	*	*	*	*		
Mangoes	2,211	11.06	1,342.42	121.38		
Oranges	105	0.32	*	*		
Papayas	461	1.73	*	*		
Pineapples	*	*	*	*		
Chat	23	0.05	*	*		
Coffee	9,790	455.73	*	*		
Hops	1,085	11.16	*	*		
Sugar cane	4,519	68.02	20,698.98	304.31		

Table 10.19 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Konta Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	16,501	9,936.44	88,563.07			
<u>Cereals</u>	14,931	6,738.18	60,928.09			
Teff	11,379	4,054.96	25,285.13	6.24	6.25	-
Barley	2,306	739.09	9,465.52	12.81	12.81	-
Wheat	1,699	251.05	3,276.35	13.05	13.15	-
Maize	3,723	606.54	9,524.07	15.70	14.29	20.01
Sorghum	5,054	1,074.07	13,274.53	12.36	12.38	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	86	12.47	102.49	8.22		
Rice	*	*	*	*		
<u>Pulses</u>	9,913	3,182.89	27,599.24			
Faba beans	6,740	1,800.76	18,222.15	10.12		
Field peas	4,192	1,117.12	7,255.48	6.49		
Haricot beans	3,798	265.01	2,121.61	8.01		
Chick-peas	*	*	*	*		
Lentils	*	*	*	*		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	*	*	*	*		
Gibto	*	*	*	*		
<u>Oilseeds</u>	534	15.37	35.74			
Neug	7	0.03	*	*		
Linseed	324	4.48	14.79	3.30		
Groundnuts	13	0.08	0.66	8.25		
Safflower	21	0.16	1.16	7.25		
Sesame	169	10.61	19.12	1.80		
Rape seed	*	*	*	*		
<u>Vegetables</u>	4,332	49.22	3,183.05			
Lettuce	*	*	*	*		
Head cabbage	84	0.94	*	*		
Ethiopian cabbage	2,547	17.68	1,768.31	100.02		
Tomatoes	74	0.46	*	*		
Green peppers	1,472	13.44	1,330.14	98.97		
Red peppers	901	16.27	84.60	5.20		
Swiss chard	7	0.43	*	*		
<u>Root crops</u>	14,524	1,433.95	229,214.70			
Beetroot	*	*	*	*		
Carrot	52	0.28	*	*		
Onion	263	2.05	*	*		
Potatoes	309	8.20	480.34	58.58		
Garlic	496	1.97	*	*		
Taro / 'Godere'	13,479	1,352.95	221,884.23	164.00		
Sweet potatoes	1,995	68.50	6,850.12	100.00		
<u>Fruit crops</u>	10,819	274.88	16,059.14			
Avocados	2,146	8.37	235.06	28.08		
Bananas	10,076	240.00	14,111.84	58.80		
Guavas	262	0.52	13.19	25.37		
Lemons	520	0.65	39.40	60.62		
Mangoes	745	2.17	236.89	109.17		
Oranges	1,361	3.75	279.15	74.44		
Papayas	4,285	19.35	1,143.61	59.10		
Pineapples	49	0.07	*	*		
Chat	1,377	31.14	261.58	8.40		
Coffee	7,866	259.90	1,143.55	4.40		
Hops	2,308	7.76	180.83	23.30		
Sugar cane	3,513	34.61	24,951.05	720.92		

Table 10.20 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

<b>Silitie</b>						
Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	138,614	88,834.88	1,166,427.85			
<u>Cereals</u>	134,527	81,270.96	1,100,901.95			
Teff	52,673	13,846.28	98,559.83	7.12	7.12	-
Barley	65,656	6,016.70	74,776.82	12.43	12.44	-
Wheat	74,342	16,887.87	237,183.26	14.04	13.86	19.61
Maize	105,536	27,848.32	514,976.77	18.49	17.11	24.74
Sorghum	89,110	14,970.43	159,128.45	10.63	10.56	-
Finger millet	17,384	1,662.22	15,764.71	9.48	9.48	-
Oats / 'Aja'	946	39.14	512.11	13.08		
Rice	*	*	*	*		
<u>Pulses</u>	102,327	7,194.73	64,453.72			
Faba beans	75,848	2,900.05	24,431.68	8.42		
Field peas	28,821	1,580.98	14,178.31	8.97		
Haricot beans	35,106	1,394.33	16,259.61	11.66		
Chick-peas	7,247	519.57	3,321.80	6.39		
Lentils	3,116	100.30	243.65	2.43		
Grass peas	6,773	666.98	5,961.45	8.94		
Soya beans	236	1.71	*	*		
Fenugreek	3,170	30.80	57.22	1.86		
Gibto	*	*	*	*		
<u>Oilseeds</u>	11,693	369.19	1,072.18			
Neug	*	*	*	*		
Linseed	9,234	338.90	1,002.78	2.96		
Groundnuts	216	0.29	*	*		
Safflower	*	*	*	*		
Sesame	*	*	*	*		
Rape seed	2,244	30.00	69.41	2.31		
<u>Vegetables</u>	122,463	9,726.32	765,555.69			
Lettuce	945	1.33	*	*		
Head cabbage	5,720	15.65	860.62	54.99		
Ethiopian cabbage	113,215	2,145.02	214,502.11	100.00		
Tomatoes	3,490	11.85	*	*		
Green peppers	1,833	14.22	*	*		
Red peppers	56,317	7,536.89	550,192.95	73.00		
Swiss chard	1,076	1.36	*	*		
<u>Root crops</u>	28,978	211.23	1,617.06			
Beetroot	7,272	8.39	1,082.06	128.97		
Carrot	4,064	4.73	*	*		
Onion	7,572	44.25	*	*		
Potatoes	12,573	128.30	*	*		
Garlic	6,217	17.71	*	*		
Taro / 'Godere'	280	0.32	*	*		
Sweet potatoes	2,400	7.54	535.00	70.95		
<u>Fruit crops</u>	45,544	153.92	11,312.83			
Avocados	10,260	15.17	1,427.57	94.10		
Bananas	25,904	76.68	*	*		
Guavas	3,938	5.33	124.24	23.31		
Lemons	4,237	4.92	*	*		
Mangoes	2,741	2.84	*	*		
Oranges	10,328	20.79	4,275.87	205.67		
Papayas	13,002	28.20	5,485.16	194.51		
Pineapples	*	*	*	*		
Chat	77,183	2,377.56	20,209.30	8.50		
Coffee	41,246	433.28	*	*		
Hops	1,396	2.50	32.95	13.18		
Sugar cane	12,191	97.62	*	*		

Table 10.21 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Alaba Special Wereda**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	33,996	26,588.69	346,081.46			
<u>Cereals</u>	33,733	25,340.61	332,875.54			
Teff	18,479	5,468.72	32,883.87	6.01	6.07	8.60
Barley	2,629	171.82	1,933.44	11.25	11.25	-
Wheat	13,121	3,159.32	42,543.90	13.47	13.12	15.95
Maize	31,911	11,894.24	211,631.35	17.79	17.26	25.86
Sorghum	27,101	3,337.99	32,102.78	9.62	9.64	-
Finger millet	15,201	1,308.53	11,780.20	9.00	9.00	-
Oats / 'Aja'	*	*	*	*		
Rice	*	*	*	*		
<u>Pulses</u>	16,300	1,189.23	13,011.60			
Faba beans	1,297	62.21	581.04	9.34		
Field peas	349	11.78	30.62	2.60		
Haricot beans	13,899	1,023.21	12,117.19	11.84		
Chick-peas	348	9.66	53.72	5.56		
Lentils	1,622	56.06	147.33	2.63		
Grass peas	*	*	*	*		
Soya beans	162	3.92	31.73	8.09		
Fenugreek	1,662	22.39	49.97	2.23		
Gibto	*	*	*	*		
<u>Oilseeds</u>	3,569	58.85	194.32			
Neug	*	*	*	*		
Linseed	2,027	29.30	108.20	3.69		
Groundnuts	176	3.01	14.74	4.90		
Safflower	88	0.07	*	*		
Sesame	*	*	*	*		
Rape seed	1,359	26.47	71.39	2.70		
<u>Vegetables</u>	26,690	2,538.49	110.19			
Lettuce	*	*	*	*		
Head cabbage	939	5.20	*	*		
Ethiopian cabbage	23,839	634.08	*	*		
Tomatoes	173	2.08	110.19	52.98		
Green peppers	511	2.09	*	*		
Red peppers	14,444	1,894.95	*	*		
Swiss chard	81	0.10	*	*		
<u>Root crops</u>	6,609	174.17	*	*		
Beetroot	503	1.95	*	*		
Carrot	406	1.05	*	*		
Onion	1,868	11.83	*	*		
Potatoes	4,280	154.12	*	*		
Garlic	539	2.26	*	*		
Taro / 'Godere'	*	*	*	*		
Sweet potatoes	999	2.96	*	*		
<u>Fruit crops</u>	7,292	32.69	940.43			
Avocados	2,130	4.75	*	*		
Bananas	4,012	14.32	422.35	29.49		
Guavas	1,491	4.74	*	*		
Lemons	247	0.33	*	*		
Mangoes	501	1.29	*	*		
Oranges	158	0.43	*	*		
Papayas	2,588	6.83	518.07	75.85		
Pineapples	*	*	*	*		
Chat	20,068	919.70	7,817.45	8.50		
Coffee	5,623	65.11	312.55	4.80		
Hops	*	*	*	*		
Sugar cane	1,394	7.07	*	*		

Table 11 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Gambela Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	29,871	9,890	171,067			
<u>Cereals</u>	28,385	8,840	168,018	-		
Teff	*	-	-	-		
Barley	*	*	*	*		
Wheat	-	-	-	-		
Maize	24,615	5,842	125,584	21.5		
Sorghum	12,806	2,889	41,288	14.29		
Finger millet	*	*	*	*		
Oats / 'Aja'	-	-	-	-		
Rice	*	*	*	*		
<u>Pulses</u>	6,228	107	503	-		
Faba beans	*	-	-	-		
Field peas	*	*	-	-		
Haricot beans	6,196	106	503	4.73		
Chick-peas	*	-	-	-		
Lentils	-	-	-	-		
Grass peas	-	-	-	-		
Soya beans	*	-	-	-		
Fenugreek	-	-	-	-		
Gibto	-	-	-	-		
<u>Oilseeds</u>	5,051	944	2,546	-		
Neug	*	*	-	-		
Linseed	-	-	-	-		
Groundnuts	2,944	76	*	*		
Safflower	*	*	-	-		
Sesame	*	*	*	*		
Rape seed	*	*	*	*		
<u>Vegetables</u>	6,159	72	-	-		
Lettuce	-	-	-	-		
Head cabbage	*	*	-	-		
Ethiopian cabbage	2,448	22	-	-		
Tomatoes	2,300	12	-	-		
Green peppers	1,118	11	-	-		
Red peppers	1,419	25	-	-		
Swiss chard	*	*	-	-		
<u>Root crops</u>	10,314	507	-	-		
Beetroot	*	*	-	-		
Carrot	*	*	-	-		
Onion	254	*	-	-		
Potatoes	1,641	*	-	-		
Garlic	263	0	-	-		
Taro / 'Godere'	7,542	384	-	-		
Sweet potatoes	4,231	95	-	-		
<u>Fruit crops</u>	14,687	404	-	-		
Avocados	1,432	7	-	-		
Bananas	7,776	183	-	-		
Guavas	568	*	-	-		
Lemons	612	4	-	-		
Mangoes	8,466	141	-	-		
Oranges	1,411	13	-	-		
Papayas	8,230	50	-	-		
Pineapples	423	3	-	-		
Chat	1,778	39	-	-		
Coffee	7,544	2,308	-	-		
Hops	950	7	-	-		
Sugar cane	5,534	96	-	-		

Table 11.1 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Zone 1**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	13,975	3,853	71,031			
<u>Cereals</u>	13,426	3,714	69,357			
Teff	-	-	-	-		
Barley	-	-	-	-		
Wheat	-	-	-	-		
Maize	12,398	3,056	57,669	18.87		
Sorghum	4,207	659	11,688	17.75		
Finger millet	-	-	-	-		
Oats / 'Aja'	-	-	-	-		
Rice	-	-	-	-		
<u>Pulses</u>	*	14	72			
Faba beans	-	-	-	-		
Field peas	-	-	-	-		
Haricot beans	*	14	72	5.01		
Chick-peas	-	-	-	-		
Lentils	-	-	-	-		
Grass peas	-	-	-	-		
Soya beans	-	-	-	-		
Fenugreek	-	-	-	-		
Gibto	-	-	-	-		
<u>Oilseeds</u>	*	*	*			
Neug	-	-	-	-		
Linseed	-	-	-	-		
Groundnuts	*	*	*	*		
Safflower	*	-	-	-		
Sesame	*	*	*	*		
Rape seed	-	-	-	-		
<u>Vegetables</u>	1,047	4	-	-		
Lettuce	-	-	-	-		
Head cabbage	-	-	-	-		
Ethiopian cabbage	*	*	-	-		
Tomatoes	*	3	-	-		
Green peppers	*	*	-	-		
Red peppers	-	-	-	-		
Swiss chard	-	-	-	-		
<u>Root crops</u>	2,030	*	-	-		
Beetroot	-	-	-	-		
Carrot	-	-	-	-		
Onion	-	-	-	-		
Potatoes	*	*	-	-		
Garlic	-	-	-	-		
Taro / 'Godere'	745	*	-	-		
Sweet potatoes	*	*	-	-		
<u>Fruit crops</u>	4,363	147.34	-	-		
Avocados	*	*	-	-		
Bananas	2,803	51.36	-	-		
Guavas	*	*	-	-		
Lemons	*	*	-	-		
Mangoes	2,879	84.16	-	-		
Oranges	*	*	-	-		
Papayas	2,182	9.29	-	-		
Pineapples	-	-	-	-		
Chat	-	-	-	-		
Coffee	-	-	-	-		
Hops	-	-	-	-		
Sugar cane	-	-	-	-		

Table 11.2 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Zone 2**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	15,895	6,037	100,036			
<u>Cereals</u>	14,960	5,126	98,661			
Teff	*	-	-	-		
Barley	*	*	*	*		
Wheat	-	-	-	-		
Maize	12,216	2,786	67,915	24.37		
Sorghum	8,599	2,230	29,600	13.27		
Finger millet	*	*	*	*		
Oats / 'Aja'	-	-	-	-		
Rice	*	*	*	*		
<u>Pulses</u>	4,470	92	431			
Faba beans	*	-	-	-		
Field peas	*	*	-	-		
Haricot beans	4,438	92	431	4.68		
Chick-peas	-	-	-	-		
Lentils	-	-	-	-		
Grass peas	-	-	-	-		
Soya beans	-	-	-	-		
Fenugreek	-	-	-	-		
Gibto	-	-	-	-		
<u>Oilseeds</u>	3,010	*	*			
Neug	*	*	-	-		
Linseed	-	-	-	-		
Groundnuts	1,338	39	200	5.15		
Safflower	297	*	-	-		
Sesame	1,413	*	*	*		
Rape seed	190	*	*	*		
<u>Vegetables</u>	5,112	68	-			
Lettuce	-	-	-	-		
Head cabbage	207	*	-	-		
Ethiopian cabbage	2,417	21	-	-		
Tomatoes	1,285	9	-	-		
Green peppers	942	11	-	-		
Red peppers	1,419	25	-	-		
Swiss chard	*	*	-	-		
<u>Root crops</u>	8,284	446	-			
Beetroot	*	*	-	-		
Carrot	*	*	-	-		
Onion	254	*	-	-		
Potatoes	1,594	*	-	-		
Garlic	263	0	-	-		
Taro / 'Godere'	6,797	355	-	-		
Sweet potatoes	2,626	63	-	-		
<u>Fruit crops</u>	10,324	257	-			
Avocados	1,383	7	-	-		
Bananas	4,973	132	-	-		
Guavas	475	*	-	-		
Lemons	583	3	-	-		
Mangoes	5,588	56	-	-		
Oranges	1,319	12	-	-		
Papayas	6,048	41	-	-		
Pineapples	423	3	-	-		
Chat	1,778	39	-	-		
Coffee	7,544	2,308	-	-		
Hops	950	7	-	-		
Sugar cane	5,342	95	-	-		



Table 12 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Harari Region**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	15,898	8,807.37	78,154.43			
<u>Cereals</u>	15,759	6,461.89	61,895.60			
Teff	36	1.36	*	*	*	-
Barley	748	54.68	594.53	10.87	10.87	-
Wheat	861	51.15	445.37	8.71	8.65	12.25
Maize	10,567	933.06	12,141.17	13.01	12.78	17.83
Sorghum	14,876	5,407.15	48,552.16	8.98	8.05	12.31
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	177	14.50	162.36	11.20		
Rice	*	*	*	*		
<u>Pulses</u>	326	7.54	108.67			
Faba beans	*	*	*	*		
Field peas	*	*	*	*		
Haricot beans	220	6.54	104.69	16.01		
Chick-peas	36	0.42	*	*		
Lentils	34	0.16	1.46	9.13		
Grass peas	*	*	*	*		
Soya beans	*	*	*	*		
Fenugreek	36	0.42	2.51	5.98		
Gibto	*	*	*	*		
<u>Oilseeds</u>	9,212	2,337.94	16,150.16			
Neug	*	*	*	*		
Linseed	*	*	*	*		
Groundnuts	9,176	2,255.22	15,686.32	6.96		
Safflower	*	*	*	*		
Sesame	1,382	82.72	463.84	5.61		
Rape seed	*	*	*	*		
<u>Vegetables</u>	189	1.12	7.71			
Lettuce	*	*	*	*		
Head cabbage	36	0.62	*	*		
Ethiopian cabbage	*	*	*	*		
Tomatoes	95	0.41	*	*		
Green peppers	28	*	*	*		
Red peppers	30	0.10	7.71	77.10		
Swiss chard	*	*	*	*		
<u>Root crops</u>	3,409	153.85	7,345.76			
Beetroot	40	0.01	*	*		
Carrot	40	0.02	*	*		
Onion	40	0.41	*	*		
Potatoes	733	61.91	*	*		
Garlic	*	*	*	*		
Taro / 'Godere'	31	0.81	*	*		
Sweet potatoes	2,644	90.69	7,345.76	81.00		
<u>Fruit crops</u>	9,145	159.78	1,462.14	9.15		
Avocados	214	1.47	*	*		
Bananas	1,858	7.72	*	*		
Guavas	3,224	26.47	*	*		
Lemons	598	1.92	*	*		
Mangoes	5,747	105.24	*	*		
Oranges	170	0.27	*	*		
Papayas	3,091	16.69	1,462.14	87.61		
Pineapples	*	*	*	*		
Chat	13,016	2,661.62	*	*		
Coffee	1,832	49.47	*	*		
Hops	179	5.03	*	*		
Sugar cane	536	24.98	*	*		

Table 13 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Addis Ababa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	5,742	10,093.96	124,036.51			
<u>Cereals</u>	5,080	7,374.62	90,698.75			
Teff	3,946	3,305.47	32,575.33	9.85	9.97	13.10
Barley	430	239.11	1,913.03	8.00	8.00	-
Wheat	4,136	3,787.57	55,806.62	14.73	14.80	17.90
Maize	829	11.72	53.47	4.56	4.56	-
Sorghum	128	22.10	303.30	13.72	13.72	-
Finger millet	28	5.42	*	*	*	-
Oats / 'Aja'	58	3.23	47.00	14.55		
Rice	*	*	*	*		
<u>Pulses</u>	4,366	2,708.82	33,322.62			
Faba beans	2,066	278.28	2,079.98	7.47		
Field peas	600	92.62	403.26	4.35		
Haricot beans	98	9.84	50.68	5.15		
Chick-peas	2,385	1,026.74	14,820.28	14.43		
Lentils	1,870	432.48	3,373.73	7.80		
Grass peas	2,880	808.79	12,227.05	15.12		
Soya beans	*	*	*	*		
Fenugreek	529	60.07	367.64	6.12		
Gibto	*	*	*	*		
<u>Oilseeds</u>	311	10.53	15.14			
Neug	*	*	*	*		
Linseed	76	9.41	12.83	1.36		
Groundnuts	*	*	*	*		
Safflower	15	0.07	*	*		
Sesame	*	*	*	*		
Rape seed	220	1.05	2.32	2.21		
<u>Vegetables</u>	2,095	17.01	325.43			
Lettuce	137	0.32	*	*		
Head cabbage	126	2.13	*	*		
Ethiopian cabbage	1,761	9.33	*	*		
Tomatoes	39	2.69	239.55	89.05		
Green peppers	284	0.86	85.88	99.86		
Red peppers	*	*	*	*		
Swiss chard	264	1.68	*	*		
<u>Root crops</u>	3,221	82.97	801.85			
Beetroot	293	7.12	*	*		
Carrot	749	58.32	*	*		
Onion	153	0.50	66.64	133.28		
Potatoes	110	9.36	729.74	77.96		
Garlic	2,633	7.63	*	*		
Taro / 'Godere'	14	*	*	*		
Sweet potatoes	59	0.05	5.47	109.40		
<u>Fruit crops</u>	48	0.05	*	*		
Avocados	24	0.01	*	*		
Bananas	24	0.01	*	*		
Guavas	*	*	*	*		
Lemons	*	*	*	*		
Mangoes	*	*	*	*		
Oranges	*	*	*	*		
Papayas	48	0.04	*	*		
Pineapples	*	*	*	*		
Chat	15	1.75	*	*		
Coffee	54	0.19	*	*		
Hops	659	6.71	59.05	8.80		
Sugar cane	87	0.06	*	*		

Table 14 - Area, Production and Yield of Crops for Private Peasant Holdings  
for Meher Season 2005/2006 (1998 E.C)

**Dire Dawa**

Crop	Number of holders	Area in hectare	Production in quintal	Average yield (qt / ha)	Non - extension yield (qt / ha)	Extension yield (qt / ha)
Grain	17,105	7,888.41	78,917.08			
<u>Cereals</u>	17,105	7,422.63	75,267.68			
Teff	*	*	*	*	*	-
Barley	514	21.65	171.58	7.93	7.93	-
Wheat	*	*	*	*	*	-
Maize	3,137	106.41	1,295.10	12.17	12.17	-
Sorghum	16,987	7,294.57	73,801.00	10.12	10.12	-
Finger millet	*	*	*	*	*	-
Oats / 'Aja'	*	*	*	*	*	-
Rice	*	*	*	*	*	-
<u>Pulses</u>	5,013	349.99	2,867.27			
Faba beans	39	0.24	*	*	*	
Field peas	*	*	*	*	*	
Haricot beans	4,818	344.70	2,847.99	8.26	*	
Chick-peas	*	*	*	*	*	
Lentils	39	0.56	*	*	*	
Grass peas	*	*	*	*	*	
Soya beans	*	*	*	*	*	
Fenugreek	272	4.48	19.28	4.30	*	
Gibto	*	*	*	*	*	
<u>Oilseeds</u>	2,090	115.79	782.14			
Neug	*	*	*	*	*	
Linseed	*	*	*	*	*	
Groundnuts	1,235	74.14	552.20	7.45	*	
Safflower	*	*	*	*	*	
Sesame	1,045	41.66	229.94	5.52	*	
Rape seed	*	*	*	*	*	
<u>Vegetables</u>	1,572	56.39	*	*	*	
Lettuce	*	*	*	*	*	
Head cabbage	*	*	*	*	*	
Ethiopian cabbage	*	*	*	*	*	
Tomatoes	1,277	52.03	*	*	*	
Green peppers	362	4.36	*	*	*	
Red peppers	*	*	*	*	*	
Swiss chard	*	*	*	*	*	
<u>Root crops</u>	2,709	102.88	*	*	*	
Beetroot	*	*	*	*	*	
Carrot	*	*	*	*	*	
Onion	824	35.53	*	*	*	
Potatoes	422	15.06	*	*	*	
Garlic	*	*	*	*	*	
Taro / 'Godere'	*	*	*	*	*	
Sweet potatoes	1,925	52.28	*	*	*	
<u>Fruit crops</u>	5,211	56.16	*	*	*	
Avocados	107	0.05	*	*	*	
Bananas	604	5.48	*	*	*	
Guavas	1,564	4.09	*	*	*	
Lemons	648	2.43	*	*	*	
Mangoes	1,198	10.95	*	*	*	
Oranges	289	1.69	*	*	*	
Papayas	3,222	31.47	*	*	*	
Pineapples	*	*	*	*	*	
Chat	10,883	834.74	8,180.50	9.80	*	
Coffee	3,330	94.64	*	*	*	
Hops	*	*	*	*	*	
Sugar cane	33	0.03	*	*	*	

## **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  $h^{\text{th}}$  stratum.

$M_h$  is the measure of size of the  $h^{\text{th}}$  stratum as obtained from the sampling frame.

$m_{hi}$  is the measure of size of the  $i^{\text{th}}$  sample EA in the  $h^{\text{th}}$  stratum obtained from the sampling frame.

$H_{hi}$  is the total number of agricultural households of the  $i^{\text{th}}$  sample EA in the  $h^{\text{th}}$  stratum.

$h_{hi}$  is the number of sample agricultural households successfully covered in the  $i^{\text{th}}$  sample EA in the  $h^{\text{th}}$  stratum.

$a_{hij}$  is the value of area for agricultural households  $j$ , in the  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  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,  $\bar{Y}_{hi} = \frac{Y_{hi}}{16C_{hi}}$  is average yield per square meter of a specific crop in the  $i^{\text{th}}$  EA in the

$h^{\text{th}}$  stratum.

$\hat{P}_h$  is estimate of total quantity of production of a specific crop in the  $h^{\text{th}}$  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  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  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  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  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  $i^{\text{th}}$  sample EA in

stratum  $h$ .

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

$\hat{A}_{hij}, \hat{P}_{hij}$  are weighted values of area and production, respectively, from  $j^{\text{th}}$  agricultural household in the  $i^{\text{th}}$  EA and  $h^{\text{th}}$  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 2005/2006 (1998 E.C)

**Ethiopia**

Crop	Holder	Standard Error	CV%	Area	Standard Error	CV %	Production	Standard Error	CV %
<b>Grain</b>	10,929,152	85,028	1	10,161,021	158,693	2	133,650,208	2,245,448	2
<u>Cereals</u>	10,582,491	86,189	1	8,072,561	127,224	2	116,074,689	2,017,807	2
Teff	5,177,125	90,590	2	2,246,017	66,667	3	21,755,977	753,700	3
Barley	3,784,238	88,305	2	997,868	45,509	5	12,706,798	704,997	6
Wheat	4,109,464	93,372	2	1,459,540	65,526	4	22,190,754	1,061,682	5
Maize	6,821,795	100,760	1	1,520,283	40,169	3	33,242,368	1,098,428	3
Sorghum	4,148,720	89,480	2	1,465,181	51,333	4	21,694,699	914,851	4
Finger millet	1,232,912	47,190	4	333,029	18,978	6	3,970,017	241,793	6
Oats / 'Aja'	341,612	29,515	9	44,401	6,539	15	401,634	54,895	14
Rice	22,496	10,343	46	*	*	*	*	*	*
<u>Pulses</u>	5,872,477	85,483	1	1,292,063	39,012	3	12,711,966	436,461	3
Horse beans	3,271,878	75,674	2	456,919	18,149	4	5,127,970	228,821	4
Field peas	1,477,302	52,598	4	233,087	13,077	6	1,822,676	114,425	6
Haricot beans	1,724,060	55,801	3	163,582	11,610	7	1,383,713	114,099	8
Chick-peas	832,623	44,496	5	201,010	15,587	8	2,105,851	184,907	9
Lentils	648,995	36,350	6	84,895	8,600	10	576,033	83,391	14
Vetch	586,787	41,296	7	123,464	10,917	9	1,459,448	140,451	10
Soya beans	29,923	4,457	15	3,327	1,245	37	*	*	*
Fenugreek	340,860	20,704	6	11,845	1,579	13	74,839	12,782	17
Gibto	88,358	14,838	17	13,936	3,106	22	123,318	28,277	23
<u>Oilseeds</u>	3,027,326	70,939	2	796,397	29,381	4	4,863,553	225,942	5
Neug	1,026,396	42,692	4	306,877	17,466	6	1,471,286	108,658	7
Linseed	1,165,022	50,123	4	215,107	16,717	8	1,259,072	114,507	9
Groundnuts	205,259	28,303	14	35,392	8,363	24	341,501	78,537	23
Safflower	170,349	19,925	12	8,867	1,697	19	59,572	13,569	23
Sesame	601,229	33,575	6	205,153	14,007	7	1,488,610	129,398	9
Rape seed	487,561	32,390	7	25,001	2,927	12	243,512	32,306	13
<u>Vegetables</u>	4,549,800	81,323	2	117,578	8,720	7	4,501,996	276,017	6
Lettuce	32,207	4,743	15	268	109	41	*	*	*
Head cabbage	198,351	13,212	7	1,653	253	15	128,823	26,833	21
Ethiopian cabbage	2,401,502	60,820	3	22,997	909	4	1,808,433	77,316	4
Tomatoes	137,785	14,681	11	4,776	2,167	45	354,073	170,478	48
Green peppers	822,257	34,956	4	6,247	485	8	401,034	31,858	8
Red peppers	1,745,291	66,652	4	81,519	8,417	10	1,790,283	190,760	11
Swiss chard	58,302	5,279	9	117	17	15	-	-	-
<u>Root crops</u>	4,468,101	78,655	2	168,836	7,465	4	13,374,684	607,556	5
Beetroot	250,996	13,164	5	1,506	314	21	162,911	40,070	25
Carrot	134,358	9,051	7	1,071	225	21	68,815	19,705	29
Onion	711,038	34,044	5	16,579	2,468	15	1,759,193	239,551	14
Potatoes	1,102,790	55,969	5	61,812	6,195	10	4,499,958	483,126	11
Garlic	1,743,605	57,014	3	12,481	1,088	9	1,071,719	103,444	10
Taro / 'Godere'	849,125	28,858	3	25,169	1,530	6	1,724,128	89,035	5
Sweet potatoes	1,136,793	35,401	3	50,218	2,471	5	4,087,961	200,335	5
<u>Fruit crops</u>	2,270,602	58,047	3	44,639	1,932	4	4,283,012	203,367	5
Avocados	528,983	25,554	5	3,589	297	8	283,477	26,725	9
Bananas	1,417,421	43,539	3	27,919	1,161	4	2,114,499	96,964	5
Guavas	188,367	16,122	9	802	124	15	14,294	2,428	17
Lemons	151,751	10,607	7	565	55	10	41,950	6,586	16
Mangoes	455,402	24,118	5	5,259	325	6	547,291	29,293	5
Oranges	348,789	23,212	7	2,748	314	11	506,573	66,327	13
Papayas	480,031	22,242	5	2,845	474	17	710,925	109,377	15
Pineapples	21,354	10,516	49	*	*	*	*	*	*
Chat	1,875,970	58,969	3	136,150	7,935	6	1,196,603	76,729	6
Coffee	2,691,933	69,205	3	258,867	12,898	5	1,716,311	90,190	5
Hops	1,512,334	49,368	3	22,884	2,272	10	227,802	21,460	9
Sugar cane	853,012	31,949	4	18,761	1,725	9	16,050,252	1,380,935	9

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Tigray**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
Grain	719,770	12,421	2	708,350	30,258	4	8,587,980	436,484	5
<u>Cereals</u>	713,853	12,331	2	585,847	26,237	4	7,568,135	410,981	5
Teff	430,239	16,195	4	138,346	10,188	7	1,244,213	103,752	8
Barley	353,478	14,938	4	79,108	8,090	10	877,473	81,588	9
Wheat	295,435	17,906	6	76,776	7,203	9	1,006,985	96,434	10
Maize	428,015	16,947	4	46,192	3,673	8	803,329	82,432	10
Sorghum	392,418	21,304	5	184,011	17,551	10	2,934,833	327,993	11
Finger millet	254,189	14,122	6	60,737	5,812	10	695,630	75,427	11
Oats / 'Aja'	3,603	1,728	48	678	327	48	5,673	2,626	46
Rice	-	-	-	-	-	-	-	-	-
<u>Pulses</u>	300,035	17,117	6	46,338	4,020	9	434,531	44,307	10
Horse beans	176,301	16,782	10	14,616	1,997	14	173,611	25,422	15
Field peas	48,511	6,159	13	5,240	976	19	49,484	10,463	21
Haricot beans	19,526	6,697	34	*	*	*	*	*	*
Chick-peas	51,827	7,524	15	11,702	2,248	19	96,648	19,501	20
Lentils	35,385	5,387	15	4,060	733	18	29,291	7,089	24
Vetch	35,594	6,801	19	6,975	1,485	21	68,497	14,984	22
Soya beans	907	679	75	*	*	*	*	*	*
Fenugreek	15,783	3,492	22	416	170	41	*	*	*
Gibto	-	-	-	-	-	-	-	-	-
<u>Oilseeds</u>	205,735	12,430	6	76,166	5,258	7	585,313	40,883	7
Neug	44,128	5,943	13	6,491	1,083	17	44,568	10,657	24
Linseed	78,632	8,207	10	9,190	1,677	18	47,650	8,573	18
Groundnuts	962	538	56	16	7	46	110	52	47
Safflower	7,140	2,800	39	*	*	*	*	*	*
Sesame	104,680	10,441	10	60,148	4,934	8	492,154	37,944	8
Rape seed	2,465	1,006	41	*	*	*	-	-	-
<u>Vegetables</u>	179,504	11,327	6	2,089	206	10	60,891	10,180	17
Lettuce	4,243	1,016	24	34	14	42	850	348	41
Head cabbage	6,115	1,541	25	30	12	41	920	369	40
Ethiopian cabbage	*	*	*	*	*	*	*	*	*
Tomatoes	23,316	4,197	18	431	108	25	23,471	8,344	36
Green peppers	44,203	6,716	15	354	65	18	21,158	4,768	23
Red peppers	119,700	9,885	8	1,205	151	13	14,443	2,826	20
Swiss chard	8,070	1,751	22	23	8	33	-	-	-
<u>Root crops</u>	95,959	11,532	12	1,648	333	20	184,748	40,184	22
Beetroot	1,458	549	38	1	0	35	*	*	*
Carrot	5,523	2,694	49	*	*	*	*	*	*
Onion	40,255	5,798	14	590	139	24	59,494	14,109	24
Potatoes	17,339	3,846	22	*	*	*	*	*	*
Garlic	56,506	9,084	16	538	114	21	72,441	15,112	21
Taro / 'Godere'	-	-	-	-	-	-	-	-	-
Sweet potatoes	1,443	616	43	5	2	44	78	30	39
<u>Fruit crops</u>	22,142	2,964	13	191	60	31	2,607	1,075	41
Avocados	*	*	*	*	*	*	-	-	-
Bananas	2,844	846	30	23	10	43	*	*	*
Guavas	7,463	1,697	23	*	*	*	*	*	*
Lemons	7,804	1,625	21	*	*	*	*	*	*
Mangoes	*	*	*	*	*	*	-	-	-
Oranges	5,683	1,187	21	24	7	27	377	99	26
Papayas	8,485	1,938	23	45	16	34	673	198	29
Pineapples	-	-	-	-	-	-	-	-	-
Chat	*	*	*	*	*	*	-	-	-
Coffee	4,676	1,303	28	29	9	30	-	-	-
Hops	84,343	10,767	13	1,118	256	23	18,305	3,940	22
Sugar cane	*	*	*	*	*	*	-	-	-

Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Afar**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
<b>Grain</b>	16,901	2,257	13	19,088	2,783	15	376,330	72,881	19
<u>Cereals</u>	15,840	1,914	12	17,358	2,374	14	370,346	72,696	20
Teff	3,602	1,127	31	1,784	624	35	8,177	2,692	33
Barley	796	331	42	*	*	*	*	*	*
Wheat	*	*	*	*	*	*	*	*	*
Maize	14,157	1,604	11	12,776	1,913	15	347,278	72,574	21
Sorghum	3,997	1,193	30	2,265	691	31	14,519	4,481	31
Finger millet	-	-	-	-	-	-	-	-	-
Oats / 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
<u>Pulses</u>	1,805	578	32	197	71	36	760	300	40
Horse beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
Haricot beans	1,444	495	34	111	49	44	473	191	40
Chick-peas	548	214	39	84	38	46	*	*	*
Lentils	*	*	*	*	*	*	-	-	-
Vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
<u>Oilseeds</u>	4,293	1,314	31	*	*	*	5,224	2,334	45
Neug	*	*	*	*	*	*	-	-	-
Linseed	*	*	*	*	*	*	-	-	-
Groundnuts	*	*	*	*	*	*	-	-	-
Safflower	1,902	675	36	*	*	*	*	*	*
Sesame	3,639	1,175	32	*	*	*	4,388	2,135	49
Rape seed	-	-	-	-	-	-	-	-	-
<u>Vegetables</u>	2,406	722	30	49	16	32	-	-	-
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	*	*	*	*	*	*	-	-	-
Ethiopian cabbage	*	*	*	*	*	*	-	-	-
Tomatoes	*	*	*	*	*	*	-	-	-
Green peppers	*	*	*	*	*	*	-	-	-
Red peppers	2,139	717	34	29	9	32	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
<u>Root crops</u>	1,222	435	36	*	*	*	*	*	*
Beetroot	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	1,103	435	39	*	*	*	*	*	*
Potatoes	-	-	-	-	-	-	-	-	-
Garlic	*	*	*	*	*	*	-	-	-
Taro / 'Godere'	-	-	-	-	-	-	-	-	-
Sweet potatoes	*	*	*	*	*	*	-	-	-
<u>Fruit crops</u>	1,636	611	37	*	*	*	*	*	*
Avocados	*	*	*	*	*	*	-	-	-
Bananas	*	*	*	*	*	*	*	*	*
Guavas	*	*	*	*	*	*	-	-	-
Lemons	*	*	*	*	*	*	*	*	*
Mangoes	*	*	*	*	*	*	-	-	-
Oranges	*	*	*	*	*	*	-	-	-
Papayas	856	372	43	*	*	*	1,153	514	45
Pineapples	-	-	-	-	-	-	-	-	-
Chat	*	*	*	*	*	*	-	-	-
Coffee	*	*	*	*	*	*	-	-	-
Hops	472	199	42	3	1	45	61	28	45
Sugar cane	*	*	*	*	*	*	-	-	-

Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Amhara**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
<b>Grain</b>	3,141,387	46,341	1	3,570,812	98,345	3	43,854,714	1,370,166	3
<b>Cereals</b>	3,097,075	47,409	2	2,714,489	76,853	3	36,498,651	1,203,265	3
Teff	1,974,238	58,554	3	907,057	44,754	5	8,658,240	463,470	5
Barley	1,285,198	56,579	4	318,420	25,124	8	3,964,682	394,013	10
Wheat	1,329,834	55,791	4	431,486	32,649	8	6,074,888	525,151	9
Maize	1,967,462	62,774	3	341,084	17,714	5	7,256,802	498,914	7
Sorghum	1,162,957	62,557	5	537,624	37,745	7	8,515,402	716,938	8
Finger millet	491,322	39,630	8	164,649	17,114	10	1,846,795	214,862	12
Oats / 'Aja'	95,319	13,172	14	8,301	1,477	18	74,017	13,570	18
Rice	*	*	*	*	*	*	*	*	*
<b>Pulses</b>	1,979,270	50,668	3	585,171	28,703	5	5,828,794	315,841	5
Horse beans	1,285,212	51,376	4	210,055	13,577	6	2,387,016	167,739	7
Field peas	569,358	35,003	6	85,905	8,098	9	690,690	74,243	11
Haricot beans	208,485	24,130	12	25,308	5,079	20	175,233	32,273	18
Chick-peas	503,604	38,937	8	122,967	13,300	11	1,271,272	157,020	12
Lentils	349,324	28,357	8	50,799	6,514	13	332,465	48,404	15
Vetch	330,884	32,300	10	69,288	8,709	13	801,510	108,223	14
Soya beans	1,286	634	49	*	*	*	*	*	*
Fenugreek	137,774	15,007	11	6,785	1,477	22	46,964	11,768	25
Gibto	88,245	14,838	17	13,935	3,106	22	123,315	28,277	23
<b>Oilseeds</b>	1,272,736	47,412	4	271,152	19,458	7	1,527,268	147,405	10
Neug	518,209	34,235	7	139,552	13,762	10	604,629	71,944	12
Linseed	427,600	28,877	7	45,310	5,034	11	193,651	25,168	13
Groundnuts	*	*	*	*	*	*	*	*	*
Safflower	121,498	18,668	15	6,053	1,292	21	45,392	12,177	27
Sesame	210,344	28,312	13	62,279	12,359	20	489,698	118,896	24
Rape seed	324,687	29,197	9	16,883	2,393	14	180,352	27,708	15
<b>Vegetables</b>	1,137,992	53,099	5	31,107	5,015	16	634,774	80,453	13
Lettuce	5,303	1,857	35	*	*	*	*	*	*
Head cabbage	32,120	6,145	19	176	54	31	9,240	3,768	41
Ethiopian cabbage	147,463	21,487	15	618	168	27	49,160	14,406	29
Tomatoes	34,512	7,768	23	319	145	45	*	*	*
Green peppers	129,765	17,768	14	837	186	22	62,366	15,580	25
Red peppers	872,744	52,811	6	29,112	5,014	17	491,265	76,727	16
Swiss chard	15,490	3,426	22	36	12	32	-	-	-
<b>Root crops</b>	1,311,495	51,416	4	38,702	4,150	11	2,877,659	346,400	12
Beetroot	27,710	4,743	17	98	40	41	3,344	1,406	42
Carrot	24,776	4,382	18	135	53	39	3,740	1,569	42
Onion	233,266	22,402	10	5,339	975	18	706,527	142,655	20
Potatoes	457,974	39,902	9	26,512	3,822	14	1,815,827	300,142	17
Garlic	934,944	45,210	5	6,353	905	14	341,477	65,008	19
Taro / 'Godere'	-	-	-	-	-	-	-	-	-
Sweet potatoes	29,530	7,008	24	264	117	44	*	*	*
<b>Fruit crops</b>	201,940	21,889	11	1,784	393	22	182,753	40,923	22
Avocados	5,928	2,235	38	*	*	*	*	*	*
Bananas	59,780	9,458	16	495	138	28	18,913	6,986	37
Guavas	31,970	7,742	24	112	34	31	2,923	950	33
Lemons	56,652	7,862	14	172	44	25	25,315	6,440	25
Mangoes	17,861	4,072	23	90	30	34	*	*	*
Oranges	68,776	12,209	18	521	146	28	86,794	22,534	26
Papayas	62,371	10,719	17	351	163	46	43,758	19,326	44
Pineapples	*	*	*	*	*	*	-	-	-
Chat	106,707	19,430	18	3,450	1,226	36	37,946	14,908	39
Coffee	246,863	27,768	11	5,331	1,020	19	27,163	6,519	24
Hops	787,369	40,541	5	14,452	2,118	15	127,825	19,201	15
Sugar cane	54,100	9,955	18	1,628	702	43	1,166,666	523,532	45

Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Oromia**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
<b>Grain</b>	4,627,073	62,740	1	4,720,123	116,217	2	67,727,141	1,647,323	2
<b>Cereals</b>	4,536,344	62,182	1	3,835,235	93,947	2	60,285,657	1,495,189	2
Teff	1,966,059	62,068	3	985,666	47,115	5	10,224,520	577,664	6
Barley	1,499,084	58,881	4	514,377	36,465	7	6,929,575	571,326	8
Wheat	1,829,680	68,298	4	816,572	55,718	7	13,177,061	905,075	7
Maize	3,186,353	67,558	2	858,096	32,466	4	20,317,484	908,881	4
Sorghum	1,832,137	55,257	3	542,046	28,855	5	8,176,429	452,536	6
Finger millet	395,500	19,430	5	83,578	4,444	5	1,141,465	63,541	6
Oats / 'Aja'	222,903	26,125	12	34,795	6,359	18	317,983	53,118	17
Rice	1,518	242	16	106	18	17	1,140	214	19
<b>Pulses</b>	2,239,888	56,722	3	487,975	24,253	5	5,010,423	279,638	6
Horse beans	1,125,775	44,118	4	170,873	11,053	6	1,995,774	145,782	7
Field peas	485,674	34,209	7	92,858	9,204	10	711,166	74,911	11
Haricot beans	854,800	39,446	5	85,170	8,791	10	783,903	90,814	12
Chick-peas	224,880	19,293	9	59,060	7,757	13	689,229	95,380	14
Lentils	235,235	21,867	9	28,584	5,564	19	207,208	67,529	33
Vetch	206,156	24,213	12	44,582	6,299	14	563,322	87,802	16
Soya beans	18,141	4,266	24	2,510	1,238	49	*	*	*
Fenugreek	162,962	13,680	8	4,339	530	12	25,277	4,882	19
Gibto	-	-	-	-	-	-	-	-	-
<b>Oilseeds</b>	1,314,382	50,362	4	396,913	20,960	5	2,431,061	162,416	7
Neug	417,364	24,260	6	144,965	10,432	7	737,942	78,029	11
Linseed	584,097	39,675	7	157,345	15,832	10	1,001,867	111,218	11
Groundnuts	152,536	27,787	18	27,588	8,271	30	251,903	75,365	30
Safflower	25,907	5,728	22	1,835	1,062	58	*	*	*
Sesame	210,010	13,931	7	57,745	3,424	6	369,979	30,310	8
Rape seed	134,160	13,286	10	7,435	1,676	23	60,370	16,578	27
<b>Vegetables</b>	1,782,045	51,327	3	51,858	6,641	13	1,777,207	199,907	11
Lettuce	15,636	3,824	24	*	*	*	*	*	*
Head cabbage	101,236	9,432	9	990	232	23	90,678	26,177	29
Ethiopian cabbage	960,502	46,471	5	8,493	622	7	641,819	52,150	8
Tomatoes	50,860	11,191	22	*	*	*	*	*	*
Green peppers	499,553	26,826	5	4,386	438	10	257,910	26,366	10
Red peppers	517,258	34,628	7	34,086	6,314	19	485,821	83,472	17
Swiss chard	16,105	2,856	18	31	9	30	-	-	-
<b>Root crops</b>	1,735,247	50,391	3	66,174	5,884	9	4,808,572	458,804	10
Beetroot	145,819	10,575	7	1,193	310	26	144,165	39,936	28
Carrot	58,527	5,546	9	512	188	37	45,795	17,782	39
Onion	324,107	23,654	7	9,452	2,248	24	871,697	190,340	22
Potatoes	336,323	35,086	10	24,924	4,812	19	1,874,780	372,708	20
Garlic	664,207	31,626	5	5,193	588	11	627,462	78,720	13
Taro / 'Godere'	260,949	22,017	8	6,730	1,288	19	388,722	71,752	18
Sweet potatoes	489,101	24,323	5	18,169	1,869	10	855,950	100,400	12
<b>Fruit crops</b>	892,729	40,587	5	14,576	1,252	9	1,556,115	150,505	10
Avocados	79,556	10,050	13	664	110	17	51,185	8,730	17
Bananas	574,704	30,126	5	8,339	775	9	642,393	60,626	9
Guavas	100,327	13,011	13	457	110	24	8,937	2,199	25
Lemons	34,392	4,969	14	97	16	17	5,674	860	15
Mangoes	235,299	22,347	10	2,347	297	13	237,921	25,851	11
Oranges	140,874	15,731	11	1,207	172	14	227,991	38,623	17
Papayas	177,682	16,851	9	1,439	437	30	380,353	106,471	28
Pineapples	5,028	2,141	43	*	*	*	*	*	*
Chat	1,142,617	41,840	4	96,754	7,073	7	915,147	70,791	8
Coffee	1,098,476	47,097	4	164,652	11,070	7	1,152,632	81,144	7
Hops	428,372	21,758	5	4,770	412	9	49,374	3,190	6
Sugar cane	264,675	19,743	7	6,301	1,247	20	3,824,614	614,571	16

Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Somale**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
Grain	81,247	5,538	7	67,290	6,744	10	378,094	42,263	11
<u>Cereals</u>	81,108	5,533	7	65,915	6,562	10	376,439	42,088	11
Teff	*	*	*	*	*	*	-	-	-
Barley	11,134	2,856	26	2,532	776	31	11,240	3,284	29
Wheat	24,461	4,446	18	9,672	2,847	29	47,166	12,675	27
Maize	64,055	4,883	8	22,965	3,487	15	137,199	27,589	20
Sorghum	58,955	5,681	10	30,475	3,749	12	180,019	26,945	15
Finger millet	-	-	-	-	-	-	-	-	-
Oats / 'Aja'	2,628	1,209	46	*	*	*	*	*	*
Rice	*	*	*	*	*	*	*	*	*
<u>Pulses</u>	7,875	1,632	21	1,173	436	37	*	*	*
Horse beans	-	-	-	-	-	-	-	-	-
Field peas	544	258	48	8	4	48	*	*	*
Haricot beans	4,684	1,260	27	651	245	38	*	*	*
Chick-peas	1,841	892	48	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*
Vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	925	386	42	*	*	*	87	41	48
Gibto	-	-	-	-	-	-	-	-	-
<u>Oilseeds</u>	3,669	1,422	39	*	*	*	*	*	*
Neug	-	-	-	-	-	-	-	-	-
Linseed	3,567	1,421	40	*	*	*	*	*	*
Groundnuts	*	*	*	*	*	*	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	*	*	*	2	1	48
Rape seed	-	-	-	-	-	-	-	-	-
<u>Vegetables</u>	2,954	993	34	69	30	44	731	260	36
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	*	*	*	*	*	*	-	-	-
Ethiopian cabbage	*	*	*	*	*	*	-	-	-
Tomatoes	2,107	766	36	*	*	*	479	154	32
Green peppers	*	*	*	*	*	*	*	*	*
Red peppers	-	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
<u>Root crops</u>	5,532	1,969	36	297	103	35	15,782	5,616	36
Beetroot	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	1,962	806	41	72	32	45	6,718	3,086	46
Potatoes	*	*	*	*	*	*	-	-	-
Garlic	*	*	*	*	*	*	*	*	*
Taro / 'Godere'	-	-	-	-	-	-	-	-	-
Sweet potatoes	*	*	*	145	63	43	2,258	346	15
<u>Fruit crops</u>	3,744	663	18	356	42	12	8,204	2,349	29
Avocados	-	-	-	-	-	-	-	-	-
Bananas	1,015	226	22	66	18	27	-	-	-
Guavas	*	*	*	*	*	*	*	*	*
Lemons	1,565	107	7	92	11	12	1,059	142	13
Mangoes	2,110	582	28	73	23	31	6,963	2,341	34
Oranges	1,250	98	8	110	16	14	-	-	-
Papayas	*	*	*	1	1	48	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Chat	23,328	3,701	16	6,917	1,923	28	17,220	4,617	27
Coffee	*	*	*	*	*	*	-	-	-
Hops	-	-	-	-	-	-	-	-	-
Sugar cane	65	31	48	*	*	*	-	-	-

Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Benishangul - Gumuz**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
<b>Grain</b>	139,086	3,187	2	171,876	9,416	5	2,085,802	143,319	7
<u>Cereals</u>	137,630	3,155	2	124,182	7,310	6	1,770,206	124,391	7
Teff	29,883	3,565	12	16,654	3,289	20	133,509	29,347	22
Barley	4,969	1,833	37	1,108	427	39	11,528	4,730	41
Wheat	5,392	2,103	39	*	*	*	*	*	*
Maize	124,195	3,472	3	31,721	2,511	8	626,628	59,440	9
Sorghum	93,032	4,096	4	52,887	4,001	8	723,157	67,079	9
Finger millet	36,673	4,077	11	19,485	3,592	18	242,916	49,555	20
Oats / 'Aja'	645	292	45	*	*	*	*	*	*
Rice	*	*	*	*	*	*	*	*	*
<u>Pulses</u>	50,814	3,392	7	6,596	800	12	50,345	7,846	16
Horse beans	6,562	2,398	37	611	234	38	6,693	2,877	43
Field peas	4,787	1,675	35	927	371	40	5,832	2,675	46
Haricot beans	34,431	2,712	8	3,907	639	16	31,914	6,284	20
Chick-peas	3,993	705	18	485	185	38	2,764	1,344	49
Lentils	*	*	*	*	*	*	*	*	*
Vetch	-	-	-	-	-	-	-	-	-
Soya beans	5,872	253	4	624	68	11	2,902	261	9
Fenugreek	*	*	*	*	*	*	*	*	*
Gibto	*	*	*	*	*	*	*	*	*
<u>Oilseeds</u>	97,736	3,922	4	41,098	3,826	9	265,251	34,497	13
Neug	34,163	2,987	9	13,076	2,037	16	73,033	20,023	27
Linseed	5,658	709	13	286	119	42	*	*	*
Groundnuts	27,358	2,824	10	4,186	909	22	58,978	19,363	33
Safflower	1,931	374	19	137	61	44	*	*	*
Sesame	66,446	4,467	7	23,280	2,595	11	131,312	15,633	12
Rape seed	3,670	1,429	39	133	34	26	636	254	40
<u>Vegetables</u>	38,532	3,257	8	1,002	87	9	23,976	674	3
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	1,516	115	8	10	1	11	1,250	136	11
Ethiopian cabbage	*	*	*	*	*	*	551	66	12
Tomatoes	1,686	583	35	17	5	29	-	-	-
Green peppers	3,603	752	21	29	9	29	1,032	234	23
Red peppers	32,386	2,950	9	876	64	7	21,144	612	3
Swiss chard	106	28	27	0	0	28	-	-	-
<u>Root crops</u>	32,222	3,425	11	698	141	20	78,734	15,760	20
Beetroot	784	147	19	1	1	38	104	17	16
Carrot	717	106	15	3	1	28	441	124	28
Onion	5,959	1,096	18	88	10	12	13,256	1,493	11
Potatoes	*	*	*	*	*	*	*	*	*
Garlic	10,478	3,141	30	83	30	36	12,124	4,488	37
Taro / 'Godere'	303	79	26	11	3	29	*	*	*
Sweet potatoes	19,093	964	5	319	16	5	32,504	1,479	5
<u>Fruit crops</u>	42,294	2,306	5	923	88	10	85,457	9,445	11
Avocados	676	241	36	7	2	26	-	-	-
Bananas	16,142	1,578	10	314	20	6	15,427	1,029	7
Guavas	2,438	416	17	21	5	25	416	58	14
Lemons	4,422	539	12	13	1	10	628	61	10
Mangoes	29,270	1,908	7	517	81	16	57,598	9,255	16
Oranges	5,024	1,315	26	24	4	16	4,837	462	10
Papayas	7,516	932	12	27	4	15	6,551	533	8
Pineapples	-	-	-	-	-	-	-	-	-
Chat	7,153	1,141	16	175	16	9	1,917	169	9
Coffee	14,291	2,172	15	*	*	*	808	39	5
Hops	9,767	2,500	26	114	50	44	945	408	43
Sugar cane	947	400	42	13	6	46	3,075	472	15

Estimate of Holders, Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**S.N.N.P.R.**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
Grain	2,164,944	30,731	1	876,693	30,749	4	10,359,040	482,220	5
<u>Cereals</u>	1,962,699	33,418	2	708,276	25,721	4	8,977,393	443,242	5
Teff	768,942	25,482	3	193,193	10,332	5	1,454,743	89,024	6
Barley	627,888	29,911	5	81,506	6,614	8	909,393	93,112	10
Wheat	619,299	24,414	4	119,118	7,870	7	1,799,321	149,824	8
Maize	1,023,024	36,343	4	206,397	14,494	7	3,740,159	339,420	9
Sorghum	573,233	23,113	4	103,150	6,174	6	1,027,684	72,059	7
Finger millet	55,200	7,925	14	4,575	917	20	43,210	10,757	25
Oats / 'Aja'	16,279	3,251	20	315	68	22	2,575	688	27
Rice	*	*	*	22	6	30	308	118	38
<u>Pulses</u>	1,283,085	34,842	3	161,547	9,633	6	1,349,346	102,469	8
Horse beans	675,923	29,211	4	60,485	4,341	7	562,797	48,122	9
Field peas	367,828	18,172	5	48,058	4,431	9	365,090	43,045	12
Haricot beans	595,553	30,337	5	44,767	5,308	12	373,781	60,181	16
Chick-peas	43,509	5,794	13	5,230	804	15	29,812	6,957	23
Lentils	25,975	3,110	12	968	175	18	3,431	736	21
Vetch	11,273	5,437	48	*	*	*	*	*	*
Soya beans	3,717	859	23	40	12	29	144	68	47
Fenugreek	22,037	1,951	9	190	29	15	399	40	10
Gibto	-	-	-	-	-	-	-	-	-
<u>Oilseeds</u>	117,162	8,526	7	6,869	1,473	21	32,300	8,097	25
Neug	12,425	4,219	34	2,792	1,229	44	11,113	5,254	47
Linseed	65,290	5,867	9	2,770	789	28	14,727	5,923	40
Groundnuts	5,416	883	16	195	42	21	726	221	30
Safflower	11,955	2,694	23	395	182	46	*	*	*
Sesame	3,594	919	26	182	39	21	383	111	29
Rape seed	22,359	4,137	19	535	165	31	2,152	1,019	47
<u>Vegetables</u>	1,402,510	31,918	2	31,329	2,595	8	2,004,084	172,180	9
Lettuce	6,887	1,841	27	11	5	49	-	-	-
Head cabbage	56,619	6,720	12	430	82	19	26,735	4,517	17
Ethiopian cabbage	1,286,718	32,762	3	13,794	640	5	1,116,854	55,232	5
Tomatoes	23,747	3,340	14	237	48	20	24,661	6,948	28
Green peppers	143,494	11,862	8	622	67	11	58,231	7,362	13
Red peppers	201,035	18,641	9	16,211	2,411	15	777,603	153,383	20
Swiss chard	18,267	2,216	12	25	4	16	-	-	-
<u>Root crops</u>	1,277,086	29,226	2	60,717	1,921	3	5,385,820	191,302	4
Beetroot	74,891	6,216	8	205	37	18	15,293	2,955	19
Carrot	44,026	4,967	11	252	76	30	8,513	2,885	34
Onion	103,370	7,858	8	741	162	22	86,211	21,398	25
Potatoes	285,332	17,039	6	9,658	738	8	746,000	58,178	8
Garlic	74,034	10,673	14	263	67	25	11,408	2,739	24
Taro / 'Godere'	587,828	18,656	3	18,427	827	4	1,335,319	52,716	4
Sweet potatoes	590,045	24,671	4	31,171	1,610	5	3,183,075	173,308	5
<u>Fruit crops</u>	1,091,712	35,028	3	26,173	1,366	5	2,402,908	124,940	5
Avocados	441,642	23,383	5	2,872	275	10	230,237	25,210	11
Bananas	759,689	29,917	4	18,255	774	4	1,395,376	65,937	5
Guavas	40,624	5,183	13	106	14	13	1,747	311	18
Lemons	45,149	4,786	11	155	23	15	8,021	641	8
Mangoes	163,029	7,792	5	2,111	91	4	241,814	9,780	4
Oranges	126,575	11,793	9	859	218	25	186,574	48,986	26
Papayas	216,213	9,514	4	931	85	9	276,798	15,903	6
Pineapples	*	*	*	*	*	*	*	*	*
Chat	568,744	36,428	6	25,060	2,742	11	216,193	25,124	12
Coffee	1,319,380	42,284	3	87,619	6,501	7	535,708	38,825	7
Hops	201,172	14,072	7	2,416	662	27	31,233	8,124	26
Sugar cane	531,684	23,052	4	10,787	963	9	11,055,897	1,120,356	10



Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Harari**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
Grain	15,898	511	3	8,807	947	11	78,154	10,879	14
<u>Cereals</u>	15,759	515	3	6,462	717	11	61,896	9,374	15
Teff	*	*	*	*	*	*	-	-	-
Barley	*	*	*	*	*	*	*	*	*
Wheat	861	383	45	*	*	*	*	*	*
Maize	10,567	957	9	933	124	13	12,141	1,574	13
Sorghum	14,876	640	4	5,407	690	13	48,552	8,567	18
Finger millet	-	-	-	-	-	-	-	-	-
Oats / 'Aja'	*	*	*	*	*	*	*	*	*
Rice	-	-	-	-	-	-	-	-	-
<u>Pulses</u>	326	121	37	8	3	39	109	48	44
Horse beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
Haricot beans	220	97	44	7	3	43	105	47	45
Chick-peas	*	*	*	*	*	*	-	-	-
Lentils	*	*	*	*	*	*	*	*	*
Vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*	*	*	*
Gibto	-	-	-	-	-	-	-	-	-
<u>Oilseeds</u>	9,212	1,263	14	2,338	438	19	16,150	3,159	20
Neug	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Groundnuts	9,176	1,257	14	2,255	416	18	15,686	3,001	19
Safflower	-	-	-	-	-	-	-	-	-
Sesame	1,382	597	43	*	*	*	*	*	*
Rape seed	-	-	-	-	-	-	-	-	-
<u>Vegetables</u>	189	74	39	*	*	*	*	*	*
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	*	*	*	*	*	*	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-	-	-
Tomatoes	*	*	*	*	*	*	-	-	-
Green peppers	*	*	*	-	-	-	-	-	-
Red peppers	*	*	*	*	*	*	*	*	*
Swiss chard	-	-	-	-	-	-	-	-	-
<u>Root crops</u>	3,409	587	17	154	51	33	7,346	1,639	22
Beetroot	*	*	*	*	*	*	-	-	-
Carrot	*	*	*	*	*	*	-	-	-
Onion	*	*	*	*	*	*	-	-	-
Potatoes	*	*	*	*	*	*	-	-	-
Garlic	-	-	-	-	-	-	-	-	-
Taro / 'Godere'	*	*	*	*	*	*	-	-	-
Sweet potatoes	2,644	439	17	91	20	22	7,346	1,639	22
<u>Fruit crops</u>	9,145	840	9	160	35	22	1,462	426	29
Avocados	214	105	49	*	*	*	-	-	-
Bananas	1,858	429	23	8	3	45	-	-	-
Guavas	3,224	628	19	26	10	38	-	-	-
Lemons	598	213	36	2	1	49	-	-	-
Mangoes	5,747	843	15	105	25	24	-	-	-
Oranges	170	76	44	*	*	*	-	-	-
Papayas	3,091	446	14	17	5	29	1,462	426	29
Pineapples	-	-	-	-	-	-	-	-	-
Chat	13,016	931	7	2,662	336	13	-	-	-
Coffee	1,832	565	31	49	24	48	-	-	-
Hops	*	*	*	*	*	*	-	-	-
Sugar cane	*	*	*	*	*	*	-	-	-

Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Addis Abeba**

Crop	Holder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
Grain	5,742	148	3	10,094	863	9	124,037	10,902	9
<u>Cereals</u>	5,080	160	3	7,375	553	7	90,699	6,959	8
Teff	3,946	157	4	3,305	245	7	32,575	2,543	8
Barley	430	65	15	239	65	27	1,913	563	29
Wheat	4,136	217	5	3,788	350	9	55,807	5,107	9
Maize	829	121	15	12	2	20	53	9	17
Sorghum	128	51	40	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*	-	-	-
Oats / 'Aja'	*	*	*	*	*	*	*	*	*
Rice	-	-	-	-	-	-	-	-	-
<u>Pulses</u>	4,366	171	4	2,709	338	12	33,323	4,367	13
Horse beans	2,066	145	7	278	31	11	2,080	303	15
Field peas	600	64	11	93	17	18	403	99	25
Haricot beans	98	37	38	*	*	*	*	*	*
Chick-peas	2,385	187	8	1,027	182	18	14,820	2,575	17
Lentils	1,870	173	9	432	47	11	3,374	356	11
Vetch	2,880	184	6	809	93	12	12,227	1,641	13
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	529	105	20	60	25	41	368	170	46
Gibto	-	-	-	-	-	-	-	-	-
<u>Oilseeds</u>	311	62	20	11	5	44	*	*	*
Neug	-	-	-	-	-	-	-	-	-
Linseed	76	36	47	9	5	49	*	*	*
Groundnuts	-	-	-	-	-	-	-	-	-
Safflower	*	*	*	*	*	*	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rape seed	220	54	24	1	0	30	2	1	38
<u>Vegetables</u>	2,095	178	9	17	4	25	*	*	*
Lettuce	137	41	30	0	0	35	-	-	-
Head cabbage	126	42	33	*	*	*	-	-	-
Ethiopian cabbage	1,761	155	9	9	2	19	-	-	-
Tomatoes	*	*	*	*	*	*	*	*	*
Green peppers	284	61	22	*	*	*	*	*	*
Red peppers	-	-	-	-	-	-	-	-	-
Swiss chard	264	51	19	2	1	42	-	-	-
<u>Root crops</u>	3,221	138	4	83	19	23	*	*	*
Beetroot	293	63	22	*	*	*	-	-	-
Carrot	749	101	14	58	14	24	-	-	-
Onion	153	40	26	1	0	39	67	26	39
Potatoes	110	43	39	*	*	*	*	*	*
Garlic	2,633	144	5	8	1	11	-	-	-
Taro / 'Godere'	*	*	*	-	-	-	-	-	-
Sweet potatoes	*	*	*	0	0	49	5	3	49
<u>Fruit crops</u>	*	*	*	*	*	*	-	-	-
Avocados	*	*	*	*	*	*	-	-	-
Bananas	*	*	*	*	*	*	-	-	-
Guavas	-	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-	-
Mangoes	-	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-	-
Papayas	*	*	*	*	*	*	-	-	-
Pineapples	-	-	-	-	-	-	-	-	-
Chat	*	*	*	*	*	*	-	-	-
Coffee	*	*	*	*	*	*	-	-	-
Hops	659	92	14	7	2	28	59	16	28
Sugar cane	87	36	42	*	*	*	-	-	-

Estimate of Holders Area, Production, Standard Errors and Coefficient of Variations  
For Crops 2005/2006 (1998 E.C)

**Dire Dawa**

Crop	Hoder	Standard Error	CV %	Area	Standard Error	CV %	Production	Standard Error	CV %
<b>Grain</b>	17,105	989	6	7,888	826	10	78,917	8,771	11
<u>Cereals</u>	17,105	989	6	7,423	769	10	75,268	8,630	11
Teff	-	-	-	-	-	-	-	-	-
Barley	*	*	*	*	*	*	*	*	*
Wheat	-	-	-	-	-	-	-	-	-
Maize	3,137	670	21	106	28	27	1,295	437	34
Sorghum	16,987	995	6	7,295	756	10	73,801	8,464	11
Finger millet	-	-	-	-	-	-	-	-	-
Oats / 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
<u>Pulses</u>	5,013	1,064	21	350	88	25	2,867	682	24
Horse beans	*	*	*	*	*	*	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
Haricot beans	4,818	1,042	22	345	88	26	2,848	682	24
Chick-peas	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	*	*	*	-	-	-
Vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*	*	*	*
Gibto	-	-	-	-	-	-	-	-	-
<u>Oilseeds</u>	2,090	518	25	116	41	35	782	293	38
Neug	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Groundnuts	1,235	489	40	*	*	*	*	*	*
Safflower	-	-	-	-	-	-	-	-	-
Sesame	1,045	291	28	42	15	36	230	85	37
Rape seed	-	-	-	-	-	-	-	-	-
<u>Vegetables</u>	1,572	520	33	*	*	*	-	-	-
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-	-	-
Tomatoes	1,277	491	38	*	*	*	-	-	-
Green peppers	362	148	41	*	*	*	-	-	-
Red peppers	-	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
<u>Root crops</u>	2,709	646	24	103	39	38	-	-	-
Beetroot	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	*	*	*	*	*	*	-	-	-
Potatoes	*	*	*	*	*	*	-	-	-
Garlic	-	-	-	-	-	-	-	-	-
Taro / 'Godere'	-	-	-	-	-	-	-	-	-
Sweet potatoes	1,925	431	22	52	14	28	-	-	-
<u>Fruit crops</u>	5,211	594	11	56	12	22	-	-	-
Avocados	*	*	*	*	*	*	-	-	-
Bananas	604	184	30	*	*	*	-	-	-
Guavas	1,564	397	25	4	1	29	-	-	-
Lemons	648	227	35	*	*	*	-	-	-
Mangoes	1,198	256	21	11	5	42	-	-	-
Oranges	289	139	48	*	*	*	-	-	-
Papayas	3,222	522	16	31	9	28	-	-	-
Pineapples	-	-	-	-	-	-	-	-	-
<b>Chat</b>	10,883	995	9	835	114	14	8,181	1,114	14
Coffee	3,330	697	21	95	24	25	-	-	-
Hops	-	-	-	-	-	-	-	-	-
Sugar cane	*	*	*	*	*	*	-	-	-

**APPENDIX III**

**NUMBER OF EAs SAMPLED AND COVERED  
NUMBER OF HOUSEHOLDS SAMPLED AND COVERED  
NUMBER OF FIELDS MEASURED AND CROP-CUTTINGS  
PERFORMED**

**Appendix III.** Number of Planned and Actually Covered Sampling Units (EAs & Households)  
of the 2005/6 (1998 E.C.) Annual Agricultural Sample Survey (Meher Season).

Region	Stratum	Enumeration Areas		Households	
	Zone/Sp.wereda	Planned	Covered	Planned	Covered
Tigray	North Western Tigray	31	31	930	930
	Central Tigray	40	40	1200	1200
	Eastern Tigray	29	29	870	870
	Southern Tigray	40	40	1200	1200
	Western Tigray	25	25	750	749
	<b>Region Total</b>	<b>165</b>	<b>165</b>	<b>4950</b>	<b>4949</b>
Afar	Zone One	24	19	720	560
	Zone Three	24	24	720	719
	<b>Region Total</b>	<b>48</b>	<b>43</b>	<b>1440</b>	<b>1279</b>
Amhara	North Gonder	44	44	1320	1319
	South Gonder	44	44	1320	1320
	North Wello	46	46	1380	1379
	South Wello	48	48	1440	1438
	North Shewa	40	39	1200	1170
	East Gojam	48	47	1440	1409
	West Gojam	48	48	1440	1440
	Wag Hemira	28	27	840	810
	Awi	32	32	960	960
	Oromia	28	27	840	810
	<b>Region Total</b>	<b>406</b>	<b>402</b>	<b>12180</b>	<b>12055</b>
Oromia	West Wellega	42	42	1260	1257
	East Wellega	45	45	1350	1350
	Illubabor	36	36	1080	1079
	Jimma	48	48	1440	1439
	West Shewa	42	42	1260	1260
	North Shewa	34	34	1020	1020
	East Shewa	44	44	1320	1320
	Arsi	46	46	1380	1379
	West Harerghe	40	40	1200	1199
	East Harerghe	44	44	1320	1317
	Bale	40	40	1200	1174
	Borena	36	36	1080	1079
	South West Shewa	40	40	1200	1200
	Guji	36	36	1080	1079
	<b>Region Total</b>	<b>573</b>	<b>573</b>	<b>17190</b>	<b>17152</b>

Appendix III (cont'd)

Region	Stratum	Enumeration Areas		Households	
	Zone/Sp.wereda	Planned	Covered	Planned	Covered
Somali	Shinile	20	20	600	594
	Jijiga	28	28	840	832
	Liben	24	24	720	715
	<b>Region Total</b>	<b>72</b>	<b>72</b>	<b>2160</b>	<b>2141</b>
Benishangul-Gumuz	Metekel	28	26	840	780
	Asosa	28	28	840	840
	Kemashi	24	24	720	720
	<b>Region Total</b>	<b>80</b>	<b>78</b>	<b>2400</b>	<b>2340</b>
SNNP	Guraghe	38	38	1140	1140
	Hadiya	34	34	1020	1020
	Kembata_Tambaro	33	33	990	989
	Sidama	44	44	1320	1320
	Gedeo	34	34	1020	1016
	Wolayita	40	40	1200	1200
	South Omo	33	33	990	990
	Shaka	24	24	720	719
	Keffa	36	36	1080	1078
	Gamo_Gofa	40	40	1200	1200
	Bench_Maji	32	31	960	929
	Yem Specia Wereda	20	20	600	600
	Amaro Special W.	20	20	600	600
	Burji Special Wereda	20	20	600	600
	Konso Special Wereda.	20	20	600	600
	Derashe Special Wereda.	20	20	600	599
	Dawro	32	32	960	959
	Basketo Special Wereda.	20	20	600	599
	Konta Special Wereda.	20	20	600	600
	Siltie	32	32	960	960
	Alaba Special Wereda.	20	20	600	600
<b>Region Total</b>	<b>612</b>	<b>611</b>	<b>18360</b>	<b>18318</b>	
Harari	Harari	24	24	720	720
Addis Ababa	Addis Ababa	20	20	600	600
Dire Dawa	Dire Dawa	24	24	720	715
<b>Country Total</b>		<b>2024</b>	<b>2012</b>	<b>60720</b>	<b>60269</b>

**Appendix III (cont'd) Number of Parcels, Fields measured and Crop-cuttings performed by Region and Zone**

<b>Region</b>	<b>Zone</b>	<b>Number of Parcels</b>	<b>Number of fields</b>	<b>Number of Crop-cuttings</b>	
<b>Tigray</b>	N.W. Tigray	4,553	8,206	1,935	
	Central Tigray	5,020	9,647	2,505	
	Eastern Tigray	3,869	8,158	1,984	
	Southern Tigray	5,875	8,279	2,257	
	Western Tigray	7,124	10,606	2,642	
	<b>Region Total</b>		26,441	44,896	11,323
<b>Afar</b>	Zone One	1,970	2,433	299	
	Zone Three	2,380	3,525	437	
	<b>Regional Total</b>	4,350	5,958	736	
<b>Amhara</b>	North Gondar	10,849	15,805	4,420	
	South Gondar	7,793	11,976	3,423	
	North Wello	7,147	11,291	3,372	
	South Wello	9,206	13,773	3,887	
	North Shewa	7,572	15,505	3,160	
	East Gojam	7,316	11,575	2,782	
	West Gojam	7,930	12,874	2,953	
	Wag Hemira	4,030	5,800	2,128	
	Awi	5,127	9,348	1,822	
	Oromia zone	3,251	5,776	1,305	
	<b>Regional Total</b>	70,221	113,723	29,252	
	<b>Oromia</b>	West Wellega	11,746	22,359	5,583
		East Wellega	8,689	16,767	4,430
		Illubabor	9,338	18,880	4,547
Jimma		7,069	16,906	3,367	
West Shewa		7,657	14,885	2,915	
North Shewa		6,670	10,547	2,160	
East Shewa		6,748	11,898	2,837	
Arsi		7,258	13,198	2,780	
West Harerghe		4,695	8,795	2,004	
East Harerghe		5,614	10,409	2,126	
Bale		3,886	6,922	2,103	
Borena		3,870	7,344	1,051	
South West Shewa		6,994	13,086	2,842	
Guji		4,185	8,237	1,614	
<b>Region Total</b>		94,419	180,233	40,359	

**Appendix III (cont'd) Number of Parcels, Fields measured and Crop-cuttings performed by Region and Zone**

<b>Region</b>	<b>Zone</b>	<b>Number of Parcels</b>	<b>Number of fields</b>	<b>Number of Crop-cuttings</b>
<b>Somali</b>	Shinile	1,888	2,898	368
	Jijiga	3,016	4,863	1,018
	Liben	2,309	2,843	476
	<b>Regional Total</b>	7,213	10,604	1,862
<b>Benish-Gumuz</b>	Metekel	3,307	5,298	1,484
	Asosa	4,202	7,155	2,042
	Kemashi	2,803	4,345	1,364
	<b>Regional Total</b>	10,312	16,798	4,890
<b>SNNP</b>	Guraghe	4,051	13,511	1,602
	Hadiya	3,564	13,679	1,878
	Kembata_Tambaro	3,272	12,844	1,472
	Sidama	4,477	10,532	1,246
	Gedeo	3,736	6,818	852
	Wolayita	4,019	13,261	1,511
	South Omo	4,294	8,611	1,484
	Shaka	2,817	6,177	722
	Keffa	4,790	12,891	2,557
	Gamo_Gofa	5,712	14,269	2,202
	Bench_Maji	3,936	8,299	1,320
	Yem SpeciWereda	2,707	7,068	1,503
	Amaro Special W.	2,467	5,443	905
	Burji Spec.Wereda	2,447	5,681	1,427
	Konso S. Wereda.	2,573	4,229	783
	Derashe Wereda.	2,243	3,675	881
	Dawro	3,294	9,510	1,412
	Basketo Wereda.	2,664	8,202	1,091
	Konta Sp. Wereda.	2,319	7,495	1,076
	Siltie	3,732	11,376	2,374
	Alaba Sp. Wereda.	2,196	6,185	1,457
	<b>Regional Total</b>	71,310	189,756	29,755
<b>Harari</b>		3,167	5,176	975
<b>Addis Ababa</b>		3,137	5,658	1,311
<b>Dire Dawa</b>		2,969	4,231	703
<b>Country</b>	<b>Total</b>	293,539	577,033	121,166



**APPENDIX IV**

**QUESTIONNAIRE**



**PART III – RESULTS OF AREA MEASUREMENTS**

18	19	20	21	22	23	24	25	26
Is the field measured?		Yes =1		No = 2		Code <span style="float:right;">→</span>		
Side	1 - 2	2 - 3	3 -	4 -	5 -	6 -	7 -	8 -
Bearing (0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Side	9 -	10 -	11 -	12 -	13 -	14 -	15 -	16 -
Bearing(0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Side	17 -	18 -	19 -	20 -	21 -	22 -	23 -	24 -
Bearing (0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Side	25 -	26 -	27 -	28 -	29 -	30 -	31 -	32 -
Bearing (0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Field Measurement	date	month	<b>Closure error</b>		Area in square meters			
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
For fields selected		Selected corner number		Shortest side length		Random number		
For crop cutting		Shortest side Bearing		Longest side length		Random number		

CENTRAL STATISTICAL AUTHORITY  
ETHIOPIAN AGRICULTURAL SAMPLE SURVEY 2005/06 (1998 E.C)

## PART I – IDENTIFICATION PARTICULARS

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Region	Zone	Wereda	PA / REST.AR	EA LOCAL	HH ID	HH HEAD SEX 1=M 2=F	HOLDER ID	HOLDER'S			HIGHEST GRADE COMPLETED	HOLDER'S HH SIZE	FARMING TYPE
								NAME	AGE	SEX M=1 F=2			CROP=1 LIVEST=2 BOTH=3

## PART II – MISCELLANEOUS QUESTIONS FOR THE HOLDER

15	16	17
SER.NO.	QUESTIONS	CODE
1	Do you exercise crop rotation on your land holding?      Yes = 1      No = 2	
2	Reason for not using chemical fertilizers on any one of your crop fields    Ignorance = 1    High price = 2 Lack of Money = 3      Non – availability of supply = 4      lack of credit service =5 Skeptical of the outcome = 6      Others (specify) = 7	
3	Reason for not participating in Extension Program      Ignorance = 1      Lack of Money = 2 Skeptical of the outcome = 3    Non – availability of the program = 4    Lack of adequate crop fields = 5 Others (specify) = 6	
4	Do you get credit services?      Yes = 1      No = 2	
5	If no in # 4 Why?    Non availability of the service = 1    Unable to pay the loan = 2 Inadequate services provided = 3    Ignorance = 4    Does not yield any results = 5    Others = 6	
6	Do you get advisory services?      Yes = 1      No = 2	
7	If no in # 6 Why?    Non availability of the service = 1      Inadequate services provided = 2 Inadequate services provided = 2    Ignorance = 3    Does not yield any results = 4    Others = 5	
8	Your major supplier of fertilizer is    Government organizations = 1      Private organizations = 2 Merchants = 3      Others (Specify) = 4      Never used fertilizer = 5	
9	How many oxen do you have in this Meher season?	
10	If you have one or no ox how do you plough? By renting ox = 1 By pairing mine with someone's ox = 2 By pairing mine with cow/ horse =3      Using horses or cows = 4      Hand digging = 5 Using borrowed oxen = 6 others = 7	
11	Total number of fields recorded for the holder	
12	Total number of crop fields recorded for the holder	
13	Has the holder ploughed additional fields over that of the previous year?      Yes =1      No = 2	
14	If yes in question # 13, what was the previous state of the additional fields? Holder's virgin land = 1    Public/ Community virgin land = 2    Borrowed fallow land = 3    Other = 4	



