

11/11/93

C-2/5

000088(60)

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

**AGRICULTURAL SAMPLE SURVEY**

**2000/2001 (1993 E.C.)**

**(September 2000 - February 2001)**

**VOLUME I**

**REPORT ON**

**AREA AND PRODUCTION FOR  
MAJOR CROPS**

**FOR**

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

**ADDIS ABABA  
MAY, 2000**

**245**

**STATISTICAL BULLETIN**

**245**

**PREPARED AND PRINTED BY  
CENTRAL STATISTICAL AUTHORITY  
P.O.BOX 1143 ADDIS ABABA  
Tel. 55-30-11**

## CONTENTS

PAGE

<b>PART I INTRODUCTION AND OBJECTIVE OF THE SURVEY.....</b>	<b>1</b>
I INTRODUCTION.....	1
2 OBJECTIVES OF THE SURVEY.....	2
<b>PART II SURVEY METHODOLOGY, DATA COLLECTION AND     PROCESSING.....</b>	<b>3</b>
I SCOPE, COVERAGE AND CONTENT OF THE SURVEY.....	3
2. CONCEPTS AND DEFINITIONS.....	5
3. SAMPLE DESIGN.....	7
4. FIELD ORGANIZATION.....	9
5. TRAINING OF FIELD STAFF.....	9
6. METHOD OF DATA COLLECTION.....	12
7. DATA PROCESSING.....	13
7.1 EDITING, CODING AND VERIFICATION.....	13
7.2 DATA ENTRY, CLEANING AND TABULATION.....	13
<b>PART III SUMMARY OF THE SURVEY RESULTS.....</b>	<b>15</b>
AREA AND PRODUCTION.....	15
<b>APPENDIX I ESTIMATION PROCEDURES OF TOTAL,     RATIO AND SAMPLING ERROR.....</b>	<b>55</b>
<b>APPENDIX II STANDARD ERRORS AND COEFFICIENTS     OF VARIATION.....</b>	<b>61</b>
<b>APPENDIX III .....</b>	<b>69</b>
- NUMBER OF EAs SAMPLED AND COVERED	
- NUMBER OF HOUSEHOLDS EXPECTED TO BE COVERED AND ACTUALLY COVERED	
- NUMBER OF PARCELS AND FIELDS MEASURED	
- NUMBER OF CROP CUTTINGS PERFORMED	
<b>APPENDIX IV     QUESTIONNAIRES.....</b>	<b>77</b>

## ABBREVIATIONS

CSA - CENTRAL STATISTICAL AUTHORITY

CV - COEFFICIENT OF VARIATION

EC - ETHIOPIAN CALENDAR

HA - HECTARE

QT - QUINTAL

SE - STANDARD ERROR

SNNPR - SOUTHERN NATIONS, NATIONALITIES AND PEOPLES REGION

## **PART I**

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

#### **I. INTRODUCTION**

The health and wealth of a nation and its potential to develop and grow depend on its ability to feed its people. To help ensure that food will remain available to those who need it, there is nothing more important to give priority to than agriculture. Accurate and timely statistics about the basic produce and supplies of agriculture are essential to assess the agricultural situation. To help policy makers deal with the fundamental challenge they are faced with in the agricultural sector of the economy and develop measures and policies to maintain food security, there should be a continuous provision of statistics. The collection of reliable, comprehensive and timely data on agriculture is thus required for the above purposes. In this perspective, the Central Statistical Authority (CSA) has endeavoured to generate agricultural data for policy makers and other users.

This bulletin contains one of the series of the 2000/2001 (1993 E.C) Agricultural Sample Survey (AgSS) results, i.e. area and production of Meher Season, for the major crops produced within the private peasant holdings sector of the economy. The report consists of three parts: Part I includes the objectives of this annual survey, Part II deals with coverage and content of the survey, sample design, field organization, training of field staff, method of data collection and Part III encompasses survey

estimates of area, production and yield of major crops. Estimation procedures and formulation for 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 the major crops are presented in Appendix II, the number of agricultural households covered, parcels, fields measured, and number of crop cuttings performed are presented in Appendix III and the survey questionnaires in Appendix IV.

## **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 considered essential for development planning, socio-economic policy formulation, food security, etc. The AgSS is composed of four components: Crop Production Forecast Survey, Meher Season Survey, Livestock Survey, and Survey of the Belg season crop area and production.

The specific objectives of the Meher season area and production survey are to estimate the total cultivated land area, production and yield per hectare of major crops (temporary). Companion reports are published separately with estimates of land use and quantity of agricultural inputs applied by type for the Meher and Belg seasons. All reports are based on the private peasant holdings in sedentary rural areas of the nation, further subdivided by regions and zones.

## PART II

# SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

### **1. Scope, Coverage and Content of the Survey**

The 2000/2001 (1993 E.C) annual Agricultural Sample Survey used a sampling frame which was designed to cover the sedentary rural agricultural population in all regions of the country (urban and nomadic areas were not included in the survey). Illustrated in Table A is a breakdown of the sample distribution as expressed by regions, zones and weredas. A total of 55 zones and 412 weredas were actually covered by the survey.

The area sampling unit used for this survey is defined as an Enumeration Areas (EAs) as defined for the 1994 Population and Housing Census. For the 2000/2001 AgSS a total of 1430 enumeration areas were selected from all regions of the country. Due to various reasons, 8 EAs were not covered in the survey which resulted in the survey actually covering 1422 Enumeration Areas (EAs). From each of the selected EAs a representative sample of forty agricultural households were selected to represent the agricultural population of the sampled EA.

Of these forty agricultural households, the first twenty-five were used for obtaining information on area under crops, Meher and Belg seasons' production of crops, land use, agricultural practices, crop damage, and quantity of agricultural inputs used. It is important to note that of the total forty agricultural households sampled in each of the selected EAs, data on

crop cutting were collected for only the fifteen (11<sup>th</sup> -25<sup>th</sup> ) households selected.

Table A: Area Coverage of the 2000/2001 Agricultural Sample Survey

REGION	NUMBER OF ZONES / SP. WEREDAS			NUMBER OF WEREDAS		
	TOTAL	COVERED	NOT COVERED	TOTAL <sup>3</sup>	COVERED	NOT COVERED
TIGRAY <sup>1</sup>	5	4	1	33	33	-
AFAR <sup>2</sup>	5	2	3	8	5	3
AMHARA <sup>1</sup>	11	10	1	93	92	1
OROMIYA	12	12	-	171	170	1
SOMALIE <sup>2</sup>	9	3	6	9	9	-
BENISHANGUL_GUMUZ	3	3	-	18	18	-
SNNP	14	14	-	73	73	-
GAMBELLA <sup>2</sup>	4	3	1	5	5	-
HARARI	1	1	-	1	1	-
ADDIS ABABA <sup>1</sup>	6	2	4	5	5	-
DIRE DAWA	1	1	-	1	1	-
TOTAL	71	55	16	417	412	5

**Note**

1= Zones not covered in these regions are urban.

2 = Zones not covered in these regions are not inhabited by significant number of sedentary population.

3 = Numbers of total weredas signify those weredas in covered zones of the respective regions.

SNNP = Southern Nations, Nationalities and Peoples.



## **2. Concepts and Definitions**

In order to collect standardized data of acceptable quality, the same concepts and definitions must be used by all field enumerators during data collection. Below are defined some of the more important concepts and terms used in the survey.

**Enumeration Area (EA)** an enumeration area in the rural parts of the country is a locality that is less than or equal to a farmers' association in geographical area and usually consists of 150-200 households.

**Household** : a household may be either,

a) a one person household, that is a person who makes provisions for his own living without combining with any other person to form part of a multi-person household or

b) a multi person household, that is, a group of two or more persons who live together and make common provisions for food and other essentials of living. The persons in the group may pool their incomes and have a common budget to 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.

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

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

**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 without regard to management, organization, size, or location.

**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 private holding.

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

**Belg season crop** : any crop harvested between the months of Megabit (March) and Nehase (August).

**Temporary crops** : 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 temporary crops since each is harvested and destroyed by ploughing in preparation for each successive crop.

**Permanent crops** are crops which are grown and occupy land for a long period of time, not requiring replanting for several years after each harvest, are considered permanent crops. All fruit trees (i.e. oranges, mandarins, banana, etc.) and tree crops (i.e. coffee, tea, etc.) are considered permanent crops, but meadows and pastures are excluded.

## **2. SAMPLE DESIGN**

The 2000/2001 (1993 E.C.) Meher season agricultural sample survey covered the rural part of the country except three zones in Afar Regional state and six zones in Somalie Regional state that are predominantly nomadic. A two-stage stratified sample design was used to select the sample. Each zone/special wereda was adopted as stratum for which major findings of the survey are reported except the four regions; namely, Gambela, Harari, Addis Ababa and Dire Dawa which were considered as

strata/reporting levels. The primary sampling units (PSUs) were enumeration areas (EAs) and agricultural households were the secondary sampling units. The survey questionnaires were administered to all agricultural holders within the sample households. A fixed number of sample EAs was determined for each stratum/reporting level based on precision of major estimates and cost considerations. Within each stratum EAs were selected using probability proportional to size systematic sampling; size being total number of agricultural households in the EAs as obtained from the 1994 population and housing census. From each sample EA, 40 agricultural households were systematically selected for the annual agricultural sample survey from a fresh list of households prepared at the beginning of the field work of the annual agricultural survey. Of the forty agricultural households, the first twenty five were used for obtaining information on area under crops, Meher and Belg season production of crops, land use, agricultural practices, crop damage, and quantity of agricultural inputs used. It is important to note that of the total forty agricultural households sampled in each of the selected EAs, data on crop cutting were collected for only the fifteen households (11<sup>th</sup>-25<sup>th</sup> households selected).

A total of 1,430 EAs were selected for the survey. However, 8 EAs were closed for various reasons beyond the control of the Authority and the survey succeeded in covering 1422 (99.44 %) EAs. With respect to ultimate sampling units, for the Meher season agricultural sample survey, it was planned to cover 35,750 agricultural households. The response rate was found to be 99.14%. Distribution of the number of sampling units sampled

and covered by strata is given in appendix I. Estimation procedures of parameters of interest (total and ratio) and their sampling error is presented in appendix II

#### **4. Field Organization**

All the 22 Branch Statistical Offices of the CSA participated in the survey undertaking, especially in organizing the second stage training, in deploying the field staff to their respective sites of assignment, in supervising the data collection, and retrieving completed questionnaires and submitting them to the head office for data processing. They were also responsible in administering the financial and logistic aspect of the survey within their areas of assignment. In the data collection of the survey, a total of 1558 enumerators and 336 field supervisors were involved with an average supervisor-enumerator ratio of 1 to 5. To accomplish the data collection operation, all the enumerators were supplied with the necessary survey equipment at the completion of the training. To assist the data collection activities in deployment, supervision and retrieval of completed questionnaires, a total of 143 four-wheel vehicles were used. Table B shows distribution of the field staff and vehicles by branch offices.

#### **5. Training of Field Staff**

The field staff training program was carried out in two stages. The first stage consisted of training of staff from the head office, Branch Statistical Office Heads and senior field supervisors. This training was given for a period of one week at CSA's headquarters in Addis Ababa. Many of these personnel trained in the first stage were assigned to conduct similar training

for field supervisors and enumerators for fifteen days in all the twenty-two CSA Branch Statistical Offices which are distributed all over the country. During this second stage of training, the field staff were given detailed classroom instruction on the objectives and uses of the AgSS, concepts and definitions of terms used, the method of area measurement, method of crop cutting, correct interviewing procedures, ... etc. The training of the enumerators and supervisors also included field practice to reinforce the understanding of the concepts, definitions and theories discussed in the classroom with regard to field measurement and crop cutting methods.

**TABLE B : DISTRIBUTION OF FIELD STAFF AND VEHICLES  
BY BRANCH OFFICES**

Branch office	Number of		
	Enumerators	Supervisors	Vehicles
Mekele	102	25	9
Asayita	32	6	3
Gondar	72	17	7
Bahir Dar	121	24	8
Dessie	102	25	7
Debre Birhan	67	18	8
Nazreth	55	15	9
Ambo	66	14	7
Nekemte	76	18	7
Jima	93	22	7
Goba	36	9	6
Asebe Teferi	46	11	5
Jijiga	22	5	3
Asosa	49	10	4
Awasa	171	40	12
Mizan Teferi	65	16	6
Arba Minch	119	28	8
Hosana	97	24	7
Gambela	32	7	4
Harar	51	13	4
Addis Ababa	31	9	7
Dire Dawa	53	10	5
<b>Total</b>	<b>1558</b>	<b>366</b>	<b>143</b>

## **6. Method of Data Collection**

In the 2000/2001 AgSS data on area and production were recorded on questionnaires using both subjective and objective enumeration methods. Information on agricultural practices (application of pesticides and use of irrigation) were collected subjectively by interviewing the holders and data on area under crops, yield, application of fertilizers and use of seeds were collected by performing objective measurements in each sampled household.

The objective measurement procedures for area measurement were carried out for the twenty-five selected agricultural households from each sampled EA. This required that all separate fields by land area utilization be physically measured using compass and measuring tape. In addition, for all fields under temporary crops of each holder of the last fifteen (11<sup>th</sup>-25<sup>th</sup>) sampled households, each was classified by type of crop and for selected major crops, a field was randomly selected for each crop for crop cutting to be performed. Crop cutting procedures consist of demarcation of a sixteen square meter plot randomly located in the selected field for which the crop in the field is to be harvested.

Following the field enumerator's harvest of the crop-cutting plot and threshing, the crop is stored in bags with identification information (i.e. name of the crop, holder's number, and parcel and field numbers). The crop placed 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. The green and dry weights are recorded on the respective forms.

## **7. Data Processing**

### **7.1 Editing, Coding and Verification**

In order to insure the quality of the collected survey data an editing, coding and verification instruction manual was prepared and printed. Then 23 editors-coders and 22 verifiers were trained for two days in the editing, coding and verification operation 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 was completed in about 30 days.

### **7.2 Data Entry, Cleaning and Tabulation**

Before starting data entry, professional staff of Agricultural Statistics Department prepared edit specifications for use on personal computers utilizing the Integrated Microcomputer Processing System (IMPS) software for data consistency checking purposes. The data on the coded questionnaires were then entered into personal computers using IMPS software. The data were then checked and cleaned using the edit specifications prepared earlier for this purpose. The data entry operation involved about 31 data encoders and it took 28 days to complete the job. Finally, tabulation was done on personal computers to produce results as indicated in the tabulation plan.

The following table shows the results of the survey conducted in 1997-1998. The data is presented in a tabular format, with columns representing different categories and rows representing different sub-categories. The table is organized into several sections, each with a heading.

Category	Sub-Category	Value
Section 1	Item 1	12.5
	Item 2	15.2
	Item 3	18.7
	Item 4	21.3
Section 2	Item 5	9.8
	Item 6	11.4
	Item 7	13.6
Section 3	Item 8	7.5
	Item 9	8.9
Section 4	Item 10	10.2
	Item 11	12.8
	Item 12	15.1
	Item 13	17.4
	Item 14	19.6
Section 5	Item 15	6.3
	Item 16	7.8
	Item 17	9.1
Section 6	Item 18	11.5
	Item 19	13.2
	Item 20	15.7
	Item 21	18.4
Section 7	Item 22	5.6
	Item 23	6.9
Section 8	Item 24	8.4
	Item 25	10.1
	Item 26	12.3
Section 9	Item 27	14.7
	Item 28	16.5
	Item 29	18.2
	Item 30	20.1
Section 10	Item 31	4.9
	Item 32	6.2
Section 11	Item 33	9.3
	Item 34	11.0
	Item 35	13.5
Section 12	Item 36	16.8
	Item 37	18.6
	Item 38	20.4
	Item 39	22.1
Section 13	Item 40	3.7
	Item 41	4.8
Section 14	Item 42	7.1
	Item 43	8.5
	Item 44	9.9
Section 15	Item 45	12.9
	Item 46	14.3
	Item 47	15.7
	Item 48	17.1
Section 16	Item 49	2.8
	Item 50	3.6
Section 17	Item 51	6.0
	Item 52	7.4
	Item 53	8.8
Section 18	Item 54	11.8
	Item 55	13.1
	Item 56	14.5
	Item 57	15.9
Section 19	Item 58	1.9
	Item 59	2.7
Section 20	Item 60	5.5
	Item 61	6.8
	Item 62	8.1
Section 21	Item 63	12.0
	Item 64	13.4
	Item 65	14.8
	Item 66	16.2
Section 22	Item 67	3.2
	Item 68	4.1
Section 23	Item 69	7.6
	Item 70	9.0
	Item 71	10.4
Section 24	Item 72	14.0
	Item 73	15.4
	Item 74	16.8
	Item 75	18.2
Section 25	Item 76	2.5
	Item 77	3.3
Section 26	Item 78	6.4
	Item 79	7.8
	Item 80	9.2
Section 27	Item 81	13.0
	Item 82	14.4
	Item 83	15.8
	Item 84	17.2
Section 28	Item 85	1.5
	Item 86	2.3
Section 29	Item 87	5.8
	Item 88	7.2
	Item 89	8.6
Section 30	Item 90	12.2
	Item 91	13.6
	Item 92	15.0
	Item 93	16.4
Section 31	Item 94	3.5
	Item 95	4.4
Section 32	Item 96	8.0
	Item 97	9.4
	Item 98	10.8
Section 33	Item 99	14.2
	Item 100	15.6
	Item 101	17.0
	Item 102	18.4
Section 34	Item 103	2.1
	Item 104	2.9
Section 35	Item 105	6.7
	Item 106	8.1
	Item 107	9.5
Section 36	Item 108	13.8
	Item 109	15.2
	Item 110	16.6
	Item 111	18.0
Section 37	Item 112	3.8
	Item 113	4.7
Section 38	Item 114	8.3
	Item 115	9.7
	Item 116	11.1
Section 39	Item 117	14.6
	Item 118	16.0
	Item 119	17.4
	Item 120	18.8
Section 40	Item 121	2.6
	Item 122	3.4
Section 41	Item 123	7.0
	Item 124	8.4
	Item 125	9.8
Section 42	Item 126	13.4
	Item 127	14.8
	Item 128	16.2
	Item 129	17.6
Section 43	Item 130	3.0
	Item 131	3.9
Section 44	Item 132	7.4
	Item 133	8.8
	Item 134	10.2
Section 45	Item 135	14.4
	Item 136	15.8
	Item 137	17.2
	Item 138	18.6
Section 46	Item 139	2.4
	Item 140	3.2
Section 47	Item 141	6.6
	Item 142	8.0
	Item 143	9.4
Section 48	Item 144	13.6
	Item 145	15.0
	Item 146	16.4
	Item 147	17.8
Section 49	Item 148	3.1
	Item 149	4.0
Section 50	Item 150	7.8
	Item 151	9.2
	Item 152	10.6
Section 51	Item 153	14.0
	Item 154	15.4
	Item 155	16.8
	Item 156	18.2
Section 52	Item 157	2.7
	Item 158	3.5
Section 53	Item 159	6.9
	Item 160	8.3
	Item 161	9.7
Section 54	Item 162	13.2
	Item 163	14.6
	Item 164	16.0
	Item 165	17.4
Section 55	Item 166	2.9
	Item 167	3.7
Section 56	Item 168	7.2
	Item 169	8.6
	Item 170	10.0
Section 57	Item 171	13.8
	Item 172	15.2
	Item 173	16.6
	Item 174	18.0
Section 58	Item 175	3.3
	Item 176	4.1
Section 59	Item 177	8.1
	Item 178	9.5
	Item 179	10.9
Section 60	Item 180	14.2
	Item 181	15.6
	Item 182	17.0
	Item 183	18.4
Section 61	Item 184	2.8
	Item 185	3.6
Section 62	Item 186	7.3
	Item 187	8.7
	Item 188	10.1
Section 63	Item 189	13.5
	Item 190	14.9
	Item 191	16.3
	Item 192	17.7
Section 64	Item 193	3.4
	Item 194	4.2
Section 65	Item 195	8.5
	Item 196	9.9
	Item 197	11.3
Section 66	Item 198	14.7
	Item 199	16.1
	Item 200	17.5
	Item 201	18.9
Section 67	Item 202	3.6
	Item 203	4.4
Section 68	Item 204	8.7
	Item 205	10.1
	Item 206	11.5
Section 69	Item 207	14.9
	Item 208	16.3
	Item 209	17.7
	Item 210	19.1
Section 70	Item 211	3.9
	Item 212	4.7
Section 71	Item 213	9.0
	Item 214	10.4
	Item 215	11.8
Section 72	Item 216	15.1
	Item 217	16.5
	Item 218	17.9
	Item 219	19.3
Section 73	Item 220	4.1
	Item 221	4.9
Section 74	Item 222	9.2
	Item 223	10.6
	Item 224	12.0
Section 75	Item 225	15.3
	Item 226	16.7
	Item 227	18.1
	Item 228	19.5
Section 76	Item 229	4.3
	Item 230	5.1
Section 77	Item 231	10.3
	Item 232	11.7
	Item 233	13.1
Section 78	Item 234	15.5
	Item 235	16.9
	Item 236	18.3
	Item 237	19.7
Section 79	Item 238	4.5
	Item 239	5.3
Section 80	Item 240	10.5
	Item 241	11.9
	Item 242	13.3
Section 81	Item 243	15.7
	Item 244	17.1
	Item 245	18.5
	Item 246	19.9
Section 82	Item 247	4.7
	Item 248	5.5
Section 83	Item 249	10.7
	Item 250	12.1
	Item 251	13.5
Section 84	Item 252	15.9
	Item 253	17.3
	Item 254	18.7
	Item 255	20.1
Section 85	Item 256	4.9
	Item 257	5.7
Section 86	Item 258	10.9
	Item 259	12.3
	Item 260	13.7
Section 87	Item 261	16.1
	Item 262	17.5
	Item 263	18.9
	Item 264	20.3
Section 88	Item 265	5.1
	Item 266	5.9
Section 89	Item 267	11.1
	Item 268	12.5
	Item 269	13.9
Section 90	Item 270	16.3
	Item 271	17.7
	Item 272	19.1
	Item 273	20.5
Section 91	Item 274	5.3
	Item 275	6.1
Section 92	Item 276	11.3
	Item 277	12.7
	Item 278	14.1
Section 93	Item 279	16.5
	Item 280	17.9
	Item 281	19.3
	Item 282	20.7
Section 94	Item 283	5.5
	Item 284	6.3
Section 95	Item 285	11.5
	Item 286	12.9
	Item 287	14.3
Section 96	Item 288	16.7
	Item 289	18.1
	Item 290	19.5
	Item 291	20.9
Section 97	Item 292	5.7
	Item 293	6.5
Section 98	Item 294	11.7
	Item 295	13.1
	Item 296	14.5
Section 99	Item 297	16.9
	Item 298	18.3
	Item 299	19.7
	Item 300	21.1

## PART III

### SUMMARY OF THE SURVEY RESULTS

#### 1. Area and Production

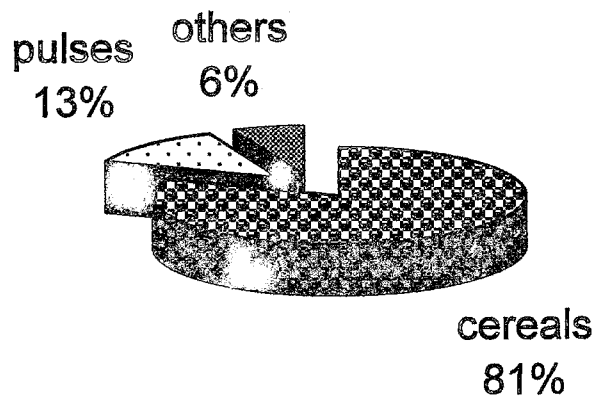
The results for area , production and yield of major crops (temporary or annual) are presented in this part of the report. The estimates for the major twenty crops exclude cash crops (coffee, chat, .... etc.), fruits, vegetables and root crops. Consequently, the total area under major temporary crops is estimated to be more than 9 million hectares (see Table C) at country level for the Meher season of 2000/2001 (1993 E.C).

Out of the total crop area, cereals accounted for about 7.64 million hectares (80.80%), while pulses and other crops (nueg, linseed, rapeseed, ground nuts, sunflower, sesame and fenugreek) accounted for about 1.23 million hectares (13.10%) and 0.57 million hectares (6.10%), respectively. Looking at specific crops, the largest area, or about 2.2 million hectares, is reported for Teff followed by maize and sorghum. For details refer to Table 1.

Table C Summary Estimates of Area, Production and Yield of Major Crops for the Year 2000/2001 (1993 E.C)

Crop type	Area in million hectares		Production in Million quintals		Yield
	number	Percent	Number	Percent	qt / hectare
Cereals	7.64	80.80	92.96	88.00	12.17
Pulses	1.23	13.10	10.74	10.00	8.70
Other crops	0.57	6.10	2.46	2.00	4.28
Total	9.44	100.00	106.16	100.00	-

**Fig.1 Estimates of Area Under Major Crops  
for Private Peasant Holdings:  
National 2000/2001 (1993 E.C)**



**Fig. 2 Estimates of Production for Major Crops  
for Private Peasant Holdings:  
National 2000/2001 (1993 E.C)**

