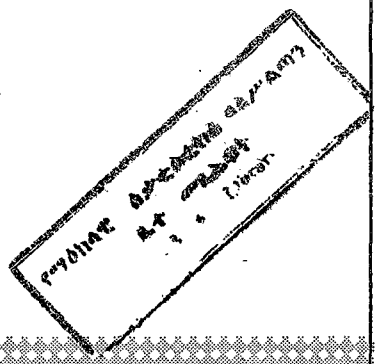
29/10/92

THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
CENTRAL STATISTICAL AUTHORITY

AGRICULTURAL SAMPLE SURVEY
1999/2000 (1992 E.C.)

(September 1999 – February 2000)



VOLUME I

REPORT ON

AREA AND PRODUCTION FOR MAJOR CROPS

(PRIVATE PEASANT HOLDINGS, MEHER SEASON)

Addis Ababa
May, 2000

227 STATISTICAL BULLETIN 227

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

CONTENTS

PAGE

PART 1 INTRODUCTION AND OBJECTIVES OF THE SURVEY.....1
1. INTRODUCTION.....1
2. OBJECTIVES OF THE SURVEY.....2

PART II SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING.....3
1. SCOPE, COVERAGE AND CONTENT OF THE SURVEY.....3
2. CONCEPTS AND DEFINITIONS.....4
3. SAMPLE DESIGN.....7
4. FIELD ORGANIZATION.....9
5. TRAINING OF FIELD STAFF.....11
6. METHOD OF DATA COLLECTION.....11
7. DATA PROCESSING.....12
7.1. EDITING, CODING AND VERIFICATION.....12
7.2. DATA ENTRY, CLEANING AND TABULATION.....13

PART III SUMMARY OF THE SURVEY RESULTS.....15
AREA AND PRODUCTION.....15

APPENDIX I ESTIMATION PROCEDURES OF TOTAL, RATIO AND SAMPLING ERROR.....55
APPENDIX II STANDARD ERRORS AND COEFFICIENTS OF VARIATION.....61
APPENDIX III 69
- 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

APPENDIX IV QUESTIONNAIRES.....75

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 issue of food security has continual national importance in Ethiopia. To achieve social and political stability, the government has to be able to create and maintain food security by issuing an appropriate agricultural policy. Agricultural statistics is just one element that enters into this policy process to formulate, monitor, assess and evaluate the policy. The collection of reliable , comprehensive and timely data on agriculture is thus essential for the above purpose. In this regard, the Central Statistical Authority (CSA) has exerted effort to provide policy makers and users with reliable and timely agricultural data.

This bulletin contains one of the series of the 1999/2000 (1992 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 1999/2000 (1992 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 56 zones and 415 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 1999/2000 AgSS a total of 1450 enumeration areas were selected from all regions of the country. Due to various reasons, 5 EAs were not covered in the survey which resulted in the survey actually covering 1445 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 (11th -25th) households selected.

Table A: Area Coverage of the 1999/2000 Agricultural Sample Survey

REGION	NUMBER OF ZONES / SP. WEREDAS			NUMBER OF WEREDAS		
	TOTAL	COVERED	NOT COVERED	TOTAL[3]	COVERED	NOT COVERED
TIGRAY[1]	5	4	1	33	33	-
AFAR[2]	5	3	2	8	8	-
AMHARA[1]	11	10	1	93	92	1
OROMIYA	12	12	-	171	170	1
SOMALIE[2]	9	3	6	9	9	-
BENISHANGUL_GUMUZ	3	3	-	18	18	-
SNNP	14	14	-	73	73	-
GAMBELA[2]	4	3	1	5	5	-
HARARI	1	1	-	1	1	-
ADDIS ABABA[1]	6	2	4	5	5	-
DIRE DAWA	1	1	-	1	1	-
TOTAL	71	56	15	417	415	2

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.

3. Sample Design

The 1999/2000 (1992 E.C.) Meher season Agricultural Sample Survey covered the rural part of the country except two zones in Afar region and six zones in Somalie region 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; size being total number of 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 (11th-25th households selected).

A total of 1,450 EAs (2.9 % of the total EAs in the rural areas of the country) were selected for the survey. However 5 EAs were closed for various reasons beyond the control of the Authority and the survey succeeded in covering 1445 (99.7 %) EAs. With respect to ultimate sampling units, for the Meher season agricultural sample survey, it was planned to cover 36,250 agricultural households. The response rate was found to be 98.5 % . Estimation procedures of parameters of interest (total and ratio) and their sampling error is presented in Appendix I. Distribution of the number of sampling units sampled and covered by strata is given in Appendix III.

4. Field Organization

All the 22 branch 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 the areas of their assignment. In the data collection of the survey, a total of 1559 enumerators and 331 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 equipments at the completion of the training. To assist the data collection activities in deployment, supervision and retrieval of completed questionnaires, a total of 123 four-wheel vehicles were used. The following table shows distribution of the field staff and vehicles by branch offices.

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

Branch office	Number of		
	Enumerators	Supervisors	Vehicles
Mekele	103	22	7
Asayita	66	15	5
Gondar	75	16	6
Debre Markos	94	20	8
Dessie	94	20	7
Debre Birhan	61	13	5
Nazreth	50	11	4
Ambo	66	15	5
Nekemte	66	15	6
Jima	66	15	7
Goba	49	12	4
Asebe Teferi	50	11	4
Jijiga	66	15	4
Asosa	84	19	6
Awasa	112	22	8
Mizan Teferi	66	14	6
Arba Minch	122	22	8
Hosana	127	25	7
Gambela	33	7	5
Harar	49	10	4
Addis Ababa	28	6	4
Dire Dawa	33	6	3
Total	1559	331	123

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.

6 .Method of Data Collection

In the 1999/2000 AgSS data on area and production were recorded on questionnaires using both subjective and objective enumeration methods. Information on agricultural practices (application of fertilizers, pesticides, use of improved seeds and irrigation) were collected both subjectively and objectively by interviewing the holders and measuring items 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 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, 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 35 editors-coders and 20 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 40 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 35 data encoders and it took 30 days to complete the job. Finally, tabulation was done on personal computers to produce results as indicated in the tabulation plan.

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 a little more than 8 million hectares (see Table C) at country level for the Meher season of 1999/2000 (1992 E.C).

Out of the total crop area, cereals accounted for about 6.7 million hectares (82.1%), while pulses and other crops (nueg, linseed, rapeseed, ground nuts, sunflower, sesame and fenugreek) accounted for about 1.0 million hectares (12.7%) and 0.4 million hectares (5.2%), respectively. Looking at specific crops, the largest area, or about 2.1 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 1999/2000 (1992 E.C)

	Area in million hectares		Production in million quintals		Yield
Crop type	number	percent	number	percent	qt / hectare
Cereals	6.75	82	77.41	87	11.47
Pulses	1.04	13	9.59	11	9.18
Other crops	0.42	5	1.90	2	4.49
Total	8.21	100	88.90	100	-

Fig.1 Estimates of Area Under Major Crops For Private Peasant Holdings: National 1999/2000 (1992 E.C)

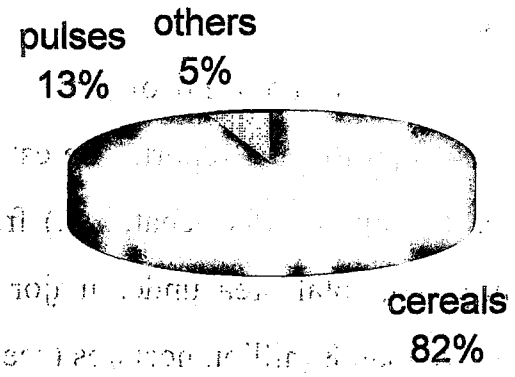


Fig.2 Estimates of Production for Major Crops for Private Peasant Holdings: National 1999/2000 (1992 E.C)

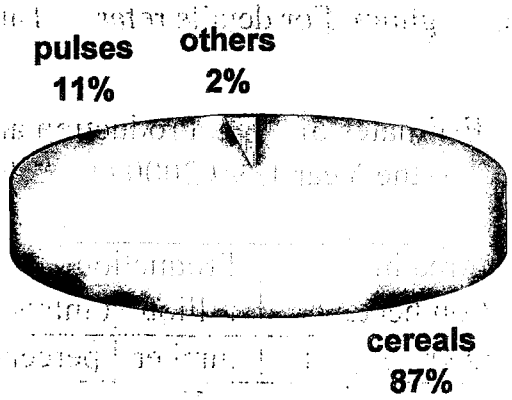


Table 1. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

National

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	6,747.47	82.12	77,412.63	87.07	11.47
Teff	2,123.47	25.84	17,175.62	19.32	8.09
Barley	794.10	9.66	7,419.28	8.34	9.34
Wheat	1,025.31	12.48	12,126.25	13.64	11.83
Maize	1,407.27	17.13	25,254.71	28.40	17.95
Sorghum	995.41	12.11	11,811.43	13.28	11.87
Millet	360.23	4.38	3,195.09	3.59	8.87
Oats	41.67	.51	430.25	.48	10.33
Pulses	1,044.97	12.72	9,594.49	10.79	9.18
Horse Beans	359.15	4.37	3,886.82	4.37	10.82
Field Peas	152.20	1.85	1,159.98	1.30	7.62
Haricot Beans	166.04	2.02	1,328.88	1.49	8.00
Chick Peas	184.79	2.25	1,646.27	1.85	8.91
Lentils	72.22	.88	497.71	.56	6.89
Vetch	110.58	1.35	1,074.83	1.21	9.72
Others	424.26	5.16	1,902.84	2.14	4.49
Neug	256.53	3.12	1,021.70	1.15	3.98
Linseed	74.12	.90	321.38	.36	4.34
Rapeseed	20.38	.25	139.05	.16	6.82
Ground Nuts	13.55	.16	119.29	.13	8.80
Sunflower	5.23	.06	37.15	.04	7.10
Sesame	38.19	.46	156.34	.18	4.09
Fenugreek	16.26	.20	107.93	.12	6.64
All Crops	8,216.70	100.00	88,909.96	100.00	-

The total production estimate at country level is about 88.90 million quintals, of which cereals accounted for 77.41 million quintals, pulses accounted for about 9.59 million quintals, and other crops (mentioned above) totaled to 1.9 million quintals. (see Table C).

The survey results also indicate that the yield of cereals was 11.47 quintals per hectare, the yield of pulses was 9.18 quintals per hectare and the yield of other crops (mentioned above) was 4.49 quintals per hectare. In Table 1 it is also shown that the highest yield is reported for maize, which was 17.95 quintals per hectare, and the lowest is for nueg at 3.98 quintals per hectare.

As shown in Table 2 total area cultivated and total production have increased by 2.50% and 3.58%, respectively compared to last crop season, i.e. 1998/99.

The 1999/2000 AgSS design increased the number of sampling units in some of the reporting levels in order to come up with relatively more reliable survey estimates at the regional and zonal levels. Comparing the AgSS estimates at the regional level the data in Table 3 illustrates the variation in yield of Ethiopian agriculture.

Table 2. **Estimates of Area, Production and Yield of Major Crops for Private Peasant Holdings in Ethiopia (Meher Season) 1998/99 (1991 E.C) and 1999/2000 (1992 E.C)**

CROP	TOTAL AREA (' 000 HA.)			TOTAL PRODUCTION (' 000 QT.)			YIELD (QT / HA.)		
	1998/99 (1991 E.C.)	1999/2000 (1992 E.C)	% CHANGE	1998/99 (1991 E.C)	1999/2000 (1992 E.C)	% CHANGE	1998/99 (1991 E.C)	1999/2000 (1992 E.C)	% CHANGE
CEREALS	6,744.71	6,747.47	0.04	76,829.91	77,412.63	0.76	11.39	11.47	0.70
TEFF	2,091.34	2,123.47	1.54	16,422.85	17,175.62	4.58	7.85	8.09	3.06
BARLEY	830.18	794.1	-4.35	7,685.85	7,419.28	-3.47	9.26	9.34	0.86
WHEAT	987.07	1025.31	3.87	11,137.83	12,126.25	8.87	11.28	11.83	4.88
MAIZE	1,303.10	1,407.27	7.99	24,166.24	25,254.71	4.50	18.55	17.95	-3.23
SORGHUM	1,042.39	995.41	-4.51	13,208.41	11,811.43	-10.58	12.67	11.87	-6.31
MILLET	446.68	360.23	-19.35	3,814.86	3,195.09	-16.25	8.54	8.87	3.86
OATS	43.97	41.67	-5.23	393.87	430.25	9.24	8.96	10.33	15.29
PULSES	875.38	1044.97	19.37	7,319.77	9,594.49	31.08	8.36	9.18	9.81
HORSE BEANS	293.41	359.15	22.41	2,851.60	3,886.82	36.30	9.72	10.82	11.32
FIELD PEAS	141.95	152.2	7.22	984.86	1159.98	17.78	6.94	7.62	9.80
HARICOT BEANS	129.47	166.04	28.25	1,024.89	1,328.88	29.66	7.92	8	1.01
CHICK PEAS	167.65	184.79	10.22	1,388.37	1,646.27	18.58	8.28	8.91	7.61
LENTILS	47.85	72.22	50.93	283.8	497.71	75.37	5.93	6.89	16.19
VETCH	95.05	110.58	16.34	786.24	1074.83	36.71	8.27	9.72	17.53
OTHERS	396.22	424.26	7.08	1,688.74	1,902.84	12.68	4.26	4.49	5.40
NEUG	221.11	256.53	16.02	845.3	1021.7	20.87	3.82	3.98	4.19
LINSEED	90.44	74.12	-18.05	352.78	321.38	-8.90	3.9	4.34	11.28
RAPESEED	10.42	20.38	95.59	84.17	139.05	65.20	8.08	6.82	-15.59
GROUNDNUTS	15.03	13.55	-9.85	83.52	119.29	42.83	5.56	8.8	58.27
SUNFLOWER	5.58	5.23	-6.27	24.86	37.15	49.44	4.46	7.1	59.19
SESAME	32.2	38.19	18.60	176.77	156.34	-11.56	5.49	4.09	-25.50
FENUGREEK	21.43	16.26	-24.13	121.34	107.93	-11.05	5.66	6.64	17.31
ALL CROPS	8,016.31	8,216.70	2.50	85,838.42	88,909.96	3.58	-	-	-

In Tigray Region, 560.89 thousand hectares of land has been allotted to grow the twenty major crops by private peasant holders in 1999/2000, a decrease of 3.33% from the previous year. Production of the twenty major crops was down by 4.65% compared to 1998/99. The 1999/2000 estimate of total major crop production of Tigray Region accounted for 7.00% of the total national crop production. The land area under the twenty major crops constitutes 6.83 % of the total land area under similar crops at country level.

In Afar Region 18.98 thousand hectares of land was cultivated in order to grow the twenty major crops by private peasant holders in 1999/2000. The area cultivated showed an increase of 24.70% from the previous year. Production of the twenty major crops was up by 34.05% compared to 1998/99 and accounted for only 0.28% of the total crop production at country level.

Amhara Region is the second largest in both area planted and production in 1999/2000 with 3.07 million hectares of land cultivated for growing the twenty major crops by private holders. This indicates an increase of the 2.97% from the previous year. This area accounted for 37.42% of the national total area planted. Production of the twenty major crops was up by 0.96% from the 1999/2000 and this production accounted for 32.40% of the crop production at country level.

Oromiya Region is the largest in both area planted and production in 1999/2000 and 3.61 million hectares of land was cultivated to grow the

Fig. 3 Estimates of Area and Production of Major Crops by Region for Private Peasant Holdings, 1999/2000 (E.C.)

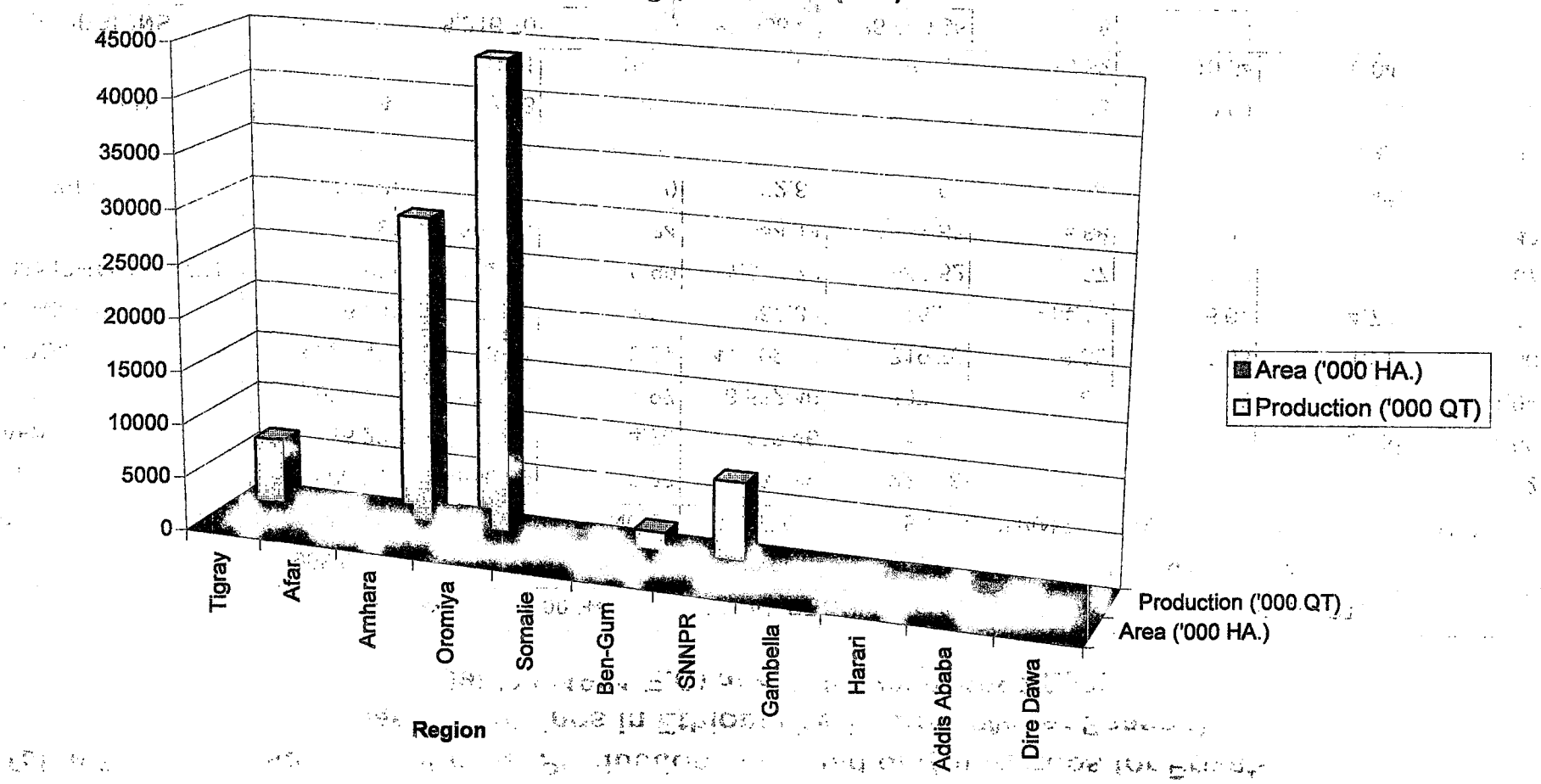


Table 3. Estimates of Area, Production and Yield of Major crops for Private Peasant Holdings in Ethiopia by Region (Meher Season) 1998/99 (1991 E.C) and 1999/2000 (1992 E.C)

REGION	TOTAL AREA (' 000 HA.)			TOTAL PRODUCTION (' 000 QT.)			YIELD (QT./HA)		
	1998/99 (1991 E.C.)	1999/2000 (1992 E.C.)	% CHANGE	1998/99 (1991 E.C.)	1999/2000 (1992 E.C.)	% CHANGE	1998/99 (1991 E.C.)	1999/2000 (1992 E.C.)	% CHANGE
TIGRAY	580.21	560.89	-3.33	6,530.89	6,227.28	-4.65	11.26	11.1	-1.42
AFAR	15.22	18.98	24.70	183.46	245.93	34.05	12.05	12.96	7.55
AMHARA	2,985.73	3,074.32	2.97	28,532.46	28,807.12	0.96	9.56	9.37	-1.99
OROMIYA	3,529.48	3,613.21	2.37	41,109.08	43,719.76	6.35	11.65	12.1	3.86
SOMALIE	46.24	47.58	2.90	262.32	225.21	-14.15	5.67	4.73	-16.58
BENISHANGUL-GUM	156.99	172.68	9.99	1,776.76	1,845.52	3.87	11.32	10.69	-5.57
S.N.N.P.R	673.09	695.54	3.34	7,044.14	7,387.57	4.88	10.47	10.62	1.43
GAMBELLA	11.18	12.79	14.40	222.82	249.07	11.78	19.93	19.47	-2.31
HARARI	5.5	6.57	19.45	46.53	58.14	24.95	8.46	8.85	4.61
ADDIS ABABA	7.4	8.03	8.51	74.33	82.99	11.65	10.04	10.33	2.89
DIRE DAWA	5.28	6.11	15.72	55.63	61.37	10.32	10.54	10.04	-4.74
ALL REGIONS	8,016.31	8,216.70	2.50	85,838.42	88,909.96	3.58	-	-	-

twenty major crops by private holders. This shows an increase of 2.37% from the previous year. This area comprised 43.97% of the total crop area at country level and accounted for 49.17% of the total crop production, at country level. The production in Oromiya of the twenty major crops was up by 6.35% compared to 1998/99.

Somalie and Gambella Regions both showed an increase of 2.90% and 14.40% in planted area and a reduction in production by 14.15% and an increase in production by 11.78%, respectively, while Benishangul-Gumuz Region showed an increase of 9.99% and 3.87% in planted area and production, respectively compared to the previous year.

SNNP Region cultivated 695.54 thousand hectares of land and is the third largest major crop growing region in the country, accounting for 8.46 of the total area planted at country level compared with 1998/99. Production in the same region increased by 4.88% compared with the previous year.

The three remaining regions of Harari, Addis Ababa, and Dire Dawa experienced similar increase in planted area 19.45%, 8.51%, and 15.72%, respectively compared with the 1998/99 Meher season crop. Production was up by 24.95% in Harari and 11.65% in Dire Dawa and 10.32% in Addis Ababa compared with that of the previous year. Detailed estimates at regional as well as zonal levels are given in Tables 4 through 14.

Note

1. Some estimates in all reporting levels are excluded due to high coefficients of variations. Nevertheless, they are incorporated in the total estimates. Hence, the sum of the specific estimates may not be equal to the total estimates.

2. Users are also advised to use those estimates with 30-50% coefficient of variation (CV) with caution.

3. For those items in the tables where "-" appears, it implies that no data was obtained from the sample units from which an estimate could be made.

Table 1. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

National

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	6,747.47	82.12	77,412.63	87.07	11.47
Teff	2,123.47	25.84	17,175.62	19.32	8.09
Barley	794.10	9.66	7,419.28	8.34	9.34
Wheat	1,025.31	12.48	12,126.25	13.64	11.83
Maize	1,407.27	17.13	25,254.71	28.40	17.95
Sorghum	995.41	12.11	11,811.43	13.28	11.87
Millet	360.23	4.38	3,195.09	3.59	8.87
Oats	41.67	.51	430.25	.48	10.33
Pulses	1,044.97	12.72	9,594.49	10.79	9.18
Horse Beans	359.15	4.37	3,886.82	4.37	10.82
Field Peas	152.20	1.85	1,159.98	1.30	7.62
Haricot Beans	166.04	2.02	1,328.88	1.49	8.00
Chick Peas	184.79	2.25	1,646.27	1.85	8.91
Lentils	72.22	.88	497.71	.56	6.89
Vetch	110.58	1.35	1,074.83	1.21	9.72
Others	424.26	5.16	1,902.84	2.14	4.49
Neug	256.53	3.12	1,021.70	1.15	3.98
Linseed	74.12	.90	321.38	.36	4.34
Rapeseed	20.38	.25	139.05	.16	6.82
Ground Nuts	13.55	.16	119.29	.13	8.80
Sunflower	5.23	.06	37.15	.04	7.10
Sesame	38.19	.46	156.34	.18	4.09
Fenugreek	16.26	.20	107.93	.12	6.64
All Crops	8,216.70	100.00	88,909.96	100.00	-

Table 4. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Tigray

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	489.49	87.27	5,657.46	90.85	11.56
Teff	126.44	22.54	1,154.40	18.54	9.13
Barley	77.90	13.89	812.73	13.05	10.43
Wheat	70.57	12.58	720.74	11.57	10.21
Maize	75.55	13.47	1,344.92	21.60	17.80
Sorghum	81.57	14.54	1,041.65	16.73	12.77
Millet	57.21	10.20	580.95	9.33	10.15
Oats	**	**	**	**	**
Pulses	43.15	7.69	453.83	7.29	10.52
Horse Beans	12.35	2.20	188.08	3.02	15.23
Field Peas	5.14	.92	58.75	.94	11.43
Haricot Beans	2.68	.48	16.45	.26	6.14
Chick Peas	13.38	2.39	119.10	1.91	8.90
Lentils	2.92	.52	16.50	.26	5.65
Vetch	6.68	1.19	54.95	.88	8.23
Others	28.25	5.04	115.99	1.86	4.11
Neug	7.48	1.33	36.33	.58	4.86
Linseed	6.59	1.17	31.73	.51	4.81
Rapeseed	**	**	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	13.79	2.46	**	**	**
Fenugreek	.26	.05	.67	.01	2.58
All Crops	560.89	100.00	6,227.28	100.00	-

Table 4.1 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

West Tigray Zone

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	139.77	86.24	1,824.04	93.08	13.05
Teff	33.93	20.94	352.92	18.01	10.40
Barley	**	**	**	**	**
Wheat	**	**	**	**	**
Maize	22.60	13.94	439.52	22.43	19.45
Sorghum	43.29	26.71	649.79	33.16	15.01
Millet	38.41	23.70	371.69	18.97	9.68
Oats	-	-	-	-	-
Pulses	5.40	3.33	61.64	3.15	11.41
Horse Beans	1.62	1.00	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	.11	.07	**	**	**
Chick Peas	3.23	1.99	24.68	1.26	7.64
Lentils	**	**	**	**	**
Vetch	**	**	**	**	**
Others	16.90	10.43	73.97	3.77	4.38
Neug	4.08	2.52	25.69	1.31	6.30
Linseed	1.21	.75	6.14	.31	5.07
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	**	**	**	**	**
Fenugreek	**	**	**	**	**
All Crops	162.07	100.00	1,959.65	100.00	-

Table 4.2 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Central Tigray Zone

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	166.96	89.94	1,884.30	92.64	11.29
Teff	51.68	27.84	416.83	20.49	8.07
Barley	15.37	8.28	158.60	7.80	10.32
Wheat	14.66	7.90	170.22	8.37	11.61
Maize	**	**	**	**	**
Sorghum	26.81	14.44	249.08	12.25	9.29
Millet	18.55	9.99	207.43	10.20	11.18
Oats	-	-	-	-	-
Pulses	12.39	6.67	130.53	6.42	10.54
Horse Beans	5.49	2.96	72.21	3.55	13.15
Field Peas	.70	.38	**	**	**
Haricot Beans	1.90	1.02	8.08	.40	4.25
Chick Peas	2.97	1.60	31.43	1.55	10.58
Lentils	.41	.22	1.92	.09	4.68
Vetch	**	**	**	**	**
Others	6.29	3.39	19.14	.94	3.04
Neug	3.20	1.72	10.17	.50	3.18
Linseed	1.80	.97	7.53	.37	4.18
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	**	**	**	**	**
Fenugreek	**	**	**	**	**
All Crops	185.64	100.00	2,033.96	100.00	-

Table 4.3 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

East Tigray Zone

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	63.03	80.46	628.82	80.27	9.98
Teff	5.51	7.03	41.51	5.30	7.53
Barley	31.27	39.92	337.73	43.11	10.80
Wheat	25.06	31.99	229.03	29.24	9.14
Maize	**	**	**	**	**
Sorghum	**	**	**	**	**
Millet	.17	.22	**	**	**
Oats	**	**	**	**	**
Pulses	13.08	16.70	142.38	18.17	10.89
Horse Beans	2.40	3.06	43.34	5.53	18.06
Field Peas	1.44	1.84	**	**	**
Haricot Beans	**	**	**	**	**
Chick Peas	4.44	5.67	38.91	4.97	8.76
Lentils	.89	1.14	6.52	.83	7.33
Vetch	3.90	4.98	32.66	4.17	8.37
Others	2.22	2.83	12.20	1.56	5.50
Neug	-	-	-	-	-
Linseed	2.13	2.72	11.90	1.52	5.59
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	78.34	100.00	783.40	100.00	-

Table 4.4 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

South Tigray Zone

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	119.73	88.80	1,320.30	91.04	11.03
Teff	35.32	26.20	343.13	23.66	9.71
Barley	30.23	22.42	309.33	21.33	10.23
Wheat	30.35	22.51	318.45	21.96	10.49
Maize	12.22	9.06	206.05	14.21	16.86
Sorghum	11.39	8.45	141.43	9.75	12.42
Millet	**	**	**	**	**
Oats	**	**	**	**	**
Pulses	12.27	9.10	119.28	8.22	9.72
Horse Beans	2.84	2.11	42.36	2.92	14.92
Field Peas	2.65	1.97	26.22	1.81	9.89
Haricot Beans	**	**	**	**	**
Chick Peas	2.74	2.03	24.08	1.66	8.79
Lentils	**	**	**	**	**
Vetch	1.81	1.34	12.93	.89	7.14
Others	2.83	2.10	10.68	.74	3.77
Neug	**	**	**	**	**
Linseed	1.44	1.07	6.17	.43	4.28
Rapeseed	**	**	-	-	**
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	**	**	**
Fenugreek	.06	.04	-	-	-
All Crops	134.83	100.00	1,450.26	100.00	-

Table 5. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Afar

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	17.70	93.26	237.10	96.41	13.40
Teff	6.61	34.83	58.87	23.94	8.91
Barley	**	**	**	**	**
Wheat	**	**	**	**	**
Maize	6.39	33.67	121.90	49.57	19.08
Sorghum	4.31	22.71	52.90	21.51	12.27
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.02	5.37	**	**	**
Horse Beans	-	-	-	-	-
Field Peas	**	**	-	-	**
Haricot Beans	**	**	**	**	**
Chick Peas	.40	2.11	**	**	**
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	.27	1.42	1.17	.48	4.33
Neug	-	-	-	-	-
Linseed	**	**	-	-	**
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	**	**	**
Fenugreek	-	-	-	-	-
All Crops	18.98	100.00	245.93	100.00	-

Table 5.1 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Zone 1

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	3.66	98.92	85.01	100.00	23.23
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	3.51	94.86	85.01	100.00	24.22
Sorghum	**	**	-	-	**
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	-	-	-	-	-
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	-	-	-	-	-
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	**	**	-	-	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	**	**	-	-	**
Fenugreek	-	-	-	-	-
All Crops	3.70	100.00	85.01	100.00	-

Table 5.2 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Zone 3

	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
CROP TYPE	('000 hectare)	%	('000 quintal)	%	
Cereals	12.82	91.18	128.27	93.60	10.01
Teff	5.96	42.39	47.60	34.73	7.99
Barley	**	**	**	**	**
Wheat	**	**	**	**	**
Maize	2.35	16.71	24.78	18.08	10.54
Sorghum	4.12	29.30	52.47	38.29	12.74
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.01	7.18	7.60	5.55	7.52
Horse Beans	-	-	-	-	-
Field Peas	**	**	-	-	**
Haricot Beans	**	**	**	**	**
Chick Peas	.40	2.84	**	**	**
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	.23	1.64	1.17	.85	5.09
Neug	-	-	-	-	-
Linseed	**	**	-	-	**
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.12	.85	**	**	**
Sesame	**	**	**	**	**
Fenugreek	-	-	-	-	-
All Crops	14.06	100.00	137.04	100.00	-

Table 6. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Amhara

	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
CROP TYPE	('000 hectare)	%	('000 quintal)	%	
Cereals	2,368.69	77.05	23,285.97	80.83	9.83
Teff	906.15	29.47	7,314.36	25.39	8.07
Barley	268.16	8.72	1,997.47	6.93	7.45
Wheat	314.19	10.22	3,271.10	11.36	10.41
Maize	309.41	10.06	5,249.05	18.22	16.96
Sorghum	356.85	11.61	3,699.44	12.84	10.37
Millet	202.47	6.59	1,657.93	5.76	8.19
Oats	11.46	.37	96.63	.34	8.43
Pulses	504.13	16.40	4,691.66	16.29	9.31
Horse Beans	170.59	5.55	1,910.62	6.63	11.20
Field Peas	68.65	2.23	485.25	1.68	7.07
Haricot Beans	53.61	1.74	490.41	1.70	9.15
Chick Peas	104.34	3.39	906.52	3.15	8.69
Lentils	44.24	1.44	325.29	1.13	7.35
Vetch	62.70	2.04	573.58	1.99	9.15
Others	201.50	6.55	829.48	2.88	4.12
Neug	140.05	4.56	531.96	1.85	3.80
Linseed	24.19	.79	69.73	.24	2.88
Rapeseed	9.34	.30	74.75	.26	8.00
Ground Nuts	**	**	**	**	**
Sunflower	4.33	.14	33.75	.12	7.79
Sesame	**	**	**	**	**
Fenugreek	7.88	.26	49.06	.17	6.23
All Crops	3,074.32	100.00	28,807.12	100.00	-

Table 6.1 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

North Gonder

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	410.24	81.21	3,214.89	85.80	7.84
Teff	110.82	21.94	683.58	18.24	6.17
Barley	37.45	7.41	204.63	5.46	5.46
Wheat	22.01	4.36	158.14	4.22	7.18
Maize	36.78	7.28	389.21	10.39	10.58
Sorghum	156.64	31.01	1,426.05	38.06	9.10
Millet	45.55	9.02	345.83	9.23	7.59
Oats	**	**	**	**	**
Pulses	50.64	10.02	336.71	8.99	6.65
Horse Beans	17.20	3.40	122.35	3.27	7.11
Field Peas	9.33	1.85	58.94	1.57	6.32
Haricot Beans	**	**	**	**	**
Chick Peas	17.70	3.50	128.15	3.42	7.24
Lentils	**	**	**	**	**
Vetch	**	**	**	**	**
Others	44.25	8.76	195.38	5.21	4.42
Neug	27.78	5.50	126.30	3.37	4.55
Linseed	2.99	.59	8.78	.23	2.94
Rapeseed	.76	.15	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	.70	.14	**	**	**
Sesame	**	**	**	**	**
Fenugreek	**	**	**	**	**
All Crops	505.14	100.00	3,746.98	100.00	-

Table 6.2 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

South Gonder

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	297.17	76.08	2,177.68	78.11	7.33
Teff	112.34	28.76	760.72	27.29	6.77
Barley	56.11	14.36	361.80	12.98	6.45
Wheat	35.25	9.02	251.27	9.01	7.13
Maize	32.65	8.36	365.12	13.10	11.18
Sorghum	11.13	2.85	**	**	**
Millet	49.59	12.70	376.17	13.49	7.59
Oats	**	**	-	-	**
Pulses	66.08	16.92	519.13	18.62	7.86
Horse Beans	21.57	5.52	215.11	7.72	9.97
Field Peas	6.09	1.56	42.54	1.53	6.99
Haricot Beans	**	**	**	**	**
Chick Peas	20.57	5.27	151.24	5.42	7.35
Lentils	1.88	.48	7.76	.28	4.13
Vetch	6.94	1.78	52.14	1.87	7.51
Others	27.37	7.01	91.16	3.27	3.33
Neug	19.45	4.98	69.09	2.48	3.55
Linseed	6.62	1.69	17.20	.62	2.60
Rapeseed	.53	.14	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	**	**	-	-	**
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	390.62	100.00	2,787.97	100.00	-

Table 6.3 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

North Wolo

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	151.20	79.05	1,644.70	81.29	10.88
Teff	57.21	29.91	497.92	24.61	8.70
Barley	28.69	15.00	270.01	13.35	9.41
Wheat	30.54	15.97	307.48	15.20	10.07
Maize	9.57	5.00	**	**	**
Sorghum	23.21	12.14	303.34	14.99	13.07
Millet	.47	.25	**	**	**
Oats	1.51	.79	13.15	.65	8.71
Pulses	35.47	18.55	355.69	17.58	10.03
Horse Beans	12.06	6.31	130.35	6.44	10.81
Field Peas	5.92	3.10	58.61	2.90	9.90
Haricot Beans	**	**	**	**	**
Chick Peas	7.63	3.99	80.19	3.96	10.51
Lentils	5.54	2.90	41.71	2.06	7.53
Vetch	3.50	1.83	**	**	11.47
Others	4.60	2.41	22.87	1.13	4.97
Neug	.52	.27	**	**	**
Linseed	2.38	1.24	7.46	.37	3.13
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	-	-	**
Fenugreek	1.37	.72	10.10	.50	7.37
All Crops	191.26	100.00	2,023.26	100.00	-

Table 6.4 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

South Wolo

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	239.71	73.38	2,625.45	73.87	10.95
Teff	96.68	29.60	982.14	27.63	10.16
Barley	26.73	8.18	239.15	6.73	8.95
Wheat	56.85	17.40	705.56	19.85	12.41
Maize	14.59	4.47	185.33	5.21	12.70
Sorghum	37.78	11.57	449.56	12.65	11.90
Millet	**	**	**	**	**
Oats	6.96	2.13	62.96	1.77	9.05
Pulses	78.57	24.05	870.88	24.50	11.08
Horse Beans	30.03	9.19	376.96	10.61	12.55
Field Peas	13.47	4.12	88.73	2.50	6.59
Haricot Beans	7.48	2.29	**	**	**
Chick Peas	10.32	3.16	114.74	3.23	11.12
Lentils	6.40	1.96	60.79	1.71	9.50
Vetch	10.87	3.33	134.99	3.80	12.42
Others	8.37	2.56	57.68	1.62	6.89
Neug	4.16	1.27	27.40	.77	6.59
Linseed	.76	.23	2.74	.08	3.61
Rapeseed	**	**	-	-	**
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	-	-	-
Fenugreek	3.10	.95	25.96	.73	8.37
All Crops	326.65	100.00	3,554.01	100.00	-

Table 6.5 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

North Shewa(Amhara)

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	285.34	71.70	2,534.07	69.68	8.88
Teff	114.73	28.83	812.62	22.34	7.08
Barley	26.27	6.60	203.42	5.59	7.74
Wheat	**	**	**	**	**
Maize	8.89	2.23	107.33	2.95	12.07
Sorghum	42.86	10.77	419.56	11.54	9.79
Millet	-	-	-	-	-
Oats	**	**	**	**	**
Pulses	106.07	26.65	1,072.59	29.49	10.11
Horse Beans	**	**	**	**	**
Field Peas	5.07	1.27	21.95	.60	4.33
Haricot Beans	5.01	1.26	27.59	.76	5.51
Chick Peas	16.57	4.16	113.21	3.11	6.83
Lentils	**	**	**	**	**
Vetch	7.51	1.89	**	**	**
Others	6.53	1.64	30.30	.83	4.64
Neug	1.78	.45	4.96	.14	2.79
Linseed	1.66	.42	2.52	.07	1.52
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	**	**	**
Fenugreek	.70	.18	2.02	.06	2.89
All Crops	397.94	100.00	3,636.96	100.00	-

Table 6.6 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

East Gojam

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	365.19	76.40	4,365.95	79.63	11.96
Teff	198.03	41.43	2,075.80	37.86	10.48
Barley	45.40	9.50	389.19	7.10	8.57
Wheat	58.04	12.14	690.66	12.60	11.90
Maize	42.21	8.83	757.67	13.82	17.95
Sorghum	**	**	**	**	**
Millet	**	**	**	**	**
Oats	-	-	-	-	-
Pulses	88.60	18.53	1,024.97	18.69	11.57
Horse Beans	19.15	4.01	218.11	3.98	11.39
Field Peas	8.95	1.87	87.48	1.60	9.77
Haricot Beans	14.98	3.13	**	**	**
Chick Peas	22.05	4.61	269.24	4.91	12.21
Lentils	**	**	**	**	**
Vetch	21.86	4.57	225.09	4.11	10.30
Others	24.22	5.07	92.16	1.68	3.81
Neug	15.86	3.32	52.58	.96	3.32
Linseed	4.29	.90	15.51	.28	3.62
Rapeseed	2.72	.57	17.47	.32	6.42
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	-	-	**
Fenugreek	1.10	.23	**	**	**
All Crops	478.02	100.00	5,483.08	100.00	-

Table 6.7 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

West Gojam

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	324.00	76.42	3,855.18	87.75	11.90
Teff	115.72	27.29	805.98	18.34	6.96
Barley	11.64	2.75	67.68	1.54	5.81
Wheat	6.84	1.61	64.02	1.46	9.36
Maize	116.38	27.45	2,351.35	53.52	20.20
Sorghum	13.21	3.12	**	**	**
Millet	59.34	14.00	487.71	11.10	8.22
Oats	**	**	**	**	**
Pulses	50.86	12.00	327.74	7.46	6.44
Horse Beans	14.89	3.51	132.04	3.01	8.87
Field Peas	10.29	2.43	63.31	1.44	6.15
Haricot Beans	**	**	**	**	**
Chick Peas	7.19	1.70	39.42	.90	5.48
Lentils	**	**	**	**	**
Vetch	**	**	24.37	.55	**
Others	49.12	11.59	210.68	4.80	4.29
Neug	42.15	9.94	162.72	3.70	3.86
Linseed	3.17	.75	8.40	.19	2.65
Rapeseed	3.65	.86	39.07	.89	10.70
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	**	**	**
Fenugreek	**	**	-	-	**
All Crops	423.98	100.00	4,393.60	100.00	-

Table 6.8 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Waghamera

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	73.46	75.86	535.98	76.60	7.30
Teff	19.80	20.45	131.45	18.79	6.64
Barley	20.55	21.22	142.19	20.32	6.92
Wheat	8.63	8.91	76.33	10.91	8.84
Maize	1.48	1.53	16.28	2.33	11.00
Sorghum	22.95	23.70	169.57	24.23	7.39
Millet	**	**	**	**	**
Oats	-	-	-	-	-
Pulses	18.88	19.50	139.92	20.00	7.41
Horse Beans	6.65	6.87	56.20	8.03	8.45
Field Peas	**	**	**	**	**
Haricot Beans	3.49	3.60	15.19	2.17	4.35
Chick Peas	.49	.51	3.05	.44	6.22
Lentils	1.95	2.01	16.99	2.43	8.71
Vetch	-	-	-	-	-
Others	4.48	4.63	23.80	3.40	5.31
Neug	.56	.58	2.08	.30	3.71
Linseed	1.31	1.35	5.21	.74	3.98
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	1.33	1.37	11.13	1.59	8.37
Sesame	**	**	**	**	**
Fenugreek	.01	.01	.01	-	1.00
All Crops	96.83	100.00	699.70	100.00	-

Table 6.9 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Awi

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	175.01	82.04	1,731.60	92.86	9.89
Teff	69.38	32.53	478.87	25.68	6.90
Barley	14.88	6.98	115.32	6.18	7.75
Wheat	3.41	1.60	23.49	1.26	6.89
Maize	34.19	16.03	602.44	32.31	17.62
Sorghum	**	**	**	**	**
Millet	46.48	21.79	435.79	23.37	9.38
Oats	.13	.06	**	**	**
Pulses	6.54	3.07	29.60	1.59	4.53
Horse Beans	2.09	.98	11.44	.61	5.47
Field Peas	2.88	1.35	13.45	.72	4.67
Haricot Beans	**	**	**	**	**
Chick Peas	**	**	**	**	**
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	31.76	14.89	103.63	5.56	3.26
Neug	27.77	13.02	84.40	4.53	3.04
Linseed	.95	.45	**	**	**
Rapeseed	1.66	.78	12.30	.66	7.41
Ground Nuts	**	**	**	**	**
Sunflower	-	-	-	-	-
Sesame	**	**	**	**	**
Fenugreek	.05	.02	.17	.01	3.40
All Crops	213.31	100.00	1,864.83	100.00	-

Table 6.10 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Oromia Zone (Amhara)

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	47.36	93.65	600.48	97.36	12.68
Teff	11.43	22.60	85.29	13.83	7.46
Barley	.46	.91	4.08	.66	8.87
Wheat	.49	.97	5.32	.86	10.86
Maize	12.66	25.03	225.39	36.55	17.80
Sorghum	21.72	42.95	274.42	44.50	12.63
Millet	.16	.32	**	**	**
Oats	**	**	**	**	**
Pulses	2.43	4.81	14.42	2.34	5.93
Horse Beans	**	**	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	1.22	2.41	6.30	1.02	5.16
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	.78	1.54	1.83	.30	2.35
Neug	**	**	-	-	**
Linseed	**	**	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	.61	1.21	**	**	**
Fenugreek	.01	.02	-	-	-
All Crops	50.57	100.00	616.74	100.00	-

Table 7 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Oromia

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	3,060.54	84.70	39,288.57	89.86	12.84
Teff	891.83	24.68	7,423.28	16.98	8.32
Barley	385.76	10.68	3,987.04	9.12	10.34
Wheat	565.92	15.66	7,331.40	16.77	12.95
Maize	747.55	20.69	14,437.99	33.02	19.31
Sorghum	368.03	10.19	5,132.95	11.74	13.95
Millet	71.80	1.99	646.18	1.48	9.00
Oats	29.65	.82	329.74	.75	11.12
Pulses	387.24	10.72	3,605.32	8.25	9.31
Horse Beans	144.82	4.01	1,497.46	3.43	10.34
Field Peas	55.62	1.54	448.37	1.03	8.06
Haricot Beans	65.50	1.81	526.82	1.20	8.04
Chick Peas	57.59	1.59	549.34	1.26	9.54
Lentils	23.94	.66	153.01	.35	6.39
Vetch	39.77	1.10	430.31	.98	10.82
Others	165.43	4.58	825.87	1.89	4.99
Neug	92.34	2.56	390.96	.89	4.23
Linseed	42.44	1.17	217.95	.50	5.14
Rapeseed	10.73	.30	64.04	.15	5.97
Ground Nuts	**	**	**	**	**
Sunflower	**	**	**	**	**
Sesame	2.05	.06	**	**	**
Fenugreek	7.61	.21	56.39	.13	7.41
All Crops	3,613.21	100.00	43,719.76	100.00	-

Table 7.1 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

West Welega

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	252.06	90.03	3,703.82	95.01	14.69
Teff	35.62	12.72	167.13	4.29	4.69
Barley	4.26	1.52	29.05	.75	6.82
Wheat	8.63	3.08	**	**	**
Maize	101.05	36.09	2,200.87	56.46	21.78
Sorghum	63.02	22.51	851.76	21.85	13.52
Millet	39.39	14.07	356.53	9.15	9.05
Oats	**	**	**	**	**
Pulses	17.85	6.38	150.03	3.85	8.41
Horse Beans	6.01	2.15	54.23	1.39	9.02
Field Peas	.79	.28	2.03	.05	2.57
Haricot Beans	9.43	3.37	84.26	2.16	8.94
Chick Peas	**	**	**	**	**
Lentils	-	-	-	-	-
Vetch	**	**	**	**	**
Others	10.06	3.59	44.38	1.14	4.41
Neug	9.69	3.46	43.34	1.11	4.47
Linseed	**	**	**	**	**
Rapeseed	**	**	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	**	**	-	-	**
Sesame	**	**	**	**	**
Fenugreek	**	**	**	**	**
All Crops	279.96	100.00	3,898.23	100.00	-

Table 7.2 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

East Welega

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	326.92	80.45	4,696.75	91.61	14.37
Teff	129.02	31.75	1,032.97	20.15	8.01
Barley	14.51	3.57	161.26	3.15	11.11
Wheat	21.24	5.23	331.42	6.46	15.60
Maize	107.42	26.43	2,524.19	49.23	23.50
Sorghum	31.80	7.83	461.12	8.99	14.50
Millet	22.78	5.61	183.66	3.58	8.06
Oats	**	**	**	**	**
Pulses	21.12	5.20	183.60	3.58	8.69
Horse Beans	14.17	3.49	138.17	2.69	9.75
Field Peas	6.32	1.56	42.11	.82	6.66
Haricot Beans	**	**	**	**	**
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	58.35	14.36	246.71	4.81	4.23
Neug	52.76	12.98	226.85	4.42	4.30
Linseed	2.19	.54	6.71	.13	3.06
Rapeseed	1.73	.43	7.04	.14	4.07
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	**	**	**	**	**
Fenugreek	**	**	.82	.02	**
All Crops	406.38	100.00	5,127.07	100.00	-

Table 7.3 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Illubabor

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	133.13	91.80	1,830.78	96.73	13.75
Teff	39.47	27.22	291.15	15.38	7.38
Barley	1.58	1.09	11.74	.62	7.43
Wheat	1.05	.72	**	**	**
Maize	64.55	44.51	1,215.85	64.24	18.84
Sorghum	21.42	14.77	264.96	14.00	12.37
Millet	4.97	3.43	40.64	2.15	8.18
Oats	**	**	-	-	**
Pulses	10.08	6.95	55.95	2.96	5.55
Horse Beans	3.17	2.19	18.01	.95	5.68
Field Peas	2.42	1.67	18.09	.96	7.48
Haricot Beans	4.26	2.94	19.49	1.03	4.58
Chick Peas	**	**	**	**	**
Lentils	-	-	-	-	-
Vetch	**	**	**	**	**
Others	1.81	1.25	6.03	.32	3.33
Neug	1.63	1.12	5.59	.30	3.43
Linseed	.13	.09	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	**	**	-	-	**
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.04	.03	**	**	**
All Crops	145.02	100.00	1,892.75	100.00	-

Table 7.4 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Jimma

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	283.34	89.03	3,341.17	94.30	11.79
Teff	125.25	39.36	795.93	22.46	6.35
Barley	12.55	3.94	109.05	3.08	8.69
Wheat	14.13	4.44	136.38	3.85	9.65
Maize	90.73	28.51	1,805.87	50.97	19.90
Sorghum	36.55	11.49	434.36	12.26	11.88
Millet	**	**	**	**	**
Oats	1.03	.32	7.05	.20	6.84
Pulses	26.59	8.36	173.86	4.91	6.54
Horse Beans	**	**	**	**	**
Field Peas	5.12	1.61	25.45	.72	4.97
Haricot Beans	**	**	**	**	**
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	8.30	2.61	**	**	**
Neug	**	**	**	**	**
Linseed	1.14	.36	1.51	.04	1.32
Rapeseed	**	**	-	-	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	**	**	**	**	**
Fenugreek	**	**	-	-	**
All Crops	318.24	100.00	3,543.08	100.00	-

Table 7.5 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

West Shewa

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	438.74	82.91	4,946.56	87.17	11.27
Teff	232.63	43.96	2,305.93	40.64	9.91
Barley	55.49	10.49	480.75	8.47	8.66
Wheat	89.65	16.94	944.57	16.65	10.54
Maize	45.28	8.56	1,007.46	17.75	22.25
Sorghum	**	**	199.22	3.51	**6
Millet	-	-	-	-	-
Oats	**	**	**	**	**3
Pulses	69.80	13.19	643.65	11.34	9.22
Horse Beans	19.32	3.65	156.25	2.75	8.09
Field Peas	4.24	.80	**	**	**8
Haricot Beans	.17	.03	-	-	-
Chick Peas	27.18	5.14	269.44	4.75	9.91
Lentils	3.34	.63	15.01	.26	4.49
Vetch	15.55	2.94	175.04	3.08	11.26
Others	20.65	3.90	84.14	1.48	4.07
Neug	10.04	1.90	33.60	.59	3.35
Linseed	6.44	1.22	18.13	.32	2.82
Rapeseed	**	**	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	529.18	100.00	5,674.35	100.00	-

Table 7.6 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

North Shewa(Oromia)

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	240.42	75.80	2,259.97	77.61	9.40
Teff	93.60	29.51	807.58	27.73	8.63
Barley	61.90	19.52	545.20	18.72	8.81
Wheat	66.10	20.84	713.29	24.50	10.79
Maize	3.49	1.10	35.21	1.21	10.09
Sorghum	13.80	4.35	149.26	5.13	10.82
Millet	-	-	-	-	-
Oats	1.52	.48	9.43	.32	6.20
Pulses	64.53	20.35	598.60	20.56	9.28
Horse Beans	25.35	7.99	266.84	9.16	10.53
Field Peas	8.06	2.54	76.20	2.62	9.45
Haricot Beans	**	**	**	**	**
Chick Peas	8.45	2.66	61.72	2.12	7.30
Lentils	9.98	3.15	70.89	2.43	7.10
Vetch	12.44	3.92	119.66	4.11	9.62
Others	12.21	3.85	53.38	1.83	4.37
Neug	7.94	2.50	41.57	1.43	5.24
Linseed	3.13	.99	6.28	.22	2.01
Rapeseed	**	**	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	-	-	-	-	-
Fenugreek	.96	.30	4.85	.17	5.05
All Crops	317.16	100.00	2,911.95	100.00	-

Table 7.7 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

East Shewa

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	273.64	80.97	3,675.86	85.29	13.43
Teff	100.07	29.61	862.41	20.01	8.62
Barley	9.91	2.93	96.21	2.23	9.71
Wheat	62.11	18.38	908.79	21.09	14.63
Maize	96.53	28.56	1,761.23	40.86	18.25
Sorghum	4.47	1.32	44.57	1.03	9.97
Millet	**	**	**	**	**
Oats	**	**	**	**	**
Pulses	62.47	18.48	622.71	14.45	9.97
Horse Beans	6.52	1.93	85.61	1.99	13.13
Field Peas	5.19	1.54	**	**	**
Haricot Beans	23.99	7.10	182.99	4.25	7.63
Chick Peas	16.65	4.93	168.16	3.90	10.10
Lentils	5.06	1.50	47.61	1.10	9.41
Vetch	5.07	1.50	**	**	**
Others	1.86	.55	**	**	**
Neug	-	-	-	-	-
Linseed	**	**	**	**	**
Rapeseed	.27	.08	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	**	**	**	**	**
Sesame	**	**	**	**	**
Fenugreek	**	**	**	**	**
All Crops	337.97	100.00	4,309.98	100.00	-

Table 7.8 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Arsi

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	519.91	83.91	6,316.59	87.80	12.15
Teff	89.37	14.42	692.07	9.62	7.74
Barley	140.00	22.59	1,486.73	20.67	10.62
Wheat	185.68	29.97	2,449.08	34.04	13.19
Maize	79.37	12.81	1,284.28	17.85	16.18
Sorghum	21.90	3.53	**	**	**
Millet	**	**	-	-	**
Oats	**	**	**	**	**
Pulses	68.32	11.03	701.40	9.75	10.27
Horse Beans	36.15	5.83	443.12	6.16	12.26
Field Peas	16.84	2.72	**	**	**
Haricot Beans	12.44	2.01	**	**	**
Chick Peas	**	**	**	**	**
Lentils	1.76	.28	**	**	**
Vetch	**	**	**	**	**
Others	31.39	5.07	176.10	2.45	5.61
Neug	**	**	**	**	**
Linseed	22.50	3.63	128.77	1.79	5.72
Rapeseed	**	**	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	**	**	-	-	**
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	619.62	100.00	7,194.09	100.00	-

Table 7.9 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

West Harerge

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	141.93	90.61	2,479.64	93.47	17.47
Teff	6.59	4.21	55.74	2.10	8.46
Barley	3.73	2.38	39.16	1.48	10.50
Wheat	1.40	.89	**	**	**
Maize	63.23	40.37	1,238.20	46.67	19.58
Sorghum	65.31	41.69	1,107.21	41.74	16.95
Millet	1.15	.73	11.40	.43	9.91
Oats	.53	.34	5.05	.19	9.53
Pulses	12.85	8.20	164.49	6.20	12.80
Horse Beans	4.90	3.13	71.86	2.71	14.67
Field Peas	.99	.63	**	**	**
Haricot Beans	5.40	3.45	58.62	2.21	10.86
Chick Peas	1.02	.65	**	**	**
Lentils	.49	.31	2.19	.08	4.47
Vetch	**	**	**	**	**
Others	1.85	1.18	8.79	.33	4.75
Neug	-	-	-	-	-
Linseed	.40	.26	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	**	**	**	**	**
Sunflower	**	**	**	**	**
Sesame	**	**	**	**	**
Fenugreek	.65	.41	**	**	**
All Crops	156.64	100.00	2,652.92	100.00	-

Table 7.10 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

East Harerge

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	159.91	88.33	2,101.23	90.33	13.14
Teff	5.26	2.91	49.01	2.11	9.32
Barley	3.61	1.99	34.98	1.50	9.69
Wheat	11.64	6.43	**	**	**
Maize	51.19	28.28	712.00	30.61	13.91
Sorghum	86.81	47.95	1,121.28	48.20	12.92
Millet	-	-	-	-	-
Oats	1.40	.77	14.59	.63	10.42
Pulses	10.61	5.86	134.67	5.79	12.69
Horse Beans	5.23	2.89	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	4.22	2.33	51.04	2.19	12.09
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	10.52	5.81	**	**	**
Neug	-	-	-	-	-
Linseed	**	**	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	9.62	5.31	**	**	**
Sunflower	-	-	-	-	-
Sesame	**	**	**	**	**
Fenugreek	.46	.25	1.99	.09	4.33
All Crops	181.04	100.00	2,326.29	100.00	-

Table 7.11 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Bale

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	236.82	89.48	3,216.53	93.29	13.58
Teff	26.43	9.99	280.74	8.14	10.62
Barley	63.60	24.03	804.97	23.35	12.66
Wheat	100.49	37.97	1,493.85	43.33	14.87
Maize	18.99	7.18	266.69	7.73	14.04
Sorghum	7.38	2.79	**	**	**
Millet	-	-	-	-	-
Oats	19.93	7.53	254.46	7.38	12.77
Pulses	19.58	7.40	154.94	4.49	7.91
Horse Beans	5.29	2.00	49.28	1.43	9.32
Field Peas	4.39	1.66	**	**	**
Haricot Beans	.44	.17	**	**	**
Chick Peas	**	**	**	**	**
Lentils	2.15	.81	11.15	.32	5.19
Vetch	**	**	**	**	**
Others	8.27	3.12	76.51	2.22	9.25
Neug	**	**	**	**	**
Linseed	5.85	2.21	52.51	1.52	8.98
Rapeseed	**	**	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	2.32	.88	**	**	**
All Crops	264.66	100.00	3,447.98	100.00	-

Table 7.12 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Borena

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	53.74	93.72	719.66	97.11	13.39
Teff	**	**	**	**	**
Barley	14.62	25.50	187.93	25.36	12.85
Wheat	**	**	**	**	**
Maize	25.72	44.86	386.14	52.11	15.01
Sorghum	**	**	**	**	**
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	3.44	6.00	21.42	2.89	6.23
Horse Beans	.94	1.64	11.20	1.51	11.91
Field Peas	**	**	**	**	**
Haricot Beans	1.82	3.17	6.82	.92	3.75
Chick Peas	**	**	-	-	**
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	**	**	-	-	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	**	**	-	-	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	57.34	100.00	741.08	100.00	-

Table 8. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Somale

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	46.17	97.04	219.08	97.28	4.75
Teff	**	**	-	-	**
Barley	3.63	7.63	24.19	10.74	6.66
Wheat	1.82	3.83	12.09	5.37	6.64
Maize	24.23	50.92	104.43	46.37	4.31
Sorghum	16.25	34.15	77.02	34.20	4.74
Millet	-	-	-	-	-
Oats	**	**	**	**	**
Pulses	1.00	2.10	**	**	**
Horse Beans	-	-	-	-	-
Field Peas	**	**	-	-	**
Haricot Beans	.73	1.53	**	**	**
Chick Peas	.23	.48	**	**	**
Lentils	-	-	-	-	-
Vetch	**	**	-	-	**
Others	**	**	**	**	3.49
Neug	-	-	-	-	-
Linseed	.06	.13	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	**	**	**	**	**
Sunflower	-	-	-	-	-
Sesame	-	-	**	**	**
Fenugreek	**	**	**	**	**
All Crops	47.58	100.00	225.21	100.00	-

Table 8.1 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Shinele

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	.43	100.00	4.49	99.34	10.44
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	.12	27.91	1.49	32.96	12.42
Sorghum	.31	72.09	3.00	66.37	9.68
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	-	-	-	-	-
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	-	-	-	-	-
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	-	-	**	**	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	**	**	**
Fenugreek	-	-	-	-	-
All Crops	.43	100.00	4.52	100.00	-

Table 8.2 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Jijiga

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	41.10	97.76	209.54	98.45	5.10
Teff	**	**	-	-	**
Barley	3.63	8.63	24.19	11.37	6.66
Wheat	1.82	4.33	12.09	5.68	6.64
Maize	19.51	46.41	97.90	46.00	5.02
Sorghum	15.90	37.82	74.01	34.77	4.65
Millet	-	-	-	-	-
Oats	**	**	**	**	**
Pulses	.53	1.26	1.89	.89	3.57
Horse Beans	-	-	-	-	-
Field Peas	**	**	-	-	**
Haricot Beans	.26	.62	**	**	**
Chick Peas	.23	.55	**	**	**
Lentils	-	-	-	-	-
Vetch	**	**	-	-	**
Others	**	**	**	**	**
Neug	-	-	-	-	-
Linseed	.06	.14	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	**	**	**	**	**
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	42.04	100.00	212.84	100.00	-

Table 8.3 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Moyale

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	4.65	91.00	5.05	64.33	1.09
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	4.60	90.02	5.04	64.20	1.10
Sorghum	**	**	**	**	**
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	.47	9.20	**	**	**
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.47	9.20	**	**	**
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	-	-	-	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	5.11	100.00	**	**	-

Table 9. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Benshangul-Gumuz

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	141.28	81.82	1,688.45	91.49	11.95
Teff	23.81	13.79	145.22	7.87	6.10
Barley	**	**	**	**	**
Wheat	**	**	**	**	**
Maize	29.54	17.11	493.54	26.74	16.71
Sorghum	60.35	34.95	743.59	40.29	12.32
Millet	24.57	14.23	280.73	15.21	11.43
Oats	**	**	-	-	**
Pulses	6.90	4.00	45.03	2.44	6.53
Horse Beans	1.22	.71	9.29	.50	7.61
Field Peas	**	**	**	**	**
Haricot Beans	4.63	2.68	28.84	1.56	6.23
Chick Peas	.40	.23	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	24.50	14.19	112.03	6.07	4.57
Neug	15.58	9.02	60.41	3.27	3.88
Linseed	.29	.17	.45	.02	1.55
Rapeseed	**	**	**	**	**
Ground Nuts	1.90	1.10	18.54	1.00	9.76
Sunflower	**	**	-	-	**
Sesame	6.64	3.85	32.41	1.76	4.88
Fenugreek	.04	.02	.15	.01	3.75
All Crops	172.68	100.00	1,845.52	100.00	-

Table 9.1 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Metekel

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	65.86	81.20	780.18	89.16	11.85
Teff	11.73	14.46	92.01	10.52	7.84
Barley	**	**	**	**	**
Wheat	**	**	**	**	**
Maize	7.71	9.51	144.12	16.47	18.69
Sorghum	25.61	31.57	314.95	35.99	12.30
Millet	18.00	22.19	205.28	23.46	11.40
Oats	**	**	-	-	**
Pulses	5.24	6.46	35.44	4.05	6.76
Horse Beans	.72	.89	6.02	.69	8.36
Field Peas	**	**	**	**	**
Haricot Beans	3.68	4.54	23.22	2.65	6.31
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	10.00	12.33	59.39	6.79	5.94
Neug	5.38	6.63	26.77	3.06	4.98
Linseed	**	**	**	**	**
Rapeseed	**	**	**	**	**
Ground Nuts	**	**	**	**	**
Sunflower	-	-	-	-	-
Sesame	**	**	**	**	**
Fenugreek	-	-	**	**	**
All Crops	81.11	100.00	875.00	100.00	-

Table 9.2 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Asosa

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	44.01	79.95	513.60	93.12	11.67
Teff	6.76	12.28	24.20	4.39	3.58
Barley	**	**	**	**	**
Wheat	**	**	**	**	**
Maize	10.92	19.84	174.46	31.63	15.98
Sorghum	24.86	45.16	299.31	54.27	12.04
Millet	1.28	2.33	14.06	2.55	10.98
Oats	-	-	-	-	-
Pulses	.48	.87	**	**	**
Horse Beans	**	**	**	**	**
Field Peas	-	-	-	-	-
Haricot Beans	**	**	**	**	**
Chick Peas	**	**	**	**	**
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	10.55	19.16	34.89	6.33	3.31
Neug	7.95	14.44	23.51	4.26	2.96
Linseed	.19	.35	.35	.06	1.84
Rapeseed	-	-	-	-	-
Ground Nuts	.77	1.40	5.39	.98	7.00
Sunflower	-	-	-	-	-
Sesame	1.64	2.98	5.63	1.02	3.43
Fenugreek	-	-	**	**	**
All Crops	55.05	100.00	551.53	100.00	-

Table 9.3 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Kemeshi

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	**	**	**	**	**
Teff	**	**	**	**	**
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	**	**	**	**	**
Sorghum	9.88	27.05	129.32	30.86	13.09
Millet	**	**	**	**	**
Oats	-	-	-	-	-
Pulses	**	**	6.55	1.56	**
Horse Beans	**	**	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	.64	1.75	3.58	.85	5.59
Chick Peas	**	**	-	-	**
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	3.94	10.79	**	**	**
Neug	**	**	**	**	**
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	.03	.08	.18	.04	6.00
Sunflower	-	-	-	-	-
Sesame	1.63	4.46	7.32	1.75	4.49
Fenugreek	**	**	.13	.03	**
All Crops	**	**	**	**	-

Table 10. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

(S.N.N.P.R)

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	593.33	85.30	6,619.89	89.61	11.16
Teff	165.05	23.73	1,048.33	14.19	6.35
Barley	56.73	8.16	578.77	7.83	10.20
Wheat	68.39	9.83	750.25	10.16	10.97
Maize	205.70	29.57	3,339.29	45.20	16.23
Sorghum	93.24	13.41	873.70	11.83	9.37
Millet	4.16	.60	29.26	.40	7.03
Oats	.06	.01	**	**	**
Pulses	99.63	14.32	762.60	10.32	7.65
Horse Beans	30.11	4.33	280.71	3.80	9.32
Field Peas	22.20	3.19	162.13	2.19	7.30
Haricot Beans	38.02	5.47	255.61	3.46	6.72
Chick Peas	**	**	**	**	**
Lentils	.91	.13	**	**	**
Vetch	**	**	**	**	**
Others	2.57	.37	5.08	.07	1.98
Neug	**	**	**	**	**
Linseed	.52	.07	1.38	.02	2.65
Rapeseed	.22	.03	.18	-	.82
Ground Nuts	**	**	**	**	**
Sunflower	.35	.05	**	**	**
Sesame	**	**	**	**	**
Fenugreek	**	**	**	**	**
All Crops	695.54	100.00	7,387.57	100.00	-

Table 10.1 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Gurage

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	122.05	86.14	1,516.32	89.30	12.42
Teff	36.38	25.68	227.87	13.42	6.26
Barley	15.47	10.92	226.35	13.33	14.63
Wheat	16.19	11.43	160.75	9.47	9.93
Maize	43.76	30.88	802.36	47.25	18.34
Sorghum	10.23	7.22	98.98	5.83	9.68
Millet	**	**	**	**	**
Oats	-	-	-	-	-
Pulses	18.32	12.93	178.82	10.53	9.76
Horse Beans	6.06	4.28	72.21	4.25	11.92
Field Peas	3.66	2.58	**	**	**
Haricot Beans	**	**	**	**	**
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	**	**	**	**	**
Others	1.32	.93	2.86	.17	2.17
Neug	**	**	**	**	**
Linseed	**	**	**	**	**
Rapeseed	**	**	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	141.69	100.00	1,698.00	100.00	-

Table 10.2 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Hadiya

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	76.85	90.56	913.31	91.98	11.88
Teff	20.62	24.30	151.08	15.22	7.33
Barley	3.11	3.66	31.00	3.12	9.97
Wheat	28.02	33.02	360.49	36.31	12.87
Maize	18.50	21.80	301.67	30.38	16.31
Sorghum	5.93	6.99	63.42	6.39	10.69
Millet	**	**	**	**	**
Oats	**	**	**	**	**
Pulses	7.86	9.26	79.43	8.00	10.11
Horse Beans	4.20	4.95	48.06	4.84	11.44
Field Peas	2.28	2.69	19.42	1.96	8.52
Haricot Beans	1.09	1.28	11.51	1.16	10.56
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	.15	.18	**	**	**
Neug	-	-	-	-	-
Linseed	**	**	**	**	**
Rapeseed	**	**	-	-	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	84.86	100.00	992.90	100.00	-

Table 10.3 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Kembata Alaba Tembaro

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	62.65	92.25	727.40	95.18	11.61
Teff	14.74	21.71	100.46	13.15	6.82
Barley	.95	1.40	8.90	1.16	9.37
Wheat	11.14	16.40	131.85	17.25	11.84
Maize	29.41	43.31	425.17	55.63	14.46
Sorghum	3.88	5.71	44.09	5.77	11.36
Millet	2.53	3.73	**	**	**
Oats	**	**	-	-	**
Pulses	4.88	7.19	36.08	4.72	7.39
Horse Beans	2.76	4.06	**	**	**
Field Peas	.41	.60	2.00	.26	4.88
Haricot Beans	1.56	2.30	7.77	1.02	4.98
Chick Peas	.11	.16	**	**	**
Lentils	**	**	-	-	**
Vetch	-	-	-	-	-
Others	.37	.54	**	**	**
Neug	-	-	-	-	-
Linseed	.05	.07	**	**	**
Rapeseed	**	**	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	67.91	100.00	764.23	100.00	-

Table 10.4 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Sidama

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	26.40	75.60	353.10	88.18	13.38
Teff	1.22	3.49	**	**	**
Barley	2.16	6.19	**	**	**
Wheat	**	**	**	**	**
Maize	22.28	63.80	323.32	80.74	14.51
Sorghum	**	**	**	**	**
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	8.50	24.34	47.35	11.82	5.57
Horse Beans	.74	2.12	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	6.80	19.47	35.21	8.79	5.18
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	**	**	-	-	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	**	**	-	-	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	34.92	100.00	400.45	100.00	-

Table 10.5 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Gedio

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	7.92	80.41	108.15	88.03	13.66
Teff	**	**	**	**	**
Barley	2.38	24.16	**	**	**
Wheat	**	**	**	**	**
Maize	4.95	50.25	79.43	64.65	16.05
Sorghum	-	-	-	-	-
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.91	19.39	14.66	11.93	7.68
Horse Beans	1.25	12.69	10.39	8.46	8.31
Field Peas	.43	4.37	2.72	2.21	6.33
Haricot Beans	**	**	**	**	**
Chick Peas	-	-	-	-	-
Lentils	-	-	**	**	**
Vetch	-	-	-	-	-
Others	.02	.20	**	**	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	.02	.20	**	**	**
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	9.85	100.00	122.86	100.00	-

Table 10.6 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

North Omo

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	157.53	84.03	1,701.58	88.52	10.80
Teff	59.04	31.49	359.95	18.73	6.10
Barley	19.05	10.16	**	**	**
Wheat	4.31	2.30	**	**	**
Maize	52.07	27.78	904.03	47.03	17.36
Sorghum	22.61	12.06	235.44	12.25	10.41
Millet	**	**	**	**	**
Oats	-	-	-	-	-
Pulses	29.75	15.87	220.32	11.46	7.41
Horse Beans	5.10	2.72	38.16	1.99	7.48
Field Peas	5.77	3.08	41.79	2.17	7.24
Haricot Beans	17.84	9.52	136.01	7.08	7.62
Chick Peas	1.04	.55	**	**	**
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	**	**	**	**	**
Neug	-	-	-	-	-
Linseed	**	**	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	**	**	-	-	**
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	187.46	100.00	1,922.24	100.00	-

Table 10.7 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

South Omo

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	28.60	86.64	236.58	90.02	8.27
Teff	2.62	7.94	21.60	8.22	8.24
Barley	2.92	8.85	22.51	8.57	7.71
Wheat	**	**	**	**	**
Maize	8.81	26.69	82.81	31.51	9.40
Sorghum	13.44	40.71	103.25	39.29	7.68
Millet	.22	.67	**	**	**
Oats	-	-	-	-	-
Pulses	4.02	12.18	25.58	9.73	6.36
Horse Beans	**	**	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	2.33	7.06	14.08	5.36	6.04
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	**	**	-	-	**
Others	.39	1.18	.65	.25	1.67
Neug	-	-	-	-	-
Linseed	**	**	-	-	**
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	**	**	**
Sunflower	.32	.97	**	**	**
Sesame	**	**	**	**	**
Fenugreek	-	-	-	-	-
All Crops	33.01	100.00	262.81	100.00	-

Table 10.8 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Kefa-Sheka

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	49.92	74.91	571.62	83.38	11.45
Teff	17.31	25.98	114.40	16.69	6.61
Barley	5.91	8.87	47.99	7.00	8.12
Wheat	3.73	5.60	**	**	**
Maize	11.37	17.06	232.54	33.92	20.45
Sorghum	11.32	16.99	147.07	21.45	12.99
Millet	**	**	**	**	**
Oats	**	**	-	-	**
Pulses	16.69	25.05	113.97	16.62	6.83
Horse Beans	7.23	10.85	58.84	8.58	8.14
Field Peas	6.78	10.17	39.11	5.70	5.77
Haricot Beans	2.67	4.01	16.02	2.34	6.00
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	.03	.05	**	**	**
Neug	-	-	-	-	-
Linseed	-	-	**	**	**
Rapeseed	.02	.03	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	66.64	100.00	685.60	100.00	-

Table 10.9 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Bench-Maji

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	14.18	89.92	191.28	95.79	13.49
Teff	2.29	14.52	8.47	4.24	3.70
Barley	1.49	9.45	11.04	5.53	7.41
Wheat	.12	.76	**	**	**
Maize	5.24	33.23	106.23	53.20	20.27
Sorghum	5.02	31.83	64.59	32.35	12.87
Millet	**	**	-	-	**
Oats	**	**	-	-	**
Pulses	1.59	10.08	8.41	4.21	5.29
Horse Beans	.70	4.44	4.28	2.14	6.11
Field Peas	.24	1.52	**	**	**
Haricot Beans	.64	4.06	2.91	1.46	4.55
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	-	-	-	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	15.77	100.00	199.69	100.00	-

Table 10.10 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Yem Special Wereda

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	9.89	85.26	81.56	86.73	8.25
Teff	4.62	39.83	33.52	35.64	7.26
Barley	1.30	11.21	8.60	9.15	6.62
Wheat	2.13	18.36	16.64	17.69	7.81
Maize	1.39	11.98	18.71	19.90	13.46
Sorghum	.43	3.71	4.03	4.29	9.37
Millet	-	-	-	-	-
Oats	.01	.09	**	**	**
Pulses	1.66	14.31	12.33	13.11	7.43
Horse Beans	1.04	8.97	9.00	9.57	8.65
Field Peas	.54	4.66	3.11	3.31	5.76
Haricot Beans	**	**	**	**	**
Chick Peas	**	**	-	-	**
Lentils	.07	.60	.19	.20	2.71
Vetch	-	-	-	-	-
Others	.05	.43	.15	.16	3.00
Neug	-	-	-	-	-
Linseed	**	**	.13	.14	**
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	**	**	**
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	**	**	**
All Crops	11.60	100.00	94.04	100.00	-

Table 10.11 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Amaro Special Wereda

	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
CROP TYPE	('000 hectare)	%	('000 quintal)	%	
Cereals	4.01	81.01	19.45	81.41	4.85
Teff	1.89	38.18	7.78	32.57	4.12
Barley	.82	16.57	6.30	26.37	7.68
Wheat	.34	6.87	1.82	7.62	5.35
Maize	**	**	**	**	**
Sorghum	**	**	**	**	**
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	.94	18.99	4.44	18.59	4.72
Horse Beans	.14	2.83	1.40	5.86	10.00
Field Peas	.26	5.25	1.60	6.70	6.15
Haricot Beans	.28	5.66	1.35	5.65	4.82
Chick Peas	**	**	**	**	**
Lentils	.02	.40	**	**	**
Vetch	-	-	-	-	-
Others	-	-	-	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	4.95	100.00	23.89	100.00	-

Table 10.12 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Burji Special Wereda

	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
CROP TYPE	('000 hectare)	%	('000 quintal)	%	
Cereals	2.25	77.05	13.91	81.35	6.18
Teff	.76	26.03	3.65	21.35	4.80
Barley	.27	9.25	.95	5.56	3.52
Wheat	.41	14.04	1.59	9.30	3.88
Maize	.32	10.96	5.03	29.42	15.72
Sorghum	.49	16.78	2.68	15.67	5.47
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	.67	22.95	3.16	18.48	4.72
Horse Beans	**	**	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	.53	18.15	2.23	13.04	4.21
Chick Peas	.10	3.42	.79	4.62	7.90
Lentils	.01	.34	**	**	**
Vetch	-	-	**	**	**
Others	.01	.34	**	**	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	**	**	**	**	**
All Crops	2.92	100.00	17.10	100.00	-

Table 10.13 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Konso Special Wereda

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	19.29	91.86	94.55	88.38	4.90
Teff	2.48	11.81	7.07	6.61	2.85
Barley	.13	.62	**	**	**
Wheat	-	-	-	-	-
Maize	4.12	19.62	33.47	31.29	8.12
Sorghum	12.54	59.71	53.72	50.21	4.28
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.69	8.05	**	**	**
Horse Beans	**	**	-	-	**
Field Peas	**	**	**	**	**
Haricot Beans	1.64	7.81	**	**	**
Chick Peas	**	**	**	**	**
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	.02	.10	**	**	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.02	.10	**	**	**
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	21.00	100.00	106.98	100.00	-

Table 10.14 Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Derashe Special Wereda

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	11.80	90.98	91.07	94.11	7.72
Teff	.94	7.25	5.09	5.26	5.41
Barley	.76	5.86	6.03	6.23	7.93
Wheat	.29	2.24	**	**	**
Maize	3.03	23.36	21.50	22.22	7.10
Sorghum	6.78	52.27	55.41	57.26	8.17
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.17	9.02	5.70	5.89	4.87
Horse Beans	**	**	**	**	**
Field Peas	**	**	**	**	**
Haricot Beans	.77	5.94	3.74	3.86	4.86
Chick Peas	.29	2.24	1.50	1.55	5.17
Lentils	**	**	**	**	**
Vetch	-	-	-	-	-
Others	**	**	-	-	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	**	**	-	-	**
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	12.97	100.00	96.77	100.00	-

Table 11. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Gambela

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	12.49	97.65	245.78	98.68	19.68
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	7.15	55.90	144.41	57.98	20.20
Sorghum	5.31	41.52	101.33	40.68	19.08
Millet	**	**	**	**	**
Oats	-	-	-	-	-
Pulses	**	**	**	**	**
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	**	**	**	**	**
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	.26	2.03	**	**	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	.03	.23	**	**	**
Sunflower	-	-	-	-	-
Sesame	.23	1.80	**	**	**
Fenugreek	-	-	-	-	-
All Crops	12.79	100.00	249.07	100.00	-

Table 12. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Harari

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	5.56	84.63	49.83	85.71	8.96
Teff	-	-	**	**	**
Barley	.03	.46	**	**	**
Wheat	.20	3.04	1.43	2.46	7.15
Maize	1.42	21.61	16.27	27.98	11.46
Sorghum	3.91	59.51	31.84	54.76	8.14
Millet	-	-	-	-	-
Oats	**	**	**	**	**
Pulses	.02	.30	.19	.33	9.50
Horse Beans	-	-	**	**	**
Field Peas	-	-	-	-	-
Haricot Beans	.02	.30	.18	.31	9.00
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	.98	14.92	8.13	13.98	8.30
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	.98	14.92	8.13	13.98	8.30
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	6.57	100.00	58.14	100.00	-

Table 13. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Addis Ababa

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	6.30	78.46	60.70	73.14	9.63
Teff	3.51	43.71	31.16	37.55	8.88
Barley	**	**	**	**	**
Wheat	2.61	32.50	27.95	33.68	10.71
Maize	.02	.25	.21	.25	10.50
Sorghum	-	-	-	-	-
Millet	-	-	-	-	-
Oats	**	**	**	**	**
Pulses	1.65	20.55	21.70	26.15	13.15
Horse Beans	.06	.75	.65	.78	10.83
Field Peas	.01	.12	.09	.11	9.00
Haricot Beans	-	-	**	**	**
Chick Peas	.64	7.97	8.25	9.94	12.89
Lentils	.11	1.37	.92	1.11	8.36
Vetch	.82	10.21	11.77	14.18	14.35
Others	.09	1.12	.60	.72	6.67
Neug	-	-	-	-	-
Linseed	.01	.12	**	**	**
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.08	1.00	.58	.70	7.25
All Crops	8.03	100.00	82.99	100.00	10.33

Table 13. Estimates of Area,Production and Yield of Major Crops for Private Peasant Holdings 1999/2000 (1992 E.C.)

Dire Dawa

CROP TYPE	TOTAL AREA ('000 hectare)	%	TOTAL PRODUCTION ('000 quintal)	%	YIELD (QT/HA)
Cereals	5.91	96.73	59.80	97.44	10.12
Teff	-	-	-	-	-
Barley	-	-	**	**	**
Wheat	**	**	**	**	**
Maize	.30	4.91	2.70	4.40	9.00
Sorghum	5.59	91.49	57.01	92.90	10.20
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	.19	3.11	1.55	2.53	8.16
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.19	3.11	1.55	2.53	8.16
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	.01	.16	**	**	**
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	**	**	-	-	**
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	**	**	**
All Crops	6.11	100.00	61.37	100.00	-

APPENDIX I

ESTIMATION PROCEDURES OF TOTAL, RATIO AND SAMPLING ERRORS

APPENDIX

ESTIMATION PROCEDURES OF TOTALS RATIOS AND SAMPLING ERRORS

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

1. For estimating total area of land under specific crop:

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

in which

$$W_{hi} = \frac{N_h M_{hi}}{n_h N_{hi} m_{hi}}$$ is the weight.

Where:

h represents the stratum.

n_h is the total number of EAs successfully covered in the hth stratum.

N_h is the measure of size of the hth stratum as obtained from the sampling frame.

N_{hi} is the measure of size of the ith sample EA in the hth stratum obtained from the sampling frame.

M_{hi} is the total number of agricultural households of the ith sample EA in the hth stratum obtained from household listing of the survey.

m_{hi} is number of sample agricultutral households successfully covered in the ith sample EA in the hth stratum.

a_{hi} is the sample total of values of area in the ith EA in the hth stratum under a specific crop.

$\hat{A}_h$ is estimate of total area under specific crop in the hth stratum.

2. For estimating level of production:

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

in which

$$p_{hi} = a_{hi} \; X \; \bar{y}_{hi}$$

where:

$$\bar{y}_{hi} = \frac{y_{hi}}{16 C_{hi}}$$

Note: W_{hi} and a_{hi} are as defined above

Where : y_{hi} is sampled total of yield of a specific crop from 16 mt^2 area of lands for crop-cutting of crop in the ith EA in the hth stratum.

C_{hi} is number of crop-cutting of a specific crop in the ith EA in the hth stratum.

$\bar{y}_{hi}$ is average yield per squar meter of a specific crop in the ith EA in the hth stratum.

p_{hi} is estimate of total production of a speicfic crop in the ith EA in the hth stratum.

$\hat{P}_h$ is estimate of total production quantity of a specific crop in the hth stratum.

3. Estimate of yield of a specific crop is given by:

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

4. Sampling variance of estimates:

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

$$Var(\hat{A}_h) = \frac{n_h}{n_h - 1}[\sum_{i=1}^{n_h} \hat{A}_{hi}^{\,2} - \frac{\hat{A}_h^{\,2}}{n_h}]$$

$$Var(\hat{P}_h) = \frac{n_h}{n_h - 1}[\sum_{i=1}^{n_h} \hat{P}_{hi}^{\,2} - \frac{\hat{P}_h^{\,2}}{n_h}]$$

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

Where

$$Cov(\hat{P}_h, \hat{A}_h) = \frac{n_h}{n_h - 1}[\sum_{i=1}^{n_h} (\hat{A}_{hi} - \frac{\hat{A}_h}{n_h})(\hat{P}_{hi} - \frac{\hat{P}_h}{n_h})]$$

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. Furthermore the finite population correction (fpc) is ignored in the formula. This is due to the fact that its effect is negligible.

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 respectively by:

$$CV(\hat{A}_h) = \frac{\sqrt{Var(\hat{A}_h)}}{\hat{A}_h} X100$$

$$CV(\hat{P}_h) = \frac{\sqrt{Var(\hat{P}_h)}}{\hat{P}_h} X100$$

$$CV(\hat{Y}_h) = \frac{\sqrt{Var(\hat{Y}_h)}}{\hat{Y}_h} X100$$

APPENDIX II

STANDARD ERRORS AND COEFFICIENTS OF VARIATION FOR ESTIMATES

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

TIGRAY

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	489.49	36.38	7.43	5,657.46	570.96	10.09
TEFF	126.44	12.54	9.91	1,154.40	142.93	12.38
BARLEY	77.9	8.13	10.44	812.73	108.55	13.36
WHEAT	70.57	8.05	11.41	720.74	84.93	11.78
MAIZE	75.55	24.08	31.88	1,344.92	453.96	33.75
SORGHUM	81.57	12.63	15.48	1,041.65	172.52	16.56
MILLET	57.21	10.21	17.84	580.95	112.05	19.29
OATS	**	**	**	**	**	**
PULSES	43.15	3.66	8.49	453.83	47.91	10.56
HORSEBEANS	12.35	1.97	15.93	188.08	32.15	17.1
FIELDPEAS	5.14	1.23	23.89	58.75	17.53	29.84
HARICOTBEANS	2.68	1.08	40.49	16.45	6.35	38.58
CHICKPEAS	13.38	2.34	17.47	119.1	23.56	19.78
LENTILS	2.92	0.91	31.2	16.5	5.49	32.28
VETCH	6.68	1.47	22.01	54.95	14.16	25.76
OTHERS	28.25	6.98	24.71	115.99	29.89	25.77
NEUG	7.48	2.12	28.27	36.33	12.42	34.18
LINSEED	6.59	0.96	14.55	31.73	6.12	19.29
RAPESEED	**	**	**	-	-	-
GROUNDNUTS	-	-	-	-	-	-
SUNFLOWER	**	**	**	**	**	**
SESAME	13.79	6.58	47.71	**	**	**
FENUGREEK	0.26	0.09	33.75	0.67	0.33	49.74
ALL CROPS	560.89	37.83	6.75	6,227.28	575.62	9.24

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

AFAR

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	17.7	3.9	22.03	237.1	42.64	17.94
TEFF	6.61	2.23	33.71	58.87	19.51	33.14
BARLEY	**	**	**	**	**	**
WHEAT	**	**	**	**	**	**
MAIZE	6.39	1.22	18.9	121.9	24.99	20.4
SORGHUM	4.31	1.33	30.95	52.9	17.37	32.64
MILLET	-	-	-	-	-	-
OATS	-	-	-	-	-	-
PULSES	1.02	0.44	43.21	**	**	**
HORSEBEANS	-	-	-	-	-	-
FIELDPEAS	**	**	**	-	-	-
HARICOTBEANS	**	**	**	**	**	**
CHICKPEAS	0.4	0.19	47.27	**	**	**
LENTILS	-	-	-	-	-	-
VETCH	-	-	-	-	-	-
OTHERS	0.27	0.09	34.77	1.17	0.57	48.67
NEUG	-	-	-	-	-	-
LINSEED	**	**	**	-	-	-
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	-	-	-	-	-	-
SUNFLOWER	**	**	**	**	**	**
SESAME	**	**	**	**	**	**
FENUGREEK	-	-	-	-	-	-
ALL CROPS	18.98	4.34	22.84	245.93	45.65	18.52

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

AMHARA

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	2368.69	109	4.6	23,185.97	1,347.53	5.78
TEFF	906.15	58.11	6.4	7,314.36	576.31	7.87
BARLEY	268.16	22.53	8.4	1,997.47	177.05	8.86
WHEAT	314.19	53.45	16.96	3,271.10	720.23	21.98
MAIZE	309.41	25.96	8.39	5,249.05	578.52	11.02
SORGHUM	356.85	42.53	11.89	3,699.44	541.28	14.6
MILLET	202.47	31.96	15.79	1,657.93	255.39	15.4
OATS	11.46	2.69	23.45	96.63	23.86	24.69
PULSES	504.13	48.79	9.67	4691.66	635.5	13.54
HORSEBEANS	170.59	26.35	15.44	1,910.62	428.41	22.41
FIELDPEAS	68.65	8.67	12.63	485.25	69.52	14.33
HARICOTBEANS	53.61	10.95	20.39	490.41	143.66	29.29
CHICKPEAS	104.34	12.92	12.36	906.52	142.79	15.72
LENTILS	44.24	14.08	31.84	325.29	118.21	36.34
VETCH	62.7	10.52	16.74	573.58	107.9	18.78
OTHERS	201.5	20.66	10.25	829.48	91.89	11.08
NEUG	140.05	17.81	12.72	531.96	76.71	14.42
LINSEED	24.19	2.95	12.2	69.73	10.19	14.61
RAPESEED	9.34	1.76	18.85	74.75	17.4	23.28
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	4.33	0.97	22.38	33.75	9.64	28.58
SESAME	**	**	**	**	**	**
FENUGREEK	7.88	1.64	20.87	49.06	12.83	26.15
ALL CROPS	3074.32	146.15	4.75	28,807.12	1,775.54	6.16

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

OROMIYA

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	3060.54	123.23	4.03	39,288.57	1,744.24	4.44
TEFF	891.83	65.64	7.36	7,423.28	634.73	8.55
BARLEY	385.76	49.09	12.72	3,987.04	539.09	13.52
WHEAT	565.92	67.22	11.88	7,331.40	903.79	12.33
MAIZE	747.55	45.48	6.08	14,437.99	1,186.83	8.22
SORGHUM	368.03	32.39	8.8	5,132.95	513.63	10
MILLET	71.8	14.42	20.08	646.18	128.33	19.86
OATS	29.65	5.82	19.65	329.74	77.16	23.4
PULSES	387.24	32.54	8.4	3,605.32	348.86	9.68
HORSEBEANS	144.82	16.64	11.49	1,497.46	179.6	11.99
FIELDPEAS	55.62	8.96	16.1	448.37	108.24	24.14
HARICOTBEANS	65.5	10.42	15.9	526.82	98.89	18.79
CHICKPEAS	57.59	14.35	24.92	549.34	143.16	26.06
LENTILS	23.94	4.5	18.79	153.01	39.6	25.88
VETCH	39.77	8.52	21.4	430.31	101.03	23.48
OTHERS	165.43	17.19	10.39	825.87	105.78	12.81
NEUG	92.34	14	15.16	390.96	74.63	19.09
LINSEED	42.44	7.85	18.51	217.95	49.5	22.71
RAPESEED	10.73	4.09	38.13	64.04	27.87	43.52
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	**	**	**	**	**	**
SESAME	2.05	0.98	47.6	**	**	**
FENUGREEK	7.61	1.51	19.83	56.39	15.68	27.8
ALL CROPS	3613.21	146.32	4.05	43,719.76	1,905.31	4.36

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

SOMALIE

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	46.17	8.75	18.96	219.08	45.58	20.8
TEFF	**	**	**	-	-	-
BARLEY	3.63	1.16	31.88	24.19	8.15	33.69
WHEAT	1.82	0.58	31.78	12.09	4.66	38.57
MAIZE	24.23	4.82	19.88	104.43	23.8	22.79
SORGHUM	16.25	4.55	28.01	77.02	22.85	29.65
MILLET	-	-	-	-	-	-
OATS	**	**	**	**	**	**
PULSES	1	0.28	28.27	**	**	**
HORSEBEANS	-	-	-	-	-	-
FIELDPEAS	**	**	**	-	-	-
HARICOTBEANS	0.73	0.26	35.57	**	**	**
CHICKPEAS	0.23	0.11	45.63	**	**	**
LENTILS	-	-	-	-	-	-
VETCH	**	**	**	-	-	-
OTHERS	**	**	**	**	**	**
NEUG	-	-	-	-	-	-
LINSEED	0.06	0.03	47.31	**	**	**
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	-	-	-	-	-	-
SESAME	-	-	-	**	**	**
FENUGREEK	**	**	**	**	**	**
ALL CROPS	47.58	8.87	18.64	225.21	46	20.42

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

BENISHANGUL-GUMUZ

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	141.28	20.02	14.17	1,688.45	254.76	15.09
TEFF	23.81	6.13	25.72	145.22	42.14	29.01
BARLEY	**	**	**	**	**	**
WHEAT	**	**	**	**	**	**
MAIZE	29.54	7.59	25.7	493.54	123.74	25.07
SORGHUM	60.35	7.4	12.26	743.59	110.47	14.86
MILLET	24.37	6.87	27.96	280.73	85.23	30.36
OATS	**	**	**	-	-	-
PULSES	6.9	1.7	24.66	45.03	13.6	30.2
HORSEBEANS	1.22	0.53	43.62	9.29	3.89	41.88
FIELDPEAS	**	**	**	**	**	**
HARICOTBEANS	4.63	1.47	31.73	28.84	11.67	40.47
CHICKPEAS	0.4	0.17	43.72	**	**	**
LENTILS	**	**	**	**	**	**
VETCH	-	-	-	-	-	-
OTHERS	24.5	3.83	15.65	112.03	25.29	22.57
NEUG	15.58	3.15	20.25	60.41	14.36	23.77
LINSEED	0.29	0.08	26.36	0.45	0.16	34.5
RAPESEED	**	**	**	**	**	**
GROUNDNUTS	1.9	0.79	41.78	18.54	8.94	48.24
SUNFLOWER	**	**	**	-	-	-
SESAME	6.64	1.85	27.84	32.41	14.1	43.5
FENUGREEK	0.04	0.02	45.77	0.15	0.06	40.65
ALL CROPS	172.68	23.49	13.6	1,845.52	274.68	14.88

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

SNNPR

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	593.33	47.74	8.04	6,619.89	607.56	9.17
TEFF	165.05	22.35	13.53	1048.33	155.06	14.78
BARLEY	56.73	11.41	19.98	578.77	130.46	22.46
WHEAT	68.39	8.95	13.09	750.25	109.29	14.57
MAIZE	205.7	21.26	10.34	3,339.29	430.3	12.89
SORGHUM	93.24	10.95	11.74	873.7	116.61	13.34
MILLET	4.16	1.36	32.74	29.26	10.87	37.14
OATS	0.06	0.02	40.39	**	**	**
PULSES	99.63	10.72	10.76	762.6	93.62	12.28
HORSEBEANS	30.11	4.19	13.92	280.71	43.64	15.54
FIELDPEAS	22.2	3.98	17.91	162.13	33.44	20.62
HARICOTBEANS	38.02	5.86	15.42	255.61	46.41	18.16
CHICKPEAS	**	**	**	**	**	**
LENTILS	0.91	0.4	43.88	**	**	**
VETCH	**	**	**	**	**	**
OTHERS	2.57	0.69	26.82	5.08	1.53	30.1
NEUG	**	**	**	**	**	**
LINSEED	0.52	0.18	34.26	1.38	0.64	46.7
RAPESEED	0.22	0.06	26.43	0.18	0.07	38.41
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	0.35	0.11	32.06	**	**	**
SESAME	**	**	**	**	**	**
FENUGREEK	**	**	**	**	**	**
ALL CROPS	695.54	55.38	7.95	7,387.57	661.78	8.95

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

GAMBELLA

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	12.49	4.17	29.77	245.78	85.72	30.96
TEFF	-	-	-	-	-	-
BARLEY	-	-	-	-	-	-
WHEAT	-	-	-	-	-	-
MAIZE	7.15	2.4	32.99	144.41	44.72	30.28
SORGHUM	5.31	3.2	47.86	101.33	40.61	40.07
MILLET	**	**	**	**	**	**
OATS	-	-	-	-	-	-
PULSES	**	**	**	**	**	**
HORSEBEANS	-	-	-	-	-	-
FIELDPEAS	-	-	-	-	-	-
HARICOTBEANS	**	**	**	**	**	**
CHICKPEAS	-	-	-	-	-	-
LENTILS	-	-	-	-	-	-
VETCH	-	-	-	-	-	-
OTHERS	0.26	0.11	41.04	**	**	**
NEUG	-	-	-	-	-	-
LINSEED	-	-	-	-	-	-
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	0.03	0.01	48.95	**	**	**
SUNFLOWER	-	-	-	-	-	-
SESAME	0.23	0.11	45.42	**	**	**
FENUGREEK	-	-	-	-	-	-
ALL CROPS	12.79	4.17	29.15	249.07	63.7	25.57

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

HARARI

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	5.56	0.46	8.23	49.83	5.02	10.08
TEFF	-	-	-	**	**	**
BARLEY	0.03	0.01	36.3	**	**	**
WHEAT	0.2	0.06	29.81	1.43	0.5	34.65
MAIZE	1.42	0.13	9.14	16.27	2.4	14.74
SORGHUM	3.91	0.39	10.07	31.84	3.78	11.89
MILLET	-	-	-	-	-	-
OATS	**	**	**	**	**	**
PULSES	0.02	0.01	26.22	0.19	0.07	39.63
HORSEBEANS	-	-	-	**	**	**
FIELDPEAS	-	-	-	-	-	-
HARICOTBEANS	0.02	0.01	31.48	0.18	0.07	42.07
CHICKPEAS	-	-	-	-	-	-
LENTILS	-	-	-	-	-	-
VETCH	-	-	-	-	-	-
OTHERS	0.98	0.26	26.39	8.13	2.07	25.45
NEUG	-	-	-	-	-	-
LINSEED	-	-	-	-	-	-
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	0.98	0.26	26.41	8.13	2.07	25.45
SUNFLOWER	-	-	-	-	-	-
SESAME	-	-	-	-	-	-
FENUGREEK	-	-	-	-	-	-
ALL CROPS	6.57	0.58	8.88	58.14	5.82	10.02

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

ADDIS ABABA

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	6.3	1.13	17.98	60.7	8.67	14.29
TEFF	3.51	0.67	18.99	31.16	4.84	15.52
BARLEY	**	**	**	**	**	**
WHEAT	2.61	0.51	19.69	27.95	4.66	16.68
MAIZE	0.02	0.01	32.07	0.21	6.09	42.58
SORGHUM	-	-	-	-	-	-
MILLET	-	-	-	-	-	-
OATS	**	**	**	**	**	**
PULSES	1.65	0.44	26.7	21.7	5019	23.94
HORSEBEANS	0.06	0.03	47.19	0.65	0.31	47.84
FIELDPEAS	0.01	0	41.81	0.09	0.04	47.98
HARICOTBEANS	-	-	-	**	**	**
CHICKPEAS	0.64	0.19	28.93	8.25	2.13	25.83
LENTILS	0.11	0.03	23.13	0.92	0.23	25.52
VETCH	0.82	0.25	30.92	11.77	3.22	27.4
OTHERS	0.09	0.03	29.88	0.6	0.17	28.99
NEUG	-	-	-	-	-	-
LINSEED	0.01	0	0	**	**	**
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	-	-	-	-	-	-
SUNFLOWER	-	-	-	-	-	-
SESAME	-	-	-	-	-	-
FENUGREEK	0.08	0.03	32.31	0.58	0.17	28.9
ALL CROPS	8.03	1.58	19.73	82.99	13.84	16.67

Table 1 Estimates of Area and Production, their Standard Errors and Coefficients of Variation for Major Crops in 1999/2000 (1992 E.C),

DIRE DAWA

TYPE OF CROP	AREA ('000 HA.)	S.E. ('000)	C.V. %	PRODUCTION ('000 QT)	S.E. ('000)	C.V %
CEREALS	5.91	0.54	9.06	59.8	5.95	9094
TEFF	-	-	-	-	-	-
BARLEY	-	-	-	**	**	**
WHEAT	**	**	**	**	**	**
MAIZE	0.3	0.06	19.76	2.7	0.61	22.48
SORGHUM	5.59	0.52	9.25	57.01	5.7	10
MILLET	-	-	-	-	-	-
OATS	-	-	-	-	-	-
PULSES	0.19	0.05	28.09	1.55	0.48	30.86
HORSEBEANS	-	-	-	-	-	-
FIELDPEAS	-	-	-	-	-	-
HARICOTBEANS	0.19	0.05	28.09	1.55	0.48	30.86
CHICKPEAS	-	-	-	-	-	-
LENTILS	-	-	-	-	-	-
VETCH	-	-	-	-	-	-
OTHERS	0.01	0.01	49.44	**	**	**
NEUG	-	-	-	-	-	-
LINSEED	-	-	-	-	-	-
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	**	**	**	-	-	-
SUNFLOWER	-	-	-	-	-	-
SESAME	-	-	-	-	-	-
FENUGREEK	-	-	-	**	**	**
ALL CROPS	6.11	0.56	9.16	61.37	6.18	10.07

APPENDIX III

- 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

Appendix III **THE 1999/2000 (1992 E.C) AGRICULTURAL SAMPLE SURVEY NUMBER OF EAs AND AGRICULTURAL HOUSEHOLDS SAMPLED, ACTUALLYCOVERED, FIELDS MEASURED AND CROP CUTTINGS**

Region	Stratum/Reporting Level Zone/Spe.Wereda	EAs		Households		Number of parcels	Number of fields measured	Number of crop cuttings
		Sampled	Covered	Sampled	Responded			
Tigray	West Tigray	25	25	625	614	1928	4321	1175
	Central Tigray	25	25	625	615	2736	6264	1519
	East Tigray	25	25	625	625	2671	6529	1150
	South Tigray	25	25	625	620	2588	3929	1024
Afar	Zone 1	20	20	500	474	973	1605	96
	Zone 3	20	19	500	419	959	1779	381
Amhara	North Gondar	30	30	750	749	2907	5662	1512
	South Gondar	30	30	750	739	3444	6097	1546
	North Wollo	30	30	750	749	2978	6167	1476
	South Wollo	30	30	750	750	3750	6921	1664
	North Shewa	30	30	750	734	3638	6731	1560
	East Gojjam	30	30	750	750	3440	6394	1523
	West Gojjam	30	30	750	745	3532	6693	1378
	Waghamera	25	25	625	624	2523	4488	1474
	Awi	25	25	625	620	2397	5127	1149
	Oromiya zone	25	25	625	6060	1842	3869	776

Region	Stratum/Reporting Level Zone/Spe.Wereda	EAs		Households		Number of parcels	Number of fields measured	Number of crop cuttings
		Sampled	Covered	Sampled	Responded			
Oromiya	West Wellega	30	30	750	750	3302	7651	1646
	East Wellega	30	30	750	750	2999	7224	1634
	Illubabor	30	30	750	750	2322	5729	1226
	Jimma	30	30	750	750	1006	3079	1333
	West Shewa	30	30	750	748	2890	7687	1490
	North Shewa	30	30	750	749	4190	7572	1503
	East Shewa	30	30	750	750	2676	6281	1292
	Arsi	30	30	750	749	2920	6432	1339
	West Harerge	30	30	750	750	2270	5464	1081
	East Harerge	30	30	750	735	2439	4937	1008
	Bale	30	30	750	750	985	2611	1198
	Borena	30	30	750	738	1322	3360	344
Somale	Shinile	20	18	500	440	700	1248	128
	Jijiga	20	20	500	500	1229	2881	566
	Moyale	20	20	500	483	910	1585	48
Benishangul-Gumz	Metekel	25	25	625	624	2158	3937	1051
	Assosa	25	25	625	625	3349	5940	1364
	Kemashi	25	25	625	625	1780	3678	1035

Region	Stratum/Reporting Level Zone/Spe.Wereda	EAs		Households		Number of parcels	Number of fields measured	Number of crop cuttings
		Sampled	Covered	Sampled	Responded			
SNNPR	Gurage	30	30	750	750	1716	7062	909
	Hadiya	30	30	750	750	1315	7973	1065
	Kembata Alaba Tembaro	30	30	750	750	1397	8223	1027
	SIdama	30	30	750	750	1148	5150	334
	Gedio	30	30	750	749	1304	3472	272
	North Omo	30	30	750	749	1388	6168	755
	South Omo	30	30	750	748	1689	3844	663
	Kefa-Sheka	30	30	750	732	1638	5673	923
	Benchi-Maji	30	30	750	749	1549	4256	437
	Yem special wereda	25	25	625	625	1051	3295	1397
	Amaro special wereda	25	25	625	625	1242	3872	510
	Burji special wereda	25	25	625	595	1490	4319	947
	Konso special wereda	25	25	625	625	1774	3158	663
	Derashe special wereda	25	25	625	625	1609	3073	743
Gambella	Gambella	30	30	750	748	1642	3199	376
Harari	Harari	30	30	750	750	2461	4823	950
Addis Ababa	Addis Ababa	25	25	625	625	2327	4773	992
Dire Dawa	Dire Dawa	30	30	750	748	1988	3152	486
Total		1450	1445	36250	35692	110887	255950	52175

APPENDIX IV

QUESTIONNAIRES

Listing form-92/0

CENTRAL STATISTICAL AUTHORITY
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
HOUSEHOLD LISTING FORM - 1992 E.C.

JOB	1	2	3
ID	1	3	1

PART 1 - IDENTIFICATION PARTICULARS

1	2	3	4	5
REGION	ZONE	WEREDA	FARMERS' ASSOCIATION	ENUMERATION AREA
4 5	6 7	8 9	10 11 12	13 14

PART 2 - LIST OF HOUSEHOLDS AND HOLDERS

1	2	3	4	5	6	7	8	9	10
SERIAL NUMBER OF HOUSEHOLDS	NAME OF HEAD OF HOUSEHOLD	MEMBER OF HOUSEHOLD	IS THERE A HOLDER IN THE HH.? YES = 1 NO = 2	SERIAL NUMBER OF HOUSEHOLDS WITHOUT HOLDERS *(IF CODE IS 2 IN COLUMN 4)*	SERIAL NUMBER OF HOLDERS WITH IN HOUSEHOLD *(IF CODE IS 1 IN COLUMN 4)*	NAME OF THE HOLDER	SERIAL NUMBER OF HOUSEHOLDS WITH HOLDERS *(IF CODE IS 1 IN COLUMN 4)*	ORDER OF SELECTION AGRICULT. SURVEY	OTHER SURVEY
15 16 17		18 19	20	21 22 23	24		25 26 27	28 29	30 31

RANDOM START COLUMN______ RANDOM INTERVAL ______
RANDOM START ______

	NAME	SIGNATURE	DATE
ENUMERATOR			/ /
SUPERVISOR			/ /
REGIONAL STAT. HEAD			/ /

1. TOTAL NUMBER OF HOUSEHOLDS WITH HOLDERS LISTED IN THE EA __________
2. TOTAL NUMBER OF HOUSEHOLDS WITHOUT HOLDERS LISTED IN THE EA __________

FORM ASS-92/1

CENTRAL STATISTICAL AUTHORITY
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
AGRICULTURAL SAMPLE SURVEY - 1992 E.C.

JOB	1	2	3
ID	1	3	2

PART 1 - IDENTIFICATION PARTICULARS

1	2	3	4	5	6
REGION	ZONE	WEREDA	SUPERVISION AREA	FARMERS' ASSOCIATION	ENUMERATION AREA
4 5	6 7	8 9	10 11	12 13 14	15

PART 2 - LIST OF SAMPLED HOUSEHOLDS AND HOLDERS

1				2	3		4	5		6			7
SERIAL NUMBER OF HOUSEHOLDS (ASS 87/0 col1)				NAME OF HEAD OF HOUSEHOLD (ASS 87/0 col2)	SERIAL NUMBER OF HOLDER (WITHIN HOU-SEHOLD		NAME OF HOLDER	TYPE OF AGRICULTURE CROP=1 LIVESTOCK=2 BOTH=3		ORDER OF SAMPLING (ASS 87/0 col6)			REMARKS
17	18	19	20			21			22		23	24	

FORM ASS 92/2

PRIVATE HOLDINGS

CENTRAL STATISTICAL AUTHORITY
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
CROP PRODUCTION FORECAST SURVEY 1992 E.C.

JOB ID: 1 2 3 / 1 4 0

PART 1 - IDENTIFICATION PARTICULARS

FOR SINGLE STAND CROP ONLY

1	2	3	4	5	6
REGION	ZONE	WEREDA	FARMERS' ASSOCIATION	ENUMERATION AREA	CROP NAME
4 5	6 7	8 9	10 11 12	13 14	15 16

PART 2- CROP CONDITION

1		2	3			4		5			6	7				8			9	10		11			12
SR. NO.		NAME OF HOLDER	HOUSEHOLD ID NUMBER			HOLDER ID NUMBER		NUMBER OF FIELDS			CROP PRODUCTIVITY COMPARED TO LAST YEAR: INCREASE =1 SAME / NO CHANGE=2 DECREASE =3	IF INCREASE QUANTITY IN PERCENT				IF DECREASE: QUANTITY IN PERCENT			ONE MAJOR REASON FOR DECREASE	CODE		CHANGE IN PERCENT			REMARKS
17	18		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		34	35	36	37	38	
0	1																							
0	2																							
0	3																							
0	4																							
0	5																							
0	6																							
0	7																							
0	8																							
0	9																							
1	0																							

NOTE: THIS FORM SHOULD BE FILLED OUT FOR MIXED CROPS ACCORDING TO THEIR TYPE IN PURE STANDS.

1		2	3			4		5			6		7			8			9	10		11			12
SR. NO.		NAME OF HOLDER	HOUSEHOLD ID NUMBER			HOLDER ID NUMBER		NUMBER OF FIELDS			CROP PRODUCTIVITY COMPARED TO LAST YEAR INCREASE =1 EQUAL/ NO CHANGE=2 DECREASE =3		IF INCREASE QUANTITY IN PERCENT			IF DECREASE QUANTITY IN PERCENT			ONE MAJOR REASON FOR DECREASE	CODE		CHANGE IN PERCENT			REMARKS
17	18		19	20	21	22	23	24	25	26		27		28	29	30	31	32	33		34	35	36	37	38	
1	1																								
1	2																								
1	3																								
1	4																								
1	5																								
1	6																								
1	7																								
1	8																								
1	9																								
2	0																								
2	1																								
2	2																								
2	3																								
2	4																								
2	5																								
2	6																								
2	7																								
2	8																								

CENTRAL STATISTICAL AUTHORITY
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
AGRICULTURAL SAMPLE SURVEY - 1992 E.C.

FORM ASS - 92/3A

PRIVATE HOLDINGS

PART 1 - IDENTIFICATION PARTICULARS

JOB ID	1	2	3
	1	5	1

1	2	3	4	5	6	7	8	9	10	11	12	13
REGION	ZONE	WEREDA	FARMERS' ASSOCIATION	ENUMERATION AREA	HOUSEHOLD ID NUMBER	HOLDER ID NUMBER	HOLDER'S NAME	SEX MALE = 1 FEMALE = 2	AGE	EDUCATIONAL STATUS (GRADE COMPLETED)	NUMBERS OF MEMBERS OF HOLDER'S HOUSEHOLD	TYPE OF AGRICULTURE CROP = 1 LIVESTOCK = 2 BOTH = 3
4 5	6 7	8 9	10 11 12	13 14	15 16 17	18 19		20	21 22	23	24 25	26

NOTES ON PART 1 COLUMN 12

ILLITERATE = 1	GRADES 7-8 COMPLETED = 4
INFORMAL EDUCATION	GRADES 9-11 COMPLETED = 5
OR GRADES 1-3 COMPLETED = 2	GRADE 12 COMPLETED = 6
GRADES 4-6 COMPLETED = 3	ABOVE 12 GRADE = 7

PART 2 - LIST OF FIELDS AND AGRICULTURAL PRACTICES (MEHER SEASON)

(ONLY PURE STAND TEMPORARY AND PERMANENT CROPS)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
LINE NUMBER	SERIAL NUMBER: PARCEL	SERIAL NUMBER: FIELD	CROP NAME TEMPORARY	CODE	TYPE OF SEED USED IMPROVED = 1 LOCAL = 2	USE OF IRRIG. YES = 1 NO = 2	USE OF FERTILIZER: USED ? YES = 1 NO = 2	USE OF FERTILIZER: IF YES NATURAL = 1 COMMERCIAL = 2 BOTH = 3	IF COMMERCIAL FERTILIZER (IF IT IN CODE 2 OR 3 IN COLUMN 9): TYPE UREA = 1 DAP = 2 BOTH = 3	IF COMMERCIAL FERTILIZER (IF IT IN CODE 2 OR 3 IN COLUMN 9): QUANTITY USED KG. / GRAMS	USE OF PESTICIDES YES = 1 NO = 2	WAS CROP DAMAGED ? YES = 1 NO = 2	IF YES REASON OF DAMAGE	CODE	PERCENT DAMAGED	REMARKS
27 28	29 30	31 32		33 34	35	36	37	38	39	40 41 42 / 43 44 45	46	47		48 49	50 51	
0 1																
0 2																
0 3																
0 4																
0 5																
			PERMANENT													
0 1																
0 2																
0 3																
0 4																

PART 3- LIST OF FIELDS AND AGRICULTURAL PRACTICES FOR MIXED CROPS (*MEHER SEASON*)

JOB ID	1	2	3
	1	5	2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
LINE NUMBER	SERIAL NUMBER: PARCEL	SERIAL NUMBER: FIELD	CROP NAME MIXED STAND	USE OF IRRIGATION YES = 1 NO = =2	USE OF FERTILIZER: USED ? YES = 1 NO = 2	USE OF FERTILIZER: IF YES NATURAL = 1 COMMERCIAL = 2 BOTH = 3	IF COMMERCIAL FERTILIZER (IF IT IS CODE 2 OR 3 IN COLUMN 7): TYPE UREA = 1 DAP = 2 BOTH =3	IF COMMERCIAL FERTILIZER (IF IT IS CODE 2 OR 3 IN COLUMN 7): QUANTITY USED KG. / GRAMS	SR. NO.	LIST OF CROPS IN MIXED STAND	CODE	TYPE OF SEED IMP. = 1 LOCA. = 2	USE OF PESTICIDE YES = 1 NO = 2	WAS CROP DAMAGED ? YES = 1 NO = 2	IF YES REASON OF DAMAGE	CODE	PERCENT DAMAGE	REMARKS
27 28	29 30	31 32		33	34	35	36	37 38 39 / 40 41 42	43		44 45	46	47	48		49 50	51 52	
0 1									1									
									2									
									3									
0 2									1									
									2									
									3									
0 3									1									
									2									
									3									

PART 4- OTHER LAND USE

JOB	1	2	3
ID	1	9	3

1		2		3		4	5		6
		SERIAL NUMBER							
LINE NUMBER		PARCEL		FIELD		TYPE OF LAND USE	CODE		REMARKS
27	28	29	30	31	32		33	34	
0	1								
0	2								
0	3								
0	4								
0	5								
0	6								

PART 5- QUANTITY OF IMPROVED AND LOCAL SEEDS BY TYPE OF CROP

JOB	1	2	3
ID	1	9	0

1		2	3		4						5					
SERIAL NUMBER		CROP NAME			IMPROVED SEED						LOCAL SEED					
					QUANTITY						QUANTITY					
			CODE		KG			GRAM			KG			GRAM		
27	28		29	30	31	32	33	34	35	36	37	38	39	40	41	42

PART 6 - TYPE AND QUANTITY OF CROP PROTECTION CHEMICALS

JOB	1	2	3
ID	1	9	1

1		2	3		4		5	6		7					
					TYPE AND QUANTITY OF CROP PROTECTION CHEMICAL USED										
SERIAL NUMBER		NAME OF CHEMICAL	CODE		INSECTICIDE = 1 FUNGICIDE = 2 HERBICIDE = 3		NAME OF MEASURMENT UNITY	CODE		QUANTITY					
27	28		29	30		31		32	33	34	35	36	37	38	39

	NAME	SIGNATURE	DATE
ENUMERATOR			/ /
SUPERVISOR			/ /
REGIONAL STAT. HEAD			/ /

FORM ASS - 92/4A

CENTRAL STATISTICAL AUTHORITY
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
AGRICULTURAL SAMPLE SURVEY - 1992 E.C.

PRIVATE HOLDINGS

JOB ID	1	2	3
	1	5	3

PART 1 - IDENTIFICATION PARTICULARS

1	2	3	4	5
REGION	ZONE	WEREDA	FARMERS' ASSOCIATION	ENUMERATIO AREA

4	5	6	7	8	9	10	11	12	13	14	15

6			7		8	9		10		11		12	13	14		15	
HOUSEHOLD ID NUMBER			HOLDER ID NUMBER		HOLDER'S NAME	PARCEL		FIELD		TYPE OF CROP STAND IN THE FIELD OR LAND USE PURE = 1 MIXED CROP = 2 OTHER LAND USE = 3		SR. NO.	CROP NAME (NAME OF LAND USE)	CODE		PERCENTAGE SHARE OF AREA *(IF CODE IS 2 IN COLUMN 11)*	
15	16	17	18	19		20	21	22	23		24	25		26	27	28	29
												1					
												2					
												3					

PART 2 - RESULTS OF AREA MEASUREMENTS

1		2		3							4	5			6					7	8	
DATE OF MEASURMENT				AREA IN SQUARE METERS							AREA IN LOCAL UNITS									IF AREA IS NOT MEASURED REASON	CODE	
DAY		MONTH									NAME	CODE			AREA							
30	31	32	33	34	35	36	37	38	39	40		41	42	43	44	45	46	47	48		49	50

	NAME	SIGNATURE	DATE
ENUMERATOR			/ /
SUPERVISOR			/ /
REGIONAL STAT. HEAD			/ /

PART 3 - FIELD AREA MEASUREMENT

SIDE	A-B					B-C					C-					D-					E-					F-					G-				
BEARING (I)			51	52	53			54	55	56			57	58	59			60	61	62			63	64	65			66	67	68			69	70	71
DISTANCE (M)	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106
SIDE	H-					I-					J-					K-					L-					M-					N-				
BEARING (I)			107	108	109			110	111	112			113	114	115			116	117	118			119	120	121			122	123	124			125	126	127
DISTANCE (M)	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
SIDE	O-					P-					Q-					R-					S-					T-					U-				
BEARING (I)			163	154	165			166	167	168			169	170	171			172	173	174			175	176	177			178	179	180			181	182	183
DISTANCE (M)	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218

SCALE 1 CM = _____ METERS

NUMBER OF FULL SQUARES = _____ HALF AND GREATER SQUARES = _____

FORM ASS - 92/5

CENTRAL STATISTICAL AUTHORITY
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
AGRICULTURAL SAMPLE SURVEY - 1992 E.C.

PRIVATE HOLDINGS

JOB ID: 1 2 3 / 1 9 4

PART 1 - IDENTIFICATION PARTICULARS

1	2	3	4	5	6	7	8
REGION	ZONE	WEREDA	FARMERS' ASSOCIATION	ENUMERATION AREA	HOUSEHOLD ID NUMBER	HOLDER ID NUMBER	HOLDER NAME
4 5	6 7	8 9	10 11 12	13 14	15 16 17	18 19	

PART 2 - LIST OF FIELDS AND SELECTION OF FIELDS FOR CROP CUTTING

1	2			3	4		5	6			7				8	9	10	11	12	13	14	15	16	17	18	19	20
SERIAL NUMBER OF				CROP NAME (TEMPORARY, TEMPORARY MIXED, TEMPORARY & PERMANENT MIXED)			PRODUCTION IN LOCAL UNITS								CROP NAME												REMARKS
PARCEL		FIELD			CODE		NAME	CODE			QUANTITY				FIELD NUMBER	SELECTED FIELD NO.	FIELD NUMBER	SELECTED FIELD NO.	FIELD NUMBER	SELECTED FIELD NO.	FIELD NUMBER	SELECTED FIELD NO.	FIELD NUMBER	SELECTED FIELD NO.	FIELD NUMBER	SELECTED FIELD NO.	
20	21	22	23		24	25		26	27	28	29	30	31	32 33													

NOTE:- IN PART 2 COLUMN 3
- . ALL TEMPORARY CROPS
- . ONE OR MORE TEMPORARY CROPS WITH MIXED STAND
- . ONE OR MORE TEMPORARY AND PERMANENT CROPS WITH MIXED STAND WILL BE TRANSFERRED

PART 3 - DETAILS OF CROP CUTTING

JOB ID	1 1	2 5	3 4

1	2			3	4		5				6					7				8					9		10	11		12		13		14
SERIAL NUMBER OF				CROP NAME	CODE		DATE OF HARVEST				FRESH WEIGHT					DATE OF RECORDED DRY WEIGHT				DRY WEIGHT					WAS CROP DAMAGED ?							TYPE OF CROP STAND		REMARKS
PARCEL		FIELD					DATE		MONTH		KG		GRAM			DATE		MONTH		KG		GRAM			YES = 1 NO = 2		IF YES REASON FOR DAMAGE	CODE		PERCENT DAMAGED		PURE = 1 MIXED = 2		
20	21	22	23		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43		44		45	46		47	48		49	

	NAME	SIGNATURE	DATE
ENUMERATOR			/ /
SUPERVISOR			/ /
REGIONAL STAT. HEAD			/ /

CENTRAL STATISTICAL AUTHORITY
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
LIVESTOCK, POULTRY, BEEHIVES AND HONEY
PRODUCTION - 1992 E.C

FORM ASS-92/6

PRIVATE HOLDINGS

JOB ID 1 2 3 / 1 5 9

PART 1 - IDENTIFICATION PARTICULARS

1	2	3	4	5	6	7	8	9	10	11	12	13
REGION	ZONE	WEREDA	FARMERS' ASSOCIATION	ENUMERATION AREA	HOUSEHOLD ID NUMBER	HOLDER ID NUMBER	HOLDER'S NAME	SEX MALE = 1 FEM. = 2	AGE	EDUCATIONAL STATUS(grade compl.)	NUMBER OF MEMBERS OF HOLDER	TYPE OF HOLDING CROP = 1 LIVESTOCK =2 BOTH = 3
4 5	6 7	8 9	10 11 12	13 14	15 16 17	18 19		20	21 22	23	24 25	26

NOTES ON PART 1 COLUMN 11

- ILLITERATE = 1
- INFORMAL EDUCATION OR GRADES 1 - 3 COMPLETED = 2
- GRADES 4 - 6 COMPLETED = 3
- GRADES 7 - 8 COMPLETED = 4
- GRADES 9 - 11 COMPLETED = 5
- GRADE 12 COMPLETED = 6
- ABOVE 12 GRADE = 7

PART 2 - CATTLE BY SEX, AGE AND PURPOSE

1	2	3	4	5	6	7	8	9	10	11	12	13
CATTLE	GRAND TOTAL	LESS THAN 6 MONTHS	6 MONTHS & < 1 YEAR	1 YEAR & < 3 YEARS	TOTAL= COL 7 + COL 8 + COL 10 + COL 11	3 YEARS AND ABOVE AND LESS THAN 10 YEARS: BEEF CATTLE	DAIRY COWS	COWS GAVE MILK IN THE LAST 12 MONTHS	CATTLE MAINLY FOR AGRICULTURAL PURPOSES	FOR OTHER PURPOSES	10 YEARS AND OVER	REMARKS
TOTAL	27 28 29	30 31 32	33 34 35	36 37 38	39 40 41	42 43 44	45 46	47 48	49 50 51	52 53 54	55 56 57	
MALE	58 59 60	61 62 63	64 65 66	67 68 69	70 71 72		73 74		75 76		77 78	79 80
FEMALE	81 82 83	84 85 86	87 88 89	90 91 92	93 94 95		96 97	98 99	100 101	102 103	104 105	106 107

NOTES

1. CATTLE INCLUDES CAVES, HEIFERS, YEARLINGS, BULLS, COWS & OXEN
2. MILKING COWS REFER TO THE 12 MONTHS PERIOD YEKATIT 2/1990 - YEKATIT 1/1991 (FEBRUARY 10/1998 - FEBRUARY 9/1999)
3. DATE OF REFERENCE IS YEKATIT 1/1991 (FEBRUARY 9/1999)
4. MENTION OTHER PURPOSES IN THE REMARK

PART 3 - SHEEP AND GOATS BY SEX, AGE AND PURPOSE

1	2	3	4	5	6	7	8	9	10	11	12	13
SR. NO.	TYPE	GRAND TOTAL	LESS THAN 6 MONTHS	6 MONTHS & < 1 YEAR	1 YEAR & LESS THAN 2 YEARS	2 YEARS AND ABOVE: TOTAL= COL 8 + COL 9 + COL 10 + COL 11 + COL 12	FOR MEAT	FOR WOOL	FOR MILK	FOR BREED	FOR OTHER PURPOSES	REMARKS
108 109		110 111 112	113 114 115	116 117 118	119 120 121	122 123 124	125 126 127	128 129 130	131 132 133	134 135 136	137 138 139	
0 1	SHEEP TOTAL											
	SHEEP MALE	140 141 142	143 144 145	146 147 148	149 150 151	152 153 154	155 156 157	158 159 160		161 162 163	164 165 166	
	SHEEP FEMALE	167 168 169	170 171 172	173 174 175	176 177 178	179 180 181	182 183 184	185 186 187	188 189 190	191 192 193	194 195 196	
0 2	GOATS TOTAL	197 198 199	200 201 202	203 204 205	206 207 208	209 210 211	212 213 214		215 216 217	218 219 220	221 222 223	
	GOATS MALE	224 225 226	227 228 229	230 231 232	233 234 235	236 237 238	239 240 241			242 243 244	245 246 247	
	GOATS FEMALE	248 249 250	251 252 253	254 255 256	257 258 259	260 261 262	263 264 265		266 267 268	269 270 271	272 273 274	

PART 4 - HORSES, ASSES, MULES AND CAMELS BY AGE AND PURPOSE

JOB	1	2	3
ID	1	6	0

1		2		3			4			5			6			7			8			9
SR. NO.		TYPE		GRAND TOTAL			LESS THAN 3 YEARS			3 YEARS & ABOVE			LESS THAN 4 YEARS			4 YEARS & ABOVE			MAINLY FOR AGRICULTURAL PURPOSE			REMARKS
27	28			29	30	31	32	33	34	35	36	37							38	39	40	
0	1	HORSES	TOTAL																			
				41	42	43	44	45	46	47	48	49							50	51	52	
			MALE																			
				53	54	55	56	57	58	59	60	61							62	63	64	
			FEMALE																			
0	2	ASSES	TOTAL	65	66	67	68	69	70	71	72	73							74	75	76	
			MALE	77	78	79	80	81	82	83	84	85							86	87	88	
			FEMALE	89	90	91	92	93	94	95	96	97							98	99	100	
0	3	MULES	TOTAL	101	102	103													104	105	106	
			MALE	107	108	109													110	111	112	
			FEMALE	113	114	115													116	117	118	
0	4	CAMELS	TOTAL	119	120	121							122	123	124	125	126	127	128	129	130	
			MALE	131	132	133							134	135	136	137	138	139	140	141	142	
			FEMALE	143	144	145							146	147	148	149	150	151	152	153	154	

PART 5 - NUMBER OF POULTRY

JOB	1	2	3
ID	1	6	1

1				2			3			4			5			6			7			8
GRAND TOTAL				PULLETS			LAYING HENS			NON LAYING HENS			COCKRELS			COCKS			CHICKS			REMARKS
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	

DATE OF REFERENCE IS YEKATIT 1/1991
(FEBRUARY 9/1999)

PART 6 - BEEHIVES AND HONEY PRODUCTION

1				2						3		4
BEEHIVES (WITH BEES)				TOTAL HONEY PRODUCED PER YEAR						FREQUENCY OF HONEY PRODUCTION PER BEEHIVES PER YEAR		REMARKS
				KG			GRAM					
TRADITION	49	50	51	52	53	54	55	56	57		58	
MODERN	59	60	61	62	63	64	65	66	67		68	

NOTE :- BEEHIVES (WITH BEES) REFER TO THE PERIOD YEKATIT 2/1990 - YEKATIT 1/1991 (FEBRUARY 10/1998 - FEBRUARY 9/1999) FROM WHICH HONEY WAS PRODUCED ATLEAST ONCE IN THE PERIOD.
- IF HONEY WAS PRODUCED FROM THE BEEHIVE WITH IN THE REFERENCE PERIOD, IT WILL BE COUNTED EVEN IF IT IS WITHOUT BEES.

	NAME	SIGNATURE	DATE
ENUMERATOR			
SUPERVISOR			
REGIONAL STAT. HEAD			