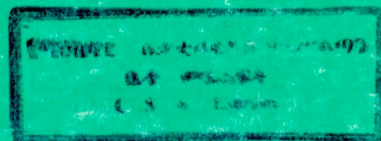


THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
CENTRAL STATISTICAL AUTHORITY



AGRICULTURAL SAMPLE SURVEY
2000/01 (1993 E.C.)

(September 11 - October 11, 2000)

REPORT ON

FORECAST OF AREA AND
PRODUCTION OF MAJOR CROPS

(For Private Peasant Holdings)

Addis Ababa
December, 2000\01

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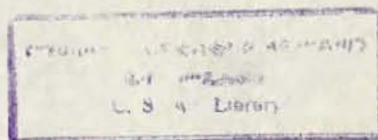
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PART I

INTRODUCTION AND OBJECTIVE OF THE SURVEY

1. INTRODUCTION

In Ethiopia, the agriculture sector is the backbone of the nation's economy. This sector continues to be extremely important, contributing about 55 percent to the national GDP, 60 percent to merchandise exports and 80 percent to the population's employment (World Bank, 1995). Besides its contribution as the main income generating sector for the majority of the rural population, it also serves as the main source for household consumption.

Food availability for the majority of Ethiopians continues to be determined by its domestic crop production. Therefore, timely crop production forecast estimates prior to harvest are of great importance and interest to the government and non-governmental donor organizations. Accurate and timely production data for use by these organizations for planning purposes are very essential. Timeliness of the estimates is of the utmost importance for these organizations to take all necessary and appropriate measures, i.e. administering exports or imports, management of stocks and distribution of food to deficit regions, regulation of price control both during periods of surplus and/or deficits,... etc.

A forecast of crop production can be defined as a statement of the most probable production of the crop which can be obtained from the coming harvest given reasonable expectations for normal growing conditions through the harvest period.

The Central Statistical Authority (CSA) has been conducting crop production forecast surveys annually, since 1980/81 (1973 E.C.). The crop forecast estimates are based on data collected from producers (farmers) using scientifically accepted probability sampling methodology subject to the conditions and expectations for harvest at the time of data collection from 10 September through 10 October 2000 (i.e from Meskerem 1 to 30, 1993 E.C)

This report presents basic information of crop production forecasts for 2000/01 (1993 E.C.), i.e. for Meher season harvest, and indicates the area coverage and expected production of major crops for the coming harvest at the national, regional as well as zonal/ special wereda levels.

2. OBJECTIVES OF THE SURVEY

The objectives of the crop production forecast survey is to collect basic quantitative information on area and expected production of major crops. Timely estimates made from this quantitative information that indicate the expected production of the 2000/01 (1993 E.C.) Meher (Main) season crops prior to their harvest are considered to be essential for policy makers and administrators to prepare policies and for implementation of timely measures such as administering exports or imports of crops, management of stocks and distributing of food to different regions, regulation of crop prices at the time of surplus and/or deficits, ... etc.

PART II

SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

1. SCOPE, COVERAGE AND CONTENT OF THE SURVEY

The 2000/01 (1993 E.C.) annual crop production forecast survey was designed to cover the **sedentary rural** agricultural population in all regions of the country. This coverage encompasses a total of 11 regions, 56 zones and five special weredas which were designated in the sampling design as the area basis to be domains /reporting levels for the survey. The geographic coverage of the survey is given in Table A.

The original sample selected totaled 1432 enumeration areas (EAs). These EAs were selected at the zonal level to be enumerated for the survey to provide specific coverage within all regions. For this report, however, the number of "Useable" EAs which were completed and acceptable for tabulation, totaled 1422 EAs. The remaining 10 EAs were incomplete and unusable due to various reasons. In each EA a sample of 40 agricultural households were selected in which 25 households were interviewed for the forecast survey which resulted in a total of 35,550 sample households. The forecast estimates of area under crops are obtained from a sub-sample of the first 10 households out of the 40 selected from each EA.

2. SAMPLE DESIGN

The 2000/01 (1993 E.C.) crop production forecast 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. But each of the four regions; namely, Gambela, Harari, Addis Ababa and Dire Dawa were considered as strata /reporting levels.

TABLE A. AREAL COVERAGE OF THE 1998/2000/01 (1993 E.C.) CROP PRODUCTION RECAST SURVEY

Region	Number of Zones		Number of Weredas Covered in the survey
	Total	Covered in the survey	
Tigray ¹	5	4	33
Afar ²	5	2	7
Amhara	10	10	92
Oromia	12	12	170
Somalie ³	9	3	9
Benshangul Gumez	3	3	18
S.N.N.P.R.	14	14	73
Gambela	4	3	5
Harari	1	1	1
Addis Ababa ⁴	6	2	5
Dire Dawa	1	1	1
Total	70	55	414

Notes:-

- 1 - In Tigray Region, four out of five zones have rural settled population.
- 2 - Afar Region has a total of five Zones, however only two Zones have significant rural sedentary population.
- 3 - Somalie Region has a total of nine Zones, however only three Zones have significant rural sedentary population.
- 4 - Addis Ababa has a total of six Zones, however, only two Zones have rural settled population. In the remaining four Zones the entire population is urban residents.

S.N.N.P.R. Southern Nations, Nationalities and peoples' Region.

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 each sample EA, 40 agricultural households were systematically selected for the annual livestock survey from a fresh list of households prepared at the beginning of the field work of the survey. For the crop forecast survey, data on crop condition factors were collected from the first 25 agricultural households and for the area measurement of the survey, the first ten sample households were selected to be covered.

A total of 1,432 EAs (2.8 % of total EAs in the rural areas of the country) were selected for the survey. However, from 10 EAs forecast data were not collected for various reasons. Hence the survey succeeded in covering 1422 (98%) EAs. With respect to ultimate sampling units, for the crop forecast survey, it was planned to cover 14,320 and 35,800 agricultural households for area measurement and crop condition factors, respectively. 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.

3. FIELD ORGANIZATION

The Heads of CSA Branch Statistical Offices as well as field supervisors and enumerators were fully involved in the administration of the Agricultural Sample Survey. At any given time during the survey there were 1627 (including 10% reserves) field enumerators stationed across the country for the data collection operation. One field enumerator is assigned to each of the selected EA. A supervisor is assigned to closely follow up the work of 4-5 enumerators. Moreover, experts from the CSA's headquarters, other support staff were involved in the survey operation.

For all field enumerators the necessary survey equipment such as compass, protractors, ruler, measuring tape, balance scale, iron pegs, rope, sample bag, ...etc. were issued at the conclusion of their training to facilitate the field work and crop cutting exercises later in the season at harvest time.

4. TRAINING OF FIELD STAFF

Preparation for the Agricultural Sample Survey required considerable planning and acquisition of all relevant materials. These included the training of personnel, procurement of equipment, designing and printing of questionnaires, as well as enumerator's and supervisor's instruction manuals.

The training program for the survey was carried out in two stages. In the first stage, about 132 trainees who are experts in various disciplines in headquarter, Branch Statistical Office Heads, and a few experienced field supervisors were given training for a period of one week, at CSA headquarter. Those trained in the first stage conducted similar training for about 373 field supervisors and 1627 field enumerators in the 22 CSA Branch Statistical Offices all over the country. The content of the training document focused on specific details pertaining to the crop production survey, including detailed class room instruction on the purpose of the survey, terminology, concepts and definitions used for the survey, how to correctly complete each questionnaire, description of field area measurement methodology, detailed discussion on all aspects used for crop cutting measurement, and correct procedures for conducting an interview with holders ...etc. The training at the branch offices was conducted for a period of two weeks and included thorough field practices to reinforce the classroom lectures and to insure that each enumerator was thoroughly familiar with interviewing holders, field measurement and crop cutting procedures.

ii. Method of Crop Production Forecasting

The crop production forecast for 2000/01 (1993 E.C.) is based on what could be considered a three component production "Models". The first component production "model" is the survey's direct expansion estimate of the actual cultivated area (obtained from the objectively measured fields during the September-October field data collection period). The second component production uses last year's Meher (Main) season crop yield estimate obtained from objectively collected crop cuttings. The third component production is the average "condition" factor which estimates the yield of this year's crop comparing with the previous year.

All specific condition factors (such as weather, pest damage,...etc.) affecting the crop growth for the rest of the current season have been taken into account by the holders in these "condition" factors and represents the holder's own subjective estimate on the future field production. Forecast estimates are published for all major temporary crops for which objective area field measurements were performed.

iii. Main Factors Which Influence the Expected Crop Production

In order for the holder to intuitively formulate the future production of his field crop production there are numerous factors subjectively assessed. Besides the meteorological factors, there are a number of other factors that influence production and yield of major crops. These are:

a. Reason for expected decrease

- too much rainfall and lodging of the crop,
- shortage of rainfall,
- insect (locust), disease and other pest (birds) damage,
- hail and frost damage,
- wild and domestic animal damage,
- shortage of seed,
- depletion of the soil fertility and
- others.

b. Reason for expected increase

- favorable weather conditions,
- improved seed and cultural practices,
- application of fertilizers,
- application of pesticides (absence of pests) and
- others.

6. DATA EDITING, CODING AND VERIFICATION

The Agricultural Sample Survey editing and coding instruction manuals were prepared and printed prior to training. Before receipt of the completed questionnaires from the branch offices, the CSA regular editor/coder staff were given one full day of intensive training on proper questionnaire review techniques. Instructions and rules associated with correctly coding the questionnaire and correcting inconsistent records were thoroughly taught. In order to undertake this task at CSA headquarters a total of 55 editors/coders were involved.

During the coding process, several of the professional staff members from ASD were assigned to guide and supervise the editors/coders in correction of the difficult problems on the filled-in questionnaire. These technical experts were also involved in answering questions, clear doubts...etc. so as to facilitate the editing and coding activity. Each editor/coder was assigned to work on a single EA at a time to assure that all questionnaires were accounted for and completed. Next the edited and coded questionnaires were checked by about 15 supervisors/verifiers. All EAs were included in this final verification process.

7. DATA ENTRY, CLEANING AND PROCESSING

The data entry process deployed about 40 data encoders and as many personal computers. The data was entered in the PCs using IMPS (Integrated Microcomputer Processing System) software which is a software package developed by the United States Bureau of the Census. Following data entry, the data was further reviewed for data inconsistencies, missing data, reasonableness ... etc. Five of the regular professional staff from Agricultural Statistics

Department and six computer operators skilled in data cleaning from Data processing Department fully participated to make appropriate data cleaning according to the output of the edit program. The final stage of the data processing was to summarize the cleaned data using the PC based IMPS software. The summary tables required reformatting and merging with the report text file for publication purposes. Three programmers were responsible for all of the data processing activity.

8. BASIC CONCEPTS AND DEFINITIONS

The concepts and definitions used in the survey are described as follows:

Enumeration Area (EA):- Is the survey primary sampling unit classified as located in the rural area of the country which is less than or equal to a peasant's Association's area and usually consists of 150-200 households.

Households:- A household may be either;

- a) a one person household, that is a person who makes provision for his own food or other essentials for 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 provision for food or other essentials for living. The persons in the group may pool their incomes and have a common budget more or less. They may be related or unrelated persons, or a combination of both.

Agricultural Households: 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 partnership with others.

Holder: A holder is a person who exercises management control over the operations of the agricultural holdings and makes the major decisions regarding the utilization of the available

resources. He has technical and economic responsibility for the holding. He may operate the holding directly as an owner or as a manager.

Using the terminology of a traditional agricultural holding the holder may be regarded as the person, who with or without help of others, operates land or raises livestock for his own purposes, i.e. the person who decides on what, when, where and how to grow crops or raise livestock and has right to determine the utilization of the products.

Holding: A holding is all the land and livestock kept which is used wholly or partially for agricultural production and is operated as one administratively managed unit by one person alone, or with others, without regard to title, legal form, size or location. A holding may consist of one or more parcels.

Parcel: A parcel is a portion of land belonging to the holding which is any piece of land entirely surrounded by land, water road, forest, etc. Which are not part of the holding. It may consist one or more cadastral units, plots or field adjacent to each other.

Field: A field is defined as any plot of land within a parcel which can be whole or part of a parcel under the same cultural practice.

Forecast of crop production: It is an estimation of the future realization of final crop production growing under conditions which introduce a random variable which can cause an uncertainty as to what the final production at harvest will be.

PART III

SUMMARY OF THE RESULTS OF THE 1999/2000 (1992 E.C) CROP PRODUCTION FORECAST SURVEY

In this part of the report the estimate of area and crop production for the 2000/01 (1993 E.C.) Crop Production Forecast Survey are presented at the Country, regional, zonal and special wereda levels. Discussions of some of the major findings and important points of the survey result are given below.

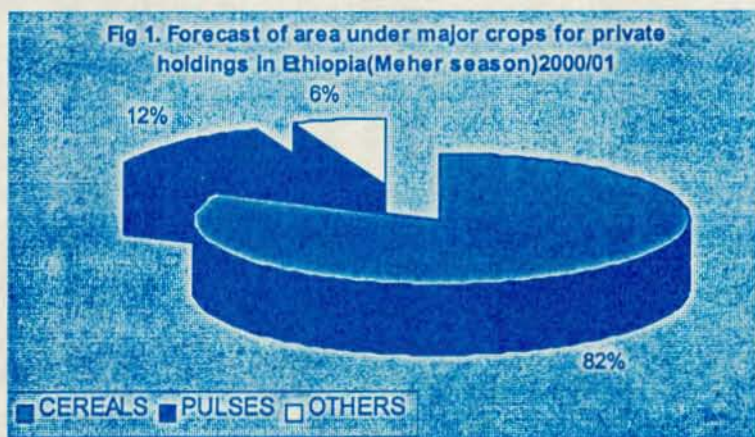
Based on the data collected for the 2000/01 (1993 E.C) crop production forecast survey results, it is estimated that about 9.60 million hectares are covered by major crops, of which in the coming harvest season it is expected that about 100.74 million quintals are to be produced.

Out of the total land under major crops, the highest area, which is about 7.86 million hectares (81.88%), and with expected production of 88.11 million quintals (87.45 %), with mean yield of 11.22 qts/ha, is reported for cereals, followed by pulses, with 1.16 million hectares (12.08 %) and 10.07 million quintals (10 %) with mean yield of 8.65 qts/ha. and then by other crops (mainly oilseeds) with 0.58 million hectares (6.04 %) and 2.57 million quintals (2.55 %), with mean yield of 4.42 qts/ha. See Table B.

Table B. Forecast of Area and Expected Production of Major Crops for Private Peasant Holdings in Ethiopia, 2000/01 (1993 E.C)

Crop Type	Area		Production		Yield Qt/ha
	In million (ha.)	%	In million (qt.)	%	
Cereals	7.86	81.88	88.11	87.45	11.22
Pulses	1.16	12.08	10.07	10.00	8.65
Others	0.58	6.04	2.57	2.55	4.42
All Crops	9.60	100.00	100.74	100.00	

Moreover, comparison of last year's main season estimates of total area, production and yield of major crops with this year's forecasted area under crop, expected production and yield of major crops are made in Table 1. As it can be seen from the table this year's expected area under crop and production showed an increase of 16.85 % and 13.31% compared with that of last year's main season estimates, respectively. On the other hand, as it can be seen from the same table this year's expected yield shows a decrease that ranges from 1 to 21%, in almost all crops except for Teff, Oats, Chick pease, Vetch, Lin seed, Sunflower, Sesame and Fenugeek.



The observed decreases in this year's expected yield for major crops are mainly contributed due to the farmers expectation of bad harvest during the time of data collection that was from September 30 to October 11, 2000. At this time, the planted crops in most parts of the country

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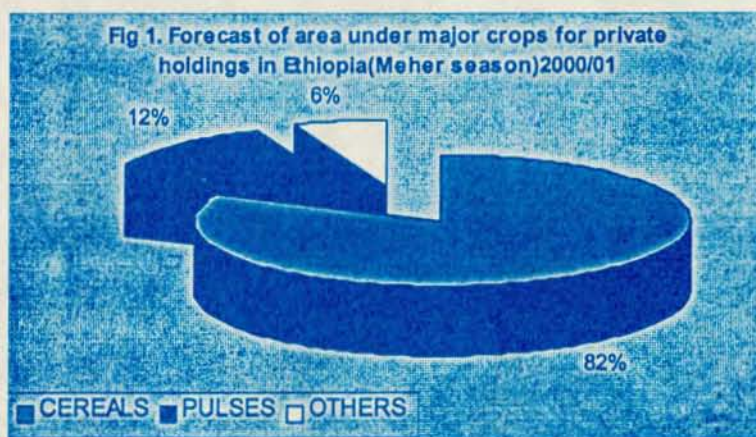
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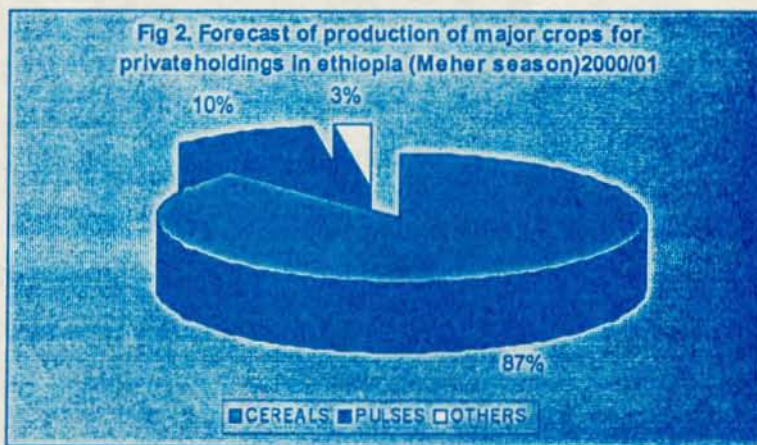


The observed decreases in this year's expected yield for major crops are mainly contributed due to the farmers expectation of bad harvest during the time of data collection that was from September 30 to October 11, 2000. At this time, the planted crops in most parts of the country

were affected by too much rain and this situation influenced the attitude of the farmers to expect lower yield in comparison to that of last year's yield.

Besides the excess rains that farmers thought will reduce crop production the following factors were reported by individual farmers for the overall decline of the expected yield in the coming harvest. These are:

- Insect (locust), disease and other pest (birds) damage,
- Hail and frost damage,
- Wild and domestic animal damage,
- Depletion of the soil fertility and...etc.



On the other hand , based on some investigations the above mentioned increase in crop area is found to be contributed by factors such as the newly claimed areas for crop cultivation from areas which has never been cultivated particularly in the low land areas; a shift of fields for Meher season crop production which were used only for Belg season crop production, shift of fields from other landuse practices; ...etc. It is important for data users to note that the objective of a probability sample survey is to make inferences about the true population value based on a sample drawn from that population. Statistical estimation can be separated into two forms: point estimates and interval estimates. For point estimates, where one value is computed on the real number scale derived from a sample of data elements, e.g x_1, x_2, \dots, x_n , such that it is used to estimate the true population value of x . Thus point estimator is directly dependent on the

individual Values of the data which will vary with multiple samples. Thus the estimates in this report are point estimates of their respective true population values which would differ on the real number scale depending on the composition of the data elements for each subsequent survey sample. To alleviate the problem of not knowing the true population value, statisticians use the second form of estimation, called interval estimation, where two points are used to define an interval on the real number scale, which should contain the true population value. Based on sample survey data this interval is constructed such that given a certain specified level of probability, the resulting confidence interval has a specific chance to contain the true population value. Again it is important to note that every sample will have its own unique confidence interval which also has a specific probability of containing the true population value.

The interval estimates for cereals, pulses and other crops (mainly oil seeds) on the results obtained from the sampled households in the selected EAs in the 2000/01 (1993 E.C) Crop production forecast sample survey are presented in Table C. The confidence intervals are based on a probability such that, unless due to chance alone, the true population values would be expected to be contained within a 95% confidence interval.

Table C. Interval Estimates for Area and production of Major Crops for private peasant Holdings in Ethiopia, 2000/01 (1993 E.C.)

Crop Type	Area		Production	
	CV	95 % Confidence interval for area	CV	95 % Confidence interval for Production
	%	Hectares	%	Quintals
Cereals	3.42	7328.89 – 8382.56	3.75	81627.458 – 94588.85
Pulses	4.86	1053.56 – 1275.22	5.77	8930.14 – 11205.57
Others	6.98	501.47 – 660.53	7.98	2164.78 – 2967.33
All Crops	3.30	8979.32 – 10222.92	3.63	93576.31 – 107907.82

In Appendix II, Standard error (SE) and the coefficient of variation (CV) for the area and crop production forecast estimates are presented. These estimates of the SE for production must be used with caution since they contain an unknown measure of forecast error.

Finally, users of this report should be aware that the information on what is called condition factors were collected in the months of September 2000 (Meskerem 1993 E.C). Therefore, the results should be used with great caution in light of the favorable or adverse conditions of weather and other factors which may affect the crop after the crop production forecast survey data was collected. The effect of these subsequent changes in crop conditions are not reflected in this report.

Note:-


1. *If in some tables figures do not add up to total it is due to rounding.*
2. *Those forecasts designated by * * in all tables could not be reported because of high coefficient of variation (i.e. they are less reliable). However they are consolidated in the total forecast.*
3. *In all tables  indicates not reported and 0.00 indicates the value is insignificant.*

Fig 3. 1999/00 Estimates and 2000/01 Forecast Area of Major Crops For private holdings in Ethiopia, Region(Meher Season)



Table 2. Forecast of 2000/01 and Estimate of 1999/00 Area, Production and Yield of major crops for peasant holdings in Ethiopia By Region (Meher Season)

Region	TOTAL AREA IN '000 HA			TOTAL PROD. IN '000 QTS			YIELD		
	Estimate's of 1999/00	Forecast of 2000/01	% age Change	Estimate's of 1999/00	Forecast of 2000/01	% age Change	Estimate's of 1999/00	Forecast of 2000/01	% age Change
Tigray	560.89	615.87	9.80	6227.28	6579.51	5.66	11.10	10.68	-3.78
Afar	18.98	29.74	56.69	245.93	301.75	22.70	12.96	10.15	-21.69
Amhara	3074.32	3564.63	15.95	28807.12	32304.24	12.14	9.37	9.06	-3.28
Oromiya	3613.21	4060.7	12.38	43719.76	48512.9	10.96	12.10	11.95	-1.26
Somali	47.58	51.36	7.94	225.21	262.48	16.55	4.73	5.11	7.97
Benshangul	172.68	171.86	-0.47	1845.52	1770.64	-4.06	10.69	10.30	-3.60
S.N.N.P	695.54	1064.59	53.06	7387.57	10455.13	41.52	10.62	9.82	-7.54
Gambela	12.79	15.17	18.61	249.07	297.53	19.46	19.47	19.61	0.72
Harari	6.57	7.98	21.46	58.14	43.99	-24.34	8.85	5.51	-37.71
Addis Ababa	8.03	11.14	38.73	82.99	127.05	53.09	10.33	11.40	10.35
DireDawa	6.11	8.08	32.24	61.37	86.85	41.52	10.04	10.75	7.01
All Regions	8216.70	9601.12	16.85	88909.96	100742.07	13.31			

Fig.4 Estimates of 1999/00 and Forecast of 2000/01 Production of Major Crops for privateholdings in Ethiopia, Region (Meher Season)

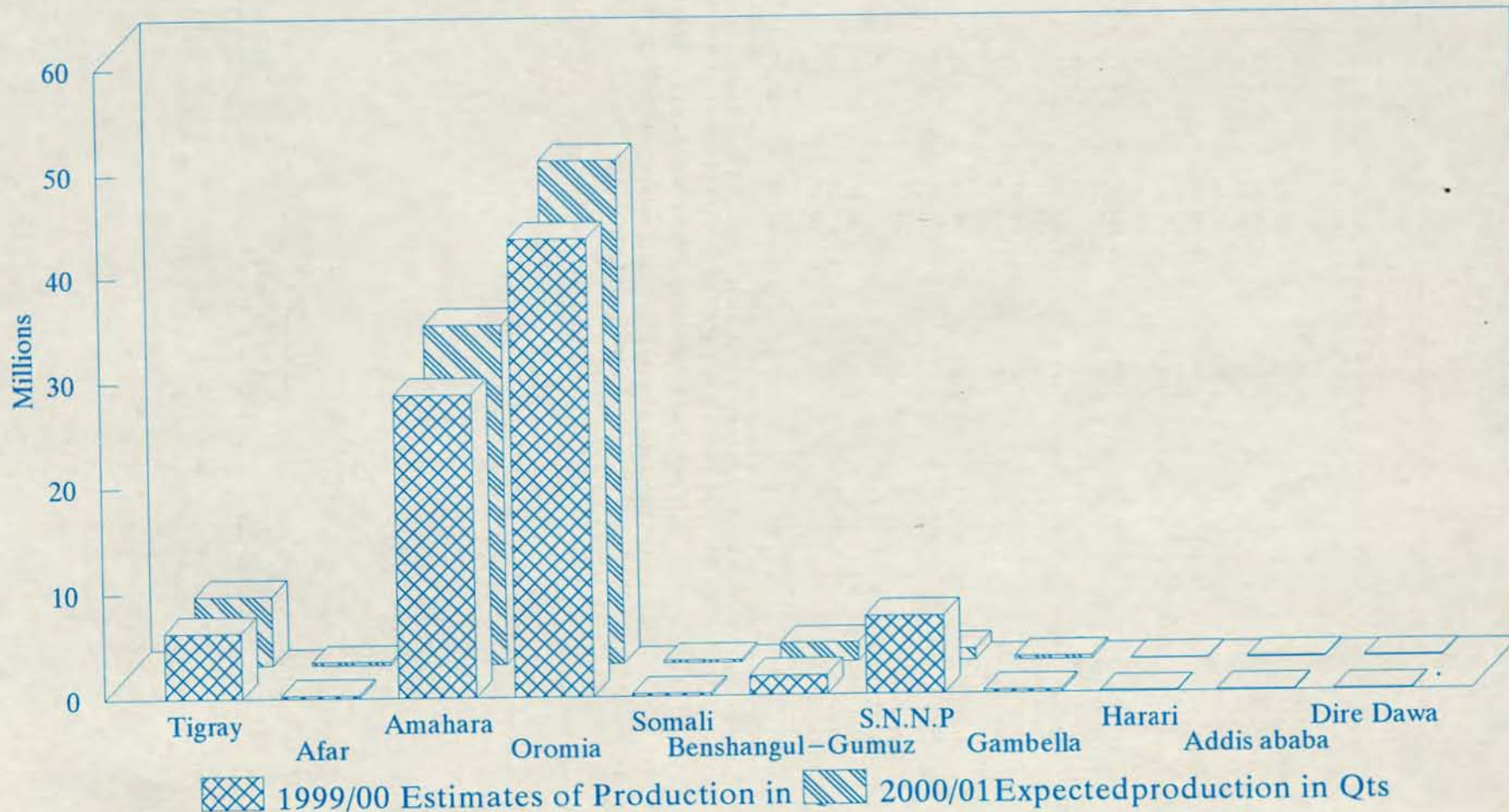


Table 3. Forecast of Area, Production and Yield of Major crops for Private Peasant Holdings 2000/2001(1993 E.C.)

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	7,855.73	81.82	88,108.15	87.46	11.22
Teff	2,316.88	24.13	19,187.90	19.05	8.28
Barley	837.30	8.72	7,583.55	7.53	9.06
Wheat	1,173.16	12.22	13,689.58	13.59	11.67
Maize	1,784.45	18.59	28,858.84	28.65	16.17
Sorghum	1,339.96	13.96	15,232.50	15.12	11.37
Millet	359.44	3.74	3,042.84	3.02	8.47
Oats	44.54	.46	512.94	.51	11.52
Pulses	1,164.39	12.13	10,067.85	9.99	8.65
Horse Beans	430.84	4.49	4,285.28	4.25	9.95
Field Peas	211.22	2.20	1,491.96	1.48	7.06
Haricot Beans	191.42	1.99	1,218.43	1.21	6.37
Chick Peas	150.92	1.57	1,461.54	1.45	9.68
Lentils	87.21	.91	539.87	.54	6.19
Vetch	92.78	.97	1,070.78	1.06	11.54
Others	581.00	6.05	2,566.06	2.55	4.42
Neug	349.95	3.64	1,301.61	1.29	3.72
Linseed	131.59	1.37	606.53	.60	4.61
Rapeseed	27.70	.29	170.55	.17	6.16
Ground Nuts	15.66	.16	*	*	*
Sunflower	8.14	.08	65.07	.06	7.99
Sesame	33.91	.35	200.36	.20	5.91
Fenugreek	14.05	.15	97.47	.10	6.94
All Crops	9,601.12	100.00	100,742.06	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Fig 5. Forecast of 1999/00 and Estimates of 2000/01 Areae and Production of major crops by type for private holdings in Ethiopia, (MEHER SEASON)

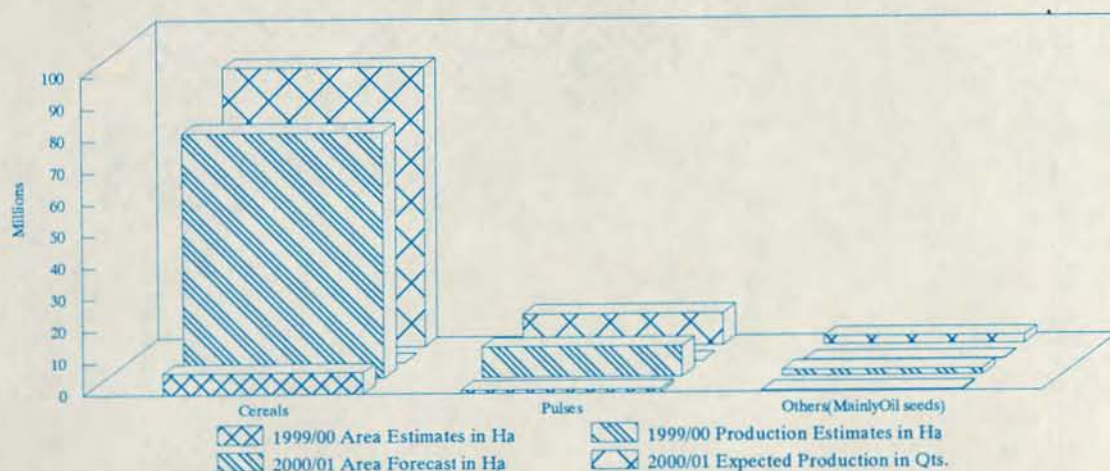


Fig 6. 2000/01 Forecast of Yield For Cereals, Pulses and Other Crops
For Private holdings in Ethiopia By Region
(Meher Season)

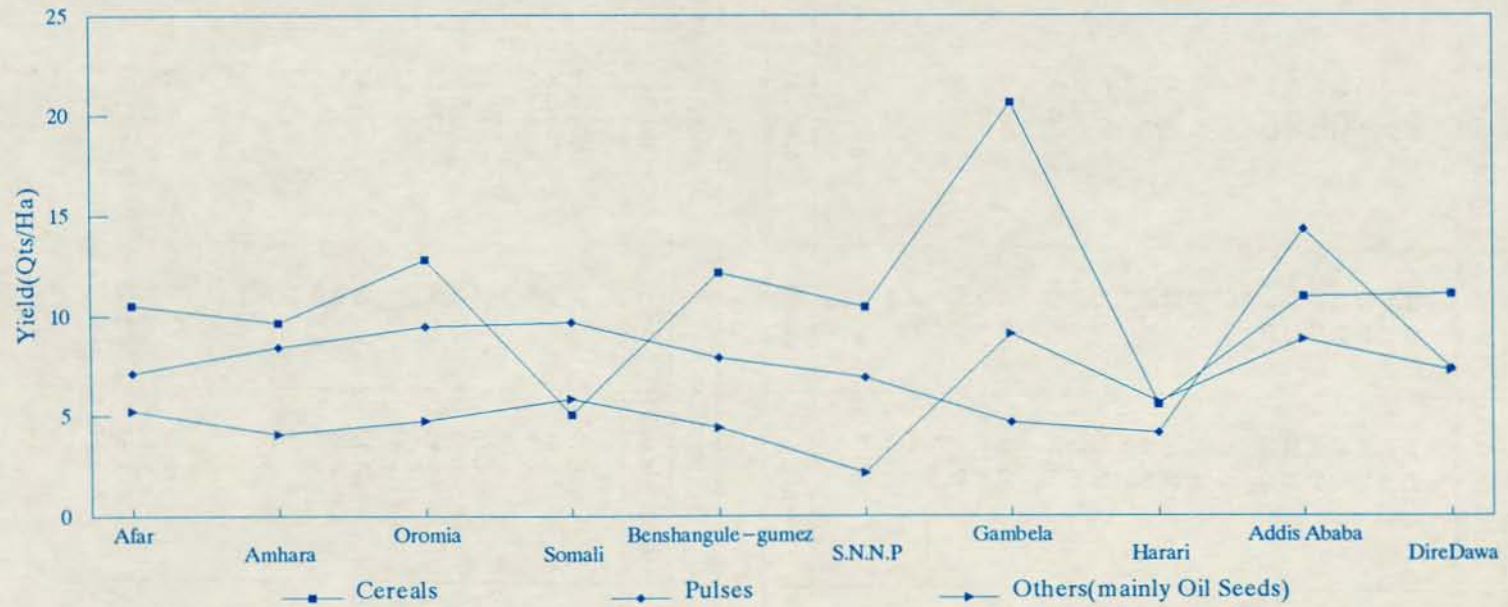


Table 4. Forecast of Area, Production and Yield of Major crops for Private Peasant Holdings 2000/2001(1993 E.C.)

Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	529.17	85.92	5,887.37	89.48	11.13
Teff	144.71	23.50	1,324.72	20.13	9.15
Barley	67.24	10.92	592.23	9.00	8.81
Wheat	70.83	11.50	633.87	9.63	8.95
Maize	57.34	9.31	975.11	14.82	17.01
Sorghum	123.59	20.07	1,737.36	26.41	14.06
Millet	65.36	10.61	623.60	9.48	9.54
Oats	*	*	*	*	*
Pulses	56.24	9.13	552.09	8.39	9.82
Horse Beans	18.64	3.03	265.85	4.04	14.26
Field Peas	6.74	1.09	57.71	.88	8.56
Haricot Beans	*	*	*	*	*
Chick Peas	13.57	2.20	105.78	1.61	7.80
Lentils	6.17	1.00	23.70	.36	3.84
Vetch	8.94	1.45	83.00	1.26	9.28
Others	30.46	4.95	140.05	2.13	4.60
Neug	9.85	1.60	40.82	.62	4.14
Linseed	12.23	1.99	45.66	.69	3.73
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	615.87	100.00	6,579.51	100.00	

Table 4.1 West Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	161.29	87.17	2,049.78	91.71	12.71
Teff	38.83	20.99	382.58	17.12	9.85
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	28.76	15.54	522.89	23.40	18.18
Sorghum	48.93	26.44	735.34	32.90	15.03
Millet	43.83	23.69	401.49	17.96	9.16
Oats	-	-	-	-	-
Pulses	7.12	3.85	92.48	4.14	12.99
Horse Beans	3.49	1.89	*	*	*
Field Peas	*	*	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	3.35	1.81	*	*	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	16.62	8.98	92.75	4.15	5.58
Neug	5.83	3.15	28.41	1.27	4.87
Linseed	2.65	1.43	11.97	.54	4.52
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	185.03	100.00	2,235.01	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 4.2 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Central Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	161.13	88.14	1,694.31	91.75	10.52
Teff	53.12	29.06	420.02	22.75	7.91
Barley	12.97	7.09	120.06	6.50	9.26
Wheat	15.42	8.43	158.56	8.59	10.28
Maize	17.78	9.73	267.19	14.47	15.03
Sorghum	43.49	23.79	526.42	28.51	12.10
Millet	18.35	10.04	202.07	10.94	11.01
Oats	-	-	-	-	-
Pulses	14.45	7.90	127.08	6.88	8.79
Horse Beans	6.62	3.62	72.17	3.91	10.90
Field Peas	*	*	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	31.14	1.69	*
Lentils	*	*	*	*	*
Vetch	1.11	.61	10.10	.55	9.10
Others	7.23	3.95	25.21	1.37	3.49
Neug	*	*	11.45	.62	*
Linseed	3.68	2.01	13.68	.74	3.72
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	*	*	-
Sesame	-	-	-	-	-
Fenugreek	*	*	-	-	-
All Crops	182.81	100.00	1,846.61	100.00	

Table 4.3 East Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	67.78	79.43	558.64	77.05	8.24
Teff	11.24	13.17	62.40	8.61	5.55
Barley	26.70	31.29	243.63	33.60	9.12
Wheat	23.33	27.34	176.40	24.33	7.56
Maize	1.97	2.31	31.55	4.35	16.02
Sorghum	1.76	2.06	25.45	3.51	14.46
Millet	*	*	18.72	2.58	*
Oats	*	*	*	*	*
Pulses	15.45	18.11	159.20	21.96	10.30
Horse Beans	2.48	2.91	43.18	5.96	17.41
Field Peas	1.73	2.03	14.36	1.98	8.30
Haricot Beans	-	-	-	-	-
Chick Peas	4.40	5.16	40.42	5.57	9.19
Lentils	1.26	1.48	8.33	1.15	6.61
Vetch	5.58	6.54	52.90	7.30	9.48
Others	2.10	2.46	7.24	1.00	3.45
Neug	*	*	*	*	*
Linseed	1.97	2.31	6.79	.94	3.45
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	85.33	100.00	725.08	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 4.4 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

South Tigray

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	138.97	85.42	1,584.64	89.39	11.40
Teff	41.51	25.51	459.72	25.93	11.07
Barley	26.65	16.38	221.13	12.47	8.30
Wheat	32.06	19.71	298.85	16.86	9.32
Maize	8.83	5.43	153.49	8.66	17.38
Sorghum	29.40	18.07	450.14	25.39	15.31
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	19.22	11.81	173.32	9.78	9.02
Horse Beans	6.06	3.72	80.80	4.56	13.33
Field Peas	4.59	2.82	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	1.99	1.22	14.32	.81	7.20
Lentils	3.37	2.07	10.17	.57	3.02
Vetch	2.24	1.38	20.00	1.13	8.93
Others	4.51	2.77	14.84	.84	3.29
Neug	*	*	*	*	*
Linseed	3.92	2.41	13.22	.75	3.37
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	162.69	100.00	1,772.81	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 5. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Afar

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	27.10	91.12	284.77	94.37	10.51
Teff	8.52	28.65	40.29	13.35	4.73
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	6.37	21.42	85.90	28.47	13.49
Sorghum	11.40	38.33	153.09	50.73	13.43
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.66	5.58	11.80	3.91	7.11
Horse Beans	-	-	-	-	-
Field Peas	*	*	*	*	*
Haricot Beans	*	*	2.86	.95	*
Chick Peas	1.16	3.90	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.99	3.33	5.19	1.72	5.24
Neug	*	*	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.55	1.85	*	*	*
Sesame	.39	1.31	2.72	.90	6.97
Fenugreek	*	*	*	*	*
All Crops	29.74	100.00	301.75	100.00	

Table 5.1 Zone 1

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	2.03	100.00	54.28	100.00	26.74
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	1.88	92.61	52.72	97.13	28.04
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	2.03	100.00	54.28	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 5.2 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Zone 3

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	25.08	90.48	230.48	93.13	9.19
Teff	8.52	30.74	40.29	16.28	4.73
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	4.49	16.20	33.18	13.41	7.39
Sorghum	11.25	40.58	151.53	61.23	13.47
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.66	5.99	11.80	4.77	7.11
Horse Beans	-	-	-	-	-
Field Peas	*	*	*	*	*
Haricot Beans	*	*	2.86	1.16	*
Chick Peas	1.16	4.18	8.46	3.42	7.29
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.99	3.57	5.19	2.10	5.24
Neug	*	*	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	.55	1.98	*	*	*
Sesame	.39	1.41	2.72	1.10	6.97
Fenugreek	*	*	*	*	*
All Crops	27.72	100.00	247.47	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 6. Forecast of Area, Production and Yield of Major crops for Private Peasant Holdings 2000/2001(1993 E.C.)

Amhara

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	2,786.62	78.17	26,833.25	83.06	9.63
Teff	1,057.20	29.66	8,656.72	26.80	8.19
Barley	284.60	7.98	1,940.52	6.01	6.82
Wheat	316.08	8.87	2,970.35	9.19	9.40
Maize	383.68	10.76	5,816.01	18.00	15.16
Sorghum	534.80	15.00	5,715.29	17.69	10.69
Millet	192.72	5.41	1,501.37	4.65	7.79
Oats	17.54	.49	*	*	*
Pulses	526.94	14.78	4,448.92	13.77	8.44
Horse Beans	185.48	5.20	1,649.49	5.11	8.89
Field Peas	99.87	2.80	673.19	2.08	6.74
Haricot Beans	46.19	1.30	282.91	.88	6.12
Chick Peas	84.18	2.36	836.05	2.59	9.93
Lentils	57.00	1.60	353.82	1.10	6.21
Vetch	54.22	1.52	653.46	2.02	12.05
Others	251.07	7.04	1,022.08	3.16	4.07
Neug	188.67	5.29	716.56	2.22	3.80
Linseed	27.83	.78	71.79	.22	2.58
Rapeseed	9.10	.26	61.75	.19	6.79
Ground Nuts	*	*	*	*	*
Sunflower	6.79	.19	59.27	.18	8.73
Sesame	12.19	.34	72.57	.22	5.95
Fenugreek	6.33	.18	39.37	.12	6.22
All Crops	3,564.63	100.00	32,304.24	100.00	

Table 6.1 North Gonder

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	440.76	77.25	3,578.69	82.43	8.12
Teff	123.94	21.72	791.89	18.24	6.39
Barley	37.26	6.53	195.27	4.50	5.24
Wheat	27.65	4.85	185.68	4.28	6.72
Maize	46.63	8.17	421.01	9.70	9.03
Sorghum	157.78	27.65	1,616.33	37.23	10.24
Millet	46.88	8.22	365.18	8.41	7.79
Oats	*	*	*	*	*
Pulses	68.96	12.09	467.08	10.76	6.77
Horse Beans	29.21	5.12	188.93	4.35	6.47
Field Peas	13.39	2.35	85.59	1.97	6.39
Haricot Beans	*	*	*	*	*
Chick Peas	19.26	3.38	156.72	3.61	8.14
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	60.84	10.66	295.94	6.82	4.86
Neug	49.47	8.67	247.62	5.70	5.01
Linseed	5.50	.96	16.03	.37	2.91
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	570.56	100.00	4,341.70	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 6. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Amhara

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	2,786.62	78.17	26,833.25	83.06	9.63
Teff	1,057.20	29.66	8,656.72	26.80	8.19
Barley	284.60	7.98	1,940.52	6.01	6.82
Wheat	316.08	8.87	2,970.35	9.19	9.40
Maize	383.68	10.76	5,816.01	18.00	15.16
Sorghum	534.80	15.00	5,715.29	17.69	10.69
Millet	192.72	5.41	1,501.37	4.65	7.79
Oats	17.54	.49	*	*	*
Pulses	526.94	14.78	4,448.92	13.77	8.44
Horse Beans	185.48	5.20	1,649.49	5.11	8.89
Field Peas	99.87	2.80	673.19	2.08	6.74
Haricot Beans	46.19	1.30	282.91	.88	6.12
Chick Peas	84.18	2.36	836.05	2.59	9.93
Lentils	57.00	1.60	353.82	1.10	6.21
Vetch	54.22	1.52	653.46	2.02	12.05
Others	251.07	7.04	1,022.08	3.16	4.07
Neug	188.67	5.29	716.56	2.22	3.80
Linseed	27.83	.78	71.79	.22	2.58
Rapeseed	9.10	.26	61.75	.19	6.79
Ground Nuts	*	*	*	*	*
Sunflower	6.79	.19	59.27	.18	8.73
Sesame	12.19	.34	72.57	.22	5.95
Fenugreek	6.33	.18	39.37	.12	6.22
All Crops	3,564.63	100.00	32,304.24	100.00	

Table 6.1 North Gonder

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	440.76	77.25	3,578.69	82.43	8.12
Teff	123.94	21.72	791.89	18.24	6.39
Barley	37.26	6.53	195.27	4.50	5.24
Wheat	27.65	4.85	185.68	4.28	6.72
Maize	46.63	8.17	421.01	9.70	9.03
Sorghum	157.78	27.65	1,616.33	37.23	10.24
Millet	46.88	8.22	365.18	8.41	7.79
Oats	*	*	*	*	*
Pulses	68.96	12.09	467.08	10.76	6.77
Horse Beans	29.21	5.12	188.93	4.35	6.47
Field Peas	13.39	2.35	85.59	1.97	6.39
Haricot Beans	*	*	*	*	*
Chick Peas	19.26	3.38	156.72	3.61	8.14
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	60.84	10.66	295.94	6.82	4.86
Neug	49.47	8.67	247.62	5.70	5.01
Linseed	5.50	.96	16.03	.37	2.91
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	570.56	100.00	4,341.70	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 6.2 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

South Gonder

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	316.39	76.65	2,038.06	80.72	6.44
Teff	112.29	27.21	654.33	25.92	5.83
Barley	54.00	13.08	288.90	11.44	5.35
Wheat	39.14	9.48	245.67	9.73	6.28
Maize	40.00	9.69	363.39	14.39	9.08
Sorghum	27.77	6.73	140.79	5.58	5.07
Millet	42.91	10.40	341.85	13.54	7.97
Oats	*	*	*	*	*
Pulses	61.32	14.86	374.83	14.85	6.11
Horse Beans	23.48	5.69	134.75	5.34	5.74
Field Peas	11.21	2.72	64.67	2.56	5.77
Haricot Beans	*	*	*	*	*
Chick Peas	15.24	3.69	139.05	5.51	9.12
Lentils	5.50	1.33	18.36	.73	3.34
Vetch	.83	.20	6.56	.26	7.90
Others	35.04	8.49	111.87	4.43	3.19
Neug	26.39	6.39	80.16	3.17	3.04
Linseed	5.91	1.43	11.57	.46	1.96
Rapeseed	1.39	.34	3.54	.14	2.55
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	412.75	100.00	2,524.77	100.00	

Table 6.3 North Wolo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	185.37	76.00	1,895.87	77.76	10.23
Teff	56.26	23.06	466.98	19.15	8.30
Barley	35.52	14.56	302.96	12.43	8.53
Wheat	36.06	14.78	386.42	15.85	10.72
Maize	9.60	3.94	152.81	6.27	15.92
Sorghum	45.27	18.56	561.00	23.01	12.39
Millet	*	*	*	*	*
Oats	2.17	.89	21.23	.87	9.78
Pulses	53.52	21.94	518.42	21.26	9.69
Horse Beans	15.77	6.47	159.66	6.55	10.12
Field Peas	10.87	4.46	80.08	3.28	7.37
Haricot Beans	*	*	*	*	*
Chick Peas	8.89	3.64	120.74	4.95	13.58
Lentils	11.99	4.92	74.65	3.06	6.23
Vetch	5.90	2.42	*	*	*
Others	5.03	2.06	23.70	.97	4.71
Neug	*	*	*	*	*
Linseed	2.64	1.08	6.57	.27	2.49
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	1.29	.53	10.78	.44	8.36
All Crops	243.92	100.00	2,437.99	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 6.4 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

South Wolo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	279.97	72.68	3,037.66	74.99	10.85
Teff	77.15	20.03	834.31	20.60	10.81
Barley	27.14	7.05	234.11	5.78	8.63
Wheat	48.45	12.58	517.81	12.78	10.69
Maize	16.13	4.19	146.01	3.60	9.05
Sorghum	91.75	23.82	1,091.41	26.94	11.90
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	96.08	24.94	950.00	23.45	9.89
Horse Beans	35.53	9.22	412.51	10.18	11.61
Field Peas	16.48	4.28	78.60	1.94	4.77
Haricot Beans	8.14	2.11	69.79	1.72	8.57
Chick Peas	9.57	2.48	105.60	2.61	11.03
Lentils	10.13	2.63	79.23	1.96	7.82
Vetch	16.22	4.21	204.26	5.04	12.59
Others	9.15	2.38	63.22	1.56	6.91
Neug	*	*	*	*	*
Linseed	2.38	.62	7.86	.19	3.30
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	385.21	100.00	4,050.88	100.00	

Table 6.5 North Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	409.98	80.86	3,346.33	82.90	8.16
Teff	207.15	40.85	1,622.64	40.20	7.83
Barley	41.23	8.13	267.69	6.63	6.49
Wheat	73.74	14.54	638.29	15.81	8.66
Maize	12.21	2.41	142.50	3.53	11.67
Sorghum	75.51	14.89	674.55	16.71	8.93
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	86.07	16.97	634.94	15.73	7.38
Horse Beans	28.39	5.60	230.78	5.72	8.13
Field Peas	8.05	1.59	40.80	1.01	5.07
Haricot Beans	2.35	.46	9.74	.24	4.14
Chick Peas	17.86	3.52	143.83	3.56	8.05
Lentils	22.28	4.39	129.35	3.20	5.81
Vetch	*	*	*	*	*
Others	11.00	2.17	55.21	1.37	5.02
Neug	1.49	.29	5.17	.13	3.47
Linseed	2.77	.55	3.42	.08	1.23
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	1.03	.20	2.07	.05	2.01
All Crops	507.05	100.00	4,036.48	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 6.6 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

East Gojam

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	411.31	79.77	5,132.56	83.02	12.48
Teff	198.09	38.42	2,250.40	36.40	11.36
Barley	51.17	9.92	416.72	6.74	8.14
Wheat	72.46	14.05	820.45	13.27	11.32
Maize	60.47	11.73	1,079.03	17.45	17.84
Sorghum	28.81	5.59	563.30	9.11	19.55
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	85.91	16.66	980.01	15.85	11.41
Horse Beans	24.76	4.80	293.60	4.75	11.86
Field Peas	16.15	3.13	170.18	2.75	10.54
Haricot Beans	*	*	*	*	*
Chick Peas	10.76	2.09	145.21	2.35	13.50
Lentils	*	*	*	*	*
Vetch	19.97	3.87	253.25	4.10	12.68
Others	18.43	3.57	69.68	1.13	3.78
Neug	14.29	2.77	46.18	.75	3.23
Linseed	2.12	.41	6.79	.11	3.20
Rapeseed	1.37	.27	13.19	.21	9.63
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	515.65	100.00	6,182.25	100.00	

Table 6.7 West Gojam

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	355.44	78.10	4,187.63	88.70	11.78
Teff	119.75	26.31	804.99	17.05	6.72
Barley	16.86	3.70	84.60	1.79	5.02
Wheat	9.06	1.99	104.26	2.21	11.51
Maize	140.79	30.93	2,660.86	56.36	18.90
Sorghum	*	*	*	*	*
Millet	56.56	12.43	414.48	8.78	7.33
Oats	*	*	*	*	*
Pulses	45.20	9.93	324.57	6.87	7.18
Horse Beans	16.59	3.65	136.43	2.89	8.22
Field Peas	17.87	3.93	123.31	2.61	6.90
Haricot Beans	9.10	2.00	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	54.50	11.97	209.12	4.43	3.84
Neug	48.08	10.56	169.69	3.59	3.53
Linseed	3.12	.69	9.30	.20	2.98
Rapeseed	3.18	.70	29.78	.63	9.36
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	-	-	-
All Crops	455.13	100.00	4,721.32	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 6.8 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Waghamera

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	67.87	72.24	405.36	69.74	5.97
Teff	17.91	19.06	105.93	18.22	5.91
Barley	13.06	13.90	84.78	14.59	6.49
Wheat	7.20	7.66	54.04	9.30	7.51
Maize	1.61	1.71	16.61	2.86	10.32
Sorghum	27.82	29.61	143.46	24.68	5.16
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	20.57	21.89	145.48	25.03	7.07
Horse Beans	8.36	8.90	72.04	12.39	8.62
Field Peas	2.92	3.11	17.51	3.01	6.00
Haricot Beans	3.92	4.17	10.43	1.79	2.66
Chick Peas	1.00	1.06	*	*	*
Lentils	4.34	4.62	36.23	6.23	8.35
Vetch	*	*	*	*	*
Others	5.51	5.86	30.41	5.23	5.52
Neug	.67	.71	*	*	*
Linseed	1.42	1.51	4.96	.85	3.49
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	1.08	1.15	11.79	2.03	10.92
Sesame	*	*	*	*	*
Fenugreek	.03	.03	-	-	-
All Crops	93.95	100.00	581.25	100.00	

Table 6.9 Awi

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	246.04	81.90	2,420.09	93.23	9.84
Teff	*	*	*	*	*
Barley	7.91	2.63	62.03	2.39	7.84
Wheat	1.84	.61	14.89	.57	8.09
Maize	40.98	13.64	651.74	25.11	15.90
Sorghum	*	*	*	*	*
Millet	39.38	13.11	355.71	13.70	9.03
Oats	-	-	-	-	-
Pulses	5.17	1.72	26.14	1.01	5.06
Horse Beans	2.61	.87	15.30	.59	5.86
Field Peas	2.55	.85	10.84	.42	4.25
Haricot Beans	-	-	-	-	-
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	49.22	16.38	149.58	5.76	3.04
Neug	45.03	14.99	138.06	5.32	3.07
Linseed	*	*	3.98	.15	*
Rapeseed	1.29	.43	4.82	.19	3.74
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	300.43	100.00	2,595.81	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 6.10 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Oromia

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	73.51	91.92	790.99	95.09	10.76
Teff	12.99	16.24	89.96	10.81	6.93
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	15.26	19.08	182.04	21.88	11.93
Sorghum	43.57	54.48	506.29	60.87	11.62
Millet	*	*	*	*	*
Oats	*	*	1.65	.20	*
Pulses	4.14	5.18	27.45	3.30	6.63
Horse Beans	.77	.96	5.49	.66	7.13
Field Peas	*	*	*	*	*
Haricot Beans	1.69	2.11	8.95	1.08	5.30
Chick Peas	*	*	*	*	*
Lentils	.55	.69	1.37	.16	2.49
Vetch	*	*	*	*	*
Others	2.33	2.91	13.36	1.61	5.73
Neug	*	*	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	1.77	2.21	11.50	1.38	6.50
Fenugreek	*	*	-	-	-
All Crops	79.97	100.00	831.81	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 7. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Oromia

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	3,398.15	83.68	43,438.61	89.54	12.78
Teff	906.91	22.33	7,924.47	16.33	8.74
Barley	404.39	9.96	4,192.36	8.64	10.37
Wheat	663.10	16.33	8,802.56	18.14	13.27
Maize	922.51	22.72	16,390.26	33.79	17.77
Sorghum	408.61	10.06	5,250.20	10.82	12.85
Millet	65.91	1.62	601.05	1.24	9.12
Oats	26.72	.66	277.72	.57	10.39
Pulses	410.20	10.10	3,874.11	7.99	9.44
Horse Beans	168.97	4.16	1,879.39	3.87	11.12
Field Peas	65.82	1.62	496.05	1.02	7.54
Haricot Beans	76.67	1.89	557.81	1.15	7.28
Chick Peas	47.92	1.18	471.07	.97	9.83
Lentils	23.16	.57	159.16	.33	6.87
Vetch	27.65	.68	310.63	.64	11.23
Others	252.34	6.21	1,200.18	2.47	4.76
Neug	124.04	3.05	438.80	.90	3.54
Linseed	89.35	2.20	482.87	1.00	5.40
Rapeseed	16.58	.41	106.60	.22	6.43
Ground Nuts	*	*	*	*	*
Sunflower	.31	.01	.92	*	2.97
Sesame	4.21	.10	24.23	.05	5.76
Fenugreek	7.11	.18	55.91	.12	7.86
All Crops	4,060.70	100.00	48,512.90	100.00	

Table 7.1 West Welega

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	260.79	86.53	3,631.87	92.47	13.93
Teff	41.30	13.70	219.57	5.59	5.32
Barley	3.30	1.09	29.15	.74	8.83
Wheat	13.76	4.57	*	*	*
Maize	115.18	38.22	2,200.90	56.04	19.11
Sorghum	53.34	17.70	703.20	17.90	13.18
Millet	33.92	11.26	294.35	7.49	8.68
Oats	-	-	-	-	-
Pulses	24.91	8.27	221.46	5.64	8.89
Horse Beans	8.49	2.82	87.56	2.23	10.31
Field Peas	2.92	.97	14.21	.36	4.87
Haricot Beans	13.35	4.43	119.15	3.03	8.93
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	*	*	*	*	*
Others	15.67	5.20	74.28	1.89	4.74
Neug	13.63	4.52	*	*	*
Linseed	*	*	*	*	*
Rapeseed	1.72	.57	11.64	.30	6.77
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	-	-	-
Fenugreek	*	*	*	*	*
All Crops	301.37	100.00	3,927.61	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 7.2 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

East Welega

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	358.30	78.26	5,483.67	92.05	15.30
Teff	132.54	28.95	1,101.19	18.48	8.31
Barley	14.41	3.15	162.11	2.72	11.25
Wheat	28.34	6.19	418.46	7.02	14.77
Maize	132.93	29.04	3,245.50	54.48	24.42
Sorghum	26.66	5.82	*	*	*
Millet	23.21	5.07	193.80	3.25	8.35
Oats	*	*	*	*	*
Pulses	24.13	5.27	208.30	3.50	8.63
Horse Beans	14.98	3.27	140.55	2.36	9.38
Field Peas	8.69	1.90	64.97	1.09	7.48
Haricot Beans	.43	.09	2.51	.04	5.84
Chick Peas	-	-	-	-	-
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	75.38	16.47	265.27	4.45	3.52
Neug	66.40	14.50	221.63	3.72	3.34
Linseed	3.46	.76	11.34	.19	3.28
Rapeseed	2.32	.51	16.32	.27	7.03
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	2.93	.64	14.97	.25	5.11
Fenugreek	*	*	*	*	*
All Crops	457.81	100.00	5,957.25	100.00	

Table 7.3 Illibabor

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	150.76	91.48	1,944.16	96.04	12.90
Teff	43.88	26.62	362.88	17.93	8.27
Barley	2.42	1.47	23.64	1.17	9.77
Wheat	2.73	1.66	18.16	.90	6.65
Maize	73.83	44.80	1,229.54	60.74	16.65
Sorghum	23.89	14.50	265.11	13.10	11.10
Millet	4.01	2.43	44.84	2.22	11.18
Oats	-	-	-	-	-
Pulses	11.03	6.69	73.38	3.62	6.65
Horse Beans	3.40	2.06	24.39	1.20	7.17
Field Peas	3.20	1.94	23.74	1.17	7.42
Haricot Beans	4.42	2.68	25.19	1.24	5.70
Chick Peas	*	*	*	*	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	3.03	1.84	6.81	.34	2.25
Neug	2.57	1.56	*	*	*
Linseed	*	*	*	*	*
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	164.81	100.00	2,024.36	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 7.4 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Jimma

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	328.51	89.90	4,033.09	94.94	12.28
Teff	114.10	31.23	703.89	16.57	6.17
Barley	18.15	4.97	164.59	3.87	9.07
Wheat	28.52	7.80	271.12	6.38	9.51
Maize	123.65	33.84	2,388.71	56.23	19.32
Sorghum	39.83	10.90	441.94	10.40	11.10
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	21.13	5.78	153.57	3.62	7.27
Horse Beans	13.27	3.63	117.16	2.76	8.83
Field Peas	4.45	1.22	21.09	.50	4.74
Haricot Beans	2.25	.62	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	15.78	4.32	*	*	*
Neug	*	*	*	*	*
Linseed	2.43	.67	5.79	.14	2.38
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	365.41	100.00	4,247.86	100.00	

Table 7.5 West Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	485.24	83.74	5,723.58	89.61	11.80
Teff	229.60	39.62	2,490.38	38.99	10.85
Barley	68.73	11.86	584.95	9.16	8.51
Wheat	104.85	18.09	1,125.72	17.63	10.74
Maize	58.73	10.13	1,138.90	17.83	19.39
Sorghum	23.04	3.98	379.69	5.94	16.48
Millet	-	-	-	-	-
Oats	*	*	*	*	*
Pulses	64.38	11.11	532.68	8.34	8.27
Horse Beans	20.73	3.58	161.43	2.53	7.79
Field Peas	*	*	23.00	.36	*
Haricot Beans	*	*	*	*	*
Chick Peas	22.37	3.86	205.56	3.22	9.19
Lentils	4.24	.73	*	*	*
Vetch	10.92	1.88	114.03	1.79	10.44
Others	29.88	5.16	130.71	2.05	4.37
Neug	*	*	39.28	.62	*
Linseed	9.54	1.65	*	*	*
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	1.31	.23	5.79	.09	4.42
All Crops	579.49	100.00	6,386.97	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 7.6 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

North Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	269.31	76.67	2,467.31	77.51	9.16
Teff	99.70	28.38	979.05	30.76	9.82
Barley	65.53	18.66	626.44	19.68	9.56
Wheat	71.65	20.40	576.49	18.11	8.05
Maize	3.64	1.04	*	*	*
Sorghum	28.00	7.97	241.57	7.59	8.63
Millet	*	*	*	*	*
Oats	.78	.22	5.04	.16	6.46
Pulses	66.23	18.86	669.30	21.03	10.11
Horse Beans	37.26	10.61	445.36	13.99	11.95
Field Peas	8.86	2.52	80.21	2.52	9.05
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	*	*	*
Lentils	6.97	1.98	39.04	1.23	5.60
Vetch	5.73	1.63	59.71	1.88	10.42
Others	15.71	4.47	46.44	1.46	2.96
Neug	8.28	2.36	30.79	.97	3.72
Linseed	6.42	1.83	11.47	.36	1.79
Rapeseed	.35	.10	2.07	.07	5.91
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	351.25	100.00	3,183.05	100.00	

Table 7.7 East Shewa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	319.84	81.39	4,483.56	85.89	14.02
Teff	110.04	28.00	1,002.99	19.21	9.11
Barley	9.23	2.35	91.44	1.75	9.91
Wheat	69.18	17.60	1,233.03	23.62	17.82
Maize	123.12	31.33	2,084.56	39.93	16.93
Sorghum	7.77	1.98	67.16	1.29	8.64
Millet	.39	.10	*	*	*
Oats	*	*	*	*	*
Pulses	70.47	17.93	721.87	13.83	10.24
Horse Beans	8.01	2.04	96.35	1.85	12.03
Field Peas	8.08	2.06	*	*	*
Haricot Beans	25.53	6.50	144.11	2.76	5.64
Chick Peas	16.61	4.23	*	*	*
Lentils	6.59	1.68	78.21	1.50	11.87
Vetch	5.65	1.44	*	*	*
Others	2.68	.68	14.91	.29	5.56
Neug	*	*	-	-	-
Linseed	.18	.05	.80	.02	4.44
Rapeseed	.66	.17	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	.44	.11	1.74	.03	3.95
Fenugreek	*	*	*	*	*
All Crops	392.98	100.00	5,220.34	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 7.8 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Arsi

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	514.27	81.27	6,310.31	87.27	12.27
Teff	70.92	11.21	426.97	5.91	6.02
Barley	125.42	19.82	1,227.09	16.97	9.78
Wheat	214.87	33.96	2,989.36	41.34	13.91
Maize	69.72	11.02	1,132.90	15.67	16.25
Sorghum	26.28	4.15	497.68	6.88	18.94
Millet	*	*	*	*	*
Oats	*	*	35.25	.49	*
Pulses	57.57	9.10	600.27	8.30	10.43
Horse Beans	40.63	6.42	499.46	6.91	12.29
Field Peas	8.93	1.41	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	-	-	-	-	-
Lentils	*	*	*	*	*
Vetch	*	*	-	-	-
Others	60.94	9.63	319.96	4.43	5.25
Neug	*	*	*	*	*
Linseed	47.52	7.51	243.92	3.37	5.13
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	632.77	100.00	7,230.53	100.00	

Table 7.9 West Harerge

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	200.12	90.79	2,751.05	92.47	13.75
Teff	11.47	5.20	94.59	3.18	8.25
Barley	4.73	2.15	49.76	1.67	10.52
Wheat	3.54	1.61	60.05	2.02	16.96
Maize	89.73	40.71	1,109.92	37.31	12.37
Sorghum	88.64	40.21	1,420.75	47.76	16.03
Millet	1.32	.60	11.45	.38	8.67
Oats	.68	.31	4.53	.15	6.66
Pulses	18.24	8.27	211.20	7.10	11.58
Horse Beans	4.62	2.10	*	*	*
Field Peas	2.18	.99	*	*	*
Haricot Beans	9.84	4.46	89.46	3.01	9.09
Chick Peas	.83	.38	*	*	*
Lentils	.77	.35	*	*	*
Vetch	-	-	-	-	-
Others	2.07	.94	12.77	.43	6.17
Neug	*	*	-	-	-
Linseed	.41	.19	*	*	*
Rapeseed	*	*	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	*	*	*	*	*
Sesame	*	*	*	*	*
Fenugreek	.64	.29	*	*	*
All Crops	220.43	100.00	2,975.02	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 7.10 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

East Harerge

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	173.18	85.62	1,744.26	85.29	10.07
Teff	5.27	2.61	49.98	2.44	9.48
Barley	4.57	2.26	46.47	2.27	10.17
Wheat	18.62	9.21	289.52	14.16	15.55
Maize	60.54	29.93	615.34	30.09	10.16
Sorghum	83.33	41.20	733.28	35.85	8.80
Millet	-	-	-	-	-
Oats	*	*	*	*	*
Pulses	18.30	9.05	210.39	10.29	11.50
Horse Beans	6.93	3.43	104.55	5.11	15.09
Field Peas	*	*	*	*	*
Haricot Beans	8.67	4.29	90.86	4.44	10.48
Chick Peas	-	-	-	-	-
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	*	*	-	-	-
All Crops	202.27	100.00	2,045.15	100.00	

Table 7.11 Bale

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	252.76	84.93	3,539.07	90.51	14.00
Teff	43.62	14.66	443.06	11.33	10.16
Barley	65.75	22.09	883.41	22.59	13.44
Wheat	102.24	34.35	1,550.39	39.65	15.16
Maize	17.77	5.97	317.54	8.12	17.87
Sorghum	7.83	2.63	137.70	3.52	17.59
Millet	-	-	-	-	-
Oats	15.56	5.23	206.97	5.29	13.30
Pulses	24.46	8.22	194.00	4.96	7.93
Horse Beans	7.70	2.59	84.36	2.16	10.96
Field Peas	7.70	2.59	*	*	*
Haricot Beans	.96	.32	7.99	.20	8.32
Chick Peas	*	*	*	*	*
Lentils	2.77	.93	16.22	.41	5.86
Vetch	*	*	*	*	*
Others	20.39	6.85	177.24	4.53	8.69
Neug	-	-	-	-	-
Linseed	18.74	6.30	164.54	4.21	8.78
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	297.61	100.00	3,910.30	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 7.12 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Borena

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	85.10	90.05	1,326.67	94.46	15.59
Teff	4.48	4.74	*	*	*
Barley	22.16	23.45	303.31	21.60	13.69
Wheat	*	*	*	*	*
Maize	53.67	56.79	887.87	63.22	16.54
Sorghum	*	*	-	-	-
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	9.36	9.90	77.68	5.53	8.30
Horse Beans	2.95	3.12	43.65	3.11	14.80
Field Peas	2.68	2.84	*	*	*
Haricot Beans	3.51	3.71	17.88	1.27	5.09
Chick Peas	*	*	*	*	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	*	*	*	*	*
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	94.50	100.00	1,404.45	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 8. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Somale

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	50.07	97.49	252.98	96.38	5.05
Teff	*	*	*	*	*
Barley	2.43	4.73	12.77	4.87	5.26
Wheat	3.55	6.91	17.39	6.63	4.90
Maize	22.02	42.87	114.34	43.56	5.19
Sorghum	21.93	42.70	107.40	40.92	4.90
Millet	-	-	-	-	-
Oats	*	*	*	*	*
Pulses	.52	1.01	5.02	1.91	9.65
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.43	.84	4.61	1.76	10.72
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	51.36	100.00	262.48	100.00	

Table 8.1 Shinele

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	.84	98.82	10.06	99.51	11.98
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	.13	15.29	2.20	21.76	16.92
Sorghum	.71	83.53	7.86	77.74	11.07
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	-	-	*	*	-
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	-	-	*	*	-
Chick Peas	-	-	*	*	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	-	-	-	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	.85	100.00	10.11	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 8.2 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Jijiga

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	49.16	97.69	241.84	96.99	4.92
Teff	*	*	*	*	*
Barley	2.43	4.83	12.77	5.12	5.26
Wheat	3.55	7.05	17.39	6.97	4.90
Maize	21.85	43.42	111.61	44.76	5.11
Sorghum	21.19	42.11	98.99	39.70	4.67
Millet	-	-	-	-	-
Oats	.09	.18	*	*	*
Pulses	.40	.79	3.01	1.21	7.53
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.31	.62	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	50.32	100.00	249.34	100.00	

Table 8.3 Moyale

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	*	*	*	*	*
Teff	-	-	-	-	-
Barley	-	-	-	-	-
Wheat	-	-	-	-	-
Maize	*	*	*	*	*
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	*	*	*	*	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 9. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Benshangul-Gumuz

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	130.08	75.69	1,572.78	88.83	12.09
Teff	17.19	10.00	103.08	5.82	6.00
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	24.53	14.27	394.72	22.29	16.09
Sorghum	62.87	36.58	792.54	44.76	12.61
Millet	22.28	12.96	252.70	14.27	11.34
Oats	*	*	*	*	*
Pulses	4.27	2.48	33.61	1.90	7.87
Horse Beans	1.02	.59	8.00	.45	7.84
Field Peas	.46	.27	3.02	.17	6.57
Haricot Beans	2.39	1.39	20.29	1.15	8.49
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	37.51	21.83	164.25	9.28	4.38
Neug	26.50	15.42	103.92	5.87	3.92
Linseed	.31	.18	.47	.03	1.52
Rapeseed	.11	.06	.41	.02	3.73
Ground Nuts	*	*	*	*	*
Sunflower	*	*	*	*	*
Sesame	7.80	4.54	37.57	2.12	4.82
Fenugreek	*	*	*	*	*
All Crops	171.86	100.00	1,770.64	100.00	

Table 9.1 Asosa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	72.90	76.67	861.19	87.96	11.81
Teff	10.33	10.86	76.85	7.85	7.44
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	10.21	10.74	168.07	17.17	16.46
Sorghum	29.18	30.69	358.32	36.60	12.28
Millet	20.12	21.16	229.69	23.46	11.42
Oats	*	*	*	*	*
Pulses	3.09	3.25	23.79	2.43	7.70
Horse Beans	.96	1.01	7.39	.75	7.70
Field Peas	.42	.44	2.85	.29	6.79
Haricot Beans	1.64	1.72	13.31	1.36	8.12
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	19.09	20.08	94.09	9.61	4.93
Neug	12.86	13.53	57.77	5.90	4.49
Linseed	*	*	*	*	*
Rapeseed	.09	.09	*	*	*
Ground Nuts	*	*	*	*	*
Sunflower	*	*	*	*	*
Sesame	4.20	4.42	19.91	2.03	4.74
Fenugreek	*	*	-	-	-
All Crops	95.08	100.00	979.07	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 9.2 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Kemeshi

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	57.19	74.48	711.59	89.90	12.44
Teff	6.16	8.02	22.43	2.83	3.64
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	14.32	18.65	226.64	28.63	15.83
Sorghum	33.69	43.87	434.22	54.86	12.89
Millet	2.16	2.81	15.20	1.92	7.04
Oats	*	*	*	*	*
Pulses	1.18	1.54	9.81	1.24	8.31
Horse Beans	*	*	*	*	*
Field Peas	*	*	*	*	*
Haricot Beans	.42	.55	4.58	.58	10.90
Chick Peas	*	*	*	*	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	18.42	23.99	70.16	8.86	3.81
Neug	13.64	17.76	46.14	5.83	3.38
Linseed	.16	.21	*	*	*
Rapeseed	*	*	*	*	*
Ground Nuts	.95	1.24	5.42	.68	5.71
Sunflower	*	*	*	*	*
Sesame	3.59	4.68	17.66	2.23	4.92
Fenugreek	.01	.01	.06	.01	6.00
All Crops	76.79	100.00	791.57	100.00	

Table 9.3 Metekel

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	72.90	76.67	861.19	87.96	11.81
Teff	10.33	10.86	76.85	7.85	7.44
Barley	*	*	*	*	*
Wheat	*	*	*	*	*
Maize	10.21	10.74	168.07	17.17	16.46
Sorghum	29.18	30.69	358.32	36.60	12.28
Millet	20.12	21.16	229.69	23.46	11.42
Oats	*	*	*	*	*
Pulses	3.09	3.25	23.79	2.43	7.70
Horse Beans	.96	1.01	7.39	.75	7.70
Field Peas	.42	.44	2.85	.29	6.79
Haricot Beans	1.64	1.72	13.31	1.36	8.12
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	19.09	20.08	94.09	9.61	4.93
Neug	12.86	13.53	57.77	5.90	4.49
Linseed	*	*	*	*	*
Rapeseed	.09	.09	*	*	*
Ground Nuts	*	*	*	*	*
Sunflower	*	*	*	*	*
Sesame	4.20	4.42	19.91	2.03	4.74
Fenugreek	*	*	-	-	-
All Crops	95.08	100.00	979.07	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

(S.N.N.P.R)

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	897.20	84.28	9,331.44	89.25	10.40
Teff	177.19	16.64	1,085.64	10.38	6.13
Barley	76.84	7.22	828.10	7.92	10.78
Wheat	112.95	10.61	1,198.66	11.46	10.61
Maize	357.03	33.54	4,880.99	46.69	13.67
Sorghum	160.21	15.05	1,275.40	12.20	7.96
Millet	*	*	62.26	.60	*
Oats	.05	*	.38	*	7.60
Pulses	162.05	15.22	1,112.33	10.64	6.86
Horse Beans	56.58	5.31	480.85	4.60	8.50
Field Peas	38.29	3.60	261.69	2.50	6.83
Haricot Beans	62.44	5.87	329.22	3.15	5.27
Chick Peas	3.01	.28	*	*	*
Lentils	.57	.05	1.15	.01	2.02
Vetch	*	*	*	*	*
Others	5.35	.50	11.36	.11	2.12
Neug	*	*	*	*	*
Linseed	1.77	.17	4.98	.05	2.81
Rapeseed	1.86	.17	1.22	.01	.66
Ground Nuts	*	*	*	*	*
Sunflower	.36	.03	1.66	.02	4.61
Sesame	*	*	*	*	*
Fenugreek	*	*	*	*	*
All Crops	1,064.59	100.00	10,455.13	100.00	

Table 10.1 Gurage

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	149.72	86.78	1,760.53	88.27	11.76
Teff	38.41	22.26	*	*	*
Barley	24.45	14.17	332.67	16.68	13.61
Wheat	19.77	11.46	209.81	10.52	10.61
Maize	48.57	28.15	764.25	38.32	15.74
Sorghum	18.44	10.69	218.22	10.94	11.83
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	21.44	12.43	231.11	11.59	10.78
Horse Beans	8.47	4.91	101.50	5.09	11.98
Field Peas	*	*	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	*	*	*
Lentils	-	-	-	-	-
Vetch	*	*	*	*	*
Others	1.38	.80	2.89	.14	2.09
Neug	*	*	*	*	*
Linseed	*	*	*	*	*
Rapeseed	.26	.15	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	*	*	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	-	-	-
All Crops	172.53	100.00	1,994.54	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10.2 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Hadiya

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	114.88	92.20	1,319.79	93.96	11.49
Teff	24.00	19.26	173.78	12.37	7.24
Barley	4.09	3.28	37.23	2.65	9.10
Wheat	45.41	36.44	576.01	41.01	12.68
Maize	29.96	24.04	425.52	30.30	14.20
Sorghum	11.13	8.93	104.45	7.44	9.38
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	9.05	7.26	83.87	5.97	9.27
Horse Beans	5.45	4.37	55.09	3.92	10.11
Field Peas	2.47	1.98	20.36	1.45	8.24
Haricot Beans	.99	.79	8.35	.59	8.43
Chick Peas	-	-	-	-	-
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.67	.54	.91	.06	1.36
Neug	-	-	-	-	-
Linseed	.44	.35	.79	.06	1.80
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	124.60	100.00	1,404.57	100.00	

Table 10.3 Kembata Alaba Tembaro

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	78.34	92.84	939.82	95.72	12.00
Teff	13.73	16.27	79.20	8.07	5.77
Barley	1.80	2.13	16.03	1.63	8.91
Wheat	18.70	22.16	213.67	21.76	11.43
Maize	35.41	41.96	551.00	56.12	15.56
Sorghum	6.49	7.69	63.80	6.50	9.83
Millet	2.20	2.61	16.02	1.63	7.28
Oats	*	*	*	*	*
Pulses	5.47	6.48	40.83	4.16	7.46
Horse Beans	3.16	3.74	*	*	*
Field Peas	.45	.53	2.40	.24	5.33
Haricot Beans	1.71	2.03	8.79	.90	5.14
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.57	.68	1.21	.12	2.12
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	.32	.38	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	84.38	100.00	981.86	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10.4 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Sidama

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	64.58	75.32	737.19	89.03	11.42
Teff	1.80	2.10	*	*	*
Barley	9.17	10.70	*	*	*
Wheat	*	*	-	-	-
Maize	46.58	54.33	609.64	73.62	13.09
Sorghum	1.13	1.32	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	20.28	23.65	90.88	10.97	4.48
Horse Beans	*	*	*	*	*
Field Peas	*	*	*	*	*
Haricot Beans	13.18	15.37	*	*	*
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	-	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	*	*	-	-	-
Ground Nuts	*	*	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	85.74	100.00	828.07	100.00	

Table 10.5 Gedio

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	13.93	77.47	197.73	85.68	14.19
Teff	*	*	*	*	*
Barley	*	*	*	*	*
Wheat	*	*	11.66	5.05	*
Maize	9.01	50.11	144.07	62.43	15.99
Sorghum	.14	.78	.44	.19	3.14
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	3.93	21.86	33.05	14.32	8.41
Horse Beans	2.59	14.40	24.32	10.54	9.39
Field Peas	*	*	6.81	2.95	*
Haricot Beans	*	*	*	*	*
Chick Peas	-	-	-	-	-
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	*	*	-	-	-
Neug	-	-	-	-	-
Linseed	.01	.06	-	-	-
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	17.98	100.00	230.78	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10.6 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

North Omo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	248.65	82.94	2,452.18	88.95	9.86
Teff	61.05	20.36	340.13	12.34	5.57
Barley	18.49	6.17	*	*	*
Wheat	10.70	3.57	88.29	3.20	8.25
Maize	121.73	40.61	1,537.85	55.78	12.63
Sorghum	35.93	11.99	337.11	12.23	9.38
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	50.21	16.75	301.50	10.94	6.00
Horse Beans	12.98	4.33	*	*	*
Field Peas	11.09	3.70	59.36	2.15	5.35
Haricot Beans	24.52	8.18	123.93	4.50	5.05
Chick Peas	*	*	*	*	*
Lentils	*	*	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	-	-	-
All Crops	299.79	100.00	2,756.81	100.00	

Table 10.7 South Omo

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	85.06	86.67	513.25	86.56	6.03
Teff	7.93	8.08	69.15	11.66	8.72
Barley	3.20	3.26	26.69	4.50	8.34
Wheat	*	*	*	*	*
Maize	18.04	18.38	175.47	29.59	9.73
Sorghum	45.07	45.92	189.54	31.97	4.21
Millet	*	*	*	*	*
Oats	-	-	-	-	-
Pulses	12.59	12.83	77.02	12.99	6.12
Horse Beans	2.17	2.21	20.52	3.46	9.46
Field Peas	*	*	*	*	*
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	.50	.51	2.64	.45	5.28
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	.35	.36	1.64	.28	4.69
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	98.14	100.00	592.91	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10.8 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Keficho-Shekicho

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	70.28	74.13	775.78	82.22	11.04
Teff	16.26	17.15	106.42	11.28	6.54
Barley	7.66	8.08	76.29	8.09	9.96
Wheat	4.94	5.21	40.48	4.29	8.19
Maize	24.86	26.22	353.01	37.41	14.20
Sorghum	16.04	16.92	191.88	20.34	11.96
Millet	*	*	*	*	*
Oats	*	*	*	*	*
Pulses	24.44	25.78	167.73	17.78	6.86
Horse Beans	12.07	12.73	95.11	10.08	7.88
Field Peas	10.34	10.91	62.30	6.60	6.03
Haricot Beans	2.00	2.11	10.27	1.09	5.14
Chick Peas	-	-	-	-	-
Lentils	*	*	*	*	*
Vetch	-	-	-	-	-
Others	*	*	-	-	-
Neug	-	-	-	-	-
Linseed	*	*	-	-	-
Rapeseed	*	*	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	94.81	100.00	943.51	100.00	

Table 10.9 Bench-Maji

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	22.24	85.70	347.22	93.38	15.61
Teff	3.82	14.72	*	*	*
Barley	.98	3.78	5.38	1.45	5.49
Wheat	*	*	*	*	*
Maize	13.14	50.64	251.19	67.55	19.12
Sorghum	3.97	15.30	66.83	17.97	16.83
Millet	*	*	-	-	-
Oats	-	-	-	-	-
Pulses	3.70	14.26	24.59	6.61	6.65
Horse Beans	2.16	8.32	13.98	3.76	6.47
Field Peas	*	*	*	*	*
Haricot Beans	.96	3.70	7.69	2.07	8.01
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	25.95	100.00	371.85	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10.10 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Yem Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	11.86	79.87	101.74	82.15	8.58
Teff	4.28	28.82	31.60	25.52	7.38
Barley	1.69	11.38	11.51	9.29	6.81
Wheat	3.26	21.95	27.44	22.16	8.42
Maize	2.10	14.14	27.16	21.93	12.93
Sorghum	.51	3.43	3.81	3.08	7.47
Millet	-	-	*	*	-
Oats	.02	.13	.19	.15	9.50
Pulses	2.85	19.19	21.88	17.67	7.68
Horse Beans	1.73	11.65	15.92	12.86	9.20
Field Peas	.94	6.33	5.42	4.38	5.77
Haricot Beans	*	*	*	*	*
Chick Peas	*	*	*	*	*
Lentils	.16	1.08	.41	.33	2.56
Vetch	-	-	-	-	-
Others	.13	.88	.23	.19	1.77
Neug	*	*	-	-	-
Linseed	*	*	*	*	*
Rapeseed	.03	.20	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	*	*	*	*	*
All Crops	14.85	100.00	123.84	100.00	

Table 10.11 Amaro Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	5.04	78.14	30.34	75.14	6.02
Teff	1.53	23.72	7.79	19.29	5.09
Barley	1.19	18.45	9.25	22.91	7.77
Wheat	.44	6.82	3.66	9.06	8.32
Maize	1.33	20.62	6.20	15.35	4.66
Sorghum	*	*	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.39	21.55	9.95	24.64	7.16
Horse Beans	.30	4.65	3.15	7.80	10.50
Field Peas	.63	9.77	4.10	10.15	6.51
Haricot Beans	.36	5.58	2.25	5.57	6.25
Chick Peas	*	*	*	*	*
Lentils	.07	1.09	.33	.82	4.71
Vetch	-	-	*	*	-
Others	*	*	.09	.22	*
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	*	*	*	*	*
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	-	-	-
All Crops	6.45	100.00	40.38	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10.12 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Burji Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	1.98	64.50	10.51	65.61	5.31
Teff	.61	19.87	2.53	15.79	4.15
Barley	.19	6.19	.85	5.31	4.47
Wheat	.22	7.17	1.40	8.74	6.36
Maize	.24	7.82	3.41	21.29	14.21
Sorghum	.73	23.78	2.31	14.42	3.16
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.07	34.85	5.48	34.21	5.12
Horse Beans	.01	.33	.06	.37	6.00
Field Peas	*	*	*	*	*
Haricot Beans	1.00	32.57	4.69	29.28	4.69
Chick Peas	.03	.98	*	*	*
Lentils	.01	.33	.08	.50	8.00
Vetch	-	-	-	-	-
Others	.02	.65	.03	.19	1.50
Neug	-	-	-	-	-
Linseed	-	-	*	*	-
Rapeseed	.02	.65	.02	.12	1.00
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	-	-	*	*	-
All Crops	3.07	100.00	16.02	100.00	

Table 10.13 Konso Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	18.34	81.44	52.99	76.54	2.89
Teff	2.24	9.95	3.50	5.06	1.56
Barley	.14	.62	*	*	*
Wheat	*	*	*	*	*
Maize	3.39	15.05	15.47	22.35	4.56
Sorghum	12.46	55.33	32.83	47.42	2.63
Millet	.09	.40	.67	.97	7.44
Oats	-	-	-	-	-
Pulses	4.17	18.52	16.20	23.40	3.88
Horse Beans	*	*	*	*	*
Field Peas	*	*	*	*	*
Haricot Beans	3.80	16.87	14.71	21.25	3.87
Chick Peas	*	*	*	*	*
Lentils	*	*	*	*	*
Vetch	*	*	*	*	*
Others	.01	.04	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	*	*	-
Sesame	-	-	-	-	-
Fenugreek	-	-	*	*	-
All Crops	22.52	100.00	69.23	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 10.14 Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Derashe Special Wereda

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	12.30	89.26	92.36	91.65	7.51
Teff	1.21	8.78	10.00	9.92	8.26
Barley	.50	3.63	4.23	4.20	8.46
Wheat	.30	2.18	3.73	3.70	12.43
Maize	2.68	19.45	16.75	16.62	6.25
Sorghum	7.61	55.22	57.65	57.21	7.58
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.46	10.60	8.25	8.19	5.65
Horse Beans	.07	.51	*	*	*
Field Peas	.18	1.31	1.26	1.25	7.00
Haricot Beans	.98	7.11	5.03	4.99	5.13
Chick Peas	.23	1.67	*	*	*
Lentils	-	-	*	*	-
Vetch	-	-	-	-	-
Others	*	*	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	13.78	100.00	100.77	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 11. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Gambela

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	13.92	91.76	286.78	96.39	20.60
Teff	-	-	-	-	-
Barley	*	*	*	*	*
Wheat	-	-	-	-	-
Maize	9.38	61.83	191.48	64.36	20.41
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	15.17	100.00	297.53	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 12. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Harari

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	6.62	82.96	36.46	82.88	5.51
Teff	-	-	-	-	-
Barley	*	*	*	*	*
Wheat	.30	3.76	1.91	4.34	6.37
Maize	1.12	14.04	5.55	12.62	4.96
Sorghum	5.15	64.54	28.83	65.54	5.60
Millet	-	-	-	-	-
Oats	-	-	*	*	-
Pulses	.09	1.13	.37	.84	4.11
Horse Beans	-	-	-	-	-
Field Peas	-	-	*	*	-
Haricot Beans	.07	.88	.27	.61	3.86
Chick Peas	.02	.25	*	*	*
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	1.27	15.91	7.17	16.30	5.65
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	1.24	15.54	6.90	15.69	5.56
Sunflower	-	-	-	-	-
Sesame	*	*	*	*	*
Fenugreek	-	-	-	-	-
All Crops	7.98	100.00	43.99	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 13. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Addis Ababa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	9.28	83.30	101.02	79.51	10.89
Teff	5.11	45.87	52.44	41.28	10.26
Barley	*	*	1.41	1.11	*
Wheat	3.96	35.55	46.29	36.43	11.69
Maize	.04	.36	.76	.60	19.00
Sorghum	*	*	*	*	*
Millet	-	-	-	-	-
Oats	-	-	-	-	-
Pulses	1.77	15.89	25.23	19.86	14.25
Horse Beans	*	*	*	*	*
Field Peas	.02	.18	*	*	*
Haricot Beans	-	-	*	*	-
Chick Peas	.67	6.01	9.52	7.49	14.21
Lentils	.13	1.17	1.24	.98	9.54
Vetch	.80	7.18	12.63	9.94	15.79
Others	.09	.81	.79	.62	8.78
Neug	-	-	-	-	-
Linseed	*	*	*	*	*
Rapeseed	-	-	-	-	-
Ground Nuts	-	-	-	-	-
Sunflower	-	-	-	-	-
Sesame	-	-	-	-	-
Fenugreek	.08	.72	.79	.62	9.88
All Crops	11.14	100.00	127.05	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

Table 14. Forecast of Area, Production and Yield of Major crops
for Private Peasant Holdings
2000/2001(1993 E.C.)

Dire Dawa

CROP TYPE	TOTAL AREA		TOTAL PRODUCTION		YIELD (QT/HA)
	('000 hectare)	%	('000 quintal)	%	
Cereals	7.51	92.95	82.70	95.22	11.01
Teff	-	-	-	-	-
Barley	-	-	*	*	-
Wheat	-	-	*	*	-
Maize	.42	5.20	3.73	4.29	8.88
Sorghum	7.08	87.62	78.87	90.81	11.14
Millet	-	-	-	-	-
Oats	-	-	*	*	-
Pulses	.52	6.44	3.79	4.36	7.29
Horse Beans	-	-	-	-	-
Field Peas	-	-	-	-	-
Haricot Beans	.52	6.44	3.79	4.36	7.29
Chick Peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Others	.05	.62	*	*	*
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Rapeseed	-	-	-	-	-
Ground Nuts	*	*	*	*	*
Sunflower	-	-	-	-	-
Sesame	.02	.25	*	*	*
Fenugreek	-	-	*	*	-
All Crops	8.08	100.00	86.85	100.00	

* These estimates could not be reported in this table because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total estimates.

APPENDIX I

ESTIMATION PROCEDURES OF TOTAL,
RATIO AND SAMPLING ERRORS

APPENDIX I

ESTIMATION PROCEDURES OF TOTAL, RATIO AND SAMPLING ERRORS

Estimator of Total

The estimate of stratum total \hat{Y}_h is given by:

$$\hat{Y}_h = \sum_i^{n_h} \left[\frac{M_h}{n_h M_{hi}} \frac{H_{hi}}{h_{hi}} \sum_j^{h_{hi}} y_{hij} \right] \quad (1)$$

Where:

N_h = total number of EAs in stratum h

n_h = number of sample EAs in stratum h

M_{hi} = total number of households of EA i in stratum h
obtained from the 1994 census map work

M_h = $\sum_i^{N_h} M_{hi}$, total number of households of stratum h

H_{hi} = total number of agricultural households listed during the survey for EA i in stratum h

h_{hi} = number of agricultural households and successfully covered

y_{hij} = the observed value of the variable y for agricultural households j, of EA i in stratum h

Estimator of Variance for Total

The variance of stratum total estimate \hat{Y}_h is:

$$v(\hat{Y}_h) = \frac{n_h}{n_h - 1} \left[\sum (\hat{Y}_{hi} - \frac{\hat{Y}_h}{n_h})^2 \right] \quad (2)$$

Where:

\hat{Y}_{hi} = estimated total for EA i in stratum h

\hat{Y}_h = estimated total for stratum h

Coefficient of variation of total

The coefficient of variation of total is defined as:

$$CV = \frac{\sqrt{v(\hat{Y}_h)}}{\hat{Y}_h} \times 100$$

Estimator of Ratio

The estimator of a given ratio \hat{R}_h in stratum h is the following:

$$\hat{R}_h = \frac{\hat{Y}_h}{\hat{X}_h}$$

Where:

- \hat{R}_h = estimate for the ratio of \hat{Y}_h to X_h in stratum h
- \hat{Y}_h = estimated total for variable Y in stratum h, given by formula (1)
- \hat{X}_h = estimated total for variable X in stratum h, given by formula (2)

Estimator of variance for ratio

The variance of a ratio is given by

$$v(\hat{R}_h) = \frac{1}{\hat{X}_h^2} [v(\hat{Y}_h) + \hat{R}_h^2 v(\hat{X}_h) - 2 \hat{R}_h \text{cov}(\hat{X}_h, \hat{Y}_h)] \quad (3)$$

Coefficient of variation of ratio

The coefficient of variation of ratio is defined as:

$$cv = \frac{\sqrt{v(\hat{R}_h)}}{\hat{R}_h} \times 100$$

Confidence Interval for Total

The confidence interval (CI) for a total is:

$$CI_{(1-\alpha)} = \hat{Y} \pm t_{(1-\alpha)} \hat{SE}$$

Where:

\hat{Y} = estimate of a population total.

level $t_{(1-\alpha)}$ = level of probability under the normal distribution, with the acceptable of error.

$\hat{SE} = \sqrt{v(\hat{Y})}$ = standard error of a total.

APPENDIX II

STANDARD ERROR AND COEFFICIENT
OF VARIATION FOR AREA AND
PRODUCTION FORECAST

APPENDIX II STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF AREA AND PRODUCTION, OF MAJOR CROPS, ETHIOPIA
2000/01 (1993 E.C.)

NATIONAL

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	7855.73	268.79	3.42	88108.15	3306.48	3.75
TEFF	2316.88	162.32	7.01	19187.90	1521.98	7.93
BARELY	837.30	58.50	6.99	7583.55	588.63	7.76
WHEAT	1173.16	88.00	7.50	13689.58	1224.69	33.25
MAIZE	1784.45	79.01	4.43	28858.84	1716.17	5.95
SORGHUM	1339.96	80.96	6.04	15232.50	989.63	6.50
MILLET	359.44	34.42	9.58	3042.84	299.62	9.85
OATS	44.54	10.43	23.42	512.94	33.33	38.09
PULSES	1164.39	10067.85	4.86	10067.85	580.47	5.77
HORSEBEANS	430.84	4285.28	6.01	4285.28	298.27	6.96
FIELDPEAS	211.22	1491.96	8.01	1491.96	145.22	9.73
HARICOTBEANS	191.42	18.36	9.59	1218.43	129.71	10.65
CHICKPEAS	150.92	19.24	12.75	1461.54	205.79	14.08
LENTILS	87.21	10.28	11.78	539.87	79.65	14.75
VECTH	92.78	13.27	14.30	1070.78	177.81	16.61
OTHERS	581.00	40.58	6.98	2566.06	204.73	7.98
NEUG	349.95	34.08	9.74	1301.61	151.09	11.61
LINSEED	131.59	17.68	13.43	606.53	101.63	16.76
RAPESEED	27.70	4.89	17.66	170.55	34.07	19.98
GROUNDNUTS	15.66	6.72	42.93	**	**	**
SUNFLOWER	8.14	1.74	21.40	65.07	14.84	22.80
SEASAME	33.91	6.27	18.50	200.36	40.19	20.06
FENUGREEK	14.05	2.40	17.08	97.47	23.25	23.86
ALL CROPS	9601.12	317.24	3.30	100742.06	3656.00	3.63

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

TIGRAY

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	529.17	37.19	7.03	5887.37	517.07	8.78
TEFF	144.71	15.25	10.54	1324.72	182.30	13.76
BARELY	67.24	7.75	11.53	592.23	77.03	13.01
WHEAT	70.83	9.55	13.48	633.87	84.52	13.33
MAIZE	57.34	7.53	13.13	975.11	135.75	13.92
SORGHUM	123.59	19.21	15.54	1737.36	294.07	16.93
MILLET	65.36	11.08	16.96	623.60	113.16	18.15
OATS	**	**	**	**	**	**
PULSES	56.24	6.04	10.74	552.09	67.43	12.21
HORSEBEANS	18.64	3.25	17.41	265.85	59.58	22.41
FIELDPEAS	6.74	2.00	29.67	57.71	24.34	42.18
HARICOTBEANS	**	**	**	**	**	**
CHICKPEAS	13.57	2.85	20.99	105.78	21.29	20.12
LENTILS	6.17	1.66	27.00	23.70	6.37	26.88
VECTH	8.94	2.05	23.00	83.00	21.15	25.48
OTHERS	30.46	5.91	19.40	140.05	33.47	23.90
NEUG	9.85	2.75	27.91	40.82	14.64	35.87
LINSEED	12.23	2.39	19.52	45.66	8.55	18.72
RAPESEED	**	**	**	**	**	**
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	**	**	**	**	**	**
SEASAME	**	**	**	**	**	**
FENUGREEK	**	**	**	**	**	**
ALL CROPS	615.87	37.99	6.17	6579.51	513.20	7.80

Abbreviations

S.E. = Standard Error

C.V. = Coefficient of Variation

- = Insignificant or not available

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 1997/98(1991 E.C.)
2000/01 (1993 E.C.)

AFAR

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	27.10	6.45	23.79	284.77	70.79	24.86
TEFF	**	**	**	**	**	**
BARELY	**	**	**	**	**	**
WHEAT	0.49	0.37	76.38	2.91	2.43	83.39
MAIZE	6.37	1.42	22.25	85.90	27.21	31.67
SORGHUM	11.40	3.93	34.52	153.09	58.22	38.03
MILLET	.	.	.	.	.	.
OATS	.	.	.	.	.	.
PULSES	1.66	0.61	36.67	11.80	4.80	40.70
HORSEBEANS	**	**	**	**	**	**
FIELDPEAS	**	**	**	**	**	**
HARICOTBEANS	**	**	**	**	**	**
CHICKPEAS	1.16	0.52	44.91	8.46	4.24	50.14
LENTILS	**	**	**	**	**	**
VECTH	.	.	.	.	.	.
OTHERS	0.99	0.33	33.13	5.19	1.90	36.70
NEUG	**	**	**	**	**	**
LINSEED	**	**	**	**	**	**
RAPESEED	.	.	.	.	.	.
GROUNDNUTS	.	.	.	2.28	1.28	55.96
SUNFLOWER	0.55	0.25	44.78	2.72	1.17	42.91
SEASAME	0.39	0.16	40.44	**	**	**
FENUGREEK	**	**	**	**	**	**
ALL CROPS	29.74	7.10	23.86	301.75	74.17	24.58

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

AMHARA

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	2786.62	162.94	5.85	26833.25	1744.20	6.50
TEFF	1057.20	132.66	12.55	8656.72	1216.19	14.05
BARELY	284.60	26.42	9.28	1940.52	197.56	10.18
WHEAT	316.08	34.75	10.99	2970.35	383.17	12.90
MAIZE	383.68	31.38	8.18	5816.01	667.05	11.47
SORGHUM	534.80	60.22	11.26	5715.29	732.95	12.82
MILLET	192.72	26.22	13.61	1501.37	226.02	15.05
OATS	17.54	8.58	48.91	**	**	**
PULSES	526.94	34.90	6.62	4448.92	364.30	8.19
HORSEBEANS	185.48	15.34	8.27	1649.49	149.86	9.09
FIELDPEAS	99.87	11.46	11.48	673.19	93.45	13.88
HARICOTBEANS	46.19	9.76	21.14	282.91	77.05	27.23
CHICKPEAS	84.18	12.48	14.82	836.05	142.43	17.04
LENTILS	57.00	8.67	15.21	353.82	63.50	17.95
VECTH	54.22	11.01	20.31	653.46	155.10	23.73
OTHERS	251.07	24.54	9.77	1022.08	119.08	11.65
NEUG	188.67	24.06	12.75	716.56	115.02	16.05
LINSEED	27.83	3.63	13.06	71.79	9.94	13.84
RAPESEED	9.10	1.65	18.15	61.75	13.30	21.54
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	6.79	1.68	24.77	59.27	14.45	24.38
SEASAME	12.19	3.51	28.83	72.75	24.42	33.64
FENUGREEK	6.33	1.65	25.99	39.37	14.57	37.02
ALL CROPS	3564.63	180.35	5.06	32304.24	1891.27	5.85

Abbreviations

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STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

OROMIYA

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	3398.15	132.45	3.90	43438.61	2024.21	4.66
TEFF	906.91	71.60	7.89	7924.47	759.01	9.58
BARELY	404.39	46.64	11.53	4192.36	492.12	11.74
WHEAT	663.10	74.40	11.22	8802.56	1094.25	12.43
MAIZE	922.51	55.21	5.98	16390.26	1373.13	8.38
SORGHUM	408.61	35.52	8.69	5250.20	492.97	9.39
MILLET	65.91	12.52	19.00	601.05	106.48	17.72
OATS	26.72	5.81	21.74	277.72	64.90	23.37
PULSES	410.20	32.15	7.84	3874.11	364.67	9.41
HORSEBEANS	168.97	16.28	9.64	1879.39	221.29	11.77
FIELDPEAS	65.82	8.36	12.70	496.05	83.12	16.76
HARICOTBEANS	76.67	11.60	15.12	557.81	82.14	14.73
CHICKPEAS	47.92	13.70	28.59	471.07	140.44	29.81
LENTILS	23.16	4.46	19.27	159.16	44.41	27.90
VECTH	27.65	6.56	23.71	310.63	77.89	25.08
OTHERS	252.34	27.91	11.06	1200.18	147.89	12.32
NEUG	124.04	21.12	17.03	438.80	85.57	19.50
LINSEED	89.35	16.71	18.71	482.87	98.71	20.44
RAPESEED	16.58	4.52	27.27	106.60	31.01	29.09
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	0.31	0.12	40.37	0.92	0.36	38.88
SEASAME	4.21	1.39	32.95	24.23	8.14	33.59
FENUGREEK	7.11	1.70	23.94	55.91	17.94	32.08
ALL CROPS	4060.70	161.25	3.97	48512.90	2222.50	4.58

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

SOMALE

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	50.07	11.37	22.71	252.98	58.37	23.07
TEFF	**	**	**	**	**	**
BARELY	2.43	1.04	42.52	12.77	4.54	35.53
WHEAT	3.55	1.18	33.10	17.39	5.90	33.94
MAIZE	22.02	6.33	28.76	114.34	39.31	34.38
SORGHUM	21.93	6.77	30.86	107.40	32.30	30.07
MILLET	.	.	.	.	.	.
OATS	**	**	**	**	**	**
PULSES	0.52	0.18	34.24	5.02	2.05	40.76
HORSEBEANS	.	.	.	.	.	.
FIELDPEAS	.	.	.	.	.	.
HARICOTBEANS	0.43	0.17	39.62	4.61	2.04	44.17
CHICKPEAS	**	**	**	**	**	**
LENTILS	**	**	**	**	**	**
VECTH	.	.	.	.	.	.
OTHERS	**	**	**	**	**	**
NEUG	.	.	.	.	.	.
LINSEED	**	**	**	**	**	**
RAPESEED	.	.	.	.	.	.
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	.	.	.	.	.	.
SEASAME
FENUGREEK	**	**	**	**	**	**
ALL CROPS	51.36	11.57	22.54	262.48	60.00	22.86

Abbreviations

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STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01(1993 E.C.)

BENSHANGUL GUMUZ

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	130.08	13.22	10.16	1572.78	180.52	11.48
TEFF	17.19	4.70	27.31	103.08	38.92	37.75
BARELY	**	**	**	**	**	**
WHEAT	**	**	**	**	**	**
MAIZE	24.53	2.81	11.44	394.72	51.20	12.97
SORGHUM	62.87	7.49	11.91	792.54	100.46	12.68
MILLET	22.28	6.65	29.82	252.70	81.57	32.28
OATS	**	**	**	**	**	**
PULSES	4.27	0.97	22.80	33.51	8.26	24.59
HORSEBEANS	1.02	0.46	44.89	8.00	3.52	43.98
FIELDPEAS	0.46	0.21	46.74	3.02	1.48	48.89
HARICOTBEANS	2.39	0.74	31.09	20.29	7.04	34.70
CHICKPEAS	**	**	**	**	**	**
LENTILS	**	**	**	**	**	**
VECTH	-	-	-	-	-	-
OTHERS	37.51	6.38	17.00	164.25	33.62	20.47
NEUG	26.50	6.23	23.52	103.92	28.25	27.19
LINSEED	0.31	0.10	31.57	0.47	0.22	47.90
RAPESEED	0.11	0.05	41.20	0.41	0.20	48.24
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	**	**	**	**	**	**
SEASAME	7.80	1.53	19.64	37.57	9.43	25.11
FENUGREEK	**	**	**	**	**	**
ALL CROPS	171.86	18.09	10.53	1770.64	202.66	11.45

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

S.N.N.P.R

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	897.20	71.37	7.95	9331.44	737.24	7.90
TEFF	177.19	25.41	14.34	1085.64	170.87	15.74
BARELY	76.84	13.58	17.67	828.10	181.21	21.88
WHEAT	112.95	15.18	13.44	1198.66	169.28	14.12
MAIZE	357.03	32.92	9.22	4880.99	489.75	10.03
SORGHUM	160.21	26.23	16.38	1275.40	154.11	12.08
MILLET	**	**	**	62.26	30.12	48.38
OATS	0.05	0.02	41.24	0.38	0.14	36.56
PULSES	162.05	17.78	10.97	1112.33	142.69	12.83
HORSEBEANS	56.58	8.80	15.55	480.85	79.48	16.53
FIELDPEAS	38.29	7.85	20.51	261.69	63.02	24.08
HARICOTBEANS	62.44	9.89	15.84	329.22	60.45	18.36
CHICKPEAS	3.01	1.31	43.69	28.37	15.78	55.64
LENTILS	0.57	0.12	22.05	1.15	0.22	19.30
VECTH	**	**	**	**	**	**
OTHERS	5.35	1.07	19.98	11.36	2.88	25.36
NEUG	**	**	**	**	**	**
LINSEED	1.77	0.71	40.37	4.98	2.36	47.26
RAPESEED	1.86	0.51	27.57	1.22	0.45	37.05
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	0.36	0.12	31.67	1.66	0.55	32.96
SEASAME	**	**	**	**	**	**
FENUGREEK	**	**	**	**	**	**
ALL CROPS	1064.59	83.69	7.86	10455.13	823.07	7.87

Abbreviations

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STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

GAMBELA

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	13.92	3.91	28.12	286.78	87.45	30.49
TEFF	-	-	-	-	-	-
BARELY	**	**	**	**	**	**
WHEAT	-	-	-	-	-	-
MAIZE	9.38	2.73	29.14	191.48	54.59	28.51
SORGHUM	**	**	**	**	**	**
MILLET	**	**	**	**	**	**
OATS	-	-	-	-	-	-
PULSES	**	**	**	**	**	**
HORSEBEANS	-	-	-	-	-	-
FIELDPEAS	-	-	-	-	-	-
HARICOTBEANS	**	**	**	**	**	**
CHICKPEAS	-	-	-	-	-	-
LENTILS	-	-	-	-	-	-
VECTH	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**
NEUG	-	-	-	-	-	-
LINSEED	-	-	-	-	-	-
RAPESEED	**	**	**	**	**	**
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	-	-	-	-	-	-
SEASAME	**	**	**	**	**	**
FENUGREEK	-	-	-	-	-	-
ALL CROPS	15.17	4.05	26.69	297.53	87.80	29.51

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

HARARI

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	6.62	0.50	7.48	36.46	2.94	8.08
TEFF	-	-	-	-	-	-
BARELY	**	**	**	**	**	**
WHEAT	0.30	0.09	30.35	1.91	0.69	35.95
MAIZE	1.12	0.12	11.01	5.55	1.05	18.88
SORGHUM	5.15	0.47	9.16	28.83	2.52	8.73
MILLET	-	-	-	-	-	-
OATS	-	-	-	-	-	-
PULSES	0.09	0.03	28.87	0.37	0.12	33.95
HORSEBEANS	-	-	-	-	-	-
FIELDPEAS	-	-	-	-	-	-
HARICOTBEANS	0.07	0.02	27.44	0.27	0.09	34.29
CHICKPEAS	0.02	0.01	49.23	**	**	**
LENTILS	-	-	-	-	-	-
VECTH	-	-	-	-	-	-
OTHERS	1.27	0.35	27.79	7.17	2.10	29.25
NEUG	-	-	-	-	-	-
LINSEED	-	-	-	-	-	-
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	1.24	0.34	27.30	6.90	1.99	28.77
SUNFLOWER	-	-	-	-	-	-
SEASAME	**	**	**	**	**	**
FENUGREEK	-	-	-	-	-	-
ALL CROPS	7.98	0.72	9.03	43.99	4.07	9.25

Abbreviations

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STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

ADDIS ABABA

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	9.28	1.91	20.62	101.02	16.31	16.15
TEFF	5.11	1.13	22.17	52.44	9.46	18.05
BARELY	**	**	**	1.41	0.64	45.10
WHEAT	3.96	0.85	21.49	46.29	8.92	19.28
MAIZE	0.04	0.01	34.99	0.76	0.32	42.65
SORGHUM	**	**	**	**	**	**
MILLET	-	-	-	-	-	-
OATS	-	-	-	-	-	-
PULSES	1.77	0.35	19.98	25.23	4.88	19.34
HORSEBEANS	**	**	**	**	**	**
FIELDPEAS	0.02	0.01	44.70	0.12	0.07	58.76
HARICOTBEANS	-	-	-	-	-	-
CHICKPEAS	0.67	0.16	23.46	9.52	2.33	24.26
LENTILS	0.13	0.03	21.31	1.24	0.30	24.41
VECTH	0.80	0.22	27.06	12.63	3.12	24.66
OTHERS	0.09	0.02	24.08	0.79	0.19	23.39
NEUG	-	-	-	-	-	-
LINSEED	**	**	**	**	**	**
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	-	-	-	-	-	-
SUNFLOWER	-	-	-	-	-	-
SEASAME	-	-	-	-	-	-
FENUGREEK	0.08	0.02	26.29	0.79	0.19	23.57
ALL CROPS	11.14	2.13	19.13	127.05	19.56	15.40

STANDARD ERROR AND COEFFICIENT OF VARIATION FOR FORECAST OF
AREA AND PRODUCTION, OF MAJOR CROPS, 2000/01 (1993 E.C.)

DIRE DAWA

TYPE OF CROP	AREA (000' HA)	S.E. (000' HA)	C.V. (%)	PRODUCTION (000' QT)	S.E. (000' QT)	C.V. (%)
CEREALS	7.51	0.74	9.90	82.70	8.06	9.75
TEFF	-	-	-	-	-	-
BARELY	-	-	-	-	-	-
WHEAT	-	-	-	-	-	-
MAIZE	0.42	0.07	17.73	3.73	0.73	19.43
SORGHUM	7.08	0.74	10.39	78.87	7.99	10.13
MILLET	-	-	-	-	-	-
OATS	-	-	-	-	-	-
PULSES	0.52	0.12	23.04	3.79	1.21	31.99
HORSEBEANS	-	-	-	-	-	-
FIELDPEAS	-	-	-	-	-	-
HARICOTBEANS	0.52	0.12	23.04	3.79	1.21	31.99
CHICKPEAS	-	-	-	-	-	-
LENTILS	-	-	-	-	-	-
VECTH	-	-	-	-	-	-
OTHERS	0.05	0.02	42.13	**	**	**
NEUG	-	-	-	-	-	-
LINSEED	-	-	-	-	-	-
RAPESEED	-	-	-	-	-	-
GROUNDNUTS	**	**	**	**	**	**
SUNFLOWER	-	-	-	-	-	-
SEASAME	0.02	0.01	49.33	**	**	**
FENUGREEK	-	-	-	-	-	-
ALL CROPS	8.08	0.81	9.97	86.85	8.62	9.93

Abbreviations

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APPENDIX III

NUMBER OF FIELDS MEASURED UNDER
MAJOR CROPS

APPENDIX III. THE 1992 E.C. (1999/2000) CROP PRODUCTION FORECAST SURVEY NUMBER OF EAs
 AGRICULTURAL ACTUALLY COVERED AND TOTAL NUMBER OF FIELDS MEASURED

Region	Stratum Zone/Sp. Wereda	Number of EAs	Number of Households	Number of Parcels	Number of Fields
Tigray		97	970	3,780	8,860
	West Tigray	24	240	744	1,844
	Central Tigray	23	230	988	2,504
	East Tigray	25	250	987	2,731
	South Tigray	25	250	1,061	1,789
Afar		40	400	789	1,786
	Zone 1	20	200	358	594
	Zone 3	20	200	431	1,192
	Zone 5	-	-	-	-
Amhara		282	2,817	12,732	26,419
	North Gondar	29	290	1,130	2,307
	South Gondar	29	290	1,318	2,571
	North Wollo	30	300	1,333	2,805
	South wollo	30	300	1,607	3,293
	North Shoa	30	300	1,676	3,849
	East Gojam	30	300	1,364	2,629
	West Gojam	30	300	1,434	2,703
	Wag-Hamra	24	240	1,034	1,893
	Agewawi	25	250	976	2,204
	Oromia Zone	25	247	860	2,165
	Oromia		360	3,600	12,571	34,085
West Wellega		30	300	1,255	3,665
East Wellega		30	300	1,087	3,138
Illubabor		30	300	858	2,391
Jimma		30	300	1,011	2,906
West Shoa		30	300	1,065	3,189
North Shoa		30	300	1,660	3,279
East Shoa		30	300	1,065	3,126
Arsi		30	300	1,226	3,367
West Hararghe		30	300	918	2,471
East Hararghe		30	300	923	2,105
Bale		30	300	970	2,766
Borena		30	300	533	1,682

Region	Stratum Zone/Sp. Wereda	Number of EAs	Number of Households	Number of Parcels	Number of Fields
Somalie		58	575	1,192	2,322
	Shinele	18	175	330	594
	Jijiga	20	200	469	1,074
	Moyale	20	200	393	654
Benshangul - Gumuz		75	750	2,793	5,776
	Metekel	25	250	800	1,664
	Assosa	25	250	1,306	2,493
S.N.N.P.R	Kemeshi	25	250	687	1,619
		395	3,950	9,033	36,020
	Gurage	30	300	664	3,550
	Hadiya	30	300	590	4,028
	Kembata AT	30	300	572	4,032
	Sidama	30	300	549	2,679
	Gedio	30	300	617	1,907
	North Omo	30	300	637	3,552
	South Omo	30	300	766	2,032
	Keficho-shekicho	30	300	677	2,799
	Bench-Maji	30	300	591	1,782
	Yem sp. wereda	25	250	796	2,985
	Amaro sp. wereda	25	250	534	2,106
	Burji sp. wereda	25	250	638	1,563
	Konso sp. wereda	25	250	748	1,469
	Derashe sp.	25	250	654	1,536
	Gambella	Gambella	30	300	653	1,348
Harari	Harari	30	300	1,013	1,890
Addis Ababa	Addis Ababa	25	249	1,026	2,495
Dire Dawa	Dire Dawa	30	300	855	1,489
	Grand Total	1,422	14,211	46,437	122,498

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