

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

**AGRICULTURAL SAMPLE SURVEY  
1997/98 (1990 E.C.)**

**VOLUME III**

REPORT ON  
**FARM MANAGEMENT PRACTICES**

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

**ADDIS ABABA**

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

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2

1.  $\frac{1}{2}$       2.  $\frac{1}{3}$   
 3.  $\frac{1}{4}$       4.  $\frac{1}{5}$   
 5.  $\frac{1}{6}$       6.  $\frac{1}{7}$   
 7.  $\frac{1}{8}$       8.  $\frac{1}{9}$   
 9.  $\frac{1}{10}$       10.  $\frac{1}{11}$   
 11.  $\frac{1}{12}$       12.  $\frac{1}{13}$   
 13.  $\frac{1}{14}$       14.  $\frac{1}{15}$   
 15.  $\frac{1}{16}$       16.  $\frac{1}{17}$   
 17.  $\frac{1}{18}$       18.  $\frac{1}{19}$   
 19.  $\frac{1}{20}$       20.  $\frac{1}{21}$   
 21.  $\frac{1}{22}$       22.  $\frac{1}{23}$   
 23.  $\frac{1}{24}$       24.  $\frac{1}{25}$   
 25.  $\frac{1}{26}$       26.  $\frac{1}{27}$   
 27.  $\frac{1}{28}$       28.  $\frac{1}{29}$   
 29.  $\frac{1}{30}$       30.  $\frac{1}{31}$   
 31.  $\frac{1}{32}$       32.  $\frac{1}{33}$   
 33.  $\frac{1}{34}$       34.  $\frac{1}{35}$   
 35.  $\frac{1}{36}$       36.  $\frac{1}{37}$   
 37.  $\frac{1}{38}$       38.  $\frac{1}{39}$   
 39.  $\frac{1}{40}$       40.  $\frac{1}{41}$   
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 43.  $\frac{1}{44}$       44.  $\frac{1}{45}$   
 45.  $\frac{1}{46}$       46.  $\frac{1}{47}$   
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 49.  $\frac{1}{50}$       50.  $\frac{1}{51}$   
 51.  $\frac{1}{52}$       52.  $\frac{1}{53}$   
 53.  $\frac{1}{54}$       54.  $\frac{1}{55}$   
 55.  $\frac{1}{56}$       56.  $\frac{1}{57}$   
 57.  $\frac{1}{58}$       58.  $\frac{1}{59}$   
 59.  $\frac{1}{60}$       60.  $\frac{1}{61}$   
 61.  $\frac{1}{62}$       62.  $\frac{1}{63}$   
 63.  $\frac{1}{64}$       64.  $\frac{1}{65}$   
 65.  $\frac{1}{66}$       66.  $\frac{1}{67}$   
 67.  $\frac{1}{68}$       68.  $\frac{1}{69}$   
 69.  $\frac{1}{70}$       70.  $\frac{1}{71}$   
 71.  $\frac{1}{72}$       72.  $\frac{1}{73}$   
 73.  $\frac{1}{74}$       74.  $\frac{1}{75}$   
 75.  $\frac{1}{76}$       76.  $\frac{1}{77}$   
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 81.  $\frac{1}{82}$       82.  $\frac{1}{83}$   
 83.  $\frac{1}{84}$       84.  $\frac{1}{85}$   
 85.  $\frac{1}{86}$       86.  $\frac{1}{87}$   
 87.  $\frac{1}{88}$       88.  $\frac{1}{89}$   
 89.  $\frac{1}{90}$       90.  $\frac{1}{91}$   
 91.  $\frac{1}{92}$       92.  $\frac{1}{93}$   
 93.  $\frac{1}{94}$       94.  $\frac{1}{95}$   
 95.  $\frac{1}{96}$       96.  $\frac{1}{97}$   
 97.  $\frac{1}{98}$       98.  $\frac{1}{99}$   
 99.  $\frac{1}{100}$       100.  $\frac{1}{101}$

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## **PART I**

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

#### **1. INTRODUCTION**

Agriculture contributes enormously to the Ethiopian economy. A significant amount of the Gross Domestic Product (GDP) is obtained from the agricultural sector of the economy while engaging the majority of the population. The collection of reliable, comprehensive and timely statistical information is thus essential for policy and decision making, as well as for other uses. In this regard, the Central Statistical Authority (CSA) has exerted every effort to provide policy makers and other users with reliable and timely agricultural data.

This report presents survey results on agricultural practices such as use of improved seeds, irrigation, application of pesticides and fertilizers within the private peasant sector of the economy. The report includes the objectives of this annual survey, while outlining the scope, coverage, and content of the survey; sample design; field organization; training of field staff; method of data collection; survey estimates of farm inputs applied to area as well as the quantity of inputs applied. Estimation procedures and formulations for estimates of totals and variance for the agricultural practices during the main (Meher) season are presented in Appendix I. Estimates of the standard errors with the corresponding coefficient of

variations (CVs) for farm inputs applied to area and quantity of inputs applied are presented in Appendix II and survey questionnaires in Appendix III.

## **2.OBJECTIVES OF THE SURVEY**

The general objective of CSA's Agricultural Sample Survey (AgSS) is to collect basic quantitative information on the country's agriculture that is considered essential for development planning, socio-economic policy formulation, food assistance, etc. The AgSS is composed of four components: a forecast survey of ten households, a Meher season survey of twenty-five households, a livestock survey of forty households, and a survey of the Belg season crop area and production.

In particular, the objectives of the Meher season farm management practices survey are to estimate the total farm inputs applied area and quantity of inputs applied by type for major temporary and permanent crops. This report is based on the private peasant holdings in the sedentary rural areas of the country, further divided by regions and zones.

## **PART II**

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

#### **1. SCOPE, COVERAGE AND CONTENT OF THE SURVEY.**

The 1997/98 (1990 E.C.) annual Agricultural Sample Survey used a sampling frame designed to cover the sedentary rural agricultural population in all regions of the country. Urban and nomadic areas were not included in the survey. Illustrated in Table A is a break down of the sample distribution as expressed by regions, zones and weredas. A total of 56 zones and 409 weredas were actually covered by the survey.

The lowest level sampling unit used for this survey is defined as an Enumeration Area (EA) as identified for the 1994 Population Census. For the AgSS a total of 1420 EAs were selected from all regions of the country. Due to various reasons, 71 of them were incompletely enumerated which resulted in covering 1349 EAs. From each of the selected EAs a representative sample of 40 agricultural households were selected to estimate the various agricultural population items of interest of the sampled EA.

Of these 40 agricultural households, the first 25 were used for obtaining information on area under crops, Meher and Belg season production of major crops, land utilization, agricultural practices, crop damage, and quantity of agricultural inputs used.

It is important to note that of the total 40 agricultural households sampled in the selected EAs, data on crop cutting were collected for only the 15 households (11<sup>th</sup> -25<sup>th</sup> households selected), for the area and production survey.

**Table A. Area Coverage of The 1997/98 Agricultural Sample Survey**

REGION	NUMBER OF ZONES			NUMBER OF WEREDAS	
	TOTAL	ZONES SAMPLED FOR THE SURVEY	NOT COVERED BY THE SURVEY	SAMPLED FOR THE SURVEY	ACTUAL NUMBER OF WEREDAS COVERED BY THE SURVEY
TIGRAY	4	4	-	34	31
AFAR <sup>1</sup>	5	3	2	8	7
AMHARA	11	10	1	93	92
OROMIYA	12	12	-	174	171
SOMALIE <sup>2</sup>	9	3	6	9	9
BENSHANGUL-GUMEZ	3	3	-	20	15
S.N.N.P.R.	14	14	-	74	72
GAMBELA	4	3	1	5	5
HARARI	1	1	-	1	1
ADDIS ABABA <sup>3</sup>	6	2	4	5	5
DIRE DAWA	1	1	-	1	1
TOTAL	70	56	14	424	409

**Note 1** - Afar region has a total of five zones, but only three zones have significant sedentary rural population.

**2** - Somalie region has a total of nine zones, however only three zones have significant sedentary rural population.

**3** - 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 and Nationalities Peoples' Region



## **2. CONCEPTS AND DEFINITIONS.**

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

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

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

**Holding:** a holding is all the land and/or livestock kept which is used wholly or partly for agricultural production and is operated as one legal entity by one person alone, or with others, without regard to management, organization, size or location.

**Size of holding**:- in this report the size of holding is determined by total area under all different crops such as area under temporary crops and permanent crops.

**Household**:- A household may be either;

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

b) a multi-person household, that is, a group of two or more persons who live together and make common provisions for food or other essentials of living. The persons in the group may pool their incomes and have a common budget to greater or lesser extent. They may be related or unrelated persons, or a combination of both. These persons are taken as members of the household.

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

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

**Field**: A field is defined as any plot of land which is a parcel or part of a parcel under the same or mixed crops..

**Meher (Main) Season Crop:** Any crop harvested from Meskerem (September) to Yekatit (February) is considered as a Meher season crop.

**Belg Season Crop:** Any crop harvested during the months of March (Megabit) to August (Nehase).

**Temporary Crops:** Crops which are grown under a cycle of less than one year, sometimes only a few months with an objective to be sown or replanted again for additional production following the current harvest. Continuously grown crops planted in rotation are also considered temporary crops since each is harvested and destroyed by ploughing in preparation for each successive crop.

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

### **3. SAMPLE DESIGN**

A two-stage stratified sample design is used for the 1997/98 (1990 E.C.) Annual Agricultural Sample Survey. All regions except Harari, Addis Ababa, Dire Dawa and Gambella are broken into zones and treated as strata/reporting levels for survey summarization purposes. For the four specifically mentioned regions, the reporting levels are the regions themselves. The sample design first-stage consists of primary sampling units (PSUs) in all strata which are enumeration areas (EAs). The second-stage sampling units

are agricultural households selected as the elementary level sampling units. The survey questionnaires are administered to all agricultural holders in the sampled agricultural households.

Based on cost and field enumeration considerations, a fixed number of sample EAs were allocated to each stratum/ reporting level taking into consideration the desired precision of the estimates and number of households per stratum. The overall sample number of EAs in a stratum was proportionately allocated to zones/special weredas within stratum based on their number of households. From within each Zone/Special Wereda the sample EAs were selected with probability proportional to size, size being the total number of households identified for EAs as obtained from the 1994 population census. From each sample EA, 40 agricultural households were sampled systematically without replacement from a newly enumerated list of agricultural households.

Information on farm inputs was collected from the first twenty-five selected agricultural households (1<sup>st</sup> - 25<sup>th</sup>) on separate questionnaires from each holder within these 25 sampled households.

#### **4. FIELD ORGANIZATION**

CSA Branch Statistical Office heads, field supervisors and enumerators, other support staff and drivers were all involved in the conduct of the AgSS data collection effort. To accomplish the data collection, all field enumerators were equipped with the necessary survey equipments (i.e. compass, protractor, ruler, measuring tape, balance scale, poles, ropes, sample bags,...etc.) at the completion of training. To assist with the field work and data collection activities a certain number of four-wheel drive vehicles were

put on operation used for supervision and collection of completed questionnaires.

## **5. TRAINING OF FIELD STAFF**

The field staff training program was carried out in two stages. The first-stage consisted of trainees from the head office, branch statistical office heads and some of the field supervisors being given training for one week at CSA's headquarters complex in Addis Ababa. Some of those trained in the first-stage conducted similar training for field supervisors and enumerators for 10 days in all of CSA's 15 branch offices which are distributed around the country. During this second-stage training, the field staff were given detailed class room instruction on the objectives and uses of the AgSS, concepts and definitions of terms used, the method of area measurement, method of crop cutting, as well as correct interviewing procedures,... etc. This training session also included a field practice to reinforce the concepts discussed in the classroom with regard to field measurement and crop cutting data collection.

## **6. METHOD OF DATA COLLECTION**

Data for the AgSS were recorded on questionnaires using both subjective and objective methods. Information on agricultural farm management practices (application of fertilizers, pesticides, use of improved seeds and irrigation) were collected subjectively by interviewing the holders located in each sampled household.

The objective measurement procedures for area measurements were carried out and data on farm inputs applied were collected for the first 25 selected households from each sampled EA in which all crop areas were physically measured using compass and measuring tape.

## **7. DATA PROCESSING**

### **a. EDITING, CODING AND VERIFICATION.**

To insure the quality of the collected survey data an editing, coding and verification instruction manual was prepared, and sixty-five editors, coders and verifiers were trained for two days to edit, code and verify the data using the aforementioned manual as a reference and teaching aid.

The filled in questionnaires from the field were edited, coded and later verified by supervisors on a 100% basis before the questionnaires were sent to the data processing unit for data entry. The editing, coding and verification of all questionnaires were completed in thirty eight days.

### **b. DATA ENTRY, CLEANING AND TABULATION.**

Before starting data entry professional staff of the Agricultural Statistics Department of the Central Statistical Authority prepared edit specifications for use on personal computers based on the Integrated Microcomputer Processing System (IMPS) software for data consistency checking purposes.

The edited, coded and verified data were then entered into the IMPS software on personal computers and the entry was verified on a 100% basis. The data

was then checked and cleaned using the edit specifications prepared earlier for this purpose. Thirty data encoders were involved in this total process and it took thirty-three days to complete the job. Finally, tabulation was done by personal computer to produce results as indicated in the tabulation plan.

**NOTE:**

1. If in some tables figures do not add up to total it is due to rounding.
2. Those estimates designated by "\*\*\*" in all tables could not be reported because of high coefficient of variations (i.e they less reliable). However they are consolidated in the total estimates.
3. It should also be noted that the smaller the coefficient of variation, the higher the reliability of the estimate.
4. "-" in tables represents data not reported.

1. The first part of the document is a letter from the author to the editor, dated 1964. The letter discusses the author's interest in the subject of the journal and the author's hope that the journal will be a success and that the author's work will be published in it.

2. The second part of the document is a letter from the editor to the author, dated 1964. The letter discusses the editor's interest in the subject of the journal and the editor's hope that the journal will be a success and that the author's work will be published in it.



### **Part III**

## **SUMMARY OF THE SURVEY RESULTS**

### **1. AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICES**

This part of the Agricultural Sample Survey report gives a picture of total crop area on which the private peasant holders applied agricultural inputs such as improved seeds, irrigation, pesticides and fertilizers in order to increase the volume and quality of crop production. The summary of results is presented below.

**Fertilizer:-** refers to anything that is added to the soil and intended to increase the amount of plant nutrients available for crop growth. In this survey two types of fertilizers (Natural and Commercial) are normally covered. The natural fertilizer consists of the farm yard manure and wood ashes while the commercial types consist of DAP (Di-Ammonium Phosphate) and UREA (Ammonium Nitrate).

**Pesticides:-** are chemicals that are useful for the control, mitigation or elimination of pests which are detrimental to crops. Pesticides include insecticides and herbicides.

**Area Irrigated:-** refers to the practice where an area of land is purposely and actually provided with water, other than by rain to improve the production of crops. The uncontrolled flooding of land by the overflow of rivers or streams is not considered to be irrigation.

**Improved Seed:-** is defined as a crop variety which gives a significantly higher yield and better quality compared to locally produced varieties of seeds.

**Summary Table B. Area Under Farm Management Practices For  
The Year 1997/1998 (1990 E.C.)**

Type of Management Practices	Area Applied (*000 Hectare)
Use of Fertilizer	2,608.55
Use of Pesticide	698.76
Use of Improved Seed	149.56
Use of Irrigation	63.64

### **1.1 Total Fertilizer Applied Area**

Although fertilizer is one of the very important agricultural inputs used to increase productivity, only 2.6 million hectares (34.47%) of the total cultivated crop area was fertilized at country level. Out of this total fertilizer applied area, 2.4 million hectares (92.30 %) was reported to have been under temporary crops and the remaining 200,790 hectares (7.70 %) was under permanent crops. See Table 1.1.

## **1.2 Total Pesticide Applied area**

As mentioned above the total cultivated crop area in 1997/98 (1990 E.C.) Meher season was about 7.6 million hectares at country level. Out of this pesticide was applied to only 9.23% of the total crop area. The total temporary crop area under pesticide was estimated at 696,170 hectares (99.63%), while the total pesticide applied to permanent crop area was 2,590 hectares (0.37%). The largest pesticide applied crop area was reported to have been under teff (44.27%) followed by wheat (35.23%).

## **1.3 Total Improved Seed Applied Area**

As illustrated in Table 1.1. the total cultivated crop area (temporary and permanent) is about 7.6 million hectares. Of this cultivated crop area, improved seeds were applied to 149,560 hectares (1.98 %). This indicates that the private peasant holders use mostly local seeds which may be due to the cost and/or inadequate availability of improved seeds. Out of the total improved seed applied area, 137,590 hectares (92 %) was under temporary crops and the remaining (8 %) was under permanent crops. For details refer to Table 1.1.

#### **1.4 Total Irrigated Area**

Of the total cultivated area, the total irrigated area at country level is 63,640 hectares (0.84%). Of the total irrigated crop area, 44,780 hectares (70.36 %) was under temporary crops while 18,860 hectares (29.64%) was under permanent crops. Out of the total area under temporary crops 19.08 % was covered by maize followed by teff 18.13 %. Similarly, of the total irrigated area under permanent crops 8.85 % was covered by coffee followed by chat 6.68 %. See Table 1.1.

#### **NOTE:**

1. If in some tables figures do not add up to total it is due to rounding.
2. Those estimates designated by "\*\*\*" in all tables could not be reported because of high coefficient of variations (i.e. they are less reliable). However they are incorporated in the total estimates.
3. "-" in tables represents data not reported.

TABLE 1.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

National

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	5,599.94	74.01	134.90	90.20	34.56	54.31	671.88	96.15	2,199.90	84.33
Teff	1,747.13	23.09	30.24	20.22	11.54	18.13	309.36	44.27	837.13	32.09
Barely	681.84	9.01	.99	.66	4.23	6.65	65.65	9.40	288.80	11.07
Wheat	787.61	10.41	43.93	29.37	2.54	3.99	246.18	35.23	477.00	18.29
Maize	1,099.87	14.54	57.44	38.41	12.14	19.08	14.13	2.02	368.17	14.11
Sorghum	954.38	12.61	2.30	1.54	3.69	5.80	29.78	4.26	99.33	3.81
Millet	289.73	3.83	-	-	**	**	1.93	.28	116.42	4.46
Oats	39.38	.52	-	-	**	**	**	**	13.05	.50
PULSES	837.34	11.07	.50	.33	1.92	3.02	15.81	2.26	116.75	4.48
Horse Beans	266.17	3.52	**	**	.84	1.32	4.11	.59	51.66	1.98
Field Peas	119.75	1.58	**	**	**	.27	3.37	.48	23.74	.91
Haricot Beans	92.19	1.22	**	**	.23	.36	**	**	20.62	.79
Chick Peas	169.97	2.25	**	**	.26	.41	2.27	.32	7.62	.29
Lentils	47.09	.62	**	**	-	-	**	**	10.40	.40
Vetch	142.17	1.88	-	-	**	**	**	**	2.71	.10
OILSEEDS	380.50	5.03	**	**	**	**	4.59	.66	32.29	1.24
Neug	195.23	2.58	**	**	**	**	**	**	10.85	.42
Lin Seed	134.64	1.78	**	**	**	**	3.80	.54	11.46	.44
Rape seed	12.67	.17	-	-	**	**	**	**	6.71	.26
Ground Nuts	11.02	.15	**	**	.02	.03	-	-	**	**
Sun Flower	3.32	.04	-	-	-	-	**	**	.13	-
Sesame	23.61	.31	-	-	**	**	**	**	**	**
Castor Bean	**	**	-	-	-	-	-	-	**	**
OTHERS	190.96	2.52	**	**	7.35	11.55	3.89	.56	58.82	2.25
Fenugreek	29.51	.39	-	-	**	**	**	.01	2.57	.10
Spices	61.44	.81	**	**	.64	1.01	1.09	.16	17.10	.66
Potatoes	27.94	.37	-	-	1.43	2.25	**	**	13.95	.53
Other Temporary	72.07	.95	**	**	5.16	8.11	**	**	25.20	.97
ALL TEMPORARY	7,008.74	92.62	137.59	92.00	44.78	70.36	696.17	99.63	2,407.76	92.30
Chat	78.57	1.04	-	-	4.25	6.68	1.22	.17	25.10	.96
Coffee	195.70	2.59	11.84	7.92	5.63	8.85	.57	.08	33.15	1.27
Enset	224.44	2.97	-	-	1.80	2.83	.48	.07	131.82	5.05
Cotton	**	**	-	-	**	**	**	**	.89	.03
Tobacco	3.54	.05	-	-	**	**	**	**	.68	.03
Fruits	19.44	.26	.09	.06	4.60	7.23	**	**	4.13	.16
Other Permanent	21.87	.29	**	**	2.51	3.94	-	-	5.02	.19
TOTAL PERMANENT	558.22	7.38	11.97	8.00	18.86	29.64	2.59	.37	200.79	7.70
ALL CROPS	7,566.96	100.00	149.56	100.00	63.64	100.00	698.76	100.00	2,608.55	100.00

TABLE 1.2 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY REGION FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

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REGION	TOTAL CROP		IMPROVED SEED APP.		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
TIGRAY	516.89	6.83	16.04	10.73	2.25	3.54	12.04	1.72	154.64	5.93
AFAR	16.05	.21	.01	.01	4.54	7.13	2.92	.42	1.32	.05
AMHARA	2,534.33	33.49	38.24	25.57	19.99	31.41	25.94	3.71	612.81	23.49
OROMIYA	3,421.58	45.22	75.91	50.76	24.58	38.62	559.91	80.13	1,380.19	52.91
SOMALIE	55.28	.73	.38	.25	.54	.85	.06	.01	.80	.03
BENSHANGUL-GUMUZ	139.86	1.85	.93	.62	1.09	1.71	.36	.05	9.25	.35
S.N.N.P.R.	849.53	11.23	16.87	11.28	9.49	14.91	96.59	13.82	439.25	16.84
GAMBELA	14.49	.20	.73	.49	.01	.02	-	-	.40	.02
HARARI	5.94	.08	.05	.03	.29	.46	.17	.02	2.91	.11
ADDIS ABABA	7.11	.09	.31	.21	.08	.13	.63	.09	6.05	.23
DIRE DAWA	5.41	.07	.08	.05	.78	1.23	.14	.02	.95	.04
TOTAL	7,566.96	100.00	149.55	100.00	63.64	100.00	698.76	100.00	2,608.57	100.00

FIG. 1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS, NATIONAL, 1997/98 ( 1990 E.C. )

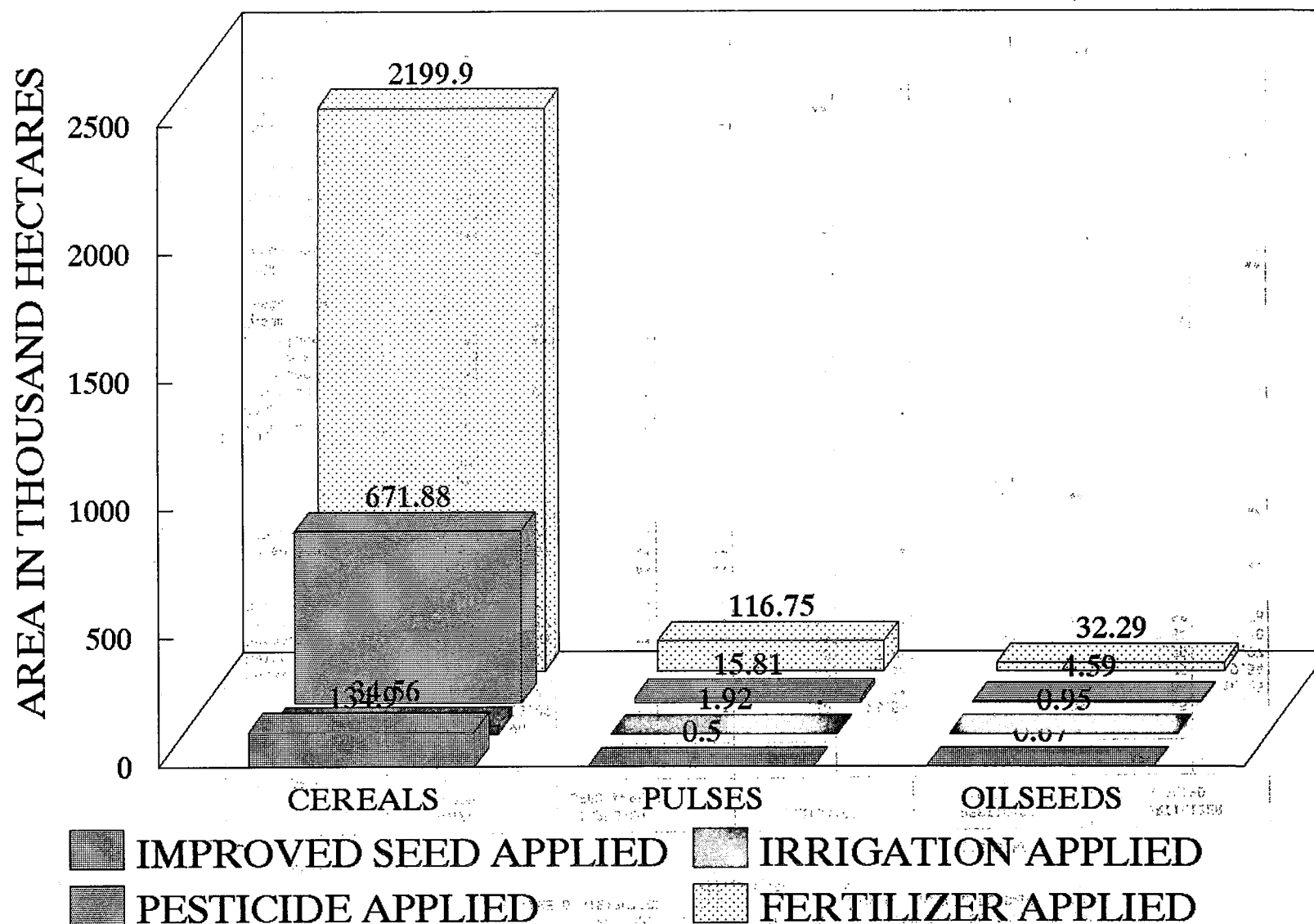


TABLE 1.3

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Tigray

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	468.23	90.59	**	**	1.41	62.39	10.22	84.81	148.88	96.26
Teff	119.34	23.09	**	**	.60	26.55	6.79	56.35	50.45	32.62
Barely	52.85	10.22	**	**	**	**	.42	3.49	15.86	10.25
Wheat	42.03	8.13	1.38	8.60	.42	18.58	.42	3.49	14.75	9.54
Maize	61.51	11.90	**	**	.18	7.96	**	**	24.70	15.97
Sorghum	124.33	24.05	**	**	**	**	**	**	29.54	19.10
Millet	68.09	13.17	-	-	**	**	**	**	13.58	8.78
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	30.35	5.87	**	**	**	**	**	**	3.33	2.15
Horse Beans	8.61	1.67	**	**	**	**	**	**	.91	.59
Field Peas	4.03	.78	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	**	**	**	**
Chick Peas	6.09	1.18	-	-	-	-	**	**	.48	.31
Lentils	3.06	.59	-	-	-	-	-	-	**	**
Vetch	5.19	1.00	-	-	-	-	-	-	**	**
OILSEEDS	14.72	2.85	**	**	**	**	**	**	**	**
Neug	2.84	.55	-	-	-	-	-	-	-	-
Lin Seed	5.25	1.02	**	**	**	**	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	.24	1.99	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.33	.45	**	**	**	**	-	-	**	**
Fenugreek	**	**	-	-	**	**	-	-	**	**
Spices	**	**	-	-	**	**	**	**	**	**
Potatoes	**	**	-	-	**	**	-	-	**	**
Other Temporary	.46	.09	**	**	**	**	-	-	**	**
ALL TEMPORARY	515.62	99.75	**	**	1.99	88.05	12.05	100.00	154.46	99.87
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	.68	.13	-	-	**	**	-	-	**	**
TOTAL PERMANENT	1.27	.25	-	-	**	**	-	-	**	**
ALL CROPS	516.89	100.00	**	**	2.26	100.00	12.05	100.00	154.66	100.00



TABLE 1.3.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

West Tigray Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	173.83	93.91	**	**	.38	100.00	**	**	66.46	97.78
Teff	40.70	21.99	**	**	.26	68.42	-	-	24.55	36.12
Barely	**	**	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	26.68	14.41	**	**	-	-	-	-	15.76	23.19
Sorghum	61.18	33.05	**	**	-	-	**	**	16.54	24.33
Millet	45.25	24.44	-	-	.12	31.58	**	**	9.61	14.14
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	3.83	2.07	-	-	-	-	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	2.75	1.49	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	6.77	3.66	-	-	-	-	**	**	**	**
Neug.	**	**	-	-	-	-	-	-	-	-
Lin Seed	.92	.50	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.30	.16	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	184.73	99.79	**	**	.38	100.00	**	**	67.97	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	-	-
ALL CROPS	185.11	100.00	**	**	.38	100.00	**	**	67.97	100.00

TABLE 1.3.2 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Central Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	133.04	89.89	1.80	94.24	.15	51.72	3.47	70.53	41.55	98.23
Teff	38.90	26.28	**	**	.13	44.83	2.98	60.57	14.14	33.43
Barely	9.79	6.61	**	**	-	-	**	**	2.77	6.55
Wheat	9.24	6.24	**	**	-	-	**	**	2.94	6.95
Maize	14.53	9.82	**	**	-	-	**	**	7.06	16.69
Sorghum	43.21	29.19	**	**	**	**	-	-	12.23	28.91
Millet	17.37	11.74	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	9.20	6.22	-	-	-	-	**	**	**	**
Horse Beans	4.04	2.73	-	-	-	-	**	**	**	**
Field Peas	.24	.16	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	.56	.38	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	5.00	3.38	**	**	-	-	**	**	**	**
Neug	.53	.36	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.40	.27	-	-	**	**	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	**	**	-	-	**	**
Other Temporary	**	**	-	-	**	**	-	-	**	**
ALL TEMPORARY	147.64	99.75	1.91	100.00	.27	93.10	4.92	100.00	42.16	99.67
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	148.01	100.00	1.91	100.00	.29	100.00	4.92	100.00	42.30	100.00

TABLE 1.3.3 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

East Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	51.79	81.96	.69	100.00	.30	58.82	.33	94.29	22.97	87.37
Teff	8.10	12.82	**	**	**	**	**	**	**	**
Barely	19.74	31.24	**	**	**	**	**	**	10.31	39.22
Wheat	12.08	19.12	.47	68.12	.09	17.65	**	**	6.10	23.20
Maize	4.65	7.36	**	**	**	**	**	**	1.39	5.29
Sorghum	3.11	4.92	-	-	-	-	**	**	**	**
Millet	4.04	6.39	-	-	-	-	**	**	1.43	5.44
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	9.42	14.91	**	**	**	**	**	**	2.38	9.05
Horse Beans	**	**	**	**	**	**	**	**	.54	2.05
Field Peas	1.52	2.41	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	1.46	2.31	-	-	-	-	-	-	**	**
Lentils	.78	1.23	-	-	-	-	-	-	**	**
Vetch	2.98	4.72	-	-	-	-	-	-	**	**
OILSEEDS	1.38	2.18	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	1.38	2.18	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	**	**
Other Temporary	**	**	**	**	**	**	-	-	**	**
ALL TEMPORARY	63.00	99.70	.69	100.00	**	**	.35	100.00	26.23	99.77
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	63.19	100.00	.69	100.00	**	**	.35	100.00	26.29	100.00

TABLE 1.3.4 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

South Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	109.54	90.85	1.02	97.14	**	**	5.44	96.80	17.92	99.01
Teff	31.63	26.23	**	**	**	**	3.68	65.48	8.80	48.62
Barely	23.30	19.32	-	-	**	**	.22	3.91	2.78	15.36
Wheat	20.71	17.18	.84	80.00	**	**	**	**	5.72	31.60
Maize	15.64	12.97	-	-	**	**	**	**	**	**
Sorghum	16.83	13.96	-	-	-	-	**	**	-	-
Millet	1.42	1.18	-	-	-	-	-	-	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	7.92	6.57	-	-	**	**	**	**	**	**
Horse Beans	1.87	1.55	-	-	**	**	-	-	**	**
Field Peas	1.88	1.56	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	.64	.53	-	-	-	-	**	**	**	**
Lentils	1.73	1.43	-	-	-	-	-	-	-	-
Vetch	1.51	1.25	-	-	-	-	-	-	-	-
OILSEEDS	1.55	1.29	-	-	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	1.51	1.25	-	-	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	**	**
Fenugreek	**	**	-	-	**	**	-	-	-	-
Spices	**	**	-	-	**	**	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	-	-
Other Temporary	.10	.08	**	**	**	**	-	-	**	**
ALL TEMPORARY	120.24	99.27	1.05	100.00	.83	77.57	5.62	100.00	18.10	100.00
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.33	.27	-	-	**	**	-	-	-	-
ALL CROPS	120.57	100.00	1.05	100.00	1.07	100.00	5.62	100.00	18.10	100.00

TABLE 1.4 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	14.61	91.08	**	**	4.47	98.46	2.75	94.83	1.25	94.70
Teff	4.66	29.05	-	-	**	**	1.00	34.48	**	**
Barely	.13	.81	-	-	-	-	**	**	-	-
Wheat	.25	1.56	-	-	-	-	**	**	**	**
Maize	5.26	32.79	**	**	**	**	.23	7.93	.16	12.12
Sorghum	4.31	26.87	-	-	.21	4.63	1.43	49.31	.58	43.94
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.80	4.99	-	-	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.46	2.87	-	-	-	-	**	**	-	-
Chick Peas	.33	2.06	-	-	-	-	**	**	**	**
Lentils	.01	.06	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.31	1.93	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.13	.81	-	-	-	-	**	**	**	**
Sesame	.18	1.12	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.05	.31	-	-	-	-	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.04	.25	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.01	.06	-	-	-	-	**	**	-	-
ALL TEMPORARY	15.77	98.32	**	**	4.47	98.46	2.84	97.93	1.32	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	.24	1.50	-	-	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.02	.12	-	-	**	**	-	-	-	-
Other Permanent	.01	.06	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.27	1.68	-	-	**	**	**	**	-	-
ALL CROPS	16.04	100.00	**	**	4.54	100.00	2.90	100.00	1.32	100.00

TABLE 1.4.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Zone 1 Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	4.16	99.52	**	**	4.16	99.52	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	4.16	99.52	**	**	4.16	99.52	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	4.16	99.52	**	**	4.16	99.52	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	**	**	-	-	-	-
ALL CROPS	4.18	100.00	**	**	4.18	100.00	-	-	-	-

TABLE 1.4.2 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Zone 3 Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	9.28	87.71	-	-	**	**	2.75	94.83	1.25	94.70
Teff	4.17	39.41	-	-	**	**	1.00	34.48	**	**
Barely	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	-	-	-	-	**	**	**	**
Maize	.98	9.26	-	-	**	**	.23	7.93	.16	12.12
Sorghum	3.75	35.44	-	-	**	**	1.43	49.31	.58	43.94
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.80	7.56	-	-	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.46	4.35	-	-	-	-	**	**	**	**
Chick Peas	.33	3.12	-	-	-	-	**	**	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.22	2.08	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.09	.85	-	-	-	-	**	**	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.04	.38	-	-	-	-	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.03	.28	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.01	.09	-	-	-	-	**	**	-	-
ALL TEMPORARY	10.34	97.73	-	-	**	**	2.84	97.93	1.32	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	.02	5.56	-	-	-	-
Other Permanent	**	**	-	-	.01	2.78	-	-	-	-
TOTAL PERMANENT	**	**	-	-	**	**	**	**	-	-
ALL CROPS	10.58	100.00	-	-	**	**	2.90	100.00	1.32	100.00

TABLE 1.4.3 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Zone 5 Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	**	**	-	-	-	-	-	-	-	-
Teff	**	**	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.11	8.59	-	-	-	-	-	-	-	-
Sorghum	.57	44.53	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	-	-	-	-	-	-	-	-



TABLE 1.5

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Amhara

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	1,907.31	75.26	37.50	98.06	11.53	57.71	23.01	88.64	575.19	93.86
Teff	744.40	29.37	12.20	31.90	5.04	25.23	6.02	23.19	288.29	47.04
Barely	220.71	8.71	**	**	3.82	19.12	1.51	5.82	36.61	5.97
Wheat	185.78	7.33	16.40	42.89	1.29	6.46	2.35	9.05	63.21	10.31
Maize	236.65	9.34	8.65	22.62	.97	4.85	1.17	4.51	90.40	14.75
Sorghum	352.39	13.90	-	-	**	**	11.43	44.03	10.85	1.77
Millet	159.36	6.29	-	-	**	**	.53	2.04	85.66	13.98
Oats	8.02	.32	-	-	**	**	-	-	.17	.03
PULSES	385.66	15.22	**	**	.98	4.90	2.08	8.01	14.99	2.45
Horse Beans	98.92	3.90	-	-	**	**	**	**	6.21	1.01
Field Peas	44.42	1.75	-	-	**	**	**	**	3.27	.53
Haricot Beans	15.41	.61	**	**	**	**	**	**	**	**
Chick Peas	108.05	4.26	-	-	**	**	**	**	2.30	.38
Lentils	18.23	.72	-	-	-	-	**	**	**	**
Vetch	100.63	3.97	-	-	**	**	**	**	**	**
OILSEEDS	151.33	5.97	**	**	**	**	**	**	10.18	1.66
Neug	105.21	4.15	**	**	**	**	**	**	6.28	1.02
Lin Seed	28.74	1.13	**	**	**	**	-	-	1.34	.22
Rape seed	3.30	.13	-	-	**	**	-	-	2.36	.39
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	2.88	.11	-	-	-	-	**	**	**	**
Sesame	11.11	.44	-	-	**	**	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	57.14	2.25	**	**	3.00	15.02	**	**	9.32	1.52
Fenugreek	13.03	.51	-	-	**	**	-	-	**	**
Spices	23.24	.92	**	**	.43	2.15	**	**	4.74	.77
Potatoes	11.90	.47	-	-	1.24	6.21	**	**	3.24	.53
Other Temporary	8.97	.35	**	**	1.23	6.16	**	**	1.18	.19
ALL TEMPORARY	2,501.44	98.70	38.13	99.71	16.33	81.73	25.80	99.38	609.68	99.49
Chat	1.87	.07	-	-	**	**	**	**	**	**
Coffee	**	**	.09	.24	1.66	8.31	-	-	.65	.11
Enset	**	**	-	-	**	**	**	**	-	-
Cotton	**	**	-	-	-	-	**	**	.86	.14
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	1.09	.04	-	-	.66	3.30	-	-	**	**
Other Permanent	7.39	.29	**	**	1.20	6.01	-	-	1.08	.18
TOTAL PERMANENT	32.88	1.30	.11	.29	3.65	18.27	**	**	**	**
ALL CROPS	2,534.32	100.00	38.24	100.00	19.98	100.00	25.96	100.00	612.80	100.00

TABLE 1.5.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

North Gonder Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	373.36	75.70	9.14	100.00	**	**	**	**	47.51	95.94
Teff	111.29	22.56	4.93	53.94	**	**	-	-	26.66	53.84
Barely	31.44	6.37	-	-	-	-	**	**	**	**
Wheat	22.21	4.50	**	**	**	**	-	-	**	**
Maize	27.77	5.63	**	**	**	**	**	**	5.26	10.62
Sorghum	143.40	29.07	-	-	-	-	-	-	**	**
Millet	36.41	7.38	-	-	-	-	**	**	7.54	15.23
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	60.75	12.32	-	-	**	**	**	**	**	**
Horse Beans	13.60	2.76	-	-	-	-	-	-	**	**
Field Peas	6.59	1.34	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	26.30	5.33	-	-	**	**	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	**	**	-	-
OILSEEDS	37.34	7.57	-	-	**	**	-	-	**	**
Neug	26.65	5.40	-	-	-	-	-	-	**	**
Lin Seed	2.77	.56	-	-	-	-	-	-	**	**
Rape seed	.38	.08	-	-	**	**	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	9.28	1.88	-	-	.20	16.53	-	-	.49	.99
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	6.28	1.27	-	-	**	**	-	-	.36	.73
Potatoes	**	**	-	-	**	**	-	-	**	**
Other Temporary	.54	.11	-	-	**	**	-	-	.02	.04
ALL TEMPORARY	480.73	97.47	9.14	100.00	**	**	.55	80.88	49.14	99.23
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	**	**	**	**
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	.67	.14	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	-	-	**	**	**	**
ALL CROPS	493.22	100.00	9.14	100.00	**	**	.68	100.00	49.52	100.00

TABLE 1.5.2 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

South Gonder Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	249.56	72.93	3.57	98.08	**	**	1.56	82.98	54.04	95.78
Teff	107.27	31.35	.98	26.92	**	**	**	**	28.13	49.86
Barely	35.93	10.50	**	**	**	**	**	**	1.55	2.75
Wheat	20.14	5.89	**	**	**	**	**	**	3.77	6.68
Maize	32.97	9.63	**	**	**	**	-	-	11.73	20.79
Sorghum	24.55	7.17	-	-	-	-	**	**	**	**
Millet	28.69	8.38	-	-	-	-	**	**	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	55.81	16.31	-	-	**	**	**	**	.33	.58
Horse Beans	12.34	3.61	-	-	**	**	**	**	**	**
Field Peas	5.00	1.46	-	-	-	-	**	**	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	25.67	7.50	-	-	-	-	-	-	**	**
Lentils	.47	.14	-	-	-	-	-	-	-	-
Vetch	6.16	1.80	-	-	-	-	-	-	**	**
OILSEEDS	24.56	7.18	**	**	**	**	-	-	**	**
Neug	17.49	5.11	**	**	**	**	-	-	**	**
Lin Seed	6.11	1.79	-	-	**	**	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	10.38	3.03	-	-	**	**	-	-	1.09	1.93
Fenugreek	**	.37	-	-	**	**	-	-	-	-
Spices	3.53	1.03	-	-	**	**	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	.69	1.22
Other Temporary	**	**	-	-	**	**	-	-	**	**
ALL TEMPORARY	340.31	99.44	3.63	99.73	**	**	1.88	100.00	56.04	99.33
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	**	**	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	1.15	.34	-	-	-	-	-	-	.08	.14
TOTAL PERMANENT	1.90	.56	**	**	**	**	-	-	**	**
ALL CROPS	342.21	100.00	3.64	100.00	.94	100.00	1.88	100.00	56.42	100.00

TABLE 1.5.3 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

North Wolo Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	111.50	75.12	4.45	100.00	**	**	.94	66.67	9.32	97.69
Teff	36.21	24.40	.55	12.36	**	**	.64	45.39	1.80	18.87
Barely	19.70	13.27	**	**	**	**	.03	2.13	**	**
Wheat	26.99	18.18	3.84	86.29	-	-	**	**	4.58	48.01
Maize	**	**	-	-	**	**	-	-	**	**
Sorghum	21.70	14.62	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	**	**
Oats	1.82	1.23	-	-	-	-	-	-	**	**
PULSES	30.07	20.26	-	-	-	-	**	**	**	**
Horse Beans	6.96	4.69	-	-	-	-	-	-	**	**
Field Peas	6.03	4.06	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	6.81	4.59	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	**	**	**	**
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	1.63	1.10	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.07	2.74	**	**	**	**	-	-	**	**
Fenugreek	2.98	2.01	-	-	-	-	-	-	-	-
Spices	.25	.17	-	-	**	**	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	**	**
Other Temporary	.73	.49	**	**	**	**	-	-	**	**
ALL TEMPORARY	147.52	99.39	4.45	100.00	**	**	1.41	100.00	9.54	100.00
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	.07	7.87	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.04	.03	-	-	.02	2.25	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	.90	.61	-	-	**	**	-	-	**	**
ALL CROPS	148.42	100.00	4.45	100.00	.89	100.00	1.41	100.00	9.54	100.00

TABLE 1.5.4 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

South Wolo Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	172.93	73.26	.86	100.00	**	**	.44	58.67	28.74	88.11
Teff	65.24	27.64	-	-	**	**	**	**	10.70	32.80
Barely	23.25	9.85	-	-	-	-	-	-	2.41	7.39
Wheat	30.06	12.73	**	**	**	**	**	**	6.61	20.26
Maize	13.48	5.71	**	**	**	**	-	-	1.65	5.06
Sorghum	35.04	14.84	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	**	**	**	**
Oats	3.63	1.54	-	-	**	**	-	-	**	**
PULSES	50.69	21.47	-	-	**	**	**	**	3.08	9.44
Horse Beans	23.66	10.02	-	-	-	-	-	-	1.29	3.95
Field Peas	9.65	4.09	-	-	-	-	-	-	**	**
Haricot Beans	1.43	.61	-	-	-	-	-	-	**	**
Chick Peas	6.43	2.72	-	-	-	-	**	**	**	**
Lentils	2.29	.97	-	-	-	-	-	-	**	**
Vetch	7.23	3.06	-	-	**	**	**	**	**	**
OILSEEDS	3.61	1.53	-	-	**	**	-	-	-	-
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	1.03	.44	-	-	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	6.67	2.83	-	-	**	**	-	-	**	**
Fenugreek	**	**	-	-	**	**	-	-	-	-
Spices	1.08	.46	-	-	**	**	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.33	.14	-	-	**	**	-	-	**	**
ALL TEMPORARY	233.90	99.08	.86	100.00	**	**	.75	100.00	32.46	99.51
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	.35	.15	-	-	**	**	-	-	**	**
TOTAL PERMANENT	2.16	.92	-	-	.20	11.24	-	-	**	**
ALL CROPS	236.06	100.00	.86	100.00	**	**	.75	100.00	32.62	100.00

TABLE 1.5.5 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

North Shewa Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	208.02	80.95	3.56	97.80	3.82	66.96	15.65	94.05	51.86	90.33
Teff	89.37	34.78	**	**	**	**	3.28	19.71	22.92	39.92
Barely	30.90	12.03	-	-	**	**	**	**	7.05	12.28
Wheat	34.14	13.29	2.55	70.05	**	**	**	**	20.07	34.96
Maize	6.81	2.65	**	**	**	**	**	**	.82	1.43
Sorghum	46.41	18.06	-	-	**	**	10.48	62.98	1.00	1.74
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	39.56	15.40	**	**	**	**	**	**	**	**
Horse Beans	12.27	4.78	-	-	**	**	**	**	**	**
Field Peas	2.53	.98	-	-	-	-	-	-	**	**
Haricot Beans	**	**	**	**	**	**	**	**	**	**
Chick Peas	10.71	4.17	-	-	**	**	**	**	.45	.78
Lentils	6.77	2.63	-	-	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	**	**	-	-
OILSEEDS	6.12	2.38	-	-	**	**	**	**	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	2.10	.82	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.89	.35	-	-	-	-	**	**	**	**
Sesame	**	**	-	-	**	**	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.41	.55	**	**	**	**	**	**	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	**	**	-	-	**	**	-	-	-	-
Other Temporary	.21	.08	**	**	**	**	-	-	**	**
ALL TEMPORARY	255.11	99.28	3.62	99.45	4.68	81.82	16.64	100.00	56.84	99.01
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	.37	6.47	-	-	**	**
Other Permanent	.55	.21	-	-	**	**	-	-	**	**
TOTAL PERMANENT	1.85	.72	**	**	**	**	-	-	**	**
ALL CROPS	256.96	100.00	3.64	100.00	5.72	100.00	16.64	100.00	57.41	100.00

TABLE 1.5.6 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

East Gojam Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	275.29	70.18	5.94	99.50	**	**	2.04	100.00	127.34	97.88
Teff	141.28	36.02	2.67	44.72	**	**	**	**	97.94	75.28
Barely	32.85	8.37	-	-	**	**	-	-	5.42	4.17
Wheat	38.88	9.91	3.09	51.76	-	-	1.31	64.22	18.32	14.08
Maize	39.56	10.09	**	**	-	-	**	**	5.37	4.13
Sorghum	22.34	5.70	-	-	-	-	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	88.07	22.45	-	-	**	**	-	-	**	**
Horse Beans	14.07	3.59	-	-	**	**	-	-	**	**
Field Peas	5.97	1.52	-	-	**	**	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	23.90	6.09	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	40.84	10.41	-	-	-	-	-	-	**	**
OILSEEDS	18.95	4.83	-	-	-	-	-	-	**	**
Neug	10.33	2.63	-	-	-	-	-	-	**	**
Lin Seed	8.11	2.07	-	-	-	-	-	-	**	**
Rape seed	.41	.10	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	7.50	1.91	**	**	**	**	-	-	**	**
Fenugreek	1.54	.39	-	-	-	-	-	-	-	-
Spices	2.35	.60	**	**	-	-	-	-	**	**
Potatoes	2.35	.60	-	-	**	**	-	-	**	**
Other Temporary	1.26	.32	**	**	**	**	-	-	**	**
ALL TEMPORARY	389.81	99.38	5.95	99.66	**	**	2.04	100.00	129.90	99.85
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	1.98	.50	-	-	**	**	-	-	.13	.10
TOTAL PERMANENT	2.44	.62	**	**	.22	15.28	-	-	**	**
ALL CROPS	392.25	100.00	5.97	100.00	1.44	100.00	2.04	100.00	130.10	100.00

TABLE 1.5.7 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

West Gojam Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	305.90	73.98	7.22	94.38	**	**	**	**	188.12	93.13
Teff	122.42	29.61	**	**	**	**	**	**	75.93	37.59
Barely	18.84	4.56	**	**	-	-	**	**	6.63	3.28
Wheat	6.09	1.47	**	**	-	-	-	-	**	**
Maize	82.89	20.05	5.78	75.56	**	**	**	**	52.45	25.97
Sorghum	13.41	3.24	-	-	-	-	**	**	**	**
Millet	61.29	14.82	-	-	**	**	**	**	49.17	24.34
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	46.34	11.21	-	-	-	-	-	-	3.15	1.56
Horse Beans	9.21	2.23	-	-	-	-	-	-	1.69	.84
Field Peas	5.30	1.28	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	6.85	1.66	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	38.85	9.40	**	**	**	**	-	-	6.08	3.01
Neug	31.66	7.66	**	**	**	**	-	-	3.36	1.66
Lin Seed	5.14	1.24	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	13.63	3.30	**	**	1.10	29.41	**	**	3.86	1.91
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	8.87	2.15	**	**	**	**	**	**	2.69	1.33
Potatoes	1.11	.27	-	-	**	**	**	**	.61	.30
Other Temporary	3.59	.87	**	**	**	**	**	**	.56	.28
ALL TEMPORARY	404.72	97.88	7.63	99.74	2.51	67.11	1.66	100.00	201.21	99.61
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	1.88	.45	**	**	**	**	-	-	.56	.28
TOTAL PERMANENT	**	**	**	**	**	**	-	-	.79	.39
ALL CROPS	413.50	100.00	7.65	100.00	3.74	100.00	1.66	100.00	202.00	100.00



TABLE 1.5.8 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Waghamera Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	52.41	83.71	**	**	.20	86.96	.13	100.00	.84	98.82
Teff	14.95	23.88	**	**	**	**	.10	76.92	**	**
Barely	10.85	17.33	-	-	**	**	**	**	**	**
Wheat	4.77	7.62	**	**	**	**	-	-	**	**
Maize	.65	1.04	-	-	**	**	-	-	**	**
Sorghum	21.10	33.70	-	-	**	**	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	8.00	12.78	-	-	.03	13.04	-	-	**	**
Horse Beans	3.57	5.70	-	-	-	-	-	-	-	-
Field Peas	1.44	2.30	-	-	-	-	-	-	-	-
Haricot Beans	1.31	2.09	-	-	-	-	-	-	-	-
Chick Peas	.88	1.41	-	-	**	**	-	-	-	-
Lentils	.80	1.28	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	.14	.22	-	-	-	-	-	-	-	-
Lin Seed	.31	.50	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	62.47	99.78	**	**	.23	100.00	.13	100.00	.85	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	-	-
ALL CROPS	62.61	100.00	**	**	.23	100.00	.13	100.00	.85	100.00

TABLE 1.5.9 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Agewawi Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	123.78	81.89	2.52	95.09	3.26	84.24	**	**	66.87	91.07
Teff	48.28	31.94	**	**	-	-	-	-	23.94	32.60
Barely	16.78	11.10	**	**	2.69	69.51	-	-	9.23	12.57
Wheat	2.33	1.54	**	**	**	**	-	-	1.37	1.87
Maize	24.08	15.93	1.13	42.64	**	**	**	**	12.93	17.61
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	28.85	19.09	-	-	-	-	-	-	19.34	26.34
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	5.36	3.55	**	**	-	-	-	-	1.62	2.21
Horse Beans	2.81	1.86	-	-	-	-	-	-	.70	.95
Field Peas	1.63	1.08	-	-	-	-	-	-	**	**
Haricot Beans	**	**	**	**	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	17.64	11.67	**	**	-	-	**	**	2.28	3.10
Neug	15.63	10.34	-	-	-	-	**	**	1.96	2.67
Lin Seed	**	**	**	**	-	-	-	-	**	**
Rape seed	.33	.22	-	-	-	-	-	-	.28	.38
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.96	2.62	**	**	.34	8.79	-	-	2.33	3.17
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	.28	.19	**	**	**	**	-	-	.18	.25
Potatoes	2.83	1.87	-	-	**	**	-	-	1.79	2.44
Other Temporary	**	**	-	-	**	**	-	-	.36	.49
ALL TEMPORARY	150.74	99.72	2.60	98.11	**	**	**	**	73.10	99.55
Chat	-	-	-	-	-	-	-	-	**	**
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	**	**	.09	2.33	-	-	.14	.19
TOTAL PERMANENT	.42	.28	**	**	**	**	-	-	**	**
ALL CROPS	151.16	100.00	2.65	100.00	3.87	100.00	**	**	73.43	100.00

TABLE 1.5.10 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Oromia Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	34.55	91.19	**	**	**	**	**	**	.52	58.43
Teff	8.09	21.35	-	-	**	**	-	-	**	**
Barely	.17	.45	-	-	-	-	-	-	**	**
Wheat	.16	.42	-	-	-	-	-	-	**	**
Maize	4.55	12.01	**	**	**	**	-	-	**	**
Sorghum	21.02	55.48	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	**	**
Oats	.42	1.11	-	-	-	-	-	-	**	**
PULSES	1.01	2.67	-	-	-	-	**	**	**	**
Horse Beans	**	**	-	-	-	-	**	**	**	**
Field Peas	.28	.74	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	.11	.29	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.28	.74	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.26	.69	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.22	.58	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	36.10	95.28	**	**	**	**	**	**	.57	64.04
Chat	.92	2.43	-	-	**	**	**	**	.29	32.58
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	**	**	-	-	**	**	**	**	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.79	4.72	**	**	**	**	**	**	**	**
ALL CROPS	37.89	100.00	**	**	.20	100.00	**	**	.89	100.00

TABLE 1.6 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	2,549.04	74.50	65.95	86.88	13.39	54.43	542.57	96.90	1,210.95	87.74
Teff	729.53	21.32	7.66	10.09	**	**	250.46	44.73	414.40	30.02
Barely	352.59	10.30	**	**	**	**	59.55	10.64	209.11	15.15
Wheat	486.47	14.22	21.56	28.40	**	**	203.05	36.26	341.66	24.75
Maize	577.45	16.88	35.88	47.27	4.48	18.21	10.47	1.87	173.63	12.58
Sorghum	326.68	9.55	**	**	2.61	10.61	13.66	2.44	43.96	3.19
Millet	45.27	1.32	-	-	-	-	.54	.10	15.34	1.11
Oats	31.05	.91	-	-	-	-	**	**	12.85	.93
PULSES	340.89	9.96	**	**	.58	2.36	9.96	1.78	71.30	5.17
Horse Beans	127.25	3.72	**	**	**	**	2.63	.47	34.54	2.50
Field Peas	51.91	1.52	**	**	-	-	2.06	.37	15.27	1.11
Haricot Beans	49.87	1.46	-	-	**	**	.94	.17	9.67	.70
Chick Peas	51.63	1.51	-	-	**	**	**	**	**	**
Lentils	25.10	.73	**	**	-	-	**	**	**	**
Vetch	35.13	1.03	-	-	**	**	**	**	.72	.05
OILSEEDS	190.96	5.58	**	**	**	**	3.75	.67	19.59	1.42
Neug	72.09	2.11	-	-	**	**	.02	-	4.10	.30
Lin Seed	99.68	2.91	**	**	-	-	3.73	.67	9.58	.69
Rape seed	9.17	.27	-	-	-	-	-	-	4.21	.31
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	68.84	2.01	**	**	**	**	**	**	17.54	1.27
Fenugreek	15.25	.45	-	-	-	-	**	-	1.89	.14
Spices	17.16	.50	-	-	.16	.65	-	-	2.26	.16
Potatoes	9.91	.29	-	-	**	**	**	**	6.30	.46
Other Temporary	26.52	.78	**	**	**	**	**	**	7.09	.51
ALL TEMPORARY	3,149.73	92.06	67.67	89.15	17.26	70.16	558.58	99.76	1,319.38	95.59
Chat	56.97	1.67	-	-	3.34	13.58	.76	.14	15.68	1.14
Coffee	120.36	3.52	8.20	10.80	2.31	9.39	**	**	10.66	.77
Enset	77.35	2.26	-	-	.32	1.30	**	**	31.41	2.28
Cotton	-	-	-	-	-	-	-	-	**	**
Tobacco	1.96	.06	-	-	**	**	**	**	.21	.02
Fruits	7.50	.22	**	**	**	**	-	-	1.57	.11
Other Permanent	7.69	.22	-	-	.88	3.58	-	-	1.28	.09
TOTAL PERMANENT	271.83	7.94	8.24	10.85	7.34	29.84	1.34	.24	60.81	4.41
ALL CROPS	3,421.56	100.00	75.91	100.00	24.60	100.00	559.92	100.00	1,380.19	100.00

TABLE 1.6.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

West Welega Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	218.41	76.89	6.02	88.01	.78	72.22	3.13	91.52	69.19	91.59
Teff	49.01	17.25	**	**	**	**	2.44	71.35	26.32	34.84
Barely	3.36	1.18	-	-	-	-	-	-	.63	.83
Wheat	6.59	2.32	**	**	-	-	**	**	**	**
Maize	86.42	30.43	5.56	81.29	.47	43.52	**	**	29.44	38.97
Sorghum	48.43	17.05	**	**	**	**	**	**	5.11	6.76
Millet	24.60	8.66	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	19.51	6.87	**	**	-	-	-	-	2.76	3.65
Horse Beans	6.80	2.39	**	**	-	-	-	-	1.22	1.62
Field Peas	2.30	.81	**	**	-	-	-	-	.56	.74
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	2.71	.95	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	3.86	1.36	-	-	-	-	-	-	-	-
Neug	3.81	1.34	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.36	1.53	-	-	**	**	-	-	1.66	2.20
Fenugreek	.09	.03	-	-	-	-	-	-	**	**
Spices	1.51	.53	-	-	**	**	-	-	.45	.60
Potatoes	1.25	.44	-	-	-	-	-	-	**	**
Other Temporary	1.51	.53	-	-	**	**	-	-	.54	.71
ALL TEMPORARY	246.14	86.66	6.04	88.30	.84	77.78	3.13	91.52	73.61	97.45
Chat	.69	.24	-	-	**	**	-	-	**	**
Coffee	32.17	11.33	**	**	**	**	**	**	**	**
Enset	.75	.26	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	**	**	.10	.13
Fruits	2.29	.81	**	**	**	**	-	-	.35	.46
Other Permanent	.64	.23	-	-	-	-	-	-	.10	.13
TOTAL PERMANENT	37.90	13.34	**	**	**	**	**	**	1.93	2.55
ALL CROPS	284.04	100.00	6.84	100.00	1.08	100.00	3.42	100.00	75.54	100.00

TABLE 1.6.2

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

East Welega Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	260.27	77.07	19.22	99.90	1.27	95.49	4.53	100.00	136.48	94.33
Teff	115.03	34.06	**	**	**	**	**	**	74.39	51.42
Barely	14.71	4.36	**	**	**	**	-	-	3.85	2.66
Wheat	17.27	5.11	**	**	-	-	**	**	**	**
Maize	83.12	24.61	**	**	**	**	**	**	45.63	31.54
Sorghum	15.63	4.63	-	-	**	**	-	-	.86	.59
Millet	14.29	4.23	-	-	-	-	**	**	6.71	4.64
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	20.61	6.10	-	-	-	-	-	-	2.79	1.93
Horse Beans	13.88	4.11	-	-	-	-	-	-	2.38	1.65
Field Peas	5.47	1.62	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	43.22	12.80	-	-	-	-	-	-	3.49	2.41
Neug	39.67	11.75	-	-	-	-	-	-	3.13	2.16
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	.48	.14	-	-	-	-	-	-	**	**
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	5.06	1.50	**	**	**	**	-	-	1.25	.86
Fenugreek	.17	.05	-	-	-	-	-	-	**	**
Spices	**	1.17	-	-	**	**	-	-	**	**
Potatoes	.35	.10	-	-	-	-	-	-	**	**
Other Temporary	.60	.18	**	**	**	**	-	-	**	**
ALL TEMPORARY	329.16	97.47	19.23	99.95	1.33	100.00	4.53	100.00	144.01	99.54
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	**	**	-	-	-	-	.07	.05
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.76	.23	-	-	-	-	-	-	**	**
Other Permanent	.89	.26	-	-	-	-	-	-	.31	.21
TOTAL PERMANENT	8.55	2.53	**	**	-	-	-	-	.67	.46
ALL CROPS	337.71	100.00	19.24	100.00	1.33	100.00	4.53	100.00	144.68	100.00

TABLE 1.6.3 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Illibabor Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	103.60	76.11	5.30	77.60	.08	100.00	6.82	96.46	25.07	98.08
Teff	41.57	30.54	**	**	-	-	6.14	86.85	17.48	68.39
Barely	1.12	.82	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	-	-
Maize	44.96	33.03	3.89	56.95	.08	100.00	**	**	7.40	28.95
Sorghum	13.89	10.20	-	-	-	-	**	**	**	**
Millet	1.72	1.26	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	11.10	8.15	-	-	-	-	**	**	**	**
Horse Beans	5.16	3.79	-	-	-	-	-	-	**	**
Field Peas	3.13	2.30	-	-	-	-	**	**	-	-
Haricot Beans	1.97	1.45	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.74	.54	-	-	-	-	**	**	**	**
Neug	**	**	-	-	-	-	**	**	-	-
Lin Seed	.28	.21	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.07	.79	**	**	-	-	-	-	.04	.16
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	.72	.53	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.32	.24	**	**	-	-	-	-	**	**
ALL TEMPORARY	116.51	85.59	5.31	77.75	.08	100.00	7.05	99.72	25.28	98.90
Chat	1.37	1.01	-	-	-	-	-	-	**	**
Coffee	15.59	11.45	1.51	22.11	-	-	**	**	**	**
Enset	1.70	1.25	-	-	-	-	-	-	.09	.35
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.66	.48	**	**	-	-	-	-	.03	.12
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	19.61	14.41	1.52	22.25	-	-	**	**	.28	1.10
ALL CROPS	136.12	100.00	6.83	100.00	.08	100.00	7.07	100.00	25.56	100.00

TABLE 1.6.4

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Jimma Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	245.10	77.18	3.98	68.15	**	**	94.62	99.13	84.83	89.42
Teff	110.62	34.83	-	-	**	**	81.42	85.30	51.01	53.77
Barely	11.00	3.46	-	-	-	-	**	**	**	**
Wheat	14.76	4.65	**	**	-	-	5.70	5.97	**	**
Maize	69.55	21.90	3.70	63.36	-	-	2.93	3.07	22.97	24.21
Sorghum	34.09	10.73	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	.36	.38	**	**
Oats	2.10	.66	-	-	-	-	**	**	**	**
PULSES	23.73	7.47	-	-	-	-	.65	.68	**	**
Horse Beans	14.59	4.59	-	-	-	-	**	**	**	**
Field Peas	5.50	1.73	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	6.34	2.00	-	-	-	-	**	**	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	1.74	.55	-	-	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	7.82	2.46	-	-	-	-	**	**	2.29	2.41
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	7.32	2.31	-	-	-	-	**	**	2.27	2.39
ALL TEMPORARY	282.99	89.11	3.98	68.15	**	**	95.40	99.95	90.37	95.26
Chat	5.60	1.76	-	-	-	-	**	**	.75	.79
Coffee	17.96	5.66	**	**	**	**	-	-	**	**
Enset	9.53	3.00	-	-	-	-	**	**	2.50	2.64
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.83	.26	-	-	-	-	-	-	.17	.18
Other Permanent	.63	.20	-	-	-	-	-	-	**	**
TOTAL PERMANENT	34.58	10.89	**	**	**	**	.05	.05	4.50	4.74
ALL CROPS	317.57	100.00	5.84	100.00	3.95	100.00	95.45	100.00	94.87	100.00



TABLE 1.6.5

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

West Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	361.54	75.15	5.95	100.00	**	**	143.25	97.94	200.00	88.74
Teff	174.65	36.30	**	**	**	**	89.92	61.48	112.79	50.05
Barely	52.57	10.93	-	-	**	**	12.53	8.57	30.60	13.58
Wheat	76.20	15.84	2.44	41.01	**	**	40.24	27.51	49.19	21.83
Maize	32.55	6.77	**	**	**	**	**	**	**	**
Sorghum	25.04	5.20	-	-	-	-	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	.53	.11	-	-	-	-	**	**	-	-
PULSES	60.39	12.55	-	-	**	**	**	**	4.84	2.15
Horse Beans	14.82	3.08	-	-	**	**	**	**	2.36	1.05
Field Peas	4.45	.93	-	-	-	-	**	**	**	**
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	25.87	5.38	-	-	-	-	**	**	**	**
Lentils	3.38	.70	-	-	-	-	**	**	.95	.42
Vetch	11.87	2.47	-	-	-	-	-	-	-	-
OILSEEDS	35.47	7.37	-	-	-	-	**	**	1.52	.67
Neug	14.66	3.05	-	-	-	-	-	-	**	**
Lin Seed	16.59	3.45	-	-	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.39	.50	-	-	**	**	**	**	1.34	.59
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	**	**	**	**	**	**
Other Temporary	1.26	.26	-	-	**	**	-	-	**	**
ALL TEMPORARY	459.79	95.57	5.95	100.00	1.81	79.04	146.25	99.99	207.70	92.16
Chat	**	**	-	-	.09	3.93	-	-	**	**
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	15.82	3.29	-	-	.20	8.73	**	**	13.05	5.79
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	**	**	-	-	**	**
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	.70	.15	-	-	**	**	-	-	**	**
TOTAL PERMANENT	21.29	4.43	**	**	.48	20.96	**	**	**	**
ALL CROPS	481.08	100.00	5.95	100.00	2.29	100.00	146.27	100.00	225.37	100.00

TABLE 1.6.6 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

North Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	189.22	74.63	3.53	95.66	**	**	13.64	98.77	54.18	94.36
Teff	74.60	29.42	**	**	-	-	9.69	70.17	29.65	51.64
Barely	45.32	17.87	**	**	-	-	**	**	4.66	8.12
Wheat	41.98	16.56	1.45	39.30	-	-	3.23	23.39	18.77	32.69
Maize	5.33	2.10	**	**	-	-	**	**	**	**
Sorghum	21.71	8.56	**	**	**	**	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	.24	.09	-	-	-	-	**	**	**	**
PULSES	48.55	19.15	**	**	**	**	**	**	2.91	5.07
Horse Beans	16.70	6.59	**	**	**	**	**	**	1.70	2.96
Field Peas	5.94	2.34	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	**	**
Vetch	9.55	3.77	-	-	**	-	-	-	**	**
OILSEEDS	13.31	5.25	-	-	**	**	-	-	**	**
Neug	5.27	2.08	-	-	**	**	-	-	-	-
Lin Seed	8.00	3.16	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.88	.35	-	-	.20	9.95	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	.21	.08	-	-	.12	5.97	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	**	**	-	-	**	**
ALL TEMPORARY	251.96	99.37	3.69	100.00	.70	34.83	13.81	100.00	57.30	99.79
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	253.55	100.00	3.69	100.00	**	**	13.81	100.00	57.42	100.00

TABLE 1.6.7 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

East Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	264.36	79.37	4.77	80.30	**	**	56.93	89.18	152.54	87.28
Teff	86.97	26.11	-	-	**	**	38.63	60.51	70.97	40.61
Barely	12.37	3.71	-	-	-	-	3.47	4.97	7.12	4.07
Wheat	59.52	17.87	2.80	47.14	-	-	12.98	20.33	51.95	29.72
Maize	102.06	30.64	**	**	**	**	2.01	3.15	21.92	12.54
Sorghum	2.69	.81	-	-	-	-	**	**	.55	.31
Millet	.59	.18	-	-	-	-	**	**	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	55.45	16.65	**	**	-	-	**	**	16.06	9.19
Horse Beans	4.79	1.44	-	-	-	-	**	**	**	**
Field Peas	4.33	1.30	-	-	-	-	**	**	**	**
Haricot Beans	24.27	7.29	-	-	-	-	.73	1.14	**	**
Chick Peas	9.34	2.80	-	-	-	-	**	**	**	**
Lentils	**	**	**	**	-	-	**	**	**	**
Vetch	4.35	1.31	-	-	-	-	**	**	**	**
OILSEEDS	.61	.18	-	-	-	-	-	-	.08	.05
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	.23	.07	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	.08	.02	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	9.98	3.00	**	**	**	**	**	**	5.43	3.11
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	**	**	-	-	**	**	-	-	**	**
Potatoes	5.13	1.54	-	-	-	-	**	**	4.00	2.29
Other Temporary	**	**	**	**	**	**	**	**	.67	.38
ALL TEMPORARY	330.40	99.20	5.94	100.00	**	**	63.84	100.00	174.11	99.62
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	-	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	2.68	.80	-	-	-	-	-	-	**	**
ALL CROPS	333.08	100.00	5.94	100.00	**	**	63.84	100.00	174.78	100.00

TABLE 1.6.8

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Arsi Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	438.40	77.46	9.11	99.35	**	**	185.12	97.76	348.58	86.97
Teff	39.82	7.04	-	-	**	**	15.34	8.10	26.65	6.65
Barely	144.58	25.54	**	**	**	**	38.03	20.08	133.80	33.38
Wheat	182.73	32.28	8.34	90.95	-	-	124.40	65.69	169.75	42.35
Maize	48.62	8.59	**	**	**	**	**	**	12.93	3.23
Sorghum	16.09	2.84	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	**	**
Oats	6.46	1.14	-	-	-	-	**	**	**	**
PULSES	58.75	10.38	-	-	-	-	2.27	1.20	35.70	8.91
Horse Beans	36.44	6.44	-	-	-	-	1.69	.89	24.18	6.03
Field Peas	11.38	2.01	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	**	**	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	57.98	10.24	-	-	-	-	**	**	12.26	3.06
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	50.14	8.86	-	-	-	-	**	**	8.22	2.05
Rape seed	4.27	.75	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.94	.87	**	**	**	**	**	**	1.16	.29
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	1.62	.29	**	**	**	**	**	**	.43	.11
ALL TEMPORARY	560.07	98.95	9.17	100.00	**	**	189.34	99.98	397.70	99.22
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	**	**	-	-	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	1.01	.18	-	-	**	**	-	-	**	**
TOTAL PERMANENT	5.93	1.05	-	-	.35	64.81	**	**	**	**
ALL CROPS	566.00	100.00	9.17	100.00	.54	100.00	189.37	100.00	400.81	100.00

TABLE 1.6.9 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

West Harerge Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	107.87	71.13	**	**	**	**	**	**	13.89	68.49
Teff	4.01	2.64	**	**	**	**	**	**	**	**
Barely	3.62	2.39	-	-	-	-	-	-	.15	.74
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	35.06	23.12	**	**	**	**	**	**	5.13	25.30
Sorghum	63.41	41.81	**	**	1.49	24.19	**	**	6.71	33.09
Millet	**	**	-	-	-	-	-	-	**	**
Oats	.45	.30	-	-	-	-	-	-	-	-
PULSES	10.35	6.82	-	-	**	**	**	**	**	**
Horse Beans	5.05	3.33	-	-	**	**	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	**	**	**	**
Chick Peas	**	**	-	-	**	**	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.78	1.83	**	**	**	**	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	2.60	1.71	**	**	**	**	-	-	**	**
ALL TEMPORARY	121.58	80.17	**	**	**	**	**	**	15.01	74.01
Chat	18.80	12.40	-	-	1.51	24.51	**	**	2.12	10.45
Coffee	9.88	6.52	**	**	**	**	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.10	.07	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	.09	.44
TOTAL PERMANENT	30.07	19.83	**	**	2.12	34.42	**	**	5.27	25.99
ALL CROPS	151.65	100.00	3.63	100.00	6.16	100.00	1.30	100.00	20.28	100.00

TABLE 1.6.10 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

East Harerge Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	119.23	71.28	**	**	2.14	42.13	**	**	42.51	70.26
Teff	**	**	-	-	-	-	-	-	**	**
Barely	2.61	1.56	-	-	**	**	-	-	**	**
Wheat	5.35	3.20	**	**	**	**	-	-	**	**
Maize	30.30	18.12	**	**	.77	15.16	1.08	16.59	13.45	22.23
Sorghum	77.84	46.54	-	-	.89	17.52	**	**	24.65	40.74
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	4.37	2.61	-	-	**	-	**	**	**	**
Horse Beans	**	**	-	-	**	**	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	**	**	**	**	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	7.52	4.50	**	**	**	**	**	**	2.71	4.48
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	1.80	1.08	-	-	**	**	**	**	1.07	1.77
Other Temporary	5.37	3.21	**	**	**	**	**	**	1.55	2.56
ALL TEMPORARY	139.86	83.62	**	**	2.49	49.02	**	**	47.75	78.93
Chat	21.54	12.88	-	-	1.60	31.50	**	**	8.21	13.57
Coffee	**	**	-	-	.33	6.50	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	27.40	16.38	-	-	2.59	50.98	**	**	12.75	21.07
ALL CROPS	167.26	100.00	**	**	5.08	100.00	**	**	60.50	100.00

TABLE 1.6.11

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Bale Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	178.93	68.95	3.90	89.66	**	**	26.89	97.92	70.32	92.65
Teff	20.70	7.98	**	**	**	**	4.51	16.43	2.00	2.64
Barely	46.37	17.87	-	-	**	**	4.26	15.52	19.58	25.80
Wheat	74.52	28.72	3.82	87.82	**	**	15.91	57.96	39.47	52.00
Maize	12.08	4.66	**	**	**	**	**	**	1.41	1.86
Sorghum	**	**	-	-	-	-	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	20.00	7.71	-	-	-	-	**	**	7.79	10.26
PULSES	21.22	8.18	-	-	**	**	**	**	**	**
Horse Beans	4.71	1.82	-	-	-	-	**	**	**	**
Field Peas	6.84	2.64	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	**	**	**	**	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	**	**	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	20.12	7.75	**	**	-	-	**	**	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	19.95	7.69	**	**	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	20.47	7.89	**	**	**	**	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	7.47	2.88	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.93	.36	**	**	**	**	-	-	**	**
ALL TEMPORARY	240.74	92.77	4.17	95.86	**	**	27.38	99.74	72.07	94.95
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	**	**	-	-
Enset	7.79	3.00	-	-	-	-	-	-	3.83	5.05
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	.18	.07	-	-	-	-	-	-	**	**
TOTAL PERMANENT	18.75	7.23	**	**	-	-	**	**	3.83	5.05
ALL CROPS	259.49	100.00	4.35	100.00	**	**	27.45	100.00	75.90	100.00

TABLE 1.6.12

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Borena Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	62.11	46.34	**	**	.01	100.00	**	**	**	**
Teff	10.31	7.69	-	-	-	-	**	**	**	**
Barely	14.95	11.16	-	-	-	-	-	-	**	**
Wheat	6.84	5.10	-	-	-	-	-	-	**	**
Maize	27.40	20.44	**	**	.01	100.00	-	-	5.11	20.86
Sorghum	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	6.92	5.16	-	-	-	-	-	-	**	**
Horse Beans	1.66	1.24	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	3.71	2.77	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.54	1.15	**	**	-	-	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	1.36	1.01	**	**	-	-	-	-	**	**
ALL TEMPORARY	70.58	52.66	**	**	.01	100.00	**	**	14.46	59.02
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	21.93	16.36	**	**	-	-	**	**	**	**
Enset	36.32	27.10	-	-	-	-	-	-	8.32	33.96
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	.10	.07	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	63.44	47.34	**	**	-	-	**	**	10.04	40.98
ALL CROPS	134.02	100.00	3.48	100.00	.01	100.00	**	**	24.50	100.00



TABLE 1.7 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Somale

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	49.56	89.67	**	**	.24	45.28	**	**	.61	76.25
Teff	**	**	-	**	-	-	-	-	-	-
Barely	4.18	7.56	**	**	-	-	-	-	**	**
Wheat	2.47	4.47	**	**	-	-	-	-	**	**
Maize	22.15	40.08	**	**	.23	43.40	**	**	.41	51.25
Sorghum	20.57	37.22	**	**	**	**	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	1.46	2.64	-	-	**	**	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	.03	5.66	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	.03	5.66	-	-	**	**
ALL TEMPORARY	51.58	93.32	**	**	.28	52.83	**	**	.63	78.75
Chat	3.22	5.83	-	-	**	**	-	-	**	**
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	.21	39.62	-	-	.03	3.75
Other Permanent	**	**	-	-	**	**	-	-	-	-
TOTAL PERMANENT	3.69	6.68	-	-	.25	47.17	-	-	**	**
ALL CROPS	55.27	100.00	**	**	.53	100.00	**	**	.80	100.00

TABLE 1.7.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Shinele Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	.48	67.61	**	**	.11	35.48	**	**	.13	76.47
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.13	18.31	**	**	.11	32.26	**	**	**	**
Sorghum	.35	49.30	**	**	.01	3.23	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.05	7.04	-	-	.03	9.68	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.05	7.04	-	-	.03	9.68	-	-	-	-
ALL TEMPORARY	.53	74.65	.08	100.00	.14	45.16	**	**	.13	76.47
Chat	**	**	-	-	.03	9.68	-	-	**	**
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.13	18.31	-	-	.13	41.94	-	-	.03	17.65
Other Permanent	**	**	-	-	.01	3.23	-	-	**	**
TOTAL PERMANENT	.18	25.35	-	-	.17	54.84	-	-	.04	23.53
ALL CROPS	.71	100.00	.08	100.00	.31	100.00	**	**	.17	100.00

TABLE 1.7.2 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Jijiga Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	38.63	90.34	**	**	.02	100.00	.02	100.00	.29	67.44
Teff	**	**	-	-	-	-	-	-	-	-
Barely	4.18	9.78	**	**	-	-	-	-	.03	6.98
Wheat	2.44	5.71	**	**	-	-	-	-	.09	20.93
Maize	12.28	28.72	**	**	.02	100.00	.02	100.00	.16	37.21
Sorghum	19.54	45.70	**	**	-	-	-	-	.01	2.33
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	.31	.72	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.08	.19	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.11	.26	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	.01	2.33
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	-	-	-	-	.01	2.33
ALL TEMPORARY	39.45	92.26	**	**	.02	100.00	.02	100.00	.30	69.77
Chat	3.18	7.44	-	-	-	-	-	-	.13	30.23
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	3.31	7.74	-	-	-	-	-	-	.13	30.23
ALL CROPS	42.76	100.00	**	**	.02	100.00	.02	100.00	.43	100.00

TABLE 1.7.3 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Moyale Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	10.45	88.48	-	-	**	**	-	-	**	**
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	-	-	-	-
Maize	9.74	82.47	-	-	**	**	-	-	**	**
Sorghum	.67	5.67	-	-	-	-	-	-	.01	5.00
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	**	**	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	11.60	98.22	-	-	**	**	-	-	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	**	**	-	-	-	-
ALL CROPS	11.81	100.00	-	-	**	**	-	-	**	**

TABLE 1.8 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Benshangul-Gumuz

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	107.26	76.69	.84	91.30	.08	7.34	**	**	8.60	92.77
Teff	22.93	16.39	**	**	-	-	**	**	3.92	42.29
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	22.01	15.74	.58	63.04	**	**	**	**	2.57	27.72
Sorghum	45.79	32.74	**	**	-	-	**	**	**	**
Millet	13.69	9.79	-	-	**	**	-	-	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	5.84	4.18	-	-	-	-	-	-	**	**
Horse Beans	1.35	.97	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	3.32	2.37	-	-	-	-	-	-	**	.11
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	20.12	14.38	-	-	**	**	-	-	**	**
Neug	14.70	10.51	-	-	**	**	-	-	**	**
Lin Seed	.24	.17	-	-	-	-	-	-	**	.11
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	1.16	.83	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	4.02	2.87	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.37	2.41	-	-	**	**	-	-	.30	3.24
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	1.94	1.39	-	-	-	-	-	-	.15	1.62
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	1.23	.88	-	-	**	**	-	-	**	**
ALL TEMPORARY	136.59	97.65	.84	91.30	.12	11.01	.35	100.00	9.20	99.24
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	.08	8.70	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.91	.65	-	-	**	**	-	-	**	**
Other Permanent	.21	.15	-	-	**	**	-	-	**	**
TOTAL PERMANENT	3.28	2.35	.08	8.70	**	**	-	-	.07	.76
ALL CROPS	139.87	100.00	.92	100.00	**	**	.35	100.00	9.27	100.00

TABLE 1.8.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Metekel Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	54.15	78.64	.39	100.00	.05	6.41	.04	100.00	6.34	93.79
Teff	12.04	17.48	-	-	-	-	-	-	3.23	47.78
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	4.84	7.03	.39	100.00	.04	5.13	.04	100.00	1.25	18.49
Sorghum	24.05	34.93	-	-	-	-	-	-	**	**
Millet	10.41	15.12	-	-	**	**	-	-	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	3.96	5.75	-	-	-	-	-	-	**	**
Horse Beans	.78	1.13	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	2.45	3.56	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	6.92	10.05	-	-	**	**	-	-	**	**
Neug	4.13	6.00	-	-	**	**	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	2.33	3.38	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.87	2.72	-	-	-	-	-	-	.24	3.55
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	1.02	1.48	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	66.90	97.15	.39	100.00	.06	7.69	.04	100.00	6.74	99.70
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	.03	3.85	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.96	2.85	-	-	**	**	-	-	**	**
ALL CROPS	68.86	100.00	.39	100.00	**	**	.04	100.00	6.76	100.00

TABLE 1.8.2 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Asosa Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	36.55	71.28	**	**	**	**	**	**	1.65	89.19
Teff	7.23	14.10	**	**	-	-	-	-	.57	30.81
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	11.07	21.59	**	**	**	**	**	**	.94	50.81
Sorghum	17.89	34.89	**	**	-	-	**	**	**	**
Millet	.36	.70	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.94	1.83	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	11.72	22.85	-	-	-	-	-	-	**	**
Neug	9.49	18.51	-	-	-	-	-	-	**	**
Lin Seed	.12	.23	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.81	1.58	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	1.30	2.54	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.23	2.40	-	-	**	**	-	-	.04	2.16
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.69	1.35	-	-	-	-	-	-	.04	2.16
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.54	1.05	-	-	**	**	-	-	-	-
ALL TEMPORARY	50.44	98.36	**	**	**	**	**	**	1.82	98.38
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	.16	.31	.08	18.18	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	.13	.25	-	-	**	**	-	-	**	**
TOTAL PERMANENT	.84	1.64	.08	18.18	**	**	-	-	.03	1.62
ALL CROPS	51.28	100.00	**	**	.18	100.00	**	**	1.85	100.00

TABLE 1.8.3 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Kemeshi Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	**	**	.09	100.00	-	-	**	**	**	**
Teff	**	**	-	-	-	-	**	**	**	**
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	**	**	.09	100.00	-	-	**	**	.37	60.66
Sorghum	3.85	19.59	-	-	-	-	-	-	**	**
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	.09	100.00	-	-	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	**	**	.09	100.00	**	**	**	**	**	**



TABLE 1.9 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

(S.N.N.P.R)

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	478.40	56.32	13.55	80.27	2.93	30.91	92.16	95.42	246.45	56.10
Teff	123.24	14.51	1.49	8.83	**	**	44.55	46.13	76.65	17.45
Barely	49.95	5.88	**	**	**	**	4.13	4.28	26.32	5.99
Wheat	66.84	7.87	4.29	25.41	**	**	40.16	41.58	54.75	12.46
Maize	165.47	19.48	7.68	45.50	**	**	1.73	1.79	75.71	17.24
Sorghum	69.58	8.19	**	**	**	**	**	**	11.50	2.62
Millet	3.16	.37	-	-	**	**	**	**	1.49	.34
Oats	**	**	-	-	-	-	.01	.01	.03	.01
PULSES	70.68	8.32	**	**	**	**	2.11	2.18	26.16	5.96
Horse Beans	29.98	3.53	-	-	-	-	.87	.90	9.85	2.24
Field Peas	18.53	2.18	-	-	**	**	1.18	1.22	4.91	1.12
Haricot Beans	18.42	2.17	**	**	**	**	**	**	10.30	2.34
Chick Peas	3.00	.35	**	**	**	**	-	-	.99	.23
Lentils	.20	.02	-	-	-	-	**	**	.09	.02
Vetch	**	**	-	-	-	-	-	-	.02	-
OILSEEDS	1.77	.21	-	-	-	-	**	**	.56	.13
Neug	**	**	-	-	-	-	-	-	.37	.08
Lin Seed	**	**	-	-	-	-	**	**	.03	.01
Rape seed	.20	.02	-	-	-	-	-	-	.13	.03
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.23	.03	-	-	-	-	-	-	.02	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	.01	-
OTHERS	57.61	6.78	**	**	**	**	1.36	1.41	30.88	7.03
Fenugreek	**	**	-	-	-	-	**	**	.31	.07
Spices	17.62	2.07	**	**	**	**	.92	.95	9.76	2.22
Potatoes	5.75	.68	-	-	**	**	**	**	4.18	.95
Other Temporary	33.69	3.97	**	**	**	**	**	**	16.63	3.79
ALL TEMPORARY	608.46	71.63	13.68	81.04	3.64	38.40	95.70	99.09	304.05	69.22
Chat	14.64	1.72	-	-	**	**	.35	.36	8.09	1.84
Coffee	63.87	7.52	3.14	18.60	.87	9.18	**	**	21.75	4.95
Enset	146.88	17.29	-	-	1.48	15.61	.41	.42	100.33	22.84
Cotton	.34	.04	-	-	**	**	-	-	.03	.01
Tobacco	.76	.09	-	-	-	-	-	-	.47	.11
Fruits	8.89	1.05	**	**	**	**	-	-	2.12	.48
Other Permanent	5.66	.67	**	**	**	**	-	-	2.44	.56
TOTAL PERMANENT	241.04	28.37	3.20	18.96	5.84	61.60	.88	.91	135.23	30.78
ALL CROPS	849.50	100.00	16.88	100.00	9.48	100.00	96.58	100.00	439.28	100.00

TABLE 1.9.1 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Gurage Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	91.64	64.42	2.68	100.00	**	**	**	**	59.69	61.96
Teff	31.26	21.97	**	**	-	-	**	**	**	**
Barely	12.82	9.01	**	**	**	**	**	**	10.35	10.74
Wheat	11.65	8.19	**	**	-	-	5.30	19.45	7.28	7.56
Maize	28.14	19.78	**	**	**	**	**	**	10.78	11.19
Sorghum	7.67	5.39	-	-	**	**	-	-	**	**
Millet	**	**	-	-	-	-	-	-	**	**
Oats	**	**	-	-	-	-	**	**	**	**
PULSES	8.56	6.02	-	-	-	-	**	**	3.68	3.82
Horse Beans	3.76	2.64	-	-	-	-	**	**	2.16	2.24
Field Peas	2.32	1.63	-	-	-	-	.53	1.94	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	7.87	5.53	-	-	**	**	**	**	3.70	3.84
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	5.11	3.59	-	-	-	-	**	**	**	**
Potatoes	-	.59	-	-	-	-	-	-	.81	.84
Other Temporary	1.92	1.35	-	-	**	**	-	-	1.43	1.48
ALL TEMPORARY	108.50	76.27	2.68	100.00	**	**	**	**	67.48	70.05
Chat	4.42	3.11	-	-	**	**	**	**	4.01	4.16
Coffee	3.24	2.28	-	-	**	**	**	**	3.09	3.21
Enset	23.66	16.63	-	-	**	**	.37	1.36	20.55	21.33
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.32	.22	-	-	-	-	-	-	.32	.33
Other Permanent	2.11	1.48	-	-	**	**	-	-	**	**
TOTAL PERMANENT	33.76	23.73	-	-	.32	57.14	.40	1.47	28.85	29.95
ALL CROPS	142.26	100.00	2.68	100.00	.56	100.00	**	**	96.33	100.00

TABLE 1.9.2 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Hadiya Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	86.75	71.29	3.25	99.69	**	**	46.41	96.93	71.77	71.90
Teff	21.86	17.97	**	**	**	**	15.78	32.96	21.51	21.55
Barely	5.37	4.41	**	**	**	**	2.50	5.22	4.98	4.99
Wheat	32.74	26.91	2.51	76.99	**	**	27.50	57.44	32.43	32.49
Maize	18.93	15.56	**	**	-	-	**	**	11.03	11.05
Sorghum	7.54	6.20	**	**	-	-	**	**	1.62	1.62
Millet	**	**	-	-	-	-	**	**	.18	.18
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	8.43	6.93	-	-	**	**	1.07	2.23	7.09	7.10
Horse Beans	4.96	4.08	-	-	-	-	**	**	4.26	4.27
Field Peas	2.88	2.37	-	-	**	**	**	**	2.57	2.57
Haricot Beans	.45	.37	-	-	-	-	**	**	.16	.16
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	**	**	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-
OTHERS	7.63	6.27	-	-	**	**	**	**	4.79	4.80
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	.85	.70	-	-	-	-	**	**	.67	.67
Other Temporary	5.39	4.43	-	-	**	**	**	**	3.03	3.04
ALL TEMPORARY	103.32	84.91	3.25	99.69	**	**	47.67	99.56	83.69	83.84
Chat	1.24	1.02	-	-	**	**	**	**	1.08	1.08
Coffee	2.26	1.86	**	**	**	**	**	**	1.86	1.86
Enset	14.10	11.59	-	-	**	**	**	**	12.68	12.70
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.32	.26	-	-	-	-	-	-	.19	.19
Fruits	**	**	-	-	-	-	-	-	.20	.20
Other Permanent	.16	.13	-	-	-	-	-	-	.12	.12
TOTAL PERMANENT	18.36	15.09	**	**	.07	15.56	.21	.44	16.13	16.16
ALL CROPS	121.68	100.00	3.26	100.00	.45	100.00	47.88	100.00	99.82	100.00

TABLE 1.9.3 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.).

Kembata Alaba Tembaro Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	54.08	68.29	2.83	96.92	**	**	15.66	91.15	39.64	65.97
Teff	11.89	15.01	**	**	**	**	6.86	39.93	11.36	18.90
Barely	.41	.52	-	-	-	-	.18	1.05	.38	.63
Wheat	10.91	13.78	**	**	-	-	6.91	40.22	10.08	16.77
Maize	26.26	33.16	2.20	75.34	**	**	**	**	15.90	26.46
Sorghum	2.82	3.56	-	-	**	**	**	**	.73	1.21
Millet	1.79	2.26	-	-	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	2.69	3.40	-	-	-	-	.39	2.27	2.14	3.56
Horse Beans	2.22	2.80	**	**	-	-	**	**	1.91	3.18
Field Peas	.14	.18	-	-	-	-	**	**	**	**
Haricot Beans	.25	.32	-	-	-	-	**	**	.11	.18
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	11.20	14.14	**	**	**	**	1.00	5.82	8.89	14.79
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	7.08	8.94	**	**	**	**	**	**	6.26	10.42
Potatoes	1.09	1.38	-	-	**	**	**	**	.67	1.11
Other Temporary	2.55	3.22	**	**	**	**	**	**	1.67	2.78
ALL TEMPORARY	68.12	86.02	2.89	98.97	**	**	17.05	99.24	50.67	84.32
Chat	1.02	1.29	-	-	-	-	**	**	.57	.95
Coffee	2.52	3.18	**	**	**	**	-	-	2.18	3.63
Enset	6.42	8.11	-	-	.04	10.20	-	-	5.78	9.62
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.53	.67	-	-	-	-	-	-	.44	.73
Other Permanent	.39	.49	-	-	**	**	-	-	**	**
TOTAL PERMANENT	11.07	13.98	**	**	**	**	**	**	9.42	15.68
ALL CROPS	79.19	100.00	2.92	100.00	.39	100.00	**	**	60.09	100.00

TABLE 1.9.4 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Sidama Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	32.48	28.36	**	**	**	**	**	**	15.13	24.17
Teff	.83	.72	-	-	-	-	-	-	.54	.86
Barely	2.40	2.10	-	-	-	-	-	-	**	**
Wheat	1.43	1.25	**	**	-	-	-	-	**	**
Maize	27.71	24.19	**	**	**	**	**	**	13.52	21.60
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	5.23	4.57	-	-	-	-	-	-	2.37	3.79
Horse Beans	1.46	1.27	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	3.41	2.98	-	-	-	-	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.40	2.97	-	-	**	**	**	**	2.27	3.63
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	2.43	2.12	-	-	**	**	**	**	1.73	2.76
ALL TEMPORARY	41.11	35.89	**	**	**	**	**	**	19.77	31.58
Chat	6.99	6.10	-	-	**	**	**	**	2.28	3.64
Coffee	20.11	17.56	.70	22.65	**	**	**	**	8.21	13.12
Enset	42.11	36.76	-	-	**	**	-	-	30.71	49.06
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.15	.13	-	-	-	-	-	-	.11	.18
Fruits	2.35	2.05	**	**	**	**	-	-	.77	1.23
Other Permanent	1.72	1.50	**	**	**	**	-	-	.75	1.20
TOTAL PERMANENT	73.43	64.11	.73	23.62	**	**	**	**	42.83	68.42
ALL CROPS	114.54	100.00	**	**	**	**	.39	100.00	62.60	100.00

TABLE 1.9.5 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1999 E.C.)

Gedio Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	6.43	18.03	**	**	-	-	**	**	2.28	30.85
Teff	.05	.14	-	-	-	-	-	-	-	-
Barely	1.75	4.91	-	-	-	-	**	**	.63	8.53
Wheat	**	**	**	**	-	-	-	-	**	**
Maize	4.14	11.61	**	**	-	-	-	-	**	**
Sorghum	.11	.31	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	2.49	6.98	-	-	-	-	-	-	.31	4.19
Horse Beans	1.70	4.77	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.26	3.53	-	-	-	-	-	-	.93	12.58
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	1.25	3.50	-	-	-	-	-	-	.92	12.45
ALL TEMPORARY	10.27	28.79	**	**	-	-	**	**	3.58	48.44
Chat	.20	.56	-	-	-	-	-	-	**	**
Coffee	12.75	35.74	.49	41.18	**	**	**	**	1.01	13.67
Enset	11.67	32.72	-	-	.02	66.67	-	-	2.71	36.67
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	.22	.62	-	-	-	-	-	-	**	**
TOTAL PERMANENT	25.40	71.21	.49	41.18	.03	100.00	.02	40.00	3.81	51.56
ALL CROPS	35.67	100.00	1.19	100.00	.03	100.00	.05	100.00	7.39	100.00

TABLE 1.9.6 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

North Omo Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	121.56	58.19	.99	94.29	**	**	-	-	49.50	51.61
Teff	36.88	17.65	**	**	**	**	-	-	11.77	12.27
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	**	**	-	-	-	-	**	**
Maize	37.53	17.97	.63	60.00	**	**	-	-	21.37	22.28
Sorghum	24.53	11.74	-	-	**	**	-	-	3.60	3.75
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	24.05	11.51	**	**	-	-	-	-	9.98	10.41
Horse Beans	6.26	3.00	-	-	-	-	-	-	**	**
Field Peas	5.55	2.66	-	-	-	-	-	-	**	**
Haricot Beans	11.45	5.48	.06	5.71	-	-	-	-	7.95	8.29
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	22.26	10.66	-	-	**	**	-	-	9.85	10.27
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	2.82	1.35	-	-	-	-	-	-	2.00	2.09
Other Temporary	17.09	8.18	-	-	**	**	-	-	7.42	7.74
ALL TEMPORARY	168.16	80.50	1.05	100.00	**	**	-	-	69.34	72.30
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	8.17	3.91	-	-	**	**	-	-	4.44	4.63
Enset	28.69	13.73	-	-	**	**	-	-	21.58	22.50
Cotton	**	**	-	-	**	**	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	.21	.22
Other Permanent	.41	.20	-	-	-	-	-	-	**	**
TOTAL PERMANENT	40.74	19.50	-	-	**	**	-	-	26.57	27.70
ALL CROPS	208.90	100.00	1.05	100.00	**	**	-	-	95.91	100.00

TABLE 1.9.7 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

South Omo Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	20.18	74.91	**	**	.02	50.00	-	-	1.06	56.99
Teff	1.09	4.05	-	-	-	-	-	-	**	**
Barely	2.47	9.17	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	7.63	28.32	**	**	**	**	-	-	**	**
Sorghum	8.36	31.03	-	-	**	**	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	1.22	4.53	-	-	-	-	-	-	**	**
Horse Beans	.71	2.64	-	-	-	-	-	-	**	**
Field Peas	.31	1.15	-	-	-	-	-	-	**	**
Haricot Beans	.20	.74	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.20	.74	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.19	.71	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.53	1.97	-	-	**	**	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.30	1.11	-	-	**	**	-	-	**	**
ALL TEMPORARY	22.13	82.15	**	**	**	**	-	-	1.21	65.05
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	2.10	7.80	**	**	**	**	-	-	**	**
Enset	2.29	8.50	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.24	.89	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	4.81	17.85	**	**	**	**	-	-	**	**
ALL CROPS	26.94	100.00	**	**	.04	100.00	-	-	1.86	100.00



TABLE 1.9.8 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Keficho-Shekicha Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	27.15	42.40	**	**	-	-	3.21	98.47	.57	17.38
Teff	11.16	17.43	-	-	-	-	2.29	70.03	**	**
Barely	3.92	6.12	-	-	-	-	**	**	**	**
Wheat	**	**	**	**	-	-	**	**	**	**
Maize	4.42	6.90	**	**	-	-	-	-	**	**
Sorghum	5.78	9.03	-	-	-	-	**	**	**	**
Millet	.13	.20	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	11.81	18.44	-	-	-	-	**	**	**	**
Horse Beans	6.31	9.85	-	-	-	-	**	**	**	**
Field Peas	4.88	7.62	-	-	-	-	**	**	**	**
Haricot Beans	.62	.97	-	-	-	-	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.26	1.97	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.71	1.11	-	-	-	-	-	-	**	**
ALL TEMPORARY	40.22	62.80	**	**	-	-	3.26	99.69	.73	22.26
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	9.80	15.30	**	**	-	-	-	-	.04	1.22
Enset	12.72	19.86	-	-	-	-	**	**	2.44	74.39
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.60	.94	**	**	-	-	-	-	**	**
Other Permanent	.32	.50	-	-	-	-	-	-	**	**
TOTAL PERMANENT	23.82	37.20	**	**	-	-	**	**	2.55	77.74
ALL CROPS	64.04	100.00	**	**	-	-	3.27	100.00	3.28	100.00

TABLE 1.9.9 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Bench-Maji Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED * SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	16.21	64.76	**	**	-	-	.01	100.00	**	**
Teff	2.67	10.67	-	-	-	-	-	-	**	**
Barely	1.55	6.19	-	-	-	-	-	-	**	**
Wheat	.28	1.12	**	**	-	-	-	-	**	**
Maize	6.74	26.93	**	**	-	-	.01	100.00	**	**
Sorghum	4.95	19.78	-	-	-	-	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.97	7.87	-	-	-	-	-	-	**	**
Horse Beans	1.45	5.79	-	-	-	-	-	-	**	**
Field Peas	.50	2.00	-	-	-	-	-	-	**	**
Naricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-
OTHERS	1.76	7.03	-	-	-	-	-	-	.20	10.36
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	1.70	6.79	-	-	-	-	-	-	.20	10.36
ALL TEMPORARY	19.95	79.70	**	**	-	-	.01	100.00	.98	50.78
Chat	.18	.72	-	-	-	-	-	-	.01	.52
Coffee	2.03	8.11	**	**	-	-	-	-	.24	12.44
Enset	1.91	7.63	-	-	.01	100.00	-	-	.61	31.61
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.82	3.28	-	-	-	-	-	-	.07	3.63
Other Permanent	.14	.56	-	-	-	-	-	-	.02	1.04
TOTAL PERMANENT	5.08	20.30	**	**	.01	100.00	-	-	.95	49.22
ALL CROPS	25.03	100.00	**	**	.01	100.00	.01	100.00	1.93	100.00

TABLE 1.9.10 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Yem Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	8.56	70.51	.15	100.00	-	-	.43	100.00	3.48	69.05
Teff	3.48	28.67	**	**	-	-	.42	97.67	2.75	54.56
Barely	1.15	9.47	-	-	-	-	-	-	.15	2.98
Wheat	2.33	19.19	**	**	-	-	-	-	.23	4.56
Maize	.92	7.58	**	**	-	-	**	**	.31	6.15
Sorghum	.67	5.52	-	-	-	-	-	-	.04	.79
Millet	.01	.08	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.70	14.00	-	-	-	-	-	-	**	**
Horse Beans	1.07	8.81	-	-	-	-	-	-	**	**
Field Peas	.61	5.02	-	-	-	-	-	-	**	**
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	.02	.16	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.04	.33	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	.04	.33	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.13	1.07	-	-	-	-	-	-	.05	.99
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	.02	.08	-	-	-	-	-	-	-	-
Other Temporary	.12	.99	-	-	-	-	-	-	.05	.99
ALL TEMPORARY	10.43	85.91	.15	100.00	-	-	.43	100.00	3.70	73.41
Chat	.06	.49	-	-	-	-	-	-	**	**
Coffee	.06	.49	-	-	-	-	-	-	**	**
Enset	1.57	12.93	-	-	-	-	-	-	1.27	25.20
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	.02	.16	-	-	-	-	-	-	.01	.20
TOTAL PERMANENT	1.71	14.09	-	-	-	-	-	-	1.34	26.59
ALL CROPS	12.14	100.00	.15	100.00	-	-	.43	100.00	5.04	100.00

TABLE 1.9.11 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Amaro Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	.98	25.13	**	**	**	**	**	**	**	**
Teff	.47	12.05	-	-	.01	.85	**	**	-	-
Barely	.25	6.41	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	**	**	**	**	-	-	-	-	-	-
Sorghum	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.61	2.71	-	-	-	-	-	-	**	**
Horse Beans	.07	.23	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	-	-	.03	1.51
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	**	**	-	-	.03	1.51
ALL TEMPORARY	1.63	41.79	**	**	**	**	**	**	**	**
Chat	.03	.77	-	-	.03	2.56	-	-	.03	1.51
Coffee	.66	16.92	.02	66.67	.50	42.74	-	-	.55	27.64
Enset	1.50	38.46	-	-	.54	46.15	-	-	1.23	61.81
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	2.27	58.21	.02	66.67	1.15	98.29	-	-	1.89	94.97
ALL CROPS	3.90	100.00	.03	100.00	1.17	100.00	**	**	1.99	100.00

TABLE 1.9.12 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Burji Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	1.01	48.56	-	-	-	-	-	-	.05	26.32
Teff	.12	5.77	-	-	-	-	-	-	**	**
Barely	.14	6.73	-	-	-	-	-	-	**	**
Wheat	.23	11.06	-	-	-	-	-	-	**	**
Maize	**	**	-	-	-	-	-	-	**	**
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.82	39.42	-	-	-	-	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.38	18.27	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.01	.48	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	.01	.48	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	-	-
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.01	.48	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.89	90.87	-	-	-	-	-	-	.08	42.11
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	.03	1.44	-	-	**	**	-	-	.01	5.26
Enset	.14	6.73	-	-	**	**	-	-	.10	52.63
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.19	9.13	-	-	**	**	-	-	.11	57.89
ALL CROPS	2.08	100.00	-	-	**	**	-	-	.19	100.00

TABLE 1.9.13 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Konso Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	7.38	87.75	-	-	.07	100.00	**	**	2.51	91.94
Teff	**	**	-	-	-	-	-	-	**	**
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	-	-
Maize	1.36	16.17	-	-	.04	57.14	-	-	**	**
Sorghum	4.65	55.29	-	-	.03	42.86	**	**	2.10	76.92
Millet	**	.71	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.62	7.37	**	**	-	-	-	-	.04	1.47
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	.05	.59	-	-	-	-	-	-	-	-
Haricot Beans	.45	5.35	-	-	-	-	-	-	.04	1.47
Chick Peas	**	**	**	**	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.01	.12	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.17	2.02	-	-	-	-	-	-	.09	3.30
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	8.18	97.27	**	**	.07	100.00	**	**	2.64	96.70
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	.11	1.31	**	**	-	-	-	-	**	**
Enset	**	**	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	.01	.37
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.23	2.73	**	**	-	-	-	-	.09	3.30
ALL CROPS	8.41	100.00	.02	100.00	.07	100.00	**	**	2.73	100.00

TABLE 1.9.14 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Derashe Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	4.00	84.75	-	-	**	**	**	**	**	**
Teff	.28	5.93	-	-	**	**	-	-	**	**
Barely	.25	5.30	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	-	-	-	-
Maize	1.48	31.36	-	-	**	**	-	-	**	**
Sorghum	1.93	40.89	-	-	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.49	10.38	-	-	**	**	-	-	-	-
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	.02	.42	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	-	-
Chick Peas	.24	5.08	-	-	**	**	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	4.56	96.61	-	-	**	**	**	**	**	**
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	.04	.85	-	-	-	-	-	-	-	-
Enset	.10	2.12	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	.01	.21	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.16	3.39	-	-	-	-	-	-	.03	25.00
ALL CROPS	4.72	100.00	-	-	**	**	**	**	.12	100.00

TABLE 1.10

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Gambela

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	11.99	80.09	**	**	**	**	-	-	.26	65.00
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	8.66	57.85	**	**	-	-	-	-	.20	50.00
Sorghum	3.26	21.78	**	**	**	**	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.77	5.14	**	**	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.75	5.01	**	**	-	-	-	-	-	-
ALL TEMPORARY	13.21	88.24	**	**	**	**	-	-	.27	67.50
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	1.26	8.42	.33	45.21	-	-	-	-	**	**
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.19	1.27	-	-	-	-	-	-	-	-
Other Permanent	.08	.53	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.76	11.76	.33	45.21	-	-	-	-	**	**
ALL CROPS	14.97	100.00	.73	100.00	**	**	-	-	.40	100.00



TABLE 1.11 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Harari

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	3.70	62.29	.05	100.00	.13	46.43	.10	58.82	1.94	66.67
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	.04	.67	.01	20.00	-	-	-	-	.03	1.03
Maize	.67	11.28	.03	60.00	.03	10.71	.02	11.76	.40	13.75
Sorghum	2.99	50.34	.01	20.00	.10	35.71	.08	47.06	1.51	51.89
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.74	12.46	-	-	.02	7.14	-	-	.17	5.84
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.74	12.46	-	-	.02	7.14	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.05	.84	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.04	.67	-	-	-	-	-	-	.01	.34
ALL TEMPORARY	4.49	75.59	.05	100.00	.15	53.57	.10	58.82	2.12	72.85
Chat	1.34	22.56	-	-	.09	32.14	.07	41.18	.75	25.77
Coffee	.02	.34	-	-	.01	3.57	-	-	.01	.34
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.09	1.52	-	-	**	**	-	-	.03	1.03
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.45	24.41	-	-	.13	46.43	.07	41.18	.79	27.15
ALL CROPS	5.94	100.00	.05	100.00	.28	100.00	.17	100.00	2.91	100.00

TABLE 1.12 ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Addis Ababa

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	5.32	75.25	.24	80.00	-	-	.59	95.16	5.21	85.97
Teff	2.99	42.29	.07	23.33	-	-	.45	72.58	2.96	48.84
Barely	**	**	-	-	-	-	**	**	**	**
Wheat	2.15	30.41	.17	56.67	-	-	.11	17.74	2.13	35.15
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	.01	.14	-	-	-	-	-	-	**	**
PULSES	1.53	21.64	-	-	-	-	-	-	.72	11.88
Horse Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	.49	6.93	-	-	-	-	-	-	.19	3.14
Lentils	.32	4.53	-	-	-	-	-	-	.21	3.47
Vetch	.66	9.34	-	-	-	-	-	-	.30	4.95
OILSEEDS	.01	.14	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.21	2.97	**	**	**	**	**	**	.13	2.15
Fenugreek	.12	1.70	-	-	-	-	-	-	.06	.99
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	7.07	100.00	.30	100.00	**	**	.62	100.00	6.06	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	7.07	100.00	.30	100.00	**	**	.62	100.00	6.06	100.00

TABLE 1.13

ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR  
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Dire Dawa

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	4.52	83.55	.07	100.00	.35	44.87	.06	42.86	.59	62.11
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.06	1.11	-	-	**	**	-	-	**	**
Sorghum	4.46	82.44	.07	100.00	.34	43.59	.06	42.86	.58	61.05
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.12	2.22	-	-	**	**	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.12	2.22	-	-	**	**	-	-	**	**
ALL TEMPORARY	4.70	86.88	.07	100.00	.41	52.56	.06	42.86	.67	70.53
Chat	.39	7.21	-	-	.07	8.97	**	**	**	**
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	**	**	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.71	13.12	-	-	**	**	**	**	**	**
ALL CROPS	5.41	100.00	.07	100.00	.78	100.00	.14	100.00	.95	100.00

## **2. Total Fertilizer Applied Area by Type of Fertilizer and Crop**

The three types of fertilizers most commonly used by the private peasants during the survey year were Natural, DAP and UREA. These fertilizers were used separately or in combination with one another, i.e. only Natural, DAP, or UREA, DAP mixed with UREA and Natural mixed with UREA or DAP.

As shown in the Summary Table C below, among the fertilizers used DAP was applied in larger cultivated crop area. Natural fertilizer and UREA were also applied to a considerable amount of crop area. In contrast, the area on which a mixture of natural and commercial fertilizers was applied estimated to be very small at the country level.

**Summary Table C. Total Fertilizer Applied Area by Type of Fertilizer**

Type of Fertilizer	Applied Area ('000 HA)
Natural	609.95
DAP	1,109.95
UREA	228.44
DAP + UREA	533.93
Natural + Commercial	45.33
Total	2,608.55

## **2.1 Natural Fertilizer Applied Area**

Out of the total fertilizer applied area which is 2.6 million hectares, natural fertilizer was applied to 609,950 hectares (23.38%). Of this area, temporary and permanent crops accounted for about 424,710 and 185,240 hectares, respectively. See Table 2.1.

## **2.2 DAP Applied Area**

The total DAP applied area was about 1.2 million hectares, (45.66%) of the total fertilized area at the country level. Area under temporary and permanent crops accounted for 1,185,500 and 5,450 hectares of the total DAP applied area, respectively. Out of the total DAP applied area under temporary crops the largest was area under teff which accounted for 444,740 hectares (37.34 %). On the other hand, area under coffee was the largest DAP applied area (2,210 hectares) of all DAP applied area under permanent crops.

## **2.3 UREA Applied Area**

As presented in Table 2.1 of the total fertilized area, total UREA applied area was 228,440 hectares (8.76%) area, UREA applied to temporary and permanent crop areas accounted for 226,360 hectares (8.68%) and 2,080 hectares (0.08%), respectively.

## **2.4 Area with a Combination of DAP and UREA Applied**

Out of the total fertilizer applied area, the mixture of DAP and UREA was applied on an estimated area of 533,930 hectares (20.47%). Temporary and permanent crop areas where the mixture of DAP and UREA was applied accounted for 528,590 hectares (99.00%) and 5,340 hectares (1.00%) of the total DAP + UREA applied area, respectively. Of all the mixture of DAP and UREA applied area under temporary crops, area under teff was the largest with 268,430 hectares (50.27%). While area under coffee was the largest with 3,980 hectares (0.75%) among permanent crops.

## **2.5 Area with a Combination of Natural and Commercial Fertilizer Applied**

Out of the total fertilizer applied area, the natural fertilizer mixed with the commercial fertilizer was applied on only 45,330 hectares (1.74%). Temporary and permanent crop areas with a mixture of natural and commercial fertilizers accounted for 42,660 hectares (94.11 %) and 2,670 hectares (5.89 %), respectively.

TABLE 2.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

National

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2,199.90	84.33	347.94	57.04	1,091.50	91.65	207.64	90.89	511.90	95.87	40.93	90.29
Teff	837.13	32.09	36.57	6.00	444.74	37.34	71.32	31.22	268.43	50.27	16.06	35.43
Barely	288.80	11.07	50.98	8.36	157.79	13.25	59.81	26.18	16.74	3.14	3.48	7.68
Wheat	477.00	18.29	19.79	3.24	262.40	22.03	36.56	16.00	150.06	28.10	8.19	18.07
Maize	368.17	14.11	161.93	26.55	115.52	9.70	25.64	11.22	57.21	10.71	7.88	17.38
Sorghum	99.33	3.81	67.64	11.09	12.49	1.05	5.11	2.24	9.79	1.83	4.30	9.49
Millet	116.42	4.46	10.65	1.75	87.91	7.38	8.04	3.52	8.82	1.65	1.01	2.23
Oats	13.05	.50	.38	.06	10.65	.89	1.16	.51	.85	.16	**	**
PULSES	116.75	4.48	33.01	5.41	58.64	4.92	12.32	5.39	12.29	2.30	.52	1.15
Horse Beans	51.66	1.98	17.04	2.79	31.87	2.68	1.64	.72	.90	.17	**	**
Chick Peas	23.74	.91	4.32	.71	15.42	1.29	.97	.42	3.01	.56	**	**
Haricot Beans	20.62	.79	5.38	.88	5.09	.43	**	**	**	**	**	**
Field Peas	7.62	.29	3.92	.64	1.41	.12	**	**	1.72	.32	**	**
Lentils	10.40	.40	.53	.09	4.28	.36	**	.19	**	**	**	**
Vetch	2.71	.10	1.82	.30	.57	.05	**	**	.22	.04	**	**
OILSEEDS	32.29	1.24	10.27	1.68	19.15	1.61	**	**	1.13	.21	**	**
Neug	10.85	.42	5.24	.86	4.86	.41	**	**	**	**	-	-
Lin Seed	11.46	.44	.87	.14	9.97	.84	**	**	**	**	-	-
Rape seed	6.71	.26	1.61	.26	4.07	.34	**	**	**	**	**	**
Ground Nuts	**	**	**	**	**	**	**	**	**	**	**	**
Sun Flower	.13	-	.08	.01	**	**	**	**	-	-	-	-
Sesame	**	**	**	**	**	**	-	-	-	-	-	-
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	58.82	2.25	33.49	5.49	16.21	1.36	**	**	3.27	.61	.89	1.96
Fenugreek	2.57	.10	.40	.07	.95	.08	.79	.35	**	**	-	-
Spices	17.10	.66	6.22	1.02	7.16	.60	2.13	.93	1.21	.23	.39	.86
Potatoes	13.95	.53	5.96	.98	5.83	.49	1.70	.74	.35	.07	**	**
Other Vegetables	25.20	.97	20.91	3.43	2.27	.19	.35	.15	1.28	.24	.39	.86
ALL TEMPORARY	2,407.76	92.30	424.71	69.63	1,185.50	99.54	226.36	99.09	528.59	99.00	42.66	94.11
Chat	25.10	.96	20.12	3.30	1.43	.12	1.36	.60	1.04	.19	1.14	2.51
Coffee	33.15	1.27	26.26	4.31	2.21	.19	.30	.13	**	**	.40	.88
Enset	131.82	5.05	129.79	21.28	.94	.08	**	**	**	**	**	**
Cotton	.89	.03	**	**	**	**	**	**	**	**	-	-
Tobacco	.68	.03	.58	.10	**	**	-	-	-	-	-	-
Fruits	4.13	.16	3.66	.60	**	**	**	**	**	**	**	**
Other Permanent	5.02	.19	4.41	.72	.40	.03	**	**	**	**	**	**
TOTAL PERMANENT	200.79	7.70	185.24	30.37	5.45	.46	2.08	.91	**	**	2.67	5.89
ALL CROPS	2,608.55	100.00	609.95	100.00	1,190.95	100.00	228.44	100.00	533.93	100.00	45.33	100.00

FIG. 2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER  
FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS,  
NATIONAL, 1997/98 (1990 E.C.)

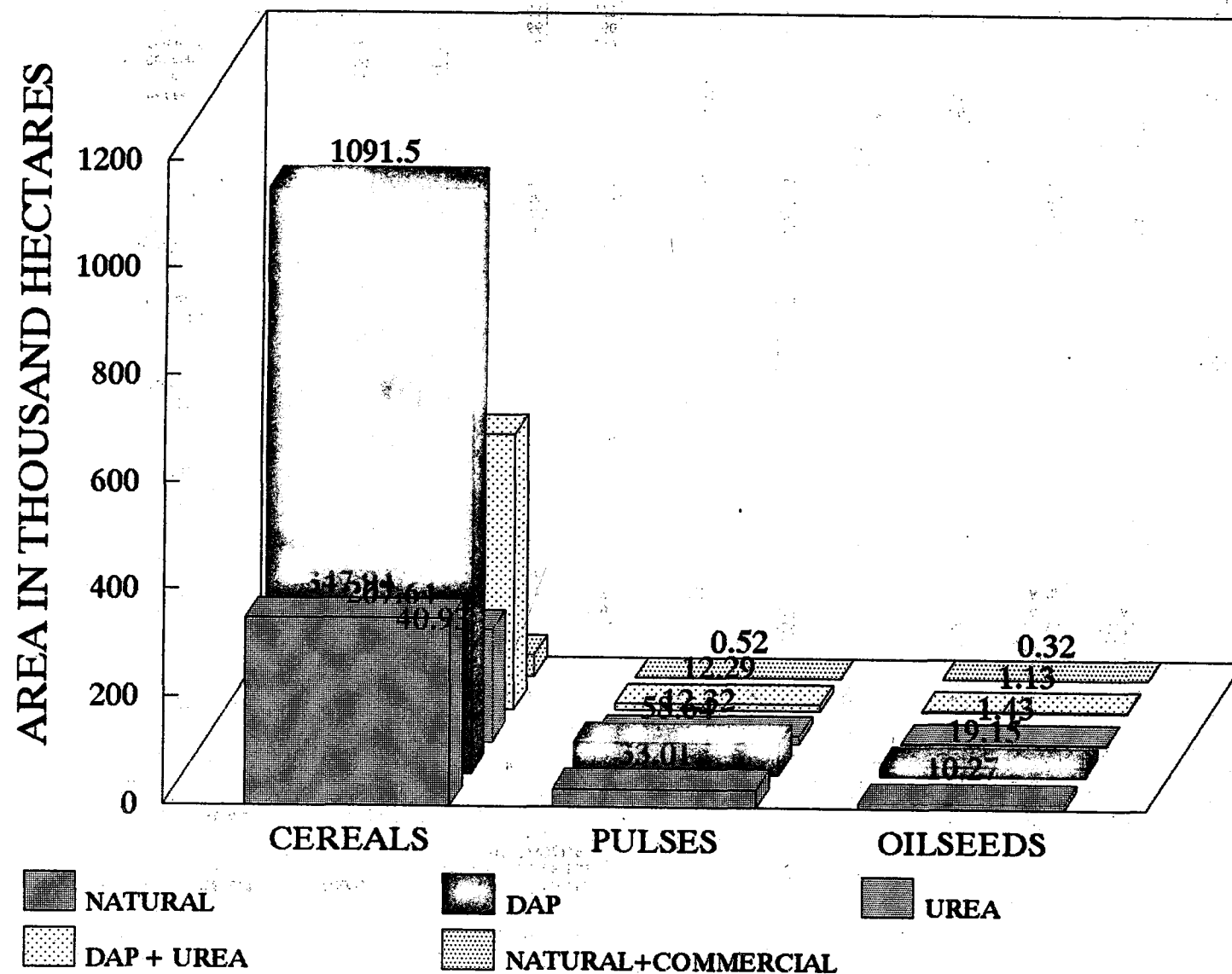




TABLE 2.2

ESTIMATES OF FERTILIZER APPLIED AREA BY REGION AND BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

('000 HA)

REGION	TOTAL		NATURAL		DAP		UREA		DAP + UREA		NAT + COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
TIGRAY	154.95	5.94	57.51	9.42	19.70	1.65	13.39	5.86	55.89	10.47	8.47	18.69
AFAR	1.32	.05	1.32	.22	-	-	-	-	-	-	.01	.02
AMHARA	612.83	23.49	114.43	18.75	316.46	26.57	56.27	24.63	114.07	21.36	11.59	25.57
OROMIYA	1,380.35	52.90	226.17	37.05	678.27	56.95	121.19	53.05	334.67	62.68	20.04	44.22
SOMALIE	.80	.03	.46	.08	.18	.02	.05	.02	.09	.02	.01	.02
BENSHANGUL-GUMUZ	9.25	.35	4.06	.67	3.45	.29	.79	.35	.85	.16	.09	.20
S.N.N.P.R.	439.35	16.84	204.31	33.47	172.40	14.47	35.85	15.69	22.61	4.23	4.18	9.22
GAMBELA	.40	.02	.15	.02	.12	.01	.08	.04	.05	.01	-	-
HARARI	2.91	.11	1.11	.18	.10	.01	.54	.24	.44	.08	.72	1.59
ADDIS ABABA	6.05	.23	.04	.01	.34	.03	.21	.09	5.25	.98	.21	.46
DIRE DAWA	1.01	.04	.89	.15	.04	-	.07	.03	-	-	-	-
TOTAL	2,609.22	100.00	610.45	100.00	1,191.06	100.00	228.44	100.00	533.92	100.00	45.32	100.00

TABLE 2.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Tigray

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	148.88	96.26	51.89	90.69	19.68	99.90	13.22	98.66	55.66	99.59	8.43	99.76
Teff	50.45	32.62	5.12	8.95	9.49	48.17	5.29	39.48	28.22	50.49	2.32	27.46
Barely	15.86	10.25	8.13	14.21	1.91	9.70	2.38	17.76	2.29	4.10	1.16	13.73
Wheat	14.75	9.54	3.87	6.76	2.07	10.51	2.29	17.09	5.58	9.98	.94	11.12
Maize	24.70	15.97	10.14	17.72	**	**	**	**	12.19	21.81	1.57	18.58
Sorghum	29.54	19.10	20.80	36.35	**	**	2.05	15.30	2.78	4.97	1.52	17.99
Millet	13.58	8.78	3.83	6.69	**	**	1.01	7.54	4.60	8.23	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	3.33	2.15	2.99	5.23	**	**	**	**	**	**	-	-
Horse Beans	.91	.59	.74	1.29	-	-	**	**	**	**	-	-
Chick Peas	**	**	**	**	-	-	-	-	**	**	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	.48	.31	**	**	-	-	**	**	**	**	-	-
Lentils	**	**	**	**	**	**	-	-	**	**	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	.51	.89	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun-Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	**	**	-	-
Fenugreek	**	**	**	**	-	-	-	-	**	**	-	-
Spices	**	**	**	**	-	-	**	**	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	**	**	**	**	-	-
ALL TEMPORARY	154.46	99.87	57.10	99.79	19.70	100.00	13.39	99.93	55.84	99.91	8.43	99.76
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	**	**	**	**	**	**
TOTAL PERMANENT	**	**	**	**	-	-	**	**	**	**	**	**
ALL CROPS	154.66	100.00	57.22	100.00	19.70	100.00	13.40	100.00	55.89	100.00	8.45	100.00

TABLE 2.3.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	66.46	97.78	15.44	91.09	12.88	100.00	2.82	100.00	31.91	100.00	3.39	100.00
Teff	24.55	36.12	-	-	7.03	54.58	.71	25.18	16.10	50.45	.70	20.65
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	15.76	23.19	**	**	**	**	**	**	10.21	32.00	**	**
Sorghum	16.54	24.33	10.43	61.53	**	**	**	**	**	**	**	**
Millet	9.61	14.14	.65	3.83	**	**	**	**	4.08	12.79	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	67.97	100.00	16.95	100.00	12.88	100.00	2.82	100.00	31.91	100.00	3.39	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	67.97	100.00	16.95	100.00	12.88	100.00	2.82	100.00	31.91	100.00	3.39	100.00

TABLE 2.3.2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Central Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	41.55	98.23	18.69	97.09	2.01	100.00	3.62	98.91	14.93	98.94	2.29	100.00
Teff	14.14	33.43	1.78	9.25	1.31	65.17	**	**	8.38	55.53	.61	26.64
Barely	2.77	6.55	**	**	.25	12.44	.30	8.20	1.17	7.75	**	**
Wheat	2.94	6.95	**	**	**	**	**	**	1.63	10.80	**	**
Maize	7.06	16.69	3.94	20.47	**	**	**	**	**	**	**	**
Sorghum	12.23	28.91	9.60	49.87	**	**	**	**	**	**	**	**
Millet	**	**	1.89	9.82	-	-	-	-	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	**	**	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	.02	.10	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	**	**	**	**	-	-
Lentils	**	**	.03	.16	-	-	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	.06	.31	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	**	**	**	**	-	-
Fenugreek	**	**	-	-	-	-	-	-	**	**	-	-
Spices	**	**	-	-	-	-	**	**	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**	-	-
ALL TEMPORARY	42.16	99.67	19.16	99.53	2.01	100.00	3.66	100.00	15.04	99.67	2.29	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	**	**	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**	-	-
ALL CROPS	42.30	100.00	19.25	100.00	2.01	100.00	3.66	100.00	15.09	100.00	2.29	100.00

TABLE 2.3.3 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	22.97	87.37	15.67	83.17	2.58	99.23	2.28	95.40	1.26	99.21	1.18	98.33
Teff	**	**	**	**	**	**	**	**	**	**	-	-
Barely	10.31	39.22	6.83	36.25	1.20	46.15	1.23	51.46	.43	33.86	.62	51.67
Wheat	6.10	23.20	2.71	14.38	1.35	51.92	.89	37.24	**	**	.45	37.50
Maize	1.39	5.29	1.36	7.22	-	-	**	**	-	-	**	**
Sorghum	**	**	**	**	**	**	**	**	-	-	-	-
Millet	1.43	5.44	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	2.38	9.05	2.26	12.00	**	**	**	**	**	**	-	-
Horse Beans	.54	2.05	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	**	**	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	.51	2.71	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	26.23	99.77	18.81	99.84	2.60	100.00	2.38	99.58	1.27	100.00	1.18	98.33
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	**	**	-	-	**	**	-	-	**	**
ALL CROPS	26.29	100.00	18.84	100.00	2.60	100.00	2.39	100.00	1.27	100.00	**	**

TABLE 2.3.4 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	17.92	99.01	2.09	95.87	2.21	100.00	4.50	99.34	7.56	99.21	1.57	100.00
Teff	8.80	48.62	**	**	**	**	2.46	54.30	3.61	47.38	1.01	64.33
Barely	2.78	15.36	**	**	**	**	**	**	0.69	9.06	**	**
Wheat	5.72	31.60	**	**	.60	27.15	**	**	3.26	42.78	.26	16.56
Maize	**	**	**	**	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	**	**	**	**	-	-	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	**	**	-	-
Horse Beans	**	**	-	-	-	-	-	-	**	**	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	**	**	-	-	-	-
ALL TEMPORARY	18.10	100.00	2.18	100.00	2.21	100.00	4.53	100.00	7.62	100.00	1.57	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	18.10	100.00	2.18	100.00	2.21	100.00	4.53	100.00	7.62	100.00	1.57	100.00

TABLE 2.4 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Afar\*

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.25	94.70	1.24	94.66	-	-	-	-	-	-	-	-
Teff	**	**	**	**	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	.16	12.12	.15	11.45	-	-	-	-	-	-	-	-
Sorghum	.58	43.94	.58	44.27	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	.01	.76	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.32	100.00	1.31	100.00	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	1.32	100.00	1.31	100.00	-	-	-	-	-	-	-	-

\* Excluding zone1 & zone5 zones for their insignificant figures.

TABLE 2.4.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Zone 3 Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.25	94.70	1.24	94.66	-	-	-	-	-	-	-	-
Teff	**	**	**	**	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	.16	12.12	.15	11.45	-	-	-	-	-	-	-	-
Sorghum	.58	43.94	.58	44.27	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.32	100.00	1.31	100.00	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	1.32	100.00	1.31	100.00	-	-	-	-	-	-	-	-



TABLE 2.5 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Amhara

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	575.19	93.86	95.44	83.41	302.66	95.64	54.58	97.00	111.28	97.55	11.21	96.72
Teff	288.29	47.04	15.95	13.94	169.17	53.46	29.92	53.17	67.44	59.12	5.81	50.13
Barely	36.61	5.97	14.28	12.48	16.99	5.37	3.13	5.56	1.51	1.32	**	**
Wheat	63.21	10.31	3.90	3.41	15.66	4.95	8.05	14.31	32.57	28.55	3.03	26.14
Maize	90.40	14.75	49.50	43.26	26.09	8.24	**	**	6.66	5.84	1.56	13.46
Sorghum	10.85	1.77	8.31	7.26	**	**	.55	.98	.63	.55	**	**
Millet	85.66	13.98	3.42	2.99	73.43	23.20	**	**	2.39	2.10	**	**
Oats	.17	.03	**	**	-	-	-	-	**	**	-	-
PULSES	14.99	2.45	7.66	6.69	4.59	1.45	**	**	**	**	**	**
Horse Beans	6.21	1.01	4.54	3.97	1.32	.42	**	**	**	**	**	**
Chick Peas	3.27	.53	**	**	**	**	**	**	**	**	-	-
Haricot Beans	**	**	**	**	**	**	**	**	**	**	-	-
Field Peas	2.30	.38	1.27	1.11	**	**	**	**	**	**	**	**
Lentils	**	**	.09	.08	**	**	-	-	**	**	-	-
Vetch	**	**	**	**	**	**	-	-	**	**	-	-
OILSEEDS	10.18	1.66	2.86	2.50	6.75	2.13	**	**	**	**	**	**
Neug	6.28	1.02	2.01	1.76	4.17	1.32	-	-	**	**	-	-
Lin Seed	1.34	.22	**	**	1.22	.39	**	**	**	**	-	-
Rape seed	2.36	.39	.79	.69	**	**	**	**	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	**	**	-	-	-	-	-	-
Sesame	**	**	-	-	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	9.32	1.52	5.91	5.17	2.32	.73	.61	1.08	.35	.31	**	**
Fenugreek	**	**	**	**	-	-	**	**	**	**	-	-
Spices	4.74	.77	3.17	2.77	1.07	.34	.25	.44	**	**	**	**
Potatoes	3.24	.53	1.99	1.74	**	**	**	**	**	**	-	-
Other Vegetables	1.18	.19	.73	.64	**	**	-	-	**	**	**	**
ALL TEMPORARY	609.68	99.49	111.87	97.77	316.32	99.95	55.99	99.50	113.92	99.87	11.59	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.65	.11	.63	.55	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	.86	.14	**	**	**	**	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	1.08	.18	1.00	.87	**	**	-	-	**	**	**	**
TOTAL PERMANENT	3.12	.51	2.55	2.23	**	**	**	**	**	**	**	**
ALL CROPS	612.80	100.00	114.42	100.00	316.47	100.00	56.27	100.00	114.07	100.00	11.59	100.00

TABLE 2.5.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Gonder Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	47.51	95.94	8.32	89.27	17.77	97.53	5.66	95.77	15.44	97.97	**	**
Teff	26.66	53.84	**	**	11.25	61.75	5.47	92.55	9.23	58.57	-	-
Barely	**	**	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	**	**	**	**
Maize	5.26	10.62	4.99	53.54	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	**	**	-	-	-	-
Millet	7.54	15.23	**	**	**	**	**	**	**	**	**	**
Oats	**	**	-	-	-	-	-	-	**	**	-	-
PULSES	**	**	**	**	**	**	-	-	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	**	**	-	-	**	**	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.49	.99	.33	3.54	**	**	-	-	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.36	.73	.25	2.68	**	**	-	-	**	**	-	-
Potatoes	**	**	**	**	-	-	-	-	**	**	-	-
Other Vegetables	.02	.04	.02	.21	-	-	-	-	**	**	-	-
ALL TEMPORARY	49.14	99.23	9.31	99.89	18.22	100.00	5.66	95.77	15.64	99.24	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	**	**	**	**	-	-
ALL CROPS	49.52	100.00	9.32	100.00	18.22	100.00	5.91	100.00	15.76	100.00	**	**

TABLE 2.5.2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Gonder Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	54.04	95.78	10.87	88.30	**	**	5.99	98.52	11.24	98.60	1.65	100.00
Teff	28.13	49.86	**	**	14.25	56.91	4.50	74.01	7.93	69.56	.89	53.94
Barely	1.55	2.75	.56	4.55	**	**	**	**	**	**	-	-
Wheat	3.77	6.68	-	-	**	**	**	**	1.84	16.14	**	**
Maize	11.73	20.79	9.73	79.04	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	-	-	**	**	-	-	-	-
Millet	**	**	**	**	**	**	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.33	.58	**	**	-	-	-	-	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**	-	-
OILSEEDS	**	**	**	**	**	**	-	-	**	**	-	-
Neug	**	**	**	**	**	**	-	-	**	**	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	-	-	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.09	1.93	.69	5.61	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	.15	1.22	**	**	**	**	**	**	-	-
Potatoes	.69	1.22	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	-	-	**	**	-	-	-	-	-	-
ALL TEMPORARY	56.04	99.33	11.93	96.91	**	**	6.08	100.00	11.39	99.91	1.65	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.08	.14	.08	.65	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**	-	-
ALL CROPS	56.42	100.00	12.31	100.00	**	**	6.08	100.00	11.40	100.00	1.65	100.00

TABLE 2.5.3 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Wolo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	9.32	97.69	**	**	.84	100.00	1.33	99.25	2.69	100.00	**	**
Teff	1.80	18.87	**	**	**	**	**	**	**	**	**	**
Barely	**	**	**	**	**	**	-	-	**	**	**	**
Wheat	4.58	48.01	**	**	**	**	1.23	91.79	1.43	53.16	**	**
Maize	**	**	**	**	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	**	**
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	**	**	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	-	-	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	-	-	**	**	-	-	-	-	-	-	-	-
Neug	-	-	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	**	**	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	-	-	-	-
Fenugreek	-	-	**	**	-	-	-	-	-	-	-	-
Spices	-	-	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	**	**	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	9.54	100.00	**	**	.84	100.00	1.34	100.00	2.69	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	**	**	-	-	-	-	-	-	-	-
Fruits	-	-	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	9.54	100.00	**	**	.84	100.00	1.34	100.00	2.69	100.00	**	**

TABLE 2.5.4 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Wolo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	28.74	88.11	16.55	81.13	3.41	100.00	.95	100.00	6.89	99.71	**	**
Teff	10.70	32.80	**	**	**	**	-	-	4.81	69.61	**	**
Barely	2.41	7.39	2.34	11.47	-	-	-	-	**	**	-	-
Wheat	6.61	20.26	1.66	8.14	**	**	**	**	1.59	23.01	.38	40.00
Maize	1.65	5.06	1.29	6.32	-	-	**	**	**	**	-	-
Sorghum	**	**	**	**	**	**	**	**	**	**	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	3.08	9.44	3.07	15.05	-	-	-	-	**	**	-	-
Horse Beans	1.29	3.95	1.29	6.32	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	**	**	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	32.46	99.51	**	**	3.41	100.00	.95	100.00	6.90	99.86	**	**
Chat	**	**	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**	-	-
ALL CROPS	32.62	100.00	20.40	100.00	3.41	100.00	.95	100.00	6.91	100.00	**	**

TABLE 2.5.5 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	51.86	90.33	6.90	72.56	8.09	88.71	4.12	98.80	31.03	94.40	**	**
Teff	22.92	39.92	1.96	20.61	**	**	2.05	49.16	13.93	42.38	**	**
Barely	7.05	12.28	2.22	23.34	**	**	**	**	**	**	**	**
Wheat	20.07	34.96	1.25	13.14	**	**	**	**	**	**	**	**
Maize	.82	1.43	.68	7.15	**	**	-	-	**	**	-	-
Sorghum	1.00	1.74	**	**	-	-	**	**	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	**	**	-	-	-	-
Haricot Beans	.45	**	-	-	-	-	-	-	**	**	-	-
Field Peas	.78	**	**	**	**	**	-	-	**	**	-	-
Lentils	**	**	**	**	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	-	-
Neug	**	**	-	-	**	**	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	**	**	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	**	**	-	-	-	-	-	-
Sesame	**	**	-	-	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	**	**	-	-
Fenugreek	**	**	**	**	-	-	**	**	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**	-	-
ALL TEMPORARY	56.84	99.01	9.02	94.85	**	**	4.17	100.00	32.86	99.97	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	**	**	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	**	**	-	-
ALL CROPS	57.41	100.00	9.51	100.00	9.12	100.00	4.17	100.00	32.87	100.00	**	**

TABLE 2.5.6 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Gojam Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	127.34	97.88	3.14	81.98	74.38	97.65	14.88	99.53	32.97	99.46	1.98	100.00
Teff	97.94	75.28	**	**	58.17	76.37	11.69	78.19	26.19	79.00	1.79	90.40
Barely	5.42	4.17	-	-	**	**	**	**	**	**	-	-
Wheat	18.32	14.08	-	-	10.07	13.22	1.72	11.51	6.40	19.31	**	**
Maize	5.37	4.13	3.04	79.37	**	**	**	**	**	**	**	**
Sorghum	**	**	-	-	-	-	-	-	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	-	-	**	**	-	-	-	-
Chick Peas	**	**	-	-	**	**	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	-	-
Neug	**	**	-	-	**	**	-	-	**	**	-	-
Lin Seed	**	**	-	-	**	**	**	**	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	**	**
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	129.90	99.85	3.67	95.82	76.13	99.95	14.95	100.00	33.15	100.00	1.98	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	**	**	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.13	.10	.13	3.39	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	.16	4.18	**	**	-	-	-	-	-	-
ALL CROPS	130.10	100.00	3.83	100.00	76.17	100.00	14.95	100.00	33.15	100.00	1.98	100.00

TABLE 2.5.7 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Gojam Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	188.12	93.13	21.05	84.67	138.26	94.33	**	**	7.62	96.58	**	**
Teff	75.93	37.59	**	**	66.02	45.04	**	**	2.72	34.47	**	**
Barely	6.63	3.28	**	**	5.14	3.51	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	**	**	-	-	-	-
Maize	52.45	25.97	18.56	74.66	22.31	15.22	**	**	4.71	59.70	1.12	38.23
Sorghum	**	**	-	-	**	**	**	**	-	-	-	-
Millet	49.17	24.34	**	**	43.72	29.83	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	3.15	1.56	**	**	1.77	1.21	**	**	-	-	**	**
Horse Beans	1.69	.84	**	**	**	**	**	**	-	-	**	**
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-	-	-
Field Peas	**	**	-	-	**	**	**	**	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	**	**	-	-	-	-	-	-
OILSEEDS	6.08	3.01	**	**	5.05	3.45	**	**	**	**	**	**
Neug	3.36	1.66	**	**	3.12	2.13	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	**	**	**	**	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	3.86	1.91	1.85	7.44	1.45	.99	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	2.69	1.33	1.60	6.44	.74	.50	**	**	**	**	**	**
Potatoes	.61	.30	**	**	**	**	**	**	-	-	-	-
Other Vegetables	.56	.28	.19	.76	**	**	-	-	-	-	-	-
ALL TEMPORARY	201.21	99.61	24.14	97.10	146.53	99.97	**	**	7.89	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	**	**	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	.56	.28	.56	2.25	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.79	.39	.72	2.90	**	**	**	**	-	-	**	**
ALL CROPS	202.00	100.00	24.86	100.00	146.57	100.00	**	**	7.89	100.00	**	**



TABLE 2.5.8 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Waghamera Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.84	98.82	**	**	.21	100.00	**	**	**	**	**	**
Teff	**	**	**	**	**	**	**	**	**	**	-	-
Barely	**	**	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	-	-	**	**	**	**	-	-	**	**
Maize	**	**	.06	24.00	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.85	100.00	**	**	.21	100.00	**	**	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.85	100.00	**	**	.21	100.00	**	**	**	**	**	**

TABLE 2.5.9 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Agewawia Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	66.87	91.07	24.97	83.34	35.41	95.99	2.70	96.77	3.35	100.00	.42	97.67
Teff	23.94	32.60	6.40	21.36	14.41	39.06	1.30	46.59	1.72	51.34	**	**
Barely	9.23	12.57	5.98	19.96	**	**	**	**	**	**	**	**
Wheat	1.37	1.87	**	**	.20	.54	**	**	**	**	**	**
Maize	12.93	17.61	11.03	36.82	**	**	**	**	.99	29.55	.14	32.56
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	19.34	26.34	.99	3.30	17.40	47.17	**	**	**	**	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	1.62	2.21	.92	3.07	**	**	-	-	-	-	-	-
Horse Beans	.70	.95	.56	1.87	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	2.28	3.10	1.88	6.28	**	**	-	-	-	-	-	-
Neug	1.96	2.67	**	**	**	**	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	.28	.38	.28	.93	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.33	3.17	1.86	6.21	**	**	**	**	-	-	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	.18	.25	.18	.60	-	-	-	-	-	-	**	**
Potatoes	1.79	2.44	1.32	4.41	**	**	**	**	-	-	-	-
Other Vegetables	.36	.49	.36	1.20	-	-	-	-	-	-	-	-
ALL TEMPORARY	73.10	99.55	29.63	98.90	36.89	100.00	2.79	100.00	3.35	100.00	.43	100.00
Chat	**	**	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	.11	.37	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.14	.19	.14	.47	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	73.43	100.00	29.96	100.00	36.89	100.00	2.79	100.00	3.35	100.00	.43	100.00

TABLE 2.5.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Oromia Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.52	58.43	.46	55.42	**	**	-	-	.02	100.00	**	**
Teff	**	**	**	**	-	-	-	-	**	**	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	**	**	**	**	**	**	-	-	-	-	-	-
Sorghum	**	**	.40	48.19	-	-	-	-	**	**	**	**
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	.01	1.20	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	.01	1.20	-	-	-	-	-	-	-	-
Neug	**	**	.01	1.20	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	.57	64.04	.51	61.45	**	**	-	-	.02	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	.02	2.41	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	.89	100.00	.83	100.00	**	**	-	-	.02	100.00	**	**

TABLE 2.6

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Oromia

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1,210.95	87.74	145.97	64.55	618.62	91.21	110.01	90.78	317.91	94.99	18.49	92.22
Teff	414.40	30.02	12.67	5.60	210.34	31.01	25.50	21.04	158.68	47.41	7.21	35.96
Barely	209.11	15.15	17.34	7.67	127.52	18.80	50.10	41.34	12.62	3.77	1.53	7.63
Wheat	341.66	24.75	7.80	3.45	202.72	29.89	22.03	18.18	105.44	31.50	3.67	18.30
Maize	173.63	12.58	75.60	33.43	52.43	7.73	9.22	7.61	32.63	9.75	3.77	18.80
Sorghum	43.96	3.19	28.98	12.82	5.21	.77	1.47	1.21	**	**	**	**
Millet	15.34	1.11	3.28	1.45	9.76	1.44	.53	.44	**	**	-	-
Oats	12.85	.93	**	**	10.64	1.57	1.16	.96	.76	.23	-	-
PULSES	71.30	5.17	15.37	6.80	39.55	5.83	**	**	9.64	2.88	**	**
Horse Beans	34.54	2.50	8.71	3.85	23.89	3.52	**	**	.78	.23	**	**
Chick Peas	15.27	1.11	2.19	.97	9.93	1.46	**	**	**	**	**	**
Haricot Beans	9.67	.70	2.27	1.00	1.41	.21	**	**	**	**	**	**
Field Peas	**	**	**	**	**	**	**	**	**	**	-	-
Lentils	**	**	**	**	**	**	**	**	**	**	-	-
Vetch	.72	.05	.28	.12	**	**	-	-	**	**	-	-
OILSEEDS	19.59	1.42	4.97	2.20	12.39	1.83	**	**	**	**	**	**
Neug	4.10	.30	**	**	**	**	**	**	**	**	-	-
Lin Seed	9.58	.69	**	**	8.73	1.29	**	**	**	**	-	-
Rape seed	4.21	.31	**	**	**	**	**	**	**	**	-	-
Ground Nuts	**	**	**	**	**	**	**	**	**	**	**	**
Sun Flower	**	**	**	**	-	-	**	**	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	17.54	1.27	7.59	3.36	5.73	.84	2.32	1.91	1.66	.50	**	**
Fenugreek	1.89	.14	.22	.10	.65	.10	**	**	**	**	-	-
Spices	2.26	.16	1.44	.64	**	**	**	**	**	**	-	-
Potatoes	6.30	.46	1.42	.63	3.40	.50	**	**	**	**	**	**
Other Vegetables	7.09	.51	4.51	1.99	1.27	.19	**	**	.90	.27	**	**
ALL TEMPORARY	1,319.38	95.59	173.90	76.90	676.29	99.72	120.10	99.11	329.96	98.59	19.18	95.66
Chat	15.68	1.14	11.72	5.18	1.12	.17	1.07	.88	.90	.27	**	**
Coffee	10.66	.77	6.34	2.80	**	**	**	**	**	**	-	-
Enset	31.41	2.28	31.33	13.85	**	**	**	**	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	.21	.02	.21	.09	-	-	-	-	-	-	-	-
Fruits	1.57	.11	1.38	.61	**	**	-	-	**	**	-	-
Other Permanent	1.28	.09	1.25	.55	**	**	-	-	-	-	-	-
TOTAL PERMANENT	60.81	4.41	52.23	23.10	1.91	.28	1.08	.89	**	**	**	**
ALL CROPS	1,380.19	100.00	226.13	100.00	678.20	100.00	121.18	100.00	334.69	100.00	20.05	100.00

TABLE 2.6.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Welega Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	69.19	91.59	31.26	83.92	25.22	98.98	1.55	95.09	8.60	99.88	2.60	100.00
Teff	26.32	34.84	2.71	7.28	17.51	68.72	.75	46.01	4.37	50.75	**	**
Barely	.63	.83	.60	1.61	**	**	-	-	**	**	-	-
Wheat	**	**	**	**	**	**	-	-	**	**	-	-
Maize	29.44	38.97	21.77	58.44	1.37	5.38	**	**	4.05	47.04	1.61	61.92
Sorghum	5.11	6.76	4.09	10.98	**	**	**	**	**	**	-	-
Millet	**	**	1.65	4.43	**	**	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	2.76	3.65	2.59	6.95	**	**	**	**	**	**	-	-
Horse Beans	1.22	1.62	1.05	2.82	**	**	**	**	**	**	-	-
Chick Peas	.56	.74	.56	1.50	-	-	-	-	-	-	-	-
Haricot Beans	**	**	.86	2.31	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.66	2.20	1.52	4.08	**	**	**	**	-	-	-	-
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	.45	.60	.41	1.10	**	**	**	**	-	-	-	-
Potatoes	**	**	**	**	**	**	**	**	-	-	-	-
Other Vegetables	.54	.71	.49	1.32	**	**	**	**	-	-	-	-
ALL TEMPORARY	73.61	97.45	35.37	94.95	25.44	99.84	1.63	100.00	8.61	100.00	2.60	100.00
Chat	**	**	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	.10	.13	.10	.27	-	-	-	-	-	-	-	-
Fruits	.35	.46	.34	.91	**	**	-	-	-	-	-	-
Other Permanent	.10	.13	.10	.27	**	**	-	-	-	-	-	-
TOTAL PERMANENT	1.93	2.55	1.88	5.05	**	**	**	**	-	-	-	-
ALL CROPS	75.54	100.00	37.25	100.00	25.48	100.00	1.63	100.00	8.61	100.00	2.60	100.00

TABLE 2.6.2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Welega Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	136.48	94.33	20.45	77.00	75.47	98.69	10.85	94.18	28.52	98.51	1.17	100.00
Teff	74.39	51.42	4.68	17.62	53.16	69.52	7.11	61.72	8.40	29.02	**	**
Barely	3.85	2.66	2.80	10.54	**	**	-	-	**	**	**	**
Wheat	**	**	**	**	**	**	**	**	**	**	-	-
Maize	45.63	31.54	11.20	42.17	**	**	**	**	**	**	**	**
Sorghum	.86	.59	.76	2.86	**	**	**	**	-	-	-	-
Millet	6.71	4.64	**	**	4.17	5.45	**	**	**	**	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	2.79	1.93	2.52	9.49	**	**	**	**	-	-	-	-
Horse Beans	2.38	1.65	2.15	8.09	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	**	**	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	3.49	2.41	**	**	**	**	**	**	**	**	-	-
Neug	3.13	2.16	**	**	**	**	**	**	**	**	-	-
Lin Seed	**	**	**	**	**	**	-	-	**	**	-	-
Rape seed	**	**	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.25	.86	.86	3.24	**	**	**	**	**	**	-	-
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	**	**	.42	1.58	**	**	**	**	**	**	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	144.01	99.54	25.90	97.52	76.47	100.00	11.51	99.91	28.95	100.00	1.17	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.07	.05	.06	.23	-	-	**	**	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.31	.21	.31	1.17	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.67	.46	.66	2.48	-	-	**	**	-	-	-	-
ALL CROPS	144.68	100.00	26.56	100.00	76.47	100.00	11.52	100.00	28.95	100.00	1.17	100.00

TABLE 2.6.3 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Illibabor Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	25.07	98.08	3.51	90.23	9.76	99.59	2.33	98.73	8.69	99.66	.78	100.00
Teff	17.48	68.39	**	**	8.61	87.86	2.14	90.68	5.62	64.45	**	**
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	7.40	28.95	**	**	1.15	11.73	**	**	3.07	35.21	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	**	**	**	**	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.04	.16	**	**	-	-	**	**	**	**	-	-
Fenugreek	-	-	**	**	-	-	-	-	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	**	**	-	-	-	-
ALL TEMPORARY	25.28	98.90	3.66	94.09	9.78	99.80	2.36	100.00	8.70	99.77	.78	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	**	**	-	-
Enset	.09	.35	**	**	-	-	**	**	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.03	.12	.03	.77	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.28	1.10	.23	5.91	**	**	**	**	**	**	-	-
ALL CROPS	25.56	100.00	3.89	100.00	9.80	100.00	2.36	100.00	8.72	100.00	.78	100.00

TABLE 2.6.4 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Jimma Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	84.83	89.42	15.26	63.35	57.39	97.99	2.88	100.00	9.17	99.89	**	**
Teff	51.01	53.77	**	**	41.47	70.80	2.72	94.44	5.86	63.83	-	-
Barely	**	**	**	**	**	**	-	-	**	**	-	-
Wheat	**	**	**	**	**	**	-	-	**	**	-	-
Maize	22.97	24.21	8.40	34.87	**	**	**	**	2.82	30.72	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-
Millet	**	**	**	**	**	**	-	-	**	**	-	-
Oats	**	**	-	-	**	**	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.29	2.41	2.29	9.51	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	2.27	2.39	2.27	9.42	-	-	-	-	-	-	-	-
ALL TEMPORARY	90.37	95.26	19.63	81.49	58.55	99.97	2.88	100.00	9.17	99.89	**	**
Chat	.75	.79	.75	3.11	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	**	**	-	-
Enset	2.50	2.64	2.50	10.38	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.17	.18	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	4.50	4.74	4.46	18.51	**	**	-	-	**	**	-	-
ALL CROPS	94.87	100.00	24.09	100.00	58.57	100.00	2.88	100.00	9.18	100.00	**	**



TABLE 2.6.5 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	200.00	88.74	6.07	22.64	76.13	97.03	13.35	97.23	101.40	98.35	3.01	92.62
Teff	112.79	50.05	.33	1.23	37.40	47.67	**	**	66.48	64.48	1.60	49.23
Barely	30.60	13.58	2.40	8.95	**	**	**	**	6.40	6.21	**	**
Wheat	49.19	21.83	**	**	16.83	21.45	2.38	17.33	28.07	27.23	**	**
Maize	**	**	1.58	5.89	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	4.84	2.15	1.67	6.23	1.74	2.22	**	**	1.10	1.07	**	**
Horse Beans	2.36	1.05	1.28	4.77	**	**	-	-	**	**	**	**
Chick Peas	**	**	**	**	**	**	**	**	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	**	**	**	**	**	**	-	-
Lentils	.95	.42	-	-	**	**	**	**	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	1.52	.67	**	**	**	**	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.34	.59	.58	2.16	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	207.70	92.16	9.14	34.09	78.46	100.00	13.73	100.00	103.10	100.00	3.25	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	13.05	5.79	13.05	48.68	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	.19	.71	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	225.37	100.00	26.81	100.00	78.46	100.00	13.73	100.00	103.10	100.00	3.25	100.00

TABLE 2.6.6 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	54.18	94.36	9.93	78.62	12.61	99.53	3.44	95.03	26.39	98.84	1.79	100.00
Teff	29.65	51.64	2.39	18.92	**	**	2.39	66.02	14.01	52.47	**	**
Barely	4.66	8.12	2.79	22.09	**	**	**	**	**	**	**	**
Wheat	18.77	32.69	**	**	**	**	.43	11.88	**	**	**	**
Maize	**	**	**	**	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	2.91	5.07	2.46	19.48	-	-	**	**	**	**	-	-
Horse Beans	1.70	2.96	1.62	12.83	-	-	-	-	**	**	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	**	**	**	**	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	**	**	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	**	**	-	-
Fenugreek	**	**	-	-	-	-	-	-	**	**	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**	-	-
ALL TEMPORARY	57.30	99.79	12.51	99.05	12.67	100.00	3.62	100.00	26.70	100.00	1.79	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	57.42	100.00	12.63	100.00	12.67	100.00	3.62	100.00	26.70	100.00	1.79	100.00

TABLE 2.6.7 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	152.54	87.28	12.51	87.12	31.52	83.06	7.33	55.66	97.43	92.38	3.73	97.14
Teff	70.97	40.61	**	**	**	**	**	**	51.07	48.42	1.97	51.30
Barely	7.12	4.07	**	**	3.47	9.14	**	**	3.07	2.91	**	**
Wheat	51.95	29.72	**	**	6.53	17.21	**	**	42.06	39.88	.91	23.70
Maize	21.92	12.54	11.69	81.41	6.01	15.84	**	**	1.23	1.17	.37	9.64
Sorghum	.55	.31	.28	1.95	.16	.42	-	-	-	-	-	**
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	16.06	9.19	.50	3.48	3.17	8.35	**	**	7.57	7.18	**	**
Horse Beans	**	**	**	**	**	**	-	-	**	**	-	-
Chick Peas	**	**	-	-	**	**	-	-	**	**	**	**
Haricot Beans	**	**	**	**	**	**	**	**	**	**	**	**
Field Peas	**	**	-	-	**	**	-	-	**	**	-	-
Lentils	**	**	**	**	**	**	**	**	**	**	-	-
Vetch	**	**	-	-	**	**	-	-	**	**	-	-
OILSEEDS	.08	.05	**	**	**	**	**	**	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**	-	-
Rape seed	**	**	**	**	**	**	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	**	**	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	5.43	3.11	.67	4.67	3.21	8.46	**	**	**	**	-	-
Fenugreek	**	**	**	**	**	**	**	**	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	4.00	2.29	**	**	2.88	7.59	**	**	-	-	-	-
Other Vegetables	.67	.38	**	**	**	**	-	-	**	**	-	-
ALL TEMPORARY	174.11	99.62	13.70	95.40	37.94	99.97	13.17	100.00	105.47	100.00	3.84	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	**	**	**	**	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-
ALL CROPS	174.78	100.00	14.36	100.00	37.95	100.00	13.17	100.00	105.47	100.00	3.84	100.00

TABLE 2.6.8 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Arsi Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	348.58	86.97	7.34	56.51	274.29	86.18	51.04	96.41	13.65	95.59	**	**
Teff	26.65	6.65	**	**	24.23	7.61	**	**	1.27	8.89	-	-
Barely	133.80	33.38	**	**	90.93	28.57	**	**	**	**	**	**
Wheat	169.75	42.35	**	**	148.16	46.55	8.73	16.49	11.11	77.80	**	**
Maize	12.93	3.23	**	**	5.82	1.83	**	**	**	**	**	**
Sorghum	**	**	-	-	**	**	-	-	-	-	-	-
Millet	**	**	-	-	-	-	**	**	-	-	-	-
Oats	**	**	**	**	**	**	**	**	-	-	-	-
PULSES	35.70	8.91	1.67	12.86	32.39	10.18	1.15	2.17	**	**	-	-
Horse Beans	24.18	6.03	1.46	11.24	21.63	6.80	**	**	**	**	-	-
Chick Peas	**	**	-	-	**	**	**	**	**	**	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	**	**	-	-	**	**	-	-	-	-	-	-
OILSEEDS	12.26	3.06	**	**	10.92	3.43	**	**	-	-	-	-
Neug	**	**	**	**	**	**	-	-	-	-	-	-
Lin Seed	8.22	2.05	-	-	8.12	2.55	**	**	-	-	-	-
Rape seed	**	**	**	**	**	**	**	**	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.16	.29	.28	2.16	.66	.21	**	**	**	**	**	**
Fenugreek	**	**	**	**	**	**	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	**	**	-	-	**	**
Other Vegetables	.43	.11	**	**	**	**	-	-	**	**	-	-
ALL TEMPORARY	397.70	99.22	9.89	76.14	318.26	100.00	52.94	100.00	14.28	100.00	2.32	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-
ALL CROPS	400.81	100.00	12.99	100.00	318.26	100.00	52.94	100.00	14.28	100.00	2.32	100.00

TABLE 2.6.9 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Harerge Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	13.89	68.49	7.23	57.70	2.79	83.53	**	**	2.63	87.09	.87	100.00
Teff	**	**	**	**	**	**	**	**	**	**	**	**
Barely	.15	.74	.15	1.20	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	**	**	**	**
Maize	5.13	25.30	2.53	20.19	.81	24.25	**	**	**	**	**	**
Sorghum	6.71	33.09	4.16	33.20	**	**	**	**	**	**	**	**
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	**	**	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	**	**	-	-
ALL TEMPORARY	15.01	74.01	8.13	64.88	2.87	85.93	**	**	2.71	89.74	.87	100.00
Chat	2.12	10.45	1.85	14.76	**	**	**	**	**	**	-	-
Coffee	**	**	2.27	18.12	**	**	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	**	**	-	-
Other Permanent	.09	.44	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	5.27	25.99	4.40	35.12	**	**	**	**	**	**	-	-
ALL CROPS	20.28	100.00	12.53	100.00	3.34	100.00	**	**	3.02	100.00	.87	100.00

TABLE 2.6.10 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Harerge Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	42.51	70.26	21.48	73.26	5.02	67.47	3.46	70.90	10.61	67.24	**	**
Teff	**	**	**	**	-	-	-	-	**	**	-	-
Barely	**	**	**	**	-	-	**	**	**	**	-	-
Wheat	**	**	**	**	**	**	**	**	**	**	-	-
Maize	13.45	22.23	6.44	21.96	**	**	2.16	44.26	2.40	15.21	.16	5.18
Sorghum	24.65	40.74	14.44	49.25	**	**	1.00	20.49	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	**	**	-	-
PULSES	**	**	.18	.61	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	**	**	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	**	**	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	**	**	**	**	**	**	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.71	4.48	.99	3.38	.82	11.02	**	**	.55	3.49	**	**
Fenugreek	**	**	**	**	**	**	**	**	-	-	-	-
Spices	**	**	**	**	-	-	-	-	**	**	-	-
Potatoes	1.07	1.77	**	**	**	**	**	**	**	**	-	-
Other Vegetables	1.55	2.56	.61	2.08	**	**	**	**	.28	1.77	**	**
ALL TEMPORARY	47.75	78.93	23.82	81.24	6.44	86.56	3.90	79.92	11.39	72.18	**	**
Chat	8.21	13.57	4.53	15.45	1.00	13.44	.98	20.08	.82	5.20	**	**
Coffee	**	**	.55	1.88	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	12.75	21.07	5.50	18.76	1.00	13.44	.98	20.08	**	**	**	**
ALL CROPS	60.50	100.00	29.32	100.00	7.44	100.00	4.88	100.00	15.78	100.00	**	**

TABLE 2.6.11

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Bale Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	70.32	92.65	1.62	28.03	45.76	98.28	13.30	96.17	9.43	99.05	**	**
Teff	2.00	2.64	-	-	1.43	3.07	-	-	**	**	-	-
Barely	19.58	25.80	**	**	12.71	27.30	4.63	33.48	1.40	14.71	-	-
Wheat	39.47	52.00	**	**	24.80	53.26	7.57	54.74	6.62	69.54	**	**
Maize	1.41	1.86	**	**	.96	2.06	-	-	**	**	-	-
Sorghum	**	**	-	-	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	7.79	10.26	**	**	5.86	12.59	**	**	.70	7.35	-	-
PULSES	**	**	**	**	**	**	-	-	**	**	-	-
Horse Beans	**	**	**	**	**	**	-	-	**	**	-	-
Chick Peas	**	**	-	-	**	**	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	**	**	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	.19	3.29	**	**	**	**	-	-	-	-
Fenugreek	**	**	-	-	**	**	**	**	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	72.07	94.95	1.95	33.74	46.56	100.00	13.83	100.00	9.52	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	3.83	5.05	3.83	66.26	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	3.83	5.05	3.83	66.26	-	-	-	-	-	-	-	-
ALL CROPS	75.90	100.00	5.78	100.00	46.56	100.00	13.83	100.00	9.52	100.00	**	**

TABLE 2.6.12 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Borena Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	2.65	84.66	**	**	1.32	100.00	-	-
Teff	**	**	-	-	**	**	**	**	-	-	-	-
Barely	**	**	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	**	**	-	-	-	-	**	**	-	-
Maize	5.11	20.86	**	**	2.12	67.73	.05	45.45	**	**	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	.04	.20	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	.04	.20	**	**	**	**	-	-	-	-
ALL TEMPORARY	14.46	59.02	**	**	2.81	89.78	**	**	1.32	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	.09	2.88	-	-	-	-	-	-
Enset	8.32	33.96	8.25	41.42	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	10.04	40.98	9.72	48.80	.32	10.22	-	-	-	-	-	-
ALL CROPS	24.50	100.00	19.92	100.00	3.13	100.00	.11	100.00	1.32	100.00	-	-



TABLE 2.7 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Somale

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.61	76.25	.39	84.78	**	**	**	**	**	**	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	**	**	-	-
Maize	.41	51.25	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	.63	78.75	.41	89.13	**	**	**	**	**	**	**	**
Chat	**	**	**	**	**	**	-	-	-	-	**	**
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.03	3.75	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	.05	10.87	**	**	-	-	-	-	**	**
ALL CROPS	.80	100.00	.46	100.00	**	**	**	**	**	**	**	**

TABLE 2.7.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Shinele Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.13	76.47	**	**	**	**	**	**	-	-	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	**	**	**	**	-	-	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	**	**	-	-	-	-	-	-
Fenugreek	-	-	**	**	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	**	-	-	-	-	-	-	-
ALL TEMPORARY	.13	76.47	**	**	**	**	**	**	-	-	**	**
Chat	**	**	**	**	-	-	-	-	-	-	**	**
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.03	17.65	.02	22.22	-	-	-	-	-	-	**	**
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.04	23.53	.02	22.22	-	-	-	-	-	-	.01	**
ALL CROPS	.17	100.00	.09	100.00	**	**	**	**	-	-	**	**

TABLE 2.7.2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Jijiga Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.29	67.44	.14	77.78	.06	37.50	**	**	.08	100.00	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	.05	62.50	-	-
Maize	.16	37.21	**	**	.06	37.50	**	**	.03	37.50	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	.30	69.77	.15	83.33	.06	37.50	**	**	.08	100.00	-	-
Chat	**	**	**	**	.10	62.50	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	.10	62.50	-	-	-	-	-	-
ALL CROPS	.43	100.00	.18	100.00	.16	100.00	**	**	.08	100.00	-	-

TABLE 2.7.3 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Moyale Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	-	-	-	-	-	-	-	-
Sorghum	.01	5.00	.01	5.00	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	-	-	-	-	-	-	-	-

TABLE 2.8 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Benshangul-Gumuz

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	8.60	92.77	3.59	88.21	3.37	97.97	**	**	.82	96.47	**	**
Teff	3.92	42.29	**	**	2.69	78.20	**	**	**	**	-	-
Barely	**	**	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	**	**	-	-	-	-
Maize	2.57	27.72	1.88	46.19	**	**	**	**	.47	55.29	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-	**	**
Millet	**	**	**	**	**	**	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	.11	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.30	3.24	.15	3.69	**	**	.05	6.25	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.15	1.62	.12	2.95	-	-	**	**	**	**	**	**
Potatoes	**	**	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	9.20	99.24	4.00	98.28	3.44	100.00	**	**	.85	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	**	**	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-	-	-
Fruits	.01	.11	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	.07	.76	.07	1.72	**	**	-	-	-	-	-	-
ALL CROPS	9.27	100.00	4.07	100.00	3.44	100.00	**	**	.85	100.00	**	**

TABLE 2.8.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Metekel Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	6.34	93.79	2.04	89.08	3.15	97.83	**	**	.46	93.88	-	-
Teff	3.23	47.78	**	**	2.52	78.26	**	**	**	**	-	-
Barely	**	**	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	**	**	-	-	-	-
Maize	1.25	18.49	.88	38.43	**	**	-	-	.26	53.06	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	**	**	-	-	**	**	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.24	3.55	**	**	**	**	**	**	**	**	-	-
Fenugreek	-	-	**	**	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	**	**	-	-	-	-
Potatoes	**	**	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**	-	-
ALL TEMPORARY	6.74	99.70	2.27	99.13	3.22	100.00	**	**	.49	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	6.76	100.00	2.29	100.00	3.22	100.00	**	**	.49	100.00	-	-

TABLE 2.8.2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Asosa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.65	89.19	**	**	.22	100.00	**	**	.30	100.00	**	**
Teff	.57	30.81	**	**	.17	77.27	**	**	**	**	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.94	50.81	**	**	**	**	-	-	.15	50.00	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.04	2.16	.03	2.46	-	-	.01	33.33	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.04	2.16	.03	2.46	-	-	.01	33.33	**	**	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.82	98.38	**	**	.22	100.00	.03	100.00	.30	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	.03	1.62	.03	**	**	**	-	-	-	-	-	-
ALL CROPS	1.85	100.00	**	**	.22	100.00	.03	100.00	.30	100.00	**	**

TABLE 2.8.3 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Kemeshi Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	-	-	**	**	.06	100.00	-	-
Teff	**	**	**	**	-	-	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	-	-	**	**	-	-	-	-	-	-	-	-
Maize	.37	60.66	**	**	-	-	**	**	.06	100.00	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	**	**	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	**	**	-	-
Horse Beans	-	-	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	**	**	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	**	**	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	**	**	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	**	**	-	-	-	-	-	-	-	-
Other Vegetables	-	-	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	-	-	**	**	.06	100.00	-	-
Chat	-	-	**	**	-	-	-	-	-	-	-	-
Coffee	-	-	**	**	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	-	-	**	**	.06	100.00	-	-



TABLE 2.9 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

(S.N.N.P.R)

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	246.45	56.10	48.18	23.59	146.71	85.09	28.50	79.45	21.06	93.14	2.01	48.20
Teff	76.65	17.45	1.61	.79	53.02	30.75	10.45	29.13	**	**	**	**
Barely	26.32	5.99	**	**	11.18	6.48	3.81	10.62	.28	1.24	**	**
Wheat	54.75	12.46	**	**	41.76	24.22	3.96	11.04	4.53	20.04	.44	10.55
Maize	75.71	17.24	24.26	11.88	36.05	20.91	9.45	26.35	5.13	22.69	.82	19.66
Sorghum	11.50	2.62	7.21	3.53	3.48	2.02	.68	1.90	**	**	**	**
Millet	**	**	**	**	**	**	**	**	**	**	**	**
Oats	**	**	-	-	**	**	**	**	-	-	**	**
PULSES	26.16	5.96	6.72	3.29	14.34	8.32	4.87	13.58	**	**	.11	2.64
Horse Beans	9.85	2.24	2.93	1.43	6.66	3.86	.19	.53	**	**	**	**
Chick Peas	4.91	1.12	.67	.33	3.52	2.04	**	**	**	**	-	-
Haricot Beans	10.30	2.34	2.68	1.31	3.64	2.11	3.88	10.82	**	**	.08	1.92
Field Peas	**	**	**	**	**	**	**	**	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	**	**	-	-	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	**	**	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	**	**	-	-	-	-	-	-	-	-
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	30.88	7.03	19.22	9.41	8.10	4.70	1.95	5.44	1.12	4.95	.50	11.99
Fenugreek	**	**	**	**	**	**	**	**	-	-	-	-
Spices	9.76	2.22	1.29	.63	5.68	3.29	1.67	4.66	.88	3.89	**	**
Potatoes	4.18	.95	2.39	1.17	1.53	.89	**	**	**	**	**	**
Other Vegetables	16.63	3.79	15.52	7.60	.60	.35	**	**	**	**	.22	5.28
ALL TEMPORARY	304.05	69.22	74.65	36.55	169.16	98.11	35.33	98.49	22.32	98.72	2.62	62.83
Chat	8.09	1.84	7.72	3.78	**	**	.12	.33	**	**	**	**
Coffee	21.75	4.95	19.21	9.41	1.71	.99	.29	.81	**	**	.40	9.59
Enset	100.33	22.84	98.39	48.17	.85	.49	**	**	**	**	**	**
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	.47	.11	.37	.18	**	**	-	-	-	-	-	-
Fruits	2.12	.48	1.85	.91	.12	.07	**	**	**	**	**	**
Other Permanent	2.44	.56	2.02	.99	**	**	**	**	-	-	**	**
TOTAL PERMANENT	135.23	30.78	129.59	63.45	3.25	1.89	.54	1.51	.29	1.28	1.55	37.17
ALL CROPS	439.28	100.00	204.24	100.00	172.41	100.00	35.87	100.00	22.61	100.00	4.17	100.00

TABLE 2.9.1 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Gurage Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	59.69	61.96	**	**	31.84	92.21	8.31	89.64	**	**	**	**
Teff	**	**	**	**	**	**	**	**	**	**	**	**
Barely	10.35	10.74	.69	1.66	6.33	18.33	**	**	**	**	-	-
Wheat	7.28	7.56	**	**	4.93	14.28	**	**	**	**	-	-
Maize	10.78	11.19	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	**	**	-	-	-	-
Millet	**	**	**	**	**	**	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-	**	**
PULSES	3.68	3.82	1.76	4.23	1.37	3.97	**	**	**	**	**	**
Horse Beans	2.16	2.24	1.47	3.53	.59	1.71	**	**	-	-	**	**
Chick Peas	**	**	**	**	**	**	**	**	**	**	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	**	**	**	**	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	3.70	3.84	1.73	4.16	1.32	3.82	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	.81	.84	.20	.48	**	**	**	**	-	-	-	-
Other Vegetables	1.43	1.48	1.38	3.32	**	**	**	**	**	**	**	**
ALL TEMPORARY	67.48	70.05	12.85	30.90	34.53	100.00	9.23	99.57	**	**	**	**
Chat	4.01	4.16	3.99	9.59	-	-	**	**	-	-	-	-
Coffee	3.09	3.21	3.07	7.38	-	-	-	-	**	**	**	**
Enset	20.55	21.33	20.55	49.41	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.32	.33	.30	.72	-	-	-	-	**	**	-	-
Other Permanent	**	**	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	28.85	29.95	28.74	69.10	-	-	**	**	**	**	**	**
ALL CROPS	96.33	100.00	41.59	100.00	34.53	100.00	9.27	100.00	**	**	**	**

TABLE 2.9.2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Hadiya Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	71.77	71.90	3.27	14.76	60.51	87.43	3.75	93.05	3.56	97.80	**	**
Teff	21.51	21.55	**	**	19.28	27.86	**	**	**	**	**	**
Barely	4.98	4.99	**	**	4.43	6.40	**	**	**	**	**	**
Wheat	32.43	32.49	.20	.90	27.93	40.36	1.38	34.24	2.72	74.73	**	**
Maize	11.03	11.05	2.50	11.29	7.65	11.05	**	**	**	**	**	**
Sorghum	1.62	1.62	.37	1.67	1.07	1.55	**	**	**	**	**	**
Millet	.18	.18	**	**	.13	.19	**	**	**	**	-	-
Oats	**	**	-	-	**	**	-	-	-	-	-	-
PULSES	7.09	7.10	.17	.77	6.69	9.67	.19	4.71	**	**	**	**
Horse Beans	4.26	4.27	.10	.45	4.10	5.92	**	**	**	**	**	**
Chick Peas	2.57	2.57	-	-	2.41	3.48	.14	3.47	**	**	-	-
Haricot Beans	.16	.16	.07	.32	.08	.12	-	-	-	-	**	**
Field Peas	**	**	-	-	**	**	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	**	**	-	-	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	**	**	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-	-	-
OTHERS	4.79	4.80	2.96	13.36	1.65	2.38	**	**	.05	1.37	**	**
Fenugreek	**	**	-	-	**	**	-	-	-	-	-	-
Spices	**	**	.07	.32	**	**	**	**	**	**	-	-
Potatoes	.67	.67	**	**	.53	.77	**	**	**	**	**	**
Other Vegetables	3.03	3.04	**	**	.19	.27	**	**	-	-	**	**
ALL TEMPORARY	83.69	83.84	6.42	28.98	68.85	99.48	4.03	100.00	3.64	100.00	**	**
Chat	1.08	1.08	1.02	4.60	**	**	-	-	-	-	**	**
Coffee	1.86	1.86	1.60	7.22	.25	.36	-	-	-	-	-	-
Enset	12.68	12.70	12.65	57.11	**	**	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.19	.19	.16	.72	**	**	-	-	-	-	-	-
Fruits	.20	.20	.19	.86	**	**	**	**	-	-	-	-
Other Permanent	.12	.12	.11	.50	**	**	-	-	-	-	-	-
TOTAL PERMANENT	16.13	16.16	15.73	71.02	.36	.52	**	**	-	-	**	**
ALL CROPS	99.82	100.00	22.15	100.00	69.21	100.00	4.03	100.00	3.64	100.00	**	**

TABLE 2.9.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Kembata Alaba Tembaro Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	39.64	65.97	2.28	17.29	28.47	80.24	5.48	81.19	2.77	76.31	.62	60.19
Teff	11.36	18.90	.10	.76	9.54	26.89	1.11	16.44	.52	14.33	**	**
Barely	.38	.63	-	-	.32	.90	**	**	**	**	-	-
Wheat	10.08	16.77	**	**	7.96	22.44	**	**	1.13	31.13	**	**
Maize	15.90	26.46	1.94	14.71	9.18	25.87	3.42	50.67	1.08	29.75	**	**
Sorghum	.73	1.21	.12	.91	.46	1.30	**	**	-	-	-	-
Millet	**	**	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	2.14	3.56	.16	1.21	1.90	5.36	**	**	**	**	**	**
Horse Beans	1.91	3.18	**	**	1.73	4.88	**	**	**	**	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	.11	.18	**	**	.07	.20	**	**	-	-	**	**
Field Peas	**	**	**	**	**	**	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	8.89	14.79	1.99	15.09	4.69	13.22	1.20	17.78	.80	22.04	.21	20.39
Fenugreek	**	**	**	**	**	**	**	**	-	-	-	-
Spices	6.26	10.42	**	**	3.91	11.02	1.17	17.33	.80	22.04	.10	9.71
Potatoes	.67	1.11	.24	1.82	.41	1.16	**	**	-	-	**	**
Other Vegetables	1.67	2.78	1.46	11.07	.09	.25	**	**	-	-	**	**
ALL TEMPORARY	50.67	84.32	4.43	33.59	35.06	98.82	6.71	99.41	3.62	99.72	.83	80.58
Chat	.57	.95	.56	4.25	**	**	-	-	-	-	**	**
Coffee	2.18	3.63	1.80	13.65	.29	.82	**	**	-	-	**	**
Enset	5.78	9.62	5.68	43.06	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	**	**	-	-	-	-	-	-
Fruits	.44	.73	.38	2.88	**	**	-	-	**	**	**	**
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	9.42	15.68	8.76	66.41	.42	1.18	**	**	**	**	.20	19.42
ALL CROPS	60.09	100.00	13.19	100.00	35.48	100.00	6.75	100.00	3.63	100.00	1.03	100.00

TABLE 2.9.4 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Sidama Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	15.13	24.17	**	**	7.72	65.93	**	**	**	**	**	**
Teff	.54	.86	**	**	**	**	**	**	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	**	**	**	**	-	-	-	-
Maize	13.52	21.60	**	**	6.70	57.22	**	**	**	**	**	**
Sorghum	**	**	-	-	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	2.37	3.79	**	**	1.48	12.64	**	**	**	**	**	**
Horse Beans	**	**	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	-	-	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	**	**	**	**	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	**	**	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-	-	-
OTHERS	2.27	3.63	1.67	3.77	.14	1.20	**	**	**	**	.07	5.00
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	1.73	2.76	1.31	2.96	0.13	1.11	**	**	**	**	.07	5.00
ALL TEMPORARY	19.77	31.58	5.69	12.85	9.34	79.76	**	**	**	**	.11	7.86
Chat	2.28	3.64	2.02	4.56	**	**	.09	3.11	**	**	**	**
Coffee	8.21	13.12	6.52	14.72	1.09	9.31	.14	4.84	0.15	6.44	.32	22.86
Enset	30.71	49.06	28.94	65.34	.82	7.00	**	**	.09	3.86	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.11	.18	.10	.23	**	**	-	-	-	-	-	-
Fruits	.77	1.23	.60	1.35	**	**	-	-	**	**	**	**
Other Permanent	.75	1.20	.42	.95	**	**	**	**	-	-	**	**
TOTAL PERMANENT	42.83	68.42	38.60	87.15	2.37	20.24	.32	11.07	.27	11.59	1.29	92.14
ALL CROPS	62.60	100.00	44.29	100.00	11.71	100.00	**	**	**	**	1.40	100.00

TABLE 2.9.5 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Gedio Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2.28	30.85	1.30	21.31	**	**	**	**	**	**	.02	50.00
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	.63	8.53	.49	8.03	-	-	-	-	**	**	-	-
Wheat	**	**	**	**	-	-	-	-	**	**	-	-
Maize	**	**	**	**	**	**	**	**	**	**	.02	50.00
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.31	4.19	.22	3.61	-	-	**	**	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	**	**	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.93	12.58	**	**	**	**	-	-	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	.92	12.45	**	**	**	**	-	-	**	**	**	**
ALL TEMPORARY	3.58	48.44	2.42	39.67	**	**	**	**	**	**	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	1.01	13.67	.93	15.25	.03	25.00	**	**	-	-	-	-
Enset	2.71	36.67	2.67	43.77	**	**	**	**	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	3.81	51.56	3.68	60.33	.04	33.33	**	**	-	-	**	**
ALL CROPS	7.39	100.00	6.10	100.00	**	**	.23	100.00	**	**	.04	100.00

TABLE 2.9.6 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Omo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	49.50	51.61	24.59	38.12	15.30	83.56	7.97	69.79	1.59	100.00	.04	66.67
Teff	11.77	12.27	.31	.48	**	**	**	**	**	**	-	-
Barely	**	**	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	**	**	-	-
Maize	21.37	22.28	9.06	14.04	8.41	45.93	**	**	1.04	65.41	.04	66.67
Sorghum	3.60	3.75	2.99	4.63	**	**	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	9.98	10.41	3.85	5.97	**	**	3.40	29.77	-	-	.02	33.33
Horse Beans	**	**	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	7.95	8.29	2.35	3.64	**	**	3.22	28.20	-	-	.02	33.33
Field Peas	**	**	**	**	**	**	**	**	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	9.85	10.27	9.59	14.87	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	2.00	2.09	1.87	2.90	**	**	**	**	-	-	-	-
Other Vegetables	7.42	7.74	7.29	11.30	**	**	-	-	-	-	-	-
ALL TEMPORARY	69.34	72.30	38.04	58.97	18.26	99.73	11.38	99.65	1.59	100.00	.06	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	4.44	4.63	4.34	6.73	**	**	**	**	-	-	-	-
Enset	21.58	22.50	21.58	33.45	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.21	.22	.21	.33	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	26.57	27.70	26.47	41.03	**	**	**	**	-	-	-	-
ALL CROPS	95.91	100.00	64.51	100.00	18.31	100.00	11.42	100.00	1.59	100.00	.06	100.00

TABLE 2.9.7 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Omo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.06	56.99	.59	42.45	.13	100.00	0.21	100.00	**	**	-	-
Teff	**	**	**	**	-	-	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	**	**	**	**	.13	100.00	0.21	100.00	**	**	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.21	65.05	**	**	.13	100.00	0.21	100.00	**	**	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	1.86	100.00	1.39	100.00	.13	100.00	0.21	100.00	**	**	-	-



TABLE 2.9.8 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Keficho-Shekicho Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.57	17.38	**	**	.17	94.44	**	**	**	**	-	-
Teff	**	**	**	**	**	**	-	-	**	**	-	-
Barely	**	**	**	**	-	-	**	**	-	-	-	-
Wheat	**	**	-	-	**	**	-	-	-	-	-	-
Maize	**	**	**	**	**	**	-	-	**	**	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	.73	22.26	**	**	.18	100.00	**	**	**	**	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	.04	1.22	.04	1.33	-	-	-	-	-	-	-	-
Enset	2.44	74.39	2.44	81.06	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	2.55	77.74	2.55	84.72	-	-	-	-	-	-	-	-
ALL CROPS	3.28	100.00	3.01	100.00	.18	100.00	**	**	**	**	-	-

TABLE 2.9.9 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Bench-Maji Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	.18	100.00	-	-	.05	100.00	-	-
Teff	**	**	**	**	**	**	-	-	**	**	-	-
Barley	**	**	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	**	**	**	**	-	-	**	**	-	-
Maize	**	**	**	**	**	**	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.20	10.36	.20	11.90	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.20	10.36	.20	11.90	-	-	-	-	-	-	-	-
ALL TEMPORARY	.98	50.78	**	**	.18	100.00	-	-	.05	100.00	-	-
Chat	.01	.52	.01	.60	-	-	-	-	-	-	-	-
Coffee	.24	12.44	.24	14.29	**	**	-	-	-	-	-	-
Enset	.61	31.61	.61	36.31	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.07	3.63	.07	4.17	-	-	-	-	-	-	-	-
Other Permanent	.02	1.04	.02	1.19	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.95	49.22	.95	56.55	**	**	-	-	-	-	-	-
ALL CROPS	1.93	100.00	1.68	100.00	.18	100.00	-	-	.05	100.00	-	-

TABLE 2.9.10 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Yem Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	3.48	69.05	**	**	2.26	93.78	1.00	98.04	.12	100.00	**	**
Teff	2.75	54.56	-	-	1.89	78.42	.79	77.45	.06	50.00	**	**
Barely	.15	2.98	-	-	.08	3.32	.06	5.88	-	-	-	-
Wheat	.23	4.56	**	**	.15	6.22	.08	7.84	-	-	-	-
Maize	.31	6.15	**	**	.13	5.39	**	**	**	**	**	**
Sorghum	.04	.79	**	**	**	**	**	**	-	-	-	-
Millet	**	**	-	-	-	-	**	**	-	-	-	-
Oats	**	**	-	-	-	-	**	**	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	-	-	**	**	**	**	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.05	.99	.05	3.38	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	-	-	-	-
Other Vegetables	.05	.99	.05	3.38	-	-	**	**	-	-	-	-
ALL TEMPORARY	3.70	73.41	.14	9.46	2.41	100.00	1.02	100.00	.12	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	**	**	**	**	**	**	-	-	-	-
Enset	1.27	25.20	1.27	85.81	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.34	26.59	1.34	90.54	**	**	**	**	-	-	**	**
ALL CROPS	5.04	100.00	1.48	100.00	2.41	100.00	1.02	100.00	.12	100.00	**	**

TABLE 2.9.11 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Amaro Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	-	-	-	-	-	-	-	-
Teff	**	**	-	-	-	-	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.03	1.51	.03	1.52	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.03	1.51	.03	1.52	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	-	-	-	-	-	-	-	-
Chat	.03	1.51	.03	1.52	-	-	-	-	-	-	-	-
Coffee	.55	27.64	.53	26.90	-	-	.01	50.00	-	-	-	-
Enset	1.23	61.81	1.23	62.44	-	-	.01	50.00	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.89	94.97	1.87	94.92	-	-	.02	100.00	-	-	-	-
ALL CROPS	1.99	100.00	1.97	100.00	-	-	.02	100.00	-	-	-	-

TABLE 2.9.12 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Burji Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.05	26.32	**	**	0.02	66.67	-	-	-	-	-	-
Teff	**	**	-	-	**	**	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	**	**	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	-	-	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-	-	-
Field Peas	**	**	-	-	**	**	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.08	42.11	**	**	**	**	-	-	-	-	-	-
Chat	**	**	-	-	-	-	-	-	-	-	-	-
Coffee	.01	5.26	.01	7.69	-	-	-	-	-	-	-	-
Enset	.10	52.63	.10	76.92	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.11	57.89	.11	84.62	-	-	-	-	-	-	-	-
ALL CROPS	.19	100.00	.13	100.00	**	**	-	-	-	-	-	-

TABLE 2.9.13 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Konso Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2.51	91.94	2.49	91.88	.02	100.00	-	-	-	-	-	-
Teff	**	**	**	**	-	-	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	**	**	**	**	**	**	-	-	-	-	-	-
Sorghum	2.10	76.92	2.08	76.75	.02	100.00	-	-	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.04	1.47	.04	1.48	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.04	1.47	.04	1.48	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.09	3.30	.09	3.32	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	2.64	96.70	2.62	96.68	.02	100.00	-	-	-	-	-	-
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.07	2.56	.07	2.58	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.09	3.30	.09	3.32	-	-	-	-	-	-	-	-
ALL CROPS	2.73	100.00	2.71	100.00	.02	100.00	-	-	-	-	-	-

TABLE 2.9.14 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Derashe Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	**	**	-	-	-	-	.04	100.00
Teff	**	**	-	-	-	-	-	-	-	-	.01	25.00
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	-	-	**	**	-	-	-	-	-	-	-	-
Maize	**	**	-	-	-	-	-	-	-	-	.03	75.00
Sorghum	**	**	-	-	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	-	-	**	**	-	-	-	-	.04	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.03	25.00	.03	100.00	-	-	-	-	-	-	-	-
ALL CROPS	.12	100.00	.03	100.00	**	**	-	-	-	-	.04	100.00

TABLE 2.10 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Gambela

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.26	65.00	**	**	.11	91.67	.08	100.00	.05	100.00	-	-
Teff	-	-	**	**	-	-	-	-	-	-	-	-
Barely	-	-	**	**	-	-	-	-	-	-	-	-
Wheat	-	-	**	**	-	-	-	-	-	-	-	-
Maize	.20	50.00	**	**	.11	91.67	**	**	**	**	-	-
Sorghum	**	**	**	**	-	-	**	**	**	**	-	-
Millet	-	-	**	**	-	-	-	-	-	-	-	-
Oats	-	-	**	**	-	-	-	-	-	-	-	-
PULSES	-	-	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	**	**	-	-	-	-	-	-	-	-
Haricot Beans	-	-	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	**	**	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	**	**	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	**	**	-	-	-	-	-	-	-	-
Other Vegetables	-	-	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	.27	67.50	**	**	.11	91.67	.08	100.00	.05	100.00	-	-
Chat	-	-	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	-	-	-	-
Enset	**	**	**	**	**	**	-	-	-	-	-	-
Cotton	-	-	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	**	**	-	-	-	-	-	-	-	-
Fruits	-	-	**	**	-	-	-	-	-	-	-	-
Other Permanent	-	-	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-
ALL CROPS	.40	100.00	**	**	.12	100.00	.08	100.00	.05	100.00	-	-



TABLE 2.11 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Harari

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.94	66.67	.75	68.18	.07	77.78	.34	62.96	.30	69.77	.49	67.12
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	**	**	-	-	**	**	**	**	**	**
Wheat	.03	1.03	-	-	**	**	.01	1.85	.02	4.65	**	**
Maize	.40	13.75	.13	11.82	.01	11.11	.07	12.96	.06	13.95	.12	16.44
Sorghum	1.51	51.89	.62	56.36	.06	66.67	.26	48.15	.22	51.16	.36	49.32
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	**	**	-	-	-	-
PULSES	**	**	**	**	-	-	**	**	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	**	**	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.17	5.84	.12	10.91	-	-	.02	3.70	-	-	.02	2.74
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.17	5.84	.12	10.91	-	-	.02	3.70	-	-	.02	2.74
Sun Flower	**	**	-	-	-	-	**	**	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.01	.34	-	-	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	**	**	**	**
Potatoes	-	-	-	-	**	**	-	-	**	**	**	**
Other Vegetables	.01	.34	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	2.12	72.85	.87	79.09	.07	77.78	.36	66.67	.30	69.77	.51	69.86
Chat	.75	25.77	.20	18.18	.02	22.22	.18	33.33	.13	30.23	.22	30.14
Coffee	.01	.34	-	-	**	**	**	**	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.03	1.03	**	**	**	**	**	**	**	**	**	**
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.79	27.15	.23	20.91	.02	22.22	.18	33.33	.13	30.23	.22	30.14
ALL CROPS	2.91	100.00	1.10	100.00	.09	100.00	.54	100.00	.43	100.00	.73	100.00

TABLE 2.12 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Addis Ababa

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	5.21	85.97	**	**	.17	53.13	.08	34.78	4.74	90.11	.20	90.91
Teff	2.96	48.84	**	**	.02	6.25	.04	17.39	2.80	53.23	.09	40.91
Barely	**	**	**	**	**	**	**	**	**	**	**	**
Wheat	2.13	35.15	**	**	.10	31.25	**	**	1.88	35.74	.10	45.45
Maize	-	-	**	**	-	-	-	-	-	-	-	-
Sorghum	-	-	**	**	-	-	-	-	-	-	-	-
Millet	-	-	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	**	**	-	-
PULSES	.72	11.88	**	**	.14	43.75	**	**	.41	7.79	**	**
Horse Beans	**	**	**	**	-	-	-	-	**	**	-	-
Chick Peas	-	-	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	**	**	-	-
Field Peas	.19	3.14	**	**	**	**	**	**	.12	2.28	**	**
Lentils	.21	3.47	**	**	.03	9.38	**	**	.16	3.04	**	**
Vetch	.30	4.95	**	**	.07	21.88	**	**	.13	2.47	**	**
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	-	-	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	**	**	-	-	-	-	-	-	-	-
OTHERS	.13	2.15	**	**	**	**	**	**	.11	2.09	**	**
Fenugreek	.06	.99	**	**	**	**	**	**	.04	.76	-	-
Spices	-	-	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	**	**	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	6.06	100.00	**	**	.32	100.00	**	**	5.26	100.00	.22	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	-	-	**	**	-	-	-	-	-	-	-	-
Enset	-	-	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	**	**	-	-	-	-
TOTAL PERMANENT	-	-	**	**	-	-	**	**	-	-	-	-
ALL CROPS	6.06	100.00	**	**	.32	100.00	**	**	5.26	100.00	.22	100.00

TABLE 2.13 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR  
MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Dire Dawa

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.59	62.11	.48	57.83	**	**	.07	100.00	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	-	-	**	**	-	-	-	-
Sorghum	.58	61.05	.47	56.63	**	**	.07	100.00	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	**	**	-	-	-	-
ALL TEMPORARY	.67	70.53	.56	67.47	**	**	.07	100.00	-	-	-	-
Chat	.06	6.32	**	**	**	**	**	**	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	**	**	-	-	-	-
ALL CROPS	.95	100.00	.83	100.00	**	**	.07	100.00	-	-	-	-

### **3. Quantity of Commercial Fertilizers Applied by Type**

As indicated in summary Table D, the total quantity of fertilizers applied by the private peasant holders at country level was 2.3 million quintals. It is important to note that the information on fertilizer quantity was collected and estimated for commercial fertilizers only.

**Summary Table D. Quantity Of Commercial Fertilizers  
Applied By Type**

Type of Fertilizer	Quantity	
	('000 Quintals)	Percent
DAP	1,184.18	50.20
UREA	252.99	10.73
DAP + UREA	848.92	35.99
Natural + Commercial	72.72	3.08
Total	2,358.82	100.00

#### **3.1 Quantity of DAP Applied**

Out of the total quantity of fertilizer applied the quantity of DAP was 1,184,180 quintals (50.20%). The total quantity of DAP applied on temporary and permanent crops was 1,158,610 and 25,570 quintals, respectively. See the details in Table 3.1.

### **3.2 Quantity of UREA Applied**

Of the total quantity of commercial fertilizers applied, the quantity of UREA was 252,990 quintals (10.73%) (Summary Table D). The total quantity of UREA applied on temporary and permanent crops was 238,460 and 14,530 quintals, respectively.

### **3.3 Quantity of DAP and UREA applied in Mix**

Out of the total quantity of commercial fertilizers applied, the quantity of the mixture of DAP and UREA was 848,920 quintals (35.99%). The quantity of the mixture of DAP and UREA applied to temporary and permanent crops was 839,070 and 9,850 quintals, respectively.

### **3.4 Quantity of Commercial and Natural Fertilizers Applied in Mix**

As observed from the survey result, application of a mixture of commercial and natural fertilizer is practiced by few private peasant holders, although the quantity is very small. It was estimated that 72,720 quintals of commercial fertilizer mixed with an unknown quantity of natural fertilizer was used.

TABLE 3.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

National\*

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	2,147.31	91.03	1,061.54	89.64	215.62	85.23	810.35	95.46	59.81	82.25
Teff	888.46	37.67	409.42	34.57	70.14	27.72	389.59	45.89	19.32	26.57
Barely	232.42	9.85	153.34	12.95	50.72	20.05	23.98	2.82	4.38	6.02
Wheat	606.80	25.72	286.25	24.17	38.31	15.14	267.92	31.56	14.32	19.69
Maize	288.87	12.25	127.61	10.78	39.04	15.43	108.44	12.77	13.77	18.94
Sorghum	40.86	1.73	13.40	1.13	9.84	3.89	11.15	1.31	6.47	8.90
Millet	80.42	3.41	63.05	5.32	6.97	2.76	8.88	1.05	**	**
Oats	9.48	.40	8.47	.72	.60	.24	.39	.05	**	**
PULSES	85.09	3.61	54.37	4.59	12.18	4.81	17.26	2.03	1.29	1.77
Horse Beans	36.53	1.55	31.77	2.68	1.45	.57	**	**	**	**
Chick Peas	17.22	.73	11.25	.95	1.18	.47	**	**	**	**
Haricot Beans	18.92	.80	7.18	.61	8.85	3.50	2.70	.32	.20	.28
Field Peas	3.26	.14	1.03	.09	**	**	1.77	.21	**	**
Lentils	7.71	.33	2.46	.21	**	**	**	**	**	**
Vetch	1.45	.06	.68	.06	**	**	.34	.04	**	**
OILSEEDS	21.86	.93	16.23	1.37	2.73	1.08	2.45	.29	**	**
Neug	3.89	.16	2.89	.24	**	**	**	**	-	-
Lin Seed	7.14	.30	5.90	.50	**	**	**	**	-	-
Rape seed	9.50	.40	6.73	.57	**	**	**	**	**	**
Ground Nuts	**	**	**	**	.11	.04	**	**	**	**
Sun Flower	**	**	**	**	**	**	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	45.80	1.94	26.47	2.24	7.93	3.13	9.01	1.06	2.37	3.26
Fenugreek	1.99	.08	**	**	**	**	.45	.05	-	-
Spices	18.86	.80	11.48	.97	3.60	1.42	3.24	.38	.54	.74
Potatoes	12.87	.55	9.99	.84	2.22	.88	.60	.07	**	**
Other Vegetables	12.08	.51	3.83	.32	1.75	.69	4.72	.56	1.77	2.43
ALL TEMPORARY	2,300.06	97.51	1,158.61	97.84	238.46	94.26	839.07	98.84	63.91	87.89
Chat	27.20	1.15	**	**	10.49	4.15	5.79	.68	4.63	6.37
Coffee	16.28	.69	9.47	.80	2.93	1.16	2.44	.29	1.43	1.97
Enset	6.60	.28	**	**	**	**	**	**	1.54	2.12
Cotton	**	**	**	**	**	**	**	**	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-
Fruits	3.63	.15	2.40	.20	**	**	**	**	**	**
Other Permanent	**	**	**	**	**	**	**	**	**	**
TOTAL PERMANENT	58.76	2.49	25.57	2.16	14.53	5.74	9.85	1.16	8.81	12.11
ALL CROPS	2,358.82	100.00	1,184.18	100.00	252.99	100.00	848.92	100.00	72.72	100.00

\* Excluding of killil Afar for its insignificant figures.

FIG. 3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED  
BY TYPE FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS,  
NATIONAL, 1997/98 (1990 E.C.)

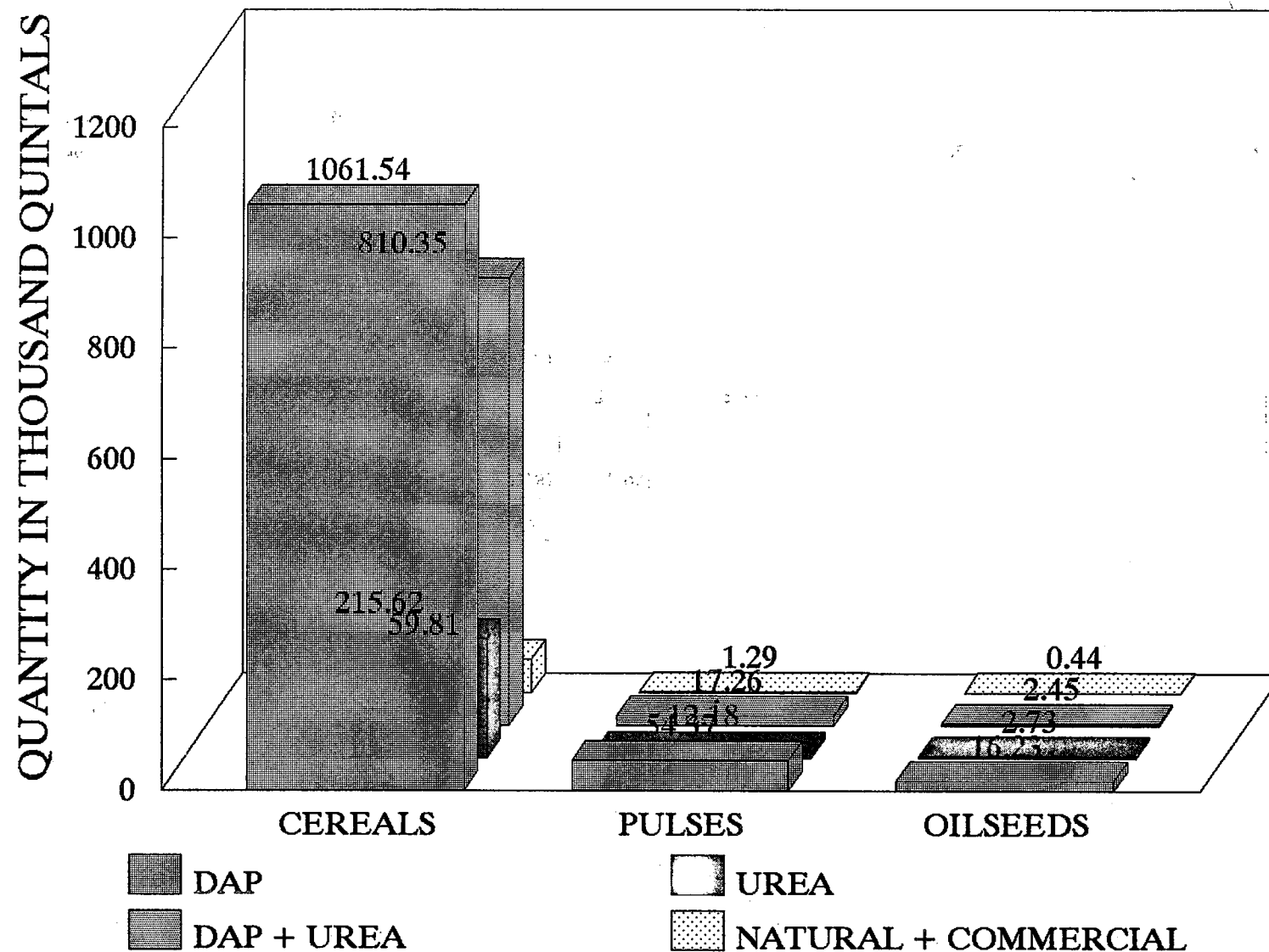


TABLE 3.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED AREA BY REGION AND BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

(000'QT)

REGION	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
TIGRAY	141.86	6.01	22.87	1.93	17.98	7.11	87.35	10.29	13.66	18.70
AFAR	-	-	-	-	-	-	-	-	-	-
AMHARA	515.00	21.83	279.82	23.63	49.58	19.60	169.63	19.98	15.97	21.86
OROMIYA	1,310.64	55.55	619.01	52.27	123.57	48.84	538.53	63.44	29.52	40.42
SOMALIE	.94	.04	.50	.04	.09	.04	.31	.04	.03	.04
BENSHANGUL-GUMUZ	3.89	.16	1.78	.15	.63	.25	1.27	.15	.22	.30
S.N.N.P.R.	366.53	15.54	259.43	21.91	59.13	23.37	37.34	4.40	10.63	14.55
GAMBELA	.36	.02	.16	.01	.11	.04	.09	.01	-	-
HARARI	6.35	.27	.25	.02	1.65	.65	1.80	.21	2.65	3.63
ADDIS ABABA	13.56	.57	.44	.04	.19	.08	12.58	1.48	.35	.48
DIRE DAWA	.12	.01	.04	-	.06	.02	.01	-	.01	.01
TOTAL	2,359.25	100.00	1,184.31	100.00	253.00	100.00	848.91	100.00	73.04	100.00



FIG. 4 ESTIMATES OF QUANTITY OF DAP AND UREA  
USED BY REGION, 1997/98 (1990 E.C.)

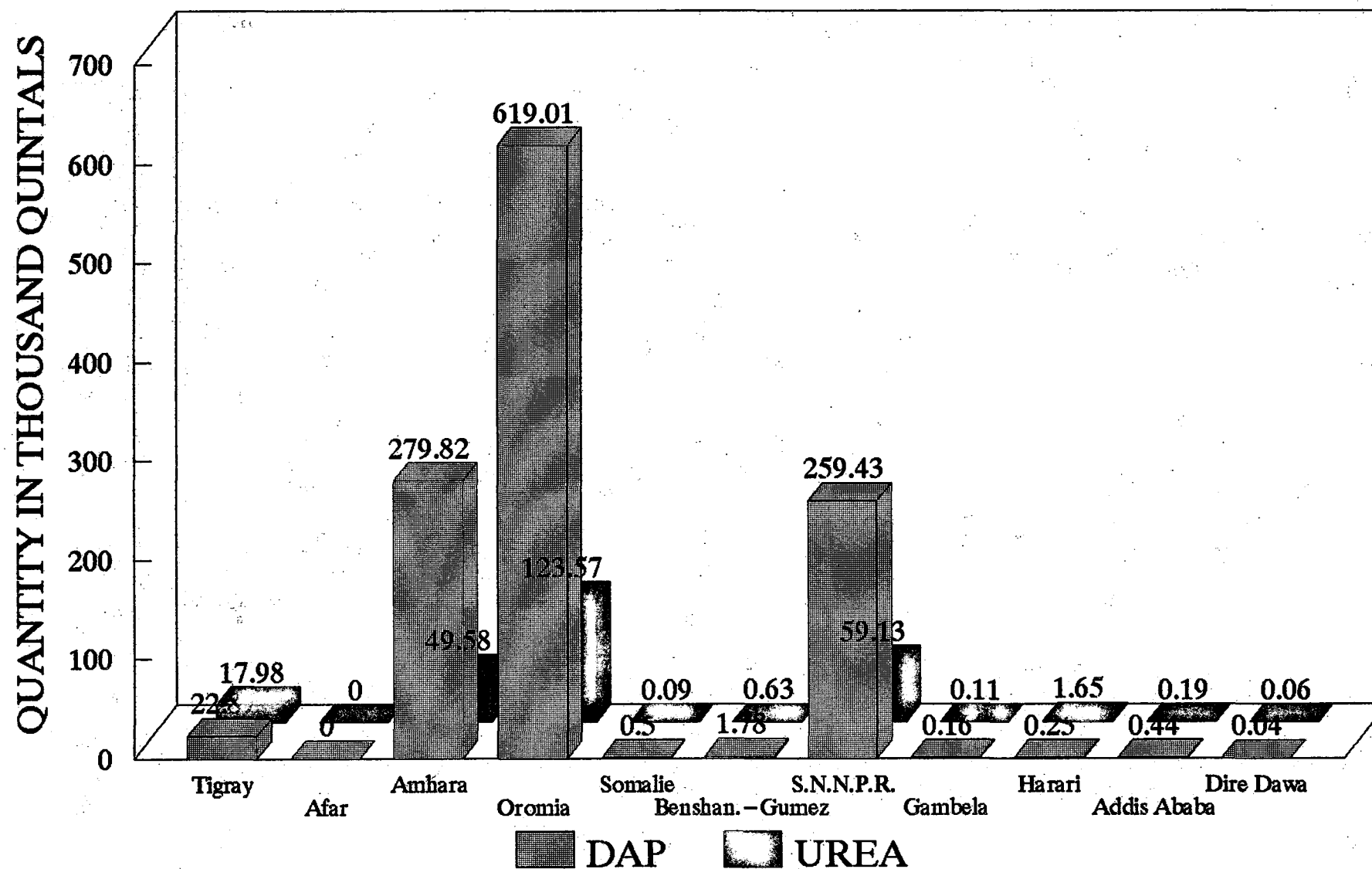


TABLE 3.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Tigray

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	140.99	99.48	22.78	99.61	17.76	98.83	86.99	99.57	13.47	99.63
Teff	57.06	40.26	7.97	34.85	4.62	25.71	40.43	46.27	4.04	29.88
Barely	15.28	10.78	3.87	16.92	4.30	23.93	5.43	6.21	1.69	12.50
Wheat	22.50	15.88	4.25	18.58	5.64	31.39	10.95	12.53	1.65	12.20
Maize	25.27	17.83	1.13	4.94	**	**	21.28	24.36	2.60	19.23
Sorghum	8.29	5.85	**	**	**	**	3.64	4.17	2.19	16.20
Millet	12.59	8.88	**	**	**	**	5.26	6.02	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.45	.32	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	**	**	**	**	-	-
Chick Peas	**	**	-	-	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	**	**	**	**	-	-
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	**	**	-	-
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	**	**	-	-	**	**	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	**	**	**	**	-	-
ALL TEMPORARY	141.56	99.89	22.87	100.00	17.94	99.83	87.28	99.90	13.47	99.63
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	**	**	**	**
TOTAL PERMANENT	**	**	-	-	**	**	**	**	**	**
ALL CROPS	141.72	100.00	22.87	100.00	17.97	100.00	87.37	100.00	13.52	100.00

TABLE 3.3.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	64.28	100.00	11.97	100.00	3.23	100.00	43.49	100.00	5.59	100.00
Teff	27.22	42.35	5.74	47.95	.93	28.79	19.52	44.88	1.03	18.43
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	19.59	30.48	**	**	**	**	17.09	39.30	1.54	27.55
Sorghum	5.77	8.98	**	**	**	**	**	**	**	**
Millet	11.70	18.20	**	**	**	**	4.71	10.83	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	64.28	100.00	11.97	100.00	3.23	100.00	43.49	100.00	5.59	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	64.28	100.00	11.97	100.00	3.23	100.00	43.49	100.00	5.59	100.00

TABLE 3.3.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Central Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	38.30	99.30	2.30	100.00	3.22	98.77	28.73	99.21	4.09	100.00
Teff	19.60	50.82	.97	42.17	1.14	34.97	15.76	54.42	1.74	42.54
Barely	4.43	11.49	**	**	.79	24.23	2.65	9.15	**	**
Wheat	5.58	14.47	**	**	.66	20.25	4.13	14.26	**	**
Maize	**	**	**	**	**	**	**	**	1.04	25.43
Sorghum	2.50	6.48	**	**	**	**	**	**	**	**
Millet	**	**	-	-	-	-	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	**	**	**	**	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	.04	1.23	**	**	-	-
Lentils	**	**	-	-	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	**	**	-	-
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	**	**	-	-	**	**	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	38.48	99.77	2.30	100.00	3.26	100.00	28.87	99.69	4.09	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	**	**	-	-
TOTAL PERMANENT	**	**	-	-	-	-	**	**	-	-
ALL CROPS	38.57	100.00	2.30	100.00	3.26	100.00	28.96	100.00	4.09	100.00

TABLE 3.3.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	12.24	97.84	4.95	98.21	3.50	96.95	1.93	98.97	1.85	97.37
Teff	.15	1.20	**	**	**	**	**	**	-	-
Barely	5.73	45.80	2.45	48.61	1.54	42.66	.83	42.56	.91	47.89
Wheat	6.20	49.56	2.44	48.41	1.87	51.80	**	**	**	**
Maize	**	**	-	-	**	**	-	-	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-
Millet	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	-	-	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	12.43	99.36	5.04	100.00	3.58	99.17	1.95	100.00	1.85	97.37
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	12.51	100.00	5.04	100.00	3.61	100.00	1.95	100.00	1.90	100.00

TABLE 3.3.4 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	26.18	99.28	3.55	100.00	7.83	99.24	12.82	99.00	1.97	100.00
Teff	10.10	38.30	**	**	**	**	5.07	39.15	1.28	64.97
Barely	5.13	19.45	**	**	**	**	1.95	15.06	**	**
Wheat	10.72	40.65	1.43	40.28	**	**	5.80	44.79	.38	19.29
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	**	**	-	-	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	-	-
Horse Beans	**	**	-	-	-	-	**	**	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun-Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	**	**	-	-	-	-
ALL TEMPORARY	26.37	100.00	3.55	100.00	7.89	100.00	12.95	100.00	1.97	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	26.37	100.00	3.55	100.00	7.89	100.00	12.95	100.00	1.97	100.00

TABLE 3.4 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Amhara

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	490.94	95.33	264.79	94.62	46.58	93.97	164.55	97.00	15.04	94.12
Teff	267.66	51.97	147.69	52.77	25.41	51.26	88.46	52.15	6.10	38.17
Barely	21.26	4.13	15.52	5.55	2.83	5.71	2.27	1.34	**	**
Wheat	87.57	17.00	16.24	5.80	7.46	15.05	58.12	34.26	5.75	35.98
Maize	53.03	10.30	32.94	11.77	**	**	12.37	7.29	2.29	14.33
Sorghum	2.59	.50	**	**	**	**	**	**	**	**
Millet	58.80	11.42	51.19	18.29	**	**	2.55	1.50	.21	1.31
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	7.36	1.43	3.17	1.13	**	**	**	**	**	**
Horse Beans	1.73	.34	1.26	.45	**	**	-	-	**	**
Chick Peas	.77	.15	.68	.24	**	**	**	**	-	-
Haricot Beans	**	**	**	**	**	**	**	**	-	-
Field Peas	1.16	.23	**	**	**	**	**	**	**	**
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	**	**	**	**	-	-	**	**	**	**
OILSEEDS	11.02	2.14	8.25	2.95	**	**	**	**	**	**
Neug	2.60	.50	2.14	.76	-	-	**	**	-	-
Lin Seed	2.31	.45	1.35	.48	**	**	**	**	-	-
Rape seed	**	**	**	**	**	**	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.75	.92	3.31	1.18	.52	1.05	.70	.41	**	**
Fenugreek	**	**	-	-	**	**	**	**	-	-
Spices	2.37	.46	1.59	.57	.21	.42	**	**	**	**
Potatoes	1.79	.35	1.39	.50	**	**	**	**	-	-
Other Vegetables	.48	.09	.33	.12	-	-	**	**	**	**
ALL TEMPORARY	514.07	99.82	279.52	99.88	49.40	99.66	169.22	99.75	15.96	99.87
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	**	**	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	**
ALL CROPS	515.01	100.00	279.85	100.00	49.57	100.00	169.64	100.00	15.98	100.00

TABLE 3.4.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Gondar Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	34.96	98.15	10.13	98.06	3.37	96.01	20.76	98.48	**	**
Teff	20.00	56.15	6.02	58.28	3.17	90.31	10.82	51.33	-	-
Barely	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	**	**	**	**
Maize	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	5.42	15.22	**	**	**	**	1.88	8.92	**	**
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	**	**	**	**	-	-	**	**	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	**	**	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	**	**	-	-
Potatoes	**	**	-	-	-	-	**	**	-	-
Other Vegetables	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	35.29	99.07	10.33	100.00	3.37	96.01	20.89	99.10	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	**	**	**	**	-	-
ALL CROPS	35.62	100.00	10.33	100.00	3.51	100.00	21.08	100.00	**	**



TABLE 3.4.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Gonder Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	39.70	93.70	**	**	3.32	96.23	13.92	95.93	3.45	100.00
Teff	22.60	53.34	**	**	2.52	73.04	7.05	48.59	.97	28.12
Barely	**	**	**	**	**	**	**	**	-	-
Wheat	**	**	**	**	**	**	**	**	**	**
Maize	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	-	-	**	**	-	-	-	-
Millet	**	**	**	**	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	**	**	-	-
OILSEEDS	**	**	**	**	-	-	**	**	-	-
Neug	**	**	**	**	-	-	**	**	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	42.36	99.98	**	**	3.45	100.00	14.50	99.93	3.45	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	**	**	-	-
ALL CROPS	42.37	100.00	**	**	3.45	100.00	14.51	100.00	3.45	100.00

TABLE 3.4.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Wolo Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	7.31	99.59	.67	100.00	1.22	97.60	3.60	100.00	**	**
Teff	1.62	22.07	**	**	**	**	**	**	**	**
Barely	.49	6.68	**	**	-	-	**	**	**	**
Wheat	5.15	70.16	**	**	1.11	88.80	2.28	63.33	**	**
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	7.34	100.00	.67	100.00	1.25	100.00	3.60	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	7.34	100.00	.67	100.00	1.25	100.00	3.60	100.00	**	**

TABLE 3.4.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Wolo Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	10.51	98.59	**	**	**	**	6.16	97.62	**	**
Teff	4.63	43.43	**	**	-	-	4.00	63.39	**	**
Barely	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	**	**	**	**	1.69	26.78	.49	50.00
Maize	**	**	-	-	**	**	**	**	-	-
Sorghum	**	**	**	**	**	**	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	10.64	99.81	**	**	**	**	6.29	99.68	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	**	**	-	-
ALL CROPS	10.66	100.00	**	**	**	**	6.31	100.00	**	**

TABLE 3.4.5

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	70.34	94.31	**	**	**	**	53.19	95.19	**	**
Teff	32.16	43.12	**	**	**	**	22.83	40.86	**	**
Barely	4.55	6.10	**	**	**	**	**	**	**	**
Wheat	32.93	44.15	**	**	**	**	**	**	**	**
Maize	**	**	**	**	-	-	**	**	-	-
Sorghum	**	**	-	-	**	**	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	-	-	**	**	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-
Field Peas	**	**	**	**	-	-	**	**	-	-
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	**	**	-	-
Fenugreek	**	**	-	-	**	**	**	**	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	**	**	-	-
Other Vegetables	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	74.16	99.44	10.68	98.07	**	**	55.67	99.62	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	**	**	-	-
TOTAL PERMANENT	**	**	**	**	-	-	**	**	-	-
ALL CROPS	74.58	100.00	10.89	100.00	**	**	55.88	100.00	**	**

TABLE 3.4.6 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Gojam Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	144.25	98.40	74.07	99.13	15.98	93.45	51.42	99.71	2.75	87.03
Teff	111.05	75.75	56.00	74.95	13.42	78.48	39.08	75.78	2.54	80.38
Barely	5.78	3.94	4.74	6.34	**	**	**	**	-	-
Wheat	24.53	16.73	11.19	14.98	1.25	7.31	11.88	23.04	**	**
Maize	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	-	-	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	**	**
Horse Beans	**	**	-	-	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	**	**	**	**	**	**	**	**	-	-
Neug	**	**	**	**	-	-	**	**	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	146.53	99.95	74.65	99.91	17.10	100.00	51.57	100.00	3.16	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	146.60	100.00	74.72	100.00	17.10	100.00	51.57	100.00	3.16	100.00

TABLE 3.4.7 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Gojam Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	157.40	92.40	127.62	92.91	**	**	12.20	91.04	2.40	81.91
Teff	64.23	37.71	57.66	41.98	**	**	2.47	18.43	**	**
Barely	5.87	3.45	5.15	3.75	**	**	-	-	-	-
Wheat	**	**	.48	.35	**	**	**	**	-	-
Maize	44.62	26.19	29.09	21.18	**	**	9.31	69.48	1.56	53.24
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	38.81	22.78	34.54	25.15	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	2.90	1.70	1.87	1.36	**	**	-	-	**	**
Horse Beans	1.41	.83	1.15	.84	**	**	-	-	**	**
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	-	-
Field Peas	**	**	**	**	**	**	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**
Neug	**	**	**	**	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	**	**	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.28	1.93	2.52	1.83	.31	1.86	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	2.08	1.22	1.45	1.06	.18	1.08	**	**	**	**
Potatoes	.96	.56	**	**	**	**	-	-	-	-
Other Vegetables	.24	.14	.24	.17	-	-	-	-	-	-
ALL TEMPORARY	170.24	99.94	137.31	99.96	**	**	13.40	100.00	2.91	99.32
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	**	**	-	-	**	**
ALL CROPS	170.34	100.00	137.36	100.00	**	**	13.40	100.00	2.93	100.00

TABLE 3.4.8 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Waghamera Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.14	100.00	.03	100.00	.06	100.00	**	**	**	**
Teff	.06	42.86	**	**	**	**	**	**	-	-
Barely	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	**	**
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.14	100.00	.03	100.00	.06	100.00	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.14	100.00	.03	100.00	.06	100.00	**	**	**	**

TABLE 3.4.9

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Agewawia Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	26.23	96.19	21.35	95.48	1.04	96.30	3.21	100.00	.63	100.00
Teff	11.31	41.47	9.66	43.20	**	**	1.15	35.83	**	**
Barely	**	**	**	**	**	**	**	**	**	**
Wheat	.81	2.97	.20	.89	**	**	**	**	**	**
Maize	2.43	8.91	**	**	**	**	1.58	49.22	.20	31.75
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	9.01	33.04	8.68	38.82	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	27.27	100.00	22.36	100.00	1.08	100.00	3.21	100.00	.63	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	27.27	100.00	22.36	100.00	1.08	100.00	3.21	100.00	.63	100.00



TABLE 3.4.10

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Oromia Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.09	100.00	.04	100.00	-	-	**	**	**	**
Teff	**	**	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	**	**	.04	100.00	-	-	-	-	-	-
Sorghum	**	**	-	-	-	-	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.09	100.00	.04	100.00	-	-	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.09	100.00	.04	100.00	-	-	**	**	**	**

TABLE 3.5 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Oromia

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1,205.72	92.00	564.20	91.16	103.89	84.08	512.92	95.25	24.68	83.60
Teff	461.83	35.24	188.59	30.47	22.78	18.44	241.86	44.91	8.59	29.10
Barely	170.62	13.02	115.09	18.60	37.95	30.71	15.74	2.92	**	**
Wheat	404.31	30.85	194.46	31.42	19.93	16.13	184.21	34.21	5.71	19.34
Maize	128.73	9.82	43.63	7.05	15.71	12.71	64.00	11.88	5.39	18.26
Sorghum	23.85	1.82	**	**	**	**	5.80	1.08	**	**
Millet	6.97	.53	5.49	.89	.53	.43	**	**	-	-
Oats	9.41	.72	8.45	1.37	.59	.48	.36	.07	-	-
PULSES	52.87	4.03	32.89	5.31	**	**	13.47	2.50	**	**
Horse Beans	25.35	1.93	21.63	3.50	.73	.59	**	**	**	**
Chick Peas	11.17	.85	6.20	1.00	**	**	**	**	**	**
Haricot Beans	9.51	.73	**	**	**	**	2.37	.44	**	**
Field Peas	**	**	**	**	**	**	**	**	-	-
Lentils	**	**	1.89	.31	**	**	**	**	-	-
Vetch	**	**	**	**	-	-	**	**	-	-
OILSEEDS	10.66	.81	7.97	1.29	**	**	**	**	**	**
Neug	1.29	.10	**	**	**	**	**	**	-	-
Lin Seed	4.80	.37	4.54	.73	**	**	**	**	-	-
Rape seed	4.00	.31	2.60	.42	**	**	**	**	-	-
Ground Nuts	**	**	**	**	**	**	**	**	**	**
Sun Flower	**	**	-	-	**	**	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	14.85	1.13	7.23	1.17	2.76	2.23	4.45	.83	**	**
Fenugreek	.87	.07	.25	.04	**	**	**	**	-	-
Spices	**	**	**	**	**	**	**	**	-	-
Potatoes	6.47	.49	4.73	.76	**	**	.48	.09	**	**
Other Vegetables	6.37	.49	1.82	.29	**	**	3.25	.60	**	**
ALL TEMPORARY	1,284.10	97.98	612.29	98.94	114.09	92.34	531.83	98.76	25.85	87.57
Chat	23.07	1.76	**	**	9.03	7.31	5.13	.95	**	**
Coffee	2.85	.22	**	**	**	**	**	**	-	-
Enset	**	**	**	**	**	**	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	26.43	2.02	**	**	9.47	7.66	6.69	1.24	**	**
ALL CROPS	1,310.53	100.00	618.88	100.00	123.56	100.00	538.52	100.00	29.52	100.00

TABLE 3.5.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Welega Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	33.60	98.07	15.99	98.10	1.22	84.14	13.31	99.03	3.08	100.00
Teff	18.49	53.97	12.33	75.64	.67	46.21	4.25	31.62	**	**
Barely	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	**	**	-	-
Maize	11.82	34.50	.73	4.48	.47	32.41	8.79	65.40	1.83	59.42
Sorghum	.57	1.66	**	**	**	**	**	**	**	**
Millet	**	**	**	**	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	**	**	**	**	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-
ALL TEMPORARY	34.14	99.65	16.28	99.88	1.35	93.10	13.44	100.00	3.08	100.00
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-
ALL CROPS	34.26	100.00	16.30	100.00	1.45	100.00	13.44	100.00	3.08	100.00

TABLE 3.5.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Welega Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	102.29	97.35	52.64	97.90	9.09	89.47	39.98	98.57	.58	100.00
Teff	57.06	54.31	42.64	79.30	5.98	58.86	8.12	20.02	**	**
Barely	**	**	.82	1.53	-	-	**	**	**	**
Wheat	**	**	**	**	**	**	**	**	-	-
Maize	35.79	34.06	5.32	9.89	2.55	25.10	**	**	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	3.96	3.77	**	**	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	-	-	**	**	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	1.45	1.38	**	**	**	**	**	**	-	-
Neug	1.17	1.11	**	**	**	**	**	**	-	-
Lin Seed	**	**	**	**	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	104.66	99.61	53.77	100.00	9.75	95.96	40.56	100.00	.58	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	**	**	-	-	-	-
ALL CROPS	105.07	100.00	53.77	100.00	10.16	100.00	40.56	100.00	.58	100.00

TABLE 3.5.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Illibabor Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	21.58	98.90	8.01	98.04	1.72	96.63	10.77	99.72	1.08	100.00
Teff	14.99	68.70	6.93	84.82	1.30	73.03	5.94	55.00	**	**
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	6.59	30.20	1.08	13.22	**	**	4.83	44.72	**	**
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	**	**	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	**	**	-	-	-	-
ALL TEMPORARY	21.65	99.22	8.05	98.53	1.75	98.31	10.77	99.72	1.08	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	**	**	-	-
Enset	**	**	-	-	**	**	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	**	**	-	-
ALL CROPS	21.82	100.00	8.17	100.00	1.78	100.00	10.80	100.00	1.08	100.00

TABLE 3.5.4 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Jimma Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	80.03	98.00	65.00	97.76	3.58	100.00	11.26	98.77	.19	100.00
Teff	54.90	67.23	45.42	68.31	3.03	84.64	6.34	55.61	**	**
Barely	**	**	**	**	-	-	**	**	-	-
Wheat	**	**	**	**	-	-	**	**	-	-
Maize	18.16	22.24	**	**	**	**	4.33	37.98	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-
Millet	**	**	**	**	-	-	**	**	-	-
Oats	**	**	**	**	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	81.45	99.74	66.42	99.89	3.58	100.00	11.26	98.77	.19	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	**	**	-	-
ALL CROPS	81.66	100.00	66.49	100.00	3.58	100.00	11.40	100.00	.19	100.00

TABLE 3.5.5 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	243.98	97.78	77.68	97.02	14.42	96.01	149.41	98.62	2.46	84.54
Teff	143.01	57.32	37.32	46.61	6.00	39.95	98.65	65.12	1.03	35.40
Barely	31.96	12.81	18.90	23.60	**	**	7.93	5.23	**	**
Wheat	62.24	24.94	16.59	20.72	**	**	42.24	27.88	**	**
Maize	**	**	**	**	**	**	**	**	**	**
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	3.22	1.29	1.64	2.05	**	**	1.02	.67	**	**
Horse Beans	1.52	.61	.97	1.21	-	-	**	**	**	**
Chick Peas	**	**	**	**	**	**	**	**	**	**
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	**	**	**	**	**	**
Lentils	.53	.21	**	**	**	**	**	**	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	249.51	100.00	80.07	100.00	15.02	100.00	151.50	100.00	2.91	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	249.51	100.00	80.07	100.00	15.02	100.00	151.50	100.00	2.91	100.00

TABLE 3.5.6 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	74.34	98.79	11.39	98.87	3.53	94.13	**	**	3.83	100.00
Teff	41.32	54.91	**	**	2.99	79.73	**	**	**	**
Barely	**	**	**	**	**	**	**	**	**	**
Wheat	**	**	**	**	**	**	**	**	1.51	39.43
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	**	**	**	**	-	-
Horse Beans	**	**	-	-	-	-	**	**	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	-	-
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	**	**	-	-
ALL TEMPORARY	75.25	100.00	11.52	100.00	3.75	100.00	**	**	3.83	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	75.25	100.00	11.52	100.00	3.75	100.00	**	**	3.83	100.00



TABLE 3.5.7 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	225.77	90.17	33.40	80.56	6.67	60.86	180.90	93.79	4.81	94.31
Teff	108.13	43.18	14.12	34.06	1.99	18.16	89.50	46.40	2.53	49.61
Barely	10.31	4.12	4.26	10.27	**	**	5.25	2.72	**	**
Wheat	95.87	38.29	9.75	23.52	**	**	**	**	1.17	22.94
Maize	11.13	4.45	5.00	12.06	1.46	13.32	**	**	.39	7.65
Sorghum	**	**	**	**	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	18.25	7.29	3.60	8.68	**	**	**	**	**	**
Horse Beans	**	**	**	**	-	-	**	**	-	-
Chick Peas	**	**	**	**	-	-	**	**	**	**
Haricot Beans	**	**	**	**	**	**	**	**	**	**
Field Peas	**	**	**	**	-	-	**	**	-	-
Lentils	**	**	**	**	**	**	**	**	-	-
Vetch	**	**	**	**	-	-	**	**	-	-
OILSEEDS	**	**	**	**	**	**	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	5.46	2.18	4.11	9.91	**	**	**	**	-	-
Fenugreek	**	**	**	**	**	**	**	**	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	4.38	1.75	3.69	8.90	**	**	-	-	-	-
Other Vegetables	**	**	**	**	-	-	**	**	-	-
ALL TEMPORARY	250.38	100.00	41.45	99.98	10.96	100.00	192.87	100.00	5.10	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	250.39	100.00	41.46	100.00	10.96	100.00	192.87	100.00	5.10	100.00

TABLE 3.5.8 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Arsi Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	318.90	90.42	255.47	89.18	40.92	95.70	19.65	95.53	**	**
Teff	19.86	5.63	18.13	6.33	**	**	1.04	5.06	**	**
Barely	112.32	31.85	80.52	28.11	**	**	**	**	**	**
Wheat	176.38	50.01	147.63	51.54	8.91	20.84	17.25	83.86	**	**
Maize	4.11	1.17	3.15	1.10	**	**	**	**	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-
Millet	**	**	-	-	**	**	-	-	-	-
Oats	**	**	**	**	**	**	-	-	-	-
PULSES	25.68	7.28	24.53	8.56	.86	2.01	**	**	-	-
Horse Beans	19.63	5.57	18.92	6.60	.67	1.57	**	**	-	-
Chick Peas	**	**	**	**	**	**	**	**	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-
OILSEEDS	7.06	2.00	6.11	2.13	**	**	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-
Lin Seed	4.04	1.15	4.00	1.40	**	**	-	-	-	-
Rape seed	**	**	**	**	**	**	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	.33	.12	**	**	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	**	**
Other Vegetables	**	**	**	**	-	-	**	**	-	-
ALL TEMPORARY	352.68	100.00	286.44	100.00	42.76	100.00	20.57	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	352.69	100.00	286.45	100.00	42.76	100.00	20.57	100.00	**	**

TABLE 3.5.9 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

West Harerge Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	**	**	**	**	**	**	1.00	100.00
Teff	**	**	**	**	**	**	**	**	**	**
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	**	**	-	-
Maize	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-
Field Peas	**	**	-	-	**	**	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	**	**	-	-
ALL TEMPORARY	**	**	**	**	**	**	**	**	1.00	100.00
Chat	**	**	**	**	**	**	**	**	-	-
Coffee	**	**	**	**	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	**	**	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	**	**	-	-
ALL CROPS	**	**	**	**	**	**	**	**	1.00	100.00

TABLE 3.5.10 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

East Harerge Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	51.94	62.77	**	**	15.61	59.83	16.64	67.12	4.66	53.44
Teff	**	**	-	-	-	-	**	**	-	-
Barely	**	**	-	-	**	**	**	**	-	-
Wheat	**	**	**	**	**	**	**	**	-	-
Maize	26.56	32.10	**	**	8.75	33.54	7.94	32.03	**	**
Sorghum	**	**	**	**	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	**	**	**	**	**	**	**	**	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	**	**	**	**	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.69	5.67	1.59	6.87	**	**	1.87	7.54	**	**
Fenugreek	**	**	**	**	**	**	-	-	-	-
Spices	**	**	-	-	-	-	**	**	-	-
Potatoes	**	**	**	**	**	**	.48	1.94	-	-
Other Vegetables	2.83	3.42	**	**	**	**	1.35	5.45	**	**
ALL TEMPORARY	60.14	72.69	17.97	77.69	17.88	68.53	19.23	77.57	5.05	57.91
Chat	21.86	26.42	**	**	8.21	31.47	4.82	19.44	3.67	42.09
Coffee	**	**	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	22.60	27.31	**	**	8.21	31.47	5.56	22.43	3.67	42.09
ALL CROPS	82.74	100.00	**	**	26.09	100.00	24.79	100.00	8.72	100.00

TABLE 3.5.11 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Bale Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	40.61	98.69	25.42	98.53	6.85	98.00	8.20	99.76	**	**
Teff	**	**	**	**	-	-	**	**	-	-
Barely	10.88	26.44	7.47	28.95	2.45	35.05	.95	11.56	-	-
Wheat	24.61	59.81	14.00	54.26	3.92	56.08	6.55	79.68	**	**
Maize	.20	.49	.16	.62	-	-	**	**	-	-
Sorghum	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	3.52	8.55	2.70	10.47	.47	6.72	.35	4.26	-	-
PULSES	**	**	**	**	-	-	**	**	-	-
Horse Beans	**	**	**	**	-	-	**	**	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-
Fenugreek	**	**	**	**	**	**	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	41.15	100.00	25.80	100.00	6.99	100.00	8.22	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	41.15	100.00	25.80	100.00	6.99	100.00	8.22	100.00	**	**

TABLE 3.5.12 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Borena Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	2.53	82.14	1.43	72.59	**	**	.95	100.00	-	-
Teff	**	**	**	**	**	**	-	-	-	-
Barely	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	-	-	-	-	**	**	-	-
Maize	**	**	1.07	54.31	**	**	**	**	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-
ALL TEMPORARY	2.64	85.71	1.53	77.66	**	**	.95	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	.44	22.34	-	-	-	-	-	-
ALL CROPS	3.08	100.00	1.97	100.00	**	**	.95	100.00	-	-

TABLE 3.6 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Somale\*

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	**	**	**	**	**	**	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	**	**	-	-
Maize	**	**	**	**	**	**	**	**	-	-
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	**	**	**	**	-	-
Chat	**	**	**	**	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**
ALL CROPS	**	**	**	**	**	**	**	**	**	**

\* Excluding Moyale zone for its insignificant figures.

TABLE 3.6.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Shinele Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	-	-	**	**	**	**	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.03	60.00	-	-	**	**	**	**	-	-
Sorghum	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	.03	60.00	-	-	**	**	**	**	-	-
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	.05	100.00	-	-	**	**	**	**	**	**



TABLE 3.6.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Jijiga Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.63	71.59	.25	50.00	**	**	.30	100.00	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	.21	70.00	-	-
Maize	.42	47.73	.25	50.00	**	**	.09	30.00	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.63	71.59	.25	50.00	**	**	.30	100.00	-	-
Chat	**	**	.25	50.00	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	.25	50.00	-	-	-	-	-	-
ALL CROPS	.88	100.00	.50	100.00	**	**	.30	100.00	-	-

TABLE 3.7 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Benshangul-Gumuz

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	3.78	96.68	1.74	98.31	**	**	1.21	95.28	.21	95.45
Teff	1.73	44.25	1.45	81.92	**	**	**	**	-	-
Barely	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	-	-
Maize	1.21	30.95	**	**	**	**	1.03	81.10	**	**
Sorghum	**	**	-	-	-	-	-	-	.14	63.64
Millet	**	**	**	**	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	.01	1.61	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.02	.51	-	-	.01	1.61	**	**	**	**
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	3.89	99.49	1.75	98.87	**	**	1.27	100.00	.22	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	3.91	100.00	1.77	100.00	**	**	1.27	100.00	.22	100.00

TABLE 3.7.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Metekel Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	3.01	97.41	1.69	99.41	**	**	.73	93.59	-	-
Teff	1.63	52.75	1.41	82.94	**	**	**	**	-	-
Barely	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	-	-
Maize	.68	22.01	**	**	**	**	.61	78.21	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	**	**	**	**	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	**	**	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	-	-
Other Vegetables	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	3.09	100.00	1.70	100.00	**	**	.78	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	3.09	100.00	1.70	100.00	**	**	.78	100.00	-	-

TABLE 3.7.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Asosa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.66	95.65	.06	75.00	**	**	.38	100.00	.21	95.45
Teff	.11	15.94	.05	62.50	**	**	**	**	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	-	-	.33	86.84	**	**
Sorghum	**	**	-	-	-	-	-	-	.14	63.64
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.01	1.45	-	-	.01	100.00	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.01	1.45	-	-	.01	100.00	**	**	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.67	97.10	.06	75.00	.01	100.00	.38	100.00	.22	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	.69	100.00	.08	100.00	.01	100.00	.38	100.00	.22	100.00

TABLE 3.7.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Kemeshi Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.12	92.31	-	-	**	**	.10	90.91	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.12	92.31	-	-	**	**	.10	90.91	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.13	100.00	-	-	**	**	.11	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.13	100.00	-	-	**	**	.11	100.00	-	-

TABLE 3.8 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

(S.N.N.P.R)

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	288.51	78.76	207.16	79.85	45.37	76.72	31.58	84.60	4.41	42.20
Teff	92.40	25.22	63.65	24.53	17.13	28.97	**	**	.40	3.83
Barely	24.57	6.71	18.67	7.20	5.25	8.88	.44	1.18	**	**
Wheat	87.68	23.93	71.13	27.42	5.11	8.64	10.38	27.81	1.07	10.24
Maize	78.29	21.37	49.40	19.04	17.04	28.81	9.16	24.54	2.69	25.74
Sorghum	3.56	.97	2.71	1.04	.59	1.00	**	**	-	-
Millet	**	**	**	**	**	**	**	**	**	**
Oats	**	**	**	**	**	**	-	-	**	**
PULSES	23.44	6.40	18.07	6.97	4.92	8.32	.30	.80	.16	1.53
Horse Beans	9.19	2.51	8.85	3.41	.20	.34	**	**	**	**
Chick Peas	5.26	1.44	4.36	1.68	**	**	**	**	**	**
Haricot Beans	8.62	2.35	4.52	1.74	3.97	6.71	**	**	.13	1.24
Field Peas	**	**	**	**	**	**	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lini Seed	**	**	**	**	**	**	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	25.58	6.98	15.92	6.14	4.54	7.68	3.40	9.11	1.72	16.46
Fenugreek	**	**	**	**	**	**	-	-	-	-
Spices	15.33	4.18	9.46	3.65	3.10	5.24	2.44	6.54	**	**
Potatoes	4.58	1.25	3.87	1.49	**	**	**	**	.02	.19
Other Vegetables	4.75	1.30	1.68	.65	**	**	**	**	1.37	13.11
ALL TEMPORARY	337.56	92.15	241.16	92.95	54.85	92.75	35.28	94.51	6.29	60.19
Chat	1.78	.49	.73	.28	.90	1.52	**	**	**	**
Coffee	13.37	3.65	8.56	3.30	2.51	4.24	.88	2.36	1.43	13.68
Enset	6.45	1.76	**	**	**	**	**	**	1.54	14.74
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-
Fruits	3.31	.90	**	**	**	**	**	**	**	**
Other Permanent	**	**	**	**	**	**	-	-	**	**
TOTAL PERMANENT	28.77	7.85	18.28	7.05	4.29	7.25	2.05	5.49	4.16	39.81
ALL CROPS	366.33	100.00	259.44	100.00	59.14	100.00	37.33	100.00	10.45	100.00

TABLE 3.8.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Gurage Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	54.72	88.47	35.05	90.20	8.55	84.24	**	**	**	**
Teff	**	**	**	**	**	**	**	**	**	**
Barely	15.50	25.06	10.91	28.08	**	**	**	**	**	**
Wheat	6.47	10.46	5.04	12.97	**	**	**	**	**	**
Maize	4.80	7.76	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	**	**	1.57	4.04	**	**	**	**	**	**
Horse Beans	.88	1.42	.78	2.01	**	**	-	-	**	**
Chick Peas	**	**	**	**	**	**	**	**	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	**	**	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.12	6.66	2.24	5.76	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	61.15	98.87	38.86	100.00	9.95	98.03	**	**	**	**
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	**	**	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	**	**	**	**
ALL CROPS	61.85	100.00	38.86	100.00	10.15	100.00	**	**	**	**

TABLE 3.8.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Hadiya Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	115.01	87.89	97.71	86.65	5.79	94.15	9.85	97.04	1.66	93.26
Teff	29.55	22.58	25.89	22.96	**	**	**	**	**	**
Barely	7.89	6.03	7.11	6.30	**	**	**	**	**	**
Wheat	60.64	46.34	50.31	44.61	2.41	39.19	7.33	72.22	**	**
Maize	15.08	11.52	13.01	11.54	**	**	**	**	**	**
Sorghum	1.44	1.10	1.14	1.01	**	**	**	**	-	-
Millet	**	**	**	**	**	**	**	**	-	-
Oats	**	**	**	**	-	-	-	-	-	-
PULSES	8.99	6.87	8.66	7.68	.20	3.25	**	**	**	**
Horse Beans	5.19	3.97	5.09	4.51	**	**	**	**	-	-
Chick Peas	3.52	2.69	3.29	2.92	.14	2.28	**	**	**	**
Haricot Beans	**	**	**	**	-	-	-	-	**	**
Field Peas	**	**	**	**	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.17	3.19	3.79	3.36	**	**	**	**	.06	3.37
Fenugreek	**	**	**	**	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-
Potatoes	**	**	**	**	**	**	**	**	**	**
Other Vegetables	.55	.42	.50	.44	**	**	-	-	**	**
ALL TEMPORARY	128.19	97.96	110.16	97.69	6.13	99.67	10.15	100.00	1.75	98.31
Chat	**	**	**	**	-	-	-	-	**	**
Coffee	1.84	1.41	1.84	1.63	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	2.67	2.04	2.61	2.31	**	**	-	-	**	**
ALL CROPS	130.86	100.00	112.77	100.00	6.15	100.00	10.15	100.00	1.78	100.00



TABLE 3.8.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Kembata Alaba Tembaro Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	52.76	73.74	40.85	76.01	6.56	68.62	4.43	65.63	.94	61.84
Teff	15.20	21.24	12.75	23.73	1.57	16.42	.77	11.41	.11	7.24
Barely	.58	.81	.48	.89	**	**	**	**	-	-
Wheat	18.25	25.51	14.48	26.94	**	**	2.20	32.59	**	**
Maize	16.49	23.05	11.34	21.10	3.49	36.51	**	**	**	**
Sorghum	.69	.96	.47	.87	**	**	-	-	-	-
Millet	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	2.95	4.12	2.83	5.27	**	**	**	**	-	-
Horse Beans	2.69	3.76	2.59	4.82	**	**	**	**	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	14.48	20.24	8.99	16.73	2.85	29.81	2.22	32.89	.41	26.97
Fenugreek	**	**	**	**	**	**	-	-	-	-
Spices	12.09	16.90	6.84	12.73	2.76	28.87	2.22	32.89	**	**
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	.46	.64	.31	.58	**	**	-	-	**	**
ALL TEMPORARY	70.19	98.10	52.67	98.01	9.45	98.85	6.73	99.70	1.35	88.82
Chat	**	**	**	**	-	-	-	-	**	**
Coffee	.77	1.08	.59	1.10	**	**	-	-	.08	5.26
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	**	**
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	1.36	1.90	1.07	1.99	**	**	**	**	.17	11.18
ALL CROPS	71.55	100.00	53.74	100.00	9.56	100.00	6.75	100.00	1.52	100.00

TABLE 3.8.4 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Sidama Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	22.10	42.80	13.22	43.75	6.25	50.57	**	**	**	**
Teff	.57	1.10	.40	1.32	**	**	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	-	-
Maize	20.12	38.96	11.86	39.25	5.62	45.47	**	**	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	4.09	7.92	2.29	7.58	**	**	**	**	**	**
Horse Beans	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	3.76	7.28	1.96	6.49	**	**	**	**	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.19	4.24	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	2.07	4.01	**	**	**	**	**	**	**	**
ALL TEMPORARY	28.38	54.96	16.06	53.14	8.73	70.63	**	**	.92	19.05
Chat	1.12	2.17	**	**	.77	6.23	**	**	**	**
Coffee	10.19	19.73	**	**	2.14	17.31	.88	20.85	1.35	27.95
Enset	6.07	11.75	**	**	**	**	**	**	1.48	30.64
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	**	**
Other Permanent	**	**	**	**	**	**	-	-	**	**
TOTAL PERMANENT	23.26	45.04	**	**	3.63	29.37	1.54	36.49	3.91	80.95
ALL CROPS	51.64	100.00	30.22	100.00	12.36	100.00	4.22	100.00	4.83	100.00

TABLE 3.8.5 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Gedio Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	**	**	**	**	**	**	.02	40.00
Teff	-	-	-	-	-	-	-	-	-	-
Barely	.11	3.96	-	-	-	-	.11	5.47	-	-
Wheat	**	**	-	-	-	-	**	**	-	-
Maize	**	**	**	**	**	**	**	**	.02	40.00
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	**	**	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	**	**	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	.02	40.00
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	**	**	.02	40.00
ALL TEMPORARY	**	**	**	**	**	**	**	**	.04	80.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	.12	29.27	**	**	-	-	-	-
Enset	**	**	**	**	**	**	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	.01	20.00
TOTAL PERMANENT	**	**	.25	60.98	**	**	-	-	.01	20.00
ALL CROPS	**	**	.41	100.00	**	**	**	**	.05	100.00

TABLE 3.8.6 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

North Omo Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	35.78	86.99	16.41	84.76	**	**	2.70	100.00	.06	50.00
Teff	**	**	5.74	29.65	**	**	**	**	-	-
Barely	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	-	-	**	**	-	-
Maize	18.88	45.90	10.30	53.20	**	**	1.95	72.22	.06	50.00
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	4.82	11.72	**	**	2.25	11.89	-	-	.06	50.00
Horse Beans	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	2.20	11.63	-	-	.06	50.00
Field Peas	**	**	**	**	**	**	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	40.90	99.44	19.18	99.07	**	**	2.70	100.00	.12	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-
ALL CROPS	41.13	100.00	19.36	100.00	**	**	2.70	100.00	.12	100.00

TABLE 3.8.7 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

South Omo Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.46	100.00	.11	100.00	.08	100.00	**	**	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.46	100.00	.11	100.00	.08	100.00	**	**	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.46	100.00	.11	100.00	.08	100.00	**	**	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.46	100.00	.11	100.00	.08	100.00	**	**	-	-

TABLE 3.8.8 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Keficho-Shekicho Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.53	92.98	.30	88.24	**	**	.21	100.00	-	-
Teff	**	**	**	**	-	-	**	**	-	-
Barely	**	**	-	-	**	**	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-
Maize	**	**	**	**	-	-	.15	71.43	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.57	100.00	.34	100.00	**	**	.21	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.57	100.00	.34	100.00	**	**	.21	100.00	-	-

TABLE 3.8.9 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Bench-Maji Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.17	100.00	.13	100.00	-	-	.03	100.00	-	-
Teff	**	**	**	**	-	-	**	**	-	-
Barely	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	**	**	-	-	**	**	-	-
Maize	**	**	**	**	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.17	100.00	.13	100.00	-	-	.03	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	.17	100.00	.13	100.00	-	-	.03	100.00	-	-

TABLE 3.8.10 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Yem Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	5.01	95.07	3.23	94.72	1.51	95.57	.23	100.00	.05	100.00
Teff	4.02	76.28	2.68	78.59	1.20	75.95	.12	52.17	**	**
Barely	.26	4.93	.14	4.11	**	**	-	-	-	-
Wheat	.26	4.93	.17	4.99	**	**	-	-	-	-
Maize	.44	8.35	.22	6.45	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	**	**	-	-	**	**	-	-	-	-
Oats	**	**	-	-	**	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-
ALL TEMPORARY	5.25	99.62	3.41	100.00	1.56	98.73	.23	100.00	.05	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-
ALL CROPS	5.27	100.00	3.41	100.00	1.58	100.00	.23	100.00	.05	100.00



TABLE 3.8.11 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Amaro Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	-	-	-	-	**	**	-	-
Teff	**	**	-	-	-	-	**	**	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	-	-	-	-	**	**	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	.02	100.00	-	-	-	-
Enset	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	.02	100.00	-	-	-	-
ALL CROPS	.03	100.00	-	-	.02	100.00	**	**	-	-

TABLE 3.8.12 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Burji Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.01	50.00	.01	50.00	-	-	-	-	-	-
Teff	**	**	**	**	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-
Horse Beans	-	-	**	**	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	.01	50.00	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	-	-	-	-	-	-

TABLE 3.8.13 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Konso, Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.02	100.00	.02	100.00	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.02	100.00	.02	100.00	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.02	100.00	.02	100.00	-	-	-	-	-	-

TABLE 3.8.14 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Derashe Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	.01	100.00	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	.01	100.00	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	.01	100.00	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	.01	100.00	-	-	-	-	-	-

TABLE 3.9 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Gambela

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.33	94.29	.13	86.67	.11	100.00	.08	100.00	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.31	88.57	.13	86.67	.10	90.91	.07	87.50	-	-
Sorghum	**	**	-	-	**	**	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.33	94.29	.13	86.67	.11	100.00	.08	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	.35	100.00	.15	100.00	.11	100.00	.08	100.00	-	-

TABLE 3.10 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Harari

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	4.04	63.62	.16	64.00	1.01	61.21	1.19	65.75	1.69	63.53
Teff	-	-	-	-	-	-	-	-	-	-
Barely	.01	.16	-	-	**	**	**	**	**	**
Wheat	.15	2.36	**	**	.03	1.82	.08	4.42	**	**
Maize	1.58	24.88	.05	20.00	.37	22.42	.42	23.20	.73	27.44
Sorghum	2.30	36.22	.10	40.00	.61	36.97	.68	37.57	.92	34.59
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	**	**	-	-	-	-
PULSES	**	**	-	-	**	**	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.14	2.20	.01	4.00	.07	4.24	.01	.55	.06	2.26
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.14	2.20	.01	4.00	**	**	.01	.55	.06	2.26
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.04	.63	-	-	.01	.61	.01	.55	.01	.38
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	**	**	-	-
Other Vegetables	.03	.47	**	**	.01	.61	.01	.55	.01	.38
ALL TEMPORARY	4.23	66.61	.17	68.00	1.09	66.06	1.21	66.85	1.77	66.54
Chat	2.08	32.76	.08	32.00	.54	32.73	.59	32.60	.88	33.08
Coffee	.02	.31	**	**	**	**	**	**	.01	.38
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.02	.31	**	**	**	**	**	**	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	2.12	33.39	.08	32.00	.56	33.94	.60	33.15	.89	33.46
ALL CROPS	6.35	100.00	.25	100.00	1.65	100.00	1.81	100.00	2.66	100.00

TABLE 3.11 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Addis Ababa

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	12.26	90.48	.30	73.17	.13	72.22	11.51	91.49	.31	88.57
Teff	7.78	57.42	**	**	.09	50.00	7.44	59.14	.18	51.43
Barely	**	**	**	**	**	**	**	**	**	**
Wheat	4.27	31.51	.14	34.15	**	**	3.97	31.56	.11	31.43
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	.91	6.72	.10	24.39	**	**	.73	5.80	.03	8.57
Horse Beans	**	**	-	-	-	-	**	**	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-
Field Peas	.22	1.62	.02	4.88	**	**	.19	1.51	-	-
Lentils	.38	2.80	.03	7.32	**	**	.32	2.54	**	**
Vetch	.31	2.29	.05	12.20	**	**	.22	1.75	**	**
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	**	**
Fenugreek	.06	.44	**	**	**	**	.04	.32	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	**	**	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	13.55	100.00	.41	100.00	.18	100.00	12.58	100.00	.35	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	-	-
TOTAL PERMANENT	**	**	-	-	**	**	-	-	-	-
ALL CROPS	13.55	100.00	.41	100.00	.18	100.00	12.58	100.00	.35	100.00

TABLE 3.12 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE  
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE PEASANT HOLDINGS IN  
1997/98(1990 E.C.)

Dire Dawa

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**0	**	**	**	**	**	**	**	**	**
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	**	**	-	-	**	**	-	-	-	-
Sorghum	**	**	**	**	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	**	**	-	-	-	-
ALL TEMPORARY	**	**	**	**	**	**	**	**	**	**
Chat	**	**	**	**	**	**	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-
ALL CROPS	**	**	**	**	**	**	**	**	**	**



#### **4. Quantity of Local and Improved Seeds used by type of Crop**

The total quantity of local and improved seeds used by the private peasant holders during 1997/98 Meher agricultural year was estimated to be 5,702,120 quintals, of which 105,270 quintals was improved seeds of major crops. This result indicates that of the total quantity of seeds used, only 1.85% was improved seeds, while the remaining 98.15% was local seeds. Hence, the use of improved seed by private peasant holders is inconsiderable for reasons which need further investigation.

**Summary Table E. Quantity of Local and Improved Seeds Applied**

Type of seed	Quantity ('000 Qt)	Percent
Local seed	5,596.85	98.15
Improved seed	105.27	1.85
Total	5,702.12	100.00

Table 4.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

National ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	104.55	4,529.02
Teff	13.33	1,004.98
Barley	1.93	1,171.14
Wheat	65.80	1,252.64
Maize	22.90	593.35
Sorghum	.59	293.03
Millet	-	139.99
Oats	-	73.89
Pulses	.62	890.01
Horse Beans	.34	387.63
Field Peas	**	138.22
Haricot Beans	-	72.87
Chick Peas	**	140.65
Lentils	**	40.41
Vetch	-	110.23
Others	**	177.82
Neug	**	45.33
Linseed	**	97.34
Rapeseed	-	8.98
Ground Nuts	-	8.85
Sunflower	-	1.27
Sesame	-	3.39
Fenugreek	-	12.66
All Crops	105.27	5,596.85

Table 4.2 Estimates of Quantity of Improved seed and Local Seed by Regions for Private Peasant Holdings 1997/98 (1990 E.C.)

National ('000 Quintal)

REGION	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
TIGRAY	9.12	351.27
AMHARA	-	5.82
OROMIYA	32.28	1,628.42
SOMALIE	47.27	3,044.32
BENS.GUMEZ	0.24	26.45
S.N.N.P.R.	0.22	47.17
GAMBELA	15.59	476.43
HARARI	0.22	3.71
ADDIS ABABA	0.04	2.56
DIRE DAWA	0.25	8.88
	0.01	1.81
TOTAL	105.27	5,596.85

FIG. 5 ESTIMATES OF QUANTITY OF SEED BY TYPE OF SEED ,  
BY REGION , 1997/98 (1990 E.C.)

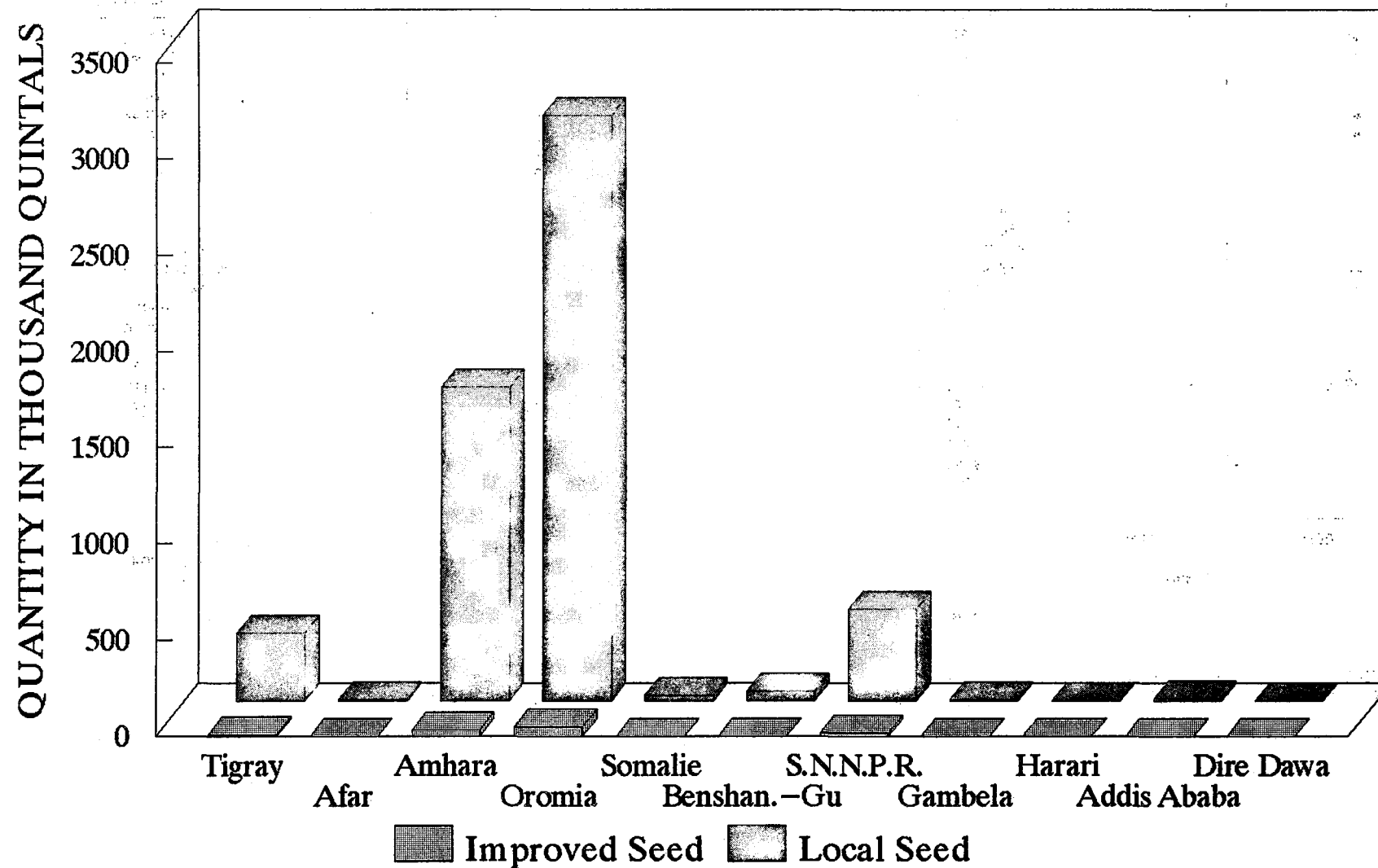


Table 4.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Tigray ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	9.08	317.72
Teff	**	54.63
Barley	**	96.01
Wheat	2.86	64.78
Maize	**	28.62
Sorghum	**	40.00
Millet	-	33.51
Oats	-	**
Pulses	**	28.45
Horse Beans	**	9.05
Field Peas	-	3.70
Haricot Beans	-	.59
Chick Peas	-	5.92
Lentils	-	3.49
Vetch	-	5.70
Others	**	5.10
Neug	-	1.06
Linseed	**	2.67
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	9.12	351.27

Table 4.3.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

West Tigray Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	68.17
Teff	**	17.58
Barley	-	**
Wheat	-	-
Maize	**	11.35
Sorghum	-	17.64
Millet	-	21.49
Oats	-	-
Pulses	-	**
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	1.70
Neug	-	**
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	-
All Crops	**	72.87

Table 4.3.2 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

East Tigray Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	1.80	74.40
Teff	**	6.70
Barley	**	38.35
Wheat	1.13	20.87
Maize	**	3.23
Sorghum	**	**
Millet	-	3.01
Oats	-	**
Pulses	**	10.23
Horse Beans	**	2.65
Field Peas	-	1.24
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	.74
Vetch	-	3.63
Others	**	**
Neug	-	**
Linseed	**	.89
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	1.84	85.89

Table 4.3.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Central Tigray Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	.53	85.31
Teff	.42	17.42
Barley	-	19.28
Wheat	-	15.29
Maize	**	8.33
Sorghum	**	16.56
Millet	-	8.43
Oats	-	-
Pulses	-	6.61
Horse Beans	-	4.14
Field Peas	-	.24
Haricot Beans	-	.40
Chick Peas	-	.74
Lentils	-	.72
Vetch	-	.37
Others	-	1.56
Neug	-	.29
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	.53	93.48

Table 4.3.4 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

South Tigray Zone ('000 Quintal)		
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	1.80	89.82
Teff	**	12.93
Barley	-	38.27
Wheat	1.73	28.61
Maize	-	5.71
Sorghum	-	3.73
Millet	-	**
Oats	-	-
Pulses	-	8.61
Horse Beans	-	2.25
Field Peas	-	2.02
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	2.03
Vetch	-	**
Others	-	.55
Neug	-	-
Linseed	-	.54
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	1.80	98.98

Table 4.4 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Afar ('000 Quintal)		
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	5.26
Teff	-	2.40
Barley	-	**
Wheat	-	**
Maize	-	1.70
Sorghum	-	.58
Millet	-	-
Oats	-	-
Pulses	-	.49
Horse Beans	-	-
Field Peas	-	-
Haricot Beans	-	**
Chick Peas	-	.20
Lentils	-	**
Vetch	-	-
Others	-	.07
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	.03
Sesame	-	**
Fenugreek	-	-
All Crops	-	5.82

Table 4.4.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Zone 1 Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	-	1.34	
Teff	-	-	
Barley	-	-	
Wheat	-	-	
Maize	-	1.34	
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	-	1.34	

Table 4.4.2 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Zone 3 Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	-	3.60	
Teff	-	2.18	
Barley	-	**	
Wheat	-	**	
Maize	-	.33	
Sorghum	-	.51	
Millet	-	-	
Oats	-	-	
Pulses	-	.49	
Horse Beans	-	-	
Field Peas	-	-	
Haricot Beans	-	**	
Chick Peas	-	.20	
Lentils	-	**	
Vetch	-	-	
Others	-	.06	
Neug	-	-	
Linseed	-	-	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	.02	
Sesame	-	**	
Fenugreek	-	-	
All Crops	-	4.15	

Table 4.4.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Zone 5 Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	-	.32	
Teff	-	**	
Barley	-	-	
Wheat	-	-	
Maize	-	**	
Sorghum	-	.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		**	

Table 4.5 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Amhara		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	32.06	1,211.53	
Teff	4.09	384.74	
Barley	**	322.73	
Wheat	24.67	208.84	
Maize	2.81	106.53	
Sorghum	**	95.86	
Millet	-	80.93	
Oats	-	11.90	
Pulses	**	370.53	
Horse Beans	**	143.26	
Field Peas	-	48.53	
Haricot Beans	-	13.63	
Chick Peas	**	82.39	
Lentils	-	16.15	
Vetch	-	66.57	
Others	**	46.36	
Neug	**	22.78	
Linseed	-	14.27	
Rapeseed	-	.61	
Ground Nuts	-	**	
Sunflower	-	1.09	
Sesame	-	1.46	
Fenugreek	-	6.13	
All Crops	32.28	1,628.42	



Table 4.5.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

North Gonder Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	7.27	157.07
Teff	1.61	44.26
Barley	-	30.04
Wheat	**	17.36
Maize	**	11.38
Sorghum	**	38.98
Millet	-	13.68
Oats	-	**
Pulses	**	40.32
Horse Beans	-	13.19
Field Peas	-	5.18
Haricot Beans	-	**
Chick Peas	**	16.75
Lentils	-	**
Vetch	-	**
Others	**	8.04
Neug	**	4.90
Linseed	-	.86
Rapeseed	-	.17
Ground Nuts	-	-
Sunflower	-	.53
Sesame	-	**
Fenugreek	-	**
All Crops	7.42	205.43

Table 4.5.2 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

South Gonder Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	4.40	182.57
Teff	**	61.12
Barley	**	55.34
Wheat	**	27.78
Maize	**	14.62
Sorghum	-	8.59
Millet	-	15.12
Oats	-	-
Pulses	**	60.75
Horse Beans	**	23.06
Field Peas	-	5.79
Haricot Beans	-	**
Chick Peas	-	19.10
Lentils	-	.79
Vetch	-	4.61
Others	-	8.99
Neug	-	4.49
Linseed	-	3.50
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	**
All Crops	4.47	252.31

Table 4.5.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

North Wolo Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	4.67	79.01
Teff	.10	16.46
Barley	**	25.57
Wheat	4.53	27.29
Maize	-	**
Sorghum	-	5.28
Millet	-	.36
Oats	-	2.27
Pulses	-	32.85
Horse Beans	-	11.70
Field Peas	-	6.77
Haricot Beans	-	-
Chick Peas	-	4.71
Lentils	-	6.35
Vetch	-	**
Others	-	2.98
Neug	-	**
Linseed	-	.99
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	1.96
All Crops	4.67	114.84

Table 4.5.4 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

South Wolo Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	122.01
Teff	**	19.19
Barley	-	33.64
Wheat	**	37.99
Maize	**	9.81
Sorghum	-	14.14
Millet	-	**
Oats	-	6.15
Pulses	-	68.90
Horse Beans	-	36.69
Field Peas	-	14.06
Haricot Beans	-	1.25
Chick Peas	-	6.47
Lentils	-	2.63
Vetch	-	7.80
Others	-	3.24
Neug	-	.45
Linseed	-	.30
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	2.48
All Crops	**	194.15

Table 4.5.5 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

North Shewa Zone ('000 Quintal)		
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.75	130.18
Teff	**	33.99
Barley	-	46.74
Wheat	3.47	39.11
Maize	**	2.37
Sorghum	**	7.59
Millet	-	**
Oats	-	**
Pulses	-	41.51
Horse Beans	-	16.47
Field Peas	-	2.63
Haricot Beans	-	**
Chick Peas	-	10.47
Lentils	-	5.09
Vetch	-	**
Others	-	2.14
Neug	-	**
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	.10
Sesame	-	.14
Fenugreek	-	.29
All Crops	3.75	173.83

Table 4.5.6 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

East Gojam Zone ('000 Quintal)		
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	6.71	204.03
Teff	1.29	85.90
Barley	-	52.68
Wheat	5.36	43.33
Maize	**	17.46
Sorghum	-	**
Millet	-	**
Oats	-	-
Pulses	-	86.76
Horse Beans	-	24.34
Field Peas	-	5.82
Haricot Beans	-	**
Chick Peas	-	19.63
Lentils	-	**
Vetch	-	34.44
Others	-	6.05
Neug	-	2.05
Linseed	-	3.51
Rapeseed	-	.09
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	.36
All Crops	6.71	296.84

Table 4.5.7 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

West Gojam Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	2.39	199.80
Teff	**	81.70
Barley	-	32.78
Wheat	**	8.09
Maize	1.66	37.09
Sorghum	-	5.77
Millet	-	33.19
Oats	-	**
Pulses	-	25.28
Horse Beans	-	9.04
Field Peas	-	5.55
Haricot Beans	-	**
Chick Peas	-	4.22
Lentils	-	-
Vetch	-	**
Others	-	9.66
Neug	-	7.21
Linseed	-	2.23
Rapeseed	-	.17
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	**
All Crops	2.39	234.74

Table 4.5.8 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Waghamera Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.05	31.52
Teff	**	5.29
Barley	-	15.42
Wheat	**	5.30
Maize	-	.57
Sorghum	-	4.91
Millet	-	**
Oats	-	-
Pulses	-	8.15
Horse Beans	-	5.14
Field Peas	-	1.21
Haricot Beans	-	.60
Chick Peas	-	.60
Lentils	-	.60
Vetch	-	-
Others	-	.31
Neug	-	.04
Linseed	-	.08
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	-
All Crops	.05	39.98

Table 4.5.9 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Agewawia Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	1.10	94.82
Teff	**	34.27
Barley	-	30.25
Wheat	**	2.17
Maize	**	9.55
Sorghum	-	**
Millet	-	17.16
Oats	-	**
Pulses	-	4.83
Horse Beans	-	3.02
Field Peas	-	1.19
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	-
Vetch	-	**
Others	-	3.91
Neug	-	3.43
Linseed	-	**
Rapeseed	-	.04
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	-
All Crops	1.10	103.56

Table 4.5.10 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Oromia Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	10.50
Teff	-	2.56
Barley	-	**
Wheat	-	**
Maize	**	1.89
Sorghum	-	4.72
Millet	-	**
Oats	-	**
Pulses	-	**
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	.02
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	-	**
Neug	-	**
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	***
Fenugreek	-	-
All Crops	**	12.70

Table 4.6 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Oromia ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	46.92	2,510.29
Teff	4.02	467.53
Barley	**	673.73
Wheat	29.97	848.40
Maize	11.98	330.45
Sorghum	**	111.20
Millet	-	18.98
Oats	-	60.00
Pulses	**	413.61
Horse Beans	**	194.31
Field Peas	**	66.06
Haricot Beans	-	46.40
Chick Peas	-	49.85
Lentils	**	20.13
Vetch	-	36.86
Others	-	120.42
Neug	**	19.27
Linseed	**	79.71
Rapeseed	-	8.35
Ground Nuts	-	**
Sunflower	-	**
Sesame	-	.23
Fenugreek	-	5.45
All Crops	47.27	3,044.32

Table 4.6.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

West Welega Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	1.92	102.59
Teff	**	28.37
Barley	-	4.15
Wheat	**	8.28
Maize	1.82	34.89
Sorghum	**	15.83
Millet	-	11.05
Oats	-	**
Pulses	-	14.95
Horse Beans	-	7.64
Field Peas	-	1.33
Haricot Beans	-	4.87
Chick Peas	-	**
Lentils	-	-
Vetch	-	**
Others	-	.88
Neug	-	.84
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	.02
All Crops	1.92	118.42

Table 4.6.2 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

East Welega Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	5.76	154.00
Teff	**	74.44
Barley	-	23.33
Wheat	**	21.41
Maize	3.52	25.10
Sorghum	-	4.09
Millet	-	4.90
Oats	-	**
Pulses	-	20.73
Horse Beans	-	14.06
Field Peas	-	5.67
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	13.22
Neug	-	10.18
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	5.76	187.95

Table 4.6.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Illibabor Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	1.48	54.17
Teff	**	22.60
Barley	-	1.25
Wheat	-	**
Maize	1.01	23.21
Sorghum	-	6.17
Millet	-	.53
Oats	-	-
Pulses	-	10.49
Horse Beans	-	4.93
Field Peas	-	2.60
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	-
Vetch	-	.26
Others	-	.22
Neug	-	.11
Linseed	-	.10
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	1.48	64.88

Table 4.6.4 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Jimma Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	3.02	192.58	
Teff	**	77.92	
Barley	-	24.22	
Wheat	**	23.80	
Maize	2.54	50.01	
Sorghum	**	11.82	
Millet	-	1.45	
Oats	-	3.36	
Pulses	**	31.49	
Horse Beans	**	22.74	
Field Peas	**	6.63	
Haricot Beans	-	**	
Chick Peas	-	**	
Lentils	-	**	
Vetch	-	-	
Others	-	3.10	
Neug	-	**	
Linseed	-	**	
Rapeseed	-	.08	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	-	
All Crops	3.19	227.17	

Table 4.6.5 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

West Shewa Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	4.92	368.07	
Teff	**	118.62	
Barley	**	99.85	
Wheat	3.48	124.50	
Maize	**	17.86	
Sorghum	-	6.39	
Millet	-	-	
Oats	-	.85	
Pulses	-	81.42	
Horse Beans	-	26.48	
Field Peas	-	9.40	
Haricot Beans	-	-	
Chick Peas	-	26.74	
Lentils	-	2.73	
Vetch	-	**	
Others	-	20.38	
Neug	-	4.20	
Linseed	-	12.50	
Rapeseed	-	**	
Ground Nuts	-	**	
Sunflower	-	**	
Sesame	-	**	
Fenugreek	-	**	
All Crops	4.92	469.87	



Table 4.6.6 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

North Shewa Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	4.08	160.36
Teff	**	34.55
Barley	**	64.22
Wheat	**	51.80
Maize	**	2.98
Sorghum	**	5.96
Millet	-	-
Oats	-	.85
Pulses	**	58.30
Horse Beans	**	27.30
Field Peas	-	7.17
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	7.96
Vetch	-	8.36
Others	-	5.73
Neug	-	1.53
Linseed	-	4.13
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	4.10	224.39

Table 4.6.7 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

East Shewa Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	6.26	261.15
Teff	**	63.09
Barley	-	28.75
Wheat	4.62	105.52
Maize	1.58	61.93
Sorghum	-	1.63
Millet	-	.23
Oats	-	-
Pulses	**	59.35
Horse Beans	**	6.27
Field Peas	-	5.64
Haricot Beans	-	23.20
Chick Peas	-	11.48
Lentils	-	**
Vetch	-	5.30
Others	-	.73
Neug	-	-
Linseed	-	.10
Rapeseed	-	.01
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	6.34	321.23

Table 4.6.8 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Arsi Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	12.03	775.87
Teff	-	30.82
Barley	**	308.58
Wheat	11.49	371.27
Maize	**	42.83
Sorghum	-	3.87
Millet	-	**
Oats	-	18.10
Pulses	-	99.92
Horse Beans	-	70.25
Field Peas	-	17.70
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	-	53.09
Neug	-	**
Linseed	-	47.40
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	12.03	928.88

Table 4.6.9 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

West Harerge Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	56.93
Teff	-	1.67
Barley	**	5.50
Wheat	-	**
Maize	**	23.25
Sorghum	**	25.49
Millet	-	**
Oats	-	.28
Pulses	**	8.20
Horse Beans	-	4.65
Field Peas	-	**
Haricot Beans	-	2.20
Chick Peas	-	**
Lentils	**	**
Vetch	-	**
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	**	65.29

Table 4.6.10 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

East Harerge Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	66.40
Teff	-	1.48
Barley	-	**
Wheat	**	5.88
Maize	**	24.49
Sorghum	-	27.69
Millet	-	-
Oats	-	**
Pulses	-	4.84
Horse Beans	-	3.62
Field Peas	-	.50
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	**	78.48

Table 4.6.11 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Bale Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	5.01	277.29
Teff	**	8.80
Barley	**	95.81
Wheat	4.47	128.96
Maize	-	8.08
Sorghum	-	**
Millet	-	-
Oats	-	33.74
Pulses	-	19.97
Horse Beans	-	4.93
Field Peas	-	7.84
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	**	15.67
Neug	-	**
Linseed	**	11.60
Rapeseed	-	**
Ground Nuts	-	**
Sunflower	-	**
Sesame	-	-
Fenugreek	-	3.84
All Crops	5.08	312.93

Table 4.6.12 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Borena Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.30	40.86	
Teff	-	5.17	
Barley	-	13.27	
Wheat	-	6.24	
Maize	.30	15.83	
Sorghum	-	**	
Millet	-	-	
Oats	-	-	
Pulses	-	3.98	
Horse Beans	-	1.44	
Field Peas	-	**	
Haricot Beans	-	**	
Chick Peas	-	**	
Lentils	-	-	
Vetch	-	-	
Others	-	**	
Neug	-	-	
Linseed	-	**	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	-	
All Crops	.30	44.85	

Table 4.7 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Somale		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	**	25.96	
Teff	-	**	
Barley	**	4.80	
Wheat	**	2.99	
Maize	**	9.93	
Sorghum	**	8.16	
Millet	-	-	
Oats	-	**	
Pulses	-	.34	
Horse Beans	-	-	
Field Peas	-	**	
Haricot Beans	-	.26	
Chick Peas	-	**	
Lentils	-	**	
Vetch	-	-	
Others	-	**	
Neug	-	-	
Linseed	-	**	
Rapeseed	-	-	
Ground Nuts	-	**	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	**	
All Crops	**	26.45	

Table 4.7.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Shinele Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.04	.13	
Teff	-	-	
Barley	-	-	
Wheat	-	-	
Maize	.03	.03	
Sorghum	**	.10	
Millet	-	-	
Oats	-	-	
Pulses	-	-	
Horse Beans	-	-	
Field Peas	-	-	
Haricot Beans	-	-	
Chick Peas	-	-	
Lentils	-	-	
Vetch	-	-	
Others	-	-	
Neug	-	-	
Linseed	-	-	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	-	
All Crops	.04	.13	

Table 4.7.2 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Jijiga Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	**	23.59	
Teff	-	-	
Barley	**	4.80	
Wheat	**	2.84	
Maize	**	7.93	
Sorghum	**	7.95	
Millet	-	-	
Oats	-	**	
Pulses	-	.10	
Horse Beans	-	-	
Field Peas	-	**	
Haricot Beans	-	**	
Chick Peas	-	**	
Lentils	-	**	
Vetch	-	-	
Others	-	**	
Neug	-	-	
Linseed	-	**	
Rapeseed	-	-	
Ground Nuts	-	**	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	**	
All Crops	**	23.84	

Table 4.7.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Moyale Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	-	2.24	
Teff	-	**	
Barley	-	-	
Wheat	-	**	
Maize	-	1.97	
Sorghum	-	.11	
Millet	-	-	
Oats	-	-	
Pulses	-	.24	
Horse Beans	-	-	
Field Peas	-	-	
Haricot Beans	-	.24	
Chick Peas	-	-	
Lentils	-	-	
Vetch	-	-	
Others	-	-	
Neug	-	-	
Linseed	-	-	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	-	
All Crops	-	2.48	

Table 4.8 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Benshangul-Gumuz		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.22	40.34	
Teff	**	11.81	
Barley	-	**	
Wheat	-	**	
Maize	.18	7.04	
Sorghum	**	11.36	
Millet	-	4.37	
Oats	-	**	
Pulses	-	3.67	
Horse Beans	-	1.45	
Field Peas	-	**	
Haricot Beans	-	1.45	
Chick Peas	-	**	
Lentils	-	**	
Vetch	-	-	
Others	-	3.16	
Neug	-	1.86	
Linseed	-	.05	
Rapeseed	-	-	
Ground Nuts	-	.65	
Sunflower	-	-	
Sesame	-	.60	
Fenugreek	-	-	
All Crops	.22	47.17	

Table 4.8.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Metekel Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	.11	29.17
Teff	-	9.46
Barley	-	**
Wheat	-	**
Maize	.11	2.70
Sorghum	-	7.45
Millet	-	3.82
Oats	-	**
Pulses	-	3.22
Horse Beans	-	1.27
Field Peas	-	**
Haricot Beans	-	1.26
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	1.38
Neug	-	.65
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	.41
Fenugreek	-	-
All Crops	.11	33.77

Table 4.8.2 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Asosa Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	**	7.88
Teff	**	1.80
Barley	-	-
Wheat	-	-
Maize	**	2.94
Sorghum	**	3.06
Millet	-	.07
Oats	-	**
Pulses	-	.16
Horse Beans	-	-
Field Peas	-	-
Haricot Beans	-	.11
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	1.61
Neug	-	1.07
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	.15
Fenugreek	-	-
All Crops	**	9.65

Table 4.8.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Kemeshi Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.03	3.30	
Teff	-	**	
Barley	-	**	
Wheat	-	-	
Maize	.03	**	
Sorghum	-	.86	
Millet	-	**	
Oats	-	-	
Pulses	-	**	
Horse Beans	-	**	
Field Peas	-	**	
Haricot Beans	-	**	
Chick Peas	-	-	
Lentils	-	-	
Vetch	-	-	
Others	-	**	
Neug	-	**	
Linseed	-	-	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	.05	
Fenugreek	-	-	
All Crops	.03	**	

Table 4.9 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

(S.N.N.P.R)		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	15.50	403.98	
Teff	1.61	80.89	
Barley	**	70.01	
Wheat	8.01	121.35	
Maize	5.53	105.95	
Sorghum	**	21.88	
Millet	-	2.19	
Oats	-	**	
Pulses	**	70.84	
Horse Beans	**	39.44	
Field Peas	**	19.32	
Haricot Beans	-	10.19	
Chick Peas	-	1.44	
Lentils	-	.15	
Vetch	-	**	
Others	-	1.61	
Neug	-	**	
Linseed	-	**	
Rapeseed	-	**	
Ground Nuts	-	-	
Sunflower	-	.04	
Sesame	-	**	
Fenugreek	-	**	
All Crops	15.59	476.43	



Table 4.9.1 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Gurage Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	2.57	78.30	
Teff	.76	18.06	
Barley	-	22.66	
Wheat	**	14.78	
Maize	**	18.52	
Sorghum	**	2.60	
Millet	-	**	
Oats	-	**	
Pulses	**	10.99	
Horse Beans	**	5.78	
Field Peas	**	3.83	
Haricot Beans	-	.17	
Chick Peas	-	**	
Lentils	-	**	
Vetch	-	**	
Others	-	**	
Neug	-	**	
Linseed	-	**	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	**	
Sesame	-	-	
Fenugreek	-	-	
All Crops	2.65	89.66	

Table 4.9.2 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Hadiya Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	6.26	117.60	
Teff	.60	15.74	
Barley	**	11.36	
Wheat	5.29	71.84	
Maize	**	14.94	
Sorghum	**	3.40	
Millet	-	**	
Oats	-	**	
Pulses	-	12.24	
Horse Beans	-	7.03	
Field Peas	-	4.77	
Haricot Beans	-	**	
Chick Peas	-	**	
Lentils	-	**	
Vetch	-	**	
Others	-	**	
Neug	-	-	
Linseed	-	**	
Rapeseed	-	**	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	**	
All Crops	6.26	130.14	

Table 4.9.3 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Kembata Alaba Tembaro Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.16	58.10
Teff	**	8.79
Barley	-	1.10
Wheat	**	23.79
Maize	**	21.51
Sorghum	-	1.43
Millet	-	**
Oats	-	**
Pulses	-	3.86
Horse Beans	-	3.37
Field Peas	-	**
Haricot Beans	-	.29
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	3.16	62.48

Table 4.9.4 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Sidama Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.88	23.00
Teff	-	.63
Barley	-	3.05
Wheat	**	2.08
Maize	**	17.16
Sorghum	-	**
Millet	-	-
Oats	-	**
Pulses	-	5.04
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	.88	28.04

Table 4.9.5 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Gedio Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	**	7.04	
Teff	**	**	
Barley	-	3.00	
Wheat	**	**	
Maize	**	3.38	
Sorghum	-	**	
Millet	-	-	
Oats	-	-	
Pulses	-	2.69	
Horse Beans	-	1.96	
Field Peas	-	.72	
Haricot Beans	-	**	
Chick Peas	-	-	
Lentils	-	-	
Vetch	-	-	
Others	-	**	
Neug	-	-	
Linseed	-	-	
Rapeseed	-	**	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	-	
All Crops	**	9.74	

Table 4.9.6 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

North Omo Zone		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	1.56	55.72	
Teff	**	16.69	
Barley	**	13.45	
Wheat	**	**	
Maize	.87	17.16	
Sorghum	-	5.67	
Millet	-	**	
Oats	-	-	
Pulses	-	16.07	
Horse Beans	-	7.13	
Field Peas	-	**	
Haricot Beans	-	5.13	
Chick Peas	-	.14	
Lentils	-	-	
Vetch	-	**	
Others	-	**	
Neug	-	-	
Linseed	-	**	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	**	
Fenugreek	-	-	
All Crops	1.56	72.12	

Table 4.9.7 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

South Omo Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.03	7.68
Teff	-	.47
Barley	-	2.32
Wheat	-	**
Maize	.03	2.83
Sorghum	-	1.87
Millet	-	**
Oats	-	-
Pulses	-	1.06
Horse Beans	-	.61
Field Peas	-	**
Haricot Beans	-	.05
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	.03
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	.02
Sesame	-	**
Fenugreek	-	-
All Crops	.03	8.77

Table 4.9.8 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Keficho-Shekicho Zone		( '000 Quintal)
CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.16	36.28
Teff	-	16.08
Barley	-	8.82
Wheat	**	**
Maize	**	5.63
Sorghum	-	2.89
Millet	-	**
Oats	-	-
Pulses	-	13.16
Horse Beans	-	8.79
Field Peas	-	3.95
Haricot Beans	-	.42
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	.16	49.44

Table 4.9.9 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Bench-Maji Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	.13	8.88
Teff	**	1.30
Barley	-	2.22
Wheat	**	.22
Maize	**	3.03
Sorghum	-	2.11
Millet	-	-
Oats	-	-
Pulses	**	2.65
Horse Beans	**	1.77
Field Peas	-	.84
Haricot Beans	-	**
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	.14	11.53

Table 4.9.10 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Yem Special Wereda Zone ('000 Quintal)		
	QUANTITY OF	
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	.13	6.66
Teff	**	2.15
Barley	-	1.44
Wheat	**	2.28
Maize	-	.55
Sorghum	-	.24
Millet	-	-
Oats	-	-
Pulses	-	1.86
Horse Beans	-	1.26
Field Peas	-	.59
Haricot Beans	-	-
Chick Peas	-	-
Lentils	-	**
Vetch	-	-
Others	-	.03
Neug	-	**
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	.13	8.55

Table 4.9.11 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Amaro Special Wereda Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	1.05
Teff	-	.48
Barley	-	.39
Wheat	-	.08
Maize	-	**
Sorghum	-	**
Millet	-	-
Oats	-	-
Pulses	-	.51
Horse Beans	-	.11
Field Peas	-	**
Haricot Beans	-	.04
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	-	1.56

Table 4.9.12 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Burji Special Wereda Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	.45
Teff	-	.07
Barley	-	.09
Wheat	-	.17
Maize	-	**
Sorghum	-	.06
Millet	-	-
Oats	-	-
Pulses	-	.35
Horse Beans	-	-
Field Peas	-	-
Haricot Beans	-	.20
Chick Peas	-	.15
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	-	.81

Table 4.9.13 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Konso Special Wereda Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	2.38
Teff	-	.31
Barley	-	**
Wheat	-	**
Maize	-	.80
Sorghum	-	1.19
Millet	-	**
Oats	-	-
Pulses	-	.23
Horse Beans	-	-
Field Peas	-	.01
Haricot Beans	-	.20
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	-	2.61

Table 4.9.14 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Derashe Special Wereda Zone ('000 Quintal)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	.83
Teff	-	**
Barley	-	.11
Wheat	-	**
Maize	-	.32
Sorghum	-	.30
Millet	-	-
Oats	-	-
Pulses	-	.13
Horse Beans	-	-
Field Peas	-	.01
Haricot Beans	-	**
Chick Peas	-	.05
Lentils	-	-
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	-	.96

Table 4.10 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Gambela		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.22	3.64	
Teff	-	-	
Barley	-	-	
Wheat	-	-	
Maize	.20	2.55	
Sorghum	**	1.08	
Millet	-	**	
Oats	-	-	
Pulses	-	**	
Horse Beans	-	-	
Field Peas	-	-	
Haricot Beans	-	**	
Chick Peas	-	-	
Lentils	-	-	
Vetch	-	-	
Others	-	.06	
Neug	-	-	
Linseed	-	-	
Rapeseed	-	-	
Ground Nuts	-	.02	
Sunflower	-	-	
Sesame	-	**	
Fenugreek	-	-	
All Crops	.22	3.71	

Table 4.11 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Harari		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.04	1.78	
Teff	-	-	
Barley	-	.01	
Wheat	**	.05	
Maize	.02	.51	
Sorghum	-	1.21	
Millet	-	-	
Oats	-	-	
Pulses	-	-	
Horse Beans	-	-	
Field Peas	-	-	
Haricot Beans	-	-	
Chick Peas	-	-	
Lentils	-	-	
Vetch	-	-	
Others	-	.78	
Neug	-	-	
Linseed	-	-	
Rapeseed	-	-	
Ground Nuts	-	.78	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	-	
All Crops	.04	2.56	



Table 4.12 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Addis Ababa		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.25	6.77	
Teff	**	2.97	
Barley	-	**	
Wheat	.22	3.43	
Maize	-	.01	
Sorghum	-	**	
Millet	-	-	
Oats	-	.01	
Pulses	-	2.00	
Horse Beans	-	**	
Field Peas	-	**	
Haricot Beans	-	-	
Chick Peas	-	.74	
Lentils	-	.33	
Vetch	-	.80	
Others	-	.11	
Neug	-	-	
Linseed	-	**	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	.10	
All Crops	.25	8.88	

Table 4.13 Estimates of Quantity of Improved seed and Local Seed by type of Crops for Private Peasant Holdings 1997/98 (1990 E.C.)

Dire Dawa		('000 Quintal)	
CROP TYPE	QUANTITY OF		
	IMPROVED SEED	LOCAL SEED	
Cereals	.01	1.74	
Teff	-	**	
Barley	-	-	
Wheat	-	-	
Maize	-	.05	
Sorghum	.01	1.68	
Millet	-	-	
Oats	-	-	
Pulses	-	**	
Horse Beans	-	-	
Field Peas	-	-	
Haricot Beans	-	**	
Chick Peas	-	-	
Lentils	-	-	
Vetch	-	-	
Others	-	-	
Neug	-	-	
Linseed	-	-	
Rapeseed	-	-	
Ground Nuts	-	-	
Sunflower	-	-	
Sesame	-	-	
Fenugreek	-	-	
All Crops	.01	1.81	

## **5. Number of Holders Who Applied Agricultural Inputs on their fields by their Educational Attainment**

The survey indicates that there were about 9.5 million holders at country level. Most of these holders (72.85%) are illiterate while 0.16% had attended higher education.

Of all holders, 1.28%, 0.83%, 4.36%, and 24.51% applied improved seeds, used irrigation, applied pesticides and fertilizer during the 1997/98 agricultural activities, respectively. Out of all holders who applied improved seeds, used irrigation, applied pesticides and fertilizers 58.12%, 70.23%, 65.59 and 67.70% of them were illiterate in that order. For details, refer to Table 5.1.

**Summary Table F. Number of Holders Who Applied  
Agricultural Inputs**

Type of Practice	Number of holders applied (in '000)
Improved Seed	121.88
Irrigation	79.25
Pesticide	415.12
Fertilizer	2,332.10

TABLE 5.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

National

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	6,930.42	72.85	70.84	58.12	55.66	70.23	272.29	65.59	1,578.81	67.70
GRADES 1 - 3	1,437.63	15.11	26.71	21.91	12.80	16.15	68.76	16.56	406.09	17.41
GRADES 4 - 6	658.23	6.92	12.89	10.58	6.27	7.91	39.70	9.56	191.78	8.22
GRADES 7 - 8	299.30	3.15	7.18	5.89	3.32	4.19	19.98	4.81	89.76	3.85
GRADES 9 - 11	123.58	1.30	2.78	2.28	.83	1.05	10.29	2.48	46.13	1.98
GRADE 12 COMPLETE	49.19	.52	1.47	1.21	**	**	3.62	.87	15.31	.66
HIGHER EDUCATION	15.56	.16	-	-	**	**	**	**	4.22	.18
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	9,513.91	100.00	121.88	100.00	79.25	100.00	415.12	100.00	2,332.10	100.00

TABLE 5.2

NUMBER OF HOLDERS BY EDUCATIONAL ATTAINMENT AND REGION  
1997/98(1990 E.C.)

NUMBER IN THOUSANDS ('000)

REGION	EDUCATIONAL ATTAINMENT IN GRADES								TOTAL HOLDERS
	ILLITERATE	1 - 3	4 - 6	7 - 8	9 - 11	12 COMPLETE	HIGHER EDUCATION	EDUCATION NOT STATED	
TIGRAY	473.53	106.66	19.67	3.53	.32	-	-	-	603.71
AFAR	29.89	1.69	.20	.03	.02	-	-	-	31.83
AMHARA	2,213.30	480.32	106.47	48.53	14.91	5.68	1.61	-	2,870.81
OROMIYA	2,560.29	536.36	296.80	145.04	58.42	23.55	10.28	-	3,630.73
SOMALIE	83.60	6.61	3.28	.53	.27	.06	.01	-	94.36
BENSHANGUL-GUMUZ	86.31	17.74	10.07	2.55	1.82	.97	.30	-	119.77
S.N.N.P.R.	1,442.22	280.24	216.07	96.65	46.70	18.59	3.26	-	2,103.71
GAMBELA	16.25	4.65	4.08	2.03	.89	.08	-	-	27.97
HARARI	9.75	1.25	.42	.14	.08	.03	-	-	11.66
ADDIS ABABA	3.54	.70	.60	.17	.11	.18	.09	-	5.39
DIRE DAWA	11.75	1.43	.57	.11	.05	.06	-	-	13.96
TOTAL	6,930.42	1,437.63	658.23	299.30	123.58	49.19	15.56	-	9,513.91

TABLE 5.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Tigray

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	473.53	78.44	9.65	60.69	1.39	82.25	7.96	70.01	115.40	75.28
GRADES 1 - 3	106.66	17.67	5.41	34.03	**	**	**	**	29.83	19.46
GRADES 4 - 6	19.67	3.26	**	**	-	-	**	**	6.39	4.17
GRADES 7 - 8	3.53	.58	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	603.71	100.00	15.90	100.00	1.69	100.00	11.37	100.00	153.29	100.00

TABLE 5.3.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

West Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	120.04	79.35	**	**	-	-	**	**	40.92	78.44
GRADES 1 - 3	25.69	16.98	3.84	36.19	-	-	-	-	8.99	17.23
GRADES 4 - 6	5.54	3.66	**	**	-	-	-	-	**	**
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	151.27	100.00	10.61	100.00	-	-	**	**	52.17	100.00

TABLE 5.3.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Central Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	153.64	76.82	**	**	-	-	2.01	40.28	36.29	72.10
GRADES 1 - 3	39.65	19.83	**	**	-	-	**	**	11.22	22.29
GRADES 4 - 6	4.91	2.46	-	-	-	-	**	**	1.62	3.22
GRADES 7 - 8	1.47	.74	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	200.00	100.00	2.03	100.00	-	-	4.99	100.00	50.33	100.00

TABLE 5.3.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

East Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	82.31	72.71	**	**	**	**	**	**	23.36	70.87
GRADES 1 - 3	24.18	21.36	**	**	**	**	-	-	7.33	22.24
GRADES 4 - 6	5.63	4.97	-	-	-	-	-	-	2.27	6.89
GRADES 7 - 8	1.09	.96	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	113.21	100.00	.74	100.00	**	**	**	**	32.96	100.00



TABLE 5.3.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

South Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	117.54	84.42	**	**	**	**	4.76	91.71	14.83	83.17
GRADES 1 - 3	17.14	12.31	0.43	17.13	-	-	**	**	**	**
GRADES 4 - 6	3.59	2.58	-	-	-	-	-	-	**	**
GRADES 7 - 8	**	**	-	-	-	-	-	-	**	**
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	139.23	100.00	2.51	100.00	1.19	100.00	5.19	100.00	17.83	100.00

TABLE 5.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Afar

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	29.89	93.91	**	**	**	**	3.15	90.00	**	**
GRADES 1 - 3	1.69	5.31	-	-	-	-	**	**	-	-
GRADES 4 - 6	.20	.63	-	-	-	-	**	**	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	31.83	100.00	**	**	**	**	3.50	100.00	**	**

TABLE 5.4.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Zone 1 Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	7.09	94.53	**	**	**	**	-	-	-	-
GRADES 1 - 3	.29	3.87	-	-	-	-	-	-	-	-
GRADES 4 - 6	.07	.93	-	-	-	-	-	-	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	7.50	100.00	.02	100.00	**	**	-	-	-	-

TABLE 5.4.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Zone 3 Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	21.60	93.43	-	-	**	**	3.15	90.00	**	**
GRADES 1 - 3	1.41	6.10	-	-	-	-	**	**	-	-
GRADES 4 - 6	**	**	-	-	-	-	**	**	-	-
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	23.12	100.00	-	-	**	**	3.50	100.00	**	**

TABLE 5.4.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Zone 5 Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	1.20	98.36	-	-	-	-	-	-	-	-
GRADES 1 - 3	-	-	-	-	-	-	-	-	-	-
GRADES 4 - 6	**	**	-	-	-	-	-	-	-	-
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	1.22	100.00	-	-	-	-	-	-	-	-

TABLE 5.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Amhara

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	2,213.30	77.10	18.80	63.24	17.56	67.15	17.67	73.02	374.69	69.93
GRADES 1 - 3	480.32	16.73	7.60	25.56	4.89	18.70	4.48	18.51	120.84	22.55
GRADES 4 - 6	106.47	3.71	**	**	**	**	**	**	22.11	4.13
GRADES 7 - 8	48.53	1.69	1.69	5.68	**	**	**	**	11.78	2.20
GRADES 9 - 11	14.91	.52	-	-	-	-	-	-	4.07	.76
GRADE 12 COMPLETE	5.68	.20	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	2,870.81	100.00	29.73	100.00	26.15	100.00	24.20	100.00	535.78	100.00

TABLE 5.5.1      NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

North Gonder Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	317.53	81.23	5.70	78.73	**	**	**	**	50.61	80.91
GRADES 1 - 3	57.11	14.61	**	**	**	**	**	**	7.66	12.25
GRADES 4 - 6	12.73	3.26	**	**	-	-	-	-	3.01	4.81
GRADES 7 - 8	**	**	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	390.88	100.00	7.24	100.00	**	**	1.87	100.00	62.55	100.00

TABLE 5.5.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

South Gonder Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	297.61	81.64	4.17	88.72	.80	67.23	2.02	65.80	50.46	78.16
GRADES 1 - 3	54.88	15.05	**	**	**	**	**	**	11.46	17.75
GRADES 4 - 6	9.59	2.63	-	-	-	-	-	-	2.12	3.28
GRADES 7 - 8	**	**	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	364.54	100.00	4.70	100.00	1.19	100.00	3.07	100.00	64.56	100.00



TABLE 5.5.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

North Wolo Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	205.52	79.32	3.73	73.43	1.23	89.78	1.57	83.07	11.98	69.61
GRADES 1 - 3	37.51	14.48	-	-	-	-	-	-	1.87	10.87
GRADES 4 - 6	11.43	4.41	**	**	**	**	-	-	2.27	13.19
GRADES 7 - 8	3.94	1.52	**	**	-	-	**	**	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	259.09	100.00	5.08	100.00	1.37	100.00	1.89	100.00	17.21	100.00

TABLE 5.5.4      NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

South Wolo Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	395.99	76.97	-	-	.61	50.00	**	**	38.87	78.80
GRADES 1 - 3	76.47	14.86	-	-	.61	50.00	-	-	5.87	11.90
GRADES 4 - 6	20.35	3.96	-	-	-	-	**	**	**	**
GRADES 7 - 8	11.60	2.25	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	514.48	100.00	-	-	1.22	100.00	**	**	49.33	100.00

TABLE 5.5.5      NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

North Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	208.64	69.60	**	**	**	**	7.12	65.44	34.65	54.61
GRADES 1 - 3	62.51	20.85	2.08	83.53	1.46	11.60	2.59	23.81	19.22	30.29
GRADES 4 - 6	16.01	5.34	-	-	2.69	21.37	**	**	4.73	7.45
GRADES 7 - 8	9.00	3.00	-	-	**	**	**	**	3.15	4.96
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	299.77	100.00	2.49	100.00	**	**	10.88	100.00	63.45	100.00

TABLE 5.5.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

East Gojam Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	291.02	74.45	**	**	**	**	2.51	100.00	43.83	68.60
GRADES 1 - 3	68.24	17.46	**	**	**	**	-	-	16.50	25.83
GRADES 4 - 6	18.13	4.64	**	**	-	-	-	-	**	**
GRADES 7 - 8	10.85	2.78	**	**	-	-	-	-	**	**
GRADES 9 - 11	2.27	.58	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	390.91	100.00	3.30	100.00	**	**	2.51	100.00	63.89	100.00

TABLE 5.5.7      NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

West Gojam Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	249.37	70.09	2.67	58.42	.88	66.67	**	**	104.62	66.54
GRADES 1 - 3	86.21	24.23	1.40	30.63	**	**	**	**	44.57	28.35
GRADES 4 - 6	12.41	3.49	-	-	-	-	-	-	4.24	2.70
GRADES 7 - 8	7.40	2.08	**	**	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	355.81	100.00	4.57	100.00	1.32	100.00	1.47	100.00	157.22	100.00

TABLE 5.5.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Waghamera Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	62.16	88.62	-	-	**	**	-	-	**	**
GRADES 1 - 3	7.72	11.01	-	-	-	-	-	-	**	**
GRADES 4 - 6	**	**	-	-	-	-	-	-	-	-
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	70.14	100.00	-	-	**	**	-	-	**	**

TABLE 5.5.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Agewawia Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	107.17	76.56	1.13	51.60	.89	79.46	**	**	38.83	68.85
GRADES 1 - 3	23.93	17.10	1.07	48.86	**	**	-	-	13.50	23.94
GRADES 4 - 6	4.49	3.21	-	-	-	-	-	-	**	**
GRADES 7 - 8	2.28	1.63	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	139.98	100.00	2.19	100.00	1.12	100.00	**	**	56.40	100.00

TABLE 5.5.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Oromia Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	78.30	91.87	**	**	**	**	**	**	**	**
GRADES 1 - 3	5.74	6.73	-	-	-	-	-	-	-	-
GRADES 4 - 6	1.08	1.27	-	-	-	-	-	-	**	**
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	85.23	100.00	**	**	**	**	**	**	**	**



TABLE 5.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Oromia

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	2,560.29	70.52	32.42	57.17	25.96	74.86	190.75	65.68	614.13	66.79
GRADES 1 - 3	536.36	14.77	9.37	16.52	4.60	13.26	46.38	15.97	147.40	16.03
GRADES 4 - 6	296.80	8.17	6.78	11.96	1.49	4.30	27.82	9.58	84.98	9.24
GRADES 7 - 8	145.04	3.99	5.32	9.38	**	**	13.63	4.69	41.08	4.47
GRADES 9 - 11	58.42	1.61	1.82	3.21	.60	1.73	9.60	3.31	22.99	2.50
GRADE 12 COMPLETE	23.55	.65	**	**	**	**	2.27	.78	5.78	.63
HIGHER EDUCATION	10.28	.28	-	-	-	-	-	-	3.20	.35
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	3,630.73	100.00	56.71	100.00	34.68	100.00	290.44	100.00	919.55	100.00

TABLE 5.6.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

West Welega Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	195.74	64.44	7.41	74.32	1.26	63.96	1.42	100.00	39.56	70.45
GRADES 1 - 3	50.12	16.50	**	**	**	**	-	-	6.57	11.70
GRADES 4 - 6	27.53	9.06	**	**	-	-	-	-	5.34	9.51
GRADES 7 - 8	19.74	6.50	**	**	-	-	-	-	3.17	5.65
GRADES 9 - 11	7.14	2.35	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	3.06	1.01	**	**	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	303.74	100.00	9.97	100.00	1.97	100.00	1.42	100.00	56.15	100.00

TABLE 5.6.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

East Welega Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	161.29	66.68	1.75	55.91	**	**	-	-	29.34	64.26
GRADES 1 - 3	29.80	12.32	-	-	**	**	-	-	4.04	8.85
GRADES 4 - 6	23.03	9.52	**	**	**	**	-	-	5.06	11.08
GRADES 7 - 8	13.78	5.70	**	**	-	-	-	-	3.60	7.88
GRADES 9 - 11	8.09	3.34	-	-	-	-	-	-	3.05	6.68
GRADE 12 COMPLETE	4.59	1.90	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	241.90	100.00	3.13	100.00	**	**	-	-	45.66	100.00

TABLE 5.6.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Illibabor Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	136.87	71.50	3.07	50.25	-	-	6.12	68.38	18.09	71.14
GRADES 1 - 3	27.98	14.62	1.47	24.06	-	-	1.76	19.66	3.21	12.62
GRADES 4 - 6	20.96	10.95	**	**	-	-	**	**	3.87	15.22
GRADES 7 - 8	3.44	1.80	**	**	-	-	**	**	**	**
GRADES 9 - 11	1.79	.94	**	**	-	-	**	**	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	191.42	100.00	6.11	100.00	-	-	8.95	100.00	25.43	100.00

TABLE 5.6.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Jimma Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	319.38	79.06	5.04	49.41	**	**	64.20	85.66	86.50	76.67
GRADES 1 - 3	52.16	12.91	3.25	31.86	-	-	6.25	8.34	16.23	14.39
GRADES 4 - 6	21.13	5.23	**	**	-	-	2.58	3.44	**	**
GRADES 7 - 8	8.25	2.04	**	**	**	**	**	**	**	**
GRADES 9 - 11	**	**	-	-	-	-	**	**	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	403.97	100.00	10.20	100.00	1.52	100.00	74.95	100.00	112.82	100.00

TABLE 5.6.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

West Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	284.12	63.13	**	**	**	**	36.54	57.00	75.97	55.44
GRADES 1 - 3	78.75	17.50	**	**	**	**	13.73	21.42	28.02	20.45
GRADES 4 - 6	46.52	10.34	-	-	**	**	8.84	13.79	17.82	13.00
GRADES 7 - 8	26.16	5.81	**	**	-	-	3.21	5.01	8.22	6.00
GRADES 9 - 11	8.73	1.94	**	**	-	-	**	**	3.51	2.56
GRADE 12 COMPLETE	3.49	.78	-	-	-	-	**	**	**	**
HIGHER EDUCATION	2.30	.51	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	450.06	100.00	3.49	100.00	2.03	100.00	64.11	100.00	137.04	100.00

TABLE 5.6.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

North Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	186.06	80.46	1.44	52.55	1.13	100.00	**	**	30.98	81.25
GRADES 1 - 3	30.33	13.12	**	**	-	-	**	**	4.44	11.64
GRADES 4 - 6	9.53	4.12	**	**	-	-	**	**	1.59	4.17
GRADES 7 - 8	3.12	1.35	-	-	-	-	-	-	**	**
GRADES 9 - 11	1.15	.50	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	**	**	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	231.24	100.00	2.74	100.00	1.13	100.00	3.78	100.00	38.13	100.00

TABLE 5.6.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

East Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	182.95	72.69	4.17	72.52	2.24	83.27	15.78	52.32	48.36	61.96
GRADES 1 - 3	34.50	13.71	**	**	-	-	7.15	23.71	15.18	19.45
GRADES 4 - 6	18.92	7.52	**	**	-	-	2.27	7.53	8.25	10.57
GRADES 7 - 8	10.60	4.21	**	**	-	-	3.34	11.07	3.85	4.93
GRADES 9 - 11	3.36	1.33	**	**	0.45	16.73	1.62	5.37	1.50	1.92
GRADE 12 COMPLETE	**	**	**	**	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	251.70	100.00	5.75	100.00	2.69	100.00	30.16	100.00	78.05	100.00



TABLE 5.6.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Arsi Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	295.24	67.71	**	**	**	**	50.03	58.90	134.81	63.68
GRADES 1 - 3	51.68	11.85	**	**	-	-	13.32	15.68	31.89	15.06
GRADES 4 - 6	47.51	10.90	**	**	-	-	10.82	12.74	21.52	10.17
GRADES 7 - 8	22.57	5.18	**	**	-	-	4.55	5.36	12.00	5.67
GRADES 9 - 11	13.47	3.09	**	**	**	**	5.70	6.71	9.22	4.36
GRADE 12 COMPLETE	3.62	.83	**	**	**	**	**	**	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	436.05	100.00	5.13	100.00	**	**	84.94	100.00	211.70	100.00

TABLE 5.6.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

West Harerge Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	202.30	77.81	**	**	4.91	84.95	-	-	13.00	61.21
GRADES 1 - 3	33.99	13.07	**	**	**	**	-	-	5.54	26.08
GRADES 4 - 6	11.91	4.58	**	**	-	-	-	-	1.48	6.97
GRADES 7 - 8	**	**	**	**	**	**	-	-	**	**
GRADES 9 - 11	1.18	.45	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	259.98	100.00	4.19	100.00	5.78	100.00	-	-	21.24	100.00

TABLE 5.6.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

East Harerge Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	264.71	75.10	1.75	100.00	14.82	82.84	**	**	83.40	76.76
GRADES 1 - 3	52.61	14.93	-	-	**	**	1.68	18.44	17.70	16.29
GRADES 4 - 6	21.54	6.11	-	-	-	-	**	**	3.67	3.38
GRADES 7 - 8	7.39	2.10	-	-	**	**	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	**	**	1.97	1.81
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	352.46	100.00	1.75	100.00	17.89	100.00	**	**	108.65	100.00

TABLE 5.6.11 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Bale Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	147.14	62.75	.86	52.76	-	-	7.01	55.02	26.54	56.38
GRADES 1 - 3	44.63	19.03	**	**	-	-	2.05	16.09	9.56	20.31
GRADES 4 - 6	24.81	10.58	-	-	**	**	**	**	6.35	13.49
GRADES 7 - 8	10.33	4.41	**	**	-	-	**	**	2.91	6.18
GRADES 9 - 11	3.75	1.60	-	-	-	-	**	**	1.17	2.49
GRADE 12 COMPLETE	3.28	1.40	-	-	-	-	**	**	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	234.48	100.00	1.63	100.00	**	**	12.74	100.00	47.07	100.00

TABLE 5.6.12 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Borena Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	184.47	67.39	1.80	68.44	-	-	-	-	27.58	73.33
GRADES 1 - 3	49.82	18.20	**	**	-	-	-	-	5.03	13.37
GRADES 4 - 6	23.41	8.55	-	-	-	-	**	**	**	**
GRADES 7 - 8	9.78	3.57	-	-	-	-	-	-	**	**
GRADES 9 - 11	4.59	1.68	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	273.73	100.00	2.63	100.00	-	-	**	**	37.61	100.00

TABLE 5.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Somale

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	83.60	88.60	**	**	1.70	73.28	**	**	1.34	62.04
GRADES 1 - 3	6.61	7.01	**	**	.13	5.60	**	**	**	**
GRADES 4 - 6	3.28	3.48	**	**	**	**	**	**	**	**
GRADES 7 - 8	.53	.56	**	**	**	**	**	**	**	**
GRADES 9 - 11	.27	.29	-	-	**	**	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	**	**	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	94.36	100.00	**	**	2.32	100.00	**	**	2.16	100.00

TABLE 5.7.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Shinele Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	4.09	90.69	**	**	**	**	**	**	**	**
GRADES 1 - 3	.17	3.77	**	**	**	**	**	**	**	**
GRADES 4 - 6	**	**	**	**	**	**	**	**	**	**
GRADES 7 - 8	**	**	**	**	**	**	**	**	**	**
GRADES 9 - 11	**	**	-	-	**	**	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	**	**	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	4.51	100.00	**	**	**	**	**	**	**	**

TABLE 5.7.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Jijiga Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	56.02	92.32	**	**	**	**	-	-	**	**
GRADES 1 - 3	2.62	4.32	-	-	-	-	-	-	**	**
GRADES 4 - 6	1.89	3.11	**	**	-	-	**	**	**	**
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	60.68	100.00	**	**	**	**	**	**	**	**



TABLE 5.7.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Moyale Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	23.50	80.53	-	-	**	**	-	-	**	**
GRADES 1 - 3	3.81	13.06	-	-	-	-	-	-	-	-
GRADES 4 - 6	1.33	4.56	-	-	**	**	-	-	**	**
GRADES 7 - 8	.28	.96	-	-	-	-	-	-	**	**
GRADES 9 - 11	.26	.89	-	-	.14	13.59	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	29.18	100.00	-	-	**	**	-	-	**	**

**TABLE 5.8**      **NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS**  
**BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS.**  
**1997/98(1990 E.C.))**

### Benshangul - Gumuz

NUMBER IN THOUSANDS ('000)

[illegible]

TABLE 5.8.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Metekel Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	32.13	69.59	-	-	**	**	**	**	3.16	75.06
GRADES 1 - 3	7.53	16.31	-	-	-	-	-	-	.56	13.30
GRADES 4 - 6	5.01	10.85	**	**	-	-	-	-	**	**
GRADES 7 - 8	.83	1.80	-	-	-	-	-	-	-	-
GRADES 9 - 11	.59	1.28	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	46.17	100.00	**	**	**	**	**	**	4.21	100.00

TABLE 5.8.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Asosa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	38.17	75.64	**	**	-	-	**	**	1.13	69.75
GRADES 1 - 3	6.91	13.69	-	-	-	-	-	-	-	-
GRADES 4 - 6	3.20	6.34	**	**	-	-	-	-	.40	24.69
GRADES 7 - 8	1.17	2.32	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	.37	.73	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	50.46	100.00	**	**	-	-	**	**	1.62	100.00

TABLE 5.8.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Kemeshi Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	**	**	**	**	-	-	-	-	**	**
GRADES 1 - 3	3.30	14.25	-	-	-	-	-	-	**	**
GRADES 4 - 6	1.87	8.08	-	-	-	-	-	-	-	-
GRADES 7 - 8	.55	2.38	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	**	**	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	23.15	100.00	**	**	-	-	-	-	**	**

TABLE 5.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

(S.N.N.P.R)

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	1,442.22	68.56	8.45	51.12	5.08	52.70	51.96	61.71	456.83	65.24
GRADES 1 - 3	280.24	13.32	4.09	24.74	2.38	24.69	14.37	17.07	105.76	15.10
GRADES 4 - 6	216.07	10.27	2.72	16.45	1.55	16.08	10.23	12.15	76.18	10.88
GRADES 7 - 8	96.65	4.59	-	-	.43	4.46	5.19	6.16	35.01	5.00
GRADES 9 - 11	46.70	2.22	**	**	**	**	**	**	18.42	2.63
GRADE 12 COMPLETE	18.59	.88	**	**	-	-	1.29	1.53	7.40	1.06
HIGHER EDUCATION	3.26	.15	-	-	**	**	**	**	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	2,103.71	100.00	16.53	100.00	9.64	100.00	84.20	100.00	700.23	100.00

TABLE 5.9.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Gurage Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	239.15	77.22	1.59	73.95	1.63	80.30	9.08	60.37	67.03	72.39
GRADES 1 - 3	41.76	13.48	.56	26.05	**	**	**	**	19.28	20.82
GRADES 4 - 6	17.89	5.78	-	-	-	-	**	**	3.95	4.27
GRADES 7 - 8	5.02	1.62	-	-	-	-	**	**	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	2.99	.97	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	**	**	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	309.68	100.00	2.15	100.00	**	**	15.04	100.00	92.60	100.00

TABLE 5.9.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Hadiya Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	118.96	64.77	1.13	40.36	**	**	25.04	62.03	52.98	66.22
GRADES 1 - 3	20.40	11.11	1.30	46.43	-	-	5.61	13.90	9.15	11.44
GRADES 4 - 6	22.76	12.39	**	**	-	-	5.46	13.52	9.54	11.92
GRADES 7 - 8	12.83	6.99	-	-	-	-	3.31	8.20	5.73	7.16
GRADES 9 - 11	5.08	2.77	-	-	-	-	**	**	**	**
GRADE 12 COMPLETE	3.64	1.98	-	-	-	-	**	**	1.49	1.86
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	183.67	100.00	2.80	100.00	**	**	40.37	100.00	80.01	100.00



TABLE 5.9.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Kembata Alaba Tembaro Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	86.09	62.35	**	**	-	-	14.51	67.68	31.93	61.65
GRADES 1 - 3	23.95	17.35	**	**	-	-	2.28	10.63	8.42	16.26
GRADES 4 - 6	14.63	10.60	**	**	-	-	**	**	7.39	14.27
GRADES 7 - 8	8.57	6.21	-	-	-	-	**	**	2.40	4.63
GRADES 9 - 11	2.59	1.88	-	-	-	-	**	**	**	**
GRADE 12 COMPLETE	2.05	1.48	**	**	-	-	**	**	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	138.08	100.00	2.85	100.00	-	-	21.44	100.00	51.79	100.00

TABLE 5.9.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Sidama Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	268.39	62.98	**	**	-	-	**	**	124.07	58.73
GRADES 1 - 3	63.71	14.95	**	**	1.33	100.00	1.32	48.00	32.98	15.61
GRADES 4 - 6	50.49	11.85	1.72	34.89	-	-	-	-	28.37	13.43
GRADES 7 - 8	22.94	5.38	-	-	-	-	-	-	13.12	6.21
GRADES 9 - 11	13.29	3.12	-	-	-	-	-	-	9.06	4.29
GRADE 12 COMPLETE	6.61	1.55	-	-	-	-	-	-	3.65	1.73
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	426.18	100.00	4.93	100.00	1.33	100.00	**	**	211.25	100.00

TABLE 5.9.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Gedio Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	67.64	58.34	**	**	-	-	-	-	12.77	56.01
GRADES 1 - 3	18.27	15.76	.96	48.24	-	-	-	-	4.84	21.23
GRADES 4 - 6	20.92	18.04	**	**	-	-	**	**	4.54	19.91
GRADES 7 - 8	5.05	4.36	-	-	-	-	-	-	-	-
GRADES 9 - 11	3.25	2.80	**	**	-	-	-	-	.64	2.81
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	115.94	100.00	1.99	100.00	-	-	**	**	22.80	100.00

TABLE 5.9.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

North Omo Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	388.63	69.49	-	-	-	-	-	-	139.05	69.67
GRADES 1 - 3	64.15	11.47	-	-	-	-	-	-	25.33	12.69
GRADES 4 - 6	60.03	10.73	-	-	**	**	-	-	18.28	9.16
GRADES 7 - 8	30.67	5.48	-	-	-	-	-	-	10.19	5.11
GRADES 9 - 11	13.82	2.47	**	**	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	559.24	100.00	**	**	**	**	-	-	199.59	100.00

TABLE 5.9.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

South Omo Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	68.77	86.98	**	**	**	**	-	-	**	**
GRADES 1 - 3	6.14	7.77	**	**	-	-	-	-	.49	19.60
GRADES 4 - 6	2.02	2.56	-	-	-	-	-	-	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	1.17	1.48	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	79.06	100.00	**	**	**	**	-	-	**	**

TABLE 5.9.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Bench-Maji Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	54.06	74.19	**	**	-	-	-	-	5.53	64.45
GRADES 1 - 3	9.60	13.17	-	-	-	-	-	-	**	**
GRADES 4 - 6	6.52	8.95	**	**	-	-	-	-	1.08	12.59
GRADES 7 - 8	1.31	1.80	-	-	**	**	-	-	**	**
GRADES 9 - 11	1.14	1.56	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	72.87	100.00	**	**	**	**	-	-	8.58	100.00

TABLE 5.9.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Keficho-Shekicho Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	96.77	65.98	-	-	-	-	1.36	38.53	6.22	63.34
GRADES 1 - 3	23.48	16.01	-	-	-	-	**	**	**	**
GRADES 4 - 6	15.03	10.25	-	-	-	-	**	**	**	**
GRADES 7 - 8	7.30	4.98	-	-	-	-	**	**	**	**
GRADES 9 - 11	2.92	1.99	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	**	**	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	146.67	100.00	-	-	-	-	3.53	100.00	9.82	100.00

TABLE 5.9.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Yem Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	10.34	74.71	**	**	-	-	**	**	4.37	77.21
GRADES 1 - 3	1.13	8.16	**	**	-	-	**	**	.35	6.18
GRADES 4 - 6	1.10	7.95	-	-	-	-	**	**	.49	8.66
GRADES 7 - 8	.57	4.12	-	-	-	-	**	**	**	**
GRADES 9 - 11	.53	3.83	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	.15	1.08	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	13.84	100.00	**	**	-	-	**	**	5.66	100.00



TABLE 5.9.11 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Amaro Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	8.77	59.14	**	**	2.74	57.08	-	-	4.18	56.26
GRADES 1 - 3	2.65	17.87	-	-	.63	13.13	-	-	1.38	18.57
GRADES 4 - 6	2.18	14.70	-	-	.88	18.33	-	-	1.20	16.15
GRADES 7 - 8	.77	5.19	-	-	**	**	-	-	.47	6.33
GRADES 9 - 11	**	**	-	-	**	**	**	**	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	**	**	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	14.83	100.00	**	**	4.80	100.00	**	**	7.43	100.00

TABLE 5.9.12 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Burji Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	4.60	68.45	-	-	**	**	-	-	**	**
GRADES 1 - 3	1.07	15.92	-	-	**	**	-	-	**	**
GRADES 4 - 6	.72	10.71	-	-	**	**	-	-	**	**
GRADES 7 - 8	.23	3.42	-	-	**	**	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	6.72	100.00	-	-	**	**	-	-	**	**

**TABLE 5.9.13 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.))**

**Konso Special Wereda Zone**

NUMBER IN THOUSANDS ('000)

[illegible]

TABLE 5.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Gambela

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	16.25	58.10	**	**	**	**	-	-	**	**
GRADES 1 - 3	4.65	16.62	**	**	-	-	-	-	**	**
GRADES 4 - 6	4.08	14.59	**	**	-	-	-	-	**	**
GRADES 7 - 8	2.03	7.26	**	**	-	-	-	-	**	**
GRADES 9 - 11	.89	3.18	**	**	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	27.97	100.00	**	**	**	**	-	-	**	**

TABLE 5.9.14 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Derashe Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	9.12	78.49	-	-	**	**	-	-	**	**
GRADES 1 - 3	1.50	12.91	-	-	-	-	-	-	**	**
GRADES 4 - 6	.66	5.68	-	-	-	-	-	-	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	11.62	100.00	-	-	**	**	-	-	**	**

TABLE 5.11 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Harari

NUMBER IN THOUSANDS ('000)

[illegible]

[illegible]

TABLE 5.13 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES ON THEIR FIELDS  
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.))

Dire Dawa

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	11.75	84.17	**	**	1.39	70.92	**	**	2.08	83.87
GRADES 1 - 3	1.43	10.24	**	**	**	**	**	**	.20	8.06
GRADES 4 - 6	.57	4.08	**	**	**	**	-	-	.11	4.44
GRADES 7 - 8	.11	.79	-	-	**	**	-	-	**	**
GRADES 9 - 11	**	**	-	-	**	**	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	**	**	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	13.96	100.00	**	**	1.96	100	**	**	2.48	100.00



# **APPENDIX I**

## **ESTIMATION PROCEDURES AND FORMULATIONS FOR ESTIMATES OF TOTALS AND VARIANCE**

1. The first part of the paper is devoted to a discussion of the  
2. various methods of determining the rate of reaction.  
3. The second part is devoted to a discussion of the  
4. various methods of determining the order of reaction.  
5. The third part is devoted to a discussion of the  
6. various methods of determining the activation energy.  
7. The fourth part is devoted to a discussion of the  
8. various methods of determining the equilibrium constant.  
9. The fifth part is devoted to a discussion of the  
10. various methods of determining the rate of reaction.

## APPENDIX I

### ESTIMATION PROCEDURES AND FORMULATIONS FOR ESTIMATES OF TOTALS AND VARIANCE.

#### *1. Estimating Area*

The following formula are used to estimate total area of land under specific crop where a certain agricultural input was applied on in a given stratum.

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

in which

$$w_{hi} = \frac{N_h M_{hi}}{n_h N_{hi} m_{hi}}$$

is the weight

where

$h$  represents the stratum.

$n_h$  is the total number of EAs selected in  $h^{\text{th}}$  stratum.

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

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

$M_{hi}$  is the total number of agricultural households of the  $i^{\text{th}}$  sample EA in the  $h^{\text{th}}$  stratum obtained from households listing of the survey.

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

$a_{hi}$  is the sample total of area values in the  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  stratum for the specific agricultural input for the specific crop.

$\hat{A}_h$  is estimate of total area under specific crop where a certain agricultural input was used in the  $h^{\text{th}}$  stratum.

## 2. To Estimate Quantity of Fertilizer

$$\hat{Q}_h = \sum_{i=1}^{n_h} w_{hi} q_{hi}$$

in which

$$w_{hi} = \frac{N_h M_{hi}}{n_h N_{hi} m_{hi}}$$

is the weight given above.

where

$\hat{Q}_h$  is estimate of total quantity of a specific fertilizer applied for a specific crop land in the  $h^{\text{th}}$  stratum.

$q_{hi}$  is the sample total of quantity of a specific fertilizer applied for a specific crop land in the  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  stratum.

## 3. Estimating Sampling Variance

Sampling variance of estimate of stratum total of area for a specific crop where a certain agricultural input used and quantity of a certain fertilizer are estimated by the following formulas respectively.

$$\text{var}(\hat{A}_h) = \frac{n_h}{n_h - 1} \left[ \sum_{i=1}^{n_h} \hat{A}_{hi}^2 - \frac{\hat{A}_h^2}{n_h} \right]$$

In estimating the sampling variance by the above formula, selection of EAs within a stratum is assumed to be with replacement. By so doing the variance estimate may be slightly over estimated but it greatly simplify the estimation procedure. Further more the finite population correction (fpc) is ignored in the formula. This is due to the fact that its effect is negligible.

#### *4. Estimating Coefficient of Variation*

Coefficient of Variation (CV) of estimate of stratum total area and quantity are given by:

$$CV(\hat{A}_h) = \frac{\sqrt{\text{var}(\hat{A}_h)}}{\hat{A}_h} \times 100\%$$

$$CV(\hat{Q}_h) = \frac{\sqrt{\text{VAR}(\hat{Q}_h)}}{\hat{Q}_h} \times 100\%$$

Regional or National Estimates of the total Characteristic and Sampling variance are obtained by aggregating the respective stratum totals.

19.  $Q_1 = 80$ ,  $Q_2 = 120$ ,  $Q_3 = 40$ .

20.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

21.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

22.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

23.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

24.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

25.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

26.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

27.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

28.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

29.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

30.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

31.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

32.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

33.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

34.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

35.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

36.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

37.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

38.  $Q_1 = 100$ ,  $Q_2 = 100$ ,  $Q_3 = 100$ ,  $Q_4 = 100$ ,  $Q_5 = 100$ ,  $Q_6 = 100$ .

## **APPENDIX II**

### **ESTIMATES OF THE STANDARD ERRORS WITH THE CORRESPONDING COEFFICIENT OF VARIATION**

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4. TABLE 1.1

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

National

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	5,599.94	130.50	2.33	134.89	15.70	11.64	34.56	5.06	14.65	671.88	62.80	9.35	2,199.91	104.41	4.75
Teff	1,747.13	66.49	3.81	30.24	7.64	25.26	11.54	3.58	31.05	309.36	31.10	10.05	837.13	54.05	6.46
Barely	681.84	48.90	7.17	0.99	0.34	34.90	4.23	1.42	33.63	65.65	14.15	21.55	288.80	39.76	13.77
Wheat	787.61	63.22	8.03	43.93	6.14	13.97	2.54	0.66	26.05	246.18	46.72	18.98	477.00	57.12	11.97
Maize	1,099.87	47.90	4.35	57.44	11.16	19.42	12.14	2.41	19.89	14.13	3.09	21.85	368.17	26.97	7.32
Sorghum	954.38	49.96	5.23	2.30	0.94	40.94	3.69	0.86	23.33	29.78	8.10	27.21	99.33	12.67	12.76
Millet	289.73	26.00	8.97	-	-	-	*	*	*	1.93	0.71	36.93	116.42	18.29	15.71
Oats	39.38	6.30	15.99	-	-	-	*	*	*	*	*	*	13.05	3.92	30.05
PULSES	837.35	42.24	5.04	0.51	0.21	42.45	1.92	0.50	25.81	15.81	3.45	21.80	116.75	13.57	11.63
Horse Beans	266.18	15.52	5.83	*	*	*	0.84	0.31	36.54	4.11	0.87	21.29	51.66	7.86	15.22
Chick Peas	169.97	18.65	10.98	*	*	*	0.26	0.13	47.91	2.27	0.96	42.27	7.62	2.04	26.75
Haricot Beans	92.19	12.59	13.65	*	*	*	0.23	0.10	44.99	*	*	*	20.62	5.71	27.71
Field Peas	119.75	9.84	8.22	*	*	*	*	*	*	3.37	0.83	24.60	23.74	5.44	22.93
Lentils	47.09	8.50	18.04	*	*	*	-	-	-	*	*	*	10.40	4.43	42.56
Vetch	142.17	24.27	17.07	-	-	-	*	*	*	*	*	*	2.71	0.85	31.21
OILSEEDS	380.50	27.42	7.21	*	*	*	*	*	*	4.59	1.76	38.38	32.28	5.62	17.41
Neug	195.23	19.14	9.80	*	*	*	*	*	*	*	*	*	10.85	2.47	22.76
Lin Seed	134.64	16.26	12.08	*	*	*	*	*	*	3.80	1.72	45.33	11.46	3.92	34.23
Rape seed	12.67	4.02	31.73	-	-	-	*	*	*	*	*	*	6.71	2.29	34.13
Ground Nuts	11.02	4.65	42.23	-	-	-	0.02	0.01	49.40	-	-	-	*	*	*
Sun Flower	3.32	0.75	22.58	-	-	-	-	-	-	*	*	*	0.13	0.05	42.69
Sesame	23.61	6.34	26.84	-	-	-	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
OTHERS	190.96	13.51	7.08	*	*	*	7.36	1.92	26.09	3.90	1.55	39.64	58.83	5.01	8.51
Fenugreek	29.51	7.36	24.94	-	-	-	*	*	*	*	*	*	2.57	0.81	31.56
Spices	61.44	7.28	11.85	*	*	*	0.64	0.17	26.93	1.09	0.45	41.16	17.10	2.76	16.16
Potatoes	27.94	4.02	14.38	-	-	-	1.43	0.46	31.96	*	*	*	13.95	2.45	17.54
Other Vegetables	72.07	6.13	8.51	*	*	*	5.16	1.83	35.58	*	*	*	25.20	3.09	12.27
ALL TEMPORARY	7,008.75	158.52	2.26	137.59	15.70	11.41	44.78	5.64	12.59	696.17	63.11	9.07	2,407.77	112.49	4.67
Chat	78.57	7.15	9.11	-	-	-	4.25	1.08	25.39	1.22	0.34	27.91	25.10	5.03	20.04
Coffee	195.70	17.80	9.10	11.84	2.60	21.98	5.63	1.44	25.59	0.57	0.24	42.17	33.15	4.99	15.06
Enset	224.44	16.48	7.34	-	-	-	1.80	0.39	21.58	0.48	0.17	36.13	131.82	11.13	8.44
Cotton	*	*	*	-	-	-	*	*	*	*	*	*	0.89	0.38	42.70
Tobacco	3.54	0.97	27.34	-	-	-	*	*	*	*	*	*	0.68	0.15	22.19
Fruits	19.44	3.24	16.65	0.09	0.04	42.35	4.60	2.30	49.99	*	*	*	4.13	0.63	15.30
Other Permanent	21.87	2.02	9.23	*	*	*	2.51	0.59	23.62	-	-	-	5.02	0.74	14.68
TOTAL PERMANENT	558.22	32.15	5.76	11.96	2.60	21.76	18.86	3.45	18.31	2.60	0.47	18.13	200.80	16.05	7.99
ALL CROPS	7,566.97	159.17	2.10	149.55	15.84	10.59	63.64	6.94	10.90	698.77	63.12	9.03	2,608.57	113.65	4.36

TABLE 1.2

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Tigray

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	468.22	41.26	8.81	*	*	*	1.41	0.46	32.82	10.22	2.20	21.57	148.88	18.43	12.38
Teff	119.34	13.59	11.38	*	*	*	0.60	0.28	47.00	6.79	1.91	28.19	50.45	9.19	18.21
Barely	52.85	6.38	12.08	*	*	*	*	*	*	0.42	0.15	35.98	15.86	2.70	16.99
Wheat	42.03	6.25	14.87	1.38	0.35	25.10	0.42	0.18	44.04	0.42	0.19	43.81	14.75	2.36	15.97
Maize	61.51	9.14	14.85	*	*	*	0.18	0.09	48.94	*	*	*	24.70	6.35	25.70
Sorghum	124.33	22.34	17.97	*	*	*	*	*	*	*	*	*	29.54	7.79	26.38
Millet	68.09	13.69	20.10	*	*	*	*	*	*	*	*	*	13.58	4.65	34.21
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	30.36	3.68	12.12	-	-	-	*	*	*	*	*	*	3.32	0.96	28.98
Horse Beans	8.61	2.49	28.93	-	-	-	*	*	*	*	*	*	0.91	0.33	35.93
Chick Peas	6.09	1.63	26.77	-	-	-	-	-	-	*	*	*	0.48	0.24	49.79
Haricot Beans	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Chick Peas	4.03	0.99	24.66	-	-	-	-	-	-	*	*	*	*	*	*
Lentils	3.06	0.80	26.21	-	-	-	-	-	-	-	-	-	*	*	*
Vetch	5.19	1.42	27.36	-	-	-	-	-	-	-	-	-	*	*	*
OILSEEDS	14.71	4.34	29.48	*	*	*	*	*	*	*	*	*	*	*	*
Neug	2.84	1.37	48.19	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	5.25	1.39	26.48	*	*	*	*	*	*	-	-	-	*	*	*
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.33	0.94	40.29	*	*	*	*	*	*	-	-	-	*	*	*
Fenugreek	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
Spices	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
Potatoes	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
Other Vegetables	0.46	0.18	38.96	*	*	*	*	*	*	-	-	-	*	*	*
ALL TEMPORARY	515.62	43.11	8.36	*	*	*	1.99	0.52	26.27	12.04	2.73	22.63	154.45	18.79	12.17
Chat	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
Other Permanent	0.68	0.34	49.40	-	-	-	*	*	*	-	-	-	*	*	*
TOTAL PERMANENT	1.27	0.52	40.82	-	-	-	*	*	*	-	-	-	*	*	*
ALL CROPS	516.89	43.12	8.34	*	*	*	2.25	0.58	25.89	12.04	2.73	22.63	154.64	18.79	12.15

TABLE 1.3

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Afar

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	14.62	2.43	16.60	-	-	-	4.47	0.89	20.02	2.76	0.46	16.73	1.25	0.48	38.68
Teff	4.66	1.35	29.03	-	-	-	*	*	*	1.00	0.36	36.03	*	*	*
Barely	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Wheat	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Maize	5.26	1.01	19.12	-	-	-	4.21	0.91	21.61	0.23	0.08	33.39	0.16	0.06	35.53
Sorghum	4.31	1.02	23.64	-	-	-	*	*	*	1.43	0.30	21.10	0.58	0.24	40.40
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	0.80	0.34	43.03	-	-	-	-	-	-	*	*	*	*	*	*
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	0.23	0.12	37.08	-	-	-	-	-	-	*	*	*	*	*	*
Haricot Beans	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.32	0.13	42.02	-	-	-	-	-	-	*	*	*	*	*	*
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	0.13	0.05	40.83	-	-	-	-	-	-	*	*	*	*	*	*
Sesame	0.18	0.08	46.19	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.04	0.02	43.48	-	-	-	-	-	-	*	*	*	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	0.04	0.02	44.95	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
ALL TEMPORARY	15.78	2.77	17.58	-	-	-	4.47	0.90	20.01	2.85	0.47	16.66	1.32	0.53	40.48
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
Other Permanent	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
ALL CROPS	16.05	2.82	17.60	-	-	-	4.54	0.89	19.58	2.92	0.50	17.09	1.32	0.53	40.48

TABLE 1.4

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Ainshara

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	1,907.31	67.64	3.55	37.50	4.35	11.59	11.54	2.62	22.73	23.01	5.62	24.42	575.17	48.78	8.48
Teff	744.40	40.46	5.44	12.20	2.49	20.39	5.04	1.55	30.68	6.02	1.39	23.03	288.29	28.35	9.83
Barely	220.71	18.23	8.26	*	*	*	3.82	1.41	36.98	1.51	0.61	40.17	36.61	5.53	15.12
Wheat	185.78	21.05	11.33	16.40	3.29	20.09	1.29	0.53	40.74	2.35	0.76	32.57	63.21	11.84	18.73
Maize	236.65	15.01	6.34	8.65	2.69	31.10	0.97	0.37	37.60	1.17	0.58	49.44	90.40	12.09	13.37
Sorghum	352.39	34.37	9.75	-	-	-	*	*	*	11.43	5.13	44.91	10.85	4.05	37.29
Millet	159.36	20.38	12.79	-	-	-	*	*	*	0.53	0.25	46.98	85.66	16.93	19.77
Oats	8.02	1.99	24.82	-	-	-	*	*	*	-	-	-	0.17	0.08	47.37
PULSES	385.67	33.90	8.79	*	*	*	0.98	0.42	42.38	2.07	0.72	34.78	15.00	3.18	21.22
Horse Beans	98.92	9.11	9.21	-	-	-	*	*	*	*	*	*	6.21	1.51	24.32
Field Peas	44.42	5.60	12.60	-	-	-	*	*	*	*	*	*	3.27	1.35	41.11
Haricot Beans	15.41	5.60	36.35	*	*	*	*	*	*	*	*	*	*	*	*
Chick Peas	108.05	14.54	13.46	-	-	-	*	*	*	*	*	*	2.30	0.63	27.47
Lentils	18.23	4.66	25.55	-	-	-	-	-	-	*	*	*	*	*	*
Vetch	100.63	23.28	23.13	-	-	-	*	*	*	*	*	*	*	*	*
OILSEEDS	151.34	15.40	10.18	*	*	*	*	*	*	*	*	*	10.18	2.94	28.90
Neug	105.21	13.13	12.48	*	*	*	*	*	*	*	*	*	6.28	1.84	29.28
Lin Seed	28.74	5.07	17.64	*	*	*	*	*	*	-	-	-	1.34	0.49	36.61
Rape seed	3.30	1.20	36.42	-	-	-	*	*	*	-	-	-	2.36	1.16	48.97
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	2.88	0.74	25.74	-	-	-	-	-	-	*	*	*	*	*	*
Sesame	11.11	4.85	43.64	-	-	-	*	*	*	*	*	*	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	57.14	6.43	11.26	*	*	*	3.00	0.74	24.63	*	*	*	9.33	1.32	14.17
Fenugreek	13.03	3.52	27.03	-	-	-	*	*	*	-	-	-	*	*	*
Spices	23.24	4.40	18.93	*	*	*	0.43	0.15	35.70	*	*	*	4.74	0.89	18.65
Potatoes	11.90	2.85	23.96	-	-	-	1.24	0.45	36.01	*	*	*	3.24	0.86	26.38
Other Vegetables	8.97	2.01	22.44	*	*	*	1.23	0.51	41.83	*	*	*	1.18	0.30	25.31
ALL TEMPORARY	2,501.45	89.35	3.57	38.13	4.36	11.43	16.34	3.04	18.59	25.79	5.64	21.88	609.69	52.00	8.53
Chat	1.87	0.63	33.62	-	-	-	*	*	*	*	*	*	*	*	*
Coffee	*	*	*	0.09	0.04	43.11	1.66	0.76	45.99	-	-	-	0.65	0.31	47.96
Enset	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
Cotton	*	*	*	-	-	-	-	-	-	*	*	*	0.86	0.38	44.13
Tobacco	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	1.09	0.32	29.56	-	-	-	0.66	0.24	35.70	-	-	-	*	*	*
Other Permanent	7.39	1.01	13.68	*	*	*	1.20	0.43	35.79	-	-	-	1.08	0.26	24.22
TOTAL PERMANENT	32.87	10.84	32.97	0.11	0.04	38.71	3.65	1.15	31.50	*	*	*	3.12	0.64	20.48
ALL CROPS	2,534.33	88.94	3.51	38.24	4.36	11.39	19.99	3.23	16.16	25.94	5.64	21.73	612.81	52.09	8.50

TABLE 1.5

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Oromia

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	2,549.03	94.58	3.71	65.96	11.50	17.43	13.39	4.06	30.32	542.55	60.42	11.14	1,210.96	86.40	7.13
Teff	729.53	47.19	6.47	7.66	2.89	37.73	*	*	*	250.46	27.59	11.01	414.40	41.81	10.09
Barely	352.59	43.48	12.33	*	*	*	*	*	*	59.55	14.06	23.61	209.11	38.60	18.46
Wheat	486.47	58.74	12.08	21.56	5.08	23.57	*	*	*	203.05	46.35	22.83	341.66	55.35	16.20
Maize	577.45	39.63	6.86	35.88	10.12	28.21	4.48	1.93	43.13	10.47	2.97	28.33	173.63	20.29	11.68
Sorghum	326.68	26.12	8.00	*	*	*	2.61	0.81	31.03	13.66	6.08	44.49	43.96	8.82	20.07
Millet	45.27	7.48	16.53	-	-	-	-	-	-	0.54	0.24	45.06	15.34	5.05	32.91
Oats	31.05	5.98	19.24	-	-	-	-	-	-	*	*	*	12.85	3.92	30.51
PULSES	340.89	23.66	6.94	*	*	*	0.57	0.21	37.37	9.97	3.09	30.98	71.30	12.50	17.53
Horse Beans	127.25	11.75	9.23	*	*	*	*	*	*	2.63	0.74	27.97	34.54	7.53	21.79
Field Peas	51.91	7.22	13.91	*	*	*	-	-	-	2.06	0.73	35.66	15.27	5.08	33.29
Haricot Beans	49.87	10.20	20.46	-	-	-	*	*	*	0.94	0.39	41.22	9.67	4.67	48.28
Chick Peas	51.63	11.53	22.34	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	25.10	7.06	28.12	*	*	*	-	-	-	*	*	*	*	*	*
Vetch	35.13	6.69	19.05	-	-	-	*	*	*	*	*	*	0.72	0.27	36.92
OILSEEDS	190.96	22.05	11.55	*	*	*	*	*	*	3.75	1.72	45.83	19.59	4.64	23.70
Neug	72.09	13.58	18.84	-	-	-	*	*	*	*	*	*	4.10	1.61	39.19
Lin Seed	99.68	15.38	15.43	*	*	*	-	-	-	3.73	1.72	46.09	9.58	3.88	40.52
Rape seed	9.17	3.84	41.82	-	-	-	-	-	-	-	-	-	4.21	1.97	46.88
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	68.84	9.98	14.49	*	*	*	*	*	*	*	*	*	17.53	2.67	15.20
Fenugreek	15.25	6.45	42.27	-	-	-	-	-	-	*	*	*	1.89	0.74	38.95
Spices	17.16	4.12	23.98	-	-	-	0.16	0.07	42.59	-	-	-	2.26	0.73	32.51
Potatoes	9.91	2.59	26.12	-	-	-	*	*	*	*	*	*	6.30	2.05	32.53
Other Vegetables	26.52	3.70	13.94	*	*	*	*	*	*	*	*	*	7.09	1.19	16.82
ALL TEMPORARY	3,149.73	113.65	3.61	67.68	11.48	16.96	17.25	4.46	25.87	558.57	60.68	10.86	1,319.38	93.44	7.08
Chat	56.97	6.57	11.53	-	-	-	3.34	0.98	29.23	0.76	0.31	40.53	15.68	4.75	30.33
Coffee	120.36	15.53	12.90	8.20	2.17	26.46	2.31	1.03	44.53	*	*	*	10.66	4.01	37.62
Enset	77.35	13.55	17.51	-	-	-	0.32	0.13	40.68	*	*	*	31.41	7.79	24.81
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	1.96	0.81	41.16	-	-	-	*	*	*	*	*	*	0.21	0.07	31.13
Fruits	7.50	1.12	14.86	*	*	*	*	*	*	-	-	-	1.57	0.42	26.77
Other Permanent	7.69	1.18	15.31	-	-	-	0.88	0.38	42.85	-	-	-	1.28	0.24	18.46
TOTAL PERMANENT	271.84	26.50	9.75	8.23	2.17	26.34	7.32	1.80	24.51	1.34	0.39	28.84	60.81	12.45	20.47
ALL CROPS	3,421.58	113.66	3.32	75.91	11.61	15.29	24.58	4.80	19.52	559.91	60.67	10.84	1,380.19	94.28	6.83

TABLE 1.6

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1999 E.C.)

Somale

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	49.58	10.24	20.65	*	*	*	0.24	0.10	39.67	*	*	*	0.61	0.18	29.97
Teff	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*
Barely	4.18	1.59	37.92	*	*	*	-	-	-	-	-	-	*	*	*
Wheat	2.47	0.84	33.98	*	*	*	-	-	-	-	-	-	*	*	*
Maize	22.15	4.55	20.55	*	*	*	0.23	0.10	41.41	*	*	*	0.41	0.17	40.40
Sorghum	20.57	6.28	30.54	*	*	*	*	*	*	*	*	*	*	*	*
Millet	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	1.45	0.69	47.31	-	-	-	*	*	*	-	-	-	*	*	*
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
Chick Peas	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lentile	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.10	0.05	49.41	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	-	-	-	0.03	0.02	49.64	-	-	-	*	*	*
Fenugreek	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	-	-	-	0.03	0.02	49.64	-	-	-	*	*	*
ALL TEMPORARY	51.59	10.45	20.25	*	*	*	0.29	0.10	36.19	*	*	*	0.63	0.18	29.42
Chat	3.22	1.02	31.60	-	-	-	*	*	*	-	-	-	*	*	*
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	-	-	-	0.21	0.07	34.20	-	-	-	0.03	0.01	49.54
Other Permanent	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
TOTAL PERMANENT	3.70	1.01	27.45	-	-	-	0.25	0.08	32.43	-	-	-	*	*	*
ALL CROPS	55.28	10.66	19.28	*	*	*	0.54	0.17	30.89	*	*	*	0.80	0.22	27.40

TABLE 1.7

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Benshangul-Gumuz

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	107.25	13.96	13.02	0.85	0.34	40.30	0.08	0.04	48.56	0.35	0.14	39.55	8.60	2.64	30.72
Teff	22.93	4.62	20.17	*	*	*	-	-	-	*	*	*	3.92	1.57	39.97
Barely	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Wheat	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Maize	22.01	4.84	21.98	0.58	0.16	27.48	*	*	*	*	*	*	2.57	0.68	26.46
Sorghum	45.79	6.45	14.08	*	*	*	-	-	-	*	*	*	*	*	*
Millet	13.69	4.08	29.82	-	-	-	*	*	*	-	-	-	*	*	*
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	5.85	1.54	26.35	-	-	-	-	-	-	-	-	-	*	*	*
Horse Beans	1.35	0.63	46.69	-	-	-	-	-	-	-	-	-	*	*	*
Field Peas	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Haricot Beans	3.32	1.24	37.31	-	-	-	-	-	-	-	-	-	*	*	*
Chick Peas	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Lentils	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	20.12	2.99	14.87	-	-	-	*	*	*	-	-	-	*	*	*
Neug	14.70	2.72	18.48	-	-	-	*	*	*	-	-	-	*	*	*
Lin Seed	0.24	0.09	39.13	-	-	-	-	-	-	-	-	-	*	*	*
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*
Ground Nuts	1.16	0.47	40.54	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	4.02	1.03	25.61	-	-	-	-	-	-	-	-	-	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	3.37	0.70	20.86	-	-	-	*	*	*	-	-	-	0.29	0.10	33.70
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	1.94	0.50	25.94	-	-	-	-	-	-	-	-	-	0.15	0.05	35.36
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Other Vegetables	1.23	0.46	37.56	-	-	-	*	*	*	-	-	-	*	*	*
ALL TEMPORARY	136.58	17.29	12.66	0.85	0.34	40.30	0.12	0.05	38.72	0.36	0.14	38.26	9.18	2.78	30.33
Chat	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	*	*	*	0.08	0.03	38.26	*	*	*	-	-	-	*	*	*
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.91	0.40	44.10	-	-	-	*	*	*	-	-	-	0.01	-	44.91
Other Permanent	0.21	0.08	37.25	-	-	-	*	*	*	-	-	-	*	*	*
TOTAL PERMANENT	3.28	1.03	31.53	0.08	0.03	38.48	*	*	*	-	-	-	0.07	0.03	34.34
ALL CROPS	139.86	17.72	12.67	0.93	0.34	36.49	*	*	*	0.36	0.14	38.28	9.25	2.78	30.07

TABLE 1.8

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

(S.N.N.P.R)

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	478.39	38.63	8.08	13.54	2.40	17.72	2.93	1.11	37.88	92.17	16.00	17.36	246.45	26.65	10.81
Teff	123.24	18.66	15.14	1.49	0.62	41.70	*	*	*	44.55	14.15	31.76	76.65	16.81	21.93
Barely	49.95	11.12	22.26	*	*	*	*	*	*	4.13	1.45	35.17	26.32	7.24	27.50
Wheat	66.84	7.89	11.81	4.29	0.91	21.14	*	*	*	40.16	5.78	14.38	54.75	7.33	13.39
Maize	165.47	18.98	11.47	7.68	2.34	30.51	*	*	*	1.73	0.59	34.40	75.71	11.34	14.98
Sorghum	69.58	7.07	10.17	*	*	*	0.24	0.12	49.44	0.79	0.36	45.79	11.50	2.32	20.19
Millet	3.16	0.99	31.26	-	-	-	*	*	*	*	*	*	*	*	*
Oats	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
PULSES	70.69	7.64	10.80	*	*	*	-	-	-	2.12	0.52	24.42	26.15	4.11	15.71
Horse Beans	29.98	3.64	12.12	-	-	-	-	-	-	0.87	0.32	36.91	9.85	1.67	16.96
Field Peas	18.53	3.49	18.81	-	-	-	*	*	*	1.18	0.38	31.94	4.91	1.38	28.13
Haricot Beans	18.42	4.24	22.99	*	*	*	*	*	*	*	*	*	10.30	3.28	31.89
Chick Peas	3.00	0.88	29.42	*	*	*	-	-	-	-	-	-	*	*	*
Lentils	0.20	0.09	43.98	-	-	-	-	-	-	*	*	*	*	*	*
Vetch	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
OILSEEDS	1.78	0.62	34.97	-	-	-	-	-	-	*	*	*	*	*	*
Neug	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Lin Seed	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Rape seed	0.20	0.10	49.90	-	-	-	-	-	-	-	-	-	*	*	*
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	0.23	0.08	35.78	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Castor Bean	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
OTHERS	57.62	6.33	10.99	*	*	*	*	*	*	1.36	0.48	35.60	30.87	4.01	13.00
Fenugreek	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Spices	17.62	3.95	22.44	*	*	*	*	*	*	0.92	0.44	47.36	9.76	2.51	25.69
Potatoes	5.75	1.13	19.71	-	-	-	*	*	*	*	*	*	4.18	1.02	24.44
Other Vegetables	33.69	4.42	13.12	*	*	*	*	*	*	*	*	*	16.63	2.83	17.04
ALL TEMPORARY	608.48	44.07	7.24	13.68	2.40	17.53	3.65	1.22	33.43	95.70	16.17	16.90	304.02	29.25	9.62
Chat	14.64	2.56	17.47	-	-	-	*	*	*	0.35	0.14	40.64	8.09	1.62	20.10
Coffee	63.87	7.04	11.02	3.14	1.43	45.51	0.87	0.25	29.14	*	*	*	21.75	2.96	13.61
Enset	146.88	9.39	6.39	-	-	-	1.48	0.37	24.80	0.41	0.17	41.18	100.33	7.94	7.92
Cotton	0.34	0.15	44.74	-	-	-	-	-	-	-	-	-	*	*	*
Tobacco	0.76	0.22	28.40	-	-	-	-	-	-	-	-	-	0.47	0.14	28.98
Fruits	8.89	2.98	33.46	*	*	*	*	*	*	-	-	-	2.12	0.41	19.42
Other Permanent	5.66	1.24	21.82	*	*	*	*	*	*	-	-	-	2.44	0.64	26.09
TOTAL PERMANENT	241.05	14.53	6.03	3.19	1.43	44.80	5.84	2.63	45.07	0.89	0.23	25.95	135.23	10.11	7.48
ALL CROPS	849.53	46.90	5.52	16.87	2.73	16.16	9.49	3.61	38.03	96.59	16.23	16.81	439.25	30.85	7.02



TABLE 1.9

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Gambela

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	11.99	3.10	25.82	*	*	*	*	*	*	-	-	-	0.26	0.06	21.45
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	8.66	3.05	35.23	*	*	*	-	-	-	-	-	-	0.20	0.06	30.89
Sorghum	3.26	0.87	26.77	*	*	*	*	*	*	-	-	-	*	*	*
Millet	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.77	0.34	44.01	*	*	*	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.75	0.34	45.66	*	*	*	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	13.21	3.40	25.73	*	*	*	*	*	*	-	-	-	0.27	0.05	20.41
Chat	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	1.26	0.47	37.15	0.33	0.15	46.78	-	-	-	-	-	-	*	*	*
Erset	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.19	0.04	22.36	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	0.08	0.03	32.06	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.77	0.55	31.17	0.33	0.15	46.37	-	-	-	-	-	-	*	*	*
ALL CROPS	14.98	3.42	22.83	0.73	0.25	34.29	*	*	*	-	-	-	0.40	0.10	25.55

TABLE 1.10

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Harari

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	3.70	0.25	6.63	0.05	0.01	23.99	0.13	0.03	19.03	0.10	0.03	29.71	1.94	0.21	10.64
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	0.04	0.01	28.88	0.01	-	39.60	-	-	-	-	-	-	0.03	0.01	30.84
Maize	0.67	0.07	9.90	0.03	0.01	26.50	0.03	0.01	19.50	0.02	0.01	43.54	0.40	0.06	14.24
Sorghum	2.99	0.22	7.30	0.01	-	39.25	0.10	0.02	21.44	0.08	0.02	28.28	1.51	0.16	10.53
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.74	0.14	18.42	-	-	-	0.02	0.01	49.38	-	-	-	0.17	0.04	24.34
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.74	0.14	18.41	-	-	-	0.02	0.01	49.38	-	-	-	0.17	0.04	24.39
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.05	0.01	18.24	-	-	-	-	-	-	-	-	-	0.01	-	31.23
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.04	0.01	18.10	-	-	-	-	-	-	-	-	-	0.01	-	25.39
ALL TEMPORARY	4.49	0.32	7.10	0.05	0.01	23.63	0.16	0.03	19.98	0.10	0.03	28.56	2.12	0.22	10.26
Chat	1.34	0.15	11.37	-	-	-	0.09	0.02	24.78	0.07	0.02	33.17	0.75	0.11	14.37
Coffee	0.02	-	26.45	-	-	-	0.01	-	37.30	-	-	-	0.01	-	36.60
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.09	0.03	33.05	-	-	-	*	*	*	-	-	-	0.03	0.01	48.94
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.45	0.15	10.24	-	-	-	0.13	0.03	25.47	0.07	0.02	32.93	0.79	0.11	13.64
ALL CROPS	5.94	0.37	6.16	0.05	0.01	23.12	0.29	0.06	20.75	0.17	0.04	21.85	2.91	0.29	9.99

TABLE 1.11

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Addis Ababa

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	5.34	0.79	14.72	0.24	0.09	38.75	-	-	-	0.59	0.12	21.11	5.20	0.78	14.93
Teff	2.99	0.56	18.67	0.07	0.03	40.67	-	-	-	0.45	0.11	23.82	2.96	0.55	18.45
Barely	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Wheat	2.15	0.27	12.59	0.17	0.07	42.26	-	-	-	0.11	0.03	29.54	2.13	0.27	12.80
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	0.01	-	41.09	-	-	-	-	-	-	-	-	-	*	*	*
PULSES	1.54	0.32	21.11	-	-	-	-	-	-	*	*	*	0.72	0.24	32.94
Horse Beans	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	0.49	0.11	23.00	-	-	-	-	-	-	-	-	-	0.19	0.07	35.53
Lentils	0.32	0.06	17.89	-	-	-	-	-	-	-	-	-	0.21	0.05	25.75
Vetch	0.66	0.20	29.65	-	-	-	-	-	-	-	-	-	0.30	0.15	48.43
OILSEEDS	0.01	0.01	43.33	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.22	0.06	25.89	*	*	*	*	*	*	*	*	*	0.13	0.05	38.82
Fenugreek	0.12	0.03	21.20	-	-	-	-	-	-	-	-	-	0.06	0.02	29.93
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL TEMPORARY	7.11	1.09	15.32	0.31	0.13	42.68	*	*	*	0.63	0.14	22.31	6.05	1.00	16.54
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	7.11	1.09	15.31	0.31	0.13	42.61	*	*	*	0.63	0.14	22.31	6.05	1.00	16.53

TABLE 1.12

ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Dire Dawa

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	4.51	0.56	12.42	0.08	0.01	18.49	0.35	0.15	41.40	0.06	0.03	44.45	0.59	0.16	26.72
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.06	0.02	32.32	-	-	-	*	*	*	-	-	-	*	*	*
Sorghum	4.46	0.56	12.57	0.07	0.02	22.11	0.34	0.15	43.08	0.06	0.03	45.43	0.58	0.16	27.03
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.12	0.05	43.29	-	-	-	*	*	*	-	-	-	*	*	*
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.12	0.05	43.72	-	-	-	*	*	*	-	-	-	*	*	*
ALL TEMPORARY	4.69	0.55	11.70	0.08	0.01	18.49	0.41	0.15	36.22	0.06	0.03	44.45	0.66	0.17	26.13
Chat	0.39	0.09	23.08	-	-	-	0.07	0.03	38.33	*	*	*	0.06	0.03	49.69
Coffee	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.72	0.26	36.04	-	-	-	*	*	*	*	*	*	*	*	*
ALL CROPS	5.41	0.56	10.44	0.08	0.01	16.95	0.78	0.32	40.28	0.14	0.06	45.83	0.95	0.29	30.64

TABLE 2.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

National

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	2,199.91	104.41	4.75	347.95	24.37	7.01	1,091.49	77.70	7.12	207.64	28.79	13.86	511.90	48.53	9.48	40.95	3.73	9.12
Teff	837.13	54.05	6.46	36.57	4.90	13.40	444.74	34.71	7.80	71.32	8.36	11.72	268.43	30.27	11.28	16.06	2.43	15.14
Barely	288.80	39.76	13.77	50.98	8.58	16.83	157.79	25.38	16.09	59.81	23.67	39.58	16.74	3.02	18.03	3.48	0.93	26.69
Wheat	477.00	57.12	11.97	19.79	4.16	21.04	262.40	46.09	17.56	36.56	6.40	17.51	150.06	23.82	15.87	8.19	1.78	21.70
Maize	368.17	26.97	7.32	161.93	12.72	7.86	115.52	16.43	14.23	25.64	5.98	23.31	57.21	12.05	21.06	7.88	1.20	15.28
Sorghum	99.33	12.67	12.76	67.64	10.25	15.15	12.49	2.64	21.17	5.11	1.18	23.04	9.79	3.76	38.43	4.30	1.70	39.48
Millet	116.42	18.29	15.71	10.65	2.22	20.82	87.91	16.34	18.59	8.04	3.48	43.36	8.82	2.52	28.62	1.01	0.48	48.00
Oats	13.05	3.92	30.05	0.38	0.17	45.20	10.65	3.61	33.86	1.16	0.56	48.00	0.85	0.30	35.53	*	*	*
PULSES	116.75	13.57	11.63	33.00	3.74	11.35	58.64	10.99	18.73	12.31	4.47	36.30	12.29	4.08	33.21	0.51	0.17	32.68
Horse Beans	51.66	7.86	15.22	17.04	2.13	12.50	31.87	7.22	22.65	1.64	0.59	35.74	0.90	0.34	37.38	*	*	*
Chick Peas	23.74	5.44	22.93	4.32	1.13	26.20	15.42	4.92	31.90	0.97	0.41	42.13	3.01	1.46	48.73	*	*	*
Haricot Beans	20.62	5.71	27.71	5.38	1.41	26.27	5.09	1.91	37.61	*	*	*	*	*	*	*	*	*
Field Peas	7.62	2.04	26.75	3.92	1.71	43.53	1.41	0.56	39.67	*	*	*	1.72	0.80	46.85	*	*	*
Lentils	10.40	4.43	42.56	0.53	0.20	37.36	4.28	2.08	48.54	*	*	*	*	*	*	*	*	*
Vetch	2.71	0.85	31.21	1.82	0.79	43.65	0.57	0.24	41.75	*	*	*	0.22	0.08	36.83	*	*	*
OILSEEDS	32.28	5.62	17.41	10.26	2.30	22.41	19.15	4.60	24.01	*	*	*	1.12	0.51	45.38	*	*	*
Neug	10.85	2.47	22.76	5.24	1.77	33.80	4.86	1.45	29.86	*	*	*	*	*	*	*	*	*
Lin Seed	11.46	3.92	34.23	0.87	0.35	39.66	9.97	3.86	38.75	*	*	*	*	*	*	*	*	*
Rape seed	6.71	2.29	34.13	1.61	0.52	32.03	4.07	1.69	41.51	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	0.13	0.05	42.69	0.08	0.03	45.46	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	58.83	5.01	8.51	33.49	3.45	10.30	16.21	2.42	14.90	4.97	1.24	24.94	3.27	0.65	19.98	0.88	0.24	27.43
Fenugreek	2.57	0.81	31.56	0.40	0.17	42.74	0.95	0.38	39.51	*	*	*	*	*	*	*	*	*
Spices	17.10	2.76	16.16	6.22	0.93	14.90	7.16	1.79	25.01	2.13	0.68	31.78	1.21	0.45	37.51	0.39	0.18	46.04
Potatoes	13.95	2.45	17.54	5.96	1.09	18.30	5.83	1.46	25.04	1.70	0.85	49.91	0.35	0.17	48.28	*	*	*
Other Vegetables	25.20	3.09	12.27	20.91	2.93	13.99	2.27	0.49	21.72	0.35	0.14	40.13	1.28	0.33	26.02	0.39	0.13	34.77
ALL TEMPORARY	2,407.77	112.49	4.67	424.70	27.16	6.40	1,185.49	85.37	7.20	226.36	29.43	13.00	528.58	51.01	9.65	42.64	3.92	9.20
Chat	25.10	5.03	20.04	20.12	4.70	23.33	1.43	0.54	37.61	1.36	0.36	26.13	1.04	0.32	30.67	1.14	0.55	47.70
Coffee	33.15	4.99	15.06	26.26	3.18	12.12	2.21	0.53	23.85	0.30	0.09	29.27	*	*	*	0.40	0.17	42.84
Erset	131.82	11.13	8.44	129.79	10.84	8.36	0.94	0.35	37.39	*	*	*	*	*	*	*	*	*
Cotton	0.89	0.38	42.70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	0.68	0.15	22.19	0.58	0.12	20.65	*	*	*	*	*	*	*	*	*	*	*	*
Fruits	4.13	0.63	15.30	3.66	0.56	15.17	*	*	*	*	*	*	*	*	*	*	*	*
Other Permanent	5.02	0.74	14.68	4.41	0.68	15.52	0.40	0.16	41.42	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	200.80	16.05	7.99	185.24	15.09	8.15	5.45	1.14	20.93	2.09	0.46	21.98	*	*	*	2.68	0.84	31.41
ALL CROPS	2,608.57	113.65	4.36	609.94	31.97	5.24	1,190.94	86.38	7.17	228.45	29.44	12.89	533.92	51.34	9.62	45.32	4.22	9.31

TABLE 2.2  
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1977/98K (1970 E.C.)

Tigray

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NIT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	148.88	18.43	12.38	51.89	8.58	16.54	19.68	5.05	25.65	13.22	2.17	16.39	55.66	11.00	19.76	8.43	1.11	13.25
Teff	50.45	9.19	18.21	5.12	1.75	34.19	9.49	3.58	37.76	5.29	1.62	30.71	28.22	5.96	21.13	2.32	0.58	25.14
Barely	15.86	2.70	16.99	8.13	2.34	28.74	1.91	0.49	25.72	2.38	0.65	35.62	2.29	0.56	24.67	1.16	0.43	37.26
Wheat	14.75	2.36	15.97	3.87	1.12	29.00	2.07	0.55	26.70	2.29	0.72	31.49	5.58	1.51	27.00	0.94	0.31	32.70
Melze	24.70	4.35	25.70	10.14	3.03	29.93	*	*	*	*	*	*	12.19	4.85	39.74	1.57	0.64	40.55
Sorghum	29.54	7.79	26.36	20.80	6.16	29.62	*	*	*	2.05	1.01	49.26	2.78	1.15	41.25	1.52	0.74	48.60
Millet	13.58	4.65	34.21	3.83	1.29	33.81	*	*	*	1.01	0.50	49.89	4.60	2.16	46.96	*	*	*
Dats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	3.32	0.96	28.98	3.00	0.93	30.95	*	*	*	*	*	*	*	*	*	*	*	*
Horse Beans	0.91	0.33	35.93	0.74	0.31	41.15	*	*	*	*	*	*	*	*	*	*	*	*
Chick Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Haricot Beans	0.48	0.24	49.79	0.35	0.16	45.55	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OILSEEDS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Neig	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lin Seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rape seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Spices	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Vegetables	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL TEMPORARY	154.45	18.79	12.17	57.10	9.62	16.84	19.70	5.05	25.62	13.38	2.15	16.07	55.84	10.99	19.69	8.43	1.11	13.25
Orat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ersset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
ALL CROPS	154.64	18.79	12.15	57.22	9.61	16.80	19.70	5.05	25.62	13.39	2.15	16.06	55.89	10.99	19.67	8.45	1.12	13.22

TABLE 2.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98/1990 E.C.)

Mar

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			MAT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	1.25	0.48	38.69	1.24	0.48	38.98	-	-	-	-	-	-	-	-	-	0.01	-	-
Teff	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Barely	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.16	0.06	35.53	0.15	0.06	36.42	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	0.58	0.24	40.40	0.58	0.24	40.69	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cereals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLUSES	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.32	0.53	40.48	1.32	0.54	40.76	-	-	-	-	-	-	-	-	-	0.01	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Erset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	1.32	0.53	40.48	1.32	0.54	40.76	-	-	-	-	-	-	-	-	-	0.01	-	-

TABLE 2.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Anbara

	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
TYPE OF CROP	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	575.17	48.78	8.48	95.43	11.26	11.80	302.66	35.83	11.84	54.59	13.32	24.40	111.28	17.99	16.17	11.21	2.44	21.78
Teff	288.29	28.35	9.83	15.95	3.75	23.52	169.17	21.23	12.55	29.92	5.76	19.23	67.44	11.05	16.39	5.81	1.76	30.27
Barely	36.61	5.53	15.12	14.28	2.74	19.15	16.99	4.13	24.32	3.13	1.25	39.87	1.51	0.61	40.56	*	*	*
Wheat	63.21	11.84	18.73	3.90	1.04	26.79	15.66	4.32	27.61	8.05	2.11	26.17	32.57	9.45	29.01	3.03	1.20	39.65
Maize	90.40	12.09	13.37	49.50	6.90	13.94	26.09	6.33	24.28	*	*	*	6.66	2.60	39.02	1.56	0.50	31.96
Sorghum	10.85	4.05	37.29	8.31	3.93	47.26	*	*	*	0.55	0.28	49.99	0.63	0.28	44.44	*	*	*
Millet	65.66	16.93	19.77	3.42	1.22	35.56	73.43	15.55	21.18	*	*	*	2.39	0.90	37.64	*	*	*
Oats	0.17	0.08	47.37	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
PULSES	15.00	3.18	21.22	7.66	1.91	24.90	4.59	1.41	30.70	*	*	*	*	*	*	*	*	*
Horse Beans	6.21	1.51	24.32	4.54	1.26	27.71	1.32	0.62	47.38	*	*	*	-	-	-	*	*	*
Chick Peas	3.27	1.35	41.11	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Haricot Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Field Peas	2.30	0.63	27.47	1.27	0.51	39.85	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	0.09	0.04	45.92	*	*	*	-	-	-	*	*	*	-	-	-
Vetch	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
OILSEEDS	10.18	2.94	28.90	2.86	0.98	34.34	6.74	2.21	32.81	*	*	*	*	*	*	*	*	*
Neug	6.28	1.84	29.28	2.01	0.90	44.56	4.17	1.39	33.34	-	-	-	*	*	*	-	-	-
Lin Seed	1.34	0.49	36.61	*	*	*	1.22	0.48	39.19	*	*	*	*	*	*	-	-	-
Rape seed	2.36	1.16	48.97	0.79	0.26	33.47	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	9.33	1.32	14.17	5.91	0.96	16.30	2.32	0.58	25.17	0.61	0.25	41.50	0.35	0.17	48.78	*	*	*
Fenugreek	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
Spices	4.74	0.89	18.65	3.17	0.67	21.04	1.07	0.31	28.96	0.25	0.12	48.17	*	*	*	*	*	*
Potatoes	3.24	0.86	26.38	1.99	0.60	30.16	*	*	*	*	*	*	*	*	*	-	-	-
Other Vegetables	1.18	0.30	25.31	0.73	0.19	25.49	*	*	*	-	-	-	*	*	*	-	-	-
ALL TEMPORARY	609.69	52.00	8.53	111.86	12.83	11.47	316.31	37.71	11.92	55.99	13.82	24.67	113.93	19.02	16.69	11.59	2.58	22.22
Chat	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	0.65	0.31	47.96	0.63	0.31	49.19	-	-	-	-	-	-	*	*	*	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	0.86	0.38	44.13	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	1.08	0.26	24.22	1.00	0.24	24.26	*	*	*	-	-	-	*	*	*	-	-	-
TOTAL PERMANENT	3.12	0.64	20.48	2.55	0.56	21.81	*	*	*	*	*	*	*	*	*	-	-	-
ALL CROPS	612.81	52.09	8.50	114.41	12.93	11.30	316.46	37.71	11.92	56.27	13.81	24.53	114.07	19.02	16.67	11.59	2.58	22.23



TABLE 2.5

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Oromia

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	1,210.96	86.40	7.13	145.97	16.23	11.12	618.60	67.11	10.85	110.00	24.79	22.53	317.90	43.01	13.53	18.49	2.53	13.69
Teff	414.40	41.81	10.09	12.67	2.52	19.91	210.34	25.43	12.09	25.50	5.04	19.75	158.68	26.51	16.70	7.21	1.52	21.15
Barely	209.11	38.60	18.46	17.34	4.85	27.99	127.52	24.91	19.53	50.10	23.55	46.99	12.62	2.90	22.97	1.53	0.61	39.99
Wheat	341.66	55.35	16.20	7.80	2.55	32.66	202.72	45.51	22.45	22.03	5.83	26.44	105.44	21.79	20.67	3.67	1.26	34.23
Maize	173.63	20.29	11.68	75.60	9.08	12.01	52.43	13.78	26.28	9.22	2.63	28.59	32.63	10.56	32.37	3.77	0.84	22.21
Sorghum	43.96	8.82	20.07	28.98	7.01	24.18	5.21	1.76	33.79	1.47	0.47	32.13	*	*	*	*	*	*
Millet	15.34	5.05	32.91	3.28	1.33	40.48	9.76	4.42	45.30	0.53	0.24	44.69	*	*	*	-	-	-
Oats	12.85	3.92	30.51	*	*	*	10.64	3.61	33.91	1.16	0.56	48.10	0.76	0.29	38.81	-	-	-
PULSES	71.30	12.50	17.53	15.37	2.69	17.48	39.55	10.55	26.67	*	*	*	9.63	3.78	39.21	*	*	*
Horse Beans	34.54	7.53	21.79	8.71	1.49	17.06	23.89	7.05	29.51	*	*	*	0.78	0.33	41.62	*	*	*
Chick Peas	15.27	5.08	33.29	2.19	0.77	35.25	9.93	4.67	47.05	*	*	*	*	*	*	*	*	*
Haricot Beans	9.67	4.67	48.28	2.27	0.84	36.74	1.41	0.63	44.49	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Vetch	0.72	0.27	36.92	0.28	0.13	45.33	*	*	*	-	-	-	*	*	*	-	-	-
OILSEEDS	19.59	4.64	23.70	4.96	1.72	34.66	12.38	4.03	32.55	*	*	*	*	*	*	*	*	*
Neug	4.10	1.61	39.19	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Lin Seed	9.58	3.88	40.52	*	*	*	8.73	3.85	43.91	*	*	*	*	*	*	-	-	-
Rape seed	4.21	1.97	46.88	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
Sesame	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	17.53	2.67	15.20	7.60	1.13	14.94	5.72	1.42	24.79	2.33	1.02	43.78	1.66	0.47	28.53	*	*	*
Fenugreek	1.89	0.74	38.95	0.22	0.10	44.15	0.65	0.27	41.70	*	*	*	*	*	*	-	-	-
Spices	2.26	0.73	32.51	1.44	0.37	25.94	*	*	*	*	*	*	*	*	*	-	-	-
Potatoes	6.30	2.05	32.53	1.42	0.40	28.11	3.40	1.33	39.23	*	*	*	*	*	*	*	*	*
Other Vegetables	7.09	1.19	16.82	4.51	0.90	19.93	1.27	0.41	32.62	*	*	*	0.90	0.29	31.94	*	*	*
ALL TEMPORARY	1,319.38	93.44	7.08	173.90	17.84	10.26	676.26	74.74	11.05	120.11	25.11	20.91	329.94	45.38	13.75	19.17	2.67	13.91
Chat	15.68	4.75	30.33	11.72	4.41	37.64	1.12	0.52	46.15	1.07	0.35	32.67	0.90	0.32	35.34	*	*	*
Coffee	10.66	4.01	37.62	6.34	1.74	27.45	*	*	*	*	*	*	*	*	*	-	-	-
Enset	31.41	7.79	24.81	31.33	7.58	24.18	*	*	*	*	*	*	*	*	*	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	0.21	0.07	31.13	0.21	0.07	31.04	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	1.57	0.42	26.77	1.38	0.37	26.54	*	*	*	-	-	-	*	*	*	-	-	-
Other Permanent	1.28	0.24	18.46	1.25	0.23	18.65	*	*	*	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	60.81	12.45	20.47	52.23	11.59	22.19	1.90	0.59	30.89	1.08	0.35	32.37	*	*	*	*	*	*
ALL CROPS	1,380.19	94.28	6.83	226.12	21.65	9.58	678.16	74.75	11.02	121.19	25.12	20.73	334.67	45.75	13.67	20.04	3.00	14.99

TABLE 2.6.  
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1977/98(1990 E.C.)

Scale

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			MAT + COM		
	Estimate ('000H)	S.E. ('000)	C.V. (%)	Estimate ('000H)	S.E. ('000)	C.V. (%)	Estimate ('000H)	S.E. ('000)	C.V. (%)	Estimate ('000H)	S.E. ('000)	C.V. (%)	Estimate ('000H)	S.E. ('000)	C.V. (%)	Estimate ('000H)	S.E. ('000)	C.V. (%)
CEREALS																		
Wheat	0.61	0.18	29.97	0.39	0.17	42.78	*	*	*	*	*	*	*	*	*	*	*	*
Barley	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	0.41	0.17	40.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PEASES																		
Black Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chick Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Herbaceous Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OILSEEDS																		
Mustard	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lin Seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rape seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sunflower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS																		
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Spices	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Vegetables	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL TEMPORARY	0.63	0.18	29.42	0.41	0.17	41.68	*	*	*	*	*	*	*	*	*	*	*	*
Chick	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Coffee	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Erset	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fruits	0.05	0.01	49.54	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Permanent	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	*	*	*	0.05	0.02	38.69	*	*	*	*	*	*	*	*	*	*	*	*
ALL CROPS	0.80	0.22	27.40	0.46	0.17	36.15	*	*	*	*	*	*	*	*	*	*	*	*

TABLE 2.7  
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Bardiyagat-Ganz

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA		MT + COM	
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	C.V. (%)
CEREALS	8.60	2.64	30.72	3.59	1.05	29.25	3.37	1.07	31.61	*	*	*	0.81	0.22	26.97	*
Teff	3.92	1.57	39.97	*	*	*	2.69	0.99	36.65	*	*	*	*	*	*	*
Barely	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	2.57	0.68	26.46	1.88	0.60	31.82	*	*	*	*	*	*	0.47	0.10	21.25	*
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PULSES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Horse Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chick Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Haricot Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OILSEEDS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Neig	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lin Seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rape seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	0.29	0.10	33.70	0.15	0.05	33.80	*	*	*	0.05	0.02	44.54	*	*	*	*
Ferlyneek	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Spices	0.15	0.05	35.36	0.12	0.05	42.09	*	*	*	*	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Vegetables	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL TEMPORARY	9.18	2.78	30.35	3.99	1.14	28.42	3.45	1.11	32.21	*	*	*	0.85	0.21	25.06	*
Chat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Coffee	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Erset	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fruits	0.01	*	44.91	0.01	*	43.94	*	*	*	*	*	*	*	*	*	*
Other Permanent	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	0.07	0.03	34.34	0.07	0.02	35.55	*	*	*	*	*	*	*	*	*	*
ALL CROPS	9.25	2.78	30.07	4.06	1.13	27.85	3.45	1.11	32.18	*	*	*	0.85	0.21	25.06	*

TABLE 2.8  
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PERMANENT HOLDINGS  
1997/98 (1990 E.C.)  
(S.N.P.R.)

	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
TYPE OF CROP	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	246.45	26.65	10.81	48.17	11.35	23.56	146.71	14.97	10.20	28.49	5.65	19.82	21.06	7.72	36.66	2.02	0.57	27.98
Teff	76.65	16.81	21.93	1.61	0.52	32.13	53.02	9.66	18.22	10.45	2.96	28.30	*	*	*	*	*	*
Barely	26.32	7.24	27.50	*	*	*	11.18	2.58	23.06	3.81	1.85	48.63	0.28	0.12	42.13	*	*	*
Wheat	54.75	7.33	13.39	*	*	*	41.76	5.84	13.98	3.96	1.43	36.03	4.53	0.50	19.80	0.44	0.20	44.47
Maize	75.71	11.34	14.98	24.26	4.72	19.44	36.05	6.32	17.54	9.45	2.66	28.11	5.13	1.82	35.43	0.82	0.31	37.36
Sorghum	11.50	2.32	20.19	7.21	1.50	20.77	3.48	1.11	31.84	0.68	0.26	37.90	*	*	*	*	*	*
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PULSES	26.15	4.11	15.71	6.72	1.51	22.52	14.32	2.72	19.00	4.86	1.45	29.83	*	*	*	0.11	0.04	33.62
Horse Beans	9.85	1.67	16.96	2.93	0.81	27.46	6.66	1.43	21.47	0.19	0.09	46.42	*	*	*	*	*	*
Chick Peas	4.91	1.38	28.13	0.67	0.29	43.65	3.52	1.12	31.84	*	*	*	*	*	*	*	*	*
Haricot Beans	10.30	3.28	31.89	2.68	1.11	41.58	3.64	1.81	49.72	3.88	1.35	34.85	*	*	*	0.08	0.03	40.06
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OILSEEDS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Neig	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lin Seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rape seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	30.87	4.01	13.00	19.21	3.09	16.11	8.10	1.87	23.03	1.55	0.66	33.79	1.11	0.41	37.09	0.50	0.18	36.18
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Spices	9.76	2.51	25.69	1.29	0.48	37.65	5.68	1.75	30.71	1.67	0.65	38.62	0.88	0.39	44.46	*	*	*
Potatoes	4.18	1.02	24.44	2.39	0.81	33.80	1.53	0.41	27.02	*	*	*	*	*	*	*	*	*
Other Vegetables	16.63	2.83	17.04	15.52	2.78	17.89	0.60	0.15	25.37	*	*	*	*	*	*	0.22	0.08	38.12
ALL TEMPORARY	304.02	29.25	9.62	74.63	12.68	16.99	169.14	15.94	9.42	35.31	6.29	17.81	22.32	7.71	34.56	2.62	0.63	26.21
Chait	8.09	1.62	20.10	7.72	1.60	20.67	*	*	*	0.12	0.05	45.31	*	*	*	*	*	*
Coffee	21.75	2.96	13.61	19.21	2.65	13.78	1.71	0.46	26.88	0.29	0.09	30.07	*	*	*	0.40	0.17	42.94
Erset	100.33	7.94	7.92	98.39	7.76	7.89	0.85	0.34	40.44	*	*	*	*	*	*	*	*	*
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	0.47	0.14	28.98	0.37	0.10	27.22	*	*	40.67	*	*	*	*	*	*	*	*	*
Fruits	2.12	0.41	19.42	1.85	0.35	18.55	0.12	0.05	*	*	*	*	*	*	*	*	*	*
Other Permanent	2.44	0.64	26.09	2.02	0.59	29.18	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	135.23	10.11	7.48	129.59	9.64	7.44	3.26	0.97	29.73	0.54	0.15	27.92	0.29	0.11	39.93	1.55	0.64	41.31
ALL CROPS	439.25	30.85	7.02	204.22	17.09	8.37	172.40	15.95	9.24	35.85	6.30	17.57	22.61	7.71	34.09	4.17	0.95	22.25

TABLE 2.9  
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98 (1990 E.C.)

Gambia

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E. (/000)	C.V. (%)	Estimate ('000HA)	S.E. (/000)	C.V. (%)	Estimate ('000HA)	S.E. (/000)	C.V. (%)	Estimate ('000HA)	S.E. (/000)	C.V. (%)	Estimate ('000HA)	S.E. (/000)	C.V. (%)	Estimate ('000HA)	S.E. (/000)	C.V. (%)
CEREALS	0.26	0.06	21.45	*	*	*	0.11	0.04	37.74	0.08	0.03	34.11	0.05	0.02	38.91	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	0.20	0.06	30.89	*	*	*	0.11	0.04	37.74	*	*	*	*	*	*	-	-	-
Maize	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Korpe Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Neig	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fatigreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	0.27	0.05	20.41	*	*	*	0.11	0.04	37.74	0.08	0.03	34.11	0.05	0.02	38.91	-	-	-
Orat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Bread	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	0.40	0.10	25.55	*	*	*	0.12	0.04	32.60	0.09	0.03	34.11	0.05	0.02	38.91	-	-	-

TABLE 2.10  
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Hereafter

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NMT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	1.94	0.21	10.64	0.75	0.12	15.55	0.07	0.01	20.69	0.35	0.06	16.92	0.30	0.06	19.25	0.48	0.09	19.41
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	0.03	0.01	30.84	0.13	0.02	18.00	0.01	-	23.21	0.01	0.02	31.36	0.02	0.01	32.55	*	*	*
Maize	0.40	0.06	14.24	0.62	0.10	16.56	0.06	0.01	23.57	0.07	0.02	22.99	0.06	0.02	23.88	0.12	0.03	22.48
Sorghum	1.51	0.16	10.53	-	-	-	-	-	-	0.26	0.05	17.70	0.22	0.04	19.07	0.36	0.07	19.04
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Orbs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.17	0.04	24.34	0.12	0.04	28.54	-	-	-	0.02	0.01	30.91	-	-	-	0.02	0.01	46.63
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.17	0.04	24.39	0.12	0.04	28.54	-	-	-	0.02	0.01	31.22	-	-	-	0.02	0.01	46.63
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.01	-	31.23	0.01	-	29.56	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.01	-	25.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	2.12	0.22	10.26	0.88	0.14	15.81	0.07	0.01	20.50	0.36	0.06	16.66	0.31	0.06	19.05	0.50	0.10	18.98
Chat	0.75	0.11	14.37	0.20	0.03	16.45	0.02	0.01	26.38	0.18	0.05	27.45	0.13	0.04	27.20	0.22	0.04	20.60
Coffee	0.01	-	36.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Erset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.03	0.01	48.94	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.79	0.11	13.64	0.25	0.04	15.82	0.02	0.01	26.38	0.18	0.05	27.18	0.14	0.04	27.08	0.22	0.04	20.49
ALL CROPS	2.91	0.29	9.99	1.11	0.16	14.17	0.10	0.02	18.89	0.54	0.10	18.95	0.44	0.09	20.08	0.72	0.13	18.58

TABLE 2.11  
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98 (1990 E.C.)

Adhis Akaba

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	5.20	0.78	14.93	*	*	*	0.17	0.07	42.91	0.07	0.03	42.85	4.74	0.70	14.77	0.19	0.06	32.90
Teff	2.96	0.55	18.65	*	*	*	0.02	0.01	46.31	0.04	0.01	37.49	2.80	0.51	18.20	0.09	0.05	49.30
Barely	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wheat	2.13	0.27	12.80	*	*	*	0.10	0.04	39.45	*	*	*	1.88	0.24	12.50	0.10	0.04	42.71
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-	-	-
PULSES	0.72	0.24	32.94	*	*	*	0.15	0.06	42.08	*	*	*	0.41	0.09	22.01	*	*	*
Horse Beans	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	0.19	0.07	35.53	*	*	*	*	*	*	*	*	*	0.12	0.03	25.55	*	*	*
Lentils	0.21	0.05	25.75	-	-	-	0.05	0.01	38.69	*	*	*	0.16	0.04	25.79	*	*	*
Vetch	0.30	0.15	49.43	-	-	-	0.07	0.03	41.77	*	*	*	0.13	0.05	38.66	*	*	*
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.13	0.05	38.82	-	-	-	*	*	*	*	*	*	0.11	0.05	45.18	-	-	-
Periagreek	0.06	0.02	29.93	-	-	-	*	*	*	*	*	*	0.04	0.01	29.95	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	6.05	1.00	16.54	*	*	*	0.34	0.11	31.18	*	*	*	5.25	0.77	14.65	0.21	0.06	30.31
that	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ersset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	6.05	1.00	16.53	*	*	*	0.34	0.11	31.18	*	*	*	5.25	0.77	14.65	0.21	0.06	30.31

TABLE 2.12

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Dire Dawa

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	0.59	0.16	26.72	0.47	0.13	27.63	*	*	*	0.07	0.04	48.72	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	0.58	0.16	27.03	0.47	0.13	28.18	*	*	*	0.07	0.03	48.37	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	0.66	0.17	26.13	0.55	0.15	27.75	*	*	*	0.07	0.04	47.60	-	-	-	-	-	-
Chat	0.06	0.03	49.69	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	0.95	0.29	30.64	0.82	0.28	33.89	*	*	*	0.07	0.04	47.17	-	-	-	-	-	-



TABLE 3.1

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

National

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	2,146.22	121.35	5.65	1,061.55	71.19	6.71	215.62	27.23	12.63	810.35	93.20	11.50	59.80	5.53	9.25
Teff	888.09	65.85	7.42	409.42	33.47	8.17	70.14	11.35	16.18	389.59	49.84	12.79	19.32	2.96	15.34
Barely	232.42	33.37	14.36	153.34	24.99	16.30	50.72	17.38	34.26	23.98	4.38	18.26	4.38	1.21	27.66
Wheat	606.51	69.16	11.40	286.25	41.95	14.66	38.31	6.29	16.42	267.92	51.52	19.23	14.32	3.56	24.84
Maize	288.44	31.87	11.05	127.61	16.15	12.65	39.04	8.09	20.73	108.44	19.90	18.35	13.77	2.25	16.34
Sorghum	40.85	11.26	27.55	13.40	4.57	34.14	9.84	3.65	37.09	11.15	3.13	28.04	6.47	1.95	30.09
Millet	80.42	14.32	17.80	63.05	13.00	20.62	6.97	3.24	46.50	8.88	2.40	27.05	*	*	*
Oats	9.48	4.26	44.92	8.47	4.19	49.41	0.60	0.25	42.07	0.39	0.13	33.37	*	*	*
PULSES	84.72	11.46	13.52	54.36	8.86	16.29	12.18	3.55	29.13	17.26	6.33	36.65	1.28	0.48	37.27
Horse Beans	36.53	7.34	20.08	31.77	7.14	22.48	1.45	0.44	30.50	*	*	*	*	*	*
Chick Peas	17.22	4.38	25.44	11.25	3.09	27.49	1.18	0.57	48.00	*	*	*	*	*	*
Haricot Beans	18.92	5.05	26.68	7.18	2.23	31.03	8.85	3.43	38.80	2.70	1.13	41.86	0.20	0.08	38.65
Field Peas	3.26	0.96	29.52	1.03	0.38	37.25	*	*	*	1.77	0.77	43.70	*	*	*
Lentils	7.71	3.26	42.23	2.46	0.85	34.64	*	*	*	*	*	*	*	*	*
Vetch	1.08	0.34	30.95	0.68	0.30	43.58	*	*	*	0.34	0.13	39.27	*	*	*
OILSEEDS	21.84	4.85	22.22	16.23	3.68	22.68	2.73	1.34	49.20	2.45	1.16	47.49	*	*	*
Neug	3.89	1.14	29.24	2.89	0.93	32.10	*	*	*	*	*	*	*	*	*
Lin Seed	7.14	1.95	27.28	5.90	1.71	28.99	*	*	*	*	*	*	*	*	*
Rape seed	9.50	3.87	40.71	6.73	2.65	39.35	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	0.11	0.05	43.74	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	45.76	6.39	13.97	26.48	4.31	16.27	7.93	2.00	25.19	9.01	1.77	19.69	2.37	0.69	28.92
Fenugreek	1.99	0.92	46.09	*	*	*	*	*	*	0.45	0.21	47.09	*	*	*
Spices	18.82	4.77	25.33	11.48	3.10	27.02	3.60	1.46	40.61	3.24	1.02	31.39	0.54	0.23	41.67
Potatoes	12.87	2.92	22.66	9.99	2.45	24.56	2.22	0.88	39.57	0.60	0.23	39.25	*	*	*
Other Vegetables	12.08	2.38	19.66	3.83	0.74	19.30	1.75	0.76	43.54	4.72	1.39	29.35	1.77	0.65	36.51
ALL TEMPORARY	2,298.54	127.53	5.55	1,158.61	77.09	6.65	238.46	28.39	11.91	839.07	96.92	11.55	63.89	5.73	8.97
Chat	27.20	10.08	37.07	*	*	*	10.49	3.50	33.38	5.79	1.91	32.95	4.63	1.88	40.57
Coffee	16.28	4.19	25.74	9.47	3.29	34.75	2.93	0.98	33.30	2.44	0.90	36.99	1.43	0.58	40.66
Erset	6.60	2.82	42.79	*	*	*	*	*	*	*	*	*	1.54	0.57	36.85
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fruits	3.63	1.56	42.97	2.40	1.10	45.97	*	*	*	*	*	*	*	*	*
Other Permanent	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	58.76	14.37	24.45	25.58	8.92	34.85	14.54	3.74	25.76	9.84	2.29	23.24	8.81	2.38	26.97
ALL CROPS	2,357.31	130.26	5.53	1,184.19	77.99	6.59	253.00	29.43	11.63	848.91	97.07	11.43	72.71	6.89	9.48

TABLE 3.2

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Tigray

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	140.47	19.27	13.72	22.78	5.93	26.02	17.76	4.12	23.21	86.97	14.95	17.19	13.48	1.80	13.35
Teff	56.97	10.60	18.62	7.97	2.40	30.14	4.62	1.48	32.05	40.43	8.28	20.47	4.04	0.97	23.94
Barely	15.28	3.30	21.56	3.87	1.17	30.35	4.30	1.80	41.77	5.43	1.41	25.92	1.69	0.62	36.69
Wheat	22.50	4.60	20.44	4.25	1.25	29.42	5.64	2.09	37.09	10.95	3.01	27.49	1.65	0.58	35.10
Maize	24.84	8.90	35.82	1.13	0.56	49.18	*	*	*	21.28	8.10	38.05	2.60	0.91	34.99
Sorghum	8.29	2.82	33.98	*	*	*	*	*	*	3.64	1.56	42.90	2.19	1.03	46.83
Millet	12.59	5.62	44.65	*	*	*	*	*	*	5.26	2.14	40.78	*	*	*
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	0.44	0.20	45.53	*	*	*	*	*	*	*	*	*	-	-	-
Horse Beans	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Chick Peas	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
Lentils	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
Fenugreek	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
ALL TEMPORARY	141.03	19.24	13.64	22.87	5.92	25.88	17.95	4.12	22.93	87.26	14.94	17.12	13.48	1.80	13.35
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
ALL CROPS	141.20	19.25	13.63	22.87	5.92	25.88	17.98	4.11	22.88	87.35	14.95	17.12	13.52	1.80	13.30

TABLE 3.3

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Amhara

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	490.89	48.91	9.96	264.78	32.36	12.22	46.59	13.14	28.21	164.54	30.31	18.42	15.03	3.10	20.65
Teff	267.66	29.08	10.87	147.69	18.91	12.80	25.41	6.73	26.47	88.46	17.31	19.57	6.10	1.72	28.19
Barely	21.26	4.27	20.11	15.52	3.62	23.30	2.83	1.22	43.22	2.27	1.05	46.37	*	*	*
Wheat	87.53	19.42	22.19	16.24	4.91	30.21	7.46	2.35	31.45	58.12	17.10	29.42	5.75	2.47	43.02
Maize	53.03	12.73	24.00	32.94	8.28	25.13	*	*	*	12.37	4.66	37.71	2.29	0.75	32.69
Sorghum	2.59	1.10	42.59	*	*	*	*	*	*	*	*	*	*	*	*
Millet	58.80	12.90	21.93	51.19	12.17	23.78	*	*	*	2.55	0.94	37.09	*	*	*
Oats	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
PULSES	7.01	2.45	35.00	3.17	0.82	25.99	*	*	*	*	*	*	*	*	*
Horse Beans	1.73	0.68	39.47	1.26	0.59	47.08	*	*	*	-	-	-	-	*	*
Chick Peas	0.77	0.34	44.42	0.68	0.31	45.75	*	*	*	*	*	*	-	-	-
Haricot Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-
Field Peas	1.16	0.52	44.85	*	*	*	*	*	*	*	*	*	*	-	-
Lentils	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
Vetch	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*
OILSEEDS	11.01	4.12	37.43	8.23	3.10	37.66	*	*	*	*	*	*	*	*	*
Neug	2.60	0.98	37.82	2.14	0.82	38.24	-	-	-	*	*	*	-	-	-
Lin Seed	2.31	1.10	47.60	1.35	0.64	47.51	*	*	*	*	*	*	-	-	-
Rape seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	4.75	1.00	21.10	3.31	0.82	24.89	0.52	0.18	34.71	0.70	0.32	46.29	*	*	*
Fenugreek	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-
Spices	2.37	0.71	29.83	1.59	0.51	31.88	0.21	0.08	40.26	*	*	*	*	*	*
Potatoes	1.79	0.61	33.98	1.39	0.58	41.91	*	*	*	*	*	*	-	-	-
Other Vegetables	0.48	0.20	40.98	0.33	0.15	44.37	-	-	-	*	*	*	*	*	*
ALL TEMPORARY	513.66	52.09	10.14	279.49	34.56	12.36	49.41	14.20	28.73	169.21	31.76	18.77	15.94	3.13	19.60
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*
TOTAL PERMANENT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL CROPS	514.60	52.20	10.14	279.82	34.55	12.35	49.58	14.19	28.62	169.63	31.81	18.75	15.97	3.13	19.63

TABLE 3.4

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Oromia

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	1,205.17	105.77	8.78	564.20	59.89	10.61	103.90	19.37	18.65	512.92	86.49	16.86	24.68	4.05	16.43
Teff	461.55	55.14	11.95	188.59	25.18	13.35	22.78	4.22	18.52	241.86	45.44	18.79	8.59	2.20	25.62
Barely	170.62	32.24	18.89	115.09	24.14	20.97	37.95	17.06	44.95	15.74	4.01	25.45	*	*	*
Wheat	404.05	65.07	16.10	194.46	40.31	20.73	19.93	5.26	26.41	184.21	48.45	26.30	5.71	2.44	42.77
Maize	128.73	24.79	19.26	43.63	10.52	24.12	15.71	4.09	26.05	64.00	17.36	27.13	5.39	1.64	30.47
Sorghum	23.85	10.81	45.32	*	*	*	*	*	*	5.80	2.66	45.96	*	*	*
Millet	6.97	2.45	35.09	5.49	2.21	40.35	0.53	0.23	43.04	*	*	*	-	-	-
Oats	9.41	4.26	45.29	8.45	4.19	49.52	0.59	0.25	42.25	0.36	0.13	36.26	-	-	-
PULSES	52.87	10.36	19.60	32.90	8.18	24.85	*	*	*	13.47	6.05	44.90	*	*	*
Horse Beans	25.35	7.04	27.77	21.63	6.86	31.71	0.73	0.33	45.56	*	*	*	*	*	*
Chick Peas	11.17	3.99	35.76	6.20	2.68	43.27	*	*	*	*	*	*	*	*	*
Haricot Beans	9.51	4.05	42.61	*	*	*	*	*	*	2.37	1.11	46.83	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Lentils	*	*	*	1.89	0.78	41.05	*	*	*	*	*	*	-	-	-
Vetch	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
OILSEEDS	10.66	2.57	24.06	7.97	1.98	24.88	*	*	*	*	*	*	*	*	*
Neug	1.29	0.57	44.38	*	*	*	*	*	*	*	*	*	-	-	-
Lin Seed	4.80	1.61	33.50	4.54	1.59	34.94	*	*	*	*	*	*	-	-	-
Rape seed	4.00	1.91	47.58	2.60	1.09	41.85	*	*	*	*	*	*	-	-	-
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	14.86	3.45	23.21	7.23	2.07	28.66	2.77	1.21	43.73	4.46	1.39	31.24	*	*	*
Fenugreek	0.87	0.37	42.92	0.25	0.12	48.24	*	*	*	*	*	*	-	-	-
Spices	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Potatoes	6.47	2.33	36.02	4.73	1.97	41.67	*	*	*	0.48	0.21	44.04	*	*	*
Other Vegetables	6.37	1.92	30.07	1.82	0.58	32.11	*	*	*	3.25	1.25	38.26	*	*	*
ALL TEMPORARY	1,283.57	110.84	8.64	612.31	65.17	10.64	114.10	19.93	17.46	531.84	89.99	16.92	25.85	4.20	16.26
Chat	23.07	10.06	43.59	*	*	*	9.03	3.48	38.51	5.13	1.90	36.99	*	*	*
Coffee	2.85	1.36	47.84	*	*	*	*	*	*	*	*	*	-	-	-
Enset	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
Other Permanent	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	26.42	10.21	38.65	*	*	*	9.47	3.50	36.96	6.70	2.09	31.25	*	*	*
ALL CROPS	1,309.99	113.46	8.66	618.90	65.72	10.62	123.57	21.34	17.27	538.53	90.13	16.74	29.52	5.42	18.36

TABLE 3.5

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Semele

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Maize	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	*	*	*	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Chat	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	-	-	-	-	-	-	-	-	-	0.02	0.01	45.69
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*
ALL CROPS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE 3.6

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Bershangul-Gumuz

	Total			DAP			UREA			DAP + UREA			NAT & COM		
TYPE OF CROP	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	3.77	1.43	37.82	1.74	0.64	36.99	*	*	*	1.21	0.31	25.59	0.21	0.10	47.15
Teff	1.73	0.78	45.26	1.45	0.57	39.00	*	*	*	*	*	*	-	-	-
Barely	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Wheat	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Maize	1.21	0.36	29.79	*	*	*	*	*	*	1.03	0.27	26.06	*	*	*
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	0.14	0.03	21.63
Millet	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
Horse Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	-	-	-	0.01	-	35.25	*	*	*	*	*	*
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	0.02	0.01	43.81	-	-	-	0.01	-	45.99	-	-	-	*	*	*
Potatoes	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Other Vegetables	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	3.88	1.44	37.18	1.76	0.66	37.31	*	*	*	1.27	0.30	23.38	0.22	0.09	43.62
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
ALL CROPS	3.89	1.44	36.98	1.78	0.65	36.73	*	*	*	1.27	0.30	23.38	0.22	0.09	43.62

TABLE 3.7

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

(S.N.N.P.R)

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	288.52	27.76	9.62	207.15	19.97	9.64	45.36	13.27	29.26	31.60	7.78	24.62	4.41	1.07	24.28
Teff	92.40	18.32	19.82	63.65	11.07	17.39	17.13	7.97	46.55	*	*	*	0.40	0.19	46.72
Barely	24.57	6.71	27.29	18.67	5.25	28.13	5.25	2.44	46.49	0.44	0.18	41.52	*	*	*
Wheat	87.68	12.24	13.95	71.13	10.45	14.70	5.11	1.41	27.60	10.38	2.22	21.39	1.07	0.49	45.59
Maize	78.29	12.63	16.13	49.40	9.01	18.23	17.04	5.65	33.16	9.16	2.66	29.00	2.69	0.98	36.31
Sorghum	3.56	0.79	22.30	2.71	0.71	26.08	0.59	0.29	49.34	*	*	*	-	-	-
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PULSES	23.44	4.22	18.00	18.08	3.30	18.28	4.91	1.48	30.26	0.30	0.14	47.59	0.16	0.05	28.50
Horse Beans	9.19	1.94	21.17	8.85	1.90	21.47	0.20	0.09	45.80	*	*	*	*	*	*
Chick Peas	5.26	1.76	33.53	4.36	1.50	34.47	*	*	*	*	*	*	*	*	*
Haricot Beans	8.62	2.97	34.48	4.52	1.77	39.22	3.97	1.39	34.94	*	*	*	0.13	0.04	31.85
Field Peas	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Lentils	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Vetch	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
OILSEEDS	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	25.54	5.29	20.69	15.91	3.69	23.17	4.54	1.58	34.73	3.40	1.03	30.23	1.72	0.63	36.87
Fenugreek	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Spices	15.29	4.66	30.48	9.46	3.05	32.24	3.10	1.43	46.22	2.44	0.90	36.92	*	*	*
Potatoes	4.58	1.64	35.83	3.87	1.34	34.74	*	*	*	*	*	*	0.02	0.01	49.24
Other Vegetables	4.75	1.37	28.88	1.68	0.43	25.60	*	*	*	*	*	*	1.37	0.61	44.52
ALL TEMPORARY	337.53	29.79	8.83	241.15	21.57	8.95	54.83	13.79	25.14	35.30	7.85	22.25	6.29	1.42	22.52
Chat	1.78	0.62	34.57	0.73	0.37	49.80	0.90	0.40	44.07	*	*	*	*	*	*
Coffee	13.37	3.96	29.63	8.56	3.23	37.79	2.51	0.89	35.26	0.88	0.44	49.71	1.43	0.58	40.87
Enset	6.45	2.82	43.79	*	*	*	*	*	*	*	*	*	1.54	0.57	36.85
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Fruits	3.31	1.54	46.68	*	*	*	*	*	*	*	*	*	*	*	*
Other Permanent	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*
TOTAL PERMANENT	28.77	10.09	35.05	18.28	8.23	45.04	4.29	1.32	30.65	2.04	0.86	42.05	4.15	1.46	35.06
ALL CROPS	366.30	31.51	8.60	259.43	23.08	8.90	59.13	13.84	23.41	37.34	7.87	21.07	10.44	2.19	20.99

TABLE 3.8

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Gambela

	Total			DAP			UREA			DAP + UREA			NAT & COM		
TYPE OF CROP	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	0.33	0.08	24.13	0.13	0.03	24.44	0.11	0.05	40.60	0.09	0.02	28.81	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.31	0.09	28.05	0.13	0.03	24.44	0.10	0.05	46.44	0.07	0.04	48.90	-	-	-
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Penugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	0.33	0.08	24.13	0.13	0.03	24.44	0.11	0.05	40.60	0.09	0.02	28.81	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Enset	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
ALL CROPS	0.36	0.09	25.12	0.16	0.04	26.25	0.11	0.05	40.60	0.09	0.02	28.81	-	-	-



TABLE 3.9

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Harari

	Total			DAP			UREA			DAP + UREA			NAT & COM		
TYPE OF CROP	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	4.04	0.62	15.25	0.16	0.03	19.33	1.01	0.18	17.70	1.18	0.25	20.79	1.68	0.34	20.16
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	0.01	0.01	48.04	-	-	-	-	-	-	*	*	*	*	*	*
Wheat	0.15	0.04	30.48	*	*	*	0.03	0.01	39.87	0.08	0.02	30.41	*	*	*
Maize	1.58	0.26	16.71	0.05	0.01	26.82	0.37	0.08	22.11	0.42	0.10	22.62	0.73	0.16	21.28
Sorghum	2.30	0.34	14.61	0.10	0.02	19.96	0.61	0.11	17.64	0.68	0.14	21.11	0.92	0.18	19.31
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.14	0.04	27.95	0.01	-	44.83	0.07	0.02	35.95	0.01	-	40.30	0.06	0.02	36.91
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.14	0.04	27.98	0.01	-	44.83	0.07	0.02	36.01	0.01	-	40.30	0.06	0.02	36.91
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.04	0.01	25.15	-	-	-	0.01	-	30.82	0.01	-	47.32	0.01	-	38.69
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.03	0.01	26.63	-	-	-	0.01	-	30.82	0.01	-	48.69	0.01	-	41.36
ALL TEMPORARY	4.22	0.62	14.77	0.17	0.03	18.16	1.09	0.19	17.37	1.20	0.25	20.72	1.76	0.34	19.54
Chat	2.08	0.34	16.12	0.08	0.02	27.05	0.54	0.11	20.55	0.59	0.15	25.08	0.88	0.18	20.49
Coffee	0.02	0.01	41.68	-	-	-	*	*	*	-	-	-	0.01	-	49.52
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.02	0.01	33.44	-	-	-	*	*	*	*	*	*	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	2.12	0.34	15.89	0.08	0.02	27.98	0.56	0.11	20.34	0.59	0.15	24.75	0.89	0.18	20.31
ALL CROPS	6.34	0.95	14.95	0.25	0.05	20.81	1.65	0.30	18.14	1.80	0.39	21.70	2.65	0.52	19.60

TABLE 3.10

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Addis Ababa

	Total			DAP			UREA			DAP + UREA			NAT & COM		
TYPE OF CROP	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	12.26	1.62	13.22	0.31	0.13	42.84	0.13	0.05	39.95	11.51	1.52	13.19	0.31	0.09	29.05
Teff	7.78	1.34	17.25	*	*	*	0.09	0.04	39.91	7.44	1.25	16.77	0.18	0.08	45.25
Barely	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wheat	4.27	0.44	10.34	0.14	0.06	43.83	*	*	*	3.97	0.43	10.94	0.11	0.03	24.43
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
PULSES	0.92	0.22	23.75	0.10	0.02	23.03	*	*	*	0.73	0.19	26.10	0.03	0.02	49.95
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	0.22	0.05	23.43	0.02	0.01	41.27	*	*	*	0.19	0.05	26.44	-	-	-
Lentils	0.38	0.12	31.94	0.03	0.01	34.80	*	*	*	0.32	0.11	33.53	*	*	*
Vetch	0.31	0.10	31.59	0.05	0.02	40.31	*	*	*	0.22	0.08	34.46	*	*	*
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	0.01	-	42.89	*	*	*	*	*	*
Fenugreek	0.06	0.02	28.35	*	*	*	-	-	-	0.04	0.01	27.42	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Other Vegetables	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
ALL TEMPORARY	13.56	1.77	13.05	0.44	0.13	30.85	0.19	0.08	43.23	12.58	1.62	12.89	0.35	0.09	25.28
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	13.56	1.77	13.05	0.44	0.13	30.85	0.19	0.08	43.17	12.58	1.62	12.89	0.35	0.09	25.28

TABLE 3.11

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Dire Dawa

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL CROPS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE 4.1

ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

National

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	104.56	8.99	8.60	4,529.02	167.27	3.69
Teff	13.33	2.90	21.78	1,004.98	43.80	4.36
Barely	1.93	0.77	39.91	1,171.14	95.05	8.12
Wheat	65.80	8.17	12.41	1,252.64	119.27	9.52
Maize	22.90	3.06	13.35	593.35	25.61	4.32
Sorghum	0.59	0.21	34.78	293.03	16.62	5.67
Millet	-	-	-	139.99	13.95	9.96
Oats	-	-	-	73.89	12.49	16.90
PULSES	0.61	0.22	36.82	890.00	45.02	5.06
Horse Beans	0.34	0.15	45.39	387.63	28.50	7.35
Field Peas	*	*	*	138.22	13.05	9.44
Haricot Beans	-	-	-	72.87	12.41	17.04
Chick Peas	*	*	*	140.65	16.42	11.67
Lentils	*	*	*	40.41	7.27	18.00
Vetch	-	-	-	110.23	17.07	15.48
Others	*	*	*	177.83	18.05	10.15
Neug	*	*	*	45.33	5.71	12.60
Lin Seed	*	*	*	97.34	15.58	16.00
Rape seed	-	-	-	8.98	3.86	43.00
Ground Nuts	-	-	-	8.85	3.90	44.04
Sun Flower	-	-	-	1.27	0.35	27.99
Sesame	-	-	-	3.39	0.90	26.45
Fenugreek	-	-	-	12.66	2.61	20.59
ALL CROPS	105.27	8.98	8.53	5,596.85	193.05	3.45

TABLE 4.2

ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Tigray

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	9.08	3.54	39.00	317.72	25.71	8.09
Teff	*	*	*	54.63	6.99	12.79
Barely	*	*	*	96.01	12.82	13.36
Wheat	2.86	0.78	27.34	64.78	9.88	15.25
Maize	*	*	*	28.62	3.93	13.72
Sorghum	*	*	*	40.00	7.48	18.71
Millet	-	-	-	33.51	7.15	21.34
Oats	-	-	-	*	*	*
PULSES	*	*	*	28.45	3.47	12.21
Horse Beans	*	*	*	9.05	2.23	24.63
Field Peas	-	-	-	3.70	0.95	25.62
Haricot Beans	-	-	-	0.59	0.23	39.38
Chick Peas	-	-	-	5.92	1.90	32.17
Lentils	-	-	-	3.49	1.12	32.09
Vetch	-	-	-	5.70	1.87	32.77
Others	*	*	*	5.09	1.20	23.47
Neug	-	-	-	1.06	0.44	41.20
Lin Seed	*	*	*	2.67	0.85	31.86
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	*	*	*
Fenugreek	-	-	-	*	*	*
ALL CROPS	9.12	3.54	38.80	351.26	27.43	7.81

TABLE 4.3

ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Afar

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>'000</sup> HA)	S.E ( <sup>'000</sup> )	C.V. (%)	Estimate ( <sup>'000</sup> HA)	S.E ( <sup>'000</sup> )	C.V. (%)
CEREALS	-	-	-	5.25	0.96	18.32
Teff	-	-	-	2.40	0.69	28.87
Barely	-	-	-	*	*	*
Wheat	-	-	-	*	*	*
Maize	-	-	-	1.70	0.25	14.74
Sorghum	-	-	-	0.58	0.14	24.20
Millet	-	-	-	-	-	-
Oats	-	-	-	-	-	-
PULSES	-	-	-	0.49	0.21	42.74
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	-	-	-	*	*	*
Chick Peas	-	-	-	0.20	0.07	35.22
Lentils	-	-	-	*	*	*
Vetch	-	-	-	-	-	-
Others	-	-	-	0.07	0.03	44.35
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	0.03	0.01	38.88
Sesame	-	-	-	*	*	*
Fenugreek	-	-	-	-	-	-
ALL CROPS	-	-	-	5.82	1.14	19.57

TABLE 4.4

ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Amhara

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>'000</sup> HA)	S.E ( <sup>'000</sup> )	C.V. (%)	Estimate ( <sup>'000</sup> HA)	S.E ( <sup>'000</sup> )	C.V. (%)
CEREALS	32.06	4.82	15.03	1,211.53	48.49	4.00
Teff	4.09	0.83	20.22	384.74	25.29	6.57
Barely	*	*	*	322.73	28.34	8.78
Wheat	24.67	4.94	20.03	208.84	24.91	11.93
Maize	2.81	0.80	28.44	106.53	7.23	6.79
Sorghum	*	*	*	95.86	10.91	11.38
Millet	-	-	-	80.93	11.20	13.84
Oats	-	-	-	11.90	3.11	26.13
PULSES	*	*	*	370.52	29.29	7.91
Horse Beans	*	*	*	143.26	16.87	11.77
Field Peas	-	-	-	48.53	6.12	12.61
Haricot Beans	-	-	-	13.63	5.20	38.18
Chick Peas	*	*	*	82.39	11.15	13.53
Lentils	-	-	-	16.15	3.98	24.67
Vetch	-	-	-	66.57	13.23	19.88
Others	*	*	*	46.36	4.41	9.52
Neug	*	*	*	22.78	2.98	13.08
Lin Seed	-	-	-	14.27	2.64	18.50
Rape seed	-	-	-	0.61	0.14	23.55
Ground Nuts	-	-	-	*	*	*
Sun Flower	-	-	-	1.09	0.34	31.35
Sesame	-	-	-	1.46	0.71	48.57
Fenugreek	-	-	-	6.13	1.66	27.03
ALL CROPS	32.30	4.81	14.89	1,628.41	65.72	4.04

TABLE 4.5 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Oromia

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	46.92	6.33	13.50	2,510.29	155.60	6.20
Teff	4.02	1.24	30.85	467.53	33.32	7.13
Barely	*	*	*	673.73	89.07	13.22
Wheat	29.97	6.18	20.63	848.40	115.27	13.59
Maize	11.98	2.18	18.17	330.45	21.37	6.47
Sorghum	*	*	*	111.20	9.36	8.42
Millet	-	-	-	18.98	3.90	20.57
Oats	-	-	-	60.00	11.98	19.97
PULSES	*	*	*	413.61	33.05	7.99
Horse Beans	*	*	*	194.31	22.33	11.49
Field Peas	*	*	*	66.06	10.89	16.48
Haricot Beans	-	-	-	46.40	11.00	23.70
Chick Peas	-	-	-	49.85	11.88	23.83
Lentils	*	*	*	20.13	5.98	29.70
Vetch	-	-	-	36.86	10.61	28.78
Others	*	*	*	120.43	17.44	14.48
Neug	-	-	-	19.27	4.83	25.05
Lin Seed	*	*	*	79.71	15.33	19.23
Rape seed	-	-	-	8.35	3.86	46.20
Ground Nuts	-	-	-	*	*	*
Sun Flower	-	-	-	*	*	*
Sesame	-	-	-	0.23	0.10	43.45
Fenugreek	-	-	-	5.45	1.93	35.41
ALL CROPS	47.27	6.33	13.39	3,044.33	176.61	5.80

TABLE 4.6 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Somale

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	*	*	*	25.96	5.84	22.51
Teff	-	-	-	*	*	*
Barely	*	*	*	4.80	1.53	31.78
Wheat	*	*	*	2.99	1.30	43.33
Maize	*	*	*	9.93	2.50	25.20
Sorghum	*	*	*	8.16	2.53	31.02
Millet	-	-	-	-	-	-
Oats	-	-	-	*	*	*
PULSES	-	-	-	0.33	0.09	26.41
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	*	*	*
Haricot Beans	-	-	-	0.26	0.08	31.70
Chick Peas	-	-	-	*	*	*
Lentils	-	-	-	*	*	*
Vetch	-	-	-	-	-	-
Others	-	-	-	*	*	*
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	*	*	*
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	*	*	*
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	*	*	*
ALL CROPS	*	*	*	26.44	5.88	22.24

TABLE 4.7 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Benshangul-Gumuz

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	0.22	0.07	31.67	40.35	8.21	20.35
Teff	*	*	*	11.81	3.70	31.30
Barely	-	-	-	*	*	*
Wheat	-	-	-	*	*	*
Maize	0.18	0.04	23.63	7.04	1.03	14.59
Sorghum	*	*	*	11.36	1.75	15.38
Millet	-	-	-	4.37	1.38	31.59
Oats	-	-	-	*	*	*
PULSES	-	-	-	3.67	0.99	27.05
Horse Beans	-	-	-	1.45	0.51	35.09
Field Peas	-	-	-	*	*	*
Haricot Beans	-	-	-	1.45	0.57	39.59
Chick Peas	-	-	-	*	*	*
Lentils	-	-	-	*	*	*
Vetch	-	-	-	-	-	-
Others	-	-	-	3.17	0.53	16.60
Newg	-	-	-	1.86	0.38	20.38
Lin Seed	-	-	-	0.05	0.03	48.81
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	0.65	0.27	40.95
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	0.60	0.16	26.28
Fenugreek	-	-	-	-	-	-
ALL CROPS	0.22	0.07	31.67	47.20	9.17	19.43

TABLE 4.8 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

(S.N.N.P.R)

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	15.51	2.21	14.22	403.99	25.52	6.32
Teff	1.61	0.50	30.92	80.89	10.30	12.73
Barely	*	*	*	70.01	11.14	15.91
Wheat	8.01	1.87	23.31	121.35	14.69	12.11
Maize	5.53	1.51	27.37	105.95	11.12	10.50
Sorghum	*	*	*	21.88	1.99	9.09
Millet	-	-	-	2.19	0.88	40.12
Oats	-	-	-	*	*	*
PULSES	*	*	*	70.84	7.94	11.20
Horse Beans	*	*	*	39.44	4.88	12.37
Field Peas	*	*	*	19.32	3.63	18.79
Haricot Beans	-	-	-	10.19	2.39	23.46
Chick Peas	-	-	-	1.44	0.66	45.73
Lentils	-	-	-	0.15	0.06	41.14
Vetch	-	-	-	*	*	*
Others	-	-	-	1.62	0.68	41.91
Newg	-	-	-	*	*	*
Lin Seed	-	-	-	*	*	*
Rape seed	-	-	-	*	*	*
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	0.04	0.02	45.21
Sesame	-	-	-	*	*	*
Fenugreek	-	-	-	*	*	*
ALL CROPS	15.60	2.23	14.28	476.44	29.71	6.24

TABLE 4.9

ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Gambela

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	0.22	0.07	32.51	3.64	0.55	15.14
Teff	-	-	-	-	-	-
Barely	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	0.20	0.07	36.29	2.55	0.53	20.75
Sorghum	*	*	*	1.08	0.28	25.69
Millet	-	-	-	*	*	*
Oats	-	-	-	-	-	-
PULSES	-	-	-	*	*	*
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	-	-	-	*	*	*
Chick Peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	0.06	0.02	40.32
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	0.02	0.01	44.61
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	*	*	*
Fenugreek	-	-	-	-	-	-
ALL CROPS	0.22	0.07	32.42	3.71	0.56	15.03

TABLE 4.10

ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Harari

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
CEREALS	0.04	0.01	33.25	1.79	0.12	6.86
Teff	-	-	-	-	-	-
Barely	-	-	-	0.01	-	43.07
Wheat	*	*	*	0.05	0.02	31.80
Maize	0.02	-	23.20	0.51	0.06	11.03
Sorghum	-	-	-	1.21	0.07	6.16
Millet	-	-	-	-	-	-
Oats	-	-	-	-	-	-
PULSES	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	0.78	0.13	16.95
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	0.78	0.13	16.97
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
ALL CROPS	0.04	0.01	33.15	2.56	0.17	6.66



TABLE 4.11 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Addis Ababa

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	0.25	0.10	40.32	6.76	0.83	12.29
Teff	*	*	*	2.97	0.50	16.77
Barely	-	-	-	*	*	*
Wheat	0.22	0.09	40.07	3.43	0.43	12.67
Maize	-	-	-	0.01	-	49.85
Sorghum	-	-	-	*	*	*
Millet	-	-	-	-	-	-
Oats	-	-	-	0.01	0.01	44.94
PULSES	-	-	-	2.01	0.33	16.22
Horse Beans	-	-	-	*	*	*
Field Peas	-	-	-	*	*	*
Haricot Beans	-	-	-	-	-	-
Chick Peas	-	-	-	0.74	0.16	21.78
Lentils	-	-	-	0.33	0.07	20.36
Vetch	-	-	-	0.80	0.18	22.07
Others	-	-	-	0.11	0.02	18.44
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	*	*	*
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	0.10	0.02	20.53
ALL CROPS	0.25	0.10	40.32	8.88	1.12	12.58

TABLE 4.12 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION  
FOR PRIVATE PEASANT HOLDINGS 1997/98(1990 E.C.)

Dire Dawa

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
CEREALS	0.01	-	22.59	1.74	0.19	11.20
Teff	-	-	-	*	*	*
Barely	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	-	-	-	0.05	0.02	38.39
Sorghum	0.01	-	32.31	1.68	0.19	11.21
Millet	-	-	-	-	-	-
Oats	-	-	-	-	-	-
PULSES	-	-	-	*	*	*
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	-	-	-	*	*	*
Chick Peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	-	-	-
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
ALL CROPS	0.01	-	22.59	1.81	0.21	11.57

TABLE 5.1

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

National

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
ILLITERATE	6,990.42	105.13	1.52	70.84	7.49	10.57	55.66	9.67	17.38	272.29	25.24	9.27	1,578.81	65.16	4.13
GRADES 1 - 3	1,437.63	38.91	2.71	26.71	3.95	14.80	12.80	2.35	18.34	68.76	7.74	11.26	406.09	22.58	5.56
GRADES 4 - 6	658.23	24.46	3.72	12.89	2.28	17.69	6.27	2.05	32.40	39.70	6.21	15.64	191.77	13.14	6.85
GRADES 7 - 8	299.30	18.29	6.11	7.18	1.76	24.51	3.32	1.43	43.18	19.98	2.74	13.73	89.75	7.96	8.86
GRADES 9 - 11	123.58	10.07	8.15	2.78	1.14	40.85	0.83	0.32	38.39	10.29	2.56	24.90	46.13	6.37	13.82
GRADES 12 COMPLETE	49.19	5.40	10.98	1.47	0.58	39.47	*	*	*	3.62	1.23	33.95	15.31	2.70	17.64
HIGHER EDUCATION	15.56	2.85	18.34	-	-	-	*	*	*	*	*	*	4.22	1.45	34.34
TOTAL	9,513.91	124.75	1.31	121.88	10.81	8.87	79.25	12.09	15.26	415.12	34.64	8.34	2,332.10	87.72	3.76

TABLE 5.2

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Tigre

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)	Estimate ( <sup>000</sup> HA)	S.E ( <sup>000</sup> )	C.V. (%)
ILLITERATE	473.53	25.99	5.49	9.65	4.35	45.02	1.39	0.45	32.44	7.96	1.54	19.41	115.40	13.50	11.70
GRADES 1 - 3	106.66	9.54	8.94	5.41	2.63	48.55	*	*	*	*	*	*	29.83	4.58	15.36
GRADES 4 - 6	19.67	3.41	17.34	*	*	*	-	-	-	*	*	*	6.38	1.69	26.43
GRADES 7 - 8	3.53	1.17	33.10	-	-	-	-	-	-	-	-	-	*	*	*
GRADES 9 - 11	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
GRADES 12 COMPLETE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	603.71	30.75	5.09	15.90	7.61	47.85	1.69	0.29	17.17	11.37	1.97	17.33	153.29	16.69	10.89

After

TABLE 5.3  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1977/98(1990 E.C.)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS AND APPLIED														
	Total			Improved Seed			Irrigation			Pesticide		Fertilizer			
	Estimate (1'000HA)	S.E. (1'000)	C.V. (%)	Estimate (1'000HA)	S.E. (1'000)	C.V. (%)	Estimate (1'000HA)	S.E. (1'000)	C.V. (%)	Estimate (1'000HA)	S.E. (1'000)	C.V. (%)	Estimate (1'000HA)	S.E. (1'000)	C.V. (%)
ILLITERATE	29.89	5.05	16.90	-	-	-	1.78	0.40	22.71	3.15	1.06	33.65	*	*	*
GRADES 1 - 3	1.69	0.58	34.00	-	-	-	-	-	-	*	*	*	*	*	*
GRADES 4 - 6	0.20	0.08	39.68	-	-	-	-	-	-	*	*	*	*	*	*
GRADES 7 - 8	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 12 COMPLETE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	31.83	5.16	16.22	-	-	-	1.78	0.40	22.71	3.50	1.10	31.57	*	*	*

Amara

TABLE 5.4  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1977/98(1990 E.C.)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS AND APPLIED														
	Total			Improved Seed			Irrigation			Pesticide		Fertilizer			
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
ILLITERATE	2,213.30	50.11	2.26	18.80	2.96	15.75	17.55	6.79	38.67	17.67	3.50	19.84	374.69	32.00	8.5%
GRADES 1 - 3	480.32	22.68	4.72	7.59	1.61	21.24	4.89	1.23	25.04	4.48	1.57	34.99	120.83	12.61	10.43
GRADES 4 - 6	106.47	9.02	8.47	*	*	*	*	*	*	*	*	*	22.11	3.66	16.57
GRADES 7 - 8	48.53	6.79	14.00	1.69	0.82	48.47	*	*	*	*	*	*	11.78	2.74	23.30
GRADES 9 - 11	14.91	4.51	30.25	-	-	-	-	-	-	-	-	-	4.07	1.58	38.87
GRADES 12 COMPLETE	5.68	1.94	34.19	-	-	-	-	-	-	-	-	-	*	*	*
HIGHER EDUCATION	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
TOTAL	2,870.81	50.54	1.76	29.73	3.51	11.82	26.15	8.71	33.31	24.20	3.50	14.45	555.78	39.31	7.34

TABLE 5.5

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Oromia

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
ILLITERATE	2,560.29	59.86	2.34	32.42	4.86	15.00	25.96	6.72	25.87	190.74	24.01	12.59	614.13	40.19	6.54
GRADES 1 - 3	536.35	24.52	4.57	9.37	2.31	24.63	4.60	1.90	41.40	46.38	6.70	14.45	147.40	14.52	9.85
GRADES 4 - 6	296.80	16.78	5.65	6.78	1.66	24.53	1.49	0.69	46.35	27.82	5.58	20.05	84.98	9.37	11.03
GRADES 7 - 8	145.04	13.78	9.50	5.32	1.55	29.22	*	*	*	13.63	2.39	17.54	41.08	5.48	13.35
GRADES 9 - 11	58.42	6.26	10.71	1.82	0.87	47.90	0.60	0.30	49.55	9.60	2.54	26.43	22.99	4.12	17.93
GRADES 12 COMPLETE	23.55	3.79	16.11	*	*	*	*	*	*	2.27	1.12	49.29	5.78	1.67	28.84
HIGHER EDUCATION	10.28	2.41	23.41	-	-	-	-	-	-	-	-	-	3.19	1.30	40.85
TOTAL	3,630.73	71.97	1.98	56.71	6.34	11.19	34.68	8.05	23.21	290.44	32.63	11.23	919.55	56.67	6.16

TABLE 5.6

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Somali

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)	Estimate ( <sup>1</sup> 000HA)	S.E ( <sup>1</sup> 000)	C.V. (%)
ILLITERATE	83.60	10.11	12.10	-	-	-	1.70	0.58	34.07	-	-	-	1.34	0.55	41.30
GRADES 1 - 3	6.60	1.85	27.97	-	-	-	0.13	0.06	47.97	-	-	-	*	*	*
GRADES 4 - 6	3.28	0.88	26.68	-	-	-	*	*	*	-	-	-	*	*	*
GRADES 7 - 8	0.53	0.20	36.56	-	-	-	*	*	*	-	-	-	*	*	*
GRADES 9 - 11	0.27	0.13	47.24	-	-	-	*	*	*	-	-	-	-	-	-
GRADES 12 COMPLETE	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
HIGHER EDUCATION	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
TOTAL	94.36	10.86	11.51	-	-	-	2.32	0.88	38.15	-	-	-	2.16	0.74	34.04

Beshergul-Guliz

TABLE 5.7  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98 (1990 E.C.)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	Total		Improved Seed		Irrigation		Pesticide		Fertilizer	
	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)
ILLITERATE	86.31	10.45	12.10	-	-	-	-	-	5.05	1.39
GRADES 1 - 3	17.74	2.14	12.05	-	-	-	-	-	* 0.75	27.51 37.85
GRADES 4 - 6	10.07	1.23	12.22	-	-	-	-	-	* 0.29	* 37.85
GRADES 7 - 8	2.55	0.50	19.49	-	-	-	-	-	* *	* *
GRADES 9 - 11	1.82	0.60	32.94	-	-	-	-	-	* *	* *
GRADES 12 COMPLETE HIGHER EDUCATION	*	*	*	-	-	-	-	-	-	-
TOTAL	119.77	12.97	10.85	-	-	-	-	-	6.65	1.71

TABLE 5.8  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98 (1990 E.C.)

(S.N.M.P.R)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	Total		Improved Seed		Irrigation		Pesticide		Fertilizer	
	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)	Estimate ('000H)	S.E. ('000)
ILLITERATE	1,442.22	65.74	4.56	8.45	5.08	1.25	51.95	6.67	654.83	37.69
GRADES 1 - 3	280.24	17.63	6.29	4.09	2.38	0.47	14.37	3.19	105.76	10.50
GRADES 4 - 6	216.06	14.89	6.89	2.72	1.55	0.74	10.23	2.42	76.18	8.27
GRADES 7 - 8	96.65	9.83	10.17	0.96	0.43	0.20	5.19	1.20	35.01	5.01
GRADES 9 - 11	46.69	6.42	13.76	*	*	*	*	*	18.42	4.58
GRADES 12 COMPLETE HIGHER EDUCATION	18.59	3.28	17.65	*	*	*	1.28	0.50	7.40	1.80
	3.26	1.26	38.54	-	-	-	*	39.19	* 24.34	* 24.34
TOTAL	2,103.71	83.75	3.98	16.53	2.43	14.70	9.64	2.05	700.23	51.51

Gardela

TABLE 5.9  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide		Fertilizer			
	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
ILLITERATE	16.25	1.78	10.96	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 1 - 3	4.65	1.24	26.69	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 4 - 6	4.08	0.69	16.85	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 7 - 8	2.03	0.51	25.35	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	0.89	0.27	30.01	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 12 COMPLETE HIGHER EDUCATION	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	27.97	3.66	13.08	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5.10  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

Harari

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide		Fertilizer			
	Estimate (1000A)	S.E. (1000)	C.V. (%)	Estimate (1000A)	S.E. (1000)	C.V. (%)	Estimate (1000A)	S.E. (1000)	C.V. (%)	Estimate (1000A)	S.E. (1000)	C.V. (%)	Estimate (1000A)	S.E. (1000)	C.V. (%)
ILLITERATE	9.75	0.40	4.12	-	-	-	-	-	-	-	-	-	3.96	0.36	9.02
GRADES 1 - 3	1.25	0.15	11.78	-	-	-	-	-	-	-	-	-	0.70	0.11	15.74
GRADES 4 - 6	0.42	0.07	17.06	-	-	-	-	-	-	-	-	-	0.26	0.05	19.73
GRADES 7 - 8	0.14	0.03	24.76	-	-	-	-	-	-	-	-	-	0.08	0.02	32.56
GRADES 9 - 11	0.08	0.02	28.63	-	-	-	-	-	-	-	-	-	0.06	0.02	34.90
GRADES 12 COMPLETE HIGHER EDUCATION	0.05	0.01	37.94	-	-	-	-	-	-	-	-	-	0.02	0.01	41.63
TOTAL	11.66	0.44	3.78	-	-	-	-	-	-	-	-	-	5.07	0.44	8.62

Addis Ababa

TABLE 5.11  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	Total		Improved Seed		Irrigation		Pesticide		Fertilizer	
	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)
	C.V. (%)		C.V. (%)		C.V. (%)		C.V. (%)		C.V. (%)	
ILLITERATE	3.54	0.49	13.77	-	-	-	-	-	2.41	0.35
GRADES 1 - 3	0.70	0.14	19.61	-	-	-	-	-	0.42	0.09
GRADES 4 - 6	0.60	0.15	25.32	-	-	-	-	-	0.34	0.09
GRADES 7 - 8	0.17	0.05	29.39	-	-	-	-	-	0.12	0.04
GRADES 9 - 11	0.11	0.05	28.23	-	-	-	-	-	0.08	0.03
GRADES 12 COMPLETE	0.18	0.07	35.85	-	-	-	-	-	0.13	0.05
HIGHER EDUCATION	0.09	0.04	44.60	-	-	-	-	-	*	36.50
TOTAL	5.39	0.77	14.35	-	-	-	-	-	3.50	0.54

Dire Dawa

TABLE 5.12  
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,  
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE PEASANT HOLDINGS  
1997/98(1990 E.C.)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	Total		Improved Seed		Irrigation		Pesticide		Fertilizer	
	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)
	C.V. (%)		C.V. (%)		C.V. (%)		C.V. (%)		C.V. (%)	
ILLITERATE	11.75	0.67	5.68	-	1.39	0.38	27.30	-	2.08	0.59
GRADES 1 - 3	1.43	0.31	21.42	-	*	*	*	-	0.20	0.09
GRADES 4 - 6	0.57	0.17	30.04	-	*	*	*	-	0.11	0.05
GRADES 7 - 8	0.11	0.05	44.80	-	*	*	*	-	*	*
GRADES 9 - 11	*	*	*	-	*	*	*	-	*	*
GRADES 12 COMPLETE	*	*	*	-	*	*	*	-	*	*
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	13.96	0.63	4.53	-	1.96	0.53	27.29	-	2.48	0.63

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1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

Trial	Control	MCI	AD
1	85	75	65
2	88	78	68
3	90	80	70
4	92	82	72
5	95	85	75



**APPENDIX III**  
**SURVEY QUESTIONNAIRES**

THE UNIVERSITY OF CHICAGO

CHICAGO, ILL.

JOB	1	2	3
ID	1	3	1

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

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

PAGE OF PAGES

JOB	1	2	3
ID	1	3	2

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

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

FORM ASS 91/2

**private holdings**

**For single stand crop only**

[illegible]

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

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

PART 2 CROP CONDITION

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

	NAME	SIGNATURE	DATE
ENUMERATOR			
SUPERVISOR			
BRANCH OFFICER			

**FORM ASS - 91/3A**

**PRIVATE HOLDINGS**

JOB ID		1	2	3	PART 1 - IDENTIFICATION PARTICULARS																								
		1	2	3	4		5		6		7		8		9		10		11		12		13						
REGION		ZONE		WEREDA		FARMERS' ASSOCIATION		ENUMERATION AREA		HOUSEHOLD ID NUMBER		HOLDER ID NUMBER		HOLDERS NAME		SEX	AGE	EDUCATIONAL STATUS		NUMBERS OF MEMBERS OF HOLDER'S HOUSEHOLD		TYPE OF AGRICULTURE							
																MALE - 1 FEMALE - 2		GRADE COMPLETED				CROP - 1 LIVESTOCK							

NOTES ON PART I COLUMN 11

ILLITERATE - 1	GRADE 7.5 COMPLETED - 4
INFORMAL EDUCATION	GRADE 9.11 COMPLETED - 5
OR GRADES 1-3 COMPLETED - 2	GRADE 12 COMPLETED - 6
GRADE 4-6 COMPLETED - 3	ABOVE 13 GRADE - 7

[illegible][illegible]

PART 4 - OTHER LAND USE					
JOB NO.	1	2	3	4	5
NO.	1	2	3	4	5
1	SERIAL NUMBER			TYPE OF LAND USE	
2	LINE NUMBER			CODE	
3	PARCEL			REMARKS	
4	FIELD				
5	27 28 29 30 31 32				
6	0 1				
7	0 2				
8	0 3				
9	0 4				
10	0 5				
11	0 6				

PART 5 - QUANTITY OF IMPROVED AND LOCAL SEEDS												
JOB NO.	1	2	3	4	5							
NO.	1	2	3	4	5							
1	SERIAL NUMBER			CROP NAME								
2	1 2 3			BY TYPE OF CROP								
3	4 5 6											
4	7 8 9											
5	10 11 12											
6	13 14 15											
7	16 17 18											
8	19 20 21											
9	22 23 24											
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84	247 248 249											
85	250 251 252											
86	253 254 255											
87	256 257 258											
88	259 260 261											
89	262 263 264											
90	265 266 267											
91	268 269 270											
92	271 272 273											
93	274 275 276											
94	277 278 279											
95	280 281 282											
96	283 284 285											
97	286 287 288											
98	289 290 291											
99	292 293 294											
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101	298 299 300											
102	301 302 303											
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105	310 311 312											
106	313 314 315											
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257	766 767 768											
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259	772 773 774											
260	775 776 777											
261	778 779 780											
262	781 782 783											
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264	787 788 789											
265	790 791 792											
266	793 794 795											
267	796 797 798											
268	799 800 801											
269	802 803 804											
270												



[illegible][illegible]

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

CENTRAL STATISTICAL AUTHORITY  
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM  
AGRICULTURAL SAMPLE SURVEY - 1991 E.C.

FORM ASS - 91/4A

**PRIVATE HOLDINGS**

PART 1 - IDENTIFICATION PARTICULARS														
JOB ID		1	2	3	4		5		6		7		8	
		1	2	3	4		5		6		7		8	
REGION		ZONE			WIZERA			FARMERS' ASSOCIATION			ENUMERATION AREA			

6		7		8		9		10		11		12		13		14		15	
HOUSEHOLD ID		HOLDER ID		HOLDER'S NAME		PARCEL		FIELD		TYPE OF CROP STAND IN THE FIELD OR LAND USE		SR. NO.		CROP NAME (NAME OF LAND USE)		CODE		PERCENTAGE SHARE OF AREA (IF CODE IS 1 IN COLUMN 11)	
NUMBER		NUMBER								PURE - 1 MIXED CROP - 2 OTHER LAND USE - 3									
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

**PART 2 - RESULTS OF AREA MEASUREMENTS**

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

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

SIZE	A-B		B-C		C		D		E		F		G																																																																																																																																																										
HEADING (°)	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106																																																																																																																																				
DISTANCE (M)	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106																																																																																																																																				
SIZE	H		I		J		K		L		M		N																																																																																																																																																										
HEADING (°)	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162																																																																																																																																				
DISTANCE (M)	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162																																																																																																																																				
SIZE	O		P		Q		R		S		T		U																																																																																																																																																										
HEADING (°)	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218																																																																																																															
DISTANCE (M)	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218																																																																																																															
HEADING (°)	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385

### PART 3 - FIELD AREA MEASUREMENT

CENTRAL STATISTICAL AUTHORITY  
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM  
AGRICULTURAL SAMPLE SURVEY - 1991 E.C.

FORM ASS - 9146

PRIVATE HOLDINGS

PART 1 - IDENTIFICATION PARTICULARS

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

HOUSEHOLD ID NUMBER	HOLDER ID NUMBER	HOLDER'S NAME	PARCEL	FIELD	TYPE OF CROP PLANTED BY THE FIELD OR LAND USE Fruit - 1 Shrub - 2 Cereals - 3 Others - 4	SL. NO.	CROP NAME (NAME OF LAND USE)	CODE	PERCENTAGE SHARE OF AREA OF CROP IN 1 OF CROP IN 2					
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

PART 2 - RESULTS OF AREA MEASUREMENTS

DATE OF MEASUREMENT	AREA IN SQUARE METERS			AREA IN LOCAL UNITS			IF AREA IS NOT MEASURED REASON	CODE												
DAY	MONTH	YEAR	NAME	CODE	AREA															
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

PART 3 - FIELD AREA MEASUREMENT

SIDE	A-B	B-C	C-D	D-E	E-F	F-G	G-H	H-I	I-J	J-K	K-L	L-M	M-N	N-O	O-P	P-Q	Q-R	R-S	S-T	T-U	U-V	V-W	W-X	X-Y	Y-Z
BEARING (°)	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
DISTANCE (M)	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
SIDE	H-I	I-J	J-K	K-L	L-M	M-N	N-O	O-P	P-Q	Q-R	R-S	S-T	T-U	U-V	V-W	W-X	X-Y	Y-Z	Z-A	A-B	B-C	C-D	D-E	E-F	F-G
BEARING (°)	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
DISTANCE (M)	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
SIDE	O-P	P-Q	Q-R	R-S	S-T	T-U	U-V	V-W	W-X	X-Y	Y-Z	Z-A	A-B	B-C	C-D	D-E	E-F	F-G	G-H	H-I	I-J	J-K	K-L	L-M	M-N
BEARING (°)	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
DISTANCE (M)	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200

ENUMERATOR	NAME	SIGNATURE	DATE
SUPERVISOR			
REGIONAL STAT. HEAD			

**FORM ASS - 91/5**

**PRIVATE HOLDINGS**

[illegible]

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

[illegible]

**NOTE: IN PART 2 COLUMN 3**

**ALL TEMPORARY CROPS  
ONE OR MORE TEMPORARY CROPS WITH MIXED STAND  
ONE OR MORE TEMPORARY AND PERMANENT CROPS WITH MIXED STAND  
WILL BE TRANSFERRED**

JOB	1	2	3
ID	1	5	4

[illegible]

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

CENTRAL STATISTICAL AUTHORITY  
NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM  
LIVESTOCK, POULTRY, BEEHIVES AND HONEY  
PRODUCTION - 1991 E.C

FORM ASS-91/6

PRIVATE HOLDINGS

JOB ID		PART 1 - IDENTIFICATION PARTICULARS																									
1		2		3		4		5		6		7		8		9		10		11		12		13			
REGION		ZONE		WEREDA		FARMERS' ASSOCIATION		ENUMERATION AREA		HOUSEHOLD ID NUMBER		HOLDER ID NUMBER		HOLDER'S NAME		SEX MALE - 1 FEM - 2		AGE		EDUCATIONAL STATUS (grade compl)		NUMBER OF MEMBERS OF HOLDER		TYPE OF HOLDING CROP - 1 LIVESTOCK - 2 BOTH - 3			
4		5		6		7		8		9		10		11		12		13		14		15		16		17	

PART 2 - CATTLE BY SEX, AGE AND PURPOSE

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

NOTES ON PART 1 COLUMN 11

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

NOTES

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

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

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

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

JOB NO.	1	2	3	4	5	6	7	8	9
TYPE	1	2	3	4	5	6	7	8	9
GRAND TOTAL	LESS THAN 3 YEARS	3 YEARS & ABOVE	LESS THAN 4 YEARS	4 YEARS & ABOVE	MAINLY FOR AGRICULTURAL PURPOSE	REMARKS			
27 28	29	30	31	32	33	34	35	36	37
0 1 HORSES	41	42	43	44	45	46	47	48	49
0 2 ASSES	50	51	52	53	54	55	56	57	58
0 3 MULES	59	60	61	62	63	64	65	66	67
0 4 CAMELS	68	69	70	71	72	73	74	75	76
TOTAL	77	78	79	80	81	82	83	84	85
MALE	86	87	88	89	90	91	92	93	94
FEMALE	95	96	97	98	99	100	101	102	103
TOTAL	104	105	106	107	108	109	110	111	112
MALE	113	114	115	116	117	118	119	120	121
FEMALE	122	123	124	125	126	127	128	129	130
TOTAL	131	132	133	134	135	136	137	138	139
MALE	140	141	142	143	144	145	146	147	148
FEMALE	149	150	151	152	153	154	155	156	157

PART 5 - NUMBER OF POULTRY

JOB NO.	1	2	3	4	5	6	7	8
TYPE	1	2	3	4	5	6	7	8
GRAND TOTAL	29	30	31	32	33	34	35	36
27 28	37	38	39	40	41	42	43	44
0 1 HORSES	45	46	47	48	49	50	51	52
0 2 ASSES	53	54	55	56	57	58	59	60
0 3 MULES	61	62	63	64	65	66	67	68
0 4 CAMELS	69	70	71	72	73	74	75	76
TOTAL	77	78	79	80	81	82	83	84
MALE	85	86	87	88	89	90	91	92
FEMALE	93	94	95	96	97	98	99	100

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

PART 6 - BEEHIVES AND HONEY PRODUCTION

1	2	3	4
BEEHIVES	TOTAL HONEY PRODUCED PER YEAR	FREQUENCY OF HONEY PRODUCTION	REMARKS
TRADITION	49 50 51 52 53 54 55 56 57	58 59 60 61 62 63 64 65 66 67	68 69 70 71 72 73 74 75 76 77
MODERN	78 79 80 81 82 83 84 85 86 87	88 89 90 91 92 93 94 95 96 97	98 99 100 101 102 103 104 105 106 107

NOTE - BEEHIVES (WITH BEES) REFER TO THE PERIOD YEKAATT 1/1991 - YEKAATT 1/1992  
(PERMANENTLY - PERMANENTLY) FROM WHICH HONEY WAS PRODUCED  
AT LEAST ONCE IN THE PERIOD.  
- IF HONEY WAS PRODUCED FROM THE BEEHIVES WITH IN THE REFERENCE PERIOD,  
IT WILL BE COUNTED EVEN IF IT IS WITHOUT BEES.

ENUMERATOR	NAME	SIGNATURE	DATE
SUPERVISOR			
REGIONAL STAT. HEAD			



CENTRAL STATISTICAL AUTHORITY  
NATIONAL INTEGRATED HOUSE HOLD SURVEY PROGRAM  
AGRICULTURAL SAMPLE SURVEY 1990 E.C

FORM ASS\_90 /7

private holdings

PART 1 - IDENTIFICATION PARTICULARS																											
JOB ID		1	2	3																							
1		1	8	5																							
1		2		3		4		5		6		7		8		9		10		11		12		13			
KILLIL		ZONE		WEREDA		FARMERS' ASSOCIATION		ENUMERATION AREA		HOUSEHOLD ID NUMBER (ASS*90/1 prt2 col1)		HOLDER ID NUMBER (ASS*91/1 prt2 col3)		HOLDER'S NAME		SEX M=1 F=2		AGE		EDUC. STATUS (grade compl)		NUMBER OF MEMBERS OF HOLDER'S HH.		TYPE OF AGRICULT CROP=1 LV.STO=2 BOTH=3			
4		5		6		7		8		9		10		11		12		13		14		15		16		17	

PART 2 - LIST OF FIELDS AND AGRICULTURAL PRACTICES (1990E.C. BELG SEASON)

1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17																			
LINE NO.		SERIAL NO. OF PARCEL		FIELD		CROP NAME TEMPORARY		CODE		TYPE OF SEED USE		USE OF IRRIG.		USE OF FERTILIZERS		IF YES		IF COMMERCIAL FERT.		QUANTITY USED		USE OF PESTICIDES		WAS CROP DAMAGED ?		IF YES		PERCENT DAMAGED		REMARKS																					
										IMPRVD=1 INDIGN.=2		YES=1 NO=2		NATURL=1 COMM=2 BOTH=3		UREA=1 DAP=2 BOTH=3		KG.		GRAM		YES=1 NO=2		YES=1 NO=2		REASON OF DAMAGE		CODE																							
27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50		51		52	
0	1																																																		
0	2																																																		
0	3																																																		
0	4																																																		
0	5																																																		
0	6																																																		
0	7																																																		
0	8																																																		
0	9																																																		
1	0																																																		

NOTES ON COL 11 ABOVE

ILLITERATE = 1  
GRADES 1-3 = 2  
GRADES 4-6 = 3  
GRADES 7-8 = 4  
GRADES 9-11 = 5  
GRADE 12 COMP. = 6  
ABOVE 12 GRADE = 7

NOTE: \* THIS FORM SHOULD BE FILLED OUT ONLY FOR TEMPORARY PURE STAND CROPS AND TEMPORARY WITH OTHER MIXED STAND CROPS.  
\*\* IN PART - 3 THE INFORMATION ABOUT AREA AND PRODUCTION SHOULD BE FILLED OUT IF AND ONLY IF THE TEMPORARY CROPS HARVESTED BEFORE SEPTEMBER 1, 1991 E.C

[illegible]

	NAME	SIGNATURE	DATE
ENUMERATOR			
SUPERVISOR			
BRANCH OFFICER			

[illegible]

