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CENTRAL STATISTICAL AUTHORITY

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CENTRAL STATISTICAL AUTHORITY
ADDIS ABABA*

**AGRICULTURAL SAMPLE SURVEY
1995/96 (1988 E.C.)**
VOLUME III
REPORT ON
AGRICULTURAL PRACTICES

(PRIVATE PEASANT HOLDINGS, MEHER SEASON)

*ADDIS ABABA
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REPORT ON
AGRICULTURAL PRACTICES

1. INTRODUCTION

Agriculture contributes a major part for the economy of Ethiopia. It contributes a significant amount to the Gross Domestic Product (GDP) and also the majority of the population in the country is engaged in it. The collection of reliable, comprehensive and timely statistical information in this sector is so imperative for the formulation of agricultural development plan and policy. However, it is becoming difficult to provide all kinds of agricultural information needed by planners and policy makers due to resource limitation.

The Central Statistical Authority (CSA) has been conducting Agricultural Sample Surveys on annual basis since 1980/81 (1973 E.C.) to produce some of the statistical data that can be used in planning and policy making activities. The survey was interrupted in 1992/93(1985 E.C.) and 1993/94(1986 E.C.) because during these two years the CSA was fully engaged in undertaking the preparatory activities for the 1994 Population and Housing Census. However, after completing the 1994 Population and Housing Census, the undertaking of annual agricultural survey was resumed in 1994/95 (1987 E.C.) and also conducted for the year 1995/96 (1988 E.C.).

This volume presents survey results on agricultural practices such as, use of improved seed, irrigation, application of pesticides and fertilizers of the private holdings. Also the reader is referred to Volume I of the same survey which is " Report on Area and Production of Major Crops; Private Holdings, Main Season, Addis Ababa, June, 1996." That volume presents in its appendices survey questionnaires; number of sampled EAs, number of EAs that

are actually covered and not covered in the survey; number of households planned to be covered and those actually covered in the survey for the purpose of agricultural practices (uses of improved seed, irrigation, pesticide and fertilizers), area and production of major crops and number of fields measured. Moreover, estimation procedures, standard errors and coefficient of variations for agricultural practices such as uses of improved seed, irrigation, pesticide and fertilizers during Main (Meher) season are presented in *Appendix I* of this report.

2. OBJECTIVES OF THE SURVEY.

The general objective of the agricultural sample survey was to collect basic quantitative information on the nation's agriculture that are considered to be essential for development planning and socio-economic policy formulation.

In particular, the objectives of the survey were to estimate the total cultivated land; total production and yield of major crops per hectare; cropland uses (temporary and permanent); quantity and cost of agricultural inputs by type; number of livestock and poultry by type, purpose, sex and age; number of beehives and honey production in the private peasant holdings at national and different reporting levels which are regions or group of zones.

3. COVERAGE AND CONTENT.

The 1995/96 (1988 E.C) annual agricultural sample survey was designed to cover the sedentary rural agricultural population in all regions of the country. Accordingly, a total of 54 zones and 367 weredas were covered in the survey. The areal coverage of the survey is given in the following table.

Table a. AREAL COVERAGE OF THE 1995/96 AGRICULTURAL SAMPLE SURVEY

REGION	NUMBER OF ZONES			NUMBER OF WEREDAS	
	TOTAL	COVERED BY THE SURVEY	NOT COVERED BY THE SURVEY	PLANNED TO BE COVERED BY THE SURVEY	COVERED BY THE SURVEY
TIGRAY ¹	5	4	1	35	34
AFAR ²	5	2	3	6	4
AMHARA	10	10	-	96	95
OROMIYA	12	12	-	148	144
SOMALIE ³	9	3	6	6	5
BENSHANGUL-GUMEZ	3	2	1	6	5
S.N.N.P.R.	16	16	-	72	69
GAMBELA	1	1	-	5	4
HARARI	1	1	-	1	1
A. ABABA ⁴	6	2	4	5	5
DIRE DAWA	1	1	-	1	1
TOTAL	69	54	15	381	367

Note

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

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

Moreover, for the survey 620 enumeration areas were selected to be covered in all regions. Nevertheless, during the data collection stage the survey succeeded to cover only 612 enumeration areas (EAs). For details see *Appendix II of Volume I* of the same survey. Furthermore, from each of the selected EAs a sample of 25 agricultural households were taken to represent the agricultural population in the sampled EA.

From these households, information on area under crops, production of major crops (temporary or annual), cropland utilisation, agricultural practices, crop damage, quantity and cost of agricultural inputs used, number of livestock and poultry by type, purpose, age and sex and number of beehives by type were collected. In addition, it was attempted for the second time to collect information on the total number of trees and number of yielding trees during the survey year (For details refer to survey questionnaires in *Appendix I of Volume I*).

This report, which is *Volume III* is one of the series of other reports and volumes of the 1995/96 annual agricultural sample survey. It presents results on agricultural practices such as uses of improved seed, irrigation, pesticide, fertilizers and rate of application of commercial fertilizers by type.

4. BASIC CONCEPTS AND DEFINITIONS.

In order to standardize the data, the same concepts and definitions should be applied during data collection. Hence, some of the 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 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 takes the major decision regarding the utilization of the available resources. He has technical and economic responsibility for the holding. He may operate the holding directly as an owner or as a manager. Under conditions of traditional agricultural holding the holder may be regarded as the person, who with or without the help of other, 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 utilisation of the products.

Holding: a holding is all the land and livestock kept which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone, or with others without regard to title, legal form, size or location.

Size of Holding: In this report size of holding is determined by total area under 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 provision for his own food or other essentials for living without combining with any other person to form part of a multi person household or

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

Temporary Crops: Temporary crops are those crops which are grown with a cycle of under one year, sometimes only a few months with a view to be sown anew or planted for further production after the harvest. Similarly, crops grown in rotation are also considered temporary crops¹ as these are destroyed when land is ploughed.

Permanent Crops: Crops which occupy land for a long period of time and are not planted for several years after each harvest are considered as permanent crops. All fruit trees (e.g. oranges, mandarins, apples, ...etc.) and trees used for beverages (like coffee, tea, ... etc.) are considered as permanent² crops. Permanent meadows and pastures, however, are excluded.

Fertilizer: refers to anything added to the soil intended to increase the amount of plant nutrients available for crop growth. Usually fertilizers are divided in to two parts, Natural and Commercial. Examples of Natural fertilizers are farmyard manure and wood ashes while commercial fertilizers are DAP (Di-Ammonium phosphate) and UREA (Ammonium Nitrate).

Note: 1. In this report, Other temporary includes tomato, carrot, cabbage, ...etc.

2. In this report also Other permanent includes sugarcane, gesho,...etc.

Pesticide: are chemicals useful for the mitigation, control or elimination of pests which are troublesome or harmful to crops. Here insecticides and herbicides are considered as pesticides.

Area Irrigated: refers to the practice where an area of land is purposely and actually provided with water, other than by rain, for improving 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 crop variety which gives a significant higher yield, better quality and/or better benefit compared to traditional varieties of seeds, and usually provided by Agricultural Inputs supply corporation (AISCO) in Ethiopia.

5. SAMPLE DESIGN.

A two stage stratified sample design was used for the 1995/96 (1988 E.C.) agricultural sample survey. In three regions, namely in Amhara, Oromiya and Southern Nations, Nationalities and Peoples' Region, group of contiguous zones were treated as strata/reporting levels of the survey results. In the remaining regions, the reporting levels were the regions themselves. The primary sampling units in all strata were Enumeration Areas (EAs). Agricultural households were the ultimate sampling units. The survey questionnaires were administered to all agricultural holders in the sampled agricultural households.

A fixed number of sample EAs was determined for each stratum/reporting level based on precision of estimates, population size of the stratum and cost considerations. The overall sample number of EAs in a stratum was proportionately allocated to zones/special weredas within the stratum to their population size. From within each zone/special wereda, sample EAs were selected with probability proportional to size, size being the total number of households of EAs as obtained from the 1994 census map work. From each sample EA, 25 agricultural households were picked systematically without replacement from a fresh list of agricultural/households. For agricultural practices of meher(main) season, information was collected from these selected 25 agricultural households. As noted above, all holders within these households were enumerated and the required data were collected from these holders.

A total of 620 EAs (1.1 % of the total agricultural EAs) in the country were planned to be covered by the survey. But 8 of the sampled EAs were closed due to various reasons and the survey covered 612 EAs effectively.

Estimation procedures of total agricultural variables and measure of precision are given in *Appendix I and II*.

6. FIELD ORGANIZATION.

CSA branch statistical office heads, field supervisors and enumerators were fully involved in the survey. Hence, 15 statistical branch office heads, about 140 field supervisors, each supervising 5 enumerators in most cases and about 651 enumerators (including reserve enumerators) stationed in each of the selected EAs, experts from head office, other support staff and about 62 drivers were involved in the operation.

For all enumerators the necessary survey equipment, such as compasses, protractors, rulers, measuring tapes, balance scales, poles, ropes, sample bags,...etc. were made available and to facilitate the field work about 62 vehicles were put on operation.

7. TRAINING OF FIELD STAFF.

At the outset all relevant materials, like equipment have been procured, questionnaires and instruction manuals were prepared and printed. Then the training program for the field staff was carried out in two stages. In the first stage, about 90 trainees, i.e. experts from the head office, branch statistical office heads and some of the field supervisors were given training for one week at the head office. Those trained in the first stage conducted similar training for about 140 field supervisors and about 651 enumerators for 10 days in all the 15 branch offices all over the country. During the training, the field staff were given detailed class room instruction on the objective and uses of the survey, concept and definitions of terms used, method of area measurement, method of crop cutting, interviewing procedures,... etc. The training sessions included thorough field practices with regard to data collection.

8. METHOD OF DATA COLLECTION.

The survey data were collected on questionnaires both by subjective and objective methods of data collection. Information on agricultural practices (application of fertilizer, pesticide, use of improved seed and irrigation), livestock, poultry and belg season information were collected subjectively by interviewing the holders in the sampled households. For these cases all selected households have been covered.

Moreover, the objective measurements were conducted for the selected households from each sampled EA in which all crop areas were physically measured using compasses and measuring tapes.

9. EDITING, CODING AND VERIFICATION.

The editing and coding instruction manuals were prepared and printed. Then an intensive training was given to the editor-coders for three days. About 20 editors were involved to accomplish the editing and coding tasks. In due course, two professional staffs were assigned to answer questions, clear doubts,...etc. so as to facilitate the editing and coding activity. In addition, the edited and coded data were checked by about 10 supervisors/verifiers. The verification was done on 100% basis.

10. DATA ENTRY, CLEANING AND PROCESSING.

About 40 data encoders have participated in the data entry activity on shift basis (20 in the morning and 20 in the afternoon). Unlike the previous years, the data was entered in personal computers using IMPS (Integrated Microcomputer Processing System) software. Then, the data entered was checked and cleaned by four regular staff. Finally, the data processing activity was also done by personal computers(PCs) to produce results which were noted out in the tabulation plan and this operation was performed by four programmers.

11. SURVEY RESULTS.

1. Area under Farm Management Practices:

This part deals with the total crop area on which the private peasant holders used farm *management practices* and these refer to practices that increase crop production and are mainly *uses of improved seed, irrigation, pesticide and fertilizer*. The results are summarized and presented below.

Table b : Summary of Area under Farm Management Practices

Type of Management Practice	Area Applied ('000 Hectare)
<i>Use of Improved Seed</i>	61.84
<i>Use of Irrigation</i>	84.64
<i>Use of Pesticide</i>	821.25
<i>Use of Fertilizer</i>	2839.91

1.1 Total Improved Seed Applied Area.

As indicated in Table 1.1, the total cultivated area of all crops is about 8687.13 thousand hectares. From this crop area, *improved seed* was applied only on 61.84 thousand hectares (0.71%). This indicates that the peasant holders applied largely the traditional seed rather than the improved ones, and this may have been actually due to less availability and high costs of the improved seed.

Out of the total area under *improved seed*, 52.27 thousand hectares was under temporary crops and 9.57 thousand hectares was under permanent crops.

1.2 Total Irrigated Area.

The total *irrigated area* at national level is 84.64 thousand hectares or 0.97% of the total area (See Summary *Table b*).

Out of the total *irrigated area* 77.16%, was under temporary crops and 22.84% was under permanent crops. Moreover, maize from temporary crops and chat from permanent crops had the largest proportion of *area irrigated* i.e. 25.77% and 8.65% respectively (Refer to Table 1.1).

1.3 Total Pesticide Applied Area.

It was mentioned above that the total cultivated land during the year 1995/96 meher season, was about 8687.13 thousand hectares out of this *pesticide* was applied on only 9.45% of the total crop land, i.e. 821.25 thousand hectares (See Summary *Table b*).

The application of *pesticides* to the temporary crops was estimated to be 770.30 thousand hectares or 93.80% while to the permanent crops it was only 50.96 thousand hectares or 6.20% of the total area under pesticide. Moreover, out of the total *pesticide* applied area, the largest proportion was reported under teff (42.22%) while the smallest proportion(0.75 hectare, almost 0.09%) was under lentils. (Refer to Table 1.1).

1.4 Total Fertilized Area.

Though fertilizer is one of the very important agricultural inputs used to facilitate the growth of crops and to increase productivity, only 2839.61 thousand hectares (32.69%) of the total cultivated land, was *fertilized* at national level (See Summary *Table b* above).

Out of the total *fertilized area*, 2659.48 thousand hectares was reported under temporary crops and the other 180.43 thousand hectares was under permanent crops. For details refer to 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 consolidated in the total estimates.

TABLE 1.1

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

National

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	6,652.55	76.58	49.69	80.35	55.05	65.04	720.31	87.71	2,466.92	86.87
Teff	2,097.40	24.14	10.05	16.25	4.49	5.30	346.74	42.22	1,094.87	38.55
Barely	825.54	9.50	**	**	1.40	1.65	50.70	6.17	242.48	8.54
Wheat	882.06	10.15	20.76	33.57	1.89	2.23	159.16	19.38	452.38	15.93
Maize	1,280.68	14.74	15.57	25.18	21.81	25.77	87.73	10.68	465.25	16.38
Sorghum	1,252.41	14.42	1.96	3.17	**	**	70.77	8.62	87.02	3.06
Millet	269.35	3.10	**	**	**	**	3.15	.38	103.71	3.65
Oats	45.11	.52	-	-	**	**	2.06	.25	21.21	.75
PULSES	904.39	10.41	**	**	5.30	6.26	29.16	3.55	101.21	3.56
Horse Beans	336.72	3.88	**	**	**	**	11.04	1.34	50.65	1.78
Field Peas	180.46	2.08	**	**	-	-	9.26	1.13	20.76	.73
Haricot Beans	101.17	1.16	**	**	**	**	5.17	.63	13.58	.48
Chick Peas	144.97	1.67	**	**	1.93	2.28	2.21	.27	7.01	.25
Lentils	65.12	.75	-	-	**	**	.75	.09	6.83	.24
Vetch	75.95	.87	**	**	**	**	**	**	2.38	.08
OILSEEDS	377.70	4.35	**	**	**	**	7.61	.93	22.87	.81
Neug	223.33	2.57	**	**	**	**	2.45	.30	4.72	.17
Lin Seed	112.72	1.30	-	-	**	**	.81	.10	3.64	.13
Rape seed	14.19	.16	-	-	-	-	.80	.10	**	**
Ground Nuts	13.26	.15	-	-	**	**	**	**	**	**
Sun Flower	4.78	.06	-	-	-	-	1.25	.15	**	**
Sesame	9.39	.11	**	**	-	-	**	**	-	-
Castor Bean	**	**	-	-	-	-	-	**	**	**
OTHERS	179.42	2.07	**	**	4.89	5.78	13.22	1.61	68.48	2.41
Fenugreek	13.90	.16	**	**	**	**	**	**	1.97	.07
Spices	45.50	.52	**	**	**	**	4.58	.56	17.68	.62
Potatoes	38.71	.45	**	**	**	**	2.33	.28	22.99	.81
Other Temporary	81.31	.94	**	**	2.25	2.66	**	**	25.84	.91
ALL TEMPORARY	8,114.06	93.40	52.27	84.52	65.31	77.16	770.30	93.80	2,659.48	93.65
Chat	86.76	1.00	-	-	7.32	8.65	6.24	.76	27.08	.95
Coffee	202.13	2.33	9.33	15.09	4.95	5.85	29.96	3.65	23.08	.81
Enset	223.81	2.58	-	-	**	**	8.53	1.04	119.28	4.20
Cotton	14.88	.17	-	-	**	**	1.59	.19	.74	.03
Tobaco	1.27	.01	**	**	-	-	**	**	.28	.01
Fruits	17.82	.21	**	**	2.75	3.25	2.96	.36	4.25	.15
Other Permanent	26.40	.30	**	**	3.40	4.02	1.66	.20	5.72	.20
TOTAL PERMANENT	573.07	6.60	9.57	15.48	19.33	22.84	50.95	6.20	180.43	6.35
ALL CROPS	8,687.13	100.00	61.84	100.00	84.64	100.00	821.25	100.00	2,839.91	100.00

FIG 1. ESTIMATES OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS, NATIONAL, 1995/96(1988 E.C.)

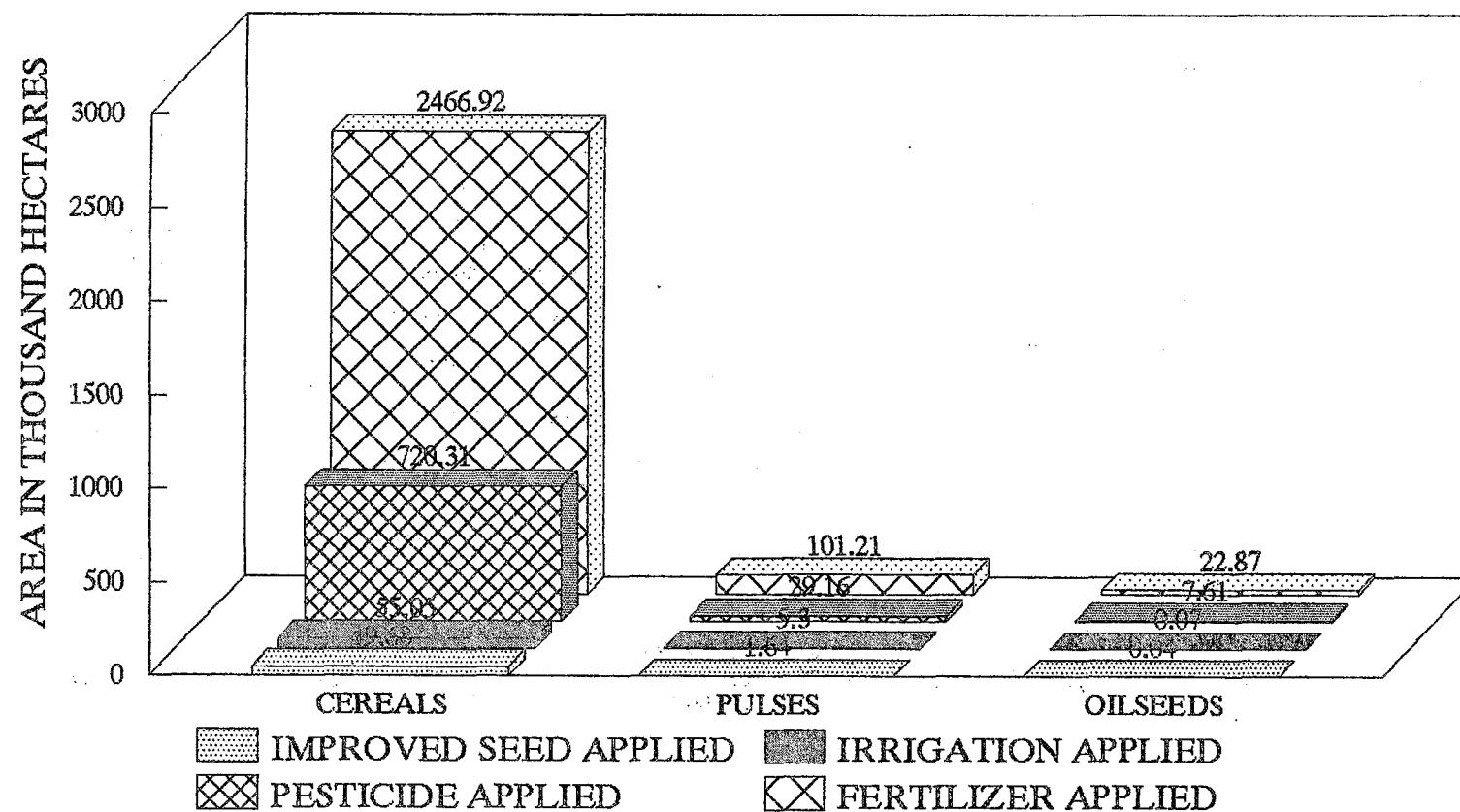


TABLE 1.2

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY REGION FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

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REGION	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
TIGRAY	483.82	5.57	3.76	6.08	11.19	13.21	22.34	2.72	97.39	3.43
AFAR	24.60	.28	-	-	.28	.33	4.15	.51	4.36	.15
AMHARA	3,010.68	34.66	13.71	22.17	25.25	29.81	103.24	12.57	751.12	26.45
OROMIYA	3,958.00	45.56	34.72	56.14	38.31	45.24	496.24	60.43	1,556.61	54.81
SOMALIE	69.32	.80	2.43	3.93	.62	.73	18.16	2.21	2.56	.09
BENSHANGUL-GUMUZ	98.72	1.14	.06	.10	.51	.60	1.28	.16	8.49	.30
S.N.N.P.R.	1,003.05	11.55	6.12	9.90	7.27	8.58	171.72	20.91	403.76	14.22
GAMBELA	14.11	.16	.59	.95	.06	.07	1.06	.13	-	-
HARARI	5.93	.07	.08	.13	.52	.61	.88	.11	4.28	.15
ADDIS ABABA	10.00	.12	.02	.03	.07	.08	.58	.07	8.67	.31
DIRE DAWA	8.92	.10	.35	.57	.61	.72	1.59	.19	2.67	.09
TOTAL	8,687.15	100.00	61.84	100.00	84.69	100.00	821.24	100.00	2,839.91	100.00

TABLE 1.3

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	436.75	90.27	3.75	99.73	**	**	21.37	95.62	93.00	95.49
Teff	87.88	18.16	1.30	34.57	**	**	**	**	18.52	19.02
Barely	87.35	18.05	-	-	**	**	7.18	32.13	21.27	21.84
Wheat	84.55	17.48	2.18	57.98	**	**	6.18	27.65	16.11	16.54
Maize	45.05	9.31	-	-	**	**	.66	2.95	22.21	22.81
Sorghum	96.14	19.87	**	**	**	**	**	**	9.26	9.51
Millet	35.78	7.40	-	-	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	36.91	7.63	-	-	**	**	**	**	4.01	4.12
Horse Beans	11.36	2.35	-	-	**	**	**	**	2.07	2.13
Field Peas	3.80	.79	-	-	-	-	**	**	**	**
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	8.81	1.82	-	-	-	-	-	-	**	**
Lentils	6.28	1.30	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	7.67	1.59	-	-	**	**	**	**	**	**
Neug	**	**	-	-	**	**	**	**	**	**
Lin Seed	5.13	1.06	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	**	**	-	-
Sesame	**	**	-	-	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.25	.26	**	**	**	**	**	**	**	**
Fenugreek	**	**	-	-	**	**	-	-	**	**
Spices	**	**	-	-	**	**	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	-	-
Other Temporary	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	482.58	99.75	3.76	100.00	**	**	22.34	99.96	97.30	99.91
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	**	**	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	**	**	**	**
ALL CROPS	483.81	100.00	3.76	100.00	**	**	22.35	100.00	97.39	100.00

TABLE 1.4
ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	22.54	91.66	-	-	**	**	**	**	**	**
Teff	4.82	19.60	-	-	-	-	**	**	**	**
Barely	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	-	-	-	-	**	**	-	-
Maize	4.50	18.30	-	-	**	**	**	**	**	**
Sorghum	13.16	53.52	-	-	**	**	**	**	**	**
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	.20	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.04	.16	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.01	.04	-	-	-	-	-	-	-	-
ALL TEMPORARY	24.38	99.15	-	-	**	**	**	**	**	**
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.21	.85	-	-	-	-	-	-	**	**
ALL CROPS	24.59	100.00	-	-	**	**	**	**	**	**

TABLE 1.5

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	2,380.35	79.06	13.42	97.96	14.87	58.87	81.66	79.09	703.56	93.67
Teff	882.28	29.30	3.52	25.69	2.61	10.33	26.17	25.35	360.48	47.99
Barely	295.85	9.83	**	**	**	**	5.81	5.63	46.40	6.18
Wheat	259.46	8.62	8.46	61.75	.78	3.09	11.97	11.59	64.06	8.53
Maize	289.69	9.62	.91	6.64	4.36	17.26	21.09	20.43	146.68	19.53
Sorghum	471.89	15.67	**	**	**	**	14.35	13.90	4.98	.66
Millet	173.19	5.75	**	**	**	**	2.27	2.20	80.23	10.68
Oats	7.99	.27	-	-	-	-	-	-	**	**
PULSES	381.99	12.69	**	**	**	**	11.16	10.81	20.18	2.69
Horse Beans	129.33	4.30	-	-	-	-	4.67	4.52	12.54	1.67
Field Peas	74.82	2.49	**	**	-	-	3.95	3.83	3.11	.41
Haricot Beans	26.57	.88	-	-	**	**	**	**	**	**
Chick Peas	81.40	2.70	**	**	**	**	**	**	**	**
Lentils	32.25	1.07	-	-	**	**	**	**	**	**
Vetch	37.62	1.25	-	-	**	**	**	**	.70	.09
OILSEEDS	165.97	5.51	-	-	**	**	3.66	3.54	9.07	1.21
Neug	111.60	3.71	-	-	-	-	1.50	1.45	4.00	.53
Lin Seed	42.02	1.40	-	-	-	-	.19	.18	1.43	.19
Rape seed	3.75	.12	-	-	-	-	.76	.74	2.80	.37
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	3.55	.12	-	-	-	-	1.11	1.08	**	**
Sesame	**	**	-	-	-	-	**	**	-	-
Castor Bean	**	**	-	-	-	-	-	-	.02	-
OTHERS	55.41	1.84	**	**	1.33	5.27	4.35	4.21	12.21	1.63
Fenugreek	4.82	.16	-	-	**	**	**	**	**	**
Spices	22.16	.74	**	**	.16	.63	2.72	2.63	3.96	.53
Potatoes	14.67	.49	**	**	**	**	1.05	1.02	6.44	.86
Other Temporary	13.76	.46	**	**	.24	.95	**	**	1.75	.23
ALL TEMPORARY	2,983.72	99.10	13.55	98.91	19.68	77.91	100.83	97.66	745.02	99.19
Chat	**	**	-	-	**	**	.09	.09	**	**
Coffee	5.12	.17	**	**	2.17	8.59	.74	.72	2.02	.27
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	.87	.84	**	**
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	1.68	.06	**	**	.77	3.05	.06	.06	**	**
Other Permanent	9.37	.31	**	**	1.18	4.67	.66	.64	2.62	.35
TOTAL PERMANENT	26.99	.90	**	**	5.58	22.09	2.42	2.34	6.11	.81
ALL CROPS	3,010.71	100.00	13.70	100.00	25.26	100.00	103.25	100.00	751.13	100.00

TABLE 1.5.1

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

North and South Gonder Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	726.45	77.94	**	**	1.38	28.57	24.45	68.64	103.20	94.38
Teff	252.77	27.12	**	**	**	**	3.99	11.20	56.71	51.87
Barely	74.93	8.04	**	**	**	**	2.83	7.94	.96	.88
Wheat	40.08	4.30	**	**	**	**	2.65	7.44	1.80	1.65
Maize	70.07	7.52	**	**	**	**	9.43	26.47	20.97	19.18
Sorghum	213.35	22.89	**	**	-	-	4.70	13.19	1.55	1.42
Millet	75.02	8.05	**	**	**	**	.85	2.39	21.21	19.40
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	107.31	11.51	-	-	**	**	6.89	19.34	.28	.26
Horse Beans	31.76	3.41	-	-	-	-	3.32	9.32	.28	.26
Field Peas	19.87	2.13	-	-	-	-	**	**	-	-
Haricot Beans	12.25	1.31	-	-	-	-	**	**	-	-
Chick Peas	**	**	-	-	**	**	**	**	-	-
Lentils	3.63	.39	-	-	**	**	-	-	-	-
Vetch	8.63	.93	-	-	**	**	-	-	-	-
OILSEEDS	64.78	6.95	-	-	-	-	1.07	3.00	.45	.41
Neug	51.24	5.50	-	-	-	-	**	**	.41	.37
Lin Seed	8.03	.86	-	-	-	-	.11	.31	-	-
Rape seed	**	**	-	-	-	-	.04	.11	.04	.04
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	1.18	.13	-	-	-	-	.38	1.07	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	22.67	2.43	**	**	**	**	1.93	5.42	3.34	3.05
Fenugreek	**	**	-	-	**	**	-	-	-	-
Spices	12.33	1.32	**	**	**	**	1.03	2.89	1.30	1.19
Potatoes	6.72	.72	-	-	-	-	.81	2.27	1.90	1.74
Other Temporary	2.12	.23	**	**	**	**	.09	.25	.14	.13
ALL TEMPORARY	921.21	98.84	**	**	**	**	34.34	96.41	107.27	98.11
Chat	.09	.01	-	-	-	-	.04	.11	.05	.05
Coffee	1.22	.13	-	-	**	**	.46	1.29	.69	.63
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	.37	1.04	.06	.05
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	.05	.05
Other Permanent	4.38	.47	**	**	**	**	.41	1.15	1.22	1.12
TOTAL PERMANENT	10.84	1.16	**	**	**	**	1.28	3.59	2.07	1.89
ALL CROPS	932.05	100.00	**	**	4.83	100.00	35.62	100.00	109.34	100.00

TABLE 1.5.2

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

East, West Gojam and Agewawi Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	858.69	79.79	3.88	99.23	**	**	13.80	66.09	491.44	94.70
Teff	399.40	37.11	**	**	**	**	**	**	251.28	48.42
Barely	84.04	7.81	-	-	**	**	**	**	30.31	5.84
Wheat	66.17	6.15	**	**	**	**	**	**	30.26	5.83
Maize	171.32	15.92	.76	19.44	**	**	7.96	38.12	120.66	23.25
Sorghum	41.88	3.89	-	-	-	-	**	**	**	**
Millet	94.90	8.82	-	-	-	-	**	**	58.39	11.25
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	108.39	10.07	-	-	**	**	**	**	9.06	1.75
Horse Beans	34.86	3.24	-	-	-	-	**	**	6.62	1.28
Field Peas	23.66	2.20	-	-	-	-	**	**	1.80	.35
Haricot Beans	12.05	1.12	-	-	**	**	**	**	**	**
Chick Peas	19.18	1.78	-	-	**	**	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	18.32	1.70	-	-	**	**	**	**	**	**
OILSEEDS	77.82	7.23	-	-	-	-	1.99	9.53	8.54	1.65
Neug	55.83	5.19	-	-	-	-	**	**	**	**
Lin Seed	17.20	1.60	-	-	-	-	-	-	**	**
Rape seed	3.61	.34	-	-	-	-	.72	3.45	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	**	**	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	**	**
OTHERS	24.52	2.28	**	**	**	**	**	**	8.03	1.55
Fenugreek	**	**	-	-	-	-	.05	.24	**	**
Spices	7.45	.69	-	-	**	**	1.65	7.90	2.25	.43
Potatoes	7.72	.72	**	**	**	**	**	**	4.38	.84
Other Temporary	8.92	.83	-	-	**	**	**	**	1.39	.27
ALL TEMPORARY	1,069.42	99.37	3.90	99.74	5.75	92.74	20.08	96.17	517.07	99.64
Chat	**	**	-	-	**	**	**	**	**	**
Coffee	**	**	**	**	**	**	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	**	**	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	**	**	**	**
Other Permanent	2.87	.27	-	-	.27	4.35	.22	1.05	1.18	.23
TOTAL PERMANENT	6.77	.63	**	**	.45	7.26	.80	3.83	1.88	.36
ALL CROPS	1,076.19	100.00	3.91	100.00	6.20	100.00	20.88	100.00	518.95	100.00

TABLE 1.5.3
ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

North Wolo and Waghamra Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	219.86	80.25	1.23	89.78	**	**	11.86	86.89	2.83	84.73
Teff	73.84	26.95	**	**	**	**	7.81	57.22	**	**
Barely	56.32	20.56	**	**	**	**	2.16	15.82	**	**
Wheat	36.89	13.47	**	**	**	**	.89	6.52	**	**
Maize	5.71	2.08	**	**	**	**	.25	1.83	.15	4.49
Sorghum	44.70	16.32	-	-	**	**	.75	5.49	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	43.38	15.83	**	**	**	**	1.23	9.01	.18	5.39
Horse Beans	12.91	4.71	**	**	**	**	.28	2.05	.09	2.69
Field Peas	14.36	5.24	-	-	-	-	.78	5.71	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	8.22	3.00	**	**	-	-	**	**	**	**
Lentils	5.53	2.02	-	-	-	-	**	**	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	6.66	2.43	-	-	**	**	**	**	**	**
Neug	.51	.19	-	-	-	-	**	**	-	-
Lin Seed	4.91	1.79	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	**	**	**	**
Sesame	**	**	-	-	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.51	.92	-	-	.05	.60	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-
Spices	.23	.08	-	-	.03	.36	**	**	**	**
Potatoes	**	**	**	**	**	**	-	-	**	**
Other Temporary	**	**	**	**	**	**	-	-	**	**
ALL TEMPORARY	272.41	99.43	1.25	91.24	**	**	13.54	99.19	3.19	95.51
Chat	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	**	**	**	**	**	**
Enset	-	-	-	-	**	**	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	**	**	**	**
Other Permanent	**	**	**	**	**	**	**	**	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	**
ALL CROPS	273.96	100.00	1.37	100.00	**	**	13.65	100.00	3.34	100.00

TABLE 1.5.4

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

South Wolo, Oromia and North Shewa Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	575.36	78.98	**	**	**	**	31.54	95.29	106.06	88.75
Teff	156.28	21.45	**	**	**	**	10.20	30.82	51.53	43.12
Barely	80.57	11.06	-	-	-	-	**	**	13.87	11.61
Wheat	116.31	15.97	**	**	**	**	**	**	31.69	26.52
Maize	42.59	5.85	**	**	**	**	**	**	4.90	4.10
Sorghum	171.96	23.60	-	-	**	**	8.38	25.32	3.21	2.69
Millet	**	**	-	-	-	-	**	**	**	**
Oats	5.01	.69	-	-	**	**	-	-	**	**
PULSES	122.93	16.87	**	**	-	-	1.13	3.41	10.65	8.91
Horse Beans	49.81	6.84	-	-	-	-	.72	2.18	**	**
Field Peas	16.93	2.32	**	**	-	-	.38	1.15	**	**
Haricot Beans	1.89	.26	-	-	-	-	**	**	**	**
Chick Peas	22.84	3.14	-	-	-	-	-	-	**	**
Lentils	22.77	3.13	-	-	-	-	-	-	**	**
Vetch	8.69	1.19	-	-	-	-	-	-	**	**
OILSEEDS	16.70	2.29	-	-	**	**	.16	.48	**	**
Neug	**	**	-	-	-	-	**	**	**	**
Lin Seed	11.88	1.63	-	-	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	**	**	-	-
Castor Bean	**	**	-	-	**	**	-	-	**	**
OTHERS	5.69	.78	-	-	**	**	.05	.15	.72	.60
Fenugreek	**	**	-	-	**	**	-	-	**	**
Spices	2.15	.30	-	-	**	**	**	**	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	1.82	.25	-	-	**	**	**	**	.14	.12
ALL TEMPORARY	720.68	98.93	**	**	**	**	32.88	99.34	117.47	98.30
Chat	**	**	-	-	**	**	**	**	**	**
Coffee	2.38	.33	-	-	**	**	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	**	**	**	**
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	1.54	.21	-	-	.27	4.59	**	**	.19	.16
TOTAL PERMANENT	7.83	1.07	**	**	**	**	.22	.66	**	**
ALL CROPS	728.51	100.00	**	**	**	**	33.10	100.00	119.50	100.00

TABLE 1.6

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	3,034.03	76.66	26.80	77.21	**	**	459.63	92.62	1,416.14	90.98
Teff	941.16	23.78	**	**	**	**	253.09	51.00	623.00	40.02
Barely	384.67	9.72	**	**	**	**	34.72	7.00	156.69	10.07
Wheat	469.99	11.87	10.10	29.10	**	**	103.84	20.93	320.69	20.60
Maize	699.62	17.68	10.38	29.90	**	**	38.73	7.80	227.99	14.65
Sorghum	452.11	11.42	**	**	**	**	26.88	5.42	51.57	3.31
Millet	49.68	1.26	-	-	-	-	**	**	15.73	1.01
Oats	36.80	.93	-	-	-	-	2.02	.41	20.47	1.32
PULSES	390.45	9.86	**	**	**	**	12.16	2.45	55.85	3.59
Horse Beans	154.56	3.91	-	-	-	-	4.98	1.00	27.01	1.74
Field Peas	79.19	2.00	-	-	-	-	**	**	13.28	.85
Haricot Beans	52.62	1.33	**	**	**	**	2.31	.47	6.60	.42
Chick Peas	47.97	1.21	**	**	**	**	**	**	**	**
Lentils	25.26	.64	-	-	-	-	**	**	**	**
Vetch	30.85	.78	**	**	**	**	-	-	**	**
OILSEEDS	191.38	4.84	**	**	**	**	3.51	.71	13.09	.84
Neug	103.08	2.60	**	**	-	-	**	**	**	**
Lin Seed	65.06	1.64	-	-	**	**	**	**	**	**
Rape seed	**	**	-	-	-	-	**	**	**	**
Ground Nuts	**	**	-	-	-	-	**	**	**	**
Sun Flower	**	**	-	-	-	-	**	**	**	**
Sesame	1.43	.04	-	-	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	59.87	1.51	**	**	2.44	6.37	1.47	.30	23.64	1.52
Fenugreek	8.84	.22	**	**	-	-	**	**	1.84	.12
Spices	7.14	.18	-	-	**	**	.25	.05	2.98	.19
Potatoes	**	**	-	-	**	**	**	**	**	**
Other Temporary	27.06	.68	**	**	1.22	3.18	.82	.17	7.96	.51
ALL TEMPORARY	3,675.73	92.87	28.85	83.12	**	**	476.77	96.08	1,508.72	96.92
Chat	60.50	1.53	-	-	5.17	13.50	3.96	.80	16.95	1.09
Coffee	130.53	3.30	5.83	16.80	**	**	11.13	2.24	2.07	.13
Enset	74.24	1.88	-	-	**	**	**	**	26.89	1.73
Cotton	**	**	-	-	-	-	-	-	-	-
Tobaco	.86	.02	-	-	-	-	.01	-	.05	-
Fruits	7.02	.18	**	**	.64	1.67	1.62	.33	.65	.04
Other Permanent	8.95	.23	-	-	**	**	.84	.17	1.29	.08
TOTAL PERMANENT	282.27	7.13	5.86	16.88	8.96	23.39	19.47	3.92	47.90	3.08
ALL CROPS	3,958.00	100.00	34.71	100.00	**	**	496.24	100.00	1,556.62	100.00

TABLE 1.6.1

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

East and West Welega Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	510.66	76.32	2.81	65.35	**	**	6.17	71.49	192.52	95.52
Teff	163.16	24.39	**	**	-	-	**	**	104.74	51.97
Barely	28.44	4.25	-	-	**	**	-	-	3.43	1.70
Wheat	28.07	4.20	-	-	-	-	**	**	4.20	2.08
Maize	177.15	26.48	2.11	49.07	**	**	4.91	56.89	58.00	28.78
Sorghum	71.51	10.69	-	-	**	**	.48	5.56	6.90	3.42
Millet	41.53	6.21	-	-	-	-	**	**	15.25	7.57
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	39.33	5.88	-	-	-	-	.42	4.87	3.94	1.95
Horse Beans	20.30	3.03	-	-	-	-	**	**	2.44	1.21
Field Peas	10.65	1.59	-	-	-	-	**	**	.90	.45
Haricot Beans	7.12	1.06	-	-	-	-	.03	.35	.53	.26
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	58.25	8.71	-	-	-	-	**	**	**	**
Neug	52.85	7.90	-	-	-	-	**	**	**	**
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	**	**	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-
OTHERS	9.97	1.49	.06	1.40	**	**	**	**	3.83	1.90
Fenugreek	.34	.05	-	-	-	-	**	**	**	**
Spices	2.75	.41	-	-	**	**	**	**	1.52	.75
Potatoes	1.72	.26	-	-	-	-	.07	.81	.89	.44
Other Temporary	5.16	.77	.06	1.40	.23	38.98	.26	3.01	1.37	.68
ALL TEMPORARY	618.21	92.40	2.87	66.74	**	**	7.10	82.27	200.66	99.56
Chat	.90	.13	-	-	**	**	**	**	**	**
Coffee	46.24	6.91	**	**	**	**	1.07	12.40	**	**
Enset	.30	.04	-	-	-	-	**	**	**	**
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	.39	.06	-	-	-	-	-	-	**	**
Fruits	1.68	.25	**	**	**	**	**	**	.20	.10
Other Permanent	1.32	.20	-	-	**	**	**	**	.26	.13
TOTAL PERMANENT	50.85	7.60	**	**	**	**	1.53	17.73	.89	.44
ALL CROPS	669.06	100.00	4.30	100.00	**	**	8.63	100.00	201.55	100.00

TABLE 1.6.2
ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

Ilubabor and Jimma Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	432.58	78.52	**	**	**	**	49.74	94.01	132.34	93.22
Teff	148.40	26.94	**	**	-	-	38.82	73.37	76.13	53.62
Barely	17.55	3.19	**	**	-	-	**	**	**	**
Wheat	11.89	2.16	-	-	-	-	**	**	**	**
Maize	168.90	30.66	**	**	**	**	6.05	11.43	45.92	32.34
Sorghum	77.60	14.09	-	-	-	-	**	**	4.79	3.37
Millet	7.39	1.34	-	-	-	-	**	**	**	**
Oats	**	**	-	-	-	-	**	**	**	**
PULSES	32.16	5.84	**	**	-	-	**	**	2.28	1.61
Horse Beans	18.12	3.29	-	-	-	-	**	**	.94	.66
Field Peas	6.60	1.20	-	-	-	-	**	**	1.13	.80
Haricot Beans	5.30	.96	**	**	-	-	-	-	.07	.05
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	5.76	1.05	-	-	-	-	**	**	**	**
Neug	3.67	.67	-	-	-	-	**	**	**	**
Lin Seed	1.89	.34	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	7.76	1.41	**	**	-	-	.23	.43	2.21	1.56
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	1.28	.23	-	-	-	-	**	**	.24	.17
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	6.23	1.13	**	**	-	-	**	**	1.97	1.39
ALL TEMPORARY	478.26	86.81	2.82	65.43	**	**	50.30	95.07	137.10	96.57
Chat	4.94	.90	-	-	**	**	**	**	1.09	.77
Coffee	57.51	10.44	1.14	34.11	**	**	1.77	3.35	1.12	.79
Enset	7.50	1.36	-	-	**	**	**	**	2.29	1.61
Cotton	**	**	-	-	-	-	-	-	-	-
Tobaco	**	**	-	-	-	-	.01	.02	**	**
Fruits	2.23	.40	**	**	-	-	.44	.83	.31	.22
Other Permanent	.37	.07	-	-	**	**	**	**	**	**
TOTAL PERMANENT	72.67	13.19	1.49	34.57	**	**	2.61	4.93	4.87	3.43
ALL CROPS	550.93	100.00	4.31	100.00	**	**	52.91	100.00	141.97	100.00

TABLE 1.6.3
ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

North and West Shewa Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	752.58	78.39	2.72	80.24	**	**	114.60	94.91	331.11	92.89
Teff	307.63	32.04	**	**	**	**	76.69	63.52	196.04	55.00
Barely	163.56	17.04	**	**	-	-	12.23	10.13	39.36	11.04
Wheat	139.59	14.54	2.25	66.37	**	**	21.76	18.02	75.98	21.32
Maize	43.89	4.57	-	-	**	**	**	**	15.62	4.38
Sorghum	95.89	9.99	-	-	**	**	**	**	**	**
Millet	**	**	-	-	-	-	**	**	**	**
Oats	1.87	.19	-	-	-	-	**	**	**	**
PULSES	126.91	13.22	**	**	**	**	4.52	3.74	7.52	2.11
Horse Beans	52.60	5.48	-	-	-	-	2.83	2.34	3.62	1.02
Field Peas	20.29	2.11	-	-	-	-	1.32	1.09	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	25.90	2.70	**	**	**	**	**	**	**	**
Lentils	10.90	1.14	-	-	-	-	**	**	.83	.23
Vetch	17.18	1.79	**	**	**	**	-	-	**	**
OILSEEDS	58.26	6.07	.03	.88	-	-	1.31	1.08	**	**
Neug	38.67	4.03	.03	.88	-	-	**	**	**	**
Lin Seed	14.80	1.54	-	-	-	-	**	**	-	-
Rape seed	**	**	-	-	-	-	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.60	.48	-	-	**	**	**	**	1.78	.50
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	**	**	**	**	**	**
Potatoes	.19	.02	-	-	**	**	-	-	**	**
Other Temporary	1.55	.16	-	-	**	**	**	**	**	**
ALL TEMPORARY	942.35	98.16	3.38	99.71	**	**	120.57	99.86	340.68	95.57
Chat	**	**	-	-	**	**	**	**	**	**
Coffee	**	**	**	**	**	**	**	**	**	**
Enset	**	**	-	-	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	1.29	.13	-	-	**	**	**	**	.23	.06
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	**
ALL CROPS	960.06	100.00	3.39	100.00	4.03	100.00	120.74	100.00	356.46	100.00

TABLE 1.6.4

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND **EIR
 PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
 1995/96(1988 E.C.)

East Shewa, Arsi, Bale and Borena Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	1,069.62	75.84	16.63	81.04	**	**	254.41	93.81	704.89	90.78
Teff	307.05	21.77	**	**	-	-	136.82	50.45	242.49	31.23
Barely	166.20	11.78	**	**	-	-	21.43	7.90	110.09	14.18
Wheat	285.77	20.26	**	**	-	-	80.23	29.58	237.16	30.54
Maize	220.68	15.65	**	**	**	**	13.48	4.97	88.43	11.39
Sorghum	57.12	4.05	-	-	-	-	**	**	6.66	.86
Millet	**	**	-	-	-	-	-	-	**	**
Oats	32.45	2.30	-	-	-	-	**	**	19.88	2.56
PULSES	171.12	12.13	**	**	**	**	**	**	39.66	5.11
Horse Beans	55.67	3.95	-	-	**	**	**	**	**	**
Field Peas	40.57	2.88	-	-	-	-	**	**	8.86	1.14
Haricot Beans	29.03	2.06	-	-	-	-	**	**	**	**
Chick Peas	**	**	**	**	-	-	**	**	**	**
Lentils	**	**	-	-	-	-	**	**	**	**
Vetch	**	**	**	**	-	-	-	-	**	**
OILSEEDS	58.56	4.15	-	-	-	-	**	**	**	**
Neug	**	**	-	-	-	-	**	**	**	**
Lin Seed	43.40	3.08	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	**	**	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	26.22	1.86	**	**	**	**	**	**	**	**
Fenugreek	5.67	.40	**	**	-	-	-	-	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	**	**	-	-	**	**	**	**	**	**
Other Temporary	6.17	.44	-	-	**	**	**	**	2.17	.28
ALL TEMPORARY	1,325.52	93.98	17.90	87.23	**	**	259.95	95.85	765.08	98.53
Chat	**	**	-	-	**	**	**	**	**	**
Coffee	**	**	**	**	**	**	**	**	**	**
Enset	51.73	3.67	-	-	**	**	**	**	**	**
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	**	**	-	-	**	**
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	5.45	.39	-	-	**	**	**	**	**	**
TOTAL PERMANENT	84.85	6.02	**	**	**	**	**	**	**	**
ALL CROPS	1,410.37	100.00	20.52	100.00	**	**	271.20	100.00	776.51	100.00

TABLE 1.6.5
ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

East and West Harerge Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	268.59	73.07	1.88	86.24	**	**	34.72	81.12	55.29	69.03
Teff	14.92	4.06	**	**	**	**	.31	.72	**	**
Barely	8.92	2.43	**	**	**	**	.19	.44	.98	1.22
Wheat	4.67	1.27	-	-	-	-	**	**	-	-
Maize	89.00	24.21	**	**	**	**	13.09	30.58	20.03	25.01
Sorghum	149.99	40.80	**	**	**	**	21.05	49.18	29.77	37.17
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	**	**	**	**	**	**
PULSES	20.95	5.70	-	-	**	**	1.70	3.97	2.44	3.05
Horse Beans	7.86	2.14	-	-	-	-	**	**	-	-
Field Peas	1.08	.29	-	-	-	-	**	**	**	**
Haricot Beans	11.14	3.03	-	-	**	**	1.59	3.71	**	**
Chick Peas	.32	.09	-	-	-	-	**	**	**	**
Lentils	.55	.15	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	**	**	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	.30	.08	-	-	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	**	**	**	**
Ground Nuts	**	**	-	-	-	-	**	**	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-
OTHERS	11.30	3.07	-	-	**	**	**	**	3.01	3.76
Fenugreek	.73	.20	-	-	-	-	**	**	**	**
Spices	**	**	-	-	**	**	-	-	**	**
Potatoes	2.27	.62	-	-	**	**	**	**	**	**
Other Temporary	7.94	2.16	-	-	**	**	**	**	1.68	2.10
ALL TEMPORARY	311.41	84.72	1.88	86.24	**	**	38.87	90.82	65.16	81.36
Chat	48.83	13.28	-	-	4.89	15.32	3.55	8.29	14.35	17.92
Coffee	6.30	1.71	**	**	**	**	.36	.84	.54	.67
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.49	.13	-	-	**	**	**	**	**	**
Other Permanent	**	**	-	-	**	**	**	**	**	**
TOTAL PERMANENT	56.17	15.28	**	**	6.91	21.65	3.93	9.18	14.93	18.64
ALL CROPS	367.58	100.00	2.18	100.00	**	**	42.80	100.00	80.09	100.00

TABLE 1.7

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

Somalie

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	59.31	85.55	**	**	**	**	17.04	93.83	**	**
Teff	**	**	-	-	-	-	**	**	-	-
Barely	4.23	6.10	-	-	-	-	**	**	**	**
Wheat	5.22	7.53	-	-	-	-	**	**	**	**
Maize	**	**	**	**	**	**	5.60	30.84	**	**
Sorghum	**	**	**	**	**	**	10.78	59.36	.30	11.72
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	.31	.45	-	-	-	-	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.23	1.77	-	-	**	**	**	**	**	**
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	**	**	**	**	**	**
Other Temporary	1.06	1.53	-	-	-	-	**	**	-	-
ALL TEMPORARY	60.93	87.88	**	**	**	**	17.18	94.60	**	**
Chat	8.39	12.10	-	-	**	**	.98	5.40	**	**
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	8.40	12.12	-	-	**	**	.98	5.40	**	**
ALL CROPS	69.33	100.00	**	**	**	**	18.16	100.00	**	**

TABLE 1.8

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	81.29	82.31	**	**	**	**	1.22	95.31	7.33	86.44
Teff	16.15	16.35	-	-	-	-	-	-	**	**
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	20.55	20.81	**	**	**	**	**	**	**	**
Sorghum	35.07	35.51	**	**	-	-	**	**	2.02	23.82
Millet	7.15	7.24	-	-	-	-	**	**	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	3.78	3.83	-	-	-	-	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	10.81	10.95	**	**	-	-	**	**	**	**
Neug	7.81	7.91	-	-	-	-	-	-	**	**
Lin Seed	.12	.12	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	**	**
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	**	**
Sesame	**	**	**	**	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	**	**
OTHERS	.85	.86	-	-	-	-	**	**	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	.42	.43	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	.32	.32	-	-	-	-	**	**	**	**
ALL TEMPORARY	96.73	97.94	**	**	**	**	1.28	100.00	8.04	94.81
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	.04	.04	-	-	**	**	**	**	**	**
TOTAL PERMANENT	2.03	2.06	**	**	**	**	**	**	**	**
ALL CROPS	98.76	100.00	**	**	**	**	1.28	100.00	8.48	100.00

TABLE 1.9

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	609.74	60.79	2.79	45.51	4.09	56.26	132.13	76.95	228.80	56.67
Teff	160.44	16.00	**	**	-	-	59.51	34.66	83.41	20.66
Barely	52.32	5.22	**	**	-	-	2.59	1.51	17.77	4.40
Wheat	58.26	5.81	**	**	**	**	36.86	21.47	47.69	11.81
Maize	194.65	19.41	**	**	**	**	18.91	11.01	64.03	15.86
Sorghum	140.37	13.99	-	-	**	**	13.88	8.08	**	**
Millet	3.51	.35	-	-	-	-	**	**	-	-
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	87.21	8.69	**	**	**	**	5.01	2.92	19.42	4.81
Horse Beans	40.60	4.05	**	**	-	-	.80	.47	8.73	2.16
Field Peas	22.26	2.22	-	-	-	-	**	**	3.39	.84
Haricot Beans	19.95	1.99	-	-	**	**	2.35	1.35	6.62	1.64
Chick Peas	3.60	.36	-	-	-	-	**	**	**	**
Lentils	.66	.07	-	-	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.60	.06	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	58.21	5.80	**	**	**	**	**	**	32.30	8.00
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	14.80	1.48	-	-	-	-	**	**	**	**
Potatoes	6.94	.69	-	-	-	-	**	**	5.62	1.39
Other Temporary	36.42	3.63	**	**	**	**	**	**	15.95	3.95
ALL TEMPORARY	755.76	75.35	3.11	50.73	4.73	65.06	144.22	83.99	280.64	69.50
Chat	12.70	1.27	-	-	**	**	1.07	.62	7.00	1.73
Coffee	64.52	6.43	2.91	47.47	**	**	18.09	10.53	18.60	4.61
Enset	149.44	14.90	-	-	**	**	6.62	3.86	92.39	22.88
Cotton	**	**	-	-	**	**	**	**	**	**
Tobacco	.36	.04	**	**	-	-	-	-	.23	.06
Fruits	7.53	.75	**	**	**	**	.85	.49	3.05	.76
Other Permanent	6.80	.68	-	-	**	**	.15	.09	1.71	.42
TOTAL PERMANENT	247.30	24.65	3.02	49.27	2.54	34.94	27.50	16.01	123.13	30.50
ALL CROPS	1,003.06	100.00	6.13	100.00	7.27	100.00	171.72	100.00	403.77	100.00

TABLE 1.9.1

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

Yem*, Keficho, Maji, Shekicho and Benchi Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	90.77	64.35	**	**	-	-	5.57	47.77	**	**
Teff	23.81	16.88	-	-	-	-	3.39	29.07	**	**
Barely	8.87	6.29	-	-	-	-	**	**	**	**
Wheat	3.00	2.13	-	-	-	-	**	**	**	**
Maize	31.84	22.57	**	**	-	-	.83	7.12	**	**
Sorghum	22.59	16.02	-	-	-	-	.39	3.34	-	-
Millet	.62	.44	-	-	-	-	**	**	-	-
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	16.20	11.49	-	-	-	-	**	**	**	**
Horse Beans	9.07	6.43	-	-	-	-	**	**	**	**
Field Peas	5.60	3.97	-	-	-	-	**	**	-	-
Haricot Beans	1.51	1.07	-	-	-	-	**	**	-	-
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	115.71	82.03	**	**	-	-	9.62	82.50	**	**
Chat	.52	.37	-	-	-	-	**	**	**	**
Coffee	9.10	6.45	**	**	-	-	.72	6.17	**	**
Enset	13.31	9.44	-	-	.02	100.00	1.05	9.01	1.60	20.57
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	1.90	1.35	-	-	-	-	.19	1.63	**	**
Other Permanent	.50	.35	-	-	-	-	**	**	**	**
TOTAL PERMANENT	25.34	17.97	**	**	.02	100.00	**	**	1.92	24.68
ALL CROPS	141.05	100.00	**	**	.02	100.00	11.66	100.00	**	**

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TABLE 1.9.2
ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

North and South Omo, Gardula* and Konso* Zones

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	220.37	67.42	**	**	3.85	69.37	21.17	68.60	31.01	45.11
Teff	51.10	15.63	**	**	-	-	**	**	12.14	17.66
Barely	13.11	4.01	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	57.91	17.72	**	**	**	**	**	**	**	**
Sorghum	95.78	29.30	-	-	**	**	11.14	36.10	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	32.65	9.99	**	**	**	**	**	**	**	**
Horse Beans	12.78	3.91	**	**	-	-	**	**	**	**
Field Peas	7.53	2.30	**	**	-	-	**	**	.40	.58
Haricot Beans	9.95	3.04	-	-	**	**	1.29	4.18	2.42	3.52
Chick Peas	**	**	-	-	-	-	**	**	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	19.55	5.98	**	**	**	**	.76	2.46	6.78	9.86
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.94	.29	-	-	-	-	**	**	**	**
Potatoes	2.52	.77	-	-	-	-	**	**	1.65	2.40
Other Temporary	16.09	4.92	**	**	**	**	.52	1.69	5.08	7.39
ALL TEMPORARY	272.96	83.51	**	**	4.13	74.41	23.95	77.61	42.40	61.68
Chat	**	**	-	-	-	-	**	**	**	**
Coffee	16.69	5.11	-	-	.37	6.67	4.01	12.99	5.40	7.86
Enset	27.21	8.33	-	-	**	**	**	**	18.52	26.94
Cotton	**	**	-	-	**	**	**	**	**	**
Tobacco	**	**	**	**	-	-	-	-	**	**
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	.52	.16	-	-	**	**	**	**	.30	.44
TOTAL PERMANENT	53.88	16.49	**	**	**	**	6.91	22.39	26.34	38.32
ALL CROPS	326.84	100.00	**	**	5.55	100.00	30.86	100.00	68.74	100.00

* Special Wereda

TABLE 1.9.3

ESTIMATE OF IMPROVED SEED,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

Hadiya, Kembata and Gurage Zones

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	243.10	70.58	**	**	**	**	103.28	90.68	182.35	70.17
Teff	78.10	22.67	**	**	-	-	54.82	48.13	67.56	26.00
Barely	15.40	4.47	-	-	**	**	2.28	2.00	13.74	5.29
Wheat	50.06	14.53	**	**	**	**	36.09	31.69	46.19	17.77
Maize	76.60	22.24	**	**	**	**	7.46	6.55	47.99	18.47
Sorghum	20.51	5.95	-	-	-	-	2.28	2.00	4.74	1.82
Millet	**	**	-	-	-	-	**	**	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	15.76	4.58	-	-	-	-	1.89	1.66	11.39	4.38
Horse Beans	8.76	2.54	-	-	-	-	**	**	7.27	2.80
Field Peas	4.34	1.26	-	-	-	-	**	**	**	**
Haricot Beans	1.81	.53	-	-	-	-	**	**	.88	.34
Chick Peas	**	**	-	-	-	-	**	**	**	**
Lentils	**	**	-	-	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	25.96	7.54	**	**	**	**	2.60	2.28	19.58	7.53
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	13.52	3.93	-	-	-	-	**	**	**	**
Potatoes	4.33	1.26	-	-	-	-	**	**	3.90	1.50
Other Temporary	8.06	2.34	**	**	**	**	.40	.35	5.01	1.93
ALL TEMPORARY	284.86	82.70	**	**	**	**	107.78	94.63	213.35	82.10
Chat	7.12	2.07	-	-	**	**	**	**	4.83	1.86
Coffee	7.40	2.15	**	**	**	**	3.44	3.02	5.62	2.16
Enset	40.98	11.90	-	-	**	**	**	**	34.33	13.21
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.13	.04	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	-	-	**	**	**	**
Other Permanent	2.94	.85	-	-	**	**	.02	.02	1.09	.42
TOTAL PERMANENT	59.59	17.30	**	**	**	**	6.12	5.37	46.52	17.90
ALL CROPS	344.45	100.00	**	**	**	**	113.90	100.00	259.87	100.00

TABLE 1.9.4

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

Sidama, Gedio, Burji* and Amaro* Zones

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	55.48	29.10	**	**	**	**	2.09	13.69	13.41	19.91
Teff	7.44	3.90	-	-	-	-	**	**	**	**
Barely	14.93	7.83	**	**	-	-	**	**	**	**
Wheat	3.21	1.68	-	-	-	-	**	**	**	**
Maize	28.30	14.84	**	**	**	**	1.85	12.12	10.21	15.16
Sorghum	1.48	.78	-	-	-	-	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	22.58	11.84	-	-	**	**	**	**	**	**
Horse Beans	9.98	5.23	-	-	-	-	**	**	**	**
Field Peas	4.79	2.51	-	-	-	-	-	-	**	**
Haricot Beans	6.68	3.50	-	-	**	**	**	**	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.13	2.17	-	-	**	**	.07	.46	2.10	3.12
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	.09	.05	-	-	-	-	-	-	**	**
Other Temporary	4.00	2.10	-	-	**	**	.07	.46	2.02	3.00
ALL TEMPORARY	82.20	43.11	**	**	**	**	2.84	18.60	19.02	28.24
Chat	4.99	2.62	-	-	**	**	**	**	2.07	3.07
Coffee	31.33	16.43	2.00	92.17	**	**	9.91	64.90	7.33	10.88
Enset	67.93	35.63	-	-	**	**	1.96	12.84	37.94	56.33
Cotton	-	-	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	1.36	.71	-	-	**	**	**	**	**	**
Other Permanent	2.83	1.48	-	-	**	**	**	**	.29	.43
TOTAL PERMANENT	108.46	56.89	2.00	92.17	**	**	12.43	81.40	48.33	71.76
ALL CROPS	190.66	100.00	2.17	100.00	**	**	15.27	100.00	67.35	100.00

* Special Wereda

TABLE 1.10

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

Gambela

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	9.64	68.42	**	**	**	**	**	**	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	5.16	36.62	**	**	**	**	**	**	-	-
Sorghum	4.44	31.51	**	**	-	-	-	-	-	-
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.41	2.91	-	-	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.15	1.06	-	-	-	-	**	**	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	.26	1.85	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.11	14.98	**	**	**	**	.01	.95	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	**	**	**	**	**	**	-	-
ALL TEMPORARY	12.18	86.44	**	**	**	**	**	**	-	-
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	.54	90.00	**	**	**	**	-	-
Enset	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	.26	1.85	-	-	-	-	**	**	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.91	13.56	.54	90.00	**	**	**	**	-	-
ALL CROPS	14.09	100.00	.60	100.00	**	**	**	**	-	-

TABLE 1.11

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

Harari

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	3.68	62.16	**	**	**	**	.77	87.50	2.88	67.13
Teff	-	-	-	-	-	-	-	-	-	-
Barely	**	**	-	-	-	-	-	-	.03	.70
Wheat	.12	2.03	**	**	-	-	.01	1.14	.11	2.56
Maize	.68	11.49	**	**	**	**	.14	15.91	.58	13.52
Sorghum	2.84	47.97	**	**	**	**	.62	70.45	2.15	50.12
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	.03	.51	-	-	-	-	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.69	11.66	-	-	**	**	.02	2.27	.29	6.76
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.69	11.66	-	-	**	**	.02	2.27	.29	6.76
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.09	1.52	-	-	.02	3.85	**	**	.05	1.17
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.09	1.52	-	-	.02	3.85	**	**	.05	1.17
ALL TEMPORARY	4.49	75.84	**	**	.32	61.54	.80	90.91	3.24	75.52
Chat	1.28	21.62	-	-	.16	30.77	**	**	1.03	24.01
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.43	24.16	-	-	.20	38.46	**	**	1.05	24.48
ALL CROPS	5.92	100.00	**	**	.52	100.00	.88	100.00	4.29	100.00

TABLE 1.12

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	7.84	78.32	**	**	**	**	.54	94.74	7.65	88.13
Teff	4.57	45.65	**	**	-	-	.42	73.68	4.52	52.07
Barely	.02	.20	-	-	-	-	**	**	.02	.23
Wheat	3.16	31.57	-	-	**	**	**	**	3.10	35.71
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	.09	.90	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.99	19.88	-	-	-	-	**	**	.96	11.06
Horse Beans	.13	1.30	-	-	-	-	-	-	.03	.35
Field Peas	.06	.60	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	.60	5.99	-	-	-	-	-	-	.31	3.57
Lentils	.51	5.09	-	-	-	-	-	-	.36	4.15
Vetch	.69	6.89	-	-	-	-	-	-	.26	3.00
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.18	1.80	-	-	**	**	**	**	.07	.81
Fenugreek	.08	.80	-	-	-	-	-	-	**	**
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	**	**	**	**	**	**
ALL TEMPORARY	10.01	100.00	.01	100.00	**	**	.57	100.00	8.68	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	10.01	100.00	.01	100.00	**	**	.57	100.00	8.68	100.00

TABLE 1.13

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1995/96(1988 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	7.39	82.85	**	**	**	**	.98	62.03	**	**
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.23	2.58	**	**	**	**	.19	12.03	**	**
Sorghum	7.16	80.27	**	**	**	**	.79	50.00	**	**
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	.18	2.02	-	-	**	**	**	**	**	**
ALL TEMPORARY	7.59	85.09	**	**	**	**	1.12	70.89	**	**
Chat	**	**	-	-	**	**	**	**	**	**
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	**	**	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.33	14.91	-	-	**	**	**	**	**	**
ALL CROPS	8.92	100.00	**	**	**	**	1.58	100.00	**	**

2. Total Fertilizer Applied Area by Type of Fertilizer and crop.

The 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, i.e. only *Natural*, only *DAP*, only *UREA*, *DAP* mixed with *UREA* and *Natural* mixed *UREA* or *DAP*.

As shown in the Summary *Table c* below, among the fertilizers used, *DAP* was applied in larger area. *Natural* fertilizer and *UREA* were also used on considerable amount of crop area. Moreover, area fertilized using a mixture of natural and commercial fertilizers was very small at national level. In addition, according to the survey result, no fertilized area was reported either for natural or commercial fertilizer in Gambela Region. For details refer to the tables presented.

Table c : Summary of Total Fertilizer Applied Area By Type of Fertilizer

TYPE OF FERTILIZER	APPLIED AREA (000 HA)
<i>Natural</i>	598.43
<i>DAP</i>	1561.60
<i>UREA</i>	205.90
<i>DAP + UREA</i>	442.63
<i>Natural+Commercial</i>	31.32
Total	2839.91

2.1 Natural Fertilizer Applied Area.

Out of the total fertilized area, i.e. 2839.91 thousand hectares, the *Natural* fertilizer was applied on about 598.43 thousand hectares or 21.07%. Out of this area, temporary and permanent crops account for about 429.13 and 169.30 thousand hectares respectively. See Table 2.1.

2.2 DAP Applied Area.

The total *DAP* applied area was 1561.60 thousand hectares or 54.99% of the total fertilized area. Temporary and permanent crops accounted for 1557.84 and 3.76 thousand hectares respectively.

Teff with 677.71 thousand hectares has the largest *DAP* applied area among temporary crops. From permanent crops, coffee with 1.61 thousand hectares has the largest *DAP* applied area. See Table 2.1.

2.3 Urea Applied Area.

The total *UREA* applied area was about 205.90 thousand hectares or 7.25% of the total fertilizer applied area. Temporary and permanent crops account for 201.62 thousand hectares or 7.10% and 4.28 thousand hectares or 0.15% respectively.

2.4 DAP and UREA Applied Area.

Out of the total fertilized area the mixture of *DAP* and *UREA* was applied on 442.63 thousand hectares or 15.59%. Temporary and permanent crops account for about 441.45 thousand hectares or 15.54% and 1.18 thousand hectares or 0.04% respectively. See Table 2.1.

Here also, teff with 296.01 thousand hectares from temporary crops and chat with 0.94 thousand hectares from permanent crops have the largest *DAP* and *UREA* applied area.

2.5 Natural and Commercial Fertilizer Applied Area.

From the total fertilized area the *Natural* fertilizer mixed with Commercial fertilizer was applied on 31.32 thousand hectares or 1.10%. Temporary and permanent crops account for 29.42 thousand hectares and 1.90 thousand hectares respectively.

TABLE 2.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

National

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2,466.92	86.87	362.55	60.58	1,459.68	93.47	187.91	91.26	429.73	97.09	27.03	86.30
Teff	1,094.87	38.55	28.38	4.74	677.71	43.40	87.04	42.27	296.01	66.88	5.73	18.30
Barely	242.48	8.54	38.74	6.47	175.08	11.21	17.11	8.31	9.73	2.20	1.82	5.81
Wheat	452.38	15.93	16.69	2.79	280.72	17.98	38.14	18.52	113.48	25.64	3.35	10.70
Maize	465.25	16.38	217.17	36.29	197.36	12.64	28.75	13.96	8.51	1.92	13.45	42.94
Sorghum	87.02	3.06	55.81	9.33	18.51	1.19	8.46	4.11	1.65	.37	2.59	8.27
Millet	103.71	3.65	5.52	.92	92.47	5.92	5.52	2.68	**	**	**	**
Oats	21.21	.75	.24	.04	17.83	1.14	**	**	**	**	-	-
PULSES	101.21	3.56	26.64	4.45	53.35	3.42	9.41	4.57	10.37	2.34	1.42	4.53
Horse Beans	50.65	1.78	17.13	2.86	28.64	1.83	2.93	1.42	1.09	.25	**	**
Chick Peas	20.76	.73	4.44	.74	**	**	**	**	3.64	.82	.06	.19
Haricot Beans	13.58	.48	2.78	.46	5.73	.37	3.71	1.80	**	**	**	**
Field Peas	7.01	.25	1.36	.23	4.52	.29	**	**	**	**	**	**
Lentils	6.83	.24	.59	.10	3.07	.20	.25	.12	2.92	.66	**	**
Vetch	2.38	.08	.34	.06	**	**	-	-	**	**	**	**
OILSEEDS	22.87	.81	7.16	1.20	**	**	**	**	**	**	**	**
Neug	4.72	.17	1.24	.21	**	**	**	**	-	-	-	-
Lin Seed	3.64	.13	.45	.08	**	**	.04	.02	**	**	-	-
Rape seed	**	**	.96	.16	**	**	**	**	**	**	**	**
Ground Nuts	**	**	**	**	**	**	.09	.04	-	-	**	**
Sun Flower	**	**	-	-	1.57	.10	-	-	**	**	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	68.48	2.41	32.78	5.48	29.94	1.92	3.88	1.88	1.12	.25	.77	2.46
Fenugreek	1.97	.07	.16	.03	1.60	.10	.02	.01	**	**	-	-
Spices	17.68	.62	5.67	.95	10.51	.67	1.14	.55	**	**	**	**
Potatoes	22.99	.81	6.92	1.16	**	**	**	**	**	**	**	**
Other Vegetables	25.84	.91	20.03	3.35	4.44	.28	.67	.33	.46	.10	.23	.73
ALL TEMPORARY	2,659.48	93.65	429.13	71.71	1,557.83	99.76	201.62	97.92	441.45	99.73	29.42	93.93
Chat	27.08	.95	20.67	3.45	**	**	3.25	1.58	.94	.21	1.18	3.77
Coffee	23.08	.81	20.81	3.48	1.61	.10	.49	.24	**	**	**	**
Enset	119.28	4.20	118.26	19.76	.46	.03	**	**	**	**	**	**
Cotton	**	**	**	**	-	-	**	**	**	**	-	-
Tobaco	.28	.01	.20	.03	**	**	**	**	-	-	-	-
Fruits	4.25	.15	3.69	.62	.29	.02	**	**	**	**	**	**
Other Permanent	5.72	.20	5.07	.85	.34	.02	.05	.02	**	**	**	**
TOTAL PERMANENT	180.43	6.35	169.30	28.29	3.76	.24	4.28	2.08	1.18	.27	1.90	6.07
ALL CROPS	2,839.91	100.00	598.43	100.00	1,561.59	100.00	205.90	100.00	442.63	100.00	31.32	100.00

FIG 2. ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER
FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS,
NATIONAL, 1995/96 (1988 E.C.)

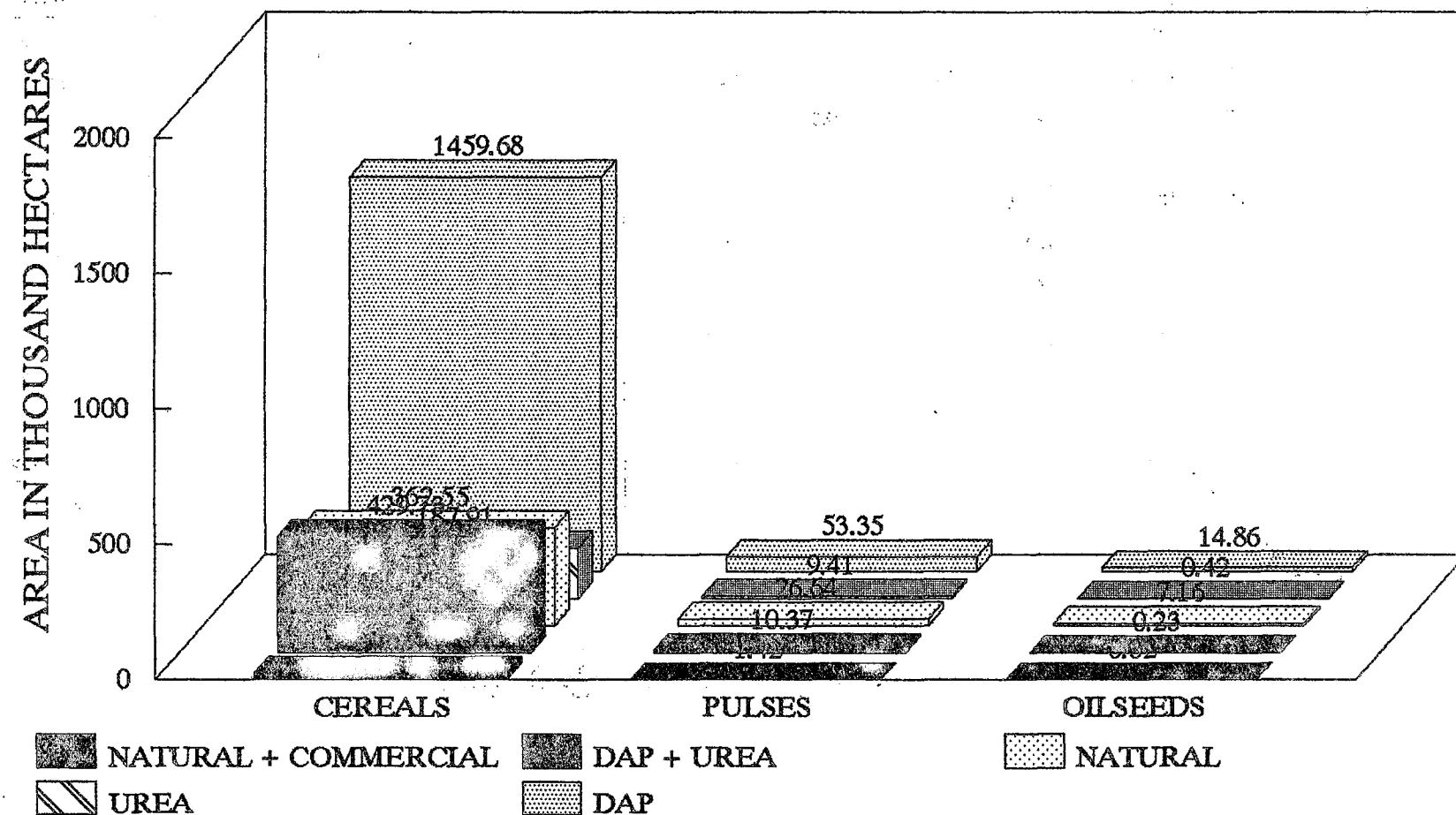


TABLE 2.2

ESTIMATES OF FERTILIZER APPLIED AREA BY REGION AND BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

('000 HA)

REGION	TOTAL		NATURAL		DAP		UREA		DAP + UREA		NAT + COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
TIGRAY	97.39	3.43	54.93	9.18	31.84	2.04	5.66	2.75	2.37	.54	2.58	8.24
AFAR	4.36	.15	4.24	.71	.12	.01	-	-	-	-	-	-
AMHARA	751.12	26.45	151.13	25.25	464.42	29.74	37.24	18.08	87.13	19.69	11.20	35.76
OROMIYA	1,556.61	54.81	216.44	36.17	869.87	55.70	113.50	55.12	342.85	77.46	13.96	44.57
SOMALIE	2.56	.09	2.17	.36	-	-	.39	.19	-	-	-	-
BENSHANGUL-GUMUZ	8.49	.30	5.38	.90	3.04	.19	.04	.02	-	-	.02	.06
S.N.N.P.R.	403.76	14.22	161.10	26.92	191.31	12.25	47.46	23.05	1.88	.42	2.01	6.42
GAMBELA	-	-	-	-	-	-	-	-	-	-	-	-
HARARI	4.28	.15	.67	.11	.25	.02	1.51	.73	.66	.15	1.19	3.80
ADDIS ABABA	8.67	.31	.04	.01	.74	.05	.13	.06	7.73	1.75	.03	.10
DIRE DAWA	2.67	.09	2.34	.39	-	-	-	-	-	-	.33	1.05
TOTAL	2,839.91	100.00	598.44	100.00	1,561.59	100.00	205.93	100.00	442.62	100.00	31.32	100.00

TABLE 2.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Tigray

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	93.00	95.49	51.49	93.74	31.22	98.02	5.33	94.17	2.38	100.00	2.58	100.00
Teff	18.52	19.02	2.17	3.95	13.53	42.48	1.49	26.33	**	**	**	**
Barely	21.27	21.84	9.93	18.08	9.04	28.38	**	**	**	**	**	**
Wheat	16.11	16.54	6.45	11.74	6.24	19.59	1.16	20.49	**	**	**	**
Maize	22.21	22.81	21.62	39.36	**	**	**	**	-	-	**	**
Sorghum	9.26	9.51	**	**	**	**	**	**	-	-	-	-
Millet	**	**	**	**	**	**	**	**	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	4.01	4.12	3.27	5.95	**	**	**	**	-	-	-	-
Horse Beans	2.07	2.13	1.44	2.62	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	.02	.06	**	**	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	**	**	**	.09	1.59	-	-	-
Lentils	**	**	**	**	**	**	**	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	-	-	-	-
Neug	**	**	**	**	-	-	**	**	-	-	-	-
Lin Seed	**	**	.09	.16	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	-	-	-	-	-
Fenugreek	**	**	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	97.30	99.91	54.87	99.89	31.82	99.91	5.66	100.00	2.38	100.00	2.58	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-
ALL CROPS	97.39	100.00	54.93	100.00	31.85	100.00	5.66	100.00	2.38	100.00	2.58	100.00

TABLE 2.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

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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	.16	3.66	.16	3.76	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	4.37	100.00	4.25	100.00	.12	100.00	-	-	-	-	-	-

TABLE 2.5

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Amhara

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	703.56	93.67	126.24	83.54	445.30	95.89	36.19	97.21	85.08	97.66	10.71	95.54
Teff	360.48	47.99	11.94	7.90	256.87	55.31	27.80	74.67	62.46	71.69	**	**
Barely	46.40	6.18	18.93	12.53	26.04	5.61	1.08	2.90	**	**	-	-
Wheat	64.06	8.53	5.37	3.55	32.19	6.93	4.72	12.68	**	**	**	**
Maize	146.68	19.53	84.74	56.07	51.73	11.14	**	**	**	**	8.68	77.43
Sorghum	4.98	.66	3.32	2.20	**	**	-	-	**	**	**	**
Millet	80.23	10.68	1.71	1.13	76.72	16.52	**	**	-	-	-	-
Oats	**	**	**	**	**	**	-	-	-	-	-	-
PULSES	20.18	2.69	9.63	6.37	8.67	1.87	**	**	**	**	-	-
Horse Beans	12.54	1.67	7.45	4.93	4.90	1.06	**	**	**	**	-	-
Chick Peas	**	**	**	**	**	**	.15	.40	**	**	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-	-	-
Field Peas	2.61	.35	**	**	1.24	.27	**	**	**	**	-	-
Lentils	**	**	**	**	**	**	-	-	**	**	-	-
Vetch	**	**	**	**	-	-	-	-	**	**	-	-
OILSEEDS	9.07	1.21	1.76	1.16	6.88	1.48	**	**	**	**	**	**
Neug	4.00	.53	.76	.50	**	**	**	**	-	-	-	-
Lin Seed	1.43	.19	**	**	**	**	-	-	-	-	-	-
Rape seed	2.80	.37	.68	.45	**	**	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	.16	.18	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	12.21	1.63	7.87	5.21	3.44	.74	.45	1.21	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	**	**	-	-
Spices	3.96	.53	2.94	1.95	**	**	**	**	**	**	**	**
Potatoes	6.44	.86	4.34	2.87	**	**	-	-	-	-	**	**
Other Vegetables	1.75	.23	.58	.38	1.10	.24	**	**	-	-	-	-
ALL TEMPORARY	745.02	99.19	145.50	96.28	464.29	99.98	37.11	99.68	87.10	99.98	10.97	97.86
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	2.02	.27	2.02	1.34	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	2.62	.35	2.27	1.50	**	**	-	-	**	**	**	**
TOTAL PERMANENT	6.11	.81	5.62	3.72	**	**	**	**	**	**	**	**
ALL CROPS	751.13	100.00	151.12	100.00	464.40	100.00	37.23	100.00	87.12	100.00	11.21	100.00

TABLE 2.5.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

North and South Gonder Zones

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TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	103.20	94.38	22.30	82.11	62.60	98.86	**	**	**	**	**	**
Teff	56.71	51.87	**	**	40.03	63.22	10.86	89.16	**	**	**	**
Barely	.96	.88	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	**	**	**	**	**	**	**	**	**	-
Maize	20.97	19.18	19.46	71.65	1.25	1.97	-	-	**	**	**	**
Sorghum	1.55	1.42	**	**	**	**	-	-	.40	6.29	**	**
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	3.34	3.05	**	**	**	**	**	**	**	**	**	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	1.30	1.19	**	**	**	**	**	**	**	**	**	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	.14	.13	.08	.29	**	**	**	**	-	-	-	-
ALL TEMPORARY	107.27	98.11	25.13	92.53	63.32	100.00	12.15	99.75	**	**	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	-	-	**	**	-	-	**	**
ALL CROPS	109.34	100.00	27.16	100.00	63.32	100.00	12.18	100.00	**	**	**	**

TABLE 2.5.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

East, West Gojam and Agewawi Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	491.44	94.70	75.38	87.62	348.66	95.75	16.95	96.91	40.12	99.11	10.32	95.47
Teff	251.28	48.42	**	**	194.47	53.41	11.89	67.98	37.10	91.65	**	**
Barely	30.31	5.84	6.50	7.56	23.01	6.32	**	**	-	-	-	-
Wheat	30.26	5.83	**	**	23.46	6.44	**	**	2.70	6.67	**	**
Maize	120.66	23.25	60.98	70.88	50.05	13.75	**	**	**	**	8.51	78.72
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	58.39	11.25	**	**	57.17	15.70	**	**	-	-	-	-
Oats	**	**	-	-	**	**	-	-	-	-	-	-
PULSES	9.06	1.75	**	**	5.64	1.55	**	**	**	**	-	-
Horse Beans	6.62	1.28	**	**	4.25	1.17	**	**	-	-	-	-
Chick Peas	1.80	.35	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	**	**	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	**	**	**	**
OILSEEDS	8.54	1.65	1.53	1.78	**	**	**	**	**	**	**	**
Neug	**	**	**	**	**	**	**	**	-	-	-	-
Lin Seed	1.38	.27	**	**	**	**	-	-	-	-	**	**
Rape seed	**	**	.68	.79	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	**	**	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	8.03	1.55	4.57	5.31	**	**	**	**	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	2.25	.43	1.98	2.30	**	**	**	**	**	**	**	**
Potatoes	4.38	.84	**	**	**	**	-	-	-	-	**	**
Other Vegetables	1.39	.27	.30	.35	1.08	.30	-	-	-	-	-	-
ALL TEMPORARY	517.07	99.64	84.59	98.33	364.02	99.97	17.40	99.49	40.46	99.95	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	**	**
Other Permanent	1.18	.23	.84	.98	**	**	-	-	**	**	**	**
TOTAL PERMANENT	1.88	.36	1.44	1.67	**	**	**	**	**	**	10.81	100.00
ALL CROPS	518.95	100.00	86.03	100.00	364.12	100.00	17.49	100.00	40.48	100.00	10.81	100.00

TABLE 2.5.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

North Wolo and Waghamra Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2.83	84.73	2.81	84.64	**	**	-	-	-	-	-	-
Teff	**	**	**	**	**	**	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	.15	4.49	.15	4.52	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.18	5.39	.18	5.42	-	-	-	-	-	-	-	-
Horse Beans	.09	2.69	.09	2.71	-	-	-	-	-	-	-	-
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	3.19	95.51	**	**	**	**	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	.02	.60	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	3.34	100.00	3.32	100.00	**	**	-	-	-	-	-	-

TABLE 2.5.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

South Wolo, Oromia and North Shewa Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	106.06	88.75	25.78	74.42	**	**	7.39	97.62	**	**	**	**
Teff	51.53	43.12	4.03	11.63	22.35	60.47	**	**	**	**	-	-
Barely	13.87	11.61	10.64	30.72	**	**	**	**	**	**	-	-
Wheat	31.69	26.52	3.85	11.11	**	**	**	**	**	**	**	**
Maize	4.90	4.10	4.15	11.98	**	**	-	-	**	**	-	-
Sorghum	3.21	2.69	**	**	**	**	-	-	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	10.65	8.91	6.20	17.90	**	**	**	**	1.40	3.48	-	-
Horse Beans	5.55	4.64	5.02	14.49	**	**	-	-	**	**	-	-
Chick Peas	**	**	**	**	**	**	**	**	-	-	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-	-	-
Field Peas	**	**	**	**	**	**	-	-	**	**	-	-
Lentils	**	**	**	**	**	**	-	-	**	**	-	-
Vetch	**	**	-	-	-	-	-	-	**	**	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	**	**	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	.72	.60	.63	1.82	-	-	**	**	**	**	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	.14	.12	**	**	-	-	**	**	-	-	-	-
ALL TEMPORARY	117.47	98.30	32.62	94.17	**	**	7.57	100.00	**	**	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.19	.16	.18	.52	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-
ALL CROPS	119.50	100.00	34.64	100.00	**	**	7.57	100.00	**	**	**	**

TABLE 2.6

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Oromiya

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1,416.14	90.98	151.80	70.14	812.84	93.44	106.95	94.25	333.19	97.19	11.35	81.25
Teff	623.00	40.02	11.20	5.17	334.29	38.43	45.72	40.29	228.13	66.54	3.67	26.27
Barely	156.69	10.07	5.75	2.66	129.09	14.84	12.62	11.12	8.96	2.61	**	**
Wheat	320.69	20.60	2.83	1.31	210.36	24.18	18.38	16.20	87.61	25.55	1.50	10.74
Maize	227.99	14.65	101.55	46.92	96.06	11.04	**	**	7.23	2.11	4.16	29.78
Sorghum	51.57	3.31	30.06	13.89	13.26	1.52	5.62	4.95	**	**	**	**
Millet	15.73	1.01	.40	.18	12.45	1.43	**	**	**	**	**	**
Oats	20.47	1.32	.01	-	17.33	1.99	**	**	**	**	-	-
PULSES	55.85	3.59	8.72	4.03	34.99	4.02	2.69	2.37	**	**	1.34	9.59
Horse Beans	27.01	1.74	5.38	2.49	**	**	**	**	.93	.27	**	**
Chick Peas	**	**	**	**	**	**	**	**	3.56	1.04	.06	.43
Haricot Beans	6.60	.42	1.27	.59	**	**	**	**	**	**	**	**
Field Peas	2.93	.19	.04	.02	2.73	.31	**	**	-	-	**	**
Lentils	4.68	.30	-	-	2.22	.26	**	**	**	**	-	-
Vetch	**	**	**	**	**	**	-	-	**	**	-	-
OILSEEDS	13.09	.84	**	**	**	**	**	**	**	**	-	-
Neug	**	**	**	**	**	**	**	**	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	**	**	-	-
Rape seed	**	**	**	**	**	**	-	-	**	**	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	23.64	1.52	8.35	3.86	**	**	1.36	1.20	.62	.18	**	**
Fenugreek	1.84	.12	**	**	1.55	.18	**	**	**	**	-	-
Spices	2.98	.19	2.39	1.10	**	**	**	**	-	-	**	**
Potatoes	10.86	.70	1.04	.48	**	**	**	**	**	**	**	**
Other Vegetables	7.96	.51	4.78	2.21	2.26	.26	**	**	**	**	**	**
ALL TEMPORARY	1,508.72	96.92	174.06	80.42	868.42	99.83	111.05	97.86	341.99	99.75	13.18	94.35
Chat	16.95	1.09	12.21	5.64	**	**	2.39	2.11	**	**	**	**
Coffee	2.07	.13	1.60	.74	.42	.05	**	**	-	-	-	-
Enset	26.89	1.73	26.80	12.38	**	**	-	-	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.05	-	.05	.02	-	-	-	-	-	-	-	-
Fruits	.65	.04	.43	.20	**	**	-	-	**	**	-	-
Other Permanent	1.29	.08	1.28	.59	-	-	-	-	**	**	-	-
TOTAL PERMANENT	47.90	3.08	42.37	19.58	1.46	.17	2.43	2.14	**	**	**	**
ALL CROPS	1,556.62	100.00	216.43	100.00	869.88	100.00	113.48	100.00	342.84	100.00	13.97	100.00

TABLE 2.6.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

East and West Welega Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	192.52	95.52	53.10	87.25	115.70	99.19	18.30	98.65	2.84	97.26	2.58	99.23
Teff	104.74	51.97	**	**	86.98	74.57	13.72	73.96	**	**	**	**
Barely	3.43	1.70	1.69	2.78	**	**	**	**	-	-	**	**
Wheat	4.20	2.08	.55	.90	3.36	2.88	**	**	-	-	-	-
Maize	58.00	28.78	42.82	70.36	10.09	8.65	1.09	5.88	2.05	70.21	1.96	75.38
Sorghum	6.90	3.42	4.85	7.97	**	**	**	**	**	**	**	**
Millet	15.25	7.57	**	**	12.36	10.60	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	3.94	1.95	3.39	5.57	.39	.33	**	**	-	-	-	-
Horse Beans	2.44	1.21	2.12	3.48	**	**	**	**	-	-	-	-
Chick Peas	.90	.45	**	**	**	**	**	**	-	-	-	-
Haricot Beans	.53	.26	.53	.87	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	**	**	-	-	-	-
Neug	**	**	**	**	-	-	**	**	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	3.83	1.90	3.29	5.41	**	**	**	**	-	-	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	1.52	.75	1.47	2.42	**	**	**	**	-	-	**	**
Potatoes	.89	.44	.68	1.12	**	**	-	-	-	-	-	-
Other Vegetables	1.37	.68	1.09	1.79	**	**	**	**	-	-	-	-
ALL TEMPORARY	200.66	99.56	60.10	98.75	116.59	99.96	18.55	100.00	2.84	97.26	2.60	100.00
Chat	**	**	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	**	**	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.02	.01	**	**	-	-	-	-	-	-	-	-
Fruits	.20	.10	**	**	-	-	-	-	**	**	-	-
Other Permanent	.26	.13	.26	.43	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.89	.44	.76	1.25	**	**	-	-	**	**	-	-
ALL CROPS	201.55	100.00	60.86	100.00	116.64	100.00	18.55	100.00	2.92	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 HOLDINGS IN
 1995/96(1988 E.C.)

Ilubabor and Jimma Zones

(1'000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	132.34	93.22	20.76	73.00	91.05	98.36	18.53	98.09	2.00	96.15	-	-
Teff	76.13	53.62	2.58	9.07	59.22	63.97	**	**	**	**	-	-
Barely	**	**	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	.11	.39	**	**	**	**	-	-	-	-
Maize	45.92	32.34	14.84	52.18	28.67	30.97	**	**	**	**	-	-
Sorghum	4.79	3.37	2.60	9.14	**	**	**	**	-	-	-	-
Millet	**	**	**	**	**	**	-	-	-	-	-	-
Oats	**	**	-	-	**	**	-	-	-	-	-	-
PULSES	2.28	1.61	**	**	**	**	**	**	-	-	-	-
Horse Beans	.94	.66	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	.07	.05	.06	.21	**	**	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	**	**	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	**	**	-	-
Lin Seed	**	**	-	-	**	**	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.21	1.56	1.80	6.33	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.24	.17	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	1.97	1.39	1.56	5.49	**	**	**	**	-	-	-	-
ALL TEMPORARY	137.10	96.57	24.06	84.60	92.16	99.56	18.85	99.79	2.03	97.60	-	-
Chat	1.09	.77	1.06	3.73	**	**	**	**	-	-	-	-
Coffee	1.12	.79	.82	2.88	**	**	**	**	-	-	-	-
Enset	2.29	1.61	2.25	7.91	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.31	.22	.19	.67	**	**	-	-	**	**	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	4.87	3.43	4.38	15.40	**	**	**	**	**	**	-	-
ALL CROPS	141.97	100.00	28.44	100.00	92.57	100.00	18.89	100.00	2.08	100.00	-	-

TABLE 2.6.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

North and West Shewa Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	331.11	92.89	24.45	56.58	180.39	97.37	30.70	98.97	91.53	98.86	**	**
Teff	196.04	55.00	4.07	9.42	114.24	61.66	13.81	44.52	60.67	65.53	**	**
Barely	39.36	11.04	2.52	5.83	26.00	14.03	**	**	**	**	**	**
Wheat	75.98	21.32	1.53	3.54	37.81	20.41	8.87	28.59	**	**	**	**
Maize	15.62	4.38	13.55	31.36	1.03	.56	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-
Millet	.14	.04	**	**	**	**	-	-	-	-	-	-
Oats	**	**	**	**	**	**	**	**	**	**	**	**
PULSES	7.52	2.11	1.77	4.10	**	**	**	**	**	**	**	**
Horse Beans	3.62	1.02	1.42	3.29	**	**	**	**	**	**	**	**
Chick Peas	**	**	.35	.81	**	**	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	**	**	**	**	-	-	-	-
Lentils	.83	.23	-	-	.79	.43	**	**	**	**	**	**
Vetch	**	**	-	-	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.78	.50	1.04	2.41	.39	.21	.07	.23	**	**	**	**
Fenugreek	**	**	-	-	**	**	**	**	-	-	**	**
Spices	.69	.19	**	**	**	**	**	**	-	-	**	**
Potatoes	**	**	**	**	**	**	-	-	**	**	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	340.68	95.57	27.49	63.62	185.26	100.00	31.02	100.00	92.53	99.94	4.37	100.00
Chat	1.35	.38	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	-	-	-	-	.04	.04	-	-
Enset	**	**	**	**	-	-	-	-	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.23	.06	.22	.51	-	-	-	-	**	**	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**	-	-
ALL CROPS	356.46	100.00	43.21	100.00	185.26	100.00	31.02	100.00	92.59	100.00	4.37	100.00

TABLE 2.6.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

East Shewa, Arsi, Bale and Borena Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	704.89	90.78	17.73	55.95	418.15	89.74	31.87	94.07	235.29	97.07	**	**
Teff	242.49	31.23	**	**	71.61	15.37	**	**	166.12	68.53	-	-
Barely	110.09	14.18	**	**	101.34	21.75	2.95	8.71	5.32	2.19	**	**
Wheat	237.16	30.54	**	**	168.22	36.10	7.22	21.31	**	**	**	**
Maize	88.43	11.39	**	**	54.99	11.80	**	**	**	**	**	**
Sorghum	6.66	.86	**	**	**	**	**	**	-	-	-	-
Millet	**	**	-	-	-	-	**	**	-	-	**	**
Oats	**	**	-	-	16.78	3.60	**	**	**	**	-	-
PULSES	39.66	5.11	1.43	4.51	29.02	6.23	**	**	**	**	**	**
Horse Beans	19.56	2.52	.77	2.43	**	**	-	-	**	**	**	**
Chick Peas	8.86	1.14	**	**	3.60	.77	**	**	**	**	.06	2.33
Haricot Beans	**	**	**	**	**	**	**	**	**	**	**	**
Field Peas	**	**	-	-	**	**	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	**	**	-	-
Vetch	**	**	-	-	**	**	-	-	**	**	-	-
OILSEEDS	**	**	**	**	7.71	1.65	-	-	-	-	-	-
Neug	**	**	-	-	**	**	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	1.19	3.76	**	**	**	**	**	**	**	**
Fenugreek	**	**	-	-	**	**	**	**	**	**	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	**	**	-	-	**	**
Other Vegetables	2.17	.28	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	765.08	98.53	20.39	64.34	465.84	99.97	33.88	100.00	242.39	100.00	**	**
Chat	**	**	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	**	**	-	-	-	-	-	-
Enset	**	**	**	**	**	**	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.01	-	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	**	**	**
ALL CROPS	776.51	100.00	31.69	100.00	465.96	100.00	33.88	100.00	242.40	100.00	2.58	100.00

TABLE 2.6.5

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

East and West Harerge Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	55.29	69.03	35.77	68.49	7.57	80.11	7.55	67.83	**	**	**	**
Teff	**	**	**	**	**	**	**	**	-	-	-	-
Barely	.87	1.09	**	**	**	**	-	-	-	-	**	**
Wheat	.98	1.22	**	**	**	**	**	**	-	-	-	-
Maize	20.03	25.01	14.00	26.80	1.28	13.54	2.77	24.89	**	**	**	**
Sorghum	29.77	37.17	**	**	**	**	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	**	**	-	-	-	-	-	-
PULSES	2.44	3.05	.79	1.51	**	**	**	**	**	**	**	**
Horse Beans	**	**	**	**	**	**	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	.39	.75	**	**	**	**	**	**	**	**
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	4.42	5.52	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	3.01	3.76	1.03	1.97	.57	6.03	**	**	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-	**	**
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	.26	2.75	**	**	**	**	**	**
Other Vegetables	1.68	2.10	.82	1.57	**	**	**	**	**	**	**	**
ALL TEMPORARY	65.16	81.36	42.01	80.43	8.56	90.58	8.75	78.62	**	**	**	**
Chat	14.35	17.92	9.72	18.61	**	**	2.38	21.38	**	**	**	**
Coffee	.54	.67	.46	.88	**	**	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	14.93	18.64	10.22	19.57	**	**	2.38	21.38	**	**	**	**
ALL CROPS	80.09	100.00	52.23	100.00	9.45	100.00	11.13	100.00	**	**	**	**

TABLE 2.7

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
 MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
 1995/96(1988 E.C.)

Somalie

('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	.30	11.72	.30	13.82	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-	-	-
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 HOLDINGS IN
1995/96(1988 E.C.)

Benshangul-Gumez

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	7.33	86.44	**	**	**	**	**	**	-	-	**	**
Teff	**	**	**	**	2.16	71.05	**	**	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	2.02	23.82	1.77	32.96	**	**	-	-	-	-	-	-
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	.17	3.17	**	**	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	.11	3.62	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	**	**	-	-	**	**	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	8.04	94.81	**	**	3.04	100.00	**	**	-	-	**	**
Chat	**	**	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	8.48	100.00	5.37	100.00	3.04	100.00	**	**	-	-	**	**

TABLE 2.9

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 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	228.80	56.67	21.18	13.15	166.85	87.21	38.05	80.16	1.44	77.01	1.29	64.18
Teff	83.41	20.66	**	**	70.66	36.93	11.96	25.19	**	**	**	**
Barely	17.77	4.40	**	**	10.89	5.69	2.28	4.80	**	**	**	**
Wheat	47.69	11.81	**	**	31.68	16.56	**	**	**	**	**	**
Maize	64.03	15.86	5.89	3.66	48.95	25.59	8.39	17.67	**	**	**	**
Sorghum	**	**	**	**	**	**	**	**	-	-	-	-
Millet	**	**	-	-	1.72	.90	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	19.42	4.81	4.36	2.71	8.68	4.54	6.12	12.89	**	**	**	**
Horse Beans	8.73	2.16	2.61	1.62	3.73	1.95	**	**	**	**	**	**
Chick Peas	**	**	**	**	**	**	.67	1.41	.07	3.74	-	-
Haricot Beans	6.62	1.64	1.18	.73	2.29	1.20	3.14	6.61	**	**	-	-
Field Peas	.35	.09	**	**	**	**	**	**	-	-	-	-
Lentils	**	**	**	**	**	**	**	**	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	32.30	8.00	16.33	10.14	13.65	7.14	2.06	4.34	**	**	**	**
Fenugreek	**	**	-	-	.04	.02	-	-	-	-	-	-
Spices	**	**	.31	.19	9.64	5.04	**	**	**	**	-	-
Potatoes	5.62	1.39	1.46	.91	2.88	1.51	1.25	2.63	-	**	**	**
Other Vegetables	15.95	3.95	14.56	9.04	1.09	.57	**	**	**	**	**	**
ALL TEMPORARY	280.64	69.50	41.91	26.01	189.21	98.90	46.27	97.47	1.73	92.51	1.51	75.12
Chat	7.00	1.73	6.44	4.00	.13	.07	**	**	**	**	**	**
Coffee	18.60	4.61	16.80	10.43	1.19	.62	.45	.95	**	**	**	**
Enset	92.39	22.88	91.46	56.77	.40	.21	**	**	**	**	**	**
Cotton	**	**	**	**	**	**	-	-	-	-	-	-
Tobacco	.23	.06	**	**	**	**	.05	.11	-	-	-	-
Fruits	3.05	.76	**	**	**	**	**	**	**	**	**	**
Other Permanent	1.71	.42	1.45	.90	.20	.10	.05	.11	-	-	**	**
TOTAL PERMANENT	123.13	30.50	119.19	73.99	2.10	1.10	1.20	2.53	**	**	**	**
ALL CROPS	403.77	100.00	161.10	100.00	191.31	100.00	47.47	100.00	1.87	100.00	2.01	100.00

TABLE 2.9.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Yem*, Keficho, Maji, Shekicho and Benchi Zones

('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	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	**	**	**	**	**	**	-	-	-	-	-	-
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	-	-	-	-
Enset	1.60	20.57	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	1.92	24.68	1.92	33.33	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	**	**	-	-	**	**	-	-

* special Wereda

TABLE 2.9.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN/
1995/96(1988 E.C.)

North and South Omo, Gardula* and Konso* Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	31.01	45.11	**	**	14.00	90.26	**	**	-	-	**	**
Teff	12.14	17.66	**	**	10.40	67.05	**	**	-	-	**	**
Barely	**	**	**	**	**	**	**	**	-	-	**	**
Wheat	**	**	**	**	**	**	**	**	-	-	-	-
Maize	**	**	**	**	**	**	**	**	-	-	-	-
Sorghum	**	**	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	4.52	6.58	2.56	5.23	.88	5.67	**	**	-	-	-	-
Horse Beans	**	**	**	**	-	-	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	**	**	-	-	-	-
Haricot Beans	2.42	3.52	**	**	.57	3.68	**	**	-	-	-	-
Field Peas	**	**	**	**	**	**	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	6.78	9.86	5.72	11.69	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-	-	-
Potatoes	1.65	2.40	.96	1.96	**	**	**	**	-	-	-	-
Other Vegetables	5.08	7.39	4.74	9.69	**	**	**	**	**	**	**	**
ALL TEMPORARY	42.40	61.68	22.68	46.37	15.46	99.68	4.06	98.78	**	**	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	5.40	7.86	5.34	10.92	**	**	-	-	-	-	-	-
Enset	18.52	26.94	18.52	37.87	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	**	**	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	-	-	-	-
Other Permanent	.30	.44	.30	.61	-	-	-	-	-	-	-	-
TOTAL PERMANENT	26.34	38.32	26.23	53.63	**	**	**	**	-	-	-	-
ALL CROPS	68.74	100.00	48.91	100.00	15.51	100.00	4.11	100.00	**	**	**	**

* Special Wereda

TABLE 2.9.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Hadiya, Kembata and Gurage Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	182.35	70.17	5.81	10.16	144.66	87.50	29.74	86.08	.98	79.67	1.15	72.78
Teff	67.56	26.00	**	**	57.86	35.00	**	**	**	**	**	**
Barely	13.74	5.29	.60	1.05	10.30	6.23	2.14	6.19	**	**	**	**
Wheat	46.19	17.77	**	**	31.43	19.01	**	**	**	**	**	**
Maize	47.99	18.47	4.26	7.45	40.40	24.44	2.85	8.25	**	**	**	**
Sorghum	4.74	1.82	.65	1.14	2.95	1.78	**	**	**	**	-	-
Millet	**	**	-	-	**	**	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	11.39	4.38	1.59	2.78	6.49	3.93	**	**	**	**	**	**
Horse Beans	7.27	2.80	**	**	3.68	2.23	**	**	**	**	**	**
Chick Peas	**	**	**	**	**	**	**	**	**	**	-	-
Haricot Beans	.88	.34	**	**	.51	.31	**	**	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	**	**	**	**	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	19.58	7.53	4.80	8.39	12.98	7.85	1.60	4.63	**	**	**	**
Fenugreek	**	**	-	-	**	**	-	-	-	-	-	-
Spices	**	**	.28	.49	**	**	**	**	**	**	-	-
Potatoes	3.90	1.50	.47	.82	2.53	1.53	**	**	-	-	**	**
Other Vegetables	5.01	1.93	4.05	7.08	.77	.47	**	**	-	-	**	**
ALL TEMPORARY	213.35	82.10	12.20	21.33	164.16	99.29	34.40	99.57	1.21	98.37	1.37	86.71
Chat	4.83	1.86	4.70	8.22	.09	.05	**	**	**	**	**	**
Coffee	5.62	2.16	4.98	8.71	.56	.34	**	**	-	-	**	**
Enset	34.33	13.21	34.01	59.46	**	**	**	**	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	**	**	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	-	-	**	**
Other Permanent	1.09	.42	.90	1.57	.17	.10	**	**	-	-	**	**
TOTAL PERMANENT	46.52	17.90	45.00	78.67	1.17	.71	**	**	**	**	**	**
ALL CROPS	259.87	100.00	57.20	100.00	165.33	100.00	34.55	100.00	1.23	100.00	1.58	100.00

TABLE 2.9.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Sidama, Gedio, Burji* and Amaro* Zones

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	13.41	19.91	**	**	6.44	73.77	5.79	65.80	**	**	-	-
Teff	**	**	**	**	.75	8.59	**	**	**	**	-	-
Barely	.94	1.40	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	-	-	**	**	**	**	-	-	-	-
Maize	10.21	15.16	**	**	**	**	4.59	52.16	**	**	-	-
Sorghum	**	**	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	.22	.45	**	**	**	**	-	-	-	-
Horse Beans	**	**	**	**	**	**	**	**	-	-	-	-
Chick Peas	**	**	**	**	**	**	**	**	-	-	-	-
Haricot Beans	**	**	.14	.28	**	**	**	**	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.10	3.12	1.98	4.02	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-	-	-
Other Vegetables	2.02	3.00	1.95	3.96	.05	.57	**	**	-	-	-	-
ALL TEMPORARY	19.02	28.24	3.21	6.52	**	**	7.80	88.64	**	**	-	-
Chat	2.07	3.07	1.65	3.35	**	**	**	**	**	**	**	**
Coffee	7.33	10.88	6.23	12.65	**	**	.43	4.89	**	**	**	**
Enset	37.94	56.33	37.34	75.82	**	**	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**	**	**
Other Permanent	.29	.43	.22	.45	**	**	**	**	-	-	-	-
TOTAL PERMANENT	48.33	71.76	46.04	93.48	.88	10.08	1.00	11.36	**	**	**	**
ALL CROPS	67.35	100.00	49.25	100.00	8.73	100.00	8.80	100.00	.29	100.00	**	**

* Special Wereda

TABLE 2.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Harari

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2.88	67.13	.41	61.19	.14	56.00	1.01	66.89	.48	73.85	.83	69.75
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	.03	.70	-	-	**	**	**	**	**	**	-	-
Wheat	.11	2.56	**	**	**	**	**	**	.05	7.69	**	**
Maize	.58	13.52	.13	19.40	.01	4.00	.21	13.91	.08	12.31	**	**
Sorghum	2.15	50.12	.27	40.30	.11	44.00	.77	50.99	.34	52.31	.66	55.46
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-	**	-
PULSES	**	**	-	-	-	-	**	**	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	**	**	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-	**	**
Field Peas	.01	.23	-	-	-	-	**	**	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.29	6.76	**	**	**	**	**	**	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.29	6.76	**	**	**	**	**	**	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.05	1.17	.02	2.99	-	-	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.05	1.17	.02	2.99	-	-	**	**	**	**	**	**
ALL TEMPORARY	3.24	75.52	.50	74.63	.19	76.00	1.12	74.17	.49	75.38	.93	78.15
Chat	1.03	24.01	.17	25.37	.06	24.00	.39	25.83	.16	24.62	.24	20.17
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.05	24.48	.17	25.37	.06	24.00	.39	25.83	.16	24.62	.26	21.85
ALL CROPS	4.29	100.00	.67	100.00	.25	100.00	1.51	100.00	.65	100.00	1.19	100.00

TABLE 2.11

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1995/96(1988 E.C.)

Addis Ababa

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	7.65	88.13	.03	100.00	.32	43.24	.10	83.33	7.16	92.51	**	**
Teff	4.52	52.07	**	**	.08	10.81	.04	33.33	4.37	56.46	**	**
Barely	.02	.23	-	-	-	-	.01	8.33	-	-	-	-
Wheat	3.10	35.71	**	**	.24	32.43	**	**	2.79	36.05	**	**
Maize	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.96	11.06	-	-	.41	55.41	.02	16.67	.52	6.72	-	-
Horse Beans	.03	.35	-	-	-	-	-	-	.02	.26	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	.31	3.57	-	-	.13	17.57	-	-	.18	2.33	-	-
Lentils	.36	4.15	-	-	.08	10.81	.02	16.67	.26	3.36	-	-
Vetch	.26	3.00	-	-	.20	27.03	-	-	.06	.78	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.07	.81	-	-	.01	1.35	-	-	.06	.78	-	-
Fenugreek	**	**	-	-	.01	1.35	-	-	**	**	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**	-	-
ALL TEMPORARY	8.68	100.00	.03	100.00	.74	100.00	.12	100.00	7.74	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	8.68	100.00	.03	100.00	.74	100.00	.12	100.00	7.74	100.00	**	**

TABLE 2.12

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
 MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
 1995/96(1988 E.C.)

Dire Dawa

('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	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	**	**	**	**	-	-	-	-	-	-	**	**
Chat	**	**	**	**	-	-	-	-	-	-	**	**
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	**	**
ALL CROPS	**	**	**	**	-	-	-	-	-	-	**	**

3. Quantity of Commercial Fertilizer Applied by Type and Crop.

The total quantity of fertilizers applied in private holdings at national level was 2.56 million quintals. It is important to note that the information on *quantity* was collected and estimated only for *commercial fertilizers*. However, section 2.5 above deals with application of both commercial and natural fertilizers in mix.

Table d : Summary of Quantity of Commercial Fertilizer Applied by Type and crop

TYPE OF FERTILIZER	QUANTITY	
	('000 QUINTALS)	PERCENT
DAP	1460.95	57.02
UREA	230.99	9.02
DAP + UREA	821.15	32.05
Natural + Commercial	49.06	1.91
Total	2562.17	100.00

3.1 Quantity of DAP Applied.

From the total quantity of fertilizer applied, quantity of *DAP* was 1460.95 thousand quintals or 57.02%. The total quantity of *DAP* applied for temporary and permanent crops was 1441.62 and 19.33 thousand quintals respectively. Refer to Summary *Table d* and Table 3.1.

3.2 Quantity of UREA Applied.

From the total quantity of commercial fertilizer applied, quantity of *UREA* was 230.99 thousand quintals or 9.02%. The total quantity of *UREA* applied for temporary and permanent crops was 217.68 and 13.31 thousand quintals respectively.

3.3 Quantity of DAP and UREA Applied In Mix.

Out of the total quantity of commercial fertilizer applied, quantity of mixture of *DAP* and *UREA* was 821.15 thousand quintals or 32.05%. The total quantity of mixture of *DAP* and *UREA* applied to temporary and permanent crops were 815.94 and 5.21 thousand quintals respectively.

3.4 Quantity of Commercial with Natural Applied in Mix.

As mentioned above, *Commercial* along with *Natural* fertilizers applied area was reported during the survey year, and the quantity applied was 49.06 thousand quintals. Here the quantity however refers to only the *Commercial* fertilizers, whereas, the application was made by mixing any commercial with natural fertilizer. For details refer to Tables.

NOTE: If in some tables figures do not add up to total it is due to rounding.

TABLE 3.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

National

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	2,339.70	91.32	1,309.33	89.62	198.71	86.03	798.92	97.29	32.73	66.71
Teff	1,185.79	46.28	569.76	39.00	76.69	33.20	533.12	64.92	6.22	12.68
Barely	192.00	7.49	156.64	10.72	19.01	8.23	14.46	1.76	1.89	3.85
Wheat	555.95	21.70	271.26	18.57	48.85	21.15	230.87	28.12	4.98	10.15
Maize	273.06	10.66	209.14	14.32	34.21	14.81	15.41	1.88	14.29	29.13
Sorghum	45.52	1.78	22.32	1.53	14.46	6.26	3.46	.42	5.27	10.74
Millet	73.99	2.89	69.00	4.72	4.45	1.93	**	**	**	**
Oats	13.39	.52	**	**	**	**	**	**	**	**
PULSES	87.60	3.42	57.46	3.93	12.51	5.42	13.57	1.65	**	**
Horse Beans	36.52	1.43	30.11	2.06	4.12	1.78	1.50	.18	**	**
Chick Peas	14.70	.57	8.96	.61	**	**	**	**	**	**
Haricot Beans	21.64	.84	**	**	6.34	2.74	**	**	**	**
Field Peas	4.86	.19	**	**	**	**	.87	.11	-	-
Lentils	6.60	.26	2.79	.19	**	**	**	**	**	**
Vetch	**	**	**	**	**	**	**	**	-	-
OILSEEDS	20.04	.78	18.34	1.26	**	**	**	**	**	**
Neug	**	**	**	**	**	**	-	-	-	-
Lin Seed	**	.08	**	**	**	**	**	**	-	-
Rape seed	12.09	.47	11.61	.79	-	-	**	**	**	**
Ground Nuts	.82	.03	**	**	**	**	**	**	**	**
Sun Flower	**	**	**	**	-	-	**	**	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	69.20	2.70	56.50	3.87	5.70	2.47	2.99	.36	4.01	8.17
Fenugreek	1.13	.04	.87	.06	**	**	**	**	**	**
Spices	**	**	**	**	**	**	**	**	**	**
Potatoes	28.25	1.10	21.73	1.49	3.26	1.41	**	**	**	**
Other Vegetables	10.77	.42	7.22	.49	1.03	.45	.93	.11	**	**
ALL TEMPORARY	2,516.54	98.22	1,441.63	98.68	217.68	94.24	815.94	99.37	41.28	84.14
Chat	26.50	1.03	**	**	10.55	4.57	4.04	.49	4.23	8.62
Coffee	9.06	.35	6.62	.45	1.43	.62	**	**	**	**
Enset	2.55	.10	1.67	.11	**	**	**	**	**	**
Cotton	**	**	-	-	**	**	**	**	-	-
Tobacco	**	**	**	**	**	**	-	-	-	-
Fruits	3.26	.13	**	**	**	**	**	**	**	**
Other Permanent	4.15	.16	1.84	.13	**	**	**	**	**	**
TOTAL PERMANENT	45.63	1.78	19.33	1.32	13.31	5.76	5.21	.63	7.78	15.86
ALL CROPS	2,562.17	100.00	1,460.96	100.00	230.99	100.00	821.15	100.00	49.06	100.00

FIG 3. ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED
BY TYPE FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS,
NATIONAL, 1995/96 (1988 E.C.)

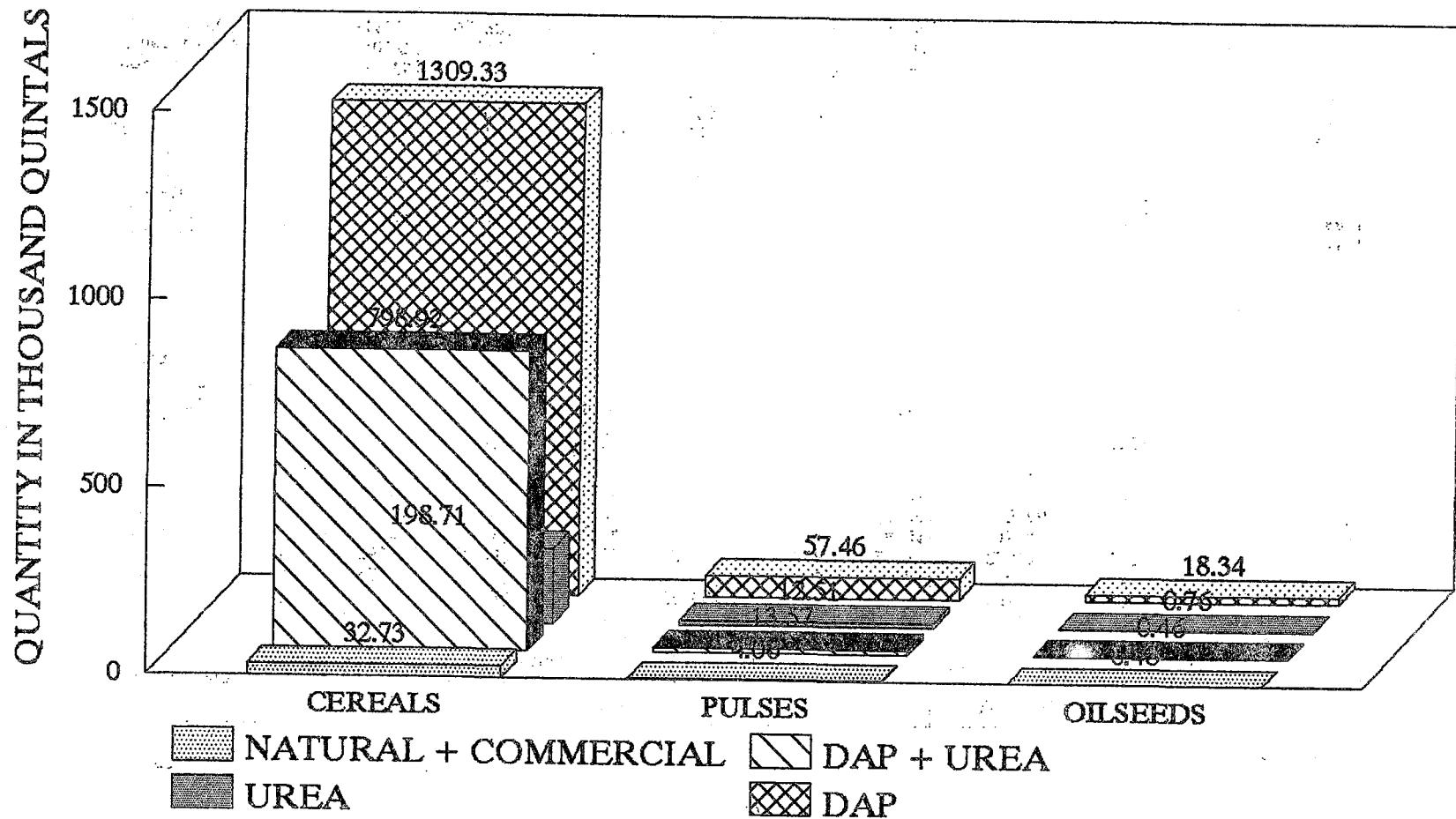


TABLE 3.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED AREA BY REGION AND BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS
1995/96(1988 E.C.)

(000'QT)

REGION	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
TIGRAY	48.10	1.88	31.31	2.14	9.81	4.25	4.29	.52	2.68	5.46
AFAR	.06	-	.06	-	-	-	-	-	-	-
AMHARA	560.12	21.86	396.36	27.13	37.78	16.35	114.10	13.90	11.87	24.19
OROMIYA	1,552.65	60.60	743.87	50.92	110.90	48.01	673.83	82.06	24.05	49.02
SOMALIE	.15	.01	-	-	.15	.06	-	-	-	-
BENSHANGUL-GUMUZ	.98	.04	.98	.07	-	-	-	-	-	-
S.N.N.P.R.	361.46	14.11	286.80	19.63	65.56	28.38	4.91	.60	4.19	8.54
GAMBELA	-	-	-	-	-	-	-	-	-	-
HARARI	16.90	.66	.72	.05	6.49	2.81	3.69	.45	5.99	12.21
ADDIS ABABA	21.57	.84	.85	.06	.31	.13	20.32	2.47	.09	.18
DIRE DAWA	.18	.01	-	-	-	-	-	-	.18	.37
TOTAL	2,562.16	100.00	1,460.95	100.00	231.00	100.00	821.15	100.00	49.06	100.00

**FIG. 4 ESTIMATES OF QUANTITY OF DAP AND UREA
USED BY REGION 1995/96 (1988 E.C.)**

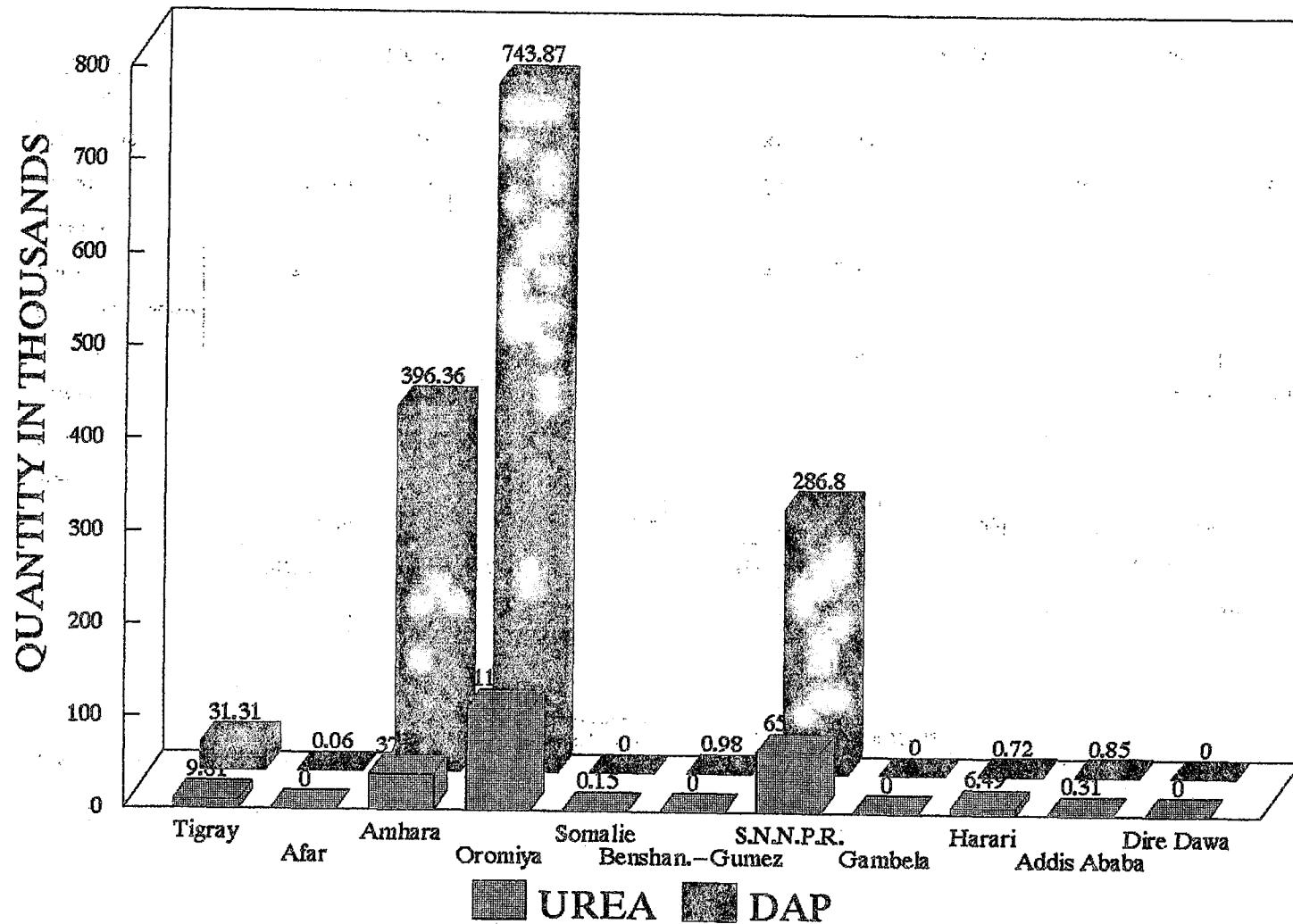


TABLE 3.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Tigray

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	47.39	98.54	30.90	98.72	9.50	96.84	4.29	100.00	2.68	100.00
Teff	16.51	34.33	11.77	37.60	2.24	22.83	**	**	**	**
Barely	14.58	30.32	10.35	33.07	**	**	**	**	**	**
Wheat	14.00	29.11	8.21	26.23	**	**	**	**	**	**
Maize	.53	1.10	**	**	**	**	-	-	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	**	**	**	**	**	**	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.42	.87	**	**	**	**	-	-	-	-
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	48.08	99.98	31.29	99.97	9.81	100.00	4.29	100.00	2.68	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-
ALL CROPS	48.09	100.00	31.30	100.00	9.81	100.00	4.29	100.00	2.68	100.00

TABLE 3.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
 OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
 1996(1988 E.C.)

Afar

('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	**	**	**	**	-	-	-	-	-	-

TABLE 3.5

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Amhara

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	530.62	94.74	371.48	93.72	**	**	112.30	98.41	9.53	80.29
Teff	291.65	52.07	183.53	46.30	**	**	80.55	70.59	**	**
Barely	30.54	5.45	29.61	7.47	**	**	.25	.22	-	-
Wheat	71.90	12.84	32.72	8.25	**	**	**	**	**	**
Maize	74.42	13.29	64.88	16.37	**	**	**	**	7.59	63.94
Sorghum	**	**	**	**	-	-	**	**	-	-
Millet	60.67	10.83	59.95	15.12	**	**	-	-	**	**
Oats	**	**	**	**	-	-	-	-	-	-
PULSES	8.31	1.48	6.68	1.69	**	**	**	**	-	-
Horse Beans	3.86	.69	3.70	.93	**	**	**	**	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	**	**	-	-
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	**	**	-	-	-	-	**	**	-	-
OILSEEDS	12.15	2.17	11.58	2.92	-	-	**	**	**	**
Neug	**	**	**	**	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	8.49	1.52	8.18	2.06	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	.27	.24	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	5.96	1.06	5.47	1.38	**	**	**	**	**	**
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	.62	.11	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	-	-	-	-	**	**
Other Vegetables	1.77	.32	1.66	.42	**	**	-	-	-	-
ALL TEMPORARY	557.04	99.45	395.21	99.71	**	**	114.10	99.99	10.01	84.33
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	**	**	**	**	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	**
ALL CROPS	560.10	100.00	396.37	100.00	**	**	114.11	100.00	11.87	100.00

TABLE 3.5.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

North and South Gonder Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	46.81	98.40	36.91	98.66	4.92	96.28	**	**	**	**
Teff	30.09	63.25	21.96	58.70	4.66	91.19	**	**	**	**
Barely	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	**	**	**	**	**	**	**	**
Maize	.71	1.49	**	**	-	-	-	-	**	**
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	.56	1.18	**	**	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-
ALL TEMPORARY	47.47	99.79	37.41	100.00	5.09	99.61	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	**	**	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	47.57	100.00	37.41	100.00	5.11	100.00	**	**	**	**

TABLE 3.5.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

East, West Gojam and Agewawi Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	384.58	94.34	296.74	93.61	**	**	53.15	99.33	9.14	80.18
Teff	207.36	50.86	138.07	43.56	**	**	49.67	92.82	**	**
Barely	25.82	6.33	25.34	7.99	**	**	-	-	-	-
Wheat	31.48	7.72	22.78	7.19	**	**	**	**	**	**
Maize	72.66	17.82	63.77	20.12	**	**	**	**	7.47	65.53
Sorghum	-	-	-	-	-	-	-	-	**	**
Millet	47.07	11.55	46.59	14.70	**	**	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-
PULSES	3.79	.93	3.57	1.13	**	**	**	**	-	-
Horse Beans	3.18	.78	3.03	.96	**	**	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	**	**	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	11.16	2.74	10.57	3.33	-	-	**	**	**	**
Neug	**	**	**	**	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	**	**
Rape seed	8.42	2.07	8.10	2.56	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	**	**	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	5.26	1.29	5.06	1.60	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.15	.04	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	-	-	-	-	**	**
Other Vegetables	1.58	.39	1.58	.50	-	-	-	-	-	-
ALL TEMPORARY	404.79	99.29	315.94	99.67	**	**	53.50	99.98	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	.04	.01	-	-	**	**	**	**	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	**
ALL CROPS	407.67	100.00	317.00	100.00	**	**	53.51	100.00	11.40	100.00

TABLE 3.5.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

North Wolo and Waghamra Zones

('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	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	-	-	-	-	-	-

TABLE 3.5.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

South Wolo, Oromia and North Shewa Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	**	**	**	**	**	**	**	**
Teff	**	**	**	**	**	**	**	**	-	-
Barely	**	**	**	**	**	**	.25	.45	-	-
Wheat	**	**	**	**	**	**	**	**	**	**
Maize	**	**	**	**	-	-	.53	.95	-	-
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 3.6

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Oromiya

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1,442.14	92.88	672.27	90.37	97.74	88.14	657.48	97.57	14.66	60.88
Teff	763.67	49.18	285.22	38.34	37.58	33.89	437.15	64.88	3.72	15.45
Barely	123.11	7.93	98.06	13.18	11.42	10.30	13.30	1.97	**	**
Wheat	388.95	25.05	176.06	23.67	17.74	16.00	**	**	2.83	11.75
Maize	115.08	7.41	80.27	10.79	**	**	11.71	1.74	**	**
Sorghum	30.05	1.94	15.75	2.12	**	**	**	**	**	**
Millet	8.14	.52	5.91	.79	**	**	**	**	**	**
Oats	13.14	.85	**	**	**	**	**	**	-	-
PULSES	56.42	3.63	38.26	5.14	3.44	3.10	**	**	**	**
Horse Beans	23.27	1.50	20.60	2.77	**	**	**	**	**	**
Chick Peas	9.14	.59	4.24	.57	**	**	**	**	**	**
Haricot Beans	**	**	**	**	**	**	**	**	**	**
Field Peas	**	**	**	**	**	**	-	-	-	-
Lentils	**	**	1.65	.22	**	**	**	**	**	-
Vetch	**	**	**	**	-	-	**	**	-	-
OILSEEDS	**	**	**	**	**	**	**	**	-	-
Neug	**	**	**	**	**	**	-	-	-	-
Lin Seed	**	**	**	**	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	24.39	1.57	**	**	2.22	2.00	**	**	**	**
Fenugreek	.96	.06	.75	.10	**	**	**	**	**	**
Spices	**	**	**	**	**	**	-	-	**	**
Potatoes	**	**	**	**	1.54	1.39	**	**	**	**
Other Vegetables	5.19	.33	2.72	.37	.62	.56	**	**	**	**
ALL TEMPORARY	1,529.67	98.52	734.11	98.69	103.45	93.29	670.13	99.45	21.98	91.28
Chat	19.14	1.23	**	**	**	**	2.84	.42	**	**
Coffee	1.83	.12	1.72	.23	**	**	**	**	-	-
Enset	**	**	**	**	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	-	-
Other Permanent	**	**	-	-	-	-	**	**	**	**
TOTAL PERMANENT	22.99	1.48	**	**	**	**	3.70	.55	**	**
ALL CROPS	1,552.66	100.00	743.87	100.00	110.89	100.00	673.83	100.00	24.08	100.00

TABLE 3.6.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

East and West Welega Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	**	**	78.11	98.47	14.39	98.56	7.23	93.77	1.48	60.16
Teff	75.15	72.22	61.44	77.46	11.85	81.16	**	**	**	**
Barely	**	**	**	**	**	**	-	-	**	**
Wheat	2.12	2.04	1.88	2.37	**	**	-	-	-	-
Maize	14.17	13.62	7.30	9.20	**	**	**	**	.99	40.24
Sorghum	.82	.79	**	**	**	**	**	**	**	**
Millet	7.50	7.21	5.84	7.36	**	**	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.38	.37	.24	.30	**	**	-	-	-	-
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	103.54	99.51	79.29	99.96	14.60	100.00	7.23	93.77	2.46	100.00
Chat	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	**	**	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	**	**	-	-
ALL CROPS	104.05	100.00	79.32	100.00	14.60	100.00	**	**	2.46	100.00

TABLE 3.6.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Ilubabor and Jimma Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	128.07	96.08	103.67	96.53	20.94	95.62	3.42	86.80	**	**
Teff	81.69	61.29	67.00	62.38	**	**	**	**	**	**
Barely	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	-	-
Maize	36.09	27.08	33.16	30.88	**	**	1.94	49.24	-	-
Sorghum	1.84	1.38	**	**	**	**	-	-	-	-
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	130.04	97.56	104.77	97.55	21.81	99.59	3.43	87.06	**	**
Chat	**	**	**	**	**	**	-	-	-	-
Coffee	1.43	1.07	1.34	1.25	**	**	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	3.25	2.44	**	**	**	**	**	**	-	-
ALL CROPS	133.29	100.00	107.40	100.00	21.90	100.00	3.94	100.00	**	**

TABLE 3.6.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

North and West Shewa Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	354.54	98.13	152.01	97.02	24.55	99.19	172.30	99.06	5.68	95.95
Teff	227.44	62.95	95.52	60.97	9.87	39.88	118.62	68.20	**	**
Barely	27.73	7.68	18.62	11.88	4.83	19.52	**	**	-	-
Wheat	96.40	26.68	35.37	22.57	9.71	39.23	**	**	**	**
Maize	1.33	.37	.93	.59	**	**	**	**	**	**
Sorghum	**	**	1.29	.82	-	-	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-
Oats	**	**	**	**	**	**	**	**	**	**
PULSES	5.20	1.44	**	**	**	**	**	**	**	**
Horse Beans	2.66	.74	**	**	**	**	**	**	**	**
Chick Peas	**	**	**	**	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	**	**	**	**	-	-
Lentils	.56	.16	.55	.35	**	**	**	**	-	-
Vetch	**	**	**	**	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	.59	.38	**	**	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	**	**
Spices	**	**	**	**	**	**	-	-	-	-
Potatoes	**	**	**	**	-	-	**	**	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	361.19	99.98	156.68	100.00	24.75	100.00	173.84	99.95	5.92	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	**	**	-	-
TOTAL PERMANENT	**	**	-	-	-	-	**	**	-	-
ALL CROPS	361.28	100.00	156.68	100.00	24.75	100.00	173.93	100.00	5.92	100.00

TABLE 3.6.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

East Shewa, Arsi, Bale and Borena Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	819.04	93.18	323.75	87.40	22.17	92.49	**	**	1.33	48.19
Teff	377.45	42.94	59.40	16.04	2.61	10.89	**	**	-	-
Barely	89.19	10.15	77.17	20.83	2.72	11.35	**	**	**	**
Wheat	285.68	32.50	137.21	37.04	4.64	19.36	**	**	**	**
Maize	49.87	5.67	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-
Millet	**	**	-	-	**	**	-	-	**	**
Oats	12.82	1.46	**	**	**	**	**	**	-	-
PULSES	38.18	4.34	**	**	**	**	**	**	**	**
Horse Beans	**	**	**	**	-	-	**	**	**	**
Chick Peas	6.81	.77	**	**	**	**	**	**	**	**
Haricot Beans	3.15	.36	**	**	**	**	**	**	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	**	**	**	**	-	-	**	**	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	**	**
Fenugreek	**	**	**	**	**	**	**	**	-	-
Spices	**	**	.15	.04	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	**	**
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	877.90	99.87	370.30	99.97	23.97	100.00	**	**	2.74	99.28
Chat	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	.01	.36
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	-	-	**	**	**	**
ALL CROPS	879.00	100.00	370.41	100.00	23.97	100.00	**	**	2.76	100.00

TABLE 3.6.5

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

East and West Harerge Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	39.32	52.39	**	**	15.69	61.17	**	**	**	**
Teff	**	**	**	**	**	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	**	**
Wheat	**	**	**	**	**	**	**	**	**	**
Maize	13.63	18.16	2.83	9.40	**	**	**	**	**	**
Sorghum	22.63	30.15	**	**	**	**	**	**	**	**
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	1.04	1.39	.38	1.26	**	**	**	**	**	**
ALL TEMPORARY	57.01	75.96	**	**	18.31	71.38	**	**	**	**
Chat	17.72	23.61	**	**	**	**	**	**	**	**
Coffee	**	**	**	**	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	18.04	24.04	**	**	**	**	**	**	**	**
ALL CROPS	75.05	100.00	**	**	25.65	100.00	**	**	**	**

TABLE 3.7

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
 OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
 1996(1988 E.C.)

Somalie

('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	**	**	-	-	**	**	-	-	-	-

TABLE 3.8

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Benshangul-Gumez

('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	**	**	**	**	-	-	-	-	-	-

TABLE 3.9

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 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	288.06	79.69	232.85	81.18	50.02	76.32	3.36	68.57	1.82	43.54
Teff	99.53	27.54	88.26	30.77	10.80	16.48	**	**	**	**
Barely	23.66	6.55	18.59	6.48	**	**	**	**	**	**
Wheat	74.32	20.56	53.94	18.81	**	**	**	**	**	**
Maize	79.10	21.88	63.47	22.13	13.56	20.69	**	**	**	**
Sorghum	7.83	2.17	5.61	1.96	**	**	-	-	**	**
Millet	**	**	**	**	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	20.86	5.77	11.84	4.13	8.66	13.21	**	**	**	**
Horse Beans	8.92	2.47	5.59	1.95	3.07	4.68	**	**	**	**
Chick Peas	**	**	**	**	**	**	**	**	-	-
Haricot Beans	6.94	1.92	2.22	.77	**	**	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-
Lentils	**	**	**	**	**	**	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	38.36	10.61	33.91	11.82	3.14	4.79	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-
Potatoes	6.75	1.87	4.96	1.73	1.72	2.62	-	-	**	**
Other Vegetables	3.36	.93	2.82	.98	**	**	**	**	**	**
ALL TEMPORARY	347.34	96.09	278.63	97.14	61.84	94.35	4.62	94.29	2.23	53.35
Chat	1.94	.54	.57	.20	**	**	-	-	**	**
Coffee	7.20	1.99	4.90	1.71	1.34	2.04	**	**	**	**
Enset	2.05	.57	1.17	.41	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	**	**	-	-	-	-
Fruits	1.84	.51	**	**	**	**	**	**	**	**
Other Permanent	1.03	.28	**	**	**	**	-	-	**	**
TOTAL PERMANENT	14.12	3.91	8.19	2.86	3.70	5.65	**	**	**	**
ALL CROPS	361.46	100.00	286.82	100.00	65.54	100.00	4.90	100.00	4.18	100.00

TABLE 3.9.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Yem*, Keficho, Maji, Shekicho and Benchi Zones

('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	**	**	**	**	-	-	**	**	-	-

* Special Wereda

TABLE 3.9.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

North and South Omo, Gardula* and Konso* Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	17.82	79.87	**	**	**	**	-	-	**	**
Teff	9.82	44.02	**	**	**	**	-	-	**	**
Barely	**	**	**	**	**	**	-	-	**	**
Wheat	**	**	**	**	**	**	-	-	**	**
Maize	**	**	**	**	**	**	-	-	-	-
Sorghum	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-
Horse Beans	**	**	-	-	**	**	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-
Haricot Beans	**	**	.37	2.33	**	**	-	-	-	-
Field Peas	**	**	.40	2.52	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.50	6.72	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-
Other Vegetables	**	**	**	**	**	**	**	**	-	-
ALL TEMPORARY	21.91	98.21	15.51	97.61	**	**	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	**	**	-	-	**	**	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-
ALL CROPS	22.31	100.00	15.89	100.00	**	**	**	**	**	**

* Special Wereda

TABLE 3.9.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Hadiya, Kembata and Gurage Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	249.50	81.40	209.46	81.51	35.77	82.86	2.53	67.47	1.76	66.17
Teff	85.68	27.95	76.28	29.69	**	**	**	**	**	**
Barely	22.93	7.48	17.95	6.99	**	**	**	**	**	**
Wheat	73.80	24.08	53.53	20.83	**	**	**	**	**	**
Maize	57.13	18.64	53.11	20.67	**	**	**	**	**	**
Sorghum	6.34	2.07	5.61	2.18	**	**	-	-	-	-
Millet	**	**	**	**	**	**	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	14.44	4.71	9.91	3.86	4.15	9.61	.27	7.20	**	**
Horse Beans	8.81	2.87	5.56	2.16	**	**	.17	4.53	**	**
Chick Peas	4.04	1.32	**	**	**	**	.10	2.67	-	-
Haricot Beans	1.11	.36	**	**	**	**	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	**	**	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-
Neug	**	**	**	**	**	**	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	36.53	11.92	32.47	12.64	2.79	6.46	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-
Potatoes	5.84	1.91	4.35	1.69	**	**	-	-	**	**
Other Vegetables	2.50	.82	2.06	.80	**	**	-	-	**	**
ALL TEMPORARY	300.51	98.04	251.87	98.02	42.72	98.96	**	**	2.17	81.58
Chat	**	**	**	**	**	**	-	-	**	**
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	.95	.31	**	**	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	.05	.02	-	-	-	-	**	**
Fruits	**	**	**	**	**	**	-	-	**	**
Other Permanent	**	**	**	**	**	**	-	-	**	**
TOTAL PERMANENT	6.01	1.96	5.09	1.98	**	**	-	-	-	-
ALL CROPS	306.52	100.00	256.96	100.00	43.17	100.00	**	**	2.66	100.00

TABLE 3.9.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Sidama, Gedio, Burji* and Amaro* Zones

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	18.14	60.37	7.66	64.81	10.13	62.84	**	**	-	-
Teff	2.01	6.69	.98	8.29	**	**	**	**	-	-
Barely	.20	.67	.20	1.69	-	-	-	-	-	-
Wheat	**	**	**	**	**	**	-	-	-	-
Maize	15.59	51.88	**	**	9.20	57.07	**	**	-	-
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	.35	1.16	.30	2.54	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-
ALL TEMPORARY	22.34	74.34	9.11	77.07	12.86	79.78	**	**	-	-
Chat	1.44	4.79	**	**	**	**	-	-	**	**
Coffee	3.69	12.28	**	**	1.21	7.51	**	**	**	**
Enset	**	**	**	**	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	**	**	**	**	**	**	-	-	-	-
TOTAL PERMANENT	7.71	25.66	**	**	3.26	20.22	**	**	**	**
ALL CROPS	30.05	100.00	11.82	100.00	16.12	100.00	**	**	**	**

* Special Wereda

TABLE 3.10

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Harari

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	10.43	61.72	.38	52.78	3.81	58.62	2.38	64.67	**	**
Teff	-	-	-	-	-	-	-	-	-	-
Barely	.07	.41	**	**	**	**	**	**	-	-
Wheat	**	**	**	**	.09	1.38	**	**	**	**
Maize	3.78	22.37	.06	8.33	1.43	22.00	.80	21.74	**	**
Sorghum	6.02	35.62	.26	36.11	2.26	34.77	1.39	37.77	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	**	**	**	**	**	**
PULSES	**	**	-	-	**	**	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	**	**	-	-	-	-
Field Peas	**	**	-	-	**	**	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.82	4.85	**	**	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.82	4.85	**	**	**	**	**	**	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.22	1.30	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.22	1.30	**	**	**	**	**	**	**	**
ALL TEMPORARY	11.61	68.70	.51	70.83	4.46	68.62	2.45	66.58	**	**
Chat	5.26	31.12	.21	29.17	2.04	31.38	1.21	32.88	**	**
Coffee	**	**	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	5.29	31.30	.21	29.17	2.04	31.38	1.23	33.42	**	**
ALL CROPS	16.90	100.00	.72	100.00	6.50	100.00	3.68	100.00	**	**

TABLE 3.11

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Addis Ababa

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	19.87	92.12	.44	51.16	.27	87.10	19.08	93.94	**	**
Teff	13.58	62.96	.14	16.28	.13	41.94	13.25	65.24	**	**
Barely	.04	.19	**	**	**	**	-	-	-	-
Wheat	6.25	28.98	.28	32.56	.13	41.94	5.83	28.71	**	**
Maize	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.44	6.68	.40	46.51	.04	12.90	.99	4.87	-	-
Horse Beans	**	**	-	-	**	**	**	**	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	.58	2.69	.22	25.58	**	**	.34	1.67	-	-
Lentils	.51	2.36	.08	9.30	**	**	.42	2.07	-	-
Vetch	.23	1.07	.10	11.63	-	-	.13	.64	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	.02	2.33	-	-	**	**	-	-
Fenugreek	.02	.09	.01	1.16	-	-	**	**	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	**	**	-	-
ALL TEMPORARY	21.57	100.00	.86	100.00	.31	100.00	20.31	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	21.57	100.00	.86	100.00	.31	100.00	20.31	100.00	**	**

TABLE 3.12

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1996(1988 E.C.)

Dire Dawa

('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	**	**	-	-	-	-	-	-	**	**

**4. Number of Holders Who Applied Agricultural Inputs in their fields by
their Educational Attainment**

According to the survey result, there are about 8.50 million holders at national level. Most of these holders (i.e. 77.10%) are illiterates and only 0.07% have attended higher education. See Table 4.1 for further information.

Out of the total holders, 0.63%, 1.44%, 8.9% and 32.8% have applied improved seed, irrigation, pesticide and fertilizer during the 1995/96 agriculture year respectively.

when we look at the educational attainment of those holders, who applied improved seed, irrigation, pesticide and fertilizer, 64.62%, 82.19%, 72.99% and 72.37% of them are illiterates in that order. For details refer to Table 4.1.

Table e. Summary of Number of Holders By Educational Attainment

Educational Attainment	Number of Holders Who applied			
	Improved Seed	Irrigation	Pesticide	Fertilizer
Illiterate	34.69	100.77	552.48	2018.94
Grades 1 - 3	6.73	11.36	102.81	399.07
Grades 4 - 6	7.07	5.30	56.66	189.89
Grades 7 - 8	**	2.62	25.22	95.14
Grades 9 - 11	**	**	16.07	55.51
Grades 12 complete	-	**	**	29.01
Higher Education	-	-	**	**
Total	53.68	122.60	756.97	2739.72

TABLE 4.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 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
ILLITRATE	6,556.83	77.10	34.69	64.62	100.77	82.19	552.48	72.99	2,018.84	72.37
GRADES 1 - 3	1,026.65	12.07	6.73	12.54	11.36	9.27	102.81	13.58	399.07	14.31
GRADES 4 - 6	538.77	6.34	7.07	13.17	5.30	4.32	56.66	7.49	189.89	6.81
GRADES 7 - 8	214.13	2.52	**	**	2.62	2.14	25.32	3.34	95.14	3.41
GRADES 9 - 11	117.22	1.38	**	**	**	**	16.07	2.12	55.51	1.99
GRADE 12 COMPLETE	44.32	.52	-	-	**	**	**	**	29.01	1.04
HIGHER EDUCATION	6.31	.07	-	-	-	-	**	**	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	8,504.23	100.00	53.68	100.00	122.60	100.00	756.97	100.00	2,789.72	100.00

TABLE 4.2 NUMBER OF HOLDERS BY EDUCATIONAL ATTAINMENT AND REGION
1995/96(1988 E.C.)

REGION	EDUCATIONAL ATTAINMENT IN GRADES								TOTAL HOLDERS
	ILLITERATE	1 - 3	4 - 6	7 - 8	9 - 11	12 COMPLETE	HIGHER EDUCATION	EDUCATION NOT STATED	
TIGRAY	489.25	56.60	11.10	2.26	.62	-	-	-	559.83
AFAR	21.44	3.97	.57	.09	.09	.09	-	-	26.26
AMHARA	2,001.56	374.32	75.74	27.76	17.81	9.72	-	-	2,506.90
OROMIYA	2,413.23	370.99	259.44	108.74	57.35	16.75	3.73	-	3,230.23
SOMALIE	89.85	9.42	2.52	-	.45	-	-	-	102.24
BENSHANGUL-GUMUZ	68.06	7.80	6.27	2.17	.75	-	-	-	85.03
S.N.N.P.R.	1,432.25	199.47	180.03	71.10	39.55	17.46	2.31	-	1,942.15
GAMBELA	17.40	1.93	1.86	1.36	.34	.18	.19	-	23.27
HARARI	9.13	.75	.68	.48	.09	.05	.06	-	11.25
ADDIS ABABA	3.43	.39	.28	.11	.11	.08	.02	-	4.42
DIRE DAWA	11.22	1.02	.27	.07	.06	-	-	-	12.64
TOTAL	6,556.83	1,026.65	538.77	214.13	117.22	44.32	6.31	-	8,504.23

NUMBER IN THOUSANDS

TABLE 4.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 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
ILLITRATE	489.25	87.39	6.08	76.29	15.02	100.00	12.96	68.43	107.38	82.10
GRADES 1 - 3	56.60	10.11	**	**	-	-	4.59	24.23	15.23	11.64
GRADES 4 - 6	11.10	1.98	**	**	-	-	**	**	**	**
GRADES 7 - 8	**	**	-	-	-	-	-	-	1.50	1.15
GRADES 9 - 11	**	**	.62	7.78	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	559.83	100.00	7.97	100.00	15.02	100.00	18.94	100.00	**	**

TABLE 4.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 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	21.44	81.65	-	-	.14	50.00	3.30	84.83	**	**
GRADES 1 - 3	**	**	-	-	.14	50.00	**	**	**	**
GRADES 4 - 6	**	**	-	-	-	-	**	**	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	.09	.34	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	26.26	100.00	-	-	.28	100.00	3.89	100.00	**	**

TABLE 4.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 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	2,001.56	79.84	5.80	73.51	25.09	81.30	82.28	82.22	519.61	73.31
GRADES 1 - 3	374.32	14.93	**	**	5.15	16.69	14.08	14.07	141.21	19.92
GRADES 4 - 6	75.74	3.02	**	**	**	**	**	**	26.65	3.76
GRADES 7 - 8	27.76	1.11	-	-	-	-	-	-	12.08	1.70
GRADES 9 - 11	17.81	.71	-	-	-	-	**	**	5.59	.79
GRADE 12 COMPLETE	9.72	.39	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	2,506.90	100.00	7.89	100.00	30.86	100.00	100.07	100.00	708.75	100.00

TABLE 4.5.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

North and South Gonder Zones

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	546.44	81.27	2.88	79.56	1.37	100.00	24.18	74.15	90.00	68.95
GRADES 1 - 3	101.62	15.11	**	**	-	-	6.05	18.55	31.51	24.14
GRADES 4 - 6	16.00	2.38	-	-	-	-	**	**	4.38	3.36
GRADES 7 - 8	5.16	.77	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	**	**	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	672.41	100.00	3.62	100.00	1.37	100.00	32.61	100.00	130.52	100.00

TABLE 4.5.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

East, West Gojam and Agewawi Zones

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	529.40	75.25	.73	100.00	2.12	36.87	16.16	72.37	293.71	73.12
GRADES 1 - 3	139.21	19.79	-	-	**	**	6.17	27.63	86.49	21.53
GRADES 4 - 6	21.31	3.03	-	-	-	-	-	-	11.67	2.91
GRADES 7 - 8	8.05	1.14	-	-	-	-	-	-	5.91	1.47
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	703.49	100.00	.73	100.00	5.75	100.00	22.33	100.00	401.66	100.00

TABLE 4.5.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

North Wolo and Waghamra Zones

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	280.73	88.54	1.33	75.57	7.73	92.91	18.39	93.21	15.41	93.45
GRADES 1 - 3	25.92	8.18	**	**	**	**	**	**	.55	3.34
GRADES 4 - 6	7.61	2.40	-	-	-	-	-	-	**	**
GRADES 7 - 8	2.39	.75	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	**	**	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	317.05	100.00	1.76	100.00	8.32	100.00	19.73	100.00	16.49	100.00

TABLE 4.5.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

South Wolo, Oromia and North Shewa Zones

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	644.99	79.24	**	**	13.86	89.83	23.55	92.72	120.50	75.27
GRADES 1 - 3	107.58	13.22	-	-	.94	6.09	.93	3.66	22.67	14.16
GRADES 4 - 6	30.83	3.79	**	**	**	**	**	**	10.48	6.55
GRADES 7 - 8	12.16	1.49	-	-	-	-	-	-	**	**
GRADES 9 - 11	11.35	1.39	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	7.05	.87	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	813.95	100.00	1.79	100.00	15.43	100.00	25.40	100.00	160.08	100.00

TABLE 4.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Oromiya

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	2,413.23	74.71	12.37	56.41	37.25	79.56	245.35	68.98	**	**
GRADES 1 - 3	370.99	11.48	3.17	14.46	2.84	6.07	56.86	15.99	145.63	13.22
GRADES 4 - 6	259.44	8.03	3.61	16.46	3.11	6.64	27.51	7.73	84.55	7.68
GRADES 7 - 8	108.74	3.37	1.66	7.57	**	**	14.73	4.14	48.05	4.36
GRADES 9 - 11	57.35	1.78	**	**	2.06	4.40	8.29	2.33	27.43	2.49
GRADE 12 COMPLETE	16.75	.52	-	-	-	-	**	**	10.01	.91
HIGHER EDUCATION	3.73	.12	-	-	-	-	-	-	1.68	.15
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	3,230.23	100.00	21.93	100.00	46.82	100.00	355.67	100.00	1,101.62	100.00

TABLE 4.6.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

East and West Welega Zones

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	340.05	69.33	-	-	.47	33.33	11.17	75.22	92.26	64.27
GRADES 1 - 3	50.76	10.35	**	**	-	-	2.24	15.08	17.04	11.87
GRADES 4 - 6	53.11	10.83	**	**	-	-	**	**	18.00	12.54
GRADES 7 - 8	26.97	5.50	-	-	.47	33.33	**	**	10.37	7.22
GRADES 9 - 11	12.33	2.51	-	-	.47	33.33	-	-	3.33	2.32
GRADE 12 COMPLETE	5.53	1.13	-	-	-	-	-	-	1.79	1.25
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	490.49	100.00	.96	100.00	1.41	100.00	14.85	100.00	143.54	100.00

TABLE 4.6.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Ilibabor and Jimma Zones

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	422.58	80.25	**	**	.63	100.00	36.50	79.75	108.71	86.97
GRADES 1 - 3	51.75	9.83	-	-	-	-	5.17	11.30	9.39	7.51
GRADES 4 - 6	38.51	7.31	**	**	-	-	2.61	5.70	4.21	3.37
GRADES 7 - 8	7.57	1.44	-	-	-	-	**	**	**	**
GRADES 9 - 11	4.32	.82	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	526.58	100.00	.95	100.00	.63	100.00	45.77	100.00	125.00	100.00

TABLE 4.6.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

North and West Shewa Zones

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	467.20	75.12	**	**	**	**	53.87	69.57	185.43	69.56
GRADES 1 - 3	72.31	11.63	-	-	**	**	11.74	15.16	39.33	14.75
GRADES 4 - 6	47.36	7.62	**	**	**	**	6.79	8.77	20.92	7.85
GRADES 7 - 8	13.14	2.11	**	**	-	-	**	**	6.17	2.31
GRADES 9 - 11	14.64	2.35	-	-	-	-	**	**	10.19	3.82
GRADE 12 COMPLETE	6.65	1.07	-	-	-	-	**	**	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	621.90	100.00	1.89	100.00	10.62	100.00	77.43	100.00	266.57	100.00

TABLE 4.6.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

East Shewa, Arsi, Bale and Borena Zones

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	680.81	66.07	8.68	58.29	**	**	89.92	57.86	281.02	64.43
GRADES 1 - 3	173.48	16.84	**	**	-	-	34.44	22.16	72.62	16.65
GRADES 4 - 6	98.02	9.51	**	**	-	-	15.50	9.97	36.32	8.33
GRADES 7 - 8	50.43	4.89	**	**	**	**	8.52	5.48	28.72	6.58
GRADES 9 - 11	23.62	2.29	**	**	**	**	6.03	3.88	13.35	3.06
GRADE 12 COMPLETE	3.18	.31	-	-	-	-	**	**	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	1,030.47	100.00	14.89	100.00	**	**	155.41	100.00	436.15	100.00

TABLE 4.6.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

East and West Harerge Zones

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	502.60	89.62	2.49	76.85	25.74	86.06	53.88	86.61	116.86	89.64
GRADES 1 - 3	22.69	4.05	**	**	**	**	3.28	5.27	7.26	5.57
GRADES 4 - 6	22.44	4.00	-	-	**	**	1.64	2.64	5.10	3.91
GRADES 7 - 8	10.64	1.90	-	-	-	-	2.23	3.58	**	**
GRADES 9 - 11	2.44	.44	-	-	**	**	**	**	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	560.80	100.00	3.24	100.00	29.91	100.00	62.21	100.00	130.37	100.00

TABLE 4.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Somalia

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	89.85	87.88	3.92	100.00	**	**	17.31	89.74	2.67	73.76
GRADES 1 - 3	9.42	9.21	-	-	**	**	**	**	**	**
GRADES 4 - 6	2.52	2.46	-	-	.32	5.62	**	**	**	**
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	.25	1.30	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	102.24	100.00	3.92	100.00	5.69	100.00	19.29	100.00	3.62	100.00

TABLE 4.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Benshangul-Gumez

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	68.06	80.04	-	-	.72	59.50	**	**	8.08	66.94
GRADES 1 - 3	7.80	9.17	-	-	.48	39.67	-	-	1.92	15.91
GRADES 4 - 6	6.27	7.37	-	-	-	-	-	-	1.12	9.28
GRADES 7 - 8	2.17	2.55	-	-	-	-	**	**	.94	7.79
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	85.03	100.00	-	-	1.21	100.00	4.75	100.00	12.07	100.00

TABLE 4.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 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	1,432.25	73.75	5.48	51.80	16.89	79.48	181.89	73.23	579.38	71.46
GRADES 1 - 3	199.47	10.27	**	**	**	**	25.42	10.23	**	**
GRADES 4 - 6	180.03	9.27	**	**	**	**	24.05	9.68	70.44	8.69
GRADES 7 - 8	71.10	3.66	**	**	**	**	10.05	4.05	32.02	3.95
GRADES 9 - 11	39.55	2.04	**	**	-	-	6.27	2.52	21.70	2.68
GRADE 12 COMPLETE	17.46	.90	-	-	**	**	-	-	15.26	1.88
HIGHER EDUCATION	2.31	.12	-	-	-	-	**	**	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	1,942.15	100.00	10.58	100.00	21.25	100.00	248.38	100.00	810.76	100.00

TABLE 4.9.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Yem*, Keficho, Maji, Shekicho and Benchu Zones

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	173.67	74.96	.46	49.46	.25	100.00	10.01	77.54	15.61	84.06
GRADES 1 - 3	22.96	9.91	**	**	-	-	.95	7.36	**	**
GRADES 4 - 6	23.60	10.19	-	-	-	-	**	**	1.58	8.51
GRADES 7 - 8	6.91	2.98	-	-	-	-	**	**	**	**
GRADES 9 - 11	3.53	1.52	-	-	-	-	**	**	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	231.69	100.00	**	**	.25	100.00	12.91	100.00	18.57	100.00

* Special Wereda

TABLE 4.9.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

North and South Omo, Gardula* and Konso* Zones

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	481.70	82.43	1.86	65.26	11.84	85.73	39.34	89.63	133.53	79.87
GRADES 1 - 3	48.76	8.34	**	**	**	**	3.24	7.38	15.75	9.42
GRADES 4 - 6	36.34	6.22	**	**	-	-	**	**	10.19	6.10
GRADES 7 - 8	7.07	1.21	-	-	**	**	-	-	**	**
GRADES 9 - 11	5.69	.97	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	4.11	.70	-	-	**	**	-	-	4.11	2.46
HIGHER EDUCATION	**	**	-	-	-	-	**	**	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	584.36	100.00	2.85	100.00	**	**	43.89	100.00	167.18	100.00

* Special Wereda

TABLE 4.9.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Hadiya, Kembata and Gurage Zones

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	417.77	73.43	1.98	59.10	**	**	92.00	70.66	278.42	71.10
GRADES 1 - 3	52.75	9.27	**	**	**	**	14.80	11.37	36.71	9.37
GRADES 4 - 6	51.67	9.08	**	**	**	**	13.13	10.08	38.27	9.77
GRADES 7 - 8	25.33	4.45	-	-	-	-	5.80	4.45	18.03	4.60
GRADES 9 - 11	14.96	2.63	-	-	-	-	4.49	3.45	14.27	3.64
GRADE 12 COMPLETE	6.50	1.14	-	-	-	-	-	-	5.89	1.50
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	568.97	100.00	3.35	100.00	2.02	100.00	130.21	100.00	391.58	100.00

TABLE 4.9.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Sidama, Gedio, Burji* and Amaro* Zones

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	359.11	64.46	**	**	4.16	80.46	40.55	66.07	151.82	65.04
GRADES 1 - 3	75.00	13.46	-	-	-	-	6.43	10.48	37.86	16.22
GRADES 4 - 6	68.43	12.28	**	**	**	**	9.11	14.84	20.41	8.74
GRADES 7 - 8	31.79	5.71	**	**	**	**	3.74	6.09	11.95	5.12
GRADES 9 - 11	15.37	2.76	**	**	-	-	**	**	5.62	2.41
GRADE 12 COMPLETE	5.82	1.04	-	-	-	-	-	-	5.26	2.25
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	557.13	100.00	3.45	100.00	5.17	100.00	61.37	100.00	233.42	100.00

* Special Wereda

TABLE 4.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 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	
ILLITRATE	17.40	74.77	.17	62.96	-	-	1.37	83.54	-	-	
GRADES 1 - 3	1.93	8.29	-	-	-	-	.20	12.20	-	-	
GRADES 4 - 6	1.86	7.99	-	-	-	-	-	-	-	-	
GRADES 7 - 8	1.36	5.84	**	**	-	-	**	**	-	-	
GRADES 9 - 11	.34	1.46	-	-	-	-	-	-	-	-	
GRADE 12 COMPLETE	.18	.77	-	-	-	-	-	-	-	-	
HIGHER EDUCATION	.19	.82	-	-	-	-	-	-	-	-	
NOT STATED	-	-	-	-	-	-	-	-	-	-	
TOTAL	23.27	100.00	.27	100.00	-	-	1.64	100.00	-	-	

TABLE 4.11 / NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Harari

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	9.13	81.16	**	**	.92	95.83	1.22	75.78	6.69	80.02
GRADES 1 - 3	.75	6.67	**	**	**	**	-	-	.58	6.94
GRADES 4 - 6	.68	6.04	**	**	-	-	**	**	.50	5.98
GRADES 7 - 8	.48	4.27	-	-	-	-	**	**	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	11.25	100.00	**	**	.96	100.00	1.61	100.00	8.36	100.00

TABLE 4.12 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 E.C.)

Addis Ababa

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	3.43	77.60	.04	66.67	-	-	.20	74.07	3.09	78.83
GRADES 1 - 3	.39	8.82	**	**	-	-	-	-	.27	6.89
GRADES 4 - 6	.28	6.33	-	-	-	-	.05	18.52	.23	5.87
GRADES 7 - 8	.11	2.49	-	-	-	-	-	-	.11	2.81
GRADES 9 - 11	.11	2.49	-	-	-	-	**	**	.11	2.81
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	4.42	100.00	.06	100.00	-	-	.27	100.00	3.92	100.00

TABLE 4.13 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1995/96 (1988 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	11.22	88.77	.43	87.76	.34	66.67	2.09	84.96	3.25	89.04
GRADES 1 - 3	1.02	8.07	-	-	**	**	**	**	**	**
GRADES 4 - 6	.27	2.14	-	-	**	**	**	**	**	**
GRADES 7 - 8	**	**	-	-	**	**	**	**	-	-
GRADES 9 - 11	**	**	**	**	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-
TOTAL	12.64	100.00	.49	100.00	.51	100.00	2.46	100.00	3.65	100.00

APPENDIX I

ESTIMATION PROCEDURES OF TOTAL AND SAMPLING ERRORS

$$\langle \rho^{\alpha\beta} \rangle = \frac{1}{N} \sum_{i=1}^N \rho_i^{\alpha\beta}$$

$$\frac{d\mu}{d\rho} = \frac{1}{2} \left(\frac{1}{\rho} - \frac{1}{\rho_0} \right) \quad \text{and} \quad \frac{d\rho}{d\mu} = \frac{2}{1 + 2\mu}.$$

APPENDIX I

ESTIMATION PROCEDURES OF TOTAL AND SAMPLING ERRORS.

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^{th} stratum.

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

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

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

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

a_{hi} is the sample total of area values in the i^{th} EA in the h^{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^{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^{th} stratum.

\hat{q}_{hi} is the sample total of quantity of a specific fertilizer applied for a specific crop land in the i^{th} EA in the h^{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:

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

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

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

APPENDIX II

ESTIMATES, STANDARD ERRORS AND COEFFICIENT OF VARIATIONS

$$\begin{aligned} & \frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = f(x, y) \\ & u(x_0, y_0) = u_0 \\ & u(x_1, y_1) = u_1 \end{aligned}$$

TABLE 1.1

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)

NATIONAL

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	6632.56	209.22	3.14	49.69	8.35	16.80	55.06	23.41	42.52	720.31	80.54	11.18	2466.92	170.97	6.93
Teff	2097.40	122.92	5.86	10.05	3.14	31.24	4.49	1.89	41.97	346.74	64.97	18.74	1094.87	112.64	10.29
Barely	825.54	70.62	8.55	**	**	**	1.40	0.55	39.09	50.70	9.49	18.71	242.48	43.51	17.94
Wheat	882.06	78.32	8.88	20.76	5.55	26.73	1.89	0.73	38.61	159.16	28.91	18.17	452.38	60.89	13.46
Maize	1280.68	75.69	5.91	15.57	3.65	23.44	21.81	10.46	47.96	87.73	9.28	10.57	465.25	45.68	9.82
Sorghum	1252.41	80.47	6.43	1.96	0.76	38.78	**	**	**	3.15	0.90	28.57	103.71	24.20	23.33
Millet	269.35	35.53	13.19	**	**	**	**	**	**	2.06	0.86	41.93	21.21	9.12	43.00
Oats	45.11	11.79	26.14	—	—	—	**	**	**	—	—	—	—	—	—
PULSES	904.39	55.44	6.13	**	**	**	5.31	2.21	41.64	29.15	4.63	15.87	101.20	15.99	15.80
Horsebeans	336.72	23.76	7.06	**	**	**	**	**	**	11.04	2.09	18.91	50.65	12.11	23.91
Fieldpeas	180.46	16.82	9.32	**	**	**	—	—	—	9.26	2.60	28.14	20.76	4.60	22.16
Harrowbean	101.17	15.45	15.27	**	**	**	**	**	**	5.17	1.28	24.81	13.58	3.18	23.42
Chickpeas	144.97	21.74	15.00	**	**	**	1.93	0.95	49.10	2.21	1.06	47.89	7.01	2.54	36.23
Lentils	65.12	14.45	22.19	—	—	—	**	**	**	0.75	0.33	43.41	6.83	2.68	39.24
Vetch	75.95	12.98	17.09	**	**	**	**	**	**	**	**	**	2.38	0.99	41.60
OILSEEDS	377.71	34.12	9.03	**	**	**	**	**	**	7.61	1.63	21.41	22.87	7.01	30.65
Neug	223.33	26.05	11.66	**	**	**	**	**	**	2.45	0.78	31.82	4.72	2.02	42.80
Linseed	112.72	16.63	14.75	—	—	—	**	**	**	0.81	0.35	43.16	3.64	1.59	43.68
Rapeseed	14.19	6.38	44.96	—	—	—	—	—	—	0.80	0.35	43.24	**	**	**
Groundnut	13.26	5.84	44.04	—	—	—	**	**	**	**	**	**	**	**	**
Sunflower	4.78	1.69	35.36	—	—	—	—	—	—	1.25	0.53	42.21	**	**	**
Sesame	9.39	4.38	46.65	**	**	**	—	—	—	**	**	—	—	**	**
Castorbean	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
OTHERS	179.12	15.40	8.60	**	**	**	4.89	1.19	24.37	13.22	3.87	29.27	68.49	10.17	15.43
Fenugreek	13.90	3.29	23.67	**	**	**	**	**	**	**	**	**	1.97	0.76	38.58
Spices	45.50	8.14	17.89	**	**	**	**	**	**	4.58	1.45	31.56	17.68	5.74	32.47
Potatoes	38.71	10.92	28.21	**	**	**	**	**	**	2.33	0.71	30.55	22.99	7.61	33.10
Other Temporary	81.31	6.62	8.14	**	**	**	2.25	0.51	22.77	**	**	**	25.84	4.64	17.95
TOTAL TEMPORARY	8114.08	252.87	3.12	52.28	8.46	16.18	65.34	24.04	36.79	770.28	82.69	10.73	2659.48	182.64	6.87
Chat	86.76	8.23	9.49	—	—	—	7.32	1.97	26.86	6.24	1.37	21.96	27.08	4.81	17.76
Coffe	202.13	22.16	10.96	9.33	2.44	26.15	4.95	1.77	35.74	29.96	6.30	21.04	23.08	2.88	12.48
Enset	223.81	27.71	12.38	—	—	—	**	**	**	8.53	2.06	24.10	119.28	15.79	13.24
Cotton	14.88	5.32	35.75	—	—	—	**	**	**	1.59	0.66	41.67	**	**	**
Tobaco	1.27	0.30	23.62	**	**	**	—	—	—	**	**	**	0.28	0.10	35.71
Fruits	17.82	2.94	16.50	**	**	**	2.75	0.93	33.86	2.96	1.03	34.90	4.25	1.50	35.29
Other Permanent	26.40	3.81	14.43	**	**	**	3.40	1.11	32.72	1.66	0.43	26.19	5.72	1.12	19.58
TOTAL PERMANENT	573.08	41.51	7.24	9.57	2.44	25.50	19.33	3.59	18.58	50.96	8.16	16.02	180.42	17.90	9.92
ALL CROPS	8687.15	248.90	2.87	61.85	8.78	14.20	84.68	24.68	29.15	821.24	82.30	10.02	2839.91	183.08	6.45

TABLE 1.2

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
TIGRAY Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	436.76	47.73	10.93	3.75	1.27	33.70	**	**	**	21.37	5.81	27.18	92.99	16.93	18.20
Teff	87.88	15.09	17.18	**	**	**	**	**	**	**	**	**	18.52	6.50	35.11
Barely	87.35	16.90	19.34	-	-	-	**	**	**	7.18	2.76	38.47	21.27	6.13	28.84
Wheat	84.55	20.75	24.55	2.18	1.01	46.44	**	**	**	6.18	2.24	36.14	16.11	3.93	24.41
Maize	45.05	11.08	24.60	-	-	-	**	**	**	0.66	0.31	46.93	22.21	8.66	38.96
Sorghum	96.14	24.92	25.92	**	**	**	**	**	**	**	**	**	9.26	4.47	48.26
Millet	35.78	10.60	29.63	-	-	-	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	36.91	6.20	16.79	-	-	-	**	**	**	**	**	**	4.01	1.44	35.81
Horsebeans	11.36	3.28	28.86	-	-	-	**	**	**	**	**	**	2.07	0.84	40.70
Fiekpeas	3.80	1.36	35.78	-	-	-	-	-	-	**	**	**	**	**	**
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	8.81	3.43	38.92	-	-	-	-	-	-	-	-	-	**	**	**
Lentils	6.28	1.82	28.95	-	-	-	-	-	-	-	-	-	**	**	**
Vetch	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
OILSEEDS	7.67	1.81	23.64	-	-	-	**	**	**	**	**	**	**	**	**
Neug	**	**	**	-	-	-	**	**	**	-	-	-	**	**	**
Linseed	5.13	1.47	28.66	-	-	-	-	-	-	**	**	**	**	**	**
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Sesame	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.25	0.60	48.00	**	**	**	**	**	**	**	**	**	**	**	**
Fenugreek	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-
Spices	**	**	**	-	-	-	**	**	**	-	-	-	**	**	**
Potatoes	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-
Other Temporary	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
TOTAL TEMPORARY	482.59	51.75	10.72	3.76	1.26	33.61	**	**	**	22.33	6.02	26.94	97.30	17.36	17.84
Chat	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-
Coffe	**	**	**	-	-	-	**	**	**	-	-	-	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	-	-	-	**	**	**	**	**	**	**	**	**
Other Permanent	**	**	**	-	-	-	**	**	**	-	-	-	**	**	**
TOTAL PERMANENT	**	**	**	-	-	-	**	**	**	22.34	6.02	26.93	97.39	17.36	17.83
ALL CROPS	483.82	52.05	10.76	3.76	1.26	33.61	**	**	**	22.34	6.02	26.93	97.39	17.36	17.83

TABLE I.3
Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1993/96 (1988 E.C.)
AFAR Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CE REALS	22.54	7.02	31.15	-	-	-	-	-	-	-	-	-	-	-	-
Teff	4.62	1.44	29.97	-	-	-	-	-	-	-	-	-	-	-	-
Barely	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Maize	4.50	1.51	33.55	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	13.16	4.69	35.63	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hariobean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Negg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linsed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.04	0.02	43.58	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	0.04	0.02	47.85	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	24.38	7.87	32.28	**	**	**	-	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.22	0.10	45.71	-	-	-	0.01	0.01	48.22	-	-	-	-	-	-
ALL CROPS	24.60	7.92	32.19	**	**	**	-	-	-	-	-	-	-	-	-

TABLE 1.4

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
AMHARA Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	2380.35	121.21	5.09	13.43	3.73	27.76	14.86	6.31	42.44	81.65	12.80	15.67	703.55	89.24	12.68
Teff	882.28	65.78	7.46	3.52	1.33	37.76	2.61	1.10	42.31	26.17	5.84	22.32	360.48	53.03	14.71
Barely	295.85	34.64	11.71	**	**	**	**	**	**	5.81	1.59	27.29	46.40	10.33	22.26
Wheat	259.46	41.44	15.97	8.46	3.22	38.01	0.78	0.35	44.99	11.97	4.94	41.30	64.06	18.00	28.10
Maize	289.69	27.18	9.38	0.91	0.39	42.65	4.36	2.06	47.25	21.09	4.62	21.92	146.68	21.42	14.61
Sorghum	471.89	55.13	11.68	**	**	**	**	**	**	14.35	4.39	30.60	4.98	1.63	32.77
Millet	173.19	32.57	18.81	**	**	**	**	**	**	2.27	0.84	36.87	80.23	23.55	29.36
Oats	7.99	2.50	31.26	-	-	-	**	**	**	-	-	-	**	**	**
PULSES	381.98	32.46	8.50	**	**	**	**	**	**	11.16	2.27	20.36	20.17	5.16	25.56
Horsebeans	129.33	13.22	10.22	-	-	-	-	-	-	4.67	1.19	25.57	12.54	3.57	28.47
Fieldpeas	74.82	10.66	14.25	**	**	**	-	-	-	3.95	1.28	32.34	3.11	1.14	36.61
Haricotbean	26.57	9.54	35.89	-	-	-	**	**	**	**	**	**	**	**	**
Chickpeas	81.40	14.17	17.41	**	**	**	**	**	**	**	**	**	**	**	**
Lentils	32.25	10.59	32.83	-	-	-	**	**	**	**	**	**	**	**	**
Vetch	37.62	7.50	19.94	-	-	-	**	**	**	**	**	**	**	**	**
OILSEEDS	165.96	20.08	12.10	-	-	-	**	**	**	3.66	0.92	25.23	9.07	3.69	40.68
Neug	111.60	16.66	14.93	-	-	-	-	-	-	1.50	0.60	39.97	4.00	1.99	49.65
Linseed	42.02	8.26	19.66	-	-	-	-	-	-	0.19	0.07	38.46	1.43	0.71	49.76
Rapeseed	3.75	1.51	40.22	-	-	-	-	-	-	0.76	0.34	45.25	2.80	1.38	49.46
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	3.55	1.42	40.04	-	-	-	-	-	-	1.11	0.52	46.91	**	**	**
Sesame	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Castorbean	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
OTHERS	55.40	8.39	15.14	**	**	**	1.33	0.66	49.88	4.34	1.18	27.39	12.21	2.82	23.11
Fenugreek	4.82	1.38	28.72	-	-	-	**	**	**	**	**	**	**	**	**
Spices	22.16	5.47	24.69	**	**	**	0.16	0.06	36.39	2.72	0.97	35.82	3.96	0.87	21.89
Potatoes	14.67	4.72	32.17	**	**	**	**	**	**	1.05	0.50	48.28	6.44	2.46	38.22
Other Temporary	13.76	3.47	25.22	**	**	**	0.24	0.11	43.80	**	**	**	1.75	0.52	29.62
TOTAL TEMPORARY	2983.72	147.41	4.94	13.56	3.73	27.51	19.67	6.88	34.98	100.81	13.58	13.47	745.00	93.56	12.56
Chat	**	**	**	-	-	-	**	**	**	0.09	0.04	46.42	**	**	**
Coffe	5.12	1.36	26.58	**	**	**	2.17	0.85	39.09	0.74	0.29	39.96	2.02	0.83	41.12
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	-	-	-	-	-	-	0.87	0.35	40.01	**	**	**
Tobacco	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	1.68	0.59	34.78	**	**	**	0.77	0.36	46.62	**	**	**	**	**	**
Other Permanent	9.37	2.82	30.09	**	**	**	1.18	0.32	26.97	0.66	0.22	33.80	2.62	0.80	30.51
TOTAL PERMANENT	26.99	5.80	21.49	**	**	**	5.58	1.93	34.66	2.42	0.61	25.29	6.12	1.61	26.32
ALL CROPS	3010.71	147.76	4.91	13.71	3.73	27.22	25.25	7.41	29.35	103.24	13.77	13.34	751.12	93.70	12.48

TABLE 1.5

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
OROMIA Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	3034.03	155.82	5.14	26.81	7.07	26.37	**	**	**	459.63	76.01	16.54	1416.14	141.34	9.98
Teff	941.16	100.76	10.71	**	**	**	**	**	**	253.09	63.49	25.09	623.00	97.81	15.70
Barely	384.67	58.39	15.18	**	**	**	**	**	**	34.72	8.89	25.62	156.69	41.48	26.47
Wheat	469.99	61.54	13.09	10.10	4.41	43.69	**	**	**	103.84	26.03	25.07	320.69	56.37	17.58
Maize	699.62	65.20	9.32	10.38	3.21	30.91	**	**	**	38.73	5.41	13.98	227.99	36.90	16.18
Sorghum	452.11	44.83	9.91	**	**	**	**	**	**	26.88	5.53	20.55	51.57	11.64	22.57
Millet	49.68	8.77	17.65	—	—	—	—	—	—	**	**	**	15.73	4.57	29.06
Oats	36.80	11.53	31.32	—	—	—	—	—	—	2.02	0.86	42.58	20.47	9.11	44.51
PULSES	390.44	43.42	11.12	**	**	**	**	**	**	12.16	3.77	31.03	55.85	14.58	26.10
Horsebeans	154.56	18.36	11.88	—	—	—	—	—	—	4.98	1.65	33.10	27.01	11.28	41.75
Fiekpeas	79.19	12.20	15.41	—	—	—	—	—	—	**	**	**	13.28	4.08	30.72
Haricotbean	52.62	11.54	21.93	**	**	**	**	**	**	2.31	0.98	42.37	6.60	2.41	36.61
Chickpeas	47.97	16.03	33.41	**	**	**	**	**	**	**	**	**	**	**	**
Lentils	25.26	9.67	38.28	—	—	—	—	—	—	**	**	**	**	**	**
Vetch	30.85	9.99	32.37	**	**	**	**	**	**	—	—	—	**	**	**
OILSEEDS	191.40	27.41	14.32	**	**	**	**	**	**	3.50	1.33	38.00	13.08	5.95	45.51
Neug	103.08	19.91	19.31	**	**	**	—	—	—	**	**	**	**	**	**
Linseed	65.06	14.36	22.07	—	—	—	—	—	—	**	**	**	**	**	**
Rapeseed	**	**	**	—	—	—	—	—	—	**	**	**	**	**	**
Groundnuts	**	**	**	—	—	—	—	—	—	**	**	**	**	**	**
Sunflower	**	**	**	—	—	—	—	—	—	**	**	**	**	**	**
Sesame	1.43	0.63	43.76	—	—	—	—	—	—	—	—	—	—	—	—
Castorbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OTHERS	59.86	10.57	17.66	**	**	**	2.44	0.90	36.90	1.48	0.33	22.40	23.63	7.25	30.66
Fenugreek	8.84	2.99	33.81	**	**	**	—	—	—	**	**	**	1.84	0.76	41.24
Spices	7.14	1.48	20.80	—	—	—	**	**	**	0.25	0.09	36.10	2.98	0.88	29.46
Potatoes	**	**	**	—	—	—	**	**	**	**	**	**	**	**	**
Other Temporary	27.06	3.26	12.05	**	**	**	1.22	0.40	33.07	0.82	0.22	25.66	7.96	1.52	19.13
TOTAL TEMPORARY	3675.73	191.08	5.20	28.86	7.19	24.92	**	**	**	476.77	77.82	16.32	1508.72	151.59	10.05
Chat	60.50	7.07	11.68	—	—	—	5.17	1.54	29.82	3.96	1.23	30.96	16.95	4.29	25.34
Coffe	130.53	20.89	16.01	5.83	2.20	37.74	**	**	**	11.13	5.21	46.83	2.07	0.55	26.85
Enset	74.24	25.18	33.91	—	—	—	**	**	**	**	**	**	26.89	12.40	46.10
Cotton	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Tobacco	0.86	0.27	31.17	—	—	—	—	—	—	**	**	**	0.05	0.02	46.07
Fruits	7.02	1.91	27.25	**	**	**	0.64	0.27	42.45	**	**	**	0.65	0.17	26.39
Other Permanent	8.95	1.94	21.74	—	—	—	**	**	**	0.84	0.37	43.76	1.29	0.64	49.31
TOTAL PERMANENT	282.26	38.28	13.56	5.90	2.20	37.33	8.96	2.60	29.06	19.47	6.86	35.23	47.90	13.74	28.69
ALL CROPS	3958.00	185.43	4.68	34.72	7.48	21.54	**	**	**	496.24	77.34	15.59	1556.62	151.88	9.76

TABLE 1.6

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
SOMALI Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	59.31	11.72	19.75	**	**	**	**	**	**	17.04	6.58	38.61	**	**	**
Teff	**	**	**	—	—	—	—	—	—	**	**	**	—	—	—
Barely	4.23	1.10	26.11	—	—	—	—	—	—	**	**	**	—	—	—
Wheat	5.22	1.54	29.46	—	—	—	—	—	—	**	**	**	**	**	**
Maize	//	20.55	7.06	34.38	**	**	**	**	**	**	**	**	**	**	**
Sorghum	29.15	7.11	24.40	**	**	**	**	**	**	5.60	1.91	34.09	**	**	**
Millet	—	—	—	—	—	—	—	—	—	10.78	4.80	44.53	0.30	0.14	45.82
Oats	**	**	**	—	—	—	—	—	—	**	**	**	—	—	—
PULSES	0.32	0.15	46.80	—	—	—	—	—	—	—	—	—	**	**	**
Horsebeans	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fieldpeas	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Haricotbean	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Chickpeas	**	**	**	—	—	—	—	—	—	—	—	—	**	**	**
Lentils	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Vetch	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OILSEEDS	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Neug	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Linseed	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Rapeseed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Groundnuts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sunflower	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sesame	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Castorbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OTHERS	1.22	0.53	43.38	—	—	—	**	**	**	**	**	**	**	**	**
Fenugreek	**	**	**	—	—	—	—	—	—	**	**	**	—	—	—
Spices	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Potatoes	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Other Temporary	1.06	0.48	45.40	—	—	—	**	**	**	**	**	**	**	**	**
TOTAL TEMPORARY	60.92	11.81	19.38	**	**	**	**	**	**	17.18	6.57	38.26	**	**	**
Chat	8.39	2.64	31.40	—	—	—	**	**	**	0.98	0.34	34.67	**	**	**
Coffe	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enset	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cotton	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tobacco	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fruits	**	**	**	—	—	—	**	**	**	—	—	—	—	—	—
Other Permanent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL PERMANENT	8.40	2.63	31.34	—	—	—	**	**	**	0.98	0.34	34.67	**	**	**
ALL CROPS	69.32	12.91	18.62	**	**	**	**	**	**	18.16	6.55	36.05	**	**	**

TABLE 1.7

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
BENSHANGULE GUMUZ Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	81.28	9.56	11.76	**	**	**	**	**	**	1.22	0.54	43.81	7.34	3.35	45.68
Teff	16.15	4.33	26.80	-	-	-	-	-	-	-	-	-	**	**	**
Barely	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Wheat	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Maize	20.55	3.97	19.34	**	**	**	**	**	**	**	**	**	2.02	0.70	34.50
Sorghum	35.07	7.87	22.43	**	**	**	-	-	-	**	**	**	-	-	-
Millet	7.15	3.23	45.12	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
PULSES	3.77	1.30	34.41	-	-	-	-	-	-	-	-	-	**	**	**
Horsebeans	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Fieldpeas	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Chickpeas	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Lentils	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
OILSEEDS	10.81	2.52	23.32	**	**	**	-	-	-	-	-	-	**	**	**
Neug	7.81	2.09	26.73	-	-	-	-	-	-	-	-	-	-	-	-
Limeed	0.12	0.06	47.81	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Groundnuts	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.85	0.20	23.77	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Spices	0.42	0.16	39.62	-	-	-	-	-	-	-	-	-	**	**	**
Potatoes	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Other Temporary	0.32	0.10	31.25	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	96.70	10.67	11.04	**	**	**	**	**	**	1.28	0.54	42.34	8.04	3.66	45.53
Chat	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Coffe	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Other Permanent	0.04	0.02	44.81	-	-	-	-	-	-	-	-	-	**	**	**
TOTAL PERMANENT	2.02	0.81	40.15	**	**	**	**	**	**	1.28	0.54	42.21	8.49	3.77	44.46
ALL CROPS	98.72	10.93	11.08	**	**	**	**	**	**	1.28	0.54	42.21	8.49	3.77	44.46

TABLE 1.8

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
S.N.N.P. Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	609.74	47.28	7.75	**	**	**	4.09	1.88	46.08	132.13	21.51	16.28	228.81	31.24	13.65
Teff	160.44	19.46	12.13	**	**	**	-	-	-	59.51	12.10	20.32	83.41	16.12	19.33
Barely	52.32	9.48	18.12	**	**	**	-	-	-	2.59	0.81	31.07	17.77	5.27	29.66
Wheat	58.26	13.97	23.98	**	**	**	**	**	**	36.86	11.36	30.82	47.69	13.79	28.92
Maize	194.65	23.37	12.01	**	**	**	**	**	**	18.91	5.56	29.39	64.03	13.79	21.54
Sorghum	140.37	25.77	18.36	-	-	-	**	**	**	13.88	5.26	37.91	**	**	**
Millet	3.51	1.43	40.74	-	-	-	-	-	-	**	**	**	**	**	**
Oats	**	**	**	-	-	-	-	-	-	**	**	**	**	**	**
PULSES	87.21	9.65	11.07	**	**	**	**	**	**	5.01	1.36	27.20	19.42	3.78	19.48
Horsebeans	40.60	6.44	15.86	**	**	**	-	-	-	0.80	0.28	35.33	8.73	2.43	27.87
Fieldpeas	22.26	4.31	19.36	-	-	-	-	-	-	**	**	**	3.39	1.68	49.60
Haricotbean	19.95	3.66	18.35	-	-	-	**	**	**	2.35	0.77	32.64	6.62	2.06	31.19
Chickpeas	3.60	1.46	40.56	-	-	-	-	-	-	**	**	**	**	**	**
Lentils	0.66	0.26	39.39	-	-	-	-	-	-	**	**	**	**	**	**
Vetch	**	**	**	-	-	-	-	-	-	**	**	**	**	**	**
OILSEEDS	0.61	0.24	39.34	-	-	-	-	-	-	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	**	**	**	**	**	**
Groundnuts	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	58.21	8.32	14.29	**	**	**	**	**	**	**	**	**	32.30	7.16	22.17
Fenugreek	**	**	**	-	-	-	-	-	-	**	**	**	**	**	**
Spices	14.80	5.82	39.32	-	-	-	-	-	-	**	**	**	**	**	**
Potatoes	6.94	1.48	21.33	-	-	-	-	-	-	**	**	**	**	**	**
Other Temporary	36.42	5.65	15.51	**	**	**	**	**	**	**	**	**	5.62	1.36	24.19
TOTAL TEMPORARY	755.77	51.93	6.87	3.11	1.45	46.62	4.73	1.99	42.10	144.22	22.60	15.67	280.64	35.94	27.28
Chat	12.70	2.64	20.79	-	-	-	**	**	**	1.07	0.51	47.36	7.00	1.94	27.71
Coffe	64.52	7.21	11.17	2.91	1.01	34.71	**	**	**	18.09	3.54	19.56	18.60	2.68	14.39
Enset	149.44	11.57	7.74	-	-	-	**	**	**	6.62	1.71	25.88	92.39	9.78	10.59
Cotton	**	**	**	-	-	-	**	**	**	**	**	**	**	**	**
Tobacco	0.36	0.13	36.11	**	**	**	-	-	-	-	-	-	0.23	0.10	42.86
Fruits	7.53	2.10	27.89	**	**	**	**	**	**	0.85	0.33	38.53	3.05	1.47	48.15
Other Permanent	6.80	1.50	22.06	-	-	-	**	**	**	0.15	0.06	36.65	1.71	0.44	25.91
TOTAL PERMANENT	247.28	14.66	5.93	**	**	**	2.54	1.16	45.69	27.50	4.35	15.83	123.12	11.31	9.18
ALL CROPS	1003.05	51.56	5.14	6.12	1.85	30.23	7.27	2.65	36.47	171.72	22.69	13.21	403.76	36.52	9.05

TABLE 1.9

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
GAMBELA Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	9.65	1.69	17.50	**	**	**	**	**	**	**	**	**	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	5.16	1.45	28.02	**	**	**	**	**	**	**	**	**	**	**	**
Sorghum	4.44	1.18	26.62	-	-	-	-	-	-	-	-	-	-	-	-
Millet	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hariotbean	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.41	0.15	35.52	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	0.15	0.06	40.93	-	-	-	-	-	-	-	-	-	**	**	**
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	0.26	0.13	49.75	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.12	0.98	46.23	**	**	**	**	**	**	**	**	**	0.02	0.01	39.66
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Other Temporary	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
TOTAL TEMPORARY	12.19	2.37	19.42	**	**	**	**	**	**	**	**	**	-	-	-
Chat	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	**	**	**	0.54	0.25	46.51	**	**	**	**	**	**	**	**	**
Enset	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.26	0.07	26.78	-	-	-	-	-	-	-	-	-	**	**	**
Other Permanent	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.92	0.78	40.52	0.54	0.25	46.51	**	**	**	**	**	**	-	-	-
ALL CROPS	14.11	2.55	18.05	0.59	0.25	41.72	**	**	**	**	**	**	-	-	-

TABLE 1.10

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1996 E.C.)
HARARI REGION

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area					
	Estimate ('000 HA)	S.E. ('000 HA)	C.V. (%)	Estimate ('000 HA)	S.E. ('000 HA)	C.V. (%)	Estimate ('000 HA)	S.E. ('000 HA)	C.V. (%)	Estimate ('000 HA)	S.E. ('000 HA)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)			
CE REALS	3.68	0.61	16.63	**	-	-	-	-	-	**	0.77	0.37	47.63	2.87	0.57	19.75		
Teff	-	-	-	**	-	-	-	-	-	-	-	-	-	-	-	-		
Barely	0.12	0.06	46.11	**	-	-	-	-	-	0.01	0.00	42.97	0.11	0.01	47.98			
Wheat	0.68	0.15	22.13	**	**	**	**	**	**	0.14	0.07	48.73	0.58	0.14	47.60			
Maize	2.84	0.46	16.37	**	**	**	**	**	**	0.62	0.30	48.15	2.15	0.42	23.77			
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.68		
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Oats	**	**	**	**	-	-	-	-	-	-	-	-	**	**	**	**		
PULSES	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-		
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fishpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Harrowbean	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-		
Chickpeas	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-		
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
OILSEEDS	0.69	0.29	42.15	**	-	-	-	-	-	0.02	0.01	49.90	0.29	0.13	44.89			
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Linseed	-	-	-	-	-	-	-	-	-	0.02	0.01	49.90	0.29	0.13	44.89			
Repesed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Groundnuts	0.69	0.29	42.15	**	-	-	-	-	-	-	-	-	-	-	-	-		
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Casterbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
OTHERS	0.10	0.02	22.76	**	-	-	-	-	-	0.02	0.01	35.92	**	0.05	0.02	33.75		
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other Temporary	0.69	0.02	24.76	**	-	-	-	-	-	0.02	0.01	35.92	**	0.05	0.02	33.66		
TOTAL TEMPORARY	4.50	0.69	15.59	**	-	-	-	-	-	0.32	0.16	48.06	0.86	0.37	3.24	0.61		
Chat	1.28	0.25	19.48	**	-	-	-	-	-	0.16	0.06	38.73	**	1.03	0.24	23.74		
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fruit	**	**	**	**	-	-	-	-	-	**	**	-	-	**	**	-		
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL PERMANENT	1.43	0.26	18.91	**	-	-	-	-	-	0.20	0.08	39.41	**	1.05	1.05	23.32		
ALL CROPS	5.93	0.91	15.27	**	**	**	**	**	**	0.52	0.22	42.18	0.88	0.42	47.26	4.28	0.82	19.16

TABLE 1.11

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
ADDIS ABABA Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	7.84	1.03	13.11	**	**	**	**	**	**	0.53	0.24	44.39	7.64	1.02	13.34
Teff	4.57	0.62	13.58	**	**	**	-	-	-	0.42	0.17	41.13	4.52	0.63	13.86
Barely	0.02	0.01	43.54	-	-	-	-	-	-	**	**	**	0.02	0.01	48.06
Wheat	3.16	0.45	14.25	-	-	-	**	**	**	**	**	**	3.10	0.44	14.33
Maize	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Sorghum	0.09	0.03	38.84	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	1.98	0.32	15.93	-	-	-	-	-	-	**	**	**	0.95	0.17	17.95
Horsebeans	0.13	0.04	30.58	-	-	-	-	-	-	-	-	-	0.03	0.01	36.16
Fieldpeas	0.06	0.02	31.28	-	-	-	-	-	-	-	-	-	-	-	-
Hariotbean	-	-	-	-	-	-	-	-	-	-	-	-	0.31	0.08	24.92
Chickpeas	0.60	0.17	29.03	-	-	-	-	-	-	-	-	-	0.36	0.09	25.68
Lentils	0.51	0.10	20.60	-	-	-	-	-	-	-	-	-	0.26	0.08	31.91
Vetch	0.69	0.11	16.45	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.17	0.07	41.15	-	-	-	**	**	**	**	**	**	0.07	0.03	40.80
Fenugreek	0.08	0.03	35.63	-	-	-	-	-	-	-	-	-	**	**	**
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Other Temporary	**	**	**	-	-	-	**	**	**	0.58	0.24	41.91	8.67	1.15	13.26
TOTAL TEMPORARY	10.00	1.32	13.22	0.02	0.01	40.41	**	**	**	0.58	0.24	41.91	8.67	1.15	13.26
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	10.00	1.32	13.22	0.02	0.01	40.41	**	**	**	0.58	0.24	41.91	8.67	1.15	13.26

TABLE 1.12

Estimates of Total Area, Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)

DIRE DAWA Region

Variable	Total Area			Improved Seed Applied Area			Irrigation Applied Area			Pesticide Applied Area			Fertilizer Applied Area		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CE REALS	7.38	2.41	32.59	**	**	**	**	**	**	0.98	0.34	35.18	**	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.23	0.08	37.00	**	**	**	**	**	**	0.19	0.08	43.55	**	**	**
Sorghum	7.16	2.40	33.52	**	**	**	**	**	**	0.79	0.31	39.47	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linsseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	-	-	-	-	-	-	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Other Temporary	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
TOTAL TEMPORARY	7.59	2.39	31.50	**	**	**	**	**	**	1.12	0.33	29.87	**	**	**
Chat	**	**	**	-	-	-	-	-	-	**	**	**	**	**	**
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
TOTAL PERMANENT	1.33	0.55	41.17	-	-	-	-	-	-	**	**	**	**	**	**
ALL CROPS	8.92	2.54	28.45	**	**	**	**	**	**	1.59	0.50	31.50	**	**	**

TABLE 2.1

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
NATIONAL

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 Ha)	S.E. ('000)	C.V. (%)															
CEREALS	2466.92	170.97	6.93	362.33	30.36	8.39	1459.68	129.15	8.85	187.92	24.58	13.08	429.74	118.52	27.58	27.03	5.31	19.64
Teff	1094.87	112.64	10.29	283.8	5.36	18.90	677.71	69.17	10.21	87.04	14.24	16.36	296.01	85.70	28.95	5.75	2.02	35.17
Barely	242.48	43.51	17.94	38.74	6.88	17.77	175.08	41.29	23.59	17.11	4.60	26.85	9.73	3.39	34.89	1.82	0.70	38.49
Wheat	452.38	60.89	13.46	166.9	2.97	17.78	280.72	45.52	16.21	38.14	10.61	27.82	113.48	40.98	36.11	3.35	1.21	36.19
Maize	465.25	45.68	9.82	217.17	21.41	9.86	197.36	35.91	18.20	28.75	11.25	39.12	8.51	2.20	25.81	13.45	3.67	27.26
Sorghum	87.02	15.00	17.24	55.81	13.95	24.99	18.51	3.90	21.06	8.46	2.67	31.55	1.65	0.65	39.37	1.65	0.65	39.37
Millet	103.71	24.20	23.33	5.52	1.98	35.90	92.47	23.67	25.60	5.52	2.02	36.56	**	**	**	**	**	**
Oats	21.21	9.12	43.03	0.24	0.12	49.61	17.83	8.25	46.26	**	**	**	**	**	**	**	**	**
PULSES	101.20	15.99	15.80	26.64	3.43	12.87	53.36	13.43	25.16	9.42	2.36	25.02	10.36	4.35	42.02	1.42	0.65	45.36
Horsebeans	50.65	12.11	23.91	17.13	2.82	16.44	28.64	11.07	38.67	2.93	1.22	41.52	1.09	0.45	41.64	**	**	**
Chickpeas	20.76	4.60	22.17	4.44	1.05	23.63	10.35	2.99	28.92	2.27	0.96	42.43	**	**	**	**	**	**
Haricotbean	13.58	3.18	23.43	2.78	0.67	23.98	5.73	2.03	33.33	3.71	1.54	41.43	**	**	**	**	**	**
Fieldpeas	7.01	2.54	36.19	1.36	0.49	35.81	**	**	**	**	**	**	0.88	0.43	48.76	**	**	**
Lentils	6.83	2.68	39.33	**	**	**	3.07	1.02	33.38	**	**	**	**	**	**	**	**	**
Vetch	2.38	0.99	41.86	0.34	0.17	48.43	**	**	**	**	**	**	**	**	**	**	**	**
OILSEEDS	22.87	7.01	30.64	7.17	3.11	43.38	14.85	6.16	41.51	0.42	0.20	46.10	**	**	**	**	**	**
Neug	4.72	2.02	42.73	1.24	0.57	46.13	**	**	**	**	**	**	**	**	**	**	**	**
Linseed	3.64	1.59	43.76	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Rapeseed	**	**	**	0.96	0.33	34.01	**	**	**	**	**	**	**	**	**	**	**	**
Groundnuts	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Sunflower	**	**	**	-	-	-	**	**	**	-	-	-	**	**	**	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	68.49	10.57	15.43	32.77	4.98	15.18	29.94	8.81	29.42	3.88	1.00	25.73	1.11	0.36	32.73	0.78	0.35	44.68
Penugreek	1.97	0.76	38.54	0.16	0.07	46.81	1.60	0.69	43.39	**	**	**	**	**	**	**	**	**
Spices	17.68	5.74	32.46	5.67	0.99	17.42	10.51	5.23	49.77	1.14	0.56	49.64	**	**	**	**	**	**
Potatoes	22.99	7.61	33.09	6.92	2.11	30.41	**	**	**	2.05	0.69	33.67	**	**	**	**	**	**
Other Temporary	25.84	4.64	17.95	20.03	4.32	21.59	4.44	1.11	25.09	0.67	0.27	39.80	0.46	0.21	44.54	0.23	0.11	47.54
TOTAL TEMPORARY	2659.48	182.64	6.87	429.13	33.31	7.76	1557.83	138.39	8.88	201.66	23.95	12.87	441.44	122.40	27.73	29.42	5.67	19.26
Chat	27.08	4.81	17.77	20.67	3.99	19.30	**	**	**	3.25	1.12	34.53	0.94	0.45	47.88	1.18	0.55	46.92
Coffe	23.08	2.88	12.49	20.81	2.61	12.56	1.61	0.47	29.19	0.49	0.20	41.23	**	**	**	**	**	**
Enset	119.28	15.79	13.24	118.26	15.78	13.34	0.46	0.18	39.28	**	**	**	**	**	**	**	**	**
Cotton	**	**	**	**	**	**	-	-	-	**	**	**	**	**	**	-	-	-
Tobaco	0.28	0.10	35.58	0.20	0.08	42.41	**	**	**	**	**	**	-	-	-	-	-	-
Fruits	4.25	1.50	35.23	3.69	1.46	39.50	0.29	0.12	42.48	**	**	**	**	**	**	**	**	**
Other Permanent	5.72	1.12	19.50	5.07	1.09	21.42	0.34	0.11	31.76	0.05	0.02	47.70	**	**	**	**	**	**
TOTAL PERMANENT	180.42	17.90	9.92	169.31	17.59	10.39	3.76	0.88	23.89	4.27	1.17	27.49	1.18	0.47	39.84	1.91	0.65	34.15
ALL CROPS	2839.91	183.08	6.45	598.44	39.81	6.65	1561.59	138.45	8.87	205.93	26.10	12.67	442.62	122.41	27.65	31.33	5.98	19.08

TABLE 2.2

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
TIGRAY Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)															
CEREALS	92.99	16.93	18.20	51.49	12.32	23.92	31.21	7.72	24.74	5.33	1.87	34.97	2.37	0.96	40.49	2.38	1.27	49.15
Teff	18.52	6.50	35.11	2.17	0.75	34.68	13.53	6.02	44.53	1.49	0.59	39.55	**	**	**	**	**	**
Barely	21.27	6.13	28.84	9.93	3.46	34.88	9.04	2.98	32.93	**	**	**	**	**	**	**	**	**
Wheat	16.11	3.93	24.41	6.45	2.14	33.16	6.24	1.99	31.93	1.16	0.43	36.96	**	**	**	**	**	**
Maize	22.21	8.66	38.96	21.62	8.45	39.07	**	**	**	**	**	**	**	**	**	**	**	**
Sorghum	9.26	4.47	48.26	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Millet	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	4.01	1.44	35.81	3.26	1.25	38.37	**	**	**	**	**	**	**	**	**	**	**	**
Horsebeans	2.07	0.84	40.70	1.44	0.58	40.31	**	**	**	**	**	**	**	**	**	**	**	**
Chickpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Neug	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Pentigreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	97.30	17.36	17.84	54.87	12.68	23.11	31.81	7.83	24.61	5.66	1.98	34.89	2.37	0.96	40.49	2.38	1.27	49.15
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	97.39	17.36	17.83	54.93	12.68	23.08	31.84	7.84	24.61	5.66	1.98	34.89	2.37	0.96	40.49	2.38	1.27	49.15

TABLE 2.3
Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
AFAR Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM.		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)															
CEREALS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Teff	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barely	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wheat	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maize	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sorghum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millet	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oats	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PULSES	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Homebeans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chickpeas	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Haricotbean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fieldpeas	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lentils	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vetch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OILSEEDS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Neug	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Linseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rapeseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Groundnuts	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sunflower	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sesame	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Castorbean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OTHERS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fenugreek	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Spices	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potatoes	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Temporary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL TEMPORARY	--	--	--															
Chat	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Coffe	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Erset	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cotton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tobaco	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fruits	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Permanent	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL PERMANENT	--	--	--															
ALL CROPS	--	--	--															

TABLE 2.4
Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1955/56 (1955 E.C.)
AMHARA Region

Type of Crop	Total ('000 HA)	Estimate ('000 HA)	S.E. ('000)	C.V. (%)	Natural Fertilizer Estimate ('000 HA)	S.E. ('000)	C.V. (%)	DAP Estimate ('000 HA)	S.E. ('000)	C.V. (%)	UREA Estimate ('000 HA)	S.E. ('000)	C.V. (%)	DAP+UREA Estimate ('000 HA)	S.E. ('000)	C.V. (%)	NAT + COM Estimate ('000 HA)	S.E. ('000)	C.V. (%)
CEREALS	703.55	89.24	12.68	12.65	126.25	14.24	11.28	445.32	77.76	17.46	361.9	8.75	24.18	85.09	30.47	35.81	107.1	3.96	37.03
Teff	360.48	53.03	14.71	11.94	4.27	3.58	25.87	44.42	17.29	7.35	26.35	62.46	10.71	32.70	**	**	**	**	**
Barely	46.40	10.33	22.26	18.93	5.47	28.87	26.04	8.72	33.47	1.08	0.49	44.86	**	**	**	**	**	**	**
Wheat	64.06	18.00	28.10	5.37	1.60	29.85	32.19	11.10	34.47	4.72	1.79	37.84	**	**	**	**	**	**	**
Maize	146.68	21.42	14.61	84.74	11.33	13.37	51.73	16.51	31.92	**	**	**	**	**	**	**	**	**	**
Sorghum	4.98	1.63	32.77	3.32	1.48	44.53	**	**	**	**	**	**	**	**	**	**	**	**	**
Millet	80.23	23.55	29.36	1.71	0.82	48.28	76.72	23.26	30.32	**	**	**	**	**	**	**	**	**	**
Oats	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
PULSES	20.17	5.16	25.56	9.62	2.52	26.20	8.67	3.66	42.16	**	**	**	**	**	**	**	**	**	**
Horsebeans	12.54	3.57	28.47	7.45	2.39	31.81	4.90	1.92	39.22	**	**	**	**	**	**	**	**	**	**
Chickpeas	3.11	1.14	36.61	1.03	0.47	45.09	1.92	0.96	49.89	**	**	**	**	**	**	**	**	**	**
Haricotbean	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Fieldpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Lentils	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Vetch	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Oilseeds	9.07	3.69	40.68	1.76	0.74	41.91	6.88	3.41	49.61	**	**	**	**	**	**	**	**	**	**
Flax	4.00	1.99	49.55	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Linseed	1.43	0.71	49.76	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
rapeseed	2.80	1.38	49.16	0.68	0.28	41.36	**	**	**	**	**	**	**	**	**	**	**	**	**
Groundnuts	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Sunflower	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Sesame	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Castorbean	12.21	2.82	23.11	7.87	2.13	27.05	3.44	1.60	49.04	0.46	0.21	46.61	**	**	**	**	**	**	**
OTHERS	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Fenugreek	3.36	0.87	21.89	2.94	0.69	23.61	**	**	**	**	**	**	**	**	**	**	**	**	**
Spices	6.44	2.46	38.22	4.34	2.01	46.37	**	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	1.75	0.52	29.62	0.58	0.15	26.13	1.10	0.45	41.34	**	**	**	**	**	**	**	**	**	**
Other Temporary	745.00	93.56	12.56	145.51	16.13	11.09	464.31	80.95	17.43	371.12	8.86	23.87	87.11	**	**	**	**	**	**
TOTAL TEMPORARY	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Chat	2.02	0.83	41.12	2.02	0.83	41.12	**	**	**	**	**	**	**	**	**	**	**	**	**
Coffe	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Eiset	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Cotton	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Tobacco	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Fruits	2.62	0.80	30.51	2.27	0.77	33.85	**	**	**	**	**	**	**	**	**	**	**	**	**
Other Permanent	6.12	1.61	26.32	5.62	1.59	28.29	**	**	**	**	**	**	**	**	**	**	**	**	**
TOTAL PERMANENT	751.12	95.70	12.48	151.13	16.41	10.85	464.42	80.98	17.44	3724	83.89	23.86	8713	31.41	10.95	340.05	11.20	4.44	37.00
ALL CROPS																			

TABLE 2.5

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
OROMIA Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 HA)	S.E. (`000)	C.V. (%)															
CEREALS	141614	14134	9.98	151.79	21.83	1438	812.84	99.33	12.22	106.96	19.05	17.81	333.20	114.53	34.37	1135	3.23	2844
Teff	623.00	97.81	15.70	11.20	2.73	24.39	334.29	50.77	15.19	45.72	10.93	23.90	228.13	83.22	36.48	3.67	1.76	4812
Barely	156.69	41.48	26.47	5.75	1.27	22.16	129.09	40.09	31.06	12.62	4.41	34.96	8.96	3.37	37.58	**	**	**
Wheat	320.69	56.37	17.58	2.83	0.63	22.35	210.36	43.15	20.51	18.38	4.66	25.35	87.61	39.08	44.61	**	**	**
Maize	227.99	36.90	16.18	101.55	15.92	15.68	96.06	29.46	30.67	**	**	**	7.23	2.12	29.37	4.16	1.35	32.38
Sorghum	51.57	11.64	22.57	30.06	10.44	34.73	1326	3.72	28.02	5.62	2.39	42.60	**	**	**	**	**	**
Millet	15.73	4.57	29.06	0.40	0.19	48.12	12.45	3.94	31.68	**	**	0.11	**	**	**	**	**	**
Oats	20.47	9.11	44.51	**	**	**	17.33	8.23	47.52	**	**	**	**	**	**	**	**	**
PULSES	55.85	14.58	26.10	8.72	1.36	15.57	34.99	12.73	34.38	2.69	1.00	37.27	**	**	**	1.33	0.64	4822
Horsebeans	27.01	11.28	41.75	5.38	0.86	16.03	**	**	**	**	**	**	0.98	0.44	47.69	**	**	**
Chickpeas	13.28	4.08	30.72	1.96	0.62	31.57	6.25	2.43	38.85	**	**	**	**	**	**	**	**	**
Haricotbean	6.60	2.41	36.61	1.27	0.33	2624	**	**	**	**	**	**	**	**	**	**	**	**
Fieldpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Lentils	**	**	**	-	-	-	2.22	0.84	37.84	**	**	**	**	**	**	**	**	**
Vetch	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
OILSEEDS	13.08	5.95	45.51	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Neug	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Linseed	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Rapeseed	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Groundnuts	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Sunflower	**	**	**	-	-	-	**	**	**	**	**	**	**	**	**	**	**	**
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	23.63	7.25	30.66	8.35	1.26	15.07	**	**	**	1.36	0.59	43.22	0.61	0.27	44.67	**	**	**
Fenugreek	1.84	0.76	41.24	**	**	**	1.55	0.69	44.66	**	**	**	**	**	**	**	**	**
Spices	2.98	0.88	29.46	2.39	0.69	28.80	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	**	**	**	1.04	0.35	33.79	**	**	**	**	**	**	**	**	**	**	**	**
Other Temporary	7.96	1.52	19.13	4.78	0.94	19.57	2.26	0.96	42.47	**	**	**	**	**	**	**	**	**
TOTAL TEMPORARY	150871	151.59	10.05	174.06	23.78	13.66	868.41	108.00	12.44	111.07	19.47	17.53	341.99	118.29	34.59	13.18	3.73	2827
Chat	1695	4.29	25.34	12.21	3.45	28.21	**	**	**	2.39	1.08	45.16	**	**	**	**	**	**
Coffe	2.07	0.55	26.85	1.60	0.43	27.10	0.42	0.17	40.95	**	**	**	-	-	-	-	-	-
Enset	2689	12.40	46.10	26.80	12.40	46.25	**	**	**	-	-	-	**	**	**	-	-	-
Coffon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	0.05	0.02	46.07	0.05	0.02	46.07	-	-	-	-	-	-	**	**	**	-	-	-
Fruits	0.65	0.17	26.39	0.43	0.12	27.62	**	**	**	-	-	-	**	**	**	-	-	-
Other Permanent	1.29	0.64	49.31	1.28	0.64	49.63	-	-	-	-	-	-	**	**	**	-	-	-
TOTAL PERMANENT	47.90	13.74	28.69	42.38	13.48	31.82	1.46	0.60	40.87	2.43	1.08	44.35	**	**	**	**	**	**
ALL CROPS	1556.61	151.88	9.76	216.44	29.63	13.69	869.87	108.03	12.42	113.50	19.64	17.30	342.85	118.30	34.50	13.96	4.01	2870

TABLE 2.6

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
SOMALI Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)															
CEREALS																		
Teff	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barely	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wheat	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maize	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sorghum	0.30	0.14	45.82	0.30	0.14	45.82	--	--	--	--	--	--	--	--	--	--	--	--
Millet	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oats	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PULSES	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Horsebeans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chickpeas	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Haricotbean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fieldpeas	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lentils	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vetch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OILSEEDS																		
Neug	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Linseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rapeseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Groundnuts	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sunflower	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sesame	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Castorbean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OTHERS																		
Fenugreek	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Spices	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potatoes	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Temporary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL TEMPORARY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chat	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Coffe	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Enset	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cotton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tobacco	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fruits	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Permanent	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL PERMANENT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALL CROPS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2.7

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1998 E.C.)
BENSHANGUE/GUMUZ Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)															
CEREALS	7.34	3.35	45.68	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Teff	**	**	**	**	**	**	2.16	1.06	49.04	**	**	**	**	**	**	**	**	**
Barely	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Wheat	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Maize	2.02	0.70	34.50	1.77	0.66	37.46	**	**	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Horsebeans	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Chickpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Lentils	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Nung	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Other Temporary	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
TOTAL TEMPORARY	8.04	3.66	45.53	**	**	**	3.04	1.48	49.55	**	**	**	**	**	**	**	**	**
Chat	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	8.49	3.77	44.46	**	**	**	3.04	1.48	49.55	**	**	**	**	**	**	**	**	**

TABLE 2.8

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
S.N.N.P. Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 HA)	S.E. (`000)	C.V. (%)															
CEREALS	228.81	31.24	13.65	21.18	8.30	39.17	166.84	26.55	15.92	38.05	12.69	33.36	1.44	0.53	36.89	1.29	0.52	40.44
Teff	83.41	16.12	19.33	--	--	--	70.66	14.00	19.81	11.96	5.42	45.31	--	--	--	--	--	--
Barely	17.77	5.27	29.66	--	--	--	10.89	3.60	33.05	2.28	1.04	45.35	--	--	--	--	--	--
Wheat	47.69	13.79	28.92	--	--	--	31.68	9.09	28.71	--	--	--	--	--	--	--	--	--
Maize	64.03	13.79	21.54	5.89	1.97	33.48	48.95	12.19	24.91	8.39	2.47	29.40	--	--	--	--	--	--
Sorghum	--	--	--	--	--	--	2.95	0.73	24.89	--	--	--	--	--	--	--	--	--
Millet	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oats	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PULSES	19.42	3.78	19.48	4.36	1.36	31.21	8.68	2.19	25.22	6.12	2.12	34.58	--	--	--	--	--	--
Horsebeans	8.73	2.43	27.87	2.61	1.10	42.16	3.73	1.25	33.49	--	--	--	--	--	--	--	--	--
Chickpeas	3.39	1.08	49.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Haricotbean	6.62	2.06	31.19	1.18	0.54	46.01	2.29	1.00	43.46	3.14	1.30	47.79	--	--	--	--	--	--
Fieldpeas	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lentils	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vetch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OILSEEDS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Neug	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Linseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rapeseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Groundnuts	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sunflower	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sesame	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Castorbean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OTHERS	32.30	7.16	22.17	16.33	4.32	26.43	13.65	5.19	38.03	--	--	--	--	--	--	--	--	--
Fenugreek	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Spices	--	--	--	0.31	0.14	45.18	--	--	--	--	--	--	--	--	--	--	--	--
Potatoes	5.62	1.36	24.19	1.46	0.50	34.16	2.88	0.98	33.90	1.25	0.56	45.00	--	--	--	--	--	--
Other Temporary	15.95	4.35	27.28	14.56	4.22	28.97	1.09	0.35	31.78	--	--	--	--	--	--	--	--	--
TOTAL TEMPORARY	280.64	35.94	128.1	41.91	9.90	23.62	189.21	29.54	15.61	46.27	14.55	31.44	1.74	0.61	34.98	1.50	0.62	41.25
Chat	7.00	1.94	27.71	6.44	1.84	28.65	0.13	0.05	39.84	--	--	--	--	--	--	--	--	--
Coffe	18.60	2.68	14.39	16.80	2.41	14.34	1.19	0.44	36.78	0.45	0.20	44.13	--	--	--	--	--	--
Emet	92.39	9.78	10.59	9.46	9.76	10.67	0.40	0.18	44.34	--	--	--	--	--	--	--	--	--
Cotton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tobacco	0.23	0.10	42.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fruits	3.05	1.47	48.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Permanent	1.71	0.44	25.91	1.45	0.43	29.39	0.20	0.09	42.12	0.05	0.02	49.98	--	--	--	--	--	--
TOTAL PERMANENT	123.12	11.31	9.18	119.18	11.15	9.36	2.10	0.65	30.85	1.19	0.42	35.14	--	--	--	--	--	--
ALL CROPS	403.76	36.52	9.05	161.10	15.78	9.79	191.31	29.60	15.47	47.46	14.57	30.70	1.88	0.61	32.65	2.01	0.73	36.41

TABLE 2.9

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
HARARI Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)															
CEREALS	2.87	0.57	19.75	0.41	0.17	40.57	0.14	0.06	38.38	1.00	0.30	30.36	0.48	0.21	43.47	0.83	0.35	42.65
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	0.03	0.01	47.98	-	-	-	**	**	**	**	**	**	**	**	**	**	**	**
Wheat	0.11	0.05	47.60	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Maize	0.38	0.14	23.77	0.13	0.06	48.22	0.01	0.01	41.40	0.21	0.06	29.54	0.08	0.03	42.25	**	**	**
Sorghum	2.15	0.42	19.68	0.27	0.11	41.36	0.11	0.05	46.90	0.77	0.25	32.73	0.34	0.15	43.01	0.34	0.15	43.01
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
PULSES	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
OILSEEDS	0.29	0.13	44.89	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	0.29	0.13	44.89	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.05	0.02	33.75	0.02	0.01	48.85	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	0.05	0.02	33.66	0.02	0.01	48.85	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	3.24	0.61	18.80	0.50	0.22	43.61	0.19	0.09	46.62	1.12	0.33	29.94	0.50	0.21	43.18	0.93	0.38	40.90
Chat	1.03	0.24	23.74	0.17	0.08	47.75	0.05	0.03	42.19	0.39	0.14	34.85	0.16	0.07	42.00	0.24	0.11	45.74
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.03	0.24	23.32	0.17	0.08	47.72	0.06	0.03	42.19	0.39	0.14	34.85	0.17	0.07	42.15	0.26	0.11	43.80
ALL CROPS	4.28	0.82	19.16	0.67	0.27	39.53	0.25	0.11	45.56	1.51	0.47	30.96	0.66	0.28	42.87	1.19	0.49	41.18

TABLE 2.10.

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
ADDIS ADDIS Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate ('000 HA)	S.E. ('000)	C.V. (%)															
CEREALS	7.64	1.02	13.34	0.04	0.01	41.41	0.32	0.10	30.56	0.10	0.03	26.46	7.16	1.00	14.02	**	**	**
Teff	4.52	0.63	13.86	**	**	**	0.08	0.03	37.68	0.04	0.02	46.59	4.37	0.62	14.13	**	**	**
Barely	0.02	0.01	48.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Wheat	3.10	0.44	14.33	**	**	**	0.24	0.08	32.17	0.05	0.02	42.27	2.79	0.44	15.96	**	**	**
Maize	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sorghum	**	**	**	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Millet	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oats	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PULSES	0.95	0.17	17.95	—	—	—	0.41	0.08	18.66	0.03	0.01	31.16	0.51	0.12	23.17	—	—	—
Horsebeans	0.03	0.01	36.16	—	—	—	—	—	—	—	—	—	0.02	0.01	41.58	—	—	—
Chickpeas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Haricotbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fieldpeas	0.31	0.08	24.92	—	—	—	0.13	0.03	20.45	—	—	—	—	—	—	—	—	—
Lentils	0.36	0.09	25.68	—	—	—	0.08	0.03	36.22	0.02	0.01	46.51	0.26	0.07	25.95	—	—	—
Vetch	0.26	0.08	31.91	—	—	—	0.20	0.07	37.54	—	—	—	0.06	0.02	35.56	—	—	—
OILSEEDS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Neig	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Linseed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rapeseed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Groundnuts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sunflower	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sesame	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Castorbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OTHERS	0.07	0.03	40.80	—	—	—	—	—	—	—	—	—	0.06	0.03	43.41	—	—	—
Fenugreek	**	**	**	—	—	—	—	—	—	—	—	—	**	**	**	—	—	—
Spices	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Potatoes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Temporary	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL TEMPORARY	8.67	1.15	13.26	0.04	0.02	40.78	0.74	0.12	16.87	0.13	0.03	22.49	7.73	1.08	13.94	**	**	**
Chat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Coffe	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enset	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cotton	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tobaco	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fruits	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Permanent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL PERMANENT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ALL CROPS	8.67	1.15	13.26	0.04	0.02	41.04	0.74	0.12	16.87	0.13	0.03	22.49	7.73	1.08	13.94	**	**	**

TABLE 2.11

Estimates of Fertilizer Applied Area by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96/1988 E.C.)
DI RE DAWA Region

Type of Crop	Total			Natural Fertilizer			DAP			UREA			DAP+UREA			NAT + COM		
	Estimate (1000 HA)	S.E. (1000)	C.V. (%)	Estimate (1000 HA)	S.E. (1000)	C.V. (%)	Estimate (1000 HA)	S.E. (1000)	C.V. (%)	Estimate (1000 HA)	S.E. (1000)	C.V. (%)	Estimate (1000 HA)	S.E. (1000)	C.V. (%)	Estimate (1000 HA)	S.E. (1000)	C.V. (%)
CEREALS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
TOTAL TEMPORARY	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Chat	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
ALL CROPS	**	**	**	2.34	1.16	49.30	-	-	-	-	-	-	-	-	-	**	**	**

TABLE 3.1

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
NATIONAL

Type of Crop	Total			DAP			UREA			DAP + UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)												
CEREALS	2339.69	288.88	12.35	1309.33	124.89	9.54	198.71	31.01	15.60	798.91	267.60	33.50	32.73	7.01	21.43
Teff	1185.79	184.03	15.52	569.76	62.36	10.95	76.69	17.96	23.42	533.12	172.06	32.27	6.22	2.00	32.11
Barely	192.00	35.87	18.68	156.64	34.23	21.85	19.01	5.29	27.85	14.46	5.89	40.75	1.89	0.77	41.00
Wheat	555.95	109.79	19.75	271.26	45.42	16.75	48.85	14.05	28.76	230.87	100.51	43.54	4.98	1.55	31.08
Maize	273.06	43.08	15.78	209.14	38.10	18.22	34.21	10.98	32.10	15.41	3.75	24.32	14.29	4.69	32.84
Sorghum	45.52	10.96	24.08	22.32	7.83	35.08	14.46	5.23	36.16	3.46	1.13	32.64	5.27	2.11	40.07
Millet	73.99	20.12	27.19	69.00	19.84	28.75	4.45	1.80	40.49	**	**	**	**	**	**
Oats	13.39	6.18	46.16	**	**	**	**	**	**	**	**	**	**	**	**
PULSES	87.60	20.73	23.66	57.46	17.25	30.03	12.51	3.55	28.36	13.57	6.16	45.37	**	**	**
Horsebeans	36.52	15.03	41.16	30.11	14.39	47.79	4.12	1.69	41.00	1.50	0.68	45.49	**	**	**
Chickpeas	14.70	4.52	30.73	8.96	3.26	36.36	**	**	**	**	**	**	**	**	**
Haricotbean	21.64	8.27	38.20	**	**	**	6.34	2.77	43.70	**	**	**	**	**	**
Fieldpeas	4.86	2.06	42.43	**	**	**	**	**	**	0.87	0.35	40.26	—	—	—
Lentils	**	**	**	2.79	0.97	34.62	**	**	**	**	**	**	**	**	**
Vetch	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
OILSEEDS	20.04	5.88	29.36	18.33	5.76	31.43	**	**	**	**	**	**	**	**	**
Neug	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Linseed	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Rapeseed	12.09	5.01	41.44	11.61	4.97	42.79	—	—	—	**	**	**	**	**	**
Groundnuts	0.82	0.40	48.96	**	**	**	**	**	**	**	**	**	**	**	**
Sunflower	**	**	**	**	**	**	—	—	—	**	**	**	**	**	**
Sesame	**	**	**	**	**	**	—	—	—	**	**	**	—	—	—
Castorbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OTHERS	69.20	19.60	28.32	56.50	17.61	31.16	5.71	1.65	28.89	2.99	1.38	46.25	4.00	1.96	49.03
Fenugreek	1.13	0.43	38.41	0.87	0.37	42.51	**	**	**	**	**	**	**	**	**
Spices	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	28.25	10.36	36.66	21.73	9.50	43.73	3.26	1.10	33.80	**	**	**	**	**	**
Other Temporary	10.77	2.10	19.48	7.22	1.67	23.15	1.03	0.34	33.37	**	**	**	**	**	**
TOTAL TEMPORARY	2516.52	303.13	12.05	1441.62	140.45	9.74	217.69	33.10	15.20	815.93	272.96	33.45	41.27	10.29	24.93
Chat	26.50	8.64	32.59	**	**	**	10.55	4.20	39.75	4.04	1.48	36.63	4.23	1.76	41.54
Coffe	9.06	2.48	27.35	6.62	1.97	29.70	1.43	0.54	37.51	**	**	**	**	**	**
Enset	2.55	0.85	33.16	1.67	0.65	38.74	**	**	**	**	**	**	**	**	**
Cotton	**	**	**	—	—	—	**	**	**	**	**	**	—	—	—
Tobacco	**	**	**	**	**	**	**	**	**	**	**	**	—	—	—
Fruits	3.26	1.18	36.19	**	**	**	**	**	**	**	**	**	**	**	**
Other Permanent	4.15	2.07	49.82	1.84	0.79	42.85	**	**	**	**	**	**	**	**	**
TOTAL PERMANENT	45.64	9.79	21.44	19.33	6.95	35.98	13.31	4.38	32.92	5.22	1.64	31.36	7.79	2.49	31.94
ALL CROPS	2562.16	304.22	11.87	1460.95	141.61	9.69	231.00	34.44	14.91	821.15	272.95	33.24	49.06	12.21	24.90

TABLE 3.2

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
TIGRAY Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)												
CEREALS	47.38	10.90	23.01	30.91	7.89	25.53	9.49	3.41	35.89	4.29	1.65	38.54	2.68	1.22	45.28
Teff	16.51	5.73	34.72	11.77	4.71	40.03	**	**	**	**	**	**	**	**	**
Barely	14.58	4.86	33.32	**	**	**	**	**	**	**	**	**	**	**	**
Wheat	14.00	4.27	30.52	8.21	2.64	32.17	**	**	**	**	**	**	**	**	**
Maize	0.53	0.24	46.52	**	**	**	**	**	**	**	**	**	**	**	**
Sorghum	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Millet	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	0.43	0.19	44.29	**	**	**	**	**	**	**	**	**	**	**	**
Horsebeans	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Chickpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Neug	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	48.09	10.97	22.81	31.30	7.97	25.46	9.81	3.46	35.33	4.29	1.65	38.54	2.68	1.22	45.28
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
ALL CROPS	48.10	10.97	22.81	31.31	7.97	25.46	9.81	3.46	35.33	4.29	1.65	38.54	2.68	1.22	45.28

TABLE 3.3

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96(1988 E.C.)
AFAR Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)
CEREALS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Teff	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-

TABLE 3.4

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)

AMHARA Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate (`000 QT)	S.E. (`000)	C.V. (%)												
CEREALS	530.62	94.55	17.82	371.49	73.15	19.69	**	**	**	112.29	43.56	38.79	9.54	3.80	39.82
Teff	291.65	51.10	17.52	183.53	34.09	18.57	**	**	**	80.55	28.77	35.72	**	**	**
Barely	30.54	12.67	41.47	29.61	12.46	42.08	**	**	**	**	**	**	**	**	**
Wheat	71.90	25.93	36.06	32.72	12.29	37.57	**	**	**	**	**	**	**	**	**
Maize	74.42	24.87	33.42	64.88	21.93	33.81	**	**	**	**	**	**	7.59	3.54	46.58
Sorghum	**	**	**	**	**	**	-	-	-	**	**	**	-	-	**
Millet	60.67	19.76	32.57	59.95	19.63	32.74	**	**	**	-	-	-	**	**	**
Oats	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
PULSES	8.32	3.59	43.20	6.67	3.04	45.55	**	**	**	**	**	**	-	-	-
Horsebeans	3.86	1.36	35.29	3.70	1.29	34.84	**	**	**	**	**	**	-	-	-
Chickpeas	**	**	**	**	**	**	**	**	**	-	-	-	-	-	-
Haricotbean	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Fieldpeas	**	**	**	**	**	**	-	-	-	**	**	**	-	-	-
Lentils	**	**	**	**	**	**	-	-	-	**	**	**	-	-	-
Vetch	**	**	**	-	-	-	-	-	-	**	**	**	**	**	**
OILSEEDS	12.16	4.53	37.29	11.57	4.40	38.05	-	-	-	-	-	-	-	-	-
Neug	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Linseed	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Rapeseed	8.49	3.66	43.05	8.18	3.60	44.05	-	-	-	-	-	-	**	**	**
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	5.95	2.63	44.13	5.47	2.51	45.94	**	**	**	**	**	**	**	**	**
Fenugreek	**	**	**	-	-	-	-	-	-	**	**	**	-	-	-
Spices	0.62	0.26	41.69	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Other Temporary	1.77	0.70	39.54	1.66	0.69	41.88	**	**	**	-	-	-	-	-	-
TOTAL TEMPORARY	557.05	99.67	17.89	395.20	78.19	19.78	**	**	**	114.09	44.51	39.01	10.02	3.89	38.84
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	-	-	-	**	**	**	**	**	**	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-	**	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	114.10	44.51	39.01	11.87	5.02	42.29
ALL CROPS	560.12	100.40	17.92	396.36	78.49	19.80	**	**	**	114.10	44.51	39.01	11.87	5.02	42.29

TABLE 3.5

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96(1988 E.C.)
OROMIA Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)												
CEREALS	1442.13	269.34	18.68	672.27	92.71	13.79	97.74	17.89	18.31	657.48	264.01	40.15	14.65	5.32	36.28
Teff	763.67	175.46	22.98	285.22	48.31	16.94	37.58	9.38	24.98	437.15	169.62	38.80	3.72	1.74	46.90
Barely	123.11	32.12	26.09	98.06	31.05	31.67	11.42	4.53	39.67	13.30	5.85	44.02	--	--	--
Wheat	388.95	104.50	26.87	176.06	40.46	22.98	17.74	4.39	24.77	--	--	--	2.83	1.37	48.29
Maize	115.08	27.91	24.25	80.27	24.59	30.64	--	--	--	11.71	3.46	29.50	--	--	--
Sorghum	30.05	10.57	35.18	15.75	7.60	48.25	--	--	--	--	--	--	--	--	--
Millet	8.14	2.64	32.45	5.91	1.99	33.71	--	--	--	--	--	--	--	--	--
Oats	13.14	6.18	46.99	--	--	--	--	--	--	--	--	--	--	--	--
PULSES	56.42	19.78	35.06	38.26	16.67	43.57	3.44	1.50	43.66	--	--	--	--	--	--
Horsebeans	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fieldpeas	9.14	3.57	39.08	4.24	1.97	46.46	--	--	--	--	--	--	--	--	--
Haricobean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chickpeas	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lentils	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vetch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OILSEEDS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Neug	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Linseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rapeseed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Groundnuts	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sunflower	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sesame	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Castorbean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OTHERS	24.38	10.10	41.41	--	--	--	2.23	0.87	39.21	--	--	--	--	--	--
Fenugreek	0.96	0.42	44.22	0.75	0.36	47.92	--	--	--	--	--	--	--	--	--
Spices	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potatoes	--	--	--	--	--	--	1.54	0.74	48.00	--	--	--	--	--	--
Other Temporary	5.19	1.60	30.81	2.72	1.08	39.84	0.62	0.28	45.18	--	--	--	--	--	--
TOTAL TEMPORARY	1529.66	280.89	18.36	734.10	105.47	14.37	103.46	18.76	18.13	670.13	269.27	40.18	21.97	9.15	41.66
Chat	19.14	8.49	44.36	--	--	--	--	--	--	--	2.84	1.40	49.29	--	--
Coffe	1.83	0.70	38.37	1.72	0.70	40.70	--	--	--	--	--	--	--	--	--
Enset	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cotton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tobacco	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fruits	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Permanent	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL PERMANENT	22.99	8.62	37.48	--	--	--	--	--	--	3.70	1.55	41.79	--	--	--
ALL CROPS	1552.65	281.73	18.14	743.87	106.67	14.34	110.90	20.72	18.68	673.83	269.26	39.96	24.05	10.50	43.68

TABLE 3.6

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96(1988 E.C.)
SOMALI Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)
CEREALS	**	**	**	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-
Chat	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-
ALL CROPS	**	**	**	-	-	-	**	**	**	-	-	-	-	-	-

TABLE 3.7

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96(1988 E.C.)

BİENSHAN GULE-GUMUZ Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)												
CEREALS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Teff	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Neug	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-

TABLE 3.8

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
S.N.N.P. Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)												
CEREALS	288.07	42.78	14.85	232.85	39.85	17.12	50.03	16.24	32.46	3.37	1.32	39.32	1.82	0.73	39.77
Teff	99.53	20.79	20.89	88.26	19.27	21.84	10.80	5.19	48.07	**	**	**	**	**	**
Barely	23.66	8.43	35.64	18.59	6.50	34.96	**	**	**	**	**	**	**	**	**
Wheat	74.32	21.06	28.33	53.94	16.39	30.38	**	**	**	**	**	**	**	**	**
Maize	79.10	21.37	27.02	63.47	19.12	30.12	13.56	4.94	36.43	**	**	**	**	**	**
Sorghum	7.83	2.39	30.56	5.61	1.86	33.13	**	**	**	**	**	**	**	**	**
Millet	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	20.85	5.03	24.12	11.84	3.23	27.31	8.65	3.21	37.09	**	**	**	**	**	**
Horsebeans	8.92	3.02	33.87	5.59	1.85	33.05	**	**	**	**	**	**	**	**	**
Chickpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Haricotbean	6.94	2.74	39.45	2.22	0.94	42.61	**	**	**	**	**	**	**	**	**
Fieldpeas	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Lentils	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	38.36	16.59	43.25	33.91	14.82	43.71	3.14	1.39	44.18	**	**	**	**	**	**
Fenugreek	**	**	**	**	**	**	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	6.75	2.14	31.77	4.96	1.70	34.36	1.72	0.82	47.51	-	-	-	**	**	**
Other Temporary	3.36	1.16	34.38	2.82	1.07	37.78	**	**	**	-	-	-	-	-	-
TOTAL TEMPORARY	347.34	54.00	15.55	278.62	49.24	17.67	61.85	19.10	30.89	4.63	2.11	45.58	2.24	0.88	39.38
Chat	1.94	0.76	39.25	0.57	0.28	48.53	**	**	**	-	-	-	**	**	**
Coffe	7.20	2.38	32.98	4.90	1.84	37.52	1.34	0.53	39.42	**	**	**	**	**	**
Enset	2.05	0.72	35.12	1.17	0.47	39.96	**	**	**	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	**	**	**	**	**	-	-	-	-	-	-
Fruits	1.84	0.86	46.53	**	**	**	**	**	**	-	-	-	**	**	**
Other Permanent	1.03	0.44	42.40	**	**	**	**	**	**	-	-	-	**	**	**
TOTAL PERMANENT	14.12	3.94	27.92	8.18	2.71	33.10	3.71	1.43	38.69	**	**	**	**	**	**
ALL CROPS	361.46	54.33	15.03	286.80	49.49	17.26	65.56	19.40	29.59	4.91	2.14	43.54	4.19	1.51	36.02

TABLE 3.9

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
HARARI Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)												
CEREALS	10.43	2.79	26.80	0.38	0.10	26.34	3.80	1.03	26.98	2.39	0.94	39.49	**	**	**
Teff	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Barely	0.07	0.03	42.44	**	**	**	**	**	**	**	**	**	—	—	—
Wheat	**	**	**	**	**	**	0.09	0.04	43.19	**	**	**	**	**	**
Maize	3.78	1.23	32.69	0.06	0.02	38.86	1.43	0.42	29.24	0.80	0.35	43.29	**	**	**
Sorghum	6.02	1.46	24.26	0.26	0.08	32.74	2.26	0.68	30.14	1.39	0.54	38.58	**	**	**
Millet	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oats	**	**	**	—	—	—	**	**	**	**	**	**	**	**	**
PULSES	**	**	**	—	—	—	**	**	**	—	—	—	**	**	**
Horsebeans	**	**	**	—	—	—	—	—	—	—	—	—	**	**	**
Chickpeas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Haricotbean	**	**	**	—	—	—	**	**	**	—	—	—	—	—	—
Fieldpeas	**	**	**	—	—	—	**	**	**	—	—	—	**	**	**
Lentils	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Vetch	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OILSEEDS	0.82	0.40	48.96	**	**	**	**	**	**	**	**	**	**	**	**
Neug	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Linseed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rapeseed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Groundnuts	0.82	0.40	48.96	**	**	**	**	**	**	**	**	**	**	**	**
Sunflower	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sesame	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Castorbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OTHERS	0.22	0.10	46.15	**	**	**	**	**	**	**	**	**	**	**	**
Fenugreek	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spices	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Potatoes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Temporary	0.22	0.10	46.26	**	**	**	**	**	**	**	**	**	**	**	**
TOTAL TEMPORARY	11.61	2.86	24.66	0.51	0.15	29.85	4.45	1.23	27.68	2.46	0.97	39.48	**	**	**
Chat	5.26	1.36	25.91	0.21	0.07	31.97	2.04	0.64	31.30	1.21	0.49	40.37	**	**	**
Coffe	**	**	**	—	—	—	—	—	—	**	**	**	—	—	—
Enset	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cotton	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tobacco	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fruits	**	**	**	—	—	—	—	—	—	—	—	—	**	**	**
Other Permanent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL PERMANENT	5.29	1.37	25.81	0.21	0.07	31.97	2.04	0.64	31.30	1.23	0.49	40.06	**	**	**
ALL CROPS	16.90	4.21	24.91	0.72	0.22	29.90	6.49	1.86	28.66	3.69	1.46	39.65	**	**	**

TABLE 3.10

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96(1988 E.C.)
ADDIS ABABA Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT		
	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)	Estimate ('000 QT)	S.E. ('000)	C.V. (%)
CEREALS	19.87	2.97	14.94	0.43	0.14	32.38	0.27	0.09	33.08	19.09	2.95	15.44	**	**	**
Teff	13.58	1.94	14.25	0.14	0.05	37.53	0.13	0.06	48.94	13.25	1.92	14.46	**	**	**
Barely	0.04	0.02	44.57	**	**	**	**	**	**	—	—	—	—	—	—
Wheat	6.25	1.14	18.21	0.28	0.09	31.62	0.13	0.06	48.90	5.83	1.14	19.50	**	**	**
Maize	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sorghum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Millet	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oats	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PULSES	1.43	0.28	19.80	0.39	0.07	18.78	0.05	0.02	38.67	0.99	0.25	25.63	—	—	—
Horsebeans	**	**	**	—	—	—	**	**	**	**	**	**	—	—	—
Chickpeas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Haricotbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fieldpeas	0.58	0.16	27.10	0.22	0.06	29.51	**	**	**	0.34	0.12	34.71	—	—	—
Lentils	0.51	0.13	25.78	0.08	0.03	36.56	**	**	**	0.42	0.11	26.31	—	—	—
Vetch	0.23	0.07	31.47	0.10	0.03	35.58	—	—	—	0.13	0.05	38.85	—	—	—
OILSEEDS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Neug	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Linseed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rapeseed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Groundnuts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sunflower	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sesame	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Castorbean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OTHERS	**	**	**	0.02	0.01	38.21	—	—	—	**	**	**	—	—	—
Fenugreek	0.02	0.01	36.81	0.01	0.00	42.26	—	—	—	**	**	**	—	—	—
Spices	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Potatoes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Temporary	**	**	**	**	**	**	—	—	—	**	**	**	—	—	—
TOTAL TEMPORARY	21.57	3.18	14.73	0.85	0.16	18.62	0.31	0.09	29.32	20.32	3.09	15.20	**	**	**
Chat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Coffe	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enset	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cotton	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tobacco	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fruits	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Permanent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL PERMANENT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ALL CROPS	21.57	3.18	14.73	0.85	0.16	18.62	0.31	0.09	29.32	20.32	3.09	15.20	**	**	**

TABLE 3.11

Estimates of Quantity of Fertilizer Applied by Type of Fertilizer,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
DIRE DAWA Region

Type of Crop	Total			DAP			UREA			DAP+UREA			COMM & NAT.		
	Estimate (`000 QT)	S.E. (`000)	C.V. (%)												
CEREALS	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horsebeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricotbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fieldpeas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castorbean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL TEMPORARY	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Chat	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Coffe	-	-	-	-	-	-	-	-	-	-	-	-	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
ALL CROPS	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**

TABLE 4.1

Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
NATIONAL

Educational Status of Holders	Number of Holders who Applied														
	Total			Improved Seed			Irrigation			Pesticides			Fertilizer		
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	6556.83	107.30	1.63	34.69	3.52	10.14	100.77	16.31	16.19	552.48	31.63	5.73	2018.84	73.31	3.63
Grades 1 - 3	1026.65	40.62	3.96	6.73	2.11	31.39	11.36	3.30	29.06	102.81	10.70	10.41	399.07	25.19	6.31
Grades 4 - 6	538.77	23.57	4.37	7.07	2.25	31.89	5.30	1.90	35.76	56.66	7.90	13.95	189.89	14.37	7.75
Grades 7 - 8	214.13	14.36	6.71	**	**	**	2.62	1.29	49.30	25.32	4.80	18.98	95.14	9.65	10.14
Grades 9 - 11	117.22	11.76	10.04	**	**	**	**	**	**	16.07	3.68	22.90	55.51	7.26	13.08
Grade 12 Complete	44.32	6.23	14.06	-	-	-	**	**	**	**	**	**	29.01	5.41	19.64
Higher Education	6.31	2.21	39.94	-	-	-	-	-	-	-	-	-	**	**	**
Not Stated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	8504.23	127.38	1.50	53.69	3.17	5.90	122.60	18.75	15.29	756.98	41.78	5.52	2789.73	95.78	3.43

TABLE 42

Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
TIGRAY Region

Educational Status of Holders	Number of Holders who Applied														
	Total			Improved Seed			Irrigation			Pesticides			Fertilizer		
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	489.25	33.32	6.81	6.08	1.52	25.05	15.02	6.83	45.46	12.96	3.23	24.88	107.38	15.30	14.24
Grades 1 - 3	56.60	9.26	16.37	**	**	**	-	-	-	4.59	1.76	38.35	15.23	5.24	34.36
Grades 4 - 6	11.10	3.04	27.36	**	**	**	-	-	-	**	**	**	**	**	**
Grades 7 - 8	**	**	**	-	-	-	-	-	-	-	-	-	**	**	**
Grades 9 - 11	**	**	**	**	**	**	-	-	-	-	-	-	**	**	**
Grade 12 Complete	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Higher Education	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Stated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	559.83	3.56	6.17	7.97	0.89	11.20	15.02	6.83	45.46	19.94	4.40	23.21	130.97	18.49	14.14

TABLE 4.3

Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
AFAR Region

Educational Status of Holders	Number of Holders who Applied														
	Total			Improved Seed			Irrigation			Pesticides			Fertilizer		
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	21.44	6.41	29.90	—	—	—	0.14	0.00	0.14	3.30	1.20	36.45	**	**	**
Grades 1 - 3	**	**	**	—	—	—	0.14	0.00	0.14	**	**	**	**	**	**
Grades 4 - 6	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Grades 7 - 8	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Grades 9 - 11	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Grade 12 Complete	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Higher Education	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Not Stated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	26.26	9.11	34.68	—	—	—	0.14	0.00	0.14	3.89	1.50	38.52	**	**	**

TABLE 4.4

Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
AMHARA Region

Educational Status of Holders	Number of Holders who Applied														
	Total			Improved Seed			Irrigation			Pesticides			Fertilizer		
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	2001.56	64.01	3.20	5.80	1.25	21.58	25.09	4.90	19.51	82.28	8.52	10.36	519.61	37.68	7.25
Grades 1 - 3	374.32	27.17	7.26	**	**	**	5.15	2.57	49.98	14.08	3.46	4.51	141.21	16.30	11.54
Grades 4 - 6	75.74	8.73	11.52	**	**	**	**	**	**	**	**	**	26.65	5.36	20.09
Grades 7 - 8	27.76	4.78	17.20	-	-	-	-	-	-	-	-	-	12.08	3.42	28.28
Grades 9 - 11	17.81	5.09	28.58	-	-	-	-	-	-	**	**	**	5.59	2.30	41.11
Grade 12 Complete	9.72	3.01	30.97	-	-	-	-	-	-	-	-	-	**	**	**
Higher Education	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Stated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2506.90	77.69	3.10	7.89	1.51	19.14	30.87	6.30	20.43	100.07	10.15	10.15	708.75	48.23	6.80

TABLE 4.5
Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
OROMIA Region

Educational Status of Holders		Number of Holders who Applied											
		Total			Improved Seed			Irrigation			Pesticides		
		Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate		2413.23	66.26	2.75	1237	2.16	17.48	37.25	12.16	32.65	245.35	25.65	10.46
Grades 1 - 3		370.99	24.41	6.58	317	1.57	49.55	2.84	1.39	32.65	56.86	8.66	15.23
Grades 4 - 6		259.44	17.80	6.86	361	1.63	45.27	3.11	1.54	49.39	27.51	6.35	23.09
Grades 7 - 8		108.74	10.72	9.86	1072	1.46	1.46	1.46	1.46	1.46	14.73	3.78	25.66
Grades 9 - 11		57.35	9.08	15.82	15.82	1.46	1.46	1.46	1.46	1.46	8.26	2.85	34.39
Grade 12 Complete		16.75	4.01	23.96	-	-	-	-	-	-	-	-	7.31
Higher Education		3.73	1.71	45.52	-	-	-	-	-	-	-	-	3.52
Total		3230.23	80.49	2.49	2193	1.73	7.89	46.82	13.33	28.48	355.67	33.23	9.34
No. Not Stated		-	-	-	-	-	-	-	-	-	-	-	-
Total		3230.23	80.49	2.49	2193	1.73	7.89	46.82	13.33	28.48	355.67	33.23	9.34
											1101.62	63.50	5.46

TABLE 4.6
Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
SOMALI Region

Educational Status of Holders	Number of Holders who Applied									
	Total			Improved Seed			Irrigation			Pesticides
	Estimate ('000)	SE ('000)	C.V. (%)	Estimate ('000)	SE ('000)	C.V. (%)	Estimate ('000)	SE ('000)	C.V. (%)	Estimate ('000)
Illiterate	89.85	9.02	10.04	3.92	1.54	39.19	4.11	10.31	4.55	26.29
Grades 1 - 3	9.42	3.59	38.15	-	-	-	0.32	0.32	-	2.67
Grades 4 - 6	2.52	0.87	34.42	-	-	-	-	-	-	0.35
Grades 7 - 8	-	-	-	-	-	-	-	-	-	0.00
Grades 9 - 11	-	-	-	-	-	-	-	-	-	0.00
Grade 12 Complete	-	-	-	-	-	-	-	-	-	0.00
Higher Education	-	-	-	-	-	-	-	-	-	0.00
Not Stated	-	-	-	-	-	-	-	-	-	0.00
Total	102.24	10.52	10.29	3.92	1.54	39.19	4.11	10.31	5.12	26.56
										0.23
										6.24

TABLE 4.7

Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
BENSHANGUL-GUMUZ Region

Educational Status of Holders	Number of Holders who Applied														
	Total			Improved Seed			Irrigation			Pesticides			Fertilizer		
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	68.06	6.44	9.46	—	—	—	**	**	**	—	—	—	8.08	1.78	21.96
Grades 1 - 3	7.80	2.53	32.45	—	—	—	**	**	**	—	—	—	1.92	0.90	46.80
Grades 4 - 6	6.27	1.20	19.12	—	—	—	—	—	—	—	—	—	1.12	0.44	39.08
Grades 7 - 8	2.17	0.82	37.79	—	—	—	—	—	—	**	**	**	0.94	0.52	21.96
Grades 9 - 11	**	**	**	—	—	—	—	—	—	—	—	—	—	—	—
Grade 12 Complete	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Higher Education	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Not Stated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	85.03	7.49	7.94	—	—	—	**	**	**	4.75	2.19	46.08	12.06	3.15	26.11

TABLE 48
Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1955/56 (1958 E.C.)
S.N.N.P Region

Educational Status of Holders	Number of Holders who Applied											
	Total		Improved Seed		Irrigation		Pesticides		Fertilizer			
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	1432.25	41.04	2.87	5.48	1.17	21.39	16.89	6.00	35.54	181.89	15.20	8.36
Grades 1 - 3	199.47	14.26	2.15	—	—	—	—	—	25.42	4.89	19.22	**
Grades 4 - 6	180.03	12.28	6.82	—	—	—	—	—	24.05	4.36	18.32	**
Grades 7 - 8	71.10	8.14	11.44	—	—	—	—	—	10.05	2.95	29.38	32.02
Grades 9 - 11	39.55	5.42	13.71	—	—	—	—	—	6.27	2.12	21.70	5.46
Grade 12 Complete	17.46	3.69	21.66	—	—	—	—	—	—	—	15.26	4.33
Higher Education	**	**	—	—	—	—	—	—	**	**	**	**
Not Stated	—	—	—	—	—	—	—	—	—	—	—	—
Total	1942.15	47.58	2.5	10.37	1.18	11.18	21.24	8.01	38.07	284.38	2202	8.86
												8.09
												6.09
												6.09

TABLE 4.9
Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1985/96 (1988 E.C.)
GAMBELA Region

Educational Status of Holders	Number of Holders who Applied									
	Total		Improved Seed		Irrigation		Pesticides		Fertilizer	
	Estimate ('000)	S.E. ('000)	Estimate ('000)	S.E. ('000)	Estimate ('000)	S.E. ('000)	Estimate ('000)	S.E. ('000)	Estimate ('000)	S.E. ('000)
Illiterate	17.40	1.63	9.39	0.17	0.02	9.23	-	1.37	0.54	39.12
Grades 1 - 3	1.93	0.69	35.90	-	-	-	-	0.20	0.09	45.80
Grades 4 - 6	1.86	0.41	21.98	-	-	-	-	-	-	**
Grades 7 - 8	1.36	0.31	23.17	**	**	**	-	-	-	-
Grades 9 - 11	**	**	**	**	**	**	-	-	-	-
Grade 12 Complete	**	**	**	**	**	**	-	-	-	-
Higher Education	-	-	-	-	-	-	-	-	-	-
Total	23.26	1.99	8.56	0.27	0.01	38.38	0.08	1.64	0.52	31.92

TABLE 4.10 Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
HARARI Region

Educational Status of Holders	Number of Holders who Applied											
	Total			Improved Seed			Irrigation			Pesticides		
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	9.13	1.20	13.10	0.92	0.92	40.67	1.22	0.36	29.30	6.69	0.92	13.69
Grades 1 - 3	0.75	0.75	36.21	**	**	**	-	-	-	0.58	0.23	38.54
Grades 4 - 6	0.68	0.68	41.40	**	**	**	-	**	**	0.50	0.23	45.66
Grades 7 - 8	0.48	0.48	47.77	-	-	-	-	**	**	**	**	**
Grades 9 - 11	**	**	**	-	-	-	-	-	-	**	**	**
Grade 12 Complete	**	**	**	-	-	-	-	-	-	**	**	**
Higher Education	-	-	-	-	-	-	-	-	-	**	**	**
Not Stated	-	-	-	-	-	-	-	-	-	-	-	-
Total	11.24	1.40	12.47	0.96	0.96	37.82	1.61	0.63	38.87	8.37	1.08	12.93

TABLE 4.11

Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1995/96 (1988 E.C.)
ADDIS ABABA Region

Number of Holders who Applied

Educational Status of Holders															
	Total			Improved Seed			Irrigation			Pesticides			Fertilizer		
	Estimate ('000)	S.E. ('000)	C.V. (%)												
Illiterate	3.43	0.41	11.99	0.04	0.02	39.70	—	—	—	0.20	0.09	38.38	3.09	0.41	13.18
Grades 1 - 3	0.39	0.10	25.69	**	**	**	—	—	—	—	—	—	0.27	0.09	32.55
Grades 4 - 6	0.28	0.13	44.71	—	—	—	—	—	—	0.05	0.02	40.31	0.23	0.91	39.01
Grades 7 - 8	0.11	0.04	36.47	—	—	—	—	—	—	**	**	**	0.11	0.04	36.47
Grades 9 - 11	0.11	0.04	33.68	—	—	—	—	—	—	—	—	—	0.11	0.04	33.68
Grade 12 Complete	**	**	**	—	—	—	—	—	—	—	—	—	**	**	**
Higher Education	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Not Stated	—	—	—	—	—	—	—	—	—	0.27	0.08	28.46	3.91	0.44	11.13
Total	4.42	0.45	10.16	-0.06	0.002	3.66	—	—	—	—	—	—	—	—	—

TABLE 4.12
Number of Holders by Agricultural Practices and Educational Attainment,
their Standard Error and Coefficient of Variation for Private Holdings, 1988/96 (1988 E.C.)
DIRE DAWA Region

Educational Status of Holders	Number of Holders who Applied											
	Total		Improved Seed		Irrigation		Pesticides		Fertilizer			
	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)	Estimate ('000)	S.E. ('000)	C.V. (%)
Illiterate	11.22	2.56	22.84	0.43	0.16	37.58	0.34	0.08	23.21	2.09	0.53	25.23
Grades 1 - 3	1.02	0.36	35.64	-	-	-	-	-	-	-	-	-
Grades 4 - 6	0.27	0.13	49.01	-	-	-	-	-	-	-	-	-
Grades 7 - 8	-	-	-	-	-	-	-	-	-	-	-	-
Grades 9 - 11	-	-	-	-	-	-	-	-	-	-	-	-
Grade 12 Complete	-	-	-	-	-	-	-	-	-	-	-	-
Higher Education	-	-	-	-	-	-	-	-	-	-	-	-
Not Stated	-	-	-	-	-	-	-	-	-	-	-	-
Total	12.64	2.67	21.37	0.49	0.18	37.39	0.51	0.24	46.42	2.48	0.54	21.80
												345
												1.56
												42.71

