

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

**AGRICULTURAL SAMPLE SURVEY
1998/99 (1991 E.C.)**

VOLUME III

**REPORT ON
FARM MANAGEMENT PRACTICES**

(PRIVATE PEASANT HOLDINGS, MEHER SEASON)

**ADDIS ABABA
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TABLE OF CONTENTS

	<u>Page</u>
List of Tables.....	iii
List of Figures.....	xiii
PART I. INTRODUCTION AND OBJECTIVES OF THE SURVEY	
1. Introduction.....	1
2. Objective of the Survey	2
PART II. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING	
1. Scope, Coverage and Content of the Survey	3
2. Concepts and Definitions.....	5
3. Sample Design	8
4. Field Organization	9
5. Training of Field Staff	11
6. Method of Data Collection	11
7. Data Processing.....	12
a) Editing, Coding and Verification	12
b) Data Entry, Cleaning and Tabulation.....	12
PART III. SUMMARY OF THE SURVEY RESULTS.	
1. Area Under Different Farm Management Practices	15
1.1 Total Fertilizer Applied Area.....	16
1.2 Total Pesticide Applied Area.....	16
1.3 Total Improved Seed Applied Area.....	17
1.4 Total Irrigated Area.....	17
2. Total Fertilizer Applied Area by Type of Fertilizer and Crop	81
2.1 Natural Fertilizer Applied Area	82
2.2 DAP Applied Area	82
2.3 UREA Applied Area	82
2.4 Area with a Combination of DAP and UREA Applied.....	82
2.5 Area with a Combination of Natural and Commercial Fertilizer Applied	83
3. Quantity of Commercial Fertilizer Applied by Type	147
3.1 Quantity of DAP Applied	147
3.2 Quantity of UREA Applied	148
3.3 Quantity of DAP and UREA Applied in Mix.....	148
3.4 Quantity of Commercial and Natural Fertilizers Applied in Mix....	148

4. Quantity of Local and Improved Seeds used by Type of Crop.....	213
5. Number of Holders Applying Agricultural Inputs on their fields by their Educational Attainment.....	247
Appendix I. Estimation Procedures and Formulations for Estimates of Totals and Variance.....	309
Appendix II. Estimates of the Standard Errors with the Corresponding Coefficient of Variations	315

LIST OF TABLES

	<u>Page</u>
Estimates of Improved Seed, Irrigation, Pesticides and Fertilizer applied area and their percentage distribution by crop for Meher season of private peasant holdings, 1998/99 (1991 E.C)	
Table 1.1 NATIONAL	19
Table 1.2 NATIONAL - REGION	20
Table 1.3 TIGRAY.....	22
Table 1.3.1 West Tigray Zone	23
Table 1.3.2 Central Tigray Zone.....	24
Table 1.3.3 East Tigray Zone.....	25
Table 1.3.4 South Tigray Zone	26
Table 1.4 AFAR.....	27
Table 1.4.1 Zone 1 Zone.....	28
Table 1.4.2 Zone 3 Zone	29
Table 1.5 AMHARA.....	30
Table 1.5.1 North Gonder Zone.....	31
Table 1.5.2 South Gonder Zone.....	32
Table 1.5.3 North Wolo Zone	33
Table 1.5.4 South Wolo Zone	34
Table 1.5.5 North Shewa Zone	35
Table 1.5.6 East Gojam Zone	36
Table 1.5.7 West Gojam Zone	37
Table 1.5.8 Waghamera Zone.....	38
Table 1.5.9 Agewawi Zone.....	39
Table 1.5.10 Oromiya Zone.....	40
Table 1.6 OROMIYA.....	41
Table 1.6.1 West Welega Zone.....	42
Table 1.6.2 East Welega Zone	43
Table 1.6.3 Ilibabor Zone.....	44
Table 1.6.4 Jimma Zone.....	45
Table 1.6.5 West Shewa Zone	46
Table 1.6.6 North Shewa Zone	47
Table 1.6.7 East Sheawa Zone.....	48
Table 1.6.8 Arsi Zone	49

	Page
Table 1.6.9 West Harerge Zone	50
Table 1.6.10 East Harerge Zone	51
Table 1.6.11 Bale Zone	52
Table 1.6.12 Borena Zone	53
Table 1.7 SOMALE	54
Table 1.7.1 Shinele Zone	55
Table 1.7.2 Jijiga Zone	56
Table 1.7.3 Moyale Zone	
Table 1.8 BENSHANGUL - GUMUZ	58
Table 1.8.1 Metekel Zone	59
Table 1.8.2 Asosa Zone	60
Table 1.8.3 Kemeshi Zone	61
Table 1.9 S.N.N.P.R.	62
Table 1.9.1 Gurage Zone	63
Table 1.9.2 Hadiya Zone	64
Table 1.9.3 Kembata Alaba Tembaro Zone	65
Table 1.9.4 Sidama Zone	66
Table 1.9.5 Gedio Zone	67
Table 1.9.6 North Omo Zone	68
Table 1.9.7 South Omo Zone	69
Table 1.9.8 Keficho- Shekicho Zone	70
Table 1.9.9 Bench-Maje Zone	71
Table 1.9.10 Yem Special Wereda Zone	72
Table 1.9.11 Amaro Special Wereda Zone	73
Table 1.9.12 Burji Special Wereda Zone	74
Table 1.9.13 Konso Special Wereda Zone	75
Table 1.9.14 Derashe Special Wereda Zone	76
Table 1.10. GAMBELA	77
Table 1.11. HARARI	78
Table 1.12. ADDIS ABABA	79
Table 1.13. DIRE DAWA	80

Estimates of Fertilizer Applied Area by Type of Fertilizer for Meher Season
Crops of Private Peasant Holdings 1998/99 (1991 E.C).

Table 2.1	NATIONAL	84
Table 2.2	NATIONAL - REGION	85
Table 2.3	TIGRAY.....	87
Table 2.3.1	West Tigray Zone	88
Table 2.3.2	Central Tigray Zone.....	89
Table 2.3.3	East Tigray Zone.....	90
Table 2.3.4	South Tigray Zone.....	91
Table 2.4	AFAR.....	92
Table 2.4.1	Zone 1 Zone	93
Table 2.4.1	Zone 3 Zone	94
Table 2.5	AMHARA.....	95
Table 2.5.1	North Gonder Zone.....	96
Table 2.5.2	South Gonder Zone.....	97
Table 2.5.3	North Wolo Zone.....	98
Table 2.5.4	South Wolo Zone.....	99
Table 2.5.5	North Shewa Zone	100
Table 2.5.6	East Gojam Zone	101
Table 2.5.7	West Gojam Zone.....	102
Table 2.5.8	Waghamera Zone.....	103
Table 2.5.9	Agewawi Zone.....	104
Table 2.5.10	Oromiya Zone	105
Table 2.6	OROMIYA.....	106
Table 2.6.1	West Welega Zone.....	107
Table 2.6.2	East Welega Zone	108
Table 2.6.3	Ilibabor Zone.....	109
Table 2.6.4	Jimma Zone.....	110
Table 2.6.5	West Shewa Zone	111
Table 2.6.6	North Shewa Zone.....	112
Table 2.6.7	East Sheawa Zone.....	113
Table 2.6.8	Arsi Zone	114
Table 2.6.9	West Harerge Zone	115
Table 2.6.10	East Harerge Zone	116

	Page
Table 2.6.11 Bale Zone	117
Table 2.6.12 Borena Zone.....	118
Table 2.7 SOMALE	119
Table 2.7.1 Shinele Zone	120
Table 2.7.2 Jijiga Zone.....	121
Table 2.7.3 Moyale Zone	122
Table 2.8 BENSHANGUL - GUMUZ	123
Table 2.8.1 Metekel Zone	124
Table 2.8.2 Asosa Zone	125
Table 2.8.3 Kemeshi Zone	126
Table 2.9 S.N.N.P.R.....	127
Table 2.9.1 Gurage Zone	128
Table 2.9.2 Hadiya Zone.....	129
Table 2.9.3 Kembata Alaba Tembaro Zone.....	130
Table 2.9.4 Sidama Zone	131
Table 2.9.5 Gedio Zone	132
Table 2.9.6 North Omo Zone.....	133
Table 2.9.7 South Omo Zone.....	134
Table 2.9.8 Keficho- Shekicho Zone.....	135
Table 2.9.9 Bench-Maje Zone	136
Table 2.9.10 Yem Special Wereda Zone	137
Table 2.9.11 Amaro Special Wereda Zone.....	138
Table 2.9.12 Burji Special Wereda Zone.....	139
Table 2.9.13 Konso Special Wereda Zone	140
Table 2.9.14 Derashe Special Wereda Zone.....	141
Table 2.10. GAMBELA.....	142
Table 2.11. HARARI	143
Table 2.12. ADDIS ABABA	144
Table 2.13. DIRE DAWA.....	145

**Estimates of Quantity of Commercial Fertilizer by Type of Fertilizer for
Meher Season Crops of Private Peasant Holdings, 1998/99 (1991 E.C).**

Table 3.1	NATIONAL	149
Table 3.2	NATIONAL - REGION	151
Table 3.3	TIGRAY.....	153
Table 3.3.1	West Tigray Zone.....	154
Table 3.3.2	Central Tigray Zone.....	155
Table 3.3.3	East Tigray Zone.....	156
Table 3.3.4	South Tigray Zone	157
Table 3.4	Afar	158
Table 3.4.1	Zone 1 Zone	159
Table 3.4.2	Zone 3 Zone	160
Table 3.4	AMHARA.....	161
Table 3.4.1	North Gonder Zone.....	162
Table 3.4.2	South Gonder Zone.....	163
Table 3.4.3	North Wolo Zone.....	164
Table 3.4.4	South Wolo Zone.....	165
Table 3.4.5	North Shewa Zone	166
Table 3.4.6	East Gojam Zone	167
Table 3.4.7	West Gojam Zone	168
Table 3.4.8	Waghamera Zone.....	169
Table 3.4.9	Agewawi Zone.....	170
Table 3.4.10	Oromiya Zone	171
Table 3.5	OROMIYA.....	172
Table 3.5.1	West Welega Zone.....	173
Table 3.5.2	East Welega Zone	174
Table 3.5.3	Ilibabor Zone.....	175
Table 3.5.4	Jimma Zone.....	176
Table 3.5.5	West Shewa Zone	177
Table 3.5.6	North Shewa Zone	178
Table 3.5.7	East Sheawa Zone.....	179
Table 3.5.8	Arsi Zone	180
Table 3.5.9	West Harerge Zone	181
Table 3.5.10	East Harerge Zone	182

	<u>Page</u>
Table 3.5.11 Bale Zone	183
Table 3.5.12 Borena Zone.....	184
Table 3.6 SOMALE	185
Table 3.6.1 Shinele Zone	186
Table 3.6.2 Jijiga Zone.....	187
Table 3.6.3 Moyale Zone	188
Table 3.7 BENSHANGUL - GUMUZ	189
Table 3.7.1 Metekel Zone	190
Table 3.7.2 Asosa Zone	191
Table 3.7.3 Kemeshi Zone	192
Table 3.8 S.N.N.P.R.....	193
Table 3.8.1 Gurage Zone	194
Table 3.8.2 Hadiya Zone.....	195
Table 3.8.3 Kembata Alaba Tembaro Zone.....	196
Table 3.8.4 Sidama Zone	197
Table 3.8.5 Gedio Zone	198
Table 3.8.6 North Omo Zone.....	199
Table 3.8.7 South Omo Zone.....	200
Table 3.8.8 Keficho- Shekicho Zone.....	201
Table 3.8.9 Bench-Maje Zone	202
Table 3.8.10 Yem Special Wereda Zone	203
Table 3.8.11 Amaro Special Wereda Zone.....	204
Table 3.8.12 Burji Special Wereda Zone.....	205
Table 3.8.13 Konso Special Wereda Zone	206
Table 3.8.14 Derashe Special Wereda Zone.....	207
Table 3.9. GAMBELA	208
Table 3.10. HARARI	209
Table 3.11. ADDIS ABABA	210
Table 3.12. DIRE DAWA.....	211

Estimates of Quantity of Improved Seed and Local Seed by Type of Crops for
Private Peasant Holdings, 1998/99 (1991 E.C).

Table 4.1	NATIONAL	214
Table 4.2	NATIONAL - REGION	214
Table 4.3	TIGRAY.....	216
Table 4.3.1	West Tigray Zone	216
Table 4.3.2	Central Tigray Zone.....	217
Table 4.3.3	East Tigray Zone.....	217
Table 4.3.4	South Tigray Zone	218
Table 4.4	AFAR.....	218
Table 4.4.1	Zone 1 Zone	219
Table 4.4.2	Zone 3 Zone	219
Table 4.5	AMHARA.....	220
Table 4.5.1	North Gonder Zone.....	221
Table 4.5.2	South Gonder Zone.....	221
Table 4.5.3	North Wolo Zone	222
Table 4.5.4	South Wolo Zone	222
Table 4.5.5	North Shewa Zone	223
Table 4.5.6	East Gojam Zone	223
Table 4.5.7	West Gojam Zone	224
Table 4.5.8	Waghamera Zone	224
Table 4.5.9	Agewawi Zone.....	225
Table 4.5.10	Oromiya Zone.....	225
Table 4.6	OROMIYA.....	226
Table 4.6.1	West Welega Zone.....	226
Table 4.6.2	East Welega Zone	227
Table 4.6.3	Ilibabor Zone.....	227
Table 4.6.4	Jimma Zone.....	228
Table 4.6.5	West Shewa Zone	228
Table 4.6.6	North Shewa Zone	229
Table 4.6.7	East Sheawa Zone.....	229
Table 4.6.8	Arsi Zone	230

	Page
Table 4.6.9 West Harerge Zone	230
Table 4.6.10 East Harerge Zone	231
Table 4.6.11 Bale Zone	231
Table 4.6.12 Borena Zone	232
Table 4.7 SOMALE	232
Table 4.7.1 Shinele Zone	233
Table 4.7.2 Jijiga Zone	233
Table 4.7.3 Moyale Zone	234
Table 4.8 BENSHANGUL - GUMUZ	234
Table 4.8.1 Metekel Zone	235
Table 4.8.2 Asosa Zone	235
Table 4.8.3 Kemeshi Zone	236
Table 4.9 S.N.N.P.R.	236
Table 4.9.1 Gurage Zone	237
Table 4.9.2 Hadiya Zone	237
Table 4.9.3 Kembata Alaba Tembaro Zone	238
Table 4.9.4 Sidama Zone	238
Table 4.9.5 Gedio Zone	239
Table 4.9.6 North Omo Zone	239
Table 4.9.7 South Omo Zone	240
Table 4.9.8 Keficho- Shekicho Zone	240
Table 4.9.9 Bench-Maje Zone	241
Table 4.9.10 Yem Special Wereda Zone	241
Table 4.9.11 Amaro Special Wereda Zone	242
Table 4.9.12 Burji Special Wereda Zone	242
Table 4.9.13 Konso Special Wereda Zone	243
Table 4.9.14 Derashe Special Wereda Zone	243
Table 4.10. GAMBELA	244
Table 4.11. HARARI	244
Table 4.12. ADDIS ABABA	245
Table 4.13. DIRE DAWA	245

Page

Number of Holders who Applied Agricultural Practices on their fields by
Educational Attainment for Private Peasant Holdings, 1998/99 (1991 E.C).

Table 5.1	NATIONAL	248
Table 5.2	NATIONAL - REGION	249
Table 5.3	TIGRAY.....	250
Table 5.3.1	West Tigray Zone	251
Table 5.3.2	Central Tigray Zone.....	252
Table 5.3.3	East Tigray Zone.....	253
Table 5.3.4	South Tigray Zone	254
Table 5.4	AFAR.....	255
Table 5.4.1	Zone 1 Zone	256
Table 5.4.2	Zone 3 Zone	257
Table 5.5	AMHARA.....	258
Table 5.5.1	North Gonder Zone.....	259
Table 5.5.2	South Gonder Zone.....	260
Table 5.5.3	North Wolo Zone	261
Table 5.5.4	South Wolo Zone.....	262
Table 5.5.5	North Shewa Zone	263
Table 5.5.6	East Gojam Zone	264
Table 5.5.7	West Gojam Zone	265
Table 5.5.8	Waghamera Zone.....	266
Table 5.5.9	Agewawi Zone	267
Table 5.5.10	Oromiya Zone	268
Table 5.6	OROMIYA.....	269
Table 5.6.1	West Welega Zone.....	270
Table 5.6.2	East Welega Zone	271
Table 5.6.3	Ilibabor Zone.....	272
Table 5.6.4	Jimma Zone.....	273
Table 5.6.5	West Shewa Zone	274
Table 5.6.6	North Shewa Zone	275

	<u>Page</u>
Table 5.6.7 East Sheawa Zone.....	276
Table 5.6.8 Arsi Zone	277
Table 5.6.9 West Harerge Zone	278
Table 5.6.10 East Harerge Zone	279
Table 5.6.11 Bale Zone.....	280
Table 5.6.12 Borena Zone.....	281
Table 5.7 SOMALE	282
Table 5.7.1 Shinele Zone	283
Table 5.7.2 Jijiga Zone.....	284
Table 5.7.3 Moyale Zone.....	285
Table 5.8 BENSHANGUL - GUMUZ	286
Table 5.8.1 Metekel Zone	287
Table 5.8.2 Asosa Zone	288
Table 5.8.3 Kemeshi Zone.....	289
Table 5.9 S.N.N.P.R.....	290
Table 5.9.1 Gurage Zone	291
Table 5.9.2 Hadiya Zone.....	292
Table 5.9.3 Kembata Alaba Tembaro Zone.....	293
Table 5.9.4 Sidama Zone	294
Table 5.9.5 Gedio Zone	295
Table 5.9.6 North Omo Zone.....	296
Table 5.9.7 South Omo Zone.....	297
Table 5.9.8 Keficho- Shekicho Zone.....	298
Table 5.9.9 Bench-Maje Zone	299
Table 5.9.10 Yem Special Wereda Zone.....	300
Table 5.9.11 Amaro Special Wereda Zone.....	301
Table 5.9.12 Burji Special Wereda Zone.....	302
Table 5.9.13 Konso Special Wereda Zone	303
Table 5.9.14 Derashe Special Wereda Zone.....	304
Table 5.10. GAMBELA.....	305
Table 5.11. HARARI	306
Table 5.12. ADDIS ABABA	307
Table 5.13. DIRE DAWA.....	308

LIST OF FIGURES

	<u>Page</u>
Figure 1. Estimates of Improved Seed, Irrigation, Pesticide and Fertilizer Applied Area for Major Crops of Private Peasant Holdings, NATIONAL, 1998/99 (1991 E.C).....	21
Figure 2. Estimates of Fertilizers Applied Area by Type of Fertilizers for Major Crops of Private Peasant Holdings, NATIONAL, 1998/99 (1991 E.C).....	86
Figure 3. Estimates of Quantity of Commercial Fertilizer Applied by Type for Major Crops of Private Peasant Holdings, NATIONAL, 1998/99 (1991 E.C).....	150
Figure 4. Estimates of Quantity of DAP and UREA used by Region 1998/99 (1991 E.C).....	152
Figure 5. Estimates of Quantity of Seed by Type and Region, 1998/99 (1991 E.C).....	215

PART I

INTRODUCTION AND OBJECTIVES OF THE SURVEY

1. INTRODUCTION

Agriculture is the major contributor to the Ethiopian economy. A great majority of the Ethiopian population are engaged in agriculture to earn their livelihood and most of the nation's exports are made up of agricultural produce. The collection of reliable, comprehensive and timely data on agriculture is thus essential for policy formulation, decision making and other uses. In this regard the Central Statistical Authority (CSA) has exerted effort to provide users and policy makers with reliable and timely agricultural data.

This report presents survey results on agricultural practices such as use of improved seeds, irrigation, application of pesticides and fertilizers within the private peasant sector of the economy. The report consists of three parts where Part I includes the objectives of this annual survey, Part II includes coverage and content of the survey, sample design, field organization, training of field staff, method of data collection and Part III includes survey estimates of farm inputs applied areas as well as the quantities of inputs applied.

Estimation procedures and formulations for estimates of totals and variance for the agricultural practices and crop areas during the main (Meher) season are presented in Appendix I and estimates of the standard errors with the corresponding coefficients of variations (CVs) for farm inputs applied area and quantity of inputs applied are presented in Appendix II.

2. OBJECTIVES OF THE SURVEY

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

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

PART II

SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

1. SCOPE, COVERAGE AND CONTENT OF THE SURVEY

The 1998/99 (1991 E.C) annual Agricultural Sample Survey used a sampling frame which was designed to cover the sedentary rural agricultural population in all regions of the country (urban and nomadic areas were not included in the survey). A break down of the sample distribution expressed by regions, zones and weredas is shown in Table A. A total of 56 zones and 417 weredas were actually covered by the survey.

The area sampling unit used for this survey is defined as an Enumeration Area (E.A) as identified for the 1994 Population and Housing Census. For the 1998/99 AgSS a total of 1450 E.As were selected from all regions of the country. Due to various reasons, 22 EAs were not covered in the survey which resulted in the survey actually covering 1428 E.As. From each of the selected E.As a representative sample of forty agricultural households were selected to estimate the various agricultural population items of interest of the sampled E.A.

Of these forty agricultural households, the first twenty-five were used for obtaining information on area under crops, Meher and Belg season

production of major crops, land use, agricultural practices, crop damage, and quantity of agricultural inputs used. It is important to note that of the total forty agricultural households sampled in each of the selected E.As, data on crop cutting were collected for only the fifteen households (11th - 25th households selected) for the area and production survey.

Table A Area Coverage of the 1998/99 Agricultural Sample Survey

REGION	NUMBER OF ZONES			NUMBER OF WEREDAS		
	TOTAL	COVERED	NOT COVERED	TOTAL ³	COVERED	NOT COVERED
TIGRAY ¹	5	4	1	33	33	-
AFAR ²	5	3	2	8	7	1
AMHARA ¹	11	10	1	93	93	-
OROMIYA	12	12	-	171	171	-
SOMALIE ²	9	3	6	9	9	-
BENISHANGUL-GUMUZ	3	3	-	18	18	-
SNNP	14	14	-	73	73	-
GAMBELA	4	3	1	5	5	-
HARARI	1	1	-	1	1	-
ADDIS ABABA ¹	6	2	4	5	5	-
DIRE DAWA	1	1	-	1	1	-
TOTAL	71	56	15	417	416	1

Note

1= Zones that are not covered in these regions are urban.

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

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

SNNP = Southern Nations, Nationalities and Peoples.

2. CONCEPTS AND DEFINITIONS

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

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

Household : a household may be either;

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

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

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

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

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

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

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

Field : a field is defined as any plot of land which is a parcel or part of a parcel under the same or mixed crops or any other form of private land holding.

Meher (main) Season crop ; any crop harvested from Meskerem (September) to Yekatit (February) is considered as a Meher season crop.

Belg season crop : any crop harvested during the months of Megabit (March) to Nehase (August).

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

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

3. SAMPLE DESIGN

The 1998/99 (1991 E.C.) meher season agricultural survey covered the rural part of the country except two zones in Afar region and six zones in Somalie region that are predominantly nomadic. A two-stage stratified sample design was used to select the sample EAs and the agricultural households. Each zone/special wereda in the sampled population of Tigray, Afar, Amhara, Oromiya, Somalie, Benishangul-Gumuz, SNNP regions was adopted as stratum for which major findings of the survey are reported. But each of the four regions, namely; Gambela, Harari, Addis Ababa and Dire Dawa were considered as reporting levels. The primary sampling units (PSUs) were enumeration areas (EAs) and agricultural households were the secondary sampling units.

The survey questionnaires were administered to all agricultural holders within the sample households. A fixed number of sample EAs was determined for each stratum/reporting level based on precision of major estimates and cost considerations. Within each stratum EAs were selected using probability proportional to size; size being total number of households in the EAs as obtained from the 1994 Population and Housing Census. From each sample EA, 25 agricultural households were systematically selected for the meher season survey from a fresh list of households prepared at the beginning of the fieldwork of the survey.

A total of 1,450 EAs (2.9 % of total EAs in the rural areas of the country) were selected for the survey. However, 22 EAs were not covered by the survey due to various reasons that were beyond the control of the Authority. Thus, the survey succeeded in covering 1428 (98.48 %) EAs. With respect to ultimate sampling units, it was planned to cover a total of 36,250 agricultural households for area measurement and the response rate was found to be 98.94 %. Estimation procedures of parameters of interest and their sampling errors are presented in appendix I.

4. FIELD ORGANIZATION

All the 22 Branch Statistical Offices of the CSA participated in the survey undertaking, especially in organizing the second stage training, in deploying the field staff to their respective sites of assignment, and retrieving completed questionnaires and submitting them to the head office for data processing. The Branch Statistical Offices were also responsible in administering the financial and logistics aspect of the survey within the areas of their assignment. In the data collection of the survey, a total of 1559 enumerators and 331 field supervisors were involved with an average supervisor-enumerator ratio of 1-to-5. To accomplish the data collection operation, all the enumerators were supplied with the necessary survey equipment (compasses, protractors, rulers, measuring tapes, balance scales, poles, ropes, sample bags, ... etc.) at the completion of the AgSS training. To assist the data collection activities in deployment, supervision and retrieval of completed questionnaires, a total of 123 four-wheel drive

The following table shows distribution of the field staff and vehicles by Branch Statistical Office.

**Table B. Distribution of Field Staff and Vehicles by
Branch Statistical Office**

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

5 TRAINING OF FIELD STAFF

The field staff training program was carried out in two stages. The first stage consisted of training of staff from the head office, Branch Statistical Office heads and the senior field supervisors. This training was given for a period of one week at CSA's headquarters in Addis Ababa. Many of these Personnel trained in the first stage were assigned to conduct similar training for field supervisors and enumerators for fifteen days in all the twenty-two CSA branch offices which are distributed all over the country. During the second stage of training, the field staff were given detailed classroom instruction on the objectives and uses of the AgSS, concepts and definition of terms used, the method of area measurement, method of crop cutting, correct interviewing procedures, etc. The training of the enumerators and supervisors also included field practice to reinforce the understanding of concepts, definitions and theories discussed in the classroom with regard to field measurement and crop cutting methods.

6. METHOD OF DATA COLLECTION

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

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

7. DATA PROCESSING

a) Editing, Coding and Verification

In order to ensure the quality of the collected survey data an editing, coding and verification instruction manual was prepared and printed. Then 50 editor-coders and 10 verifiers were trained for two days in the editing, coding and verification operation using the aforementioned manual as a reference and teaching aid.

The completed questionnaires were edited, coded and later verified on a 100% basis before the questionnaires were passed over to the data entry unit. The editing, coding and verification exercise of all questionnaires was completed in about 40 days.

b) Data entry, Cleaning and Tabulations

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

The data on the coded questionnaires were then entered into personal computers using IMPS software. The data were then checked and cleaned using the edit specifications prepared earlier for this purpose. The data entry operation involved about 50 data encoders and it took 35 days to complete the job. Finally, tabulation was done on personal computers to produce results as indicated in the tabulation plan.

PART III

SUMMARY OF SURVEY RESULTS

1. AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICES

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

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

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

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

Improved seeds :- are defined as a crop variety which give a significantly higher yield and better quality compared to locally produced varieties of seeds.

**Summary Table A. Area Under Farm Management Practices
1998/99 (1991 E.C)**

Practices	Area ('000 H.A)
Use of Fertilizer	3444.83
Use of Pesticides	384.90
Use of Improved Seeds	239.02
Use of Irrigation	63.17

1.1 Total Fertilizer Applied Area

Although fertilizer is one of the very important agricultural inputs used to increase production only 3.4 million hectares (38.6%) of the total cultivated crop area had fertilizer applied on it at national level. Out of this total fertilizer applied area 3.2 million hectares (92.3%) was reported to have been under temporary crops and the remaining 265 thousand hectares (7.7%) was under permanent crops. See Table 1.1

1.2 Total Pesticide Applied Area

As mentioned above the total cultivated crop area in 1998/99 (1991 E.C) Meher season was about 8.9 million hectares at country level. Out of this

pesticide was applied to only 4.3% of the total crop area. The total pesticide applied on temporary crop area was estimated at about 374 thousand hectares (97.1%) of the total pesticide applied area while the total pesticide applied on permanent crop area was 11 thousand hectares (2.9%). The largest pesticide applied crop area was reported to have been under teff (37.2%) followed by wheat (35.9%).

1.3 Total Improved Seed Applied Area

As illustrated in Table 1.1 the total cultivated crop area (temporary and permanent) was about 8.9 million hectares. Of this cultivated crop area, improved seeds were applied to 239 thousand hectares (2.7%). This indicates that the private peasant holders use mostly indigenous seeds which may be due to the cost and/or inadequate availability of improved seeds. Out of the total improved seed applied area, about 222 thousand hectares (92.8%) was under temporary crops and the remaining (7.2%) was under permanent crops. For details refer to Table 1.1.

1.4 Total Irrigated Area

Of the total cultivated area, the total irrigated area at national level was 63 thousand hectares (0.7%). Of the total irrigated crop area about 42 thousand hectares (66.2%) was under temporary crops while 21 thousand hectares (33.8%) was under permanent crops. Out of the total irrigated area under temporary crops 32.6% was covered by maize followed by sorghum 17.3%.

Similarly of the total irrigated area under permanent crops, 33.2% was covered by chat followed by fruits 20.7% (see Table 1.1).

Note

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

TABLE 1.1

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

National

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	6,743.87	75.57	218.00	91.21	30.11	47.67	360.27	93.60	2,936.85	85.25
Teff	2,090.89	23.43	22.41	9.38	2.89	4.57	143.07	37.17	1,074.29	31.19
Barely	830.15	9.30	**	**	3.58	5.67	35.13	9.13	368.27	10.69
Wheat	987.04	11.06	59.33	24.82	2.57	4.07	138.15	35.89	648.78	18.83
Maize	1,302.91	14.60	131.78	55.13	13.65	21.61	20.75	5.39	499.93	14.51
Sorghum	1,042.28	11.68	1.99	.83	7.24	11.46	17.89	4.65	126.75	3.68
Millet	446.63	5.00	-	-	**	**	4.13	1.07	201.38	5.85
Oats	43.97	.49	-	-	**	**	1.15	.30	17.45	.51
PULSES	875.36	9.81	**	**	2.66	4.21	7.39	1.92	123.76	3.59
Horse Beans	293.41	3.29	**	**	**	**	3.39	.88	57.98	1.68
Field Peas	141.95	1.59	**	**	**	**	1.28	.33	35.60	1.03
Haricot Beans	129.45	1.45	**	**	.57	.90	.93	.24	20.35	.59
Chick Peas	167.65	1.88	**	**	1.48	2.34	.79	.21	4.65	.13
Lentils	47.85	.54	**	**	-	-	**	**	3.94	.11
Vetch	95.05	1.07	-	-	**	**	**	**	1.24	.04
OILSEEDS	374.82	4.20	**	**	**	**	2.90	.75	26.86	.78
Neug	221.11	2.48	-	-	-	-	1.01	.26	9.66	.28
Lin Seed	90.44	1.01	**	**	**	**	1.48	.38	5.95	.17
Rape seed	10.42	.12	-	-	**	**	**	**	6.46	.19
Ground Nuts	15.03	.17	**	**	.06	.09	.01	-	2.71	.08
Sun Flower	5.58	.06	-	-	**	**	**	**	**	**
Sesame	32.20	.36	-	-	**	**	**	**	**	**
Castor Bean	**	**	-	-	**	**	-	-	**	**
OTHERS	254.30	2.85	1.71	.72	8.83	13.98	3.12	.81	91.90	2.67
Fenugreek	21.43	.24	-	-	**	**	**	.01	1.42	.04
Spices	54.05	.61	**	**	1.12	1.77	.54	.14	17.60	.51
Potatoes	50.95	.57	-	-	1.53	2.42	**	**	26.45	.77
Other Temporary	127.87	1.43	1.70	.71	5.96	9.43	**	**	46.43	1.35
ALL TEMPORARY	8,248.35	92.43	221.83	92.81	41.82	66.20	373.68	97.08	3,179.37	92.29
Chat	94.33	1.06	-	-	7.10	11.24	2.99	.78	32.95	.96
Coffee	251.31	2.82	16.13	6.75	3.98	6.30	4.36	1.13	42.75	1.24
Enset	257.91	2.89	-	-	1.71	2.71	3.54	.92	173.64	5.04
Cotton	**	**	-	-	**	**	**	**	**	**
Tobacco	2.12	.02	**	**	.01	.02	-	-	.48	.01
Fruits	24.09	.27	**	**	**	**	**	**	6.26	.18
Other Permanent	29.52	.33	**	**	4.09	6.47	**	**	7.72	.22
TOTAL PERMANENT	675.90	7.57	17.19	7.19	21.35	33.80	11.22	2.92	265.46	7.71
ALL CROPS	8,924.25	100.00	239.02	100.00	63.17	100.00	384.90	100.00	3,444.83	100.00

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
1998/99(1991 E.C.)

('000 HA)

REGION	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
TIGRAY	582.54	6.53	7.55	3.16	6.99	11.06	5.65	1.47	198.26	5.76
AFAR	15.54	.17	-	-	2.00	3.16	.98	.25	.64	.02
AMHARA	3,078.22	34.49	50.53	21.14	13.02	20.60	28.74	7.47	898.69	26.09
OROMIYA	3,927.40	44.01	127.32	53.27	30.41	48.11	301.45	78.32	1,746.84	50.71
SOMALIE	52.10	.58	.22	.09	.71	1.12	.21	.05	3.03	.09
BENSHANGUL-GUMUZ	163.71	1.83	1.24	.52	.93	1.47	.97	.25	16.92	.49
S.N.N.P.R.	1,068.54	11.97	49.87	20.87	7.62	12.06	45.95	11.94	569.13	16.52
GAMBELA	14.16	.16	.44	.18	-	-	.54	.14	.09	-
HARARI	8.09	.09	.17	.07	.52	.82	.13	.03	3.83	.11
ADDIS ABABA	7.52	.08	.18	.08	.05	.08	.23	.06	6.32	.18
DIRE DAWA	6.44	.07	1.49	.62	.96	1.52	.04	.01	1.08	.03
TOTAL	8,924.26	100.00	239.01	100.00	63.21	100.00	384.89	100.00	3,444.83	100.00

FIG.1 ESTIMATES OF IMPROVED SEED ,IRRIGATION,PESTICIDE AND FERTILIZER APPLIED AREA FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS,NATIONAL ,1998/99(1991 E.C.)

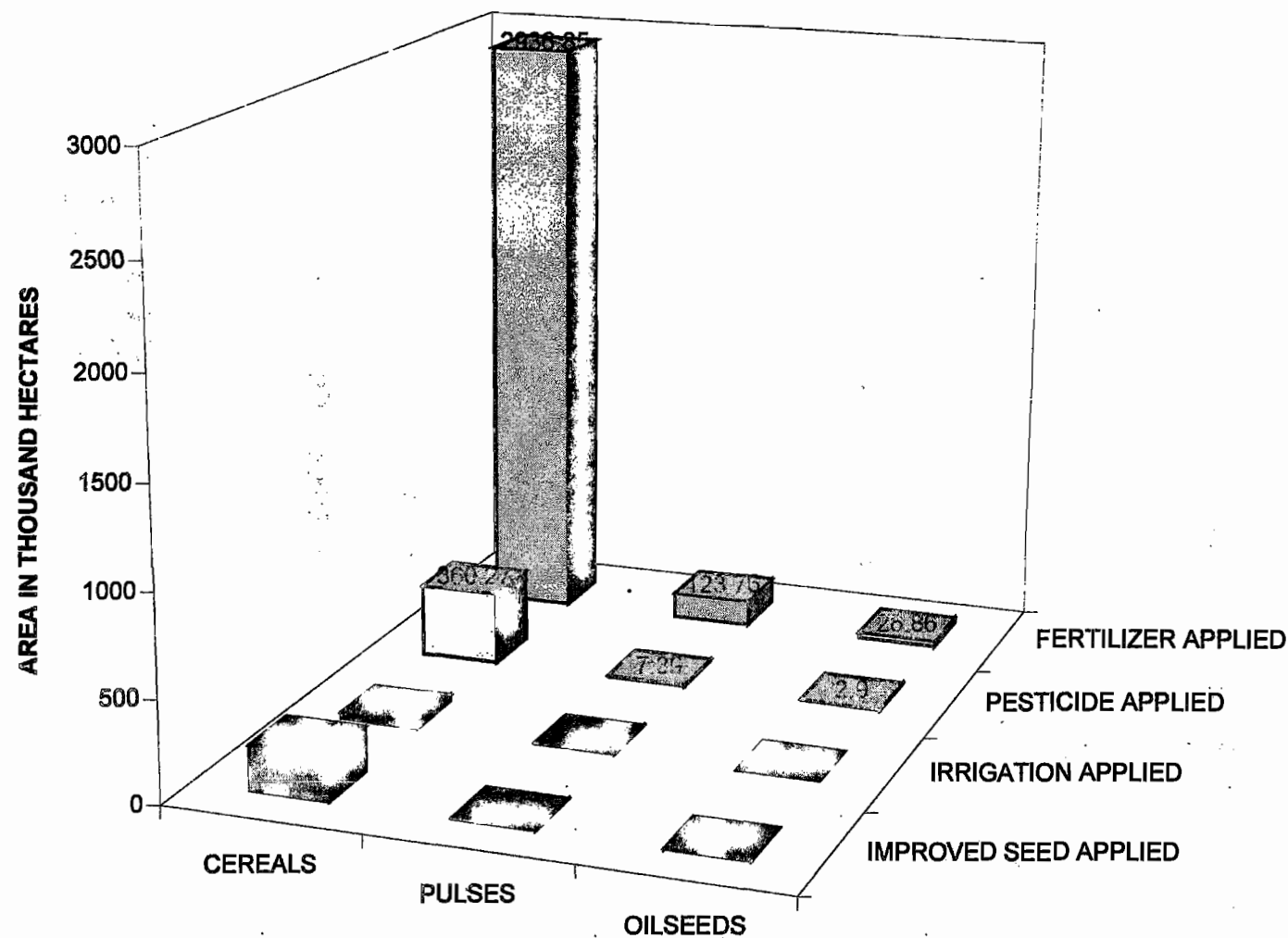


TABLE 1.3

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Tigray

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	522.36	89.67	7.55	100.00	5.40	77.25	5.40	95.41	193.75	97.73
Teff	140.64	24.14	2.51	33.25	**	**	1.72	30.39	58.55	29.53
Barely	78.40	13.46	**	**	.56	8.01	**	**	29.49	14.88
Wheat	54.94	9.43	2.45	32.45	1.12	16.02	**	**	21.27	10.73
Maize	69.87	11.99	**	**	1.82	26.04	.69	12.19	34.01	17.16
Sorghum	108.69	18.66	**	**	**	**	**	**	29.78	15.02
Millet	69.36	11.91	-	-	.06	.86	**	**	20.48	10.33
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	34.12	5.86	-	-	**	**	**	**	3.32	1.67
Horse Beans	9.85	1.69	-	-	**	**	**	**	2.04	1.03
Field Peas	3.44	.59	-	-	-	-	-	-	.46	.23
Haricot Beans	2.34	.40	-	-	**	**	**	**	.16	.08
Chick Peas	10.35	1.78	-	-	**	**	-	-	**	**
Lentils	2.68	.46	-	-	-	-	-	-	.11	.06
Vetch	5.46	.94	-	-	-	-	**	**	**	**
OILSEEDS	23.22	3.99	-	-	**	**	**	**	.53	.27
Neug	4.92	.84	-	-	-	-	-	-	**	**
Lin Seed	6.03	1.04	-	-	**	**	-	-	.15	.08
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	12.26	2.10	-	-	-	-	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.12	.19	-	-	.16	2.29	**	**	**	**
Fenugreek	.33	.06	-	-	-	-	-	-	**	**
Spices	.41	.07	**	**	**	**	-	-	**	**
Potatoes	**	**	**	**	-	-	-	-	**	**
Other Temporary	.35	.06	**	**	**	**	**	**	**	**
ALL TEMPORARY	580.82	99.70	7.55	100.00	6.76	96.71	5.66	100.00	197.90	99.82
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.02	-	-	-	**	**	-	-	-	-
Other Permanent	1.06	.18	-	-	**	**	-	-	**	**
TOTAL PERMANENT	1.73	.30	-	-	**	**	-	-	.35	.18
ALL CROPS	582.55	100.00	7.55	100.00	6.99	100.00	5.66	100.00	198.25	100.00

TABLE 1.3.1

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

West Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	142.11	88.04	**	**	**	**	**	**	50.37	98.96
Teff	30.99	19.20	**	**	**	**	**	**	17.47	34.32
Barely	**	**	-	-	**	**	-	-	-	-
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	24.81	15.37	**	**	**	**	**	**	16.27	31.96
Sorghum	43.70	27.07	**	**	**	**	**	**	**	**
Millet	41.11	25.47	-	-	-	-	**	**	9.58	18.82
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	5.12	3.17	-	-	**	**	**	**	**	**
Horse Beans	.83	.51	-	-	-	-	**	**	**	**
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	**	**
Chick Peas	3.77	2.34	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	13.36	8.28	-	-	-	-	**	**	**	**
Neug	2.34	1.45	-	-	-	-	-	-	**	**
Lin Seed	.67	.42	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	10.35	6.41	-	-	-	-	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	**	**	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	160.89	99.68	**	**	**	**	**	**	50.77	99.74
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-
Other Permanent	.15	.09	**	**	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**
ALL CROPS	161.41	100.00	**	**	**	**	**	**	50.90	100.00

TABLE 1.3.2

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Central Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	176.73	93.18	97	100.00	**	**	2.98	98.03	89.41	98.17
Teff	65.51	34.54	**	**	**	**	1.15	37.83	31.84	34.96
Barely	13.65	7.20	**	**	**	**	**	**	5.77	6.34
Wheat	10.58	5.58	**	**	**	**	**	**	4.79	5.26
Maize	20.64	10.88	**	**	**	**	.24	7.89	14.83	16.28
Sorghum	42.86	22.60	-	-	**	**	**	**	22.14	24.31
Millet	23.32	12.30	-	-	**	**	**	**	9.87	10.84
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	7.85	4.14	-	-	**	**	**	**	1.32	1.45
Horse Beans	3.74	1.97	-	-	**	**	**	**	1.11	1.22
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	1.58	.83	-	-	**	**	-	-	.14	.15
Chick Peas	1.39	.73	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	4.37	2.30	-	-	-	-	-	-	**	**
Neug	2.41	1.27	-	-	-	-	-	-	**	**
Lin Seed	1.56	.82	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.35	.18	-	-	**	**	**	**	.07	.08
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	**	**	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.08	.04	-	-	**	**	**	**	**	**
ALL TEMPORARY	189.30	99.80	.97	100.00	**	**	3.04	100.00	91.04	99.96
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	189.67	100.00	.97	100.00	**	**	3.04	100.00	91.08	100.00

TABLE 1.3.3

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

East Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	64.65	82.99	.74	100.00	.38	100.00	.28	93.33	28.62	93.50
Teff	8.16	10.47	**	**	**	7.89	.12	40.00	2.82	9.21
Barely	25.81	33.13	-	-	.21	55.26	**	**	14.40	47.04
Wheat	15.81	20.30	.55	74.32	.06	15.79	**	**	7.95	25.97
Maize	4.56	5.85	**	**	**	**	**	**	1.94	6.34
Sorghum	5.84	7.50	-	-	**	**	-	-	.50	1.63
Millet	4.30	5.52	-	-	-	-	**	**	1.01	3.30
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	10.64	13.66	-	-	-	-	**	**	1.70	5.55
Horse Beans	2.27	2.91	-	-	-	-	-	-	.78	2.55
Field Peas	1.45	1.86	-	-	-	-	-	-	.34	1.11
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	3.43	4.40	-	-	-	-	-	-	**	**
Lentils	.78	1.00	-	-	-	-	-	-	.10	.33
Vetch	2.71	3.48	-	-	-	-	.02	6.67	**	**
OILSEEDS	2.03	2.61	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	2.03	2.61	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	.02	.07
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	77.45	99.42	.74	100.00	.38	100.00	.30	100.00	30.43	99.41
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	77.90	100.00	.74	100.00	.38	100.00	.30	100.00	30.61	100.00

TABLE 1.3.4

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

South Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	138.86	90.45	2.42	100.00	4.21	80.34	1.25	90.58	25.35	98.68
Teff	35.99	23.44	**	**	**	**	**	**	6.42	24.99
Barely	37.95	24.72	-	-	**	**	**	**	9.31	36.24
Wheat	28.02	18.25	1.85	76.45	.92	17.56	**	**	8.39	32.66
Maize	19.86	12.94	-	-	1.51	28.82	**	**	.97	3.78
Sorghum	**	**	-	-	**	**	-	-	**	**
Millet	.63	.41	-	-	**	**	-	-	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	10.50	6.84	-	-	**	**	**	**	.25	.97
Horse Beans	3.00	1.95	-	-	**	**	**	**	**	**
Field Peas	1.47	.96	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	**	**	**	**
Chick Peas	1.77	1.15	-	-	**	**	-	-	-	-
Lentils	1.66	1.08	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	3.44	2.24	-	-	**	**	-	-	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	1.76	1.15	-	-	**	**	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.34	.22	-	-	.11	2.10	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	.11	.07	-	-	**	**	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	.14	.09	-	-	**	**	-	-	**	**
ALL TEMPORARY	153.14	99.75	2.42	100.00	5.19	99.05	1.38	100.00	25.69	100.00
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	153.52	100.00	2.42	100.00	5.24	100.00	1.38	100.00	25.69	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
1998/99(1991 E.C.)

Afar

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	14.16	91.12	-	-	1.93	96.98	.95	97.94	.59	92.19
Teff	5.28	33.98	-	-	**	**	.38	39.18	**	**
Barely	**	**	-	-	-	-	**	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	3.39	21.81	-	-	1.69	84.92	**	6.19	.12	18.75
Sorghum	5.14	33.08	-	-	**	**	**	52.58	.20	31.25
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.89	5.73	-	-	-	-	**	1.03	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.60	3.86	-	-	-	-	**	1.03	-	-
Chick Peas	.28	1.80	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.17	1.09	-	-	**	**	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	**	**	-	-	**	**
Castor Bean	**	**	-	-	**	**	-	-	-	-
OTHERS	.02	.13	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.02	.13	-	-	**	**	**	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	15.24	98.07	-	-	1.95	97.99	.96	98.97	.64	100.00
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	.27	1.74	-	-	**	**	**	1.03	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.02	.13	-	-	.01	.50	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.30	1.93	-	-	.04	2.01	**	1.03	-	-
ALL CROPS	15.54	100.00	-	-	1.99	100.00	.97	100.00	.64	100.00

TABLE 1.4.1

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Zone 1 Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	1.81	98.91	-	-	1.75	98.87	**	**	.01	100.00
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	1.69	92.35	-	-	1.63	92.09	**	**	.01	100.00
Sorghum	**	**	-	-	**	**	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	**	**	-	-	-	-
Castor Bean	**	**	-	-	**	**	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.83	100.00	-	-	1.77	100.00	**	**	.01	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	1.83	100.00	-	-	1.77	100.00	**	**	.01	100.00

TABLE 1.4.2

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99 (1991 E.C.)

Zone 3 Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	11.29	89.46	-	-	**	**	.83	97.65	.58	92.06
Teff	4.90	38.83	-	-	**	**	.32	37.65	**	**
Barely	**	**	-	-	-	-	**	**	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	1.37	10.86	-	-	**	**	**	**	**	**
Sorghum	4.67	37.00	-	-	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.87	6.89	-	-	-	-	**	***	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	-	-
Chick Peas	.28	2.22	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.14	1.11	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.02	.16	-	-	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.02	.16	-	-	**	**	**	**	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	12.32	97.62	-	-	**	**	.84	98.82	.63	100.00
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	.27	2.14	-	-	**	**	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.02	.16	-	-	.01	4.55	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.30	2.38	-	-	.04	18.18	**	**	-	-
ALL CROPS	12.62	100.00	-	-	**	**	.85	100.00	.63	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
1998/99(1991 E.C.)

Amhara

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	2,395.25	77.81	49.89	98.67	7.12	54.73	26.13	90.92	843.98	93.91
Teff	884.64	28.74	12.03	23.79	.70	5.38	10.92	38.00	369.83	41.15
Barely	262.62	8.53	**	**	2.62	20.14	1.01	3.51	44.38	4.94
Wheat	244.88	7.96	13.75	27.20	**	**	4.18	14.54	101.01	11.24
Maize	305.41	9.92	24.01	47.49	3.00	23.06	3.42	11.90	148.01	16.47
Sorghum	414.01	13.45	.09	.18	**	**	**	**	23.47	2.61
Millet	273.81	8.90	-	-	**	**	2.03	7.06	156.30	17.39
Oats	9.88	.32	-	-	**	**	-	-	.98	.11
PULSES	401.96	13.06	**	**	.93	7.15	1.35	4.70	18.97	2.11
Horse Beans	123.38	4.01	**	**	**	**	**	**	9.02	1.00
Field Peas	56.38	1.83	**	**	-	-	**	**	5.85	.65
Haricot Beans	40.09	1.30	**	**	**	**	**	**	1.01	.11
Chick Peas	96.93	3.15	-	-	**	**	.35	1.22	.96	.11
Lentils	27.29	.89	**	**	-	-	**	**	**	**
Vetch	57.89	1.88	-	-	**	**	**	**	**	**
OILSEEDS	177.59	5.77	-	-	**	**	.78	2.71	13.39	1.49
Neug	130.64	4.24	-	-	-	-	**	**	7.50	.83
Lin Seed	23.93	.78	-	-	-	-	**	**	.59	.07
Rape seed	5.05	.16	-	-	**	**	-	-	3.67	.41
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	4.86	.16	-	-	**	**	**	**	**	**
Sesame	12.67	.41	-	-	**	**	**	**	**	**
Castor Bean	**	**	-	-	-	-	-	-	**	**
OTHERS	67.70	2.20	**	**	2.16	16.60	**	**	17.20	1.91
Fenugreek	10.81	.35	-	-	**	**	-	-	.08	.01
Spices	22.54	.73	-	-	.68	5.23	**	**	6.90	.77
Potatoes	22.18	.72	-	-	**	**	-	-	7.82	.87
Other Temporary	12.17	.40	**	**	.30	2.31	**	**	2.40	.27
ALL TEMPORARY	3,042.50	98.84	50.33	99.55	10.22	78.55	28.32	98.54	893.54	99.43
Chat	1.88	.06	-	-	.23	1.77	**	**	.56	.06
Coffee	**	**	.05	.10	.87	6.69	**	**	1.16	.13
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	1.58	.05	**	**	.49	3.77	**	**	.40	.04
Other Permanent	8.39	.27	**	**	1.20	9.22	**	**	1.69	.19
TOTAL PERMANENT	35.72	1.16	**	**	2.79	21.45	**	**	5.16	.57
ALL CROPS	3,078.22	100.00	50.56	100.00	13.01	100.00	28.74	100.00	898.70	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
1998/99(1991 E.C.)

North Gonder Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	496.37	82.75	6.05	97.27	**	**	**	**	**	**
Teff	144.05	24.02	4.39	70.58	**	**	-	-	49.00	32.62
Barely	43.65	7.28	-	-	**	**	-	-	**	**
Wheat	20.11	3.35	**	**	-	-	-	-	**	**
Maize	31.78	5.30	1.13	18.17	-	-	**	**	11.28	7.51
Sorghum	142.43	23.75	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	**	**	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	47.03	7.84	**	**	-	-	-	-	**	**
Horse Beans	16.39	2.73	**	**	-	-	-	-	**	**
Field Peas	6.48	1.08	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	15.38	2.56	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	34.28	5.71	-	-	-	-	**	**	**	**
Neug	25.84	4.31	-	-	-	-	**	**	**	**
Lin Seed	2.24	.37	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	9.52	1.59	-	-	**	**	**	**	2.36	1.57
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	4.78	.80	-	-	**	**	-	-	**	**
Potatoes	2.17	.36	-	-	-	-	-	-	**	**
Other Temporary	.64	.11	-	-	.04	18.18	**	**	.15	.10
ALL TEMPORARY	587.20	97.89	6.07	97.59	**	**	1.23	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	**	**
Other Permanent	.87	.15	-	-	**	**	-	-	.12	.08
TOTAL PERMANENT	**	**	**	**	**	**	-	-	**	**
ALL CROPS	599.83	100.00	6.22	100.00	.22	100.00	1.23	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
1998/99(1991 E.C.)

South Gonder Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	301.28	73.62	6.31	100.00	**	**	6.18	93.49	73.81	94.17
Teff	112.24	27.43	**	**	**	**	3.94	59.61	38.00	48.48
Barely	47.63	11.64	-	-	-	-	**	**	**	**
Wheat	31.96	7.81	1.75	27.73	-	-	.91	13.77	8.58	10.95
Maize	39.28	9.60	**	**	**	**	.55	8.32	12.65	16.14
Sorghum	24.83	6.07	-	-	-	-	**	**	**	**
Millet	45.27	11.06	-	-	-	-	**	**	12.33	15.73
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	59.01	14.42	-	-	**	**	**	**	**	**
Horse Beans	19.59	4.79	-	-	-	-	-	-	**	**
Field Peas	5.36	1.31	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	20.98	5.13	-	-	**	**	**	**	-	-
Lentils	1.77	.43	-	-	-	-	-	-	-	-
Vetch	5.70	1.39	-	-	**	**	**	**	-	-
OILSEEDS	28.58	6.98	-	-	-	-	**	**	**	**
Neug	23.23	5.68	-	-	-	-	-	-	-	-
Lin Seed	4.49	1.10	-	-	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.64	.16	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	19.11	4.67	-	-	**	**	**	**	4.03	5.14
Fenugreek	**	**	-	-	**	**	-	-	-	-
Spices	3.50	.86	-	-	**	**	**	**	.86	1.10
Potatoes	11.60	2.83	-	-	**	**	-	-	3.06	3.90
Other Temporary	2.03	.50	-	-	**	**	-	-	.11	.14
ALL TEMPORARY	407.98	99.69	6.31	100.00	1.44	99.31	6.61	100.00	78.05	99.58
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	.80	.20	-	-	**	**	-	-	.18	.23
TOTAL PERMANENT	1.28	.31	-	-	**	**	-	-	.33	.42
ALL CROPS	409.26	100.00	6.31	100.00	1.45	100.00	6.61	100.00	78.38	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
1998/99(1991 E.C.)

North Wolo Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	155.10	79.75	3.34	100.00	**	**	**	**	15.25	95.91
Teff	51.99	26.73	**	**	**	**	**	**	**	**
Barely	28.07	14.43	**	**	**	**	**	**	**	**
Wheat	31.55	16.22	2.84	85.03	**	**	**	**	9.52	59.87
Maize	**	**	**	**	**	**	**	**	.31	1.95
Sorghum	25.40	13.06	-	-	-	-	-	-	**	**
Millet	.67	.34	-	-	-	-	-	-	**	**
Oats	1.84	.95	-	-	-	-	-	-	**	**
PULSES	30.79	15.83	-	-	**	**	**	**	**	**
Horse Beans	10.47	5.38	-	-	**	**	-	-	**	**
Field Peas	3.78	1.94	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	6.74	3.47	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	4.34	2.23	-	-	-	-	**	**	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	3.46	1.78	-	-	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.68	1.38	-	-	**	**	-	-	.22	1.38
Fenugreek	1.17	.60	-	-	-	-	-	-	-	-
Spices	.23	.12	-	-	**	**	-	-	**	**
Potatoes	.71	.37	-	-	-	-	-	-	**	**
Other Temporary	.57	.29	-	-	**	**	-	-	.08	.50
ALL TEMPORARY	192.91	99.19	3.34	100.00	.22	28.57	1.76	100.00	15.89	99.94
Chat	.02	.01	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	. **	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	1.57	.81	-	-	**	**	-	-	**	**
ALL CROPS	194.48	100.00	3.34	100.00	**	**	1.76	100.00	15.90	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
1998/99(1991 E.C.)

South Wolo Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	228.70	75.44	3.78	100.00	**	**	**	**	55.66	91.19
Teff	82.43	27.19	-	-	**	**	16	16.84	18.52	30.34
Barely	24.93	8.22	-	-	-	-	-	-	2.93	4.80
Wheat	43.73	14.42	3.78	100.00	-	-	**	**	17.31	28.36
Maize	15.19	5.01	-	-	**	**	-	-	4.12	6.75
Sorghum	52.55	17.33	-	-	-	-	-	-	**	**
Millet	**	**	-	-	-	-	-	-	**	**
Oats	6.10	2.01	-	-	-	-	-	-	**	**
PULSES	60.43	19.93	-	-	**	**	**	**	3.23	5.29
Horse Beans	24.74	8.16	-	-	**	**	**	**	2.33	3.82
Field Peas	9.71	3.20	-	-	-	-	-	-	.62	1.02
Haricot Beans	4.41	1.45	-	-	-	-	-	-	**	**
Chick Peas	7.90	2.61	-	-	**	**	-	-	**	**
Lentils	5.22	1.72	-	-	-	-	-	-	**	**
Vetch	8.45	2.79	-	-	-	-	-	-	**	**
OILSEEDS	5.60	1.85	-	-	-	-	-	-	**	**
Neug	2.66	.88	-	-	-	-	-	-	-	-
Lin Seed	1.48	.49	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	1.41	.47	-	-	-	-	-	-	**	**
Castor Bean	**	**	-	-	-	-	-	-	**	**
OTHERS	6.15	2.03	-	-	**	**	**	**	.86	1.41
Fenugreek	4.06	1.34	-	-	**	**	-	-	**	**
Spices	1.41	.47	-	-	**	**	-	-	.58	.95
Potatoes	**	**	-	-	**	**	-	-	**	**
Other Temporary	.58	.19	-	-	**	**	**	**	**	**
ALL TEMPORARY	300.88	99.24	3.78	100.00	.42	73.68	**	**	60.31	98.80
Chat	.65	.21	-	-	**	**	-	-	**	**
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	.57	.19	-	-	**	**	-	-	**	**
TOTAL PERMANENT	2.29	.76	-	-	**	**	-	-	**	**
ALL CROPS	303.17	100.00	3.78	100.00	.57	100.00	**	**	61.04	100.00

TABLE 1.5.5

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

North Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	254.05	80.89	3.05	95.61	**	**	8.06	96.64	66.63	92.84
Teff	101.78	32.41	.51	15.99	**	**	3.46	41.49	32.75	45.63
Barely	22.22	7.07	-	-	**	**	**	**	**	**
Wheat	43.36	13.81	2.52	79.00	-	-	**	**	26.13	36.41
Maize	10.16	3.23	**	**	**	**	**	**	2.79	3.89
Sorghum	76.30	24.29	**	**	**	**	**	**	2.39	3.33
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	49.08	15.63	**	**	**	**	**	**	4.15	5.78
Horse Beans	14.33	4.56	-	-	-	-	**	**	1.38	1.92
Field Peas	3.80	1.21	**	**	-	-	**	**	**	**
Haricot Beans	4.16	1.32	-	-	**	**	**	**	.65	.91
Chick Peas	12.47	3.97	-	-	**	**	-	-	**	**
Lentils	10.55	3.36	**	**	-	-	-	-	**	**
Vetch	3.77	1.20	-	-	-	-	-	-	**	**
OILSEEDS	4.79	1.53	-	-	**	**	**	**	.12	.17
Neug	1.17	.37	-	-	-	-	-	-	**	**
Lin Seed	1.75	.56	-	-	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	**	**	**	**
Sesame	1.32	.42	-	-	**	**	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.55	.81	-	-	**	**	-	-	**	**
Fenugreek	.61	.19	-	-	**	**	-	-	-	-
Spices	1.01	.32	-	-	**	**	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.92	.29	-	-	**	**	-	-	**	**
ALL TEMPORARY	310.47	98.85	3.17	99.37	**	**	8.29	99.40	71.29	99.33
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	**	**	**	**	.46	12.78	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.47	.15	-	-	.31	8.61	**	**	**	**
Other Permanent	1.48	.47	**	**	**	**	-	-	**	**
TOTAL PERMANENT	3.60	1.15	**	**	1.13	31.39	**	**	**	**
ALL CROPS	314.07	100.00	3.19	100.00	**	**	8.34	100.00	71.77	100.00

TABLE 1.5.6

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

East Gojam Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	357.45	75.89	9.97	96.89	**	**	3.57	84.20	194.81	96.69
Teff	188.19	39.96	**	**	-	-	1.53	36.08	134.22	66.62
Barely	48.04	10.20	-	-	**	**	**	**	9.63	4.78
Wheat	55.90	11.87	2.02	19.63	**	**	**	**	31.72	15.74
Maize	46.15	9.80	**	**	-	-	**	**	19.21	9.53
Sorghum	18.83	4.00	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	83.14	17.65	**	**	**	**	**	**	3.27	1.62
Horse Beans	17.16	3.64	-	-	-	-	-	-	1.21	.60
Field Peas	10.47	2.22	-	-	-	-	-	-	**	**
Haricot Beans	**	**	**	**	-	-	-	-	**	**
Chick Peas	21.74	4.62	-	-	**	**	**	**	**	**
Lentils	**	**	-	-	-	-	**	**	**	**
Vetch	20.74	4.40	-	-	-	-	**	**	-	-
OILSEEDS	20.00	4.25	-	-	-	-	**	**	**	**
Neug	**	**	-	-	-	-	**	**	**	**
Lin Seed	4.68	.99	-	-	-	-	-	-	**	**
Rape seed	.51	.11	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	8.14	1.73	**	**	**	**	-	-	1.34	.67
Fenugreek	.88	.19	-	-	-	-	-	-	-	-
Spices	2.44	.52	-	-	**	**	-	-	**	**
Potatoes	2.81	.60	-	-	**	**	-	-	**	**
Other Temporary	2.01	.43	**	**	-	-	-	-	.31	.15
ALL TEMPORARY	468.73	99.52	10.27	99.81	**	**	4.23	99.76	200.98	99.76
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	**	**
Other Permanent	1.65	.35	-	-	.03	5.45	**	**	.41	.20
TOTAL PERMANENT	2.27	.48	**	**	**	**	**	**	.49	.24
ALL CROPS	471.00	100.00	10.29	100.00	**	**	4.24	100.00	201.47	100.00

TABLE 1.5.7

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

West Gojam Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	331.02	72.88	14.25	99.79	**	**	3.38	87.79	201.31	90.76
Teff	123.14	27.11	**	**	**	**	.98	25.45	71.36	32.17
Barely	18.61	4.10	-	-	**	**	**	**	6.71	3.03
Wheat	8.79	1.94	**	**	**	**	**	**	3.77	1.70
Maize	101.47	22.34	13.38	93.70	**	**	**	**	71.72	32.34
Sorghum	15.24	3.36	-	-	-	-	**	**	**	**
Millet	62.66	13.80	-	-	**	**	**	**	47.01	21.19
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	54.55	12.01	-	-	**	**	**	**	5.40	2.43
Horse Beans	14.05	3.09	-	-	**	**	**	**	2.60	1.17
Field Peas	12.08	2.66	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	10.12	2.23	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	44.44	9.78	-	-	**	**	-	-	8.50	3.83
Neug	35.73	7.87	-	-	-	-	-	-	4.12	1.86
Lin Seed	3.42	.75	-	-	-	-	-	-	**	**
Rape seed	3.59	.79	-	-	**	**	-	-	3.29	1.48
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	14.62	3.22	-	-	**	**	**	**	5.55	2.50
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	8.20	1.81	-	-	**	**	-	-	2.98	1.34
Potatoes	2.13	.47	-	-	**	**	-	-	1.31	.59
Other Temporary	4.14	.91	-	-	**	**	**	**	1.25	.56
ALL TEMPORARY	444.63	97.90	14.25	99.79	**	**	3.53	91.69	220.76	99.53
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	**	**	**	**	**	**	**	**	.17	.08
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.16	.04	-	-	**	**	-	-	**	**
Other Permanent	1.71	.38	-	-	.16	7.88	-	-	.61	.28
TOTAL PERMANENT	**	**	**	**	.37	18.23	**	**	1.04	.47
ALL CROPS	454.17	100.00	14.28	100.00	**	**	3.85	100.00	221.80	100.00

TABLE 1.5.8

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Waghamera Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	68.86	81.77	-	-	**	**	**	**	1.71	95.00
Teff	18.83	22.36	-	-	-	-	**	**	.16	8.89
Barely	13.28	15.77	-	-	-	-	-	-	**	**
Wheat	6.75	8.02	-	-	-	-	-	-	**	**
Maize	1.36	1.62	-	-	**	**	-	-	.22	12.22
Sorghum	28.23	33.52	-	-	-	-	**	**	**	**
Millet	.41	.49	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	10.10	11.99	-	-	-	-	**	**	**	**
Horse Beans	3.73	4.43	-	-	-	-	**	**	**	**
Field Peas	1.67	1.98	-	-	-	-	-	-	-	-
Haricot Beans	2.70	3.21	-	-	-	-	-	-	**	**
Chick Peas	.48	.57	-	-	-	-	-	-	-	-
Lentils	1.52	1.81	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	5.04	5.99	-	-	-	-	**	**	**	**
Neug	.41	.49	-	-	-	-	-	-	-	-
Lin Seed	1.07	1.27	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.85	1.01	-	-	-	-	**	**	**	**
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.02	.02	-	-	**	**	-	-	-	-
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	**	**	-	-	**	**
ALL TEMPORARY	84.02	99.77	-	-	**	**	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	84.21	100.00	-	-	.01	100.00	**	**	**	**

TABLE 1.5.9

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Agewawia Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	158.78	79.59	3.04	99.67	3.16	88.76	1.00	89.29	85.23	93.11
Teff	52.16	26.15	-	-	-	-	**	**	21.63	23.63
Barely	15.99	8.02	-	-	**	**	-	-	8.43	9.21
Wheat	2.45	1.23	**	**	**	**	-	-	1.37	1.50
Maize	34.14	17.11	3.00	98.36	**	**	.61	54.46	24.46	26.72
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	46.26	23.19	-	-	-	-	**	**	29.26	31.96
Oats	**	**	-	-	**	**	-	-	**	**
PULSES	6.14	3.08	-	-	**	**	-	-	1.92	2.10
Horse Beans	2.66	1.33	-	-	**	**	-	-	.64	.70
Field Peas	2.74	1.37	-	-	-	-	-	-	**	**
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	.74	.37	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	29.65	14.86	-	-	-	-	**	**	1.69	1.85
Neug	26.87	13.47	-	-	-	-	-	-	1.22	1.33
Lin Seed	1.29	.65	-	-	-	-	**	**	**	**
Rape seed	.49	.25	-	-	-	-	-	-	.32	.35
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.39	2.20	**	**	.09	2.53	-	-	2.37	2.59
Fenugreek	.02	.01	-	-	-	-	-	-	.02	.02
Spices	.50	.25	-	-	**	**	-	-	.35	.38
Potatoes	2.66	1.33	-	-	**	**	-	-	1.81	1.98
Other Temporary	1.21	.61	**	**	**	**	-	-	.19	.21
ALL TEMPORARY	198.96	99.73	3.04	99.67	3.30	92.70	1.12	100.00	91.21	99.64
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	.21	.11	**	**	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	**	**	**	**
Other Permanent	.22	.11	-	-	.07	1.97	-	-	.14	.15
TOTAL PERMANENT	.54	.27	.01	.33	**	**	**	**	**	**
ALL CROPS	199.50	100.00	3.05	100.00	3.56	100.00	1.12	100.00	91.54	100.00

TABLE 1.5.10

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Oromia Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	43.67	89.87	.08	100.00	.04	16.67	**	**	4.18	87.45
Teff	9.82	20.21	-	-	-	-	**	**	.89	18.62
Barely	.20	.41	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	10.30	21.20	-	-	**	**	**	**	1.25	26.15
Sorghum	22.45	46.20	.08	100.00	**	**	**	**	1.80	37.66
Millet	.49	1.01	-	-	**	**	-	-	**	**
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	1.69	3.48	-	-	-	-	**	**	**	**
Horse Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	.30	.62	-	-	-	-	-	-	**	**
Haricot Beans	.45	.93	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.88	1.81	-	-	-	-	-	-	.05	1.05
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	.70	1.44	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.54	1.11	-	-	-	-	**	**	.09	1.88
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	.47	.97	-	-	**	**	**	**	.08	1.67
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	46.78	96.27	.08	100.00	.04	16.67	.29	90.63	4.39	91.84
Chat	1.09	2.24	-	-	**	**	**	**	.31	6.49
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.04	.08	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	1.81	3.73	-	-	**	**	**	**	**	**
ALL CROPS	48.59	100.00	.08	100.00	.24	100.00	.32	100.00	4.78	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
1998/99(1991 E.C.)

Oromia

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	3,011.86	76.69	111.28	87.40	12.38	40.71	287.20	95.27	1,562.58	89.45
Teff	867.62	22.09	5.93	4.66	**	**	113.20	37.55	547.68	31.35
Barely	383.45	9.76	**	**	**	**	32.29	10.71	221.76	12.69
Wheat	599.14	15.26	32.14	25.24	.63	2.07	115.56	38.33	455.15	26.06
Maize	702.64	17.89	70.73	55.55	5.36	17.63	13.96	4.63	240.03	13.74
Sorghum	351.24	8.94	**	**	**	**	9.90	3.28	60.04	3.44
Millet	74.36	1.89	-	-	**	**	**	**	21.67	1.24
Oats	33.41	.85	-	-	**	**	1.14	.38	16.25	.93
PULSES	355.80	9.06	**	**	**	**	4.61	1.53	70.08	4.01
Horse Beans	137.23	3.49	-	-	-	-	2.79	.93	37.78	2.16
Field Peas	61.69	1.57	-	-	-	-	.60	.20	21.26	1.22
Haricot Beans	56.02	1.43	-	-	**	**	.54	.18	7.73	.44
Chick Peas	52.85	1.35	**	**	**	**	**	**	1.26	.07
Lentils	17.28	.44	-	-	-	-	**	**	1.57	.09
Vetch	30.73	.78	-	-	-	-	.15	.05	.48	.03
OILSEEDS	152.03	3.87	**	**	**	**	1.88	.62	12.02	.69
Neug	73.35	1.87	-	-	-	-	**	**	1.77	.10
Lin Seed	59.59	1.52	**	**	-	-	1.13	.37	5.09	.29
Rape seed	5.25	.13	-	-	-	-	**	**	2.71	.16
Ground Nuts	11.73	.30	-	-	**	**	-	-	**	**
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	**	**	-	-	**	**
Castor Bean	**	**	-	-	-	-	-	-	**	**
OTHERS	92.60	2.36	**	**	5.87	19.30	2.20	.73	32.50	1.86
Fenugreek	9.34	.24	-	-	**	**	**	**	1.11	.06
Spices	12.29	.31	**	**	.35	1.15	**	**	2.63	.15
Potatoes	17.64	.45	-	-	.52	1.71	**	**	11.27	.65
Other Temporary	53.33	1.36	**	**	4.98	16.38	**	**	17.49	1.00
ALL TEMPORARY	3,612.29	91.98	113.87	89.44	18.75	61.66	295.89	98.15	1,677.18	96.01
Chat	66.90	1.70	-	-	6.12	20.12	1.47	.49	20.11	1.15
Coffee	154.36	3.93	12.66	9.94	1.44	4.74	2.31	.77	11.46	.66
Enset	70.86	1.80	-	-	.49	1.61	1.55	.51	33.40	1.91
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	1.07	.03	-	-	.01	.03	-	-	.20	.01
Fruits	10.77	.27	**	**	**	**	**	**	2.21	.13
Other Permanent	11.12	.28	**	**	2.37	7.79	-	-	2.27	.13
TOTAL PERMANENT	315.10	8.02	13.45	10.56	11.66	38.34	5.57	1.85	69.65	3.99
ALL CROPS	3,927.39	100.00	127.32	100.00	30.41	100.00	301.46	100.00	1,746.83	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
1998/99(1991 E.C.)

West Welega Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	264.83	74.80	13.34	88.05	.41	65.08	5.92	96.89	84.11	94.01
Teff	50.91	14.38	.83	5.48	-	-	**	**	27.96	31.25
Barely	2.82	.80	-	-	-	-	-	-	.39	.44
Wheat	8.25	2.33	**	**	-	-	**	**	.89	.99
Maize	97.40	27.51	11.87	78.35	.32	50.79	2.03	33.22	34.67	38.75
Sorghum	65.52	18.51	**	**	**	**	.88	14.40	7.07	7.90
Millet	39.88	11.26	-	-	-	-	**	**	13.13	14.68
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	19.31	5.45	-	-	-	-	-	-	2.03	2.27
Horse Beans	6.07	1.71	-	-	-	-	-	-	.79	.88
Field Peas	1.31	.37	-	-	-	-	-	-	.13	.15
Haricot Beans	9.94	2.81	-	-	-	-	-	-	.92	1.03
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	.47	.13	-	-	-	-	-	-	**	**
OILSEEDS	7.50	2.12	-	-	-	-	-	-	.33	.37
Neug	7.12	2.01	-	-	-	-	-	-	**	**
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	6.80	1.92	-	-	**	**	.02	.33	1.95	2.18
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	1.62	.46	-	-	-	-	**	**	.73	.82
Potatoes	1.88	.53	-	-	**	**	**	**	.69	.77
Other Temporary	3.20	.90	-	-	**	**	-	-	.53	.59
ALL TEMPORARY	298.44	84.30	13.34	88.05	.42	66.67	5.94	97.22	88.42	98.83
Chat	1.02	.29	-	-	**	**	-	-	.03	.03
Coffee	51.43	14.53	1.81	11.95	**	**	**	**	.59	.66
Enset	.35	.10	-	-	-	-	-	-	.06	.07
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	2.21	.62	-	-	-	-	-	-	.29	.32
Other Permanent	.51	.14	-	-	-	-	-	-	**	**
TOTAL PERMANENT	55.60	15.70	1.81	11.95	.21	33.33	**	**	1.05	1.17
ALL CROPS	354.04	100.00	15.15	100.00	.63	100.00	6.11	100.00	89.47	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 1998/99 (1991 E.C.)

East Welega Zone										
TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	299.90	77.11	22.90	99.91	.33	55.00	7.19	87.79	132.50	94.45
Teff	127.39	32.75	-	-	-	-	3.06	37.36	77.01	54.89
Barely	15.00	3.86	-	-	-	-	**	**	1.60	1.14
Wheat	22.00	5.66	-	-	-	-	.09	1.10	7.60	5.42
Maize	90.47	23.26	20.15	87.91	.33	55.00	**	**	37.82	26.96
Sorghum	22.71	5.84	-	-	-	-	**	**	.44	.31
Millet	22.26	5.72	-	-	-	-	**	**	8.03	5.72
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	24.04	6.18	-	-	-	-	**	**	4.12	2.94
Horse Beans	14.46	3.72	-	-	-	-	**	**	2.82	2.01
Field Peas	8.78	2.26	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	50.41	12.96	-	-	-	-	**	**	1.76	1.25
Neug	44.41	11.42	-	-	-	-	**	**	**	**
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	.62	.16	-	-	-	-	-	-	.30	.21
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flowers	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-
OTHERS	5.40	1.39	**	**	-	-	**	**	1.44	1.03
Fenugreek	.14	.04	-	-	-	-	-	-	.03	.02
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	.78	.20	-	-	-	-	-	-	.39	.28
Other Temporary	.78	.20	**	**	-	-	**	**	.37	.26
ALL TEMPORARY	379.75	97.64	22.91	99.96	.33	55.00	7.94	96.95	139.82	99.66
Chat	7.10	1.83	-	-	**	**	-	-	**	**
Coffee	7.42	1.91	**	**	**	**	**	**	**	**
Enset	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.55	.14	-	-	**	**	-	-	.10	.07
Other Permanent	.98	.25	-	-	**	**	-	-	.28	.20
TOTAL PERMANENT	9.17	2.36	**	**	**	**	**	**	.47	.34
ALL CROPS	388.92	100.00	22.92	100.00	.60	100.00	8.19	100.00	140.29	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
1998/99(1991 E.C.)

Illibabor Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	126.08	74.65	12.63	82.01	**	**	3.61	90.48	38.40	96.75
Teff	38.91	23.04	**	**	-	-	2.16	54.14	15.85	39.93
Barely	1.24	.73	-	-	-	-	-	-	**	**
Wheat	.46	.27	-	-	-	-	**	**	**	**
Maize	60.86	36.03	12.33	80.06	**	**	1.29	32.33	21.92	55.23
Sorghum	19.21	11.37	-	-	-	-	.11	2.76	.61	1.54
Millet	5.38	3.19	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	9.38	5.55	-	-	**	**	**	**	.45	1.13
Horse Beans	2.46	1.46	-	-	-	-	**	**	.12	.30
Field Peas	2.80	1.66	-	-	-	-	-	-	**	**
Haricot Beans	3.60	2.13	-	-	**	**	-	-	**	**
Chick Peas	**	**	-	-	-	-	**	**	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	1.17	.69	-	-	-	-	-	-	**	**
Neug	1.07	.63	-	-	-	-	-	-	**	**
Lin Seed	.09	.05	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.09	.65	**	**	-	-	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	.55	.33	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.50	.30	**	**	-	-	-	-	.07	.18
ALL TEMPORARY	137.72	81.54	12.64	82.08	**	**	3.73	93.48	39.12	98.56
Chat	1.86	1.10	-	-	**	**	-	-	**	**
Coffee	26.01	15.40	2.76	17.92	**	**	**	**	**	**
Enset	1.85	1.10	-	-	-	-	**	**	**	**
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	1.03	.61	**	**	**	**	-	-	.09	.23
Other Permanent	.39	.23	-	-	**	**	-	-	.03	.08
TOTAL PERMANENT	31.18	18.46	2.76	17.92	.13	86.67	**	**	.57	1.44
ALL CROPS	168.90	100.00	15.40	100.00	.15	100.00	3.99	100.00	39.69	100.00

TABLE 1.6.4

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Jimma Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	262.99	76.66	10.21	85.44	**	**	32.46	94.94	104.75	86.11
Teff	124.46	36.28	**	**	**	**	26.98	78.91	63.53	52.22
Barely	9.72	2.83	**	**	-	-	**	**	**	**
Wheat	12.81	3.73	**	**	-	-	2.26	6.61	**	**
Maize	80.56	23.48	9.69	81.09	-	-	**	**	32.10	26.39
Sorghum	29.19	8.51	-	-	-	-	**	**	2.31	1.90
Millet	**	**	-	-	-	-	**	**	**	**
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	21.82	6.36	-	-	-	-	**	**	1.15	.95
Horse Beans	12.82	3.74	-	-	-	-	**	**	.65	.53
Field Peas	5.64	1.64	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	6.79	1.98	-	-	-	-	**	**	**	**
Neug	**	**	-	-	-	-	**	**	**	**
Lin Seed	.71	.21	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	10.40	3.03	**	**	**	**	**	**	4.14	3.40
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	.02	.02
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	10.15	2.96	**	**	**	**	**	**	4.12	3.39
ALL TEMPORARY	302.00	88.03	10.22	85.52	**	**	33.64	98.39	110.36	90.72
Chat	6.01	1.75	-	-	**	**	**	**	1.86	1.53
Coffee	22.57	6.58	1.71	14.31	**	**	.35	1.02	2.22	1.82
Enset	10.97	3.20	-	-	**	**	**	**	6.63	5.45
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.69	.20	**	**	-	-	**	**	**	**
Other Permanent	.78	.23	-	-	-	-	-	-	.29	.24
TOTAL PERMANENT	41.05	11.97	1.73	14.48	.25	71.43	.55	1.61	11.29	9.28
ALL CROPS	343.05	100.00	11.95	100.00	.35	100.00	34.19	100.00	121.65	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
1998/99(1991 E.C.)

West Shewa Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	452.50	80.79	14.76	96.85	**	**	80.50	98.68	304.10	92.69
Teff	218.59	39.03	**	**	**	**	41.34	50.67	165.40	50.41
Barely	58.45	10.44	**	**	-	-	10.53	12.91	38.12	11.62
Wheat	110.54	19.74	6.11	40.09	-	-	27.79	34.06	77.28	23.55
Maize	42.16	7.53	**	**	**	**	.46	.56	22.27	6.79
Sorghum	22.24	3.97	-	-	-	-	**	**	.92	.28
Millet	-	-	-	-	-	-	-	-	-	-
Oats	.52	.09	-	-	-	-	-	-	**	**
PULSES	69.45	12.40	**	**	**	**	**	**	9.14	2.79
Horse Beans	26.06	4.65	-	-	-	-	**	**	3.30	1.01
Field Peas	6.41	1.14	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	21.60	3.86	**	**	**	**	-	-	**	**
Lentils	3.37	.60	-	-	-	-	-	-	.66	.20
Vetch	11.93	2.13	-	-	-	-	**	**	**	**
OILSEEDS	15.43	2.75	-	-	-	-	**	**	1.41	.43
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	7.53	1.34	-	-	-	-	**	**	**	**
Rape seed	**	**	-	-	-	-	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.53	.81	**	**	.80	41.45	**	**	2.15	.66
Fenugreek	.56	.10	-	-	-	-	-	-	**	**
Spices	**	**	-	-	**	**	**	**	**	**
Potatoes	.95	.17	-	-	**	**	-	-	.62	.19
Other Temporary	2.19	.39	**	**	.40	20.73	-	-	.76	.23
ALL TEMPORARY	541.91	96.75	15.23	99.93	1.08	55.96	81.58	100.00	316.80	96.56
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	14.14	2.52	-	-	**	**	-	-	10.05	3.06
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	**	**	**	**	-	-	**	**
Other Permanent	1.43	.26	-	-	.25	12.95	-	-	.51	.16
TOTAL PERMANENT	18.19	3.25	**	**	.85	44.04	-	-	11.29	3.44
ALL CROPS	560.10	100.00	15.24	100.00	1.93	100.00	81.58	100.00	328.09	100.00

TABLE 1.6.6

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

North Shewa Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	269.09	78.48	5.08	99.80	**	**	9.63	97.08	98.38	95.90
Teff	91.79	26.77	**	**	-	-	4.82	48.59	51.72	50.41
Barely	69.75	20.34	-	-	-	-	**	**	5.64	5.50
Wheat	67.65	19.73	5.03	98.82	**	**	2.67	26.92	38.94	37.96
Maize	4.60	1.34	-	-	**	**	**	**	1.86	1.81
Sorghum	34.81	10.15	-	-	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	.49	.14	-	-	-	-	-	-	**	**
PULSES	59.30	17.30	-	-	-	-	**	**	3.76	3.67
Horse Beans	20.94	6.11	-	-	-	-	**	**	3.16	3.08
Field Peas	7.10	2.07	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	8.40	2.45	-	-	-	-	-	-	**	**
Vetch	9.82	2.86	-	-	-	-	-	-	-	-
OILSEEDS	11.56	3.37	-	-	-	-	**	**	**	**
Neug	5.40	1.57	-	-	-	-	-	-	-	-
Lin Seed	5.96	1.74	-	-	-	-	**	**	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.23	.65	-	-	**	**	-	-	.30	.29
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	**	**	-	-	**	**
Potatoes	**	**	-	-	**	**	-	-	-	-
Other Temporary	1.49	.43	-	-	**	**	-	-	.26	.25
ALL TEMPORARY	342.18	99.80	5.08	99.80	.48	64.86	9.92	100.00	102.45	99.86
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	-	-
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.02	.01	-	-	**	**	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	.48	.14	**	**	**	**	-	-	.13	.13
TOTAL PERMANENT	.68	.20	**	**	**	**	-	-	.14	.14
ALL CROPS	342.86	100.00	5.09	100.00	.74	100.00	9.92	100.00	102.59	100.00

TABLE 1.6.7

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

East Shewa Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	263.90	79.75	8.72	86.08	**	**	29.34	91.80	160.50	90.22
Teff	96.22	29.08	-	-	-	-	19.40	60.70	81.16	45.62
Barely	9.07	2.74	-	-	-	-	.91	2.85	5.96	3.35
Wheat	58.44	17.66	5.50	54.29	-	-	6.74	21.09	53.45	30.04
Maize	95.42	28.83	3.22	31.79	**	**	2.26	7.07	18.74	10.53
Sorghum	4.06	1.23	-	-	-	-	**	**	**	**
Millet	.65	.20	-	-	-	-	-	-	**	**
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	50.57	15.28	-	-	**	**	.97	3.04	5.55	3.12
Horse Beans	5.70	1.72	-	-	-	-	**	**	1.24	.70
Field Peas	4.49	1.36	-	-	-	-	**	**	**	**
Haricot Beans	20.39	6.16	-	-	-	-	**	**	**	**
Chick Peas	13.04	3.94	-	-	**	**	**	**	**	**
Lentils	2.47	.75	-	-	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	.34	.10	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	.14	.04	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	13.28	4.01	**	**	**	**	**	**	10.39	5.84
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	.54	.16	-	-	**	**	-	-	**	**
Potatoes	**	**	-	-	-	-	**	**	**	**
Other Temporary	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	328.09	99.14	9.43	93.09	**	**	31.73	99.28	176.45	99.18
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	1.09	.33	-	-	**	**	-	-	**	**
TOTAL PERMANENT	2.83	.86	**	**	**	**	**	**	**	**
ALL CROPS	330.92	100.00	10.13	100.00	**	**	31.96	100.00	177.90	100.00

TABLE 1.6.8

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Arsi Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	547.12	82.98	8.79	90.25	1.13	46.89	96.40	98.05	440.21	89.19
Teff	75.81	11.50	-	-	-	-	10.77	10.95	52.16	10.57
Barely	154.04	23.36	**	**	**	**	15.08	15.34	137.39	27.84
Wheat	222.56	33.76	6.75	69.30	**	**	67.97	69.13	211.08	42.77
Maize	70.53	10.70	-	-	.50	20.75	.93	.95	27.68	5.61
Sorghum	16.00	2.43	-	-	-	-	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	8.18	1.24	-	-	**	**	.49	.50	**	**
PULSES	62.69	9.51	-	-	**	**	1.10	1.12	39.15	7.93
Horse Beans	34.96	5.30	-	-	-	-	.94	.96	24.94	5.05
Field Peas	15.87	2.41	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	**	**	**	**	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	.42	.06	-	-	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	32.25	4.89	**	**	-	-	**	**	5.59	1.13
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	26.93	4.08	**	**	-	-	**	**	4.04	.82
Rape seed	1.83	.28	-	-	-	-	**	**	1.54	.31
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	7.24	1.10	**	**	**	**	**	**	3.07	.62
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	**	**	-	-	**	**	**	**	**	**
Other Temporary	3.46	.52	**	**	**	**	**	**	1.60	.32
ALL TEMPORARY	649.30	98.48	9.67	99.28	1.20	49.79	98.05	99.73	488.02	98.88
Chat	**	**	-	-	**	**	**	**	**	**
Coffee	**	**	**	**	**	**	**	**	**	**
Enset	**	**	-	-	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	**	**	**	**	-	-	**	**
TOTAL PERMANENT	10.03	1.52	**	**	**	**	**	**	**	**
ALL CROPS	659.33	100.00	9.74	100.00	2.41	100.00	98.32	100.00	493.57	100.00

TABLE 1.6.9

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

West Harerge Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	123.23	66.22	3.26	69.81	**	**	**	**	24.38	66.67
Teff	8.42	4.52	**	**	.23	1.99	-	-	**	**
Barely	3.79	2.04	-	-	**	**	-	-	.44	1.20
Wheat	**	**	**	**	-	-	**	**	**	**
Maize	57.52	30.91	2.96	63.38	**	**	**	**	12.83	35.08
Sorghum	51.17	27.50	-	-	**	**	**	**	6.77	18.51
Millet	1.20	.64	-	-	**	**	-	-	**	**
Oats	.41	.22	-	-	-	-	**	**	**	**
PULSES	11.87	6.38	**	**	**	**	-	-	1.50	4.10
Horse Beans	4.95	2.66	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	4.83	2.60	-	-	**	**	-	-	.99	2.71
Chick Peas	.51	.27	**	**	**	**	-	-	**	**
Lentils	.55	.30	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	1.27	.68	-	-	**	**	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	.65	.35	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	**	**	-	-	**	**
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	**	**	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	11.28	6.06	**	**	.89	7.71	**	**	1.22	3.34
Fenugreek	.97	.52	-	-	**	**	-	-	.18	.49
Spices	.19	.10	-	-	**	**	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	9.99	5.37	**	**	.80	6.93	**	**	1.01	2.76
ALL TEMPORARY	147.65	79.35	3.40	72.81	**	**	**	**	27.19	74.35
Chat	24.01	12.90	-	-	2.09	18.10	.40	19.51	5.14	14.06
Coffee	11.82	6.35	**	**	**	**	**	**	3.95	10.80
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.26	.14	-	-	**	**	-	-	.04	.11
Fruits	.67	.36	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	38.43	20.65	**	**	3.38	29.26	.76	37.07	9.38	25.65
ALL CROPS	186.08	100.00	4.67	100.00	11.55	100.00	2.05	100.00	36.57	100.00

TABLE 1.6.10

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

East Harerge Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	148.65	67.91	5.92	92.36	1.85	23.15	**	**	69.59	73.80
Teff	4.76	2.17	-	-	**	**	**	**	**	**
Barely	4.26	1.95	-	-	**	**	-	-	**	**
Wheat	8.43	3.85	**	**	**	**	**	**	3.90	4.14
Maize	52.22	23.86	4.71	73.48	.99	12.39	**	**	26.70	28.31
Sorghum	77.21	35.28	-	-	.72	9.01	**	**	34.67	36.77
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	10.19	4.66	-	-	**	**	**	**	2.73	2.90
Horse Beans	4.75	2.17	-	-	-	-	**	**	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	3.22	1.47	-	-	**	**	**	**	2.13	2.26
Chick Peas	**	**	-	-	**	**	-	-	**	**
Lentils	.40	.18	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	11.78	5.38	-	-	**	**	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	.27	.12	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	11.30	5.16	-	-	**	**	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	**	**	-	-	-	-	-	-	**	**
OTHERS	16.88	7.71	**	**	1.78	22.28	**	**	5.95	6.31
Fenugreek	.61	.28	-	-	**	**	-	-	.15	.16
Spices	**	**	**	**	-	-	-	-	**	**
Potatoes	3.85	1.76	-	-	.27	3.38	**	**	1.71	1.81
Other Temporary	12.37	5.65	**	**	1.50	18.77	**	**	4.04	4.28
ALL TEMPORARY	187.50	85.66	5.96	92.98	3.76	47.06	**	**	80.70	85.58
Chat	28.27	12.92	-	-	3.33	41.68	**	**	11.94	12.66
Coffee	1.99	.91	**	**	**	**	**	**	1.32	1.40
Enset	**	**	-	-	**	**	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.05	.02	-	-	**	**	-	-	**	**
Fruits	**	**	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	31.38	14.34	**	**	4.23	52.94	1.01	13.84	13.60	14.42
ALL CROPS	218.88	100.00	6.41	100.00	7.99	100.00	**	**	94.30	100.00

TABLE 1.6.11

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Bale Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	205.58	77.85	4.77	93.71	-	-	14.11	91.45	99.39	95.24
Teff	24.73	9.36	**	**	-	-	**	**	6.41	6.14
Barely	46.46	17.59	-	-	-	-	2.64	17.11	24.87	23.83
Wheat	85.38	32.33	3.92	77.01	-	-	7.85	50.87	57.40	55.00
Maize	20.93	7.93	**	**	-	-	**	**	1.53	1.47
Sorghum	7.49	2.84	-	-	-	-	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	20.59	7.80	-	-	-	-	.64	4.15	8.58	8.22
PULSES	15.49	5.87	-	-	-	-	**	**	.47	.45
Horse Beans	3.63	1.37	-	-	-	-	**	**	**	**
Field Peas	5.90	2.23	-	-	-	-	**	**	.18	.17
Haricot Beans	1.09	.41	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	1.08	.41	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	13.55	5.13	**	**	-	-	**	**	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	13.07	4.95	**	**	-	-	**	**	-	-
Rape seed	.10	.04	-	-	-	-	**	**	**	**
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	9.96	3.77	**	**	-	-	**	**	.48	.46
Fenugreek	4.41	1.67	-	-	-	-	**	**	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	.27	.10	-	-	-	-	-	-	-	-
Other Temporary	1.85	.70	**	**	-	-	-	-	.17	.16
ALL TEMPORARY	244.58	92.62	5.09	100.00	-	-	14.80	95.92	100.36	96.17
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	6.81	2.58	-	-	.06	100.00	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	.56	.21	-	-	-	-	-	-	**	**
TOTAL PERMANENT	19.50	7.38	-	-	.06	100.00	.63	4.08	4.00	3.83
ALL CROPS	264.08	100.00	5.09	100.00	.06	100.00	15.43	100.00	104.36	100.00

TABLE 1.6.12

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Borena Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	47.97	43.52	**	**	-	-	**	**	**	**
Teff	5.63	5.11	-	-	-	-	-	-	**	**
Barely	**	**	-	-	-	-	**	**	**	**
Wheat	**	**	**	**	-	-	-	-	**	**
Maize	29.97	27.19	**	**	-	-	**	**	**	**
Sorghum	**	**	**	**	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.69	1.53	-	-	-	-	-	-	.09	.49
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	.51	.46	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.48	3.16	-	-	-	-	**	**	1.21	6.54
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	3.20	2.90	-	-	-	-	**	**	1.18	6.38
ALL TEMPORARY	53.14	48.21	**	**	-	-	**	**	**	**
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	19.25	17.46	4.63	83.73	**	**	**	**	**	**
Enset	31.68	28.74	-	-	**	**	**	**	8.29	44.84
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	3.03	2.75	-	-	**	**	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	57.09	51.79	4.63	83.73	**	**	**	**	10.88	58.84
ALL CROPS	110.23	100.00	5.53	100.00	**	**	2.42	100.00	18.49	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
1998/99(1991 E.C.)

Somale

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	44.74	85.91	**	**	.37	52.11	**	**	**	**
Teff	**	**	-	-	-	-	-	-	-	-
Barely	5.12	9.83	-	-	-	-	**	**	**	**
Wheat	1.77	3.40	**	**	-	-	**	**	**	**
Maize	21.96	42.17	**	**	.33	46.48	**	**	**	**
Sorghum	15.76	30.26	.02	8.70	**	**	**	**	.10	3.29
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	.84	1.61	-	-	**	**	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.32	.61	-	-	**	**	-	-	**	**
Chick Peas	.48	.92	-	-	-	-	**	**	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	**	**	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	**	**	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.22	2.34	**	**	.07	9.86	**	**	**	**
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.95	1.82	**	**	.07	9.86	**	**	**	**
ALL TEMPORARY	47.18	90.59	**	**	.46	64.79	.21	100.00	**	**
Chat	4.50	8.64	-	-	**	**	-	-	**	**
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.21	.40	**	**	.21	29.58	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	4.90	9.41	**	**	.25	35.21	-	-	**	**
ALL CROPS	52.08	100.00	**	**	.71	100.00	.21	100.00	**	**

TABLE 1.7.1

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Shinele Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	.30	54.55	.04	100.00	.18	42.86	**	**	**	**
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.15	27.27	**	**	.14	33.33	**	**	**	**
Sorghum	.15	27.27	.02	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	.04	7.27	**	**	.04	9.52	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.04	7.27	**	**	.04	9.52	-	-	**	**
ALL TEMPORARY	.34	61.82	.04	100.00	.22	52.38	-	-	**	**
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	**	**	**	**	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.16	29.09	**	**	.16	38.10	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.21	38.18	**	**	.20	47.62	-	-	**	**
ALL CROPS	.55	100.00	.04	100.00	.42	100.00	-	-	.11	100.00

TABLE 1.7.2

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Jijiga Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	40.72	86.05	.18	100.00	-	-	.13	65.00	**	**
Teff	**	**	-	-	-	-	-	-	-	-
Barely	5.12	10.82	-	-	-	-	**	**	.07	2.42
Wheat	1.77	3.74	.01	5.56	-	-	**	**	**	**
Maize	18.13	38.31	.17	94.44	-	-	**	**	**	**
Sorghum	15.57	32.90	-	-	-	-	-	-	.07	2.42
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	.62	1.31	-	-	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.10	.21	-	-	-	-	-	-	**	**
Chick Peas	.48	1.01	-	-	-	-	**	**	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	.08	.17	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	**	**	.13	4.50
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	.87	1.84	-	-	-	-	**	**	.13	4.50
ALL TEMPORARY	42.86	90.57	.18	100.00	-	-	.20	100.00	**	**
Chat	4.46	9.43	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	4.46	9.43	-	-	-	-	-	-	**	**
ALL CROPS	47.32	100.00	.18	100.00	-	-	.20	100.00	**	**

TABLE 1.7.3

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Moyale Zone

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TYPE-OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	**	**	-	-	**	**	.01	100.00	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	-	-	-	-
Maize	**	**	-	-	**	**	.01	100.00	-	-
Sorghum	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.22	5.25	-	-	**	**	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.22	5.25	-	-	**	**	-	-	-	-
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	**	**	-	-	**	**	.01	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	.03	100.00
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	**	**	-	-	.03	100.00
ALL CROPS	4.19	100.00	-	-	**	**	.01	100.00	.03	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
1998/99(1991 E.C.)

Benshangul-Gumuz

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	132.48	80.93	1.05	85.37	**	**	.75	78.95	14.83	87.60
Teff	21.64	13.22	**	**	-	-	**	**	3.69	21.80
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	**	**	**	**
Maize	29.01	17.72	1.03	83.74	**	**	.30	31.58	5.32	31.42
Sorghum	52.14	31.85	-	-	-	-	**	**	**	**
Millet	26.44	16.15	-	-	-	-	**	**	1.83	10.81
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	6.38	3.90	-	-	-	-	**	**	**	**
Horse Beans	1.19	.73	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	4.03	2.46	-	-	-	-	-	-	.09	.53
Chick Peas	.38	.23	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	18.11	11.06	-	-	-	-	**	**	.47	2.78
Neug	11.47	7.01	-	-	-	-	**	**	**	**
Lin Seed	.16	.10	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	1.57	.96	-	-	-	-	-	-	**	**
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	4.88	2.98	-	-	-	-	**	**	**	**
Castor Bean	**	**	-	-	-	-	-	-	**	**
OTHERS	4.34	2.65	**	**	**	**	**	**	.78	4.61
Fenugreek	.01	.01	-	-	-	-	-	-	**	**
Spices	1.38	.84	-	-	**	**	**	**	.25	1.48
Potatoes	**	**	-	-	-	-	**	**	**	**
Other Temporary	2.58	1.58	**	**	**	**	**	**	.25	1.48
ALL TEMPORARY	161.31	98.54	1.10	89.43	.07	7.45	.96	100.00	16.70	98.64
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	1.27	.78	.13	10.57	**	**	**	**	.13	.77
Enset	.01	.01	-	-	-	-	-	-	**	**
Cotton	.07	.04	-	-	-	-	-	-	**	**
Tobacco	.04	.02	-	-	-	-	-	-	**	**
Fruits	.77	.47	**	**	.10	10.64	-	-	.06	.35
Other Permanent	.15	.09	-	-	.03	3.19	**	**	**	**
TOTAL PERMANENT	2.39	1.46	.13	10.57	**	**	**	**	.23	1.36
ALL CROPS	163.70	100.00	1.23	100.00	**	**	.95	100.00	16.93	100.00

TABLE 1.8.1

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Metekel Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	66.47	82.15	.57	91.94	**	**	.35	71.43	11.50	87.79
Teff	11.51	14.23	**	**	-	-	**	**	3.51	26.79
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	6.57	8.12	.55	88.71	**	**	.10	20.41	2.22	16.95
Sorghum	25.40	31.39	-	-	-	-	**	**	**	**
Millet	20.10	24.84	-	-	-	-	**	**	1.82	13.89
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	4.00	4.94	-	-	-	-	**	**	**	**
Horse Beans	.82	1.01	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	2.37	2.93	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	7.42	9.17	-	-	-	-	**	**	**	**
Neug	4.05	5.01	-	-	-	-	**	**	**	**
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	2.57	3.18	-	-	-	-	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.09	2.58	**	**	**	**	**	**	.49	3.74
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	.64	.79	-	-	**	**	**	**	**	**
Potatoes	**	**	-	-	-	-	**	**	**	**
Other Temporary	1.10	1.36	**	**	-	-	-	-	.12	.92
ALL TEMPORARY	79.98	98.85	.62	100.00	**	**	.49	100.00	13.00	99.24
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	**	**	**	**
Enset	**	**	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	.01	.01	-	-	-	-	-	-	-	-
Fruits	.06	.07	-	-	.02	2.50	-	-	.01	.08
Other Permanent	**	**	-	-	**	**	**	**	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	.10	.76
ALL CROPS	80.91	100.00	.62	100.00	**	**	.49	100.00	13.10	100.00

TABLE 1.8.2

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Asosa Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	41.11	75.40	.26	66.67	**	**	.34	85.00	2.20	85.94
Teff	5.76	10.56	-	-	-	-	**	**	**	**
Barely	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	**	**	-	-
Maize	13.17	24.16	.26	66.67	**	**	.16	40.00	1.98	77.34
Sorghum	20.94	38.41	-	-	-	-	**	**	**	**
Millet	.89	1.63	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.28	2.35	-	-	-	-	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	9.10	16.69	-	-	-	-	**	**	**	**
Neug	6.56	12.03	-	-	-	-	**	**	**	**
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	.80	1.47	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	1.62	2.97	-	-	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.74	3.19	**	**	-	-	**	**	.21	8.20
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.67	1.23	-	-	-	-	**	**	.15	5.86
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	1.06	1.94	**	**	-	-	**	**	.06	2.34
ALL TEMPORARY	53.23	97.63	.26	66.67	**	**	.40	100.00	2.42	94.53
Chat	**	**	-	-	**	**	-	-	**	**
Coffee	.43	.79	.13	33.33	**	**	-	-	.07	2.73
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.03	.06	-	-	-	-	-	-	**	**
Fruits	.63	1.16	**	**	.06	54.55	-	-	.05	1.95
Other Permanent	.11	.20	-	-	.03	27.27	**	**	.01	.39
TOTAL PERMANENT	1.29	2.37	.13	33.33	.10	90.91	**	**	.14	5.47
ALL CROPS	54.52	100.00	.39	100.00	.11	100.00	.40	100.00	2.56	100.00

TABLE 1.8.3

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Kemeshi Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	**	**	**	**	-	-	.08	100.00	1.13	90.40
Teff	**	**	-	-	-	-	**	**	-	-
Barely	**	**	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	-	-	.04	50.00	1.12	89.60
Sorghum	5.80	20.50	-	-	-	-	**	**	.01	.80
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	-	-	.02	1.60
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	.02	1.60
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	1.59	5.62	-	-	-	-	**	**	.03	2.40
Neug	**	**	-	-	-	-	**	**	.03	2.40
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.04	.14	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	.70	2.47	-	-	-	-	**	**	-	-
Castor Bean	**	**	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	.01	50.00	**	**	.07	5.60
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	**	**	-	-
Potatoes	.01	.04	-	-	-	-	-	-	-	-
Other Temporary	**	**	-	-	.01	50.00	-	-	.07	5.60
ALL TEMPORARY	**	**	**	**	.01	50.00	.08	100.00	1.25	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	-	-
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	.05	.18	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	.01	50.00	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.18	.64	-	-	.01	50.00	-	-	**	**
ALL CROPS	**	**	.22	100.00	.02	100.00	.08	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
1998/99(1991 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	596.57	55.83	46.25	92.74	2.17	28.52	38.90	84.62	310.54	54.56
Teff	167.36	15.66	1.90	3.81	.48	6.31	16.52	35.94	90.70	15.94
Barely	98.63	9.23	**	**	**	**	1.17	2.55	**	**
Wheat	82.34	7.71	10.87	21.80	**	**	18.08	39.33	68.45	12.03
Maize	162.66	15.22	33.29	66.75	1.24	16.29	1.78	3.87	70.20	12.33
Sorghum	82.91	7.76	**	**	.21	2.76	1.05	2.28	8.73	1.53
Millet	2.60	.24	-	-	-	-	**	**	1.11	.20
Oats	**	**	-	-	-	-	**	**	**	**
PULSES	73.81	6.91	.08	.16	.16	2.10	1.17	2.55	30.25	5.31
Horse Beans	21.68	2.03	**	**	**	**	**	**	8.76	1.54
Field Peas	19.66	1.84	-	-	**	**	.58	1.26	7.89	1.39
Haricot Beans	25.87	2.42	**	**	.14	1.84	.20	.44	11.32	1.99
Chick Peas	5.80	.54	**	**	**	**	-	-	**	**
Lentils	**	**	**	**	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	2.02	.19	-	-	**	**	-	-	.22	.04
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	.61	.06	-	-	-	-	-	-	.12	.02
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	**	**	-	-	**	**	-	-	-	-
Sun Flower	.39	.04	-	-	**	**	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	85.44	8.00	**	**	.36	4.73	.75	1.63	40.66	7.14
Fenugreek	.61	.06	-	-	-	-	**	**	**	**
Spices	17.36	1.62	-	-	**	**	.20	.41	7.61	1.34
Potatoes	10.69	1.00	-	-	**	**	**	**	7.06	1.24
Other Temporary	56.78	5.31	.48	.96	**	**	.36	.78	25.80	4.53
ALL TEMPORARY	757.84	70.92	46.81	93.86	2.69	35.35	40.82	88.80	381.67	67.06
Chat	18.08	1.69	-	-	**	**	1.44	3.13	9.87	1.73
Coffee	83.11	7.78	3.00	6.02	.86	11.30	1.68	3.65	29.97	5.27
Enset	186.81	17.48	-	-	1.21	15.90	1.98	4.31	140.23	24.64
Cotton	**	**	-	-	**	**	**	**	**	**
Tobacco	.64	.06	**	**	-	-	-	-	.26	.05
Fruits	10.13	.95	**	**	**	**	**	**	3.46	.61
Other Permanent	8.51	.80	**	**	.26	3.42	**	**	3.48	.61
TOTAL PERMANENT	310.71	29.08	3.06	6.14	4.92	64.65	5.15	11.20	187.49	32.94
ALL CROPS	1,068.55	100.00	49.87	100.00	7.61	100.00	45.97	100.00	569.16	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
1998/99(1991 E.C.)

Gurage Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	130.20	68.25	15.64	99.43	.27	79.41	9.35	89.39	77.44	65.09
Teff	37.56	19.69	**	**	**	**	4.79	45.79	28.32	23.80
Barely	16.69	8.75	**	**	**	**	**	**	14.32	12.04
Wheat	19.59	10.27	3.21	20.41	**	**	3.53	33.75	14.64	12.30
Maize	40.80	21.39	11.20	71.20	**	**	**	**	19.22	16.15
Sorghum	15.55	8.15	**	**	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	14.24	7.46	**	**	**	**	**	**	6.36	5.35
Horse Beans	5.35	2.80	**	**	**	**	-	-	2.60	2.19
Field Peas	4.02	2.11	-	-	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	9.64	5.05	**	**	**	**	**	**	4.34	3.65
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	6.83	3.58	-	-	-	-	**	**	2.10	1.77
Potatoes	.81	.42	-	-	-	-	-	-	.73	.61
Other Temporary	1.95	1.02	**	**	**	**	-	-	1.47	1.24
ALL TEMPORARY	155.01	81.25	15.67	99.62	.28	82.35	9.90	94.65	88.17	74.10
Chat	4.79	2.51	-	-	**	**	**	**	3.63	3.05
Coffee	3.02	1.58	**	**	**	**	**	**	2.70	2.27
Enset	25.89	13.57	-	-	**	**	**	**	23.61	19.84
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.48	.25	-	-	**	**	-	-	.40	.34
Other Permanent	1.59	.83	-	-	**	**	-	-	.47	.40
TOTAL PERMANENT	35.77	18.75	**	**	.06	17.65	**	**	30.81	25.90
ALL CROPS	190.78	100.00	15.73	100.00	.34	100.00	10.46	100.00	118.98	100.00

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
1998/99(1991 E.C.)

Hadiya Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	84.22	69.59	4.90	99.80	-	-	16.05	98.23	70.54	69.01
Teff	20.40	16.86	.30	6.11	-	-	5.24	32.07	19.71	19.28
Barely	4.57	3.78	-	-	-	-	.48	2.94	4.20	4.11
Wheat	35.04	28.95	3.07	62.53	-	-	9.99	61.14	34.62	33.87
Maize	16.61	13.72	**	**	-	-	**	**	10.87	10.63
Sorghum	7.16	5.92	-	-	-	-	**	**	.92	.90
Millet	**	**	-	-	-	-	-	-	**	**
Oats	**	**	-	-	-	-	**	**	**	**
PULSES	8.80	7.27	-	-	-	-	**	**	8.09	7.92
Horse Beans	4.69	3.88	-	-	-	-	-	-	4.47	4.37
Field Peas	3.46	2.86	-	-	-	-	**	**	3.30	3.23
Haricot Beans	.56	.46	-	-	-	-	**	**	.27	.26
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.18	.15	-	-	-	-	-	-	.09	.09
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	.14	.12	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	6.16	5.09	-	-	.01	11.11	**	**	4.07	3.98
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	.96	.79	-	-	-	-	**	**	.82	.80
Other Temporary	4.37	3.61	-	-	.01	11.11	-	-	2.60	2.54
ALL TEMPORARY	99.36	82.10	4.90	99.80	.01	11.11	16.22	99.27	82.79	81.00
Chat	1.53	1.26	-	-	-	-	-	-	1.17	1.14
Coffee	2.80	2.31	**	**	-	-	**	**	2.32	2.27
Enset	16.28	13.45	-	-	.05	55.56	**	**	15.19	14.86
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	.13	.11	-	-	-	-	-	-	**	**
Fruits	.29	.24	-	-	-	-	-	-	.21	.21
Other Permanent	.64	.53	-	-	**	**	-	-	.43	.42
TOTAL PERMANENT	21.67	17.90	**	**	.08	88.89	**	**	19.42	19.00
ALL CROPS	121.03	100.00	4.91	100.00	.09	100.00	16.34	100.00	102.21	100.00

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
1998/99(1991 E.C.)

Kembata Alaba Tembaro Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	60.88	68.82	4.74	97.93	**	**	8.89	93.97	42.10	66.12
Teff	15.88	17.95	**	**	**	**	3.74	39.53	14.23	22.35
Barely	1.19	1.35	-	-	-	-	**	**	.85	1.34
Wheat	14.52	16.41	.60	12.40	**	**	4.46	47.15	13.44	21.11
Maize	25.83	29.20	3.98	82.23	**	**	**	**	12.13	19.05
Sorghum	1.98	2.24	-	-	-	-	**	**	.56	.88
Millet	1.48	1.67	-	-	-	-	**	**	.89	1.40
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	2.48	2.80	**	**	**	**	**	**	1.86	2.92
Horse Beans	1.38	1.56	-	-	-	-	**	**	1.14	1.79
Field Peas	.62	.70	-	-	**	**	**	**	.52	.82
Haricot Beans	.45	.51	**	**	-	-	**	**	.20	.31
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	12.44	14.06	**	**	.04	11.43	**	**	8.62	13.54
Fenugreek*	**	**	-	-	-	-	-	-	**	**
Spices	5.74	6.49	-	-	**	**	**	**	4.72	7.41
Potatoes	1.00	1.13	-	-	-	-	**	**	.79	1.24
Other Temporary	5.19	5.87	**	**	**	**	**	**	2.99	4.70
ALL TEMPORARY	75.87	85.77	4.84	100.00	**	**	9.36	98.94	52.63	82.66
Chat	1.50	1.70	-	-	-	-	**	**	1.15	1.81
Coffee	2.42	2.74	-	-	**	**	**	**	2.12	3.33
Enset	7.40	8.37	-	-	**	**	**	**	7.00	10.99
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	.02	.03
Fruits	.48	.54	-	-	**	**	**	**	.40	.63
Other Permanent	.66	.75	-	-	**	**	-	-	.35	.55
TOTAL PERMANENT	12.59	14.23	-	-	.19	54.29	**	**	11.04	17.34
ALL CROPS	88.46	100.00	4.84	100.00	.35	100.00	9.46	100.00	63.67	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
1998/99(1991 E.C.)

Sidama Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	24.86	18.46	7.55	81.53	**	**	**	**	12.70	14.63
Teff	1.29	.96	**	**	-	-	-	-	.47	.54
Barely	2.86	2.12	-	-	-	-	**	**	**	**
Wheat	**	**	**	**	-	-	-	-	**	**
Maize	19.86	14.74	7.40	79.91	**	**	**	**	11.87	13.68
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	5.97	4.43	-	-	**	**	**	**	3.89	4.48
Horse Beans	.43	.32	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	5.25	3.90	-	-	**	**	**	**	3.87	4.46
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.32	3.21	**	**	**	**	**	**	3.03	3.49
FenuGreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	4.27	3.17	**	**	**	**	**	**	3.01	3.47
ALL TEMPORARY	35.17	26.11	7.69	83.05	.29	38.16	**	**	19.63	22.62
Chat	9.03	6.70	-	-	**	**	1.37	45.36	3.66	4.22
Coffee	26.25	19.49	**	**	**	**	**	**	12.84	14.79
Enset	58.09	43.13	-	-	**	**	**	**	47.35	54.56
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	2.92	2.17	-	-	**	**	-	-	1.78	2.05
Other Permanent	3.15	2.34	-	-	**	**	-	-	1.51	1.74
TOTAL PERMANENT	99.52	73.89	**	**	**	**	2.26	74.83	67.16	77.38
ALL CROPS	134.69	100.00	9.26	100.00	.76	100.00	3.02	100.00	86.79	100.00

TABLE 1.9.5

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Gedio Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	6.67	16.58	**	**	**	**	**	**	2.63	29.48
Teff	**	**	-	-	-	-	-	-	**	**
Barely	**	**	-	-	**	**	-	-	**	**
Wheat	**	**	**	**	-	-	**	**	**	**
Maize	4.73	11.76	**	**	-	-	.01	2.44	**	**
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.09	2.71	**	**	-	-	-	-	**	**
Horse Beans	.68	1.69	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.73	4.30	-	-	**	**	-	-	1.02	11.43
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	1.72	4.28	-	-	**	**	-	-	1.02	11.43
ALL TEMPORARY	9.51	23.64	**	**	**	**	**	**	3.87	43.39
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	15.56	38.68	.35	22.01	-	-	.38	92.68	1.72	19.28
Enset	13.83	34.38	-	-	**	**	.02	4.88	3.18	35.65
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.85	2.11	-	-	-	-	-	-	**	**
Other Permanent	.22	.55	-	-	-	-	-	-	**	**
TOTAL PERMANENT	30.72	76.36	.35	22.01	**	**	.40	97.56	5.05	56.61
ALL CROPS	40.23	100.00	**	**	.09	100.00	.41	100.00	8.92	100.00

TABLE 1.9.6

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

North Omo Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	178.09	59.67	8.40	95.13	**	**	**	**	**	**
Teff	65.64	21.99	**	**	**	**	**	**	22.32	14.13
Barely	**	**	-	-	-	-	**	**	**	**
Wheat	5.03	1.69	**	**	-	-	**	**	3.05	1.93
Maize	26.80	8.98	6.45	73.05	**	**	**	**	11.61	7.35
Sorghum	18.49	6.20	-	-	-	-	**	**	.98	.62
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	22.35	7.49	**	**	**	**	**	**	9.21	5.83
Horse Beans	2.76	.92	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	12.54	4.20	**	**	**	**	**	**	6.64	4.20
Chick Peas	**	**	**	**	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	40.91	13.71	**	**	**	**	.39	14.61	18.07	11.44
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	6.32	2.12	-	-	**	**	**	**	4.03	2.55
Other Temporary	31.85	10.67	**	**	**	**	.26	9.74	13.88	8.79
ALL TEMPORARY	241.69	80.98	8.69	98.41	**	**	**	**	115.86	73.36
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	10.65	3.57	**	**	**	**	**	**	6.70	4.24
Enset	38.85	13.02	-	-	**	**	**	**	34.19	21.65
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	**	**	-	-	-	-	.11	.07
Fruits	**	**	-	-	**	**	-	-	.39	.25
Other Permanent	1.13	.38	**	**	**	**	**	**	.52	.33
TOTAL PERMANENT	56.76	19.02	.14	1.59	**	**	.70	26.22	42.08	26.64
ALL CROPS	298.45	100.00	8.83	100.00	**	**	**	**	157.94	100.00

TABLE 1.9.7

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

South Omo Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	27.48	71.28	.99	100.00	.05	41.67	.39	100.00	1.12	68.29
Teff	2.31	5.99	-	-	-	-	**	**	-	-
Barely	2.67	6.93	-	-	-	-	**	**	-	-
Wheat	1.05	2.72	**	**	-	-	-	-	**	**
Maize	9.42	24.44	**	**	.03	25.00	**	**	.44	26.83
Sorghum	11.90	30.87	-	-	.02	16.67	**	**	**	**
Millet	.13	.34	-	-	-	-	-	-	**	**
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	1.81	4.70	-	-	.02	16.67	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.84	2.18	-	-	.02	16.67	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.35	.91	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	.32	.83	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.04	5.29	**	**	.01	8.33	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	-	-
Potatoes	.14	.36	-	-	-	-	-	-	-	-
Other Temporary	1.56	4.05	**	**	.01	8.33	**	**	**	**
ALL TEMPORARY	31.68	82.18	.99	100.00	.08	66.67	.39	100.00	1.15	70.12
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	2.64	6.85	**	**	.04	33.33	-	-	**	**
Enset	3.74	9.70	-	-	-	-	-	-	**	**
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.40	1.04	-	-	-	-	-	-	**	**
Other Permanent	.09	.23	-	-	-	-	-	-	**	**
TOTAL PERMANENT	6.87	17.82	**	**	.04	33.33	-	-	**	**
ALL CROPS	38.55	100.00	.99	100.00	.12	100.00	.39	100.00	1.64	100.00

TABLE 1.9.8

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Keficho-Shekicho Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	32.68	42.19	1.29	60.28	.09	100.00	1.11	53.37	4.17	50.67
Teff	14.46	18.67	**	**	.09	100.00	.94	45.19	2.23	27.10
Barely	3.98	5.14	-	-	-	-	**	**	**	**
Wheat	2.81	3.63	.93	43.46	-	-	-	-	1.15	13.97
Maize	4.15	5.36	**	**	-	-	-	-	**	**
Sorghum	7.19	9.28	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	11.76	15.18	-	-	-	-	.04	1.92	**	**
Horse Beans	4.50	5.81	-	-	-	-	**	**	**	**
Field Peas	5.46	7.05	-	-	-	-	-	-	-	-
Haricot Beans	1.80	2.32	-	-	-	-	**	**	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.77	3.58	**	**	-	-	**	**	.12	1.46
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	.70	.90	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	2.01	2.59	**	**	-	-	**	**	.12	1.46
ALL TEMPORARY	47.22	60.96	1.29	60.28	.09	100.00	1.16	55.77	4.31	52.37
Chat	**	**	-	-	-	-	-	-	-	-
Coffee	13.96	18.02	**	**	-	-	**	**	**	**
Enset	14.72	19.00	-	-	-	-	**	**	3.59	43.62
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.69	.89	**	**	-	-	**	**	**	**
Other Permanent	.47	.61	-	-	-	-	-	-	**	**
TOTAL PERMANENT	30.24	39.04	**	**	-	-	**	**	3.92	47.63
ALL CROPS	77.46	100.00	2.14	100.00	.09	100.00	2.08	100.00	8.23	100.00

TABLE 1.9.9

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Bench-Maji Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	10.61	46.33	.91	91.92	**	**	**	**	.98	29.97
Teff	1.70	7.42	-	-	-	-	**	**	**	**
Barely	1.05	4.59	-	-	-	-	-	-	**	**
Wheat	.22	.96	.16	16.16	-	-	-	-	.17	5.20
Maize	3.42	14.93	.73	73.74	**	**	**	**	.72	22.02
Sorghum	4.19	18.30	**	**	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	.71	3.10	-	-	-	-	-	-	**	**
Horse Beans	.26	1.14	-	-	-	-	-	-	**	**
Field Peas	.23	1.00	-	-	-	-	-	-	-	-
Haricot Beans	.22	.96	-	-	-	-	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.16	13.80	**	**	**	**	**	**	.36	11.01
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	-	-
Other Temporary	3.08	13.45	**	**	**	**	**	**	.36	11.01
ALL TEMPORARY	14.48	63.23	.91	91.92	**	**	.23	82.14	1.34	40.98
Chat	.24	1.05	-	-	-	-	-	-	**	**
Coffee	4.29	18.73	**	**	-	-	**	**	.34	10.40
Enset	2.73	11.92	-	-	**	**	**	**	1.45	44.34
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.81	3.54	-	-	-	-	**	**	**	**
Other Permanent	.35	1.53	-	-	-	-	-	-	.04	1.22
TOTAL PERMANENT	8.42	36.77	**	**	**	**	**	**	1.93	59.02
ALL CROPS	22.90	100.00	.99	100.00	.01	100.00	.28	100.00	3.27	100.00

TABLE 1.9.10

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Yem Special Wereda Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	9.08	70.01	.40	100.00	-	-	**	**	3.77	65.22
Teff	3.68	28.37	**	**	-	-	**	**	2.84	49.13
Barely	1.08	8.33	-	30.00	-	-	**	**	.09	1.56
Wheat	2.19	16.89	.12	60.00	-	-	**	**	.32	5.54
Maize	1.54	11.87	.24	-	-	-	.10	17.24	.48	8.30
Sorghum	.57	4.39	-	-	-	-	**	**	**	**
Millet	**	**	-	-	-	-	-	-	**	**
Oats	**	**	-	-	-	-	**	**	**	**
PULSES	1.67	12.88	-	-	-	-	**	**	.47	8.13
Horse Beans	1.01	7.79	-	-	-	-	**	**	.29	5.02
Field Peas	.60	4.63	-	-	-	-	-	-	.17	2.94
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	.06	.46	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	.01	.17
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.30	2.31	-	-	-	-	**	**	.12	2.08
Fenugreek	-	-	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	.02	.15	-	-	-	-	-	-	.01	.17
Other Temporary	.28	2.16	-	-	-	-	**	**	.11	1.90
ALL TEMPORARY	11.08	85.43	.40	100.00	-	-	**	**	4.37	75.61
Chat	.06	.46	-	-	-	-	-	-	.02	.35
Coffee	.07	.54	-	-	-	-	-	-	.02	.35
Enset	1.72	13.26	-	-	-	-	**	**	1.36	23.53
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.01	.08	-	-	-	-	-	-	**	**
Other Permanent	.03	.23	-	-	-	-	-	-	.01	.17
TOTAL PERMANENT	1.89	14.57	-	-	-	-	**	**	1.41	24.39
ALL CROPS	12.97	100.00	.40	100.00	-	-	**	**	5.78	100.00

TABLE 1.9.11

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Amaro Special Wereda Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	3.38	40.19	.16	100.00	.46	22.12	**	**	.64	15.84
Teff	1.66	19.74	**	**	.26	12.50	**	**	.42	10.40
Barely	.62	7.37	-	-	**	**	-	-	**	**
Wheat	.36	4.28	**	**	-	-	-	-	.05	1.24
Maize	**	**	**	**	**	**	-	-	**	**
Sorghum	**	**	-	-	**	**	-	-	**	**
Millet	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	.01	.48	**	**	**	**
Horse Beans	.08	.95	-	-	-	-	-	-	**	**
Field Peas	.12	1.43	-	-	-	-	**	**	**	**
Haricot Beans	.19	2.26	-	-	.01	.48	**	**	**	**
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	**	**	-	-	-	-
OTHERS	.09	1.07	-	-	.03	1.44	-	-	.05	1.24
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	.09	1.07	-	-	.03	1.44	-	-	.05	1.24
ALL TEMPORARY	4.27	50.77	.16	100.00	.50	24.04	**	**	.71	17.57
Chat	.10	1.19	-	-	**	**	-	-	.06	1.49
Coffee	1.03	12.25	**	**	.63	30.29	**	**	.73	18.07
Enset	2.86	34.01	-	-	.78	37.50	**	**	2.46	60.89
Cotton	**	**	-	-	**	**	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.04	.48	-	-	.03	1.44	-	-	.02	.50
Other Permanent	.10	1.19	-	-	.07	3.37	-	-	.06	1.49
TOTAL PERMANENT	4.14	49.23	**	**	1.58	75.96	**	**	3.33	82.43
ALL CROPS	8.41	100.00	.16	100.00	2.08	100.00	**	**	4.04	100.00

TABLE 1.9.12

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Burji Special Wereda Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	2.00	66.67	**	**	**	**	.10	100.00	.21	34.43
Teff	.44	14.67	-	-	-	-	.03	30.00	**	**
Barely	.21	7.00	-	-	-	-	**	**	.02	3.28
Wheat	.33	11.00	**	**	-	-	**	**	**	**
Maize	.44	14.67	**	**	**	**	.04	40.00	.10	16.39
Sorghum	.58	19.33	-	-	**	**	**	**	.04	6.56
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.50	16.67	-	-	-	-	-	-	.03	4.92
Horse Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.42	14.00	-	-	-	-	-	-	.03	4.92
Chick Peas	.06	2.00	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.04	1.33	-	-	**	**	**	**	.01	1.64
Fenugreek	**	**	-	-	-	-	**	**	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	.03	1.00	-	-	**	**	-	-	.01	1.64
ALL TEMPORARY	2.54	84.67	**	**	**	**	.10	100.00	.25	40.98
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	.05	1.67	**	**	-	-	-	-	.03	4.92
Enset	.38	12.67	-	-	**	**	-	-	.33	54.10
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.01	.33	-	-	-	-	-	-	-	-
Other Permanent	.02	.67	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.46	15.33	**	**	-	-	-	-	.36	59.02
ALL CROPS	3.00	100.00	**	**	-	-	.10	100.00	.61	100.00

TABLE 1.9.13

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Konso Special Wereda Zone

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TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	16.96	82.21	**	**	.34	100.00	**	**	5.40	80.84
Teff	1.54	7.46	-	-	-	-	**	**	.08	1.20
Barely	.09	.44	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	-	-
Maize	3.35	16.24	**	**	.26	76.47	**	**	.49	7.34
Sorghum	11.98	58.07	**	**	**	**	**	**	4.83	72.31
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.91	4.41	-	-	**	**	-	-	.06	.90
Horse Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.84	4.07	-	-	**	**	-	-	.06	.90
Chick Peas	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.01	.05	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	-	-
Spices	.02	.10	-	-	-	-	-	-	.01	.15
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Temporary	.29	1.41	-	-	-	-	-	-	.14	2.10
ALL TEMPORARY	19.54	94.72	**	**	.34	100.00	**	**	6.28	94.01
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	.29	1.41	**	**	**	**	-	-	.21	3.14
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	**	**	-	-	-	-	**	**	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.04	.19	-	-	**	**	-	-	**	**
Other Permanent	.02	.10	-	-	**	**	-	-	**	**
TOTAL PERMANENT	1.09	5.28	**	**	**	**	**	**	**	**
ALL CROPS	20.63	100.00	**	**	.34	100.00	**	**	6.68	100.00

TABLE 1.9.14

ESTIMATE OF IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA AND THEIR
PERCENTAGE DISTRIBUTION BY CROP FOR MEHER SEASON OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

Derashe Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	9.48	87.05	-	-	**	**	.12	100.00	**	**
Teff	.71	6.52	-	-	-	-	**	**	**	**
Barely	.42	3.86	-	-	-	-	**	**	**	**
Wheat	.12	1.10	-	-	-	-	-	-	**	**
Maize	5.10	46.83	-	-	**	**	**	**	**	**
Sorghum	3.13	28.74	-	-	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.72	6.61	-	-	**	**	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	.39	3.58	-	-	**	**	-	-	**	**
Chick Peas	.29	2.66	-	-	.01	2.94	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.02	.18	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.02	.18	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.14	1.29	-	-	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	**	**	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	**	**
Other Temporary	.08	.73	-	-	-	-	**	**	**	**
ALL TEMPORARY	10.36	95.13	-	-	.32	94.12	.12	100.00	**	**
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	.07	.64	-	-	-	-	-	-	.02	5.88
Enset	.29	2.66	-	-	-	-	-	-	.05	14.71
Cotton	.12	1.10	-	-	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.02	.18	-	-	**	**	-	-	**	**
Other Permanent	.02	.18	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.53	4.87	-	-	**	**	-	-	.07	20.59
ALL CROPS	10.89	100.00	-	-	.34	100.00	.12	100.00	.34	100.00

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
1998/99(1991 E.C.)

Gambela

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	10.86	76.75	**	**	-	-	.48	88.89	**	**
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	6.62	46.78	**	**	-	-	.45	83.33	**	**
Sorghum	4.18	29.54	**	**	-	-	**	**	-	-
Millet	.06	.42	-	-	-	-	**	**	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.30	2.12	**	**	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.04	.28	**	**	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.93	6.57	**	**	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	**	**	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Temporary	.89	6.29	**	**	-	-	-	-	**	**
ALL TEMPORARY	12.10	85.51	**	**	-	-	.54	100.00	**	**
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	1.42	10.04	**	**	-	-	-	-	**	**
Enset	.22	1.55	-	-	-	-	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.32	2.26	**	**	-	-	-	-	-	-
Other Permanent	.07	.49	-	-	-	-	-	-	**	**
TOTAL PERMANENT	2.05	14.49	**	**	-	-	**	**	**	**
ALL CROPS	14.15	100.00	**	**	-	-	.54	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
1998/99(1991 E.C.)

Harari

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	4.51	55.82	.16	100.00	.22	43.14	.07	53.85	2.36	61.62
Teff	**	**	-	-	-	-	-	-	-	-
Barely	.02	.25	-	-	-	-	-	-	.02	.52
Wheat	.08	.99	.03	18.75	-	-	**	**	.07	1.83
Maize	1.14	14.11	.12	75.00	.07	13.73	.04	30.77	.75	19.58
Sorghum	3.26	40.35	**	**	.15	29.41	.03	23.08	1.52	39.69
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	**	**
PULSES	.03	.37	-	-	**	**	**	**	.02	.52
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	**	**
Haricot Beans	.02	.25	-	-	**	**	**	**	.01	.26
Chick Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.95	11.76	-	-	.03	5.88	.01	7.69	.18	4.70
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.95	11.76	-	-	.03	5.88	.01	7.69	.18	4.70
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.35	4.33	-	-	.02	3.92	**	**	.14	3.66
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	.02	.25	-	-	**	**	-	-	**	**
Other Temporary	.33	4.08	-	-	.02	3.92	**	**	.13	3.39
ALL TEMPORARY	5.84	72.28	.16	100.00	.27	52.94	.08	61.54	2.70	70.50
Chat	2.06	25.50	-	-	.18	35.29	.05	38.46	1.10	28.72
Coffee	.02	.25	-	-	-	-	**	**	.01	.26
Enset	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	.15	1.86	-	-	**	**	-	-	.02	.52
Other Permanent	**	**	-	-	**	**	**	**	**	**
TOTAL PERMANENT	2.24	27.72	-	-	.24	47.06	.05	38.46	1.13	29.50
ALL CROPS	8.08	100.00	.16	100.00	.51	100.00	.13	100.00	3.83	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
1998/99(1991 E.C.)

Addis Ababa

('000 HA)

TYPE OF CROP	TOTAL CROP		IMPROVED SEED APPLIED		IRRIGATED		PESTICIDE APPLIED		FERTILIZER APPLIED	
	AREA	%	AREA	%	AREA	%	AREA	%	AREA	%
CEREALS	5.95	79.12	.11	61.11	-	-	.23	95.83	5.76	91.14
Teff	3.65	48.54	**	**	-	-	.15	62.50	3.62	57.28
Barely	.14	1.86	-	-	-	-	**	**	**	**
Wheat	2.12	28.19	.09	50.00	-	-	.06	25.00	2.06	32.59
Maize	.02	.27	-	-	-	-	**	**	-	-
Sorghum	.01	.13	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	-	-
PULSES	1.37	18.22	-	-	-	-	.01	4.17	.45	7.12
Horse Beans	.07	.93	-	-	-	-	**	**	.01	.16
Field Peas	.01	.13	-	-	-	-	-	-	**	**
Haricot Beans	-	-	-	-	-	-	-	-	**	**
Chick Peas	.57	7.58	-	-	-	-	**	**	.18	2.85
Lentils	.13	1.73	-	-	-	-	**	**	.06	.95
Vetch	.59	7.85	-	-	-	-	**	**	.20	3.16
OILSEEDS	.01	.13	-	-	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	-	-
Lin Seed	.01	.13	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	**	**
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.18	2.39	.07	38.89	**	**	**	**	.11	1.74
Fenugreek	.07	.93	-	-	-	-	-	-	.03	.47
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	**	**	-	-	**	**
Other Temporary	.10	1.33	.07	38.89	**	**	**	**	.08	1.27
ALL TEMPORARY	7.51	99.87	.18	100.00	**	**	.24	100.00	6.32	100.00
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	-	-	-	-	-	-
Enset	**	**	-	-	**	**	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	.01	.13	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.01	.13	-	-	**	**	-	-	-	-
ALL CROPS	7.52	100.00	.18	100.00	**	**	.24	100.00	6.32	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
1998/99(1991 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	5.12	79.50	1.41	94.63	.49	51.58	**	50.00	.81	75.00
Teff	**	**	-	-	-	-	-	-	-	-
Barely	**	**	-	-	**	**	-	-	-	-
Wheat	**	**	-	-	**	**	**	-	-	-
Maize	.18	2.80	.07	4.70	.08	8.42	**	-	.06	5.56
Sorghum	4.94	76.71	1.34	89.93	.41	43.16	**	50.00	.75	69.44
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.14	2.17	.07	4.70	**	**	**	-	.01	.93
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.14	2.17	.07	4.70	**	**	**	-	.01	.93
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.02	.31	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.02	.31	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.40	6.21	**	**	.11	11.58	-	-	.07	6.48
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	**	**	-	-	-	-
Potatoes	**	**	-	-	**	**	-	-	-	-
Other Temporary	.40	6.21	**	**	.11	11.58	**	-	.07	6.48
ALL TEMPORARY	5.68	88.20	1.49	100.00	.60	63.16	.02	50.00	.89	82.41
Chat	.55	8.54	-	-	.17	17.89	**	-	.10	9.26
Coffee	.08	1.24	**	**	.06	6.32	-	-	.02	1.85
Enset	**	**	-	-	**	**	**	25.00	**	**
Cotton	**	**	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	-	-
Fruits	.12	1.86	**	**	**	**	**	25.00	**	**
Other Permanent	**	**	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.76	11.80	**	**	.35	36.84	**	50.00	.19	17.59
ALL CROPS	6.44	100.00	1.49	100.00	.95	100.00	.04	100.00	1.08	100.00

2.TOTAL FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER AND CROP

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

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

Summary Table B. Total Fertilizer Applied Area by Type of Fertilizer

Fertilizer type	Applied Area ('000 H.A)
Natural	824.09
DAP	1147.59
UREA	148.78
DAP + UREA	1244.33
Natural + Commercial	80.09
Total	3444.83

2.1 Natural Fertilizer Applied Area

Out of the total fertilizer applied area which is 3.4 million hectares, natural fertilizer was applied to 824 thousand hectares (23.9%). Of this area, temporary and permanent crops accounted for about 577 thousand and 246 thousand hectares, respectively. See Table 2.1.

2.2 DAP Applied Area

The total DAP applied area was 1.1 million hectares, (33.3%) of the total fertilizer applied area at national level. Area under temporary and permanent crops accounted for 1.1 million and 5 thousand hectares of the total DAP applied area, respectively. Out of the total DAP applied area under temporary crops the largest was area under teff which accounted for 383 thousand hectares (33.4%). On the other hand, area under coffee was the largest DAP applied area (about 3 thousand hectares) of all DAP applied area under permanent crops.

2.3 UREA Applied Area

As presented in table 2.1 of the total fertilizer applied area, total UREA applied area was about 149 thousand hectares (4.3%). UREA applied to temporary and permanent crop areas accounted for about 144 thousand hectares (96.6%) and 5 thousand hectares (3.4%), respectively.

2.4 Area with a Combination of DAP and UREA Applied

Out of the total fertilizer applied area, the mixture of DAP and UREA was applied on an estimated area of 1.2 million hectares (36.1%). Temporary

and permanent crop areas where the mixture of DAP and UREA was applied accounted for 1.2 million hectares (99.7%) and about 4 thousand hectares (0.3%) of the total DAP+UREA applied area, respectively. Of all the mixture of DAP and UREA applied area under temporary crops, area under teff was the largest with about 572 thousand hectares (46.1%) while area under chat was the largest with about 2 thousand hectares (45.2%) among permanent crops.

2.5 Area with a Combination of Natural and Commercial Fertilizers

Applied

Out of the total fertilizer applied area, the natural fertilizer mixed with the commercial fertilizer was applied on only 80 thousand hectares (2.3%). Temporary and permanent crop areas with a mixture of natural and commercial fertilizers accounted for 75 thousand hectares (93.8%) and about 5 thousand hectares (6.2%), respectively.

TABLE 2.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

National

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2,936.85	85.25	473.48	57.45	1,050.42	91.53	130.12	87.46	1,212.35	97.43	70.51	88.04
Teff	1,074.29	31.19	32.34	3.92	383.02	33.38	65.45	43.99	571.78	45.95	21.70	27.09
Barely	368.27	10.69	**	**	192.30	16.76	10.25	6.89	68.13	5.48	4.70	5.87
Wheat	648.78	18.83	18.54	2.25	278.59	24.28	23.11	15.53	316.52	25.44	12.03	15.02
Maize	499.93	14.51	228.15	27.69	96.33	8.39	16.23	10.91	138.24	11.11	20.98	26.20
Sorghum	126.75	3.68	88.92	10.79	8.31	.72	4.74	3.19	17.38	1.40	7.41	9.25
Millet	201.38	5.85	11.77	1.43	77.96	6.79	9.97	6.70	**	**	3.27	4.08
Oats	17.45	.51	.86	.10	13.91	1.21	**	**	1.89	.15	**	**
PULSES	123.76	3.59	33.32	4.04	63.91	5.57	7.83	5.26	16.05	1.29	2.65	3.31
Horse Beans	57.98	1.68	20.62	2.50	28.49	2.48	2.05	1.38	5.95	.48	.87	1.09
Chick Peas	35.60	1.03	3.93	.48	24.32	2.12	**	**	4.78	.38	**	**
Haricot Beans	20.35	.59	6.52	.79	7.14	.62	2.93	1.97	2.32	.19	1.44	1.80
Field Peas	4.65	.13	1.30	.16	**	**	**	**	.96	.08	**	**
Lentils	3.94	.11	.39	.05	1.48	.13	**	**	1.71	.14	**	**
Vetch	1.24	.04	.56	.07	.23	.02	**	**	**	**	**	**
OILSEEDS	26.86	.78	10.11	1.23	11.01	.96	1.34	.90	4.12	.33	.30	.37
Neug	9.66	.28	3.74	.45	3.27	.28	**	**	2.07	.17	-	-
Lin Seed	5.95	.17	.87	.11	4.12	.36	**	**	.64	.05	**	**
Rape seed	6.46	.19	2.24	.27	3.17	.28	**	**	**	**	**	**
Ground Nuts	2.71	.08	**	**	**	**	.03	.02	**	**	**	**
Sun Flower	**	**	.10	.01	**	**	**	**	**	**	-	-
Sesame	**	**	.57	.07	**	**	-	-	**	**	**	**
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	91.90	2.67	60.67	7.36	17.14	1.49	4.49	3.02	7.98	.64	1.64	2.05
Fenugreek	1.42	.04	.45	.05	.42	.04	**	**	.48	.04	**	**
Spices	17.60	.51	8.16	.99	4.76	.41	.91	.61	3.28	.26	.50	.62
Potatoes	26.45	.77	14.29	1.73	8.48	.76	1.06	.71	1.95	.16	**	**
Other Vegetables	46.43	1.35	37.77	4.58	3.48	.30	2.48	1.67	2.27	.18	.43	.54
ALL TEMPORARY	3,179.37	92.29	577.58	70.09	1,142.48	99.55	143.78	96.64	1,240.50	99.69	75.10	93.77
Chat	32.95	.96	26.01	3.16	.94	.08	2.35	1.58	1.73	.14	1.92	2.40
Coffee	42.75	1.24	36.37	4.41	2.73	.24	1.89	1.27	.64	.05	1.12	1.40
Enset	173.64	5.04	170.86	20.73	.53	.05	.33	.22	**	**	**	**
Cotton	**	**	.50	.06	.08	.01	**	**	**	**	**	**
Tobacco	.48	.01	.47	.06	**	**	-	-	-	-	-	-
Fruits	6.26	.18	5.08	.62	**	**	.18	.12	.12	.01	.13	.16
Other Permanent	7.72	.22	7.22	.88	.08	.01	.17	.11	**	**	**	**
TOTAL PERMANENT	265.46	7.71	246.51	29.91	5.11	.45	5.00	3.36	3.83	.31	4.99	6.23
ALL CROPS	3,444.83	100.00	824.09	100.00	1,147.59	100.00	148.78	100.00	1,244.33	100.00	80.09	100.00

TABLE 2.2

ESTIMATES OF FERTILIZER APPLIED AREA BY REGION AND BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

('000 HA)

REGION	TOTAL		NATURAL		DAP		UREA		DAP + UREA		NAT + COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
TIGRAY	198.28	5.75	77.16	9.34	8.54	.74	5.87	3.95	93.65	7.52	13.07	16.15
AFAR	.64	.02	.53	.06	.06	.01	.04	.03	.02	-	-	-
AMHARA	898.74	26.06	163.51	19.80	258.33	22.50	59.75	40.16	390.17	31.35	26.98	33.34
OROMIYA	1,746.99	50.66	275.25	33.33	726.88	63.30	56.66	38.08	656.54	52.75	31.67	39.13
SOMALIE	3.03	.09	2.87	.35	.12	.01	.03	.02	-	-	-	-
BENSHANGUL-GUMUZ	16.92	.49	8.80	1.07	5.40	.47	.12	.08	2.12	.17	.47	.58
S.N.N.P.R.	572.35	16.60	295.22	35.75	148.19	12.91	25.10	16.87	95.99	7.71	7.86	9.71
GAMBELA	.09	-	-	-	.08	.01	.01	.01	-	-	-	-
HARARI	3.83	.11	1.47	.18	.15	.01	.92	.62	.51	.04	.78	.96
ADDIS ABABA	6.32	.18	.03	-	.46	.04	.25	.17	5.51	.44	.07	.09
DIRE DAWA	1.09	.03	1.00	.12	.01	-	.03	.02	.02	-	.03	.04
TOTAL	3,448.28	100.00	825.84	100.00	1,148.22	100.00	148.78	100.00	1,244.53	100.00	80.93	100.00

FIG.2 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS, NATIONAL, 1998/99(1991 E.C.)

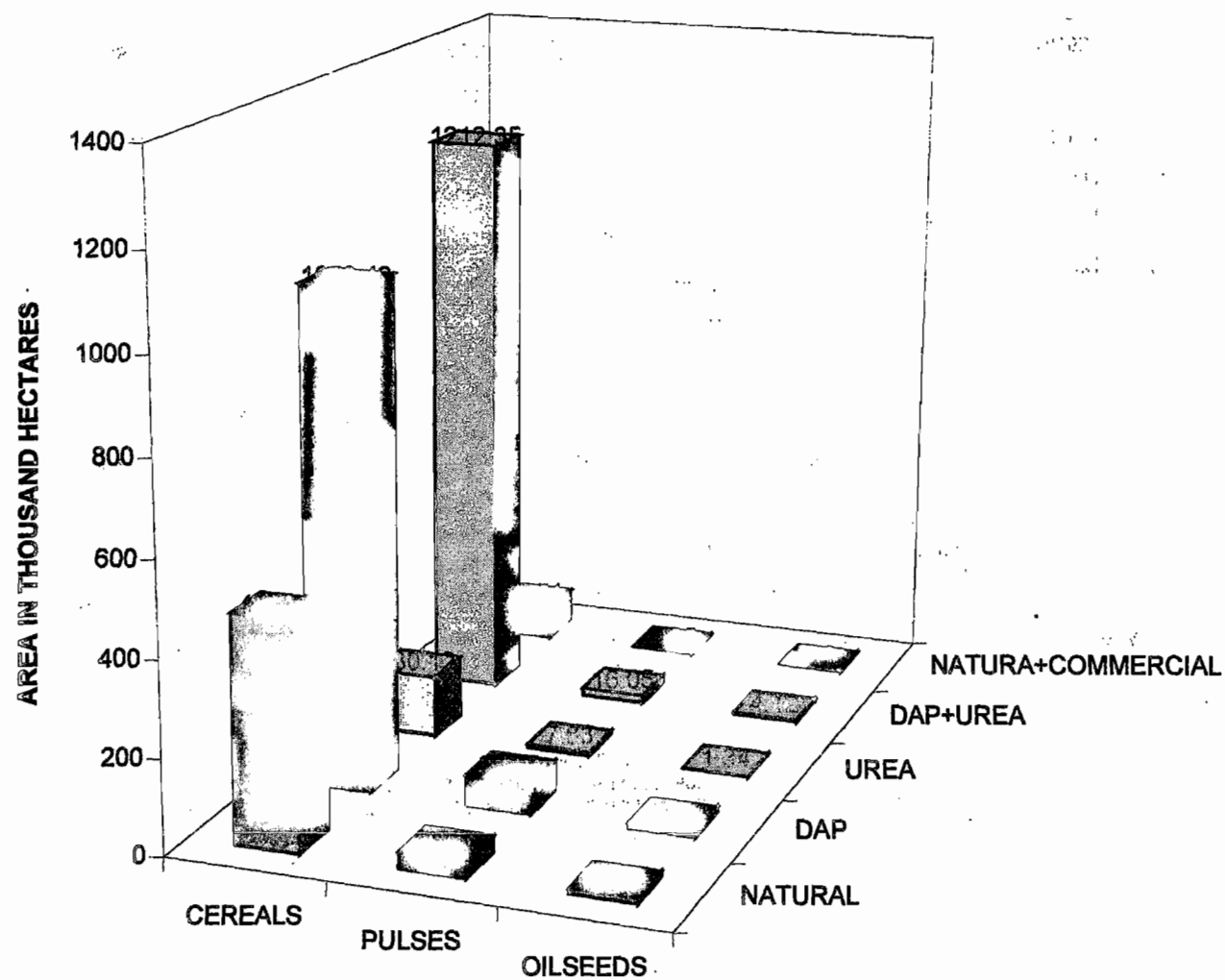


TABLE 2.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Tigray

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	193.75	97.73	73.41	95.19	8.40	98.59	5.85	99.49	93.10	99.41	12.99	99.31
Teff	58.55	29.53	6.16	7.99	3.34	39.20	2.38	40.48	43.79	46.76	2.88	22.02
Barely	29.49	14.88	11.52	14.94	1.31	15.38	1.34	22.79	13.86	14.80	1.46	11.16
Wheat	21.27	10.73	4.36	5.65	1.41	16.55	1.09	18.54	12.63	13.49	1.78	13.61
Maize	34.01	17.16	19.33	25.06	**	**	.45	7.65	9.88	10.55	3.20	24.46
Sorghum	29.78	15.02	24.24	31.43	**	**	**	**	3.59	3.83	1.41	10.78
Millet	20.48	10.33	7.80	10.11	**	**	.49	8.33	9.18	9.80	2.26	17.28
Oats	**	**	-	-	-	-	-	-	**	.18	-	-
PULSES	3.32	1.67	2.78	3.60	**	**	**	**	.38	.41	**	**
Horse Beans	2.04	1.03	1.66	2.15	-	-	**	**	.35	.37	**	**
Chick Peas	.46	.23	.39	.51	**	**	-	-	**	.01	**	**
Haricot Beans	.16	.08	.15	.19	-	-	-	-	**	.01	-	-
Field Peas	**	.11	**	**	-	-	-	-	-	-	-	-
Lentils	.11	.06	**	**	-	-	-	-	**	.01	-	-
Vetch	**	**	**	**	**	**	-	-	-	-	-	-
OILSEEDS	.53	.27	.43	.56	**	**	-	-	**	.07	**	**
Neug	**	.13	**	**	-	-	-	-	**	.06	-	-
Lin Seed	.15	.08	.10	.13	**	**	-	-	**	.01	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	**	**	.07	**	**
Fenugreek	**	**	**	**	-	-	-	-	**	.01	-	-
Spices	**	**	**	**	-	-	**	**	**	.06	**	**
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	**	-	-	-
ALL TEMPORARY	197.90	99.82	76.82	99.61	8.52	100.00	5.87	99.83	93.62	99.97	13.07	99.92
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	**	**	**	.03	**	**
TOTAL PERMANENT	.35	.18	.30	.39	**	**	**	**	**	.03	**	**
ALL CROPS	198.25	100.00	77.12	100.00	8.52	100.00	5.88	100.00	93.65	100.00	13.08	100.00

TABLE 2.3.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	50.37	98.96	14.73	96.72	3.16	100.00	1.28	100.00	27.19	99.93	3.97	99.50
Teff	17.47	34.32	.67	4.40	1.61	50.95	.75	58.59	13.54	49.76	**	**
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	-	-	**	**	**	**
Maize	16.27	31.96	7.18	47.14	**	**	**	**	6.16	22.64	1.56	39.10
Sorghum	**	**	**	**	-	-	-	-	**	**	**	**
Millet	9.58	18.82	1.70	11.16	**	**	**	**	5.77	21.21	1.38	34.59
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	50.77	99.74	15.10	99.15	3.16	100.00	1.28	100.00	27.21	100.00	3.99	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	50.90	100.00	15.23	100.00	3.16	100.00	1.28	100.00	27.21	100.00	3.99	100.00

TABLE 2.3.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Central Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	89.41	98.17	40.48	96.98	1.58	100.00	1.93	99.48	39.55	99.07	5.87	99.49
Teff	31.84	34.96	3.41	8.17	.76	48.10	1.17	60.31	24.86	62.27	1.64	27.80
Barely	5.77	6.34	2.50	5.99	.12	7.59	**	**	2.76	6.91	.22	3.73
Wheat	4.79	5.26	.98	2.35	**	**	**	**	3.28	8.22	**	**
Maize	14.83	16.28	9.80	23.48	**	**	**	**	3.39	8.49	1.56	26.44
Sorghum	22.14	24.31	18.50	44.32	**	**	**	**	1.85	4.63	1.26	21.36
Millet	9.87	10.84	5.29	12.67	**	**	**	**	3.24	8.12	**	**
Oats	**	**	-	-	-	-	-	-	**	**	-	-
PULSES	1.32	1.45	1.05	2.52	-	-	**	**	**	**	**	**
Horse Beans	1.11	1.22	.86	2.06	-	-	**	**	**	**	**	**
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.14	.15	**	**	-	-	-	-	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	**	**	-	-
Lin Seed	**	**	**	**	-	-	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.07	.08	**	**	-	-	-	-	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	**	**	-	-
Spices	**	**	-	-	-	-	-	-	**	**	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	91.04	99.96	41.72	99.95	1.58	100.00	1.94	100.00	39.90	99.95	5.90	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	**	**	**	**
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**	**	**
ALL CROPS	91.08	100.00	41.74	100.00	1.58	100.00	1.94	100.00	39.92	100.00	5.90	100.00

TABLE 2.3.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	28.62	93.50	16.18	89.39	1.17	99.15	.90	98.90	7.94	99.75	2.42	99.59
Teff	2.82	9.21	1.87	10.33	**	**	**	**	**	**	.06	2.47
Barely	14.40	47.04	8.33	46.02	.42	35.59	.40	43.96	4.14	52.01	1.10	45.27
Wheat	7.95	25.97	3.04	16.80	.70	59.32	.46	50.55	2.60	32.66	1.15	47.33
Maize	1.94	6.34	1.79	9.89	-	-	**	**	**	**	**	**
Sorghum	.50	1.63	.35	1.93	-	-	-	-	**	**	**	**
Millet	1.01	3.30	.80	4.42	-	-	-	-	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	1.70	5.55	1.67	9.23	-	-	-	-	**	**	**	**
Horse Beans	.78	2.55	.77	4.25	-	-	-	-	**	**	-	-
Chick Peas	.34	1.11	.32	1.77	-	-	-	-	**	**	**	**
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	.10	.33	.10	.55	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.02	.07	**	**	-	-	-	-	**	**	-	-
Fenugreek	**	**	**	**	-	-	-	-	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	**	**	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	30.43	99.41	17.94	99.12	1.18	100.00	.90	98.90	7.96	100.00	2.43	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	**	**	**	**	**	**
TOTAL PERMANENT	**	**	**	**	-	-	**	**	**	**	**	**
ALL CROPS	30.61	100.00	18.10	100.00	1.18	100.00	.91	100.00	7.96	100.00	2.43	100.00

TABLE 2.3.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Tigray Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	25.35	98.68	2.00	97.56	2.49	95.77	1.75	99.43	18.39	99.24	.70	97.22
Teff	6.42	24.99	**	**	**	**	.45	25.57	4.56	24.61	**	**
Barely	9.31	36.24	**	**	**	**	**	43.18	6.95	37.51	**	**
Wheat	8.39	32.66	**	**	**	**	.51	28.98	6.62	35.73	.26	36.11
Maize	.97	3.78	.56	27.32	**	**	-	-	**	**	**	**
Sorghum	**	**	**	**	-	-	**	1.70	**	**	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.25	.97	**	**	**	**	-	-	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	**	**	-	-
Chick Peas	**	**	-	-	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	**	**	-	-
Vetch	**	**	-	-	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	**	.57	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	**	.57	**	**	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	25.69	100.00	2.05	100.00	2.60	100.00	1.76	100.00	18.53	100.00	.72	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	25.69	100.00	2.05	100.00	2.60	100.00	1.76	100.00	18.53	100.00	.72	100.00

TABLE 2.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Afar

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.59	92.19	.49	92.45	.05	100.00	.02	66.67	.02	100.00	-	-
Teff	**	35.94	**	**	.05	100.00	**	**	**	50.00	-	-
Barely	**	6.25	**	**	-	-	**	**	-	-	-	-
Wheat	**	-	**	**	-	-	-	-	-	-	-	-
Maize	.12	18.75	**	**	**	**	-	-	-	-	-	-
Sorghum	.20	31.25	**	**	-	-	**	**	**	50.00	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	1.56	-	-	-	-	**	**	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	1.56	-	-	-	-	**	**	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	6.25	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	3.13	**	**	-	-	-	-	-	-	-	-
Sesame	**	3.13	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Fehugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.64	100.00	.53	100.00	.05	100.00	.03	100.00	.02	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.64	100.00	.53	100.00	.05	100.00	.03	100.00	.02	100.00	-	-

TABLE 2.4.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Zone 1 Zone

('000 HA)

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

TABLE 2.4.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Zone 3 Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.58	92.06	.48	92.31	.05	100.00	.02	66.67	.02	100.00	-	-
Teff	**	**	**	**	.05	100.00	**	**	**	**	-	-
Barely	**	**	**	**	-	-	**	**	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	**	**	**	**	**	**	-	-	-	-	-	-
Sorghum	.20	31.75	.17	32.69	-	-	**	**	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	**	**	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	.63	100.00	.52	100.00	.05	100.00	.03	100.00	.02	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.63	100.00	.52	100.00	.05	100.00	.03	100.00	.02	100.00	-	-

TABLE 2.5

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Amhara

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	843.98	93.91	134.97	82.56	245.97	95.22	55.58	93.04	381.91	97.88	25.55	94.70
Teff	369.83	41.15	14.72	9.00	132.63	51.34	32.66	54.67	179.75	46.07	10.07	37.32
Barely	44.38	4.94	15.53	9.50	14.30	5.54	2.04	3.41	11.03	2.83	**	**
Wheat	101.01	11.24	4.72	2.89	13.06	5.06	8.96	15.00	70.59	18.09	3.68	13.64
Maize	148.01	16.47	81.34	49.76	21.07	8.16	4.26	7.13	32.87	8.42	8.47	31.39
Sorghum	23.47	2.61	15.14	9.26	**	**	**	**	**	**	**	**
Millet	156.30	17.39	2.93	1.79	63.87	24.73	7.05	11.80	**	**	**	**
Oats	.98	.11	**	**	**	**	-	-	**	**	**	**
PULSES	18.97	2.11	8.48	5.19	5.27	2.04	**	**	2.63	.67	**	**
Horse Beans	9.02	1.00	5.87	3.59	2.09	.81	**	**	.49	.13	**	**
Chick Peas	5.85	.65	1.01	.62	2.66	1.03	**	**	**	**	-	-
Haricot Beans	1.01	.11	.64	.39	**	**	**	**	**	**	-	-
Field Peas	.96	.11	.64	.39	-	-	-	-	**	**	-	-
Lentils	**	**	**	**	**	**	**	**	**	**	-	-
Vetch	**	**	**	**	**	**	-	-	-	-	-	-
OILSEEDS	13.39	1.49	4.06	2.48	5.27	2.04	.98	1.64	2.86	.73	**	**
Neug	7.50	.83	2.44	1.49	3.13	1.21	**	**	**	**	-	-
Lin Seed	.59	.07	.18	.11	**	**	**	**	**	**	**	**
Rape seed	3.67	.41	1.19	.73	**	**	**	**	**	**	**	**
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	**	**	**	**	**	**	-	-
Sesame	**	**	**	**	**	**	-	-	**	**	**	**
Castor Bean	**	-	**	**	-	-	-	-	-	-	-	-
OTHERS	17.20	1.91	12.06	7.38	1.73	.67	.84	1.41	1.78	.46	.81	3.00
Fenugreek	.08	.01	.04	.02	-	-	-	-	**	**	**	**
Spices	6.90	.77	4.57	2.80	.45	.17	**	**	1.20	.31	**	**
Potatoes	7.82	.87	6.21	3.80	.77	.30	**	**	**	**	**	**
Other Vegetables	2.40	.27	1.24	.76	**	**	**	**	.33	.08	.03	.11
ALL TEMPORARY	893.54	99.43	159.57	97.61	258.24	99.97	59.61	99.78	389.18	99.74	26.97	99.96
Chat	.56	.06	.55	.34	-	-	-	-	**	**	-	-
Coffee	1.16	.13	1.14	.70	-	-	-	-	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	.18	.11	**	**	**	**	**	**	**	**
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.40	.04	.40	.24	-	-	-	-	-	-	-	-
Other Permanent	1.69	.19	1.62	.99	**	**	**	**	-	-	**	**
TOTAL PERMANENT	5.16	.57	3.91	2.39	**	**	**	**	**	**	.01	.04
ALL CROPS	898.70	100.00	163.48	100.00	258.32	100.00	59.74	100.00	390.20	100.00	26.98	100.00

TABLE 2.5.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1999 E.C.)

North Gonder Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	**	**	4.18	98.82	**	**	1.33	98.52
Teff	49.00	32.62	**	**	**	**	3.03	71.63	24.80	25.78	**	**
Barely	**	**	**	**	**	**	**	**	**	**	-	-
Wheat	**	**	-	-	**	**	**	**	1.48	1.54	**	**
Maize	11.28	7.51	8.33	37.34	**	**	**	**	1.90	1.98	**	**
Sorghum	**	**	**	**	-	-	-	-	**	**	-	-
Millet	**	**	**	**	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	**	**	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.36	1.57	1.91	8.56	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	**	**	**	**	-	-
Potatoes	**	**	**	**	**	**	-	-	**	**	**	**
Other Vegetables	.15	.10	**	**	**	**	-	-	**	**	**	**
ALL TEMPORARY	**	**	22.00	98.61	**	**	4.22	99.76	**	**	1.35	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	**	**	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.12	.08	.11	.49	-	-	**	**	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	**	**	**	**	-	-
ALL CROPS	**	**	22.31	100.00	26.10	100.00	4.23	100.00	**	**	1.35	100.00

TABLE 2.5.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Gonder Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	73.81	94.17	9.83	73.80	9.78	98.09	4.50	98.68	48.75	98.43	**	**
Teff	38.00	48.48	**	**	5.43	54.46	3.05	66.89	28.88	58.31	**	**
Barely	**	**	**	**	**	**	**	**	**	**	-	-
Wheat	8.58	10.95	**	**	**	**	**	**	6.30	12.72	**	**
Maize	12.65	16.14	9.04	67.87	**	**	**	**	**	**	**	**
Sorghum	**	**	-	-	-	-	-	-	**	**	-	-
Millet	12.33	15.73	-	-	**	**	**	**	9.17	18.51	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	**	**	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	-	-	**	**
Rape seed	**	**	**	**	**	**	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	**	**	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	4.03	5.14	3.12	23.42	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.86	1.10	**	**	.02	.20	**	**	**	**	-	-
Potatoes	3.06	3.90	2.85	21.40	**	**	-	-	**	**	-	-
Other Vegetables	.11	.14	**	**	-	-	-	-	**	**	-	-
ALL TEMPORARY	78.05	99.58	12.99	97.52	9.97	100.00	4.56	100.00	49.53	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	.18	.23	.18	1.35	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.33	.42	.33	2.48	-	-	-	-	-	-	-	-
ALL CROPS	78.38	100.00	13.32	100.00	9.97	100.00	4.56	100.00	49.53	100.00	**	**

TABLE 2.5.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Wolo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	15.25	95.91	2.35	80.20	.36	90.00	.86	96.63	10.66	100.00	1.04	100.00
Teff	**	**	**	**	**	**	.53	59.55	**	**	**	**
Barely	**	**	**	**	-	-	**	**	**	**	-	-
Wheat	9.52	59.87	**	**	**	**	**	**	8.17	76.64	**	**
Maize	.31	1.95	.20	6.83	**	**	-	-	**	**	-	-
Sorghum	**	**	**	**	-	-	-	-	**	**	-	-
Millet	**	**	-	-	**	**	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	**	**	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	.03	.19	-	-	-	-	**	**	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.22	1.38	.20	6.83	**	**	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	.08	.50	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	15.89	99.94	2.92	99.66	.40	100.00	.89	100.00	10.66	100.00	1.04	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	15.90	100.00	2.93	100.00	.40	100.00	.89	100.00	10.66	100.00	1.04	100.00

TABLE 2.5.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Wolo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	55.66	91.19	15.90	78.60	1.21	98.37	**	**	28.93	97.90	**	**
Teff	18.52	30.34	1.79	8.85	.51	41.46	**	**	13.55	45.85	**	**
Barely	2.93	4.80	2.49	12.31	-	-	**	**	**	**	**	**
Wheat	17.31	28.36	1.67	8.26	**	**	**	**	9.91	33.54	**	**
Maize	4.12	6.75	3.94	19.48	-	-	**	**	**	**	-	-
Sorghum	**	**	5.10	25.21	**	**	**	**	**	**	**	**
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	**	**	-	-	**	**	**	**
PULSES	3.23	5.29	2.70	13.35	**	**	**	**	**	**	**	**
Horse Beans	2.33	3.82	1.99	9.84	-	-	**	**	**	**	**	**
Chick Peas	.62	1.02	**	**	-	-	-	-	**	**	-	-
Haricot Beans	**	**	**	**	**	**	-	-	**	**	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	**	**	**	**
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	.86	1.41	.81	4.00	**	**	-	-	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	**	**	**	**
Spices	.58	.95	.58	2.87	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	60.31	98.80	19.50	96.39	1.23	100.00	**	**	29.55	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	61.04	100.00	20.23	100.00	1.23	100.00	**	**	29.55	100.00	**	**

TABLE 2.5.5

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	66.63	92.84	8.58	77.23	**	**	4.94	95.74	43.42	96.10	**	**
Teff	32.75	45.63	3.39	30.51	**	**	3.52	68.22	19.73	43.67	**	**
Barely	**	**	.71	6.39	**	**	**	**	**	**	**	**
Wheat	26.13	36.41	.64	5.76	**	**	1.05	20.35	22.41	49.60	.42	.26
Maize	2.79	3.89	2.33	20.97	**	**	-	-	**	**	**	**
Sorghum	2.39	3.33	1.51	13.59	**	**	**	**	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	4.15	5.78	1.67	15.03	**	**	**	**	**	**	-	-
Horse Beans	1.38	1.92	**	**	**	**	-	-	**	**	-	-
Chick Peas	**	**	**	**	**	**	-	-	**	**	-	-
Haricot Beans	.65	.91	**	**	**	**	**	**	**	**	-	-
Field Peas	**	**	**	**	-	-	-	-	**	**	-	-
Lentils	**	**	**	**	**	**	**	**	**	**	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.12	.17	**	**	**	**	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	**	-	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	**	**	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	.05	.45	**	**	**	**	-	-	-	-
ALL TEMPORARY	71.29	99.33	10.63	95.68	**	**	5.16	100.00	45.18	100.00	**	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	**	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	**	-
ALL CROPS	71.77	100.00	11.11	100.00	**	**	5.16	100.00	45.18	100.00	**	100.00

TABLE 2.5.6

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Gojam Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	194.81	96.69	11.06	86.54	67.75	95.61	17.60	95.34	94.39	99.01	4.01	99.26
Teff	134.22	66.62	2.22	17.37	48.79	68.85	14.72	79.74	66.25	69.50	2.24	55.45
Barely	9.63	4.78	**	**	5.89	8.31	**	**	2.83	2.97	-	-
Wheat	31.72	15.74	**	**	8.04	11.35	.78	4.23	21.76	22.83	**	**
Maize	19.21	9.53	8.10	63.38	5.03	7.10	1.43	7.75	**	**	**	**
Sorghum	**	**	-	-	-	-	-	-	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	3.27	1.62	.57	4.46	**	**	**	**	**	**	-	-
Horse Beans	1.21	.60	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	-	-	**	**	**	**	**	**	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	-	-	**	**	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	**	**	**	**	-	-
Neug	**	**	-	-	**	**	**	**	**	**	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.34	.67	**	**	**	**	**	**	.29	.30	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	**	**	-	-	**	**	-	-
Other Vegetables	.31	.15	.12	.94	**	**	**	**	**	**	-	-
ALL TEMPORARY	200.98	99.76	12.33	96.48	70.86	100.00	18.43	99.84	95.33	100.00	4.04	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	**	**	-	-	**	**	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.41	.20	.38	2.97	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.49	.24	.45	3.52	**	**	**	**	**	**	**	**
ALL CROPS	201.47	100.00	12.78	100.00	70.86	100.00	18.46	100.00	95.33	100.00	4.04	100.00

TABLE 2.5.7

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Gojam Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	201.31	90.76	31.88	81.53	93.85	92.65	14.49	83.76	52.96	95.37	8.10	94.63
Teff	71.36	32.17	**	1.02	40.85	40.33	**	**	22.05	39.71	**	**
Barely	6.71	3.03	1.42	3.63	2.76	2.72	.73	4.22	**	**	**	**
Wheat	3.77	1.70	**	.38	**	**	**	**	**	**	**	**
Maize	71.72	32.34	28.86	73.81	14.67	14.48	2.13	12.31	20.46	36.84	5.60	65.42
Sorghum	**	**	**	1.71	-	-	-	-	-	-	-	-
Millet	47.01	21.19	**	.97	33.44	33.01	4.02	23.24	8.54	15.38	**	**
Oats	**	**	-	-	-	-	-	-	**	**	-	-
PULSES	5.40	2.43	1.70	4.35	**	**	**	**	**	**	**	**
Horse Beans	2.60	1.17	1.15	2.94	1.05	1.04	**	**	**	**	**	**
Chick Peas	**	**	**	.38	**	**	**	**	-	-	-	-
Haricot Beans	**	**	**	.15	-	-	-	-	-	-	-	-
Field Peas	**	**	**	.61	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	.26	**	**	-	-	-	-	-	-
OILSEEDS	8.50	3.83	1.42	3.63	4.08	4.03	**	**	**	**	**	**
Neug	4.12	1.86	**	1.43	**	**	**	**	**	**	-	-
Lin Seed	**	**	**	-	**	**	**	**	**	**	-	-
Rape seed	3.29	1.48	**	2.20	**	**	**	**	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	**	**	**	**	-	-
Sesame	**	**	-	-	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	5.55	2.50	3.24	8.29	1.18	1.16	.60	3.47	**	**	**	**
Fenugreek	**	**	**	.03	-	-	-	-	-	-	-	-
Spices	2.98	1.34	2.12	5.42	**	**	**	**	**	**	**	**
Potatoes	1.31	.59	**	1.69	**	**	**	**	**	**	-	-
Other Vegetables	1.25	.56	.45	1.15	**	**	**	**	**	**	**	**
ALL TEMPORARY	220.76	99.53	38.24	97.80	101.21	99.92	17.20	99.42	55.52	99.98	8.55	99.88
Chat	**	**	**	.08	-	-	-	-	-	-	-	-
Coffee	.17	.08	.16	.41	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	.18	**	**	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	.05	-	-	-	-	-	-	-	-
Other Permanent	.61	.28	.58	1.48	**	**	**	**	-	-	**	**
TOTAL PERMANENT	1.04	.47	.86	2.20	**	**	.10	.58	**	**	**	**
ALL CROPS	221.80	100.00	39.10	100.00	101.29	100.00	17.30	100.00	55.53	100.00	8.56	100.00

TABLE 2.5.8

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Waghamera Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.71	95.00	**	**	.04	80.00	.19	100.00	.26	96.30	-	-
Teff	.16	8.89	**	**	.04	80.00	**	**	**	**	-	-
Barely	**	**	**	**	-	-	-	-	**	**	-	-
Wheat	**	**	**	**	-	-	**	**	-	-	-	-
Maize	.22	12.22	.22	17.19	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	**	**	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	.01	20.00	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	.01	20.00	-	-	**	**	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	.05	100.00	**	**	.27	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	.05	100.00	**	**	.27	100.00	-	-

TABLE 2.5.9

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Agewawia Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	85.23	93.11	32.88	87.63	38.23	97.75	4.14	97.64	6.43	97.72	3.56	87.47
Teff	21.63	23.63	5.94	15.83	11.49	29.38	1.23	29.01	2.10	31.91	**	**
Barely	8.43	9.21	5.65	15.06	**	**	**	**	**	**	**	**
Wheat	1.37	1.50	.74	1.97	.16	.41	**	**	.26	3.95	**	**
Maize	24.46	26.72	19.85	52.91	**	**	**	**	2.50	37.99	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	29.26	31.96	.62	1.65	24.50	62.64	**	**	1.51	22.95	**	**
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	1.92	2.10	.96	2.56	**	**	**	**	-	-	**	**
Horse Beans	.64	.70	.46	1.23	**	**	-	-	-	-	**	**
Chick Peas	**	**	.32	.85	**	**	**	**	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	1.69	1.85	1.64	4.37	**	**	-	-	**	**	**	**
Neug	1.22	1.33	1.18	3.14	**	**	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	.32	.35	.31	.83	-	-	-	-	**	**	**	**
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.37	2.59	1.71	4.56	**	**	**	**	**	**	**	**
Fenugreek	.02	.02	.02	.05	-	-	-	-	-	-	-	-
Spices	.35	.38	.31	.83	**	**	**	**	**	**	**	**
Potatoes	1.81	1.98	1.20	3.20	**	**	-	-	**	**	**	**
Other Vegetables	.19	.21	.18	.48	-	-	**	**	-	-	**	**
ALL TEMPORARY	91.21	99.64	37.19	99.12	39.11	100.00	**	**	6.58	100.00	4.07	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.14	.15	.14	.37	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	91.54	100.00	37.52	100.00	39.11	100.00	**	**	6.58	100.00	4.07	100.00

TABLE 2.5.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Oromia Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	4.18	87.45	2.26	79.30	**	**	-	-	**	**	**	**
Teff	.89	18.62	.20	7.02	**	**	-	-	.23	17.42	**	**
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	1.25	26.15	.46	16.14	-	-	-	-	**	**	-	-
Sorghum	1.80	37.66	**	**	**	**	-	-	**	**	-	-
Millet	**	**	**	**	**	**	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.05	1.05	**	**	-	-	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.09	1.88	.09	3.16	-	-	-	-	-	-	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	.08	1.67	.08	2.81	-	-	-	-	-	-	**	**
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	4.39	91.84	2.46	86.32	**	**	-	-	**	**	**	**
Chat	.31	6.49	**	**	-	-	-	-	**	**	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	**	**	-	-
ALL CROPS	4.78	100.00	2.85	100.00	**	**	-	-	**	**	**	**

TABLE 2.6

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Oromia

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1,562.58	89.45	175.92	63.94	668.16	91.92	49.67	87.65	641.40	97.69	27.42	86.61
Teff	547.68	31.35	8.24	2.99	188.82	25.98	23.65	41.73	319.41	48.65	7.56	23.88
Barely	221.76	12.69	13.71	4.98	166.44	22.90	5.07	8.95	35.01	5.33	1.54	4.86
Wheat	455.15	26.06	7.95	2.89	236.83	32.58	7.09	12.51	197.32	30.05	5.95	18.79
Maize	240.03	13.74	105.76	38.44	45.68	6.28	7.74	13.66	73.67	11.22	7.18	22.68
Sorghum	60.04	3.44	39.61	14.40	5.15	.71	3.41	6.02	6.99	1.06	**	**
Millet	21.67	1.24	.41	.15	11.38	1.57	**	**	7.50	1.14	**	**
Oats	16.25	.93	.24	.09	13.86	1.91	**	**	1.50	.23	**	**
PULSES	70.08	4.01	16.37	5.95	41.12	5.66	1.59	2.81	9.35	1.42	1.68	5.31
Horse Beans	37.78	2.16	11.10	4.03	22.11	3.04	.48	.85	3.69	.56	**	**
Chick Peas	21.26	1.22	2.14	.78	15.34	2.11	**	**	3.42	.52	**	**
Haricot Beans	7.73	.44	2.71	.98	2.30	.32	.97	1.71	**	**	**	**
Field Peas	1.26	.07	**	.07	**	**	-	-	**	**	**	**
Lentils	1.57	.09	**	.05	.84	.12	**	**	.52	.08	-	-
Vetch	.48	.03	**	.03	**	**	-	-	**	**	-	-
OILSEEDS	12.02	.69	4.91	1.78	5.65	.78	**	**	1.15	.18	**	**
Neug	1.77	.10	**	.35	**	**	**	**	**	**	-	-
Lin Seed	5.09	.29	**	.21	3.98	.55	**	**	**	**	**	**
Rape seed	2.71	.16	1.02	.37	1.52	.21	-	-	**	**	-	-
Ground Nuts	**	**	**	.83	-	-	-	-	**	**	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	.03	-	-	-	-	-	-	-	-
Castor Bean	**	**	**	-	-	-	-	-	-	-	-	-
OTHERS	32.50	1.86	16.95	6.16	9.74	1.34	2.65	4.68	2.76	.42	**	**
Fenugreek	1.11	.06	.40	.15	.30	.04	**	**	**	**	**	**
Spices	2.63	.15	2.25	.82	.24	.03	**	**	**	**	**	**
Potatoes	11.27	.65	2.65	.96	**	**	.79	1.39	.80	.12	**	**
Other Vegetables	17.49	1.00	11.65	4.23	2.36	.32	1.74	3.07	**	**	.21	.66
ALL TEMPORARY	1,677.18	96.01	214.15	77.84	724.67	99.70	54.23	95.69	654.66	99.71	29.52	93.24
Chat	20.11	1.15	14.81	5.38	.62	.09	1.74	3.07	1.44	.22	1.51	4.77
Coffee	11.46	.66	9.19	3.34	.89	.12	**	**	.29	.04	**	**
Enset	33.40	1.91	33.06	12.02	**	**	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.20	.01	.20	.07	-	-	-	-	-	-	-	-
Fruits	2.21	.13	1.50	.55	**	**	**	**	**	**	**	**
Other Permanent	2.27	.13	2.22	.81	**	**	-	-	**	**	-	-
TOTAL PERMANENT	69.65	3.99	60.98	22.16	2.19	.30	2.44	4.31	1.91	.29	2.14	6.76
ALL CROPS	1,746.83	100.00	275.13	100.00	726.86	100.00	56.67	100.00	656.57	100.00	31.66	100.00

TABLE 2.6.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Welega Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	84.11	94.01	27.22	84.46	17.71	99.44	4.24	99.53	32.63	99.27	2.31	100.00
Teff	27.96	31.25	.58	1.80	8.69	48.79	**	44.13	16.54	50.32	.27	11.69
Barely	.39	.44	**	**	-	-	**	**	**	**	-	-
Wheat	.89	.99	**	**	**	**	**	**	.54	1.64	-	-
Maize	34.67	38.75	20.88	64.78	**	**	**	**	10.89	33.13	1.67	72.29
Sorghum	7.07	7.90	5.07	15.73	**	**	**	**	**	**	**	**
Millet	13.13	14.68	**	**	7.57	42.50	**	**	3.42	10.40	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	2.03	2.27	1.99	6.17	**	**	-	-	**	**	-	-
Horse Beans	.79	.88	.78	2.42	-	-	-	-	**	**	-	-
Chick Peas	.13	.15	.13	.40	-	-	-	-	-	-	-	-
Haricot Beans	.92	1.03	.89	2.76	**	**	-	-	**	**	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	**	**	-	-	-	-	-	-	-	-
OILSEEDS	.33	.37	.15	.47	**	**	-	-	**	**	-	-
Neug	**	**	**	**	**	**	-	-	**	**	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.95	2.18	1.86	5.77	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.73	.82	.73	2.26	-	-	-	-	-	-	-	-
Potatoes	.69	.77	.66	2.05	**	**	-	-	**	**	-	-
Other Vegetables	.53	.59	.47	1.46	**	**	**	**	**	**	-	-
ALL TEMPORARY	88.42	98.83	31.22	96.87	17.80	99.94	**	**	32.84	99.91	2.31	100.00
Chat	.03	.03	.03	.09	-	-	-	-	-	-	-	-
Coffee	.59	.66	.58	1.80	-	-	-	-	**	**	-	-
Enset	.06	.07	.06	.19	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.29	.32	.26	.81	**	**	-	-	**	**	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.05	1.17	1.01	3.13	**	**	-	-	**	**	-	-
ALL CROPS	89.47	100.00	32.23	100.00	17.81	100.00	**	**	32.87	100.00	2.31	100.00

TABLE 2.6.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Welega Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	132.50	94.45	17.07	75.40	47.47	97.51	3.50	91.86	60.94	98.86	3.54	100.00
Teff	77.01	54.89	**	**	35.66	73.25	2.63	69.03	33.31	54.04	2.03	57.34
Barely	1.60	1.14	.66	2.92	**	**	**	**	**	**	-	-
Wheat	7.60	5.42	**	**	**	**	-	-	**	**	**	**
Maize	37.82	26.96	12.20	53.89	4.60	9.45	**	**	19.48	31.60	**	**
Sorghum	.44	.31	.37	1.63	-	-	-	-	**	**	-	-
Millet	8.03	5.72	**	**	3.63	7.46	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	4.12	2.94	2.95	13.03	**	**	-	-	**	**	-	-
Horse Beans	2.82	2.01	2.43	10.73	**	**	-	-	**	**	-	-
Chick Peas	**	**	.48	2.12	**	**	-	-	**	**	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	1.76	1.25	**	**	**	**	**	**	**	**	-	-
Neug	**	**	**	**	**	**	**	**	**	**	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-	-	-
Rape seed	.30	.21	.12	.53	**	**	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.44	1.03	1.39	6.14	**	**	**	**	**	**	-	-
Fenugreek	.03	.02	.03	.13	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	**	**	**	**	-	-
Potatoes	.39	.28	.39	1.72	-	-	-	-	**	**	-	-
Other Vegetables	.37	.26	.35	1.55	**	**	-	-	**	**	-	-
ALL TEMPORARY	139.82	99.66	22.18	97.97	48.68	100.00	3.81	100.00	61.63	99.98	3.54	100.00
Chat	**	**	.01	.04	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.10	.07	**	**	-	-	-	-	-	-	-	-
Other Permanent	.28	.20	.28	1.24	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.47	.34	.46	2.03	-	-	-	-	**	**	-	-
ALL CROPS	140.29	100.00	22.64	100.00	48.68	100.00	3.81	100.00	61.64	100.00	3.54	100.00

TABLE 2.6.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Illibabor Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	38.40	96.75	5.75	84.43	3.55	97.53	**	**	26.94	99.96	**	**
Teff	15.85	39.93	.44	6.46	2.57	70.60	.55	31.98	12.03	44.64	**	**
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	**	**	-	-	-	-
Maize	21.92	55.23	4.82	70.78	.95	26.10	**	**	14.89	55.25	**	**
Sorghum	.61	1.54	.48	7.05	**	**	**	**	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.45	1.13	.44	6.46	-	-	**	**	-	-	-	-
Horse Beans	.12	.30	.11	1.62	-	-	**	**	-	-	-	-
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	.07	.18	.05	.73	**	**	-	-	-	-	-	-
ALL TEMPORARY	39.12	98.56	6.37	93.54	3.64	100.00	**	**	26.94	99.96	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	**	**	**	**	-	-
Enset	**	**	.22	3.23	**	**	-	-	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.09	.23	.08	1.17	**	**	-	-	-	-	-	-
Other Permanent	.03	.08	.03	.44	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.57	1.44	.44	6.46	**	**	**	**	**	**	-	-
ALL CROPS	39.69	100.00	6.81	100.00	3.64	100.00	1.72	100.00	26.95	100.00	**	**

TABLE 2.6.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Jimma Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	104.75	86.11	15.51	49.38	67.86	98.76	3.75	100.00	16.96	99.76	**	**
Teff	63.53	52.22	1.15	3.66	50.74	73.85	3.46	92.27	8.05	47.35	**	**
Barely	**	**	**	**	**	**	**	**	-	-	-	-
Wheat	**	**	-	-	**	**	**	**	**	**	-	-
Maize	32.10	26.39	12.60	40.11	**	**	.25	6.67	8.69	51.12	**	**
Sorghum	2.31	1.90	1.63	5.19	**	**	**	**	-	-	-	-
Millet	**	**	-	-	**	**	-	-	-	-	-	-
Oats	**	**	**	**	**	**	-	-	-	-	-	-
PULSES	1.15	.95	.60	1.91	**	**	-	-	-	-	-	-
Horse Beans	.65	.53	**	**	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	4.14	3.40	4.14	13.18	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.02	.02	.02	.06	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	4.12	3.39	4.12	13.12	-	-	-	-	-	-	-	-
ALL TEMPORARY	110.36	90.72	20.53	65.36	68.45	99.62	3.75	100.00	16.96	99.76	**	**
Chat	1.86	1.53	1.83	5.83	**	**	-	-	-	-	-	-
Coffee	2.22	1.82	1.96	6.24	**	**	-	-	**	**	-	-
Enset	6.63	5.45	6.53	20.79	**	**	-	-	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	**	**	-	-
Other Permanent	.29	.24	.28	.89	**	**	-	-	-	-	-	-
TOTAL PERMANENT	11.29	9.28	10.88	34.64	**	**	-	-	**	**	**	**
ALL CROPS	121.65	100.00	31.41	100.00	68.71	100.00	3.75	100.00	17.00	100.00	**	**

TABLE 2.6.5
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN 1998/99 (1991 E.C.)

1998/99(1991 E.C.)												
West Shewa Zone												
('000 HA)												
TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area**	% **	Area **	% **	Area -	% -	Area -	%	Area	%	Area	%
CEREALS	304.10	92.69	20.36	55.37	61.01	93.62	9.64	99.38	208.46	98.45	4.64	98.31
Teff	165.40	50.41	.67	1.82	29.66	45.51	7.90	81.44	125.31	59.18	**	**
Barely	38.12	11.52	3.66	9.95	11.72	17.98	**	**	21.83	10.31	**	**
Wheat	77.28	23.55	2.07	5.63	16.58	25.44	.73	7.53	56.15	26.52	**	**
Maize	22.27	6.79	13.66	37.15	**	**	**	**	**	**	**	**
Sorghum	.92	.28	.30	.82	**	**	.20	2.06	**	**	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	**	**	-	-
PULSES	9.14	2.79	2.21	6.01	**	**	**	**	2.90	1.37	**	**
Horse Beans	3.30	1.01	1.64	4.46	**	**	**	**	.73	.34	-	-
Chick Peas	**	**	**	**	**	**	-	-	**	**	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	**	**	**	**	**	**	**	**
Lentils	.66	.20	**	**	**	**	**	**	**	**	-	-
Vetch	**	**	**	**	-	-	-	-	**	**	-	-
OILSEEDS	1.41	.43	**	**	**	**	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	3.18	3.08	5.35	-	-	-	-	-	-	-	-	-
OTHERS	2.15	.66	1.66	4.51	**	**	-	-	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	**	**	**	**
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	.62	.19	.54	1.47	**	**	-	-	**	**	-	-
Other Vegetables	.76	.23	.52	1.41	**	**	-	-	**	**	**	**
ALL TEMPORARY	316.80	96.56	25.48	69.30	65.17	100.00	9.70	100.00	211.74	100.00	4.72	100.00
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	10.05	3.06	10.05	27.33	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.51	.16	.51	1.39	-	-	-	-	-	-	-	-
TOTAL PERMANENT	11.29	3.44	11.29	30.70	-	-	-	-	-	-	-	-
ALL CROPS	328.09	100.00	36.77	100.00	65.17	100.00	9.70	100.00	211.74	100.00	4.72	100.00

TABLE 2.6.6

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Shewa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	98.38	95.90	7.00	66.04	10.58	99.72	2.49	100.00	75.94	99.28	2.37	98.75
Teff	51.72	50.41	.45	4.25	**	**	1.43	57.43	43.06	56.29	.96	40.00
Barely	5.64	5.50	2.33	21.98	**	**	-	-	**	**	**	**
Wheat	38.94	37.96	**	**	**	**	**	42.57	31.15	40.72	**	**
Maize	1.86	1.81	1.86	17.55	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**	-	-
PULSES	3.76	3.67	3.25	30.66	**	**	-	-	**	**	-	-
Horse Beans	3.16	3.08	2.72	25.66	-	-	-	-	**	**	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.30	.29	**	**	-	-	-	-	**	**	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.26	**	**	**	-	-	-	-	**	**	**	**
ALL TEMPORARY	102.45	99.86	10.46	98.68	10.61	100.00	2.49	100.00	76.49	100.00	2.40	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.13	.13	.13	1.23	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.14	.14	.14	1.32	-	-	-	-	-	-	-	-
ALL CROPS	102.59	100.00	10.60	100.00	10.61	100.00	2.49	100.00	76.49	100.00	2.40	100.00

TABLE 2.6.7

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Shewa Zone.

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	160.50	90.22	4.17	66.83	31.58	75.21	7.19	84.09	114.08	97.50	**	**
Teff	81.16	45.62	**	**	**	**	**	**	63.91	54.62	**	**
Barely	5.96	3.35	**	**	1.79	4.26	**	**	**	**	**	**
Wheat	53.45	30.04	**	**	7.52	17.91	**	**	42.96	36.71	**	**
Maize	18.74	10.53	3.80	60.90	10.10	24.05	1.73	20.23	3.07	2.62	**	**
Sorghum	**	**	**	**	**	**	**	**	**	**	-	-
Millet	**	**	**	**	**	**	-	-	**	**	-	-
Oats	**	**	-	-	-	-	-	-	**	**	-	-
PULSES	5.55	3.12	**	**	2.74	6.53	**	**	1.53	1.31	**	**
Horse Beans	1.24	.70	**	**	**	**	-	-	**	**	-	-
Chick Peas	**	**	**	**	**	**	**	**	**	**	-	-
Haricot Beans	**	**	**	**	1.48	3.52	**	**	**	**	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	**	**	**	**	**	**	-	-
Vetch	**	**	-	-	**	**	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	10.39	5.84	**	**	7.26	17.29	**	**	**	**	**	**
Fenugreek	**	**	-	-	**	**	-	-	**	**	-	-
Spices	**	**	**	**	**	**	**	**	-	-	-	-
Potatoes	**	**	**	**	**	**	**	**	**	**	**	**
Other Vegetables	**	**	.32	5.13	**	**	.85	9.94	**	**	**	**
ALL TEMPORARY	176.45	99.18	5.30	84.94	41.58	99.02	8.52	99.65	116.95	99.95	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	**	**	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**	-	-
Other Permanent	**	**	**	**	-	-	-	-	**	**	-	-
TOTAL PERMANENT	**	**	**	**	**	**	**	**	**	**	-	-
ALL CROPS	177.90	100.00	6.24	100.00	41.99	100.00	8.55	100.00	117.01	100.00	4.11	100.00

TABLE 2.6.8

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Arsi Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	440.21	89.19	22.80	71.90	342.85	89.71	4.62	89.36	69.37	94.82	**	**
Teff	52.16	10.57	**	**	36.92	9.66	1.04	20.12	13.63	18.63	-	-
Barely	137.39	27.84	**	**	129.50	33.88	2.55	49.32	3.74	5.11	**	**
Wheat	211.08	42.77	**	**	157.81	41.29	.73	14.12	51.48	70.37	**	**
Maize	27.68	5.61	15.05	47.46	11.63	3.04	**	**	**	**	**	**
Sorghum	**	**	**	**	.95	.25	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	**	**	-	-	**	**	-	-
PULSES	39.15	7.93	2.52	7.95	32.31	8.45	.36	6.96	**	**	**	**
Horse Beans	24.94	5.05	2.21	6.97	20.04	5.24	.36	6.96	**	**	**	**
Chick Peas	**	**	**	**	**	**	-	-	**	**	**	**
Haricot Beans	**	**	**	**	**	**	-	-	**	**	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	**	**	-	-
Vetch	**	**	-	-	**	**	-	-	-	-	-	-
OILSEEDS	5.59	1.13	**	**	5.13	1.34	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	4.04	.82	-	-	3.68	.96	-	-	**	**	-	-
Rape seed	1.54	.31	**	**	1.45	.38	-	-	**	**	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	3.07	.62	1.13	3.56	1.62	.42	**	**	**	**	**	**
Fenugreek	**	**	**	**	**	**	-	-	**	**	-	-
Spices	**	**	**	**	**	**	**	**	-	-	**	**
Potatoes	**	**	**	**	**	**	-	-	**	**	-	-
Other Vegetables	1.60	.32	.84	2.65	**	**	**	**	**	**	**	**
ALL TEMPORARY	488.02	98.88	26.51	83.60	381.91	99.93	5.17	100.00	73.14	99.97	1.29	97.73
Chat	**	**	**	**	**	**	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	-	-	**	**	**	**
Enset	**	**	**	**	**	**	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	**	**	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	**	**	-	-	**	**	**	**
ALL CROPS	493.57	100.00	31.71	100.00	382.19	100.00	5.17	100.00	73.16	100.00	1.32	100.00

TABLE 2.6.9

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Harerge Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	24.38	66.67	10.65	56.02	2.42	74.69	.97	50.00	9.76	87.61	**	**
Teff	**	10.31	**	**	**	**	**	**	**	**	**	**
Barely	.44	1.20	.29	1.53	-	-	**	**	**	**	-	-
Wheat	**	1.37	**	**	**	**	-	-	**	**	-	-
Maize	12.83	35.08	5.06	26.62	1.07	33.02	.31	15.98	5.94	53.32	**	**
Sorghum	6.77	18.51	4.62	24.30	**	**	**	**	**	**	-	-
Millet	**	.16	**	**	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	1.50	4.10	.81	4.26	**	**	**	**	**	**	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	.99	2.71	.39	2.05	**	**	**	**	**	**	-	-
Field Peas	**	**	-	-	-	-	-	-	**	**	-	-
Lentils	**	**	**	**	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.22	3.34	1.10	5.79	**	**	**	**	.06	.54	**	**
Fenugreek	.18	.49	.15	.79	-	-	-	-	**	**	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	1.01	2.76	.92	4.84	**	**	**	**	**	**	**	**
ALL TEMPORARY	27.19	74.35	12.64	66.49	**	**	1.27	65.46	10.21	91.65	**	**
Chat	5.14	14.06	3.78	19.88	**	**	**	**	**	**	**	**
Coffee	3.95	10.80	2.36	12.41	.44	13.58	**	**	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.04	.11	.04	.21	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	-	-	**	**
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	9.38	25.65	6.37	33.51	**	**	**	**	.93	8.35	**	**
ALL CROPS	36.57	100.00	19.01	100.00	3.24	100.00	1.94	100.00	11.14	100.00	**	**

TABLE 2.6.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Harerge Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	69.59	73.80	39.70	70.40	4.48	84.85	6.20	64.72	12.05	86.69	**	**
Teff	**	**	.41	.73	**	**	.17	1.77	**	**	**	**
Barely	**	**	**	**	**	**	**	**	**	**	**	**
Wheat	3.90	4.14	.90	1.60	**	**	**	**	**	**	-	-
Maize	26.70	28.31	15.37	27.26	1.51	28.60	3.07	32.05	4.64	33.38	**	**
Sorghum	34.67	36.77	22.18	39.33	1.30	24.62	2.69	28.08	**	**	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	**	**	**	**	**	**
PULSES	2.73	2.90	1.11	1.97	**	**	.53	5.53	**	**	**	**
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	**	**	-	-	-	-
Haricot Beans	2.13	2.26	.85	1.51	**	**	.50	5.22	**	**	**	**
Field Peas	**	**	**	**	-	-	-	-	**	**	**	**
Lentils	**	**	**	**	**	**	**	**	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	**	**	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	**	**	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	**	**	**	**	-	-	-	-	-	-	-	-
OTHERS	5.95	6.31	3.61	6.40	**	**	1.30	13.57	.57	4.10	**	**
Fenugreek	.15	.16	.13	.23	**	**	**	**	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	1.71	1.81	.48	.85	**	**	.58	6.05	.40	2.88	**	**
Other Vegetables	4.04	4.28	2.95	5.23	**	**	**	**	**	**	**	**
ALL TEMPORARY	80.70	85.58	46.73	82.87	5.00	94.70	8.04	83.92	13.17	94.75	7.73	84.67
Chat	11.94	12.66	8.04	14.26	.27	5.11	**	**	.70	5.04	1.40	15.33
Coffee	1.32	1.40	1.28	2.27	**	**	-	-	**	**	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	13.60	14.42	9.66	17.13	.28	5.30	**	**	.73	5.25	1.40	15.33
ALL CROPS	94.30	100.00	56.39	100.00	5.28	100.00	9.58	100.00	13.90	100.00	9.13	100.00

TABLE 2.6.11

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Bale Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	99.39	95.24	**	**	77.80	99.26	5.21	98.12	13.16	99.47	1.55	96.27
Teff	6.41	6.14	-	-	5.36	6.84	**	**	**	**	**	**
Barely	24.87	23.83	**	**	18.97	24.20	1.85	34.84	**	**	**	**
Wheat	57.40	55.00	**	**	44.05	56.20	2.91	54.80	8.20	61.98	**	**
Maize	1.53	1.47	.13	2.25	1.33	1.70	-	-	**	**	-	-
Sorghum	**	**	-	-	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	8.58	8.22	-	.69	7.49	9.56	**	**	**	**	**	**
PULSES	.47	.45	**	**	.27	.34	**	**	**	**	**	**
Horse Beans	**	.24	**	**	**	**	**	**	**	**	**	**
Chick Peas	.18	.17	**	**	.18	.23	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	**	**	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.48	.46	.15	2.60	.31	.40	**	**	**	**	-	-
Fenugreek	**	**	-	-	**	**	**	**	-	-	-	-
Spices	**	**	**	**	**	**	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.17	.16	.13	2.25	**	**	-	-	**	**	-	-
ALL TEMPORARY	100.36	96.17	**	**	78.38	100.00	5.31	100.00	13.23	100.00	1.61	100.00
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	**	**	3.57	61.76	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	4.00	3.83	4.00	69.20	-	-	-	-	-	-	-	-
ALL CROPS	104.36	100.00	5.78	100.00	78.38	100.00	5.31	100.00	13.23	100.00	1.61	100.00

TABLE 2.6.12

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Borena Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	.86	73.50	.26	68.42	1.12	79.43	-	-
Teff	**	**	-	-	**	**	-	-	**	**	-	-
Barely	**	**	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	**	**	-	-	-	-
Maize	**	**	**	**	**	**	**	**	**	**	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.09	.49	**	**	**	**	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.21	6.54	.83	5.34	**	**	**	**	**	**	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	1.18	6.38	.80	5.15	**	**	**	**	**	**	-	-
ALL TEMPORARY	**	**	**	**	**	**	.30	78.95	1.33	94.33	-	-
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	**	**	**	**	-	-	-	-
Enset	8.29	44.84	8.22	52.93	-	-	**	**	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	10.88	58.84	10.56	68.00	**	**	**	**	**	**	-	-
ALL CROPS	18.49	100.00	15.53	100.00	1.17	100.00	**	**	1.41	100.00	-	-

TABLE 2.7

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Somale

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	51.74	**	**	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	**	**	**	2.43	-	-	-	-	-	-	-	-
Wheat	**	**	**	2.78	-	-	-	-	-	-	-	-
Maize	**	**	**	43.06	**	**	-	-	-	-	-	-
Sorghum	.10	3.29	.10	3.47	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	.69	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	.69	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	4.86	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	4.86	-	-	**	**	-	-	-	-
ALL TEMPORARY	**	**	**	57.29	**	**	**	**	-	-	-	-
Chat	**	**	**	41.67	-	-	-	-	-	-	-	-
Coffee	**	**	**	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	1.04	-	-	**	**	-	-	-	-
Other Permanent	**	**	**	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	42.71	-	-	**	**	-	-	-	-
ALL CROPS	**	**	**	100.00	**	**	**	**	-	-	-	-

TABLE 2.7.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Shinele Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	**	**	**	**	-	-	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	.01	10.00	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	.01	10.00	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	-	-	-	-	-	-	-	-
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	.11	100.00	.10	100.00	-	-	-	-	-	-	-	-

TABLE 2.7.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Jijiga Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	.12	100.00	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	.07	2.42	.07	2.53	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	**	**	**	**	.12	100.00	-	-	-	-	-	-
Sorghum	.07	2.42	.07	2.53	-	-	-	-	-	-	-	-
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	.13	4.50	.13	4.69	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.13	4.50	.13	4.69	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	.12	100.00	-	-	-	-	-	-
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	.12	100.00	-	-	-	-	-	-

TABLE 2.7.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Moyale Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
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	.03	100.00	-	-	-	-	.03	100.00	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.03	100.00	-	-	-	-	.03	100.00	-	-	-	-
ALL CROPS	.03	100.00	-	-	-	-	.03	100.00	-	-	-	-

TABLE 2.8

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Benshangul-Gumuz

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	14.83	87.60	7.10	80.59	5.12	94.99	.10	83.33	2.06	96.71	**	**
Teff	3.69	21.80	.27	3.06	2.52	46.75	**	**	**	**	**	**
Barely	**	**	**	1.14	**	**	-	-	**	**	-	-
Wheat	**	**	**	1.02	**	**	**	**	**	**	-	-
Maize	5.32	31.42	3.83	43.47	**	**	**	**	1.09	51.17	**	**
Sorghum	**	**	**	24.63	-	-	-	-	-	-	-	-
Millet	1.83	10.81	**	7.04	1.20	22.26	**	**	-	-	-	-
Oats	**	**	**	.23	-	-	-	-	-	-	-	-
PULSES	**	**	.44	4.99	**	**	-	-	**	**	**	**
Horse Beans	**	**	.27	3.06	**	**	-	-	-	-	**	**
Chick Peas	**	**	.07	.79	**	**	-	-	-	-	-	-
Haricot Beans	.09	.53	**	.91	-	-	-	-	**	**	**	**
Field Peas	-	-	**	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	.23	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.47	2.78	.47	5.33	**	**	-	-	-	-	-	-
Neug	**	**	**	1.36	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	.11	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	1.70	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	.11	-	-	-	-	-	-	-	-
Sesame	**	**	**	2.04	**	**	-	-	-	-	-	-
Castor Bean	**	**	**	-	-	-	-	-	-	-	-	-
OTHERS	.78	4.61	.59	6.70	**	**	**	**	**	**	**	**
Fenugreek	**	-	**	-	-	-	-	-	-	-	-	-
Spices	.25	1.48	.20	2.27	**	**	**	**	**	**	**	**
Potatoes	**	**	**	2.16	**	**	-	-	**	**	**	**
Other Vegetables	.25	1.48	.20	2.27	**	**	-	-	**	**	**	**
ALL TEMPORARY	16.70	98.64	8.60	97.62	5.38	99.81	.12	100.00	2.13	100.00	**	**
Chat	**	**	**	.11	-	-	-	-	-	-	-	-
Coffee	.13	.77	.11	1.25	**	**	-	-	**	**	-	-
Enset	**	**	**	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	.11	-	-	-	-	-	-	-	-
Tobacco	**	**	**	-	-	-	-	-	-	-	-	-
Fruits	.06	.35	.06	.68	-	-	-	-	-	-	**	**
Other Permanent	**	**	**	.23	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.23	1.36	.21	2.38	**	**	**	**	**	**	**	**
ALL CROPS	16.93	100.00	8.81	100.00	5.39	100.00	.12	100.00	2.13	100.00	**	**

TABLE 2.8.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Metekel Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	11.50	87.79	**	**	4.95	95.19	.08	100.00	1.45	97.32	**	**
Teff	3.51	26.79	.26	4.38	2.37	45.58	-	-	**	**	**	**
Barely	**	**	**	**	**	**	-	-	**	**	-	-
Wheat	**	**	**	**	**	**	**	**	**	**	-	-
Maize	2.22	16.95	1.43	24.11	**	**	**	**	.49	32.89	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	1.82	13.89	**	**	1.20	23.08	**	**	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	**	**	.41	6.91	**	**	-	-	-	-	**	**
Horse Beans	**	**	.27	4.55	**	**	-	-	-	-	**	**
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.49	3.74	.35	5.90	**	**	-	-	**	**	**	**
Fenugreek	**	**	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-	**	**
Other Vegetables	.12	.92	.07	1.18	**	**	-	-	**	**	-	-
ALL TEMPORARY	13.00	99.24	**	**	5.20	100.00	.08	100.00	1.49	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.01	.08	.01	.17	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.10	.76	.10	1.69	-	-	-	-	-	-	-	-
ALL CROPS	13.10	100.00	**	**	5.20	100.00	.08	100.00	1.49	100.00	**	**

TABLE 2.8.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Asosa Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2.20	85.94	1.57	84.86	**	**	**	**	.40	95.24	**	**
Teff	**	**	**	**	**	**	**	**	**	**	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	1.98	77.34	1.52	82.16	**	**	**	**	.39	92.86	**	**
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.01	.39	**	**	-	-	-	-	**	**	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.01	.39	**	**	-	-	-	-	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.21	8.20	.16	8.65	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.15	5.86	**	**	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	.06	2.34	.06	3.24	-	-	-	-	-	-	-	-
ALL TEMPORARY	2.42	94.53	1.74	94.05	.19	95.00	.05	100.00	.42	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.07	2.73	.05	2.70	**	**	-	-	**	**	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.05	1.95	.05	2.70	-	-	-	-	-	-	**	**
Other Permanent	.01	.39	-	-	-	-	**	**	-	-	-	-
TOTAL PERMANENT	.14	5.47	.11	5.95	**	**	**	**	**	**	**	**
ALL CROPS	2.56	100.00	1.85	100.00	.20	100.00	.05	100.00	.42	100.00	**	**

TABLE 2.8.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Kemeshi Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.13	90.40	**	**	-	-	-	-	**	100.00	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	1.12	89.60	**	**	-	-	-	-	**	100.00	**	**
Sorghum	.01	.80	**	**	-	-	-	-	-	-	-	-
Millet	-	-	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.02	1.60	**	**	-	-	-	-	**	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.02	1.60	**	**	-	-	-	-	**	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.03	2.40	**	**	-	-	-	-	-	-	-	-
Neug	.03	2.40	**	**	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	**	**	-	-	-	-	-	-	-	-
Castor Bean	-	-	**	**	-	-	-	-	-	-	-	-
OTHERS	.07	5.60	**	**	-	-	-	-	**	**	**	**
Fehugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	**	**	-	-	-	-	**	**	-	-
Potatoes	-	-	-	-	-	-	-	-	**	**	-	-
Other Vegetables	.07	5.60	**	**	-	-	-	-	**	**	**	**
ALL TEMPORARY	1.25	100.00	**	**	-	-	-	-	**	**	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	**	**	**	**	-	-	-	-	**	**	**	**

TABLE 2.9

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 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	310.54	54.56	**	26.72	122.07	82.71	18.27	72.79	88.18	92.07	3.56	50.71
Teff	90.70	15.94	2.77	.94	55.57	37.65	6.73	26.81	24.79	25.88	.83	11.82
Barely	**	**	**	17.68	9.49	6.43	1.78	7.09	7.93	8.28	**	**
Wheat	68.45	12.03	**	.45	26.63	18.04	5.91	23.55	34.00	35.50	.60	8.55
Maize	70.20	12.33	16.21	5.52	27.97	18.95	3.55	14.14	20.63	21.54	1.84	26.21
Sorghum	8.73	1.53	6.22	2.12	1.63	1.10	.22	.88	.64	.67	**	**
Millet	1.11	.20	**	.01	.76	.51	**	**	**	**	**	**
Oats	**	**	**	-	**	**	-	-	-	-	-	-
PULSES	30.25	5.31	5.22	1.78	17.12	11.60	3.78	15.06	3.60	3.76	**	**
Horse Beans	8.76	1.54	1.72	.59	4.21	2.85	**	**	1.42	1.48	**	**
Chick Peas	7.89	1.39	.31	.11	6.21	4.21	.48	1.91	.89	.93	-	-
Haricot Beans	11.32	1.99	2.92	.99	4.72	3.20	1.92	7.65	1.27	1.33	**	**
Field Peas	**	**	**	.09	**	**	**	**	-	-	-	-
Lentils	**	**	**	-	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.22	.04	.06	.02	.08	.05	**	**	**	**	**	**
Neug	**	**	**	.01	-	-	-	-	-	-	-	-
Lin Seed	.12	.02	**	.01	**	**	**	**	**	**	**	**
Rape seed	**	**	**	.01	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	.01	-	**	-	**	**	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	40.66	7.14	30.60	10.42	5.54	3.75	.95	3.78	3.23	3.37	.35	4.99
Fenugreek	**	**	**	-	**	**	**	**	**	**	-	-
Spices	7.61	1.34	1.03	.35	4.06	2.75	.37	1.47	1.98	2.07	**	**
Potatoes	7.06	1.24	5.23	1.78	.79	.54	**	**	.91	.95	**	**
Other Vegetables	25.80	4.53	24.34	8.29	.57	.39	**	**	.30	.31	.16	2.28
ALL TEMPORARY	381.67	67.06	114.35	38.94	144.81	98.12	23.01	91.67	95.06	99.26	4.46	63.53
Chat	9.87	1.73	8.99	3.06	**	**	**	**	.14	.15	**	**
Coffee	29.97	5.27	25.90	8.82	1.82	1.23	1.29	5.14	.33	.34	.63	8.97
Enset	140.23	24.64	137.79	46.92	.38	.26	**	**	**	**	**	**
Cotton	**	**	**	.07	-	-	**	**	-	-	-	-
Tobacco	.26	.05	.25	.09	**	**	-	-	-	-	-	-
Fruits	3.46	.61	3.04	1.04	.23	.16	.05	.20	.04	.04	**	**
Other Permanent	3.48	.61	3.16	1.08	.07	.05	**	**	**	**	**	**
TOTAL PERMANENT	187.49	32.94	179.34	61.06	2.77	1.88	2.09	8.33	.71	.74	**	**
ALL CROPS	569.16	100.00	293.69	100.00	147.58	100.00	25.10	100.00	95.77	100.00	7.02	100.00

TABLE 2.9.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Gurage Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	77.44	65.09	6.57	16.42	38.09	88.25	5.05	86.47	27.04	92.73	**	**
Teff	28.32	23.80	**	**	**	**	1.36	23.29	10.55	36.18	**	**
Barely	14.32	12.04	.46	1.15	6.18	14.32	1.20	20.55	6.36	21.81	**	**
Wheat	14.64	12.30	**	**	7.66	17.75	**	**	5.16	17.70	-	-
Maize	19.22	16.15	5.53	13.82	**	**	**	**	4.82	16.53	**	**
Sorghum	**	.79	**	**	**	**	-	-	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	6.36	5.35	1.01	2.52	3.69	8.55	**	**	1.17	4.01	**	**
Horse Beans	2.60	2.19	1.00	2.50	.86	1.99	**	**	.62	2.13	**	**
Chick Peas	**	**	**	**	**	**	**	**	**	**	-	-
Haricot Beans	**	**	**	**	**	**	-	-	**	**	-	-
Field Peas	**	**	-	-	**	**	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	4.34	3.65	1.65	4.12	1.36	3.15	.33	5.65	.95	3.26	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**	-	-
Spices	2.10	1.77	**	**	1.00	2.32	**	**	.65	2.23	**	**
Potatoes	.73	.61	.17	.42	**	**	**	**	**	**	**	**
Other Vegetables	1.47	1.24	1.35	3.37	**	**	**	**	**	**	**	**
ALL TEMPORARY	88.17	74.10	9.25	23.11	43.16	100.00	5.82	99.66	29.16	100.00	**	**
Chat	3.63	3.05	3.61	9.02	-	-	-	-	-	-	**	**
Coffee	2.70	2.27	2.68	6.70	-	-	**	**	-	-	**	**
Enset	23.61	19.84	23.61	59.00	-	-	**	**	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.40	.34	.40	1.00	-	-	-	-	-	-	-	-
Other Permanent	.47	.40	.47	1.17	-	-	-	-	-	-	-	-
TOTAL PERMANENT	30.81	25.90	30.77	76.89	-	-	**	**	**	**	**	**
ALL CROPS	118.98	100.00	40.02	100.00	43.16	100.00	5.84	100.00	29.16	100.00	.77	100.00

TABLE 2.9.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Hadiya Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	70.54	69.01	**	**	28.40	80.70	5.56	83.99	32.35	95.68	1.18	95.93
Teff	19.71	19.28	**	**	8.38	23.81	2.62	39.58	8.46	25.02	.22	17.89
Barely	4.20	4.11	.08	.32	2.57	7.30	**	**	1.25	3.70	**	**
Wheat	34.62	33.87	.07	.28	13.36	37.97	1.43	21.60	19.45	57.53	**	**
Maize	10.87	10.63	**	**	3.62	10.29	1.18	17.82	**	**	**	**
Sorghum	.92	.90	.36	1.42	.34	.97	**	**	**	**	**	**
Millet	**	**	-	-	**	**	**	**	**	**	**	**
Oats	**	**	-	-	**	**	-	-	-	-	-	-
PULSES	8.09	7.92	.20	.79	5.89	16.74	**	**	**	**	**	**
Horse Beans	4.47	4.37	.13	.51	2.77	7.87	**	**	**	**	**	**
Chick Peas	3.30	3.23	**	**	2.98	8.47	**	**	**	**	-	-
Haricot Beans	.27	.26	**	**	**	**	**	**	**	**	**	**
Field Peas	**	**	**	**	-	-	**	**	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.09	.09	-	-	**	**	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	**	**	**	**	**	**
Rape seed	**	**	-	-	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	4.07	3.98	2.81	11.08	**	**	**	**	.46	1.36	**	**
Fenugreek	**	**	-	-	**	**	-	-	-	-	-	-
Spices	**	**	.11	.43	**	**	**	**	**	**	-	-
Potatoes	.82	.80	.16	.63	.32	.91	**	**	**	**	**	**
Other Vegetables	2.60	2.54	2.54	10.02	**	**	-	-	**	**	**	**
ALL TEMPORARY	82.79	81.00	6.08	23.98	35.10	99.74	6.60	99.70	33.79	99.94	1.21	98.37
Chat	1.17	1.14	1.15	4.54	**	**	-	-	**	**	**	**
Coffee	2.32	2.27	2.20	8.68	**	**	**	**	**	**	**	**
Enset	15.19	14.86	15.19	59.92	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	.21	.21	.20	.79	**	**	-	-	**	**	**	**
Other Permanent	.43	.42	.43	1.70	-	-	-	-	-	-	-	-
TOTAL PERMANENT	19.42	19.00	19.27	76.02	**	**	**	**	**	**	**	**
ALL CROPS	102.21	100.00	25.35	100.00	35.19	100.00	6.62	100.00	33.81	100.00	1.23	100.00

TABLE 2.9.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Kembata Alaba Tembaro Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	42.10	66.12	1.77	10.71	21.38	84.47	3.52	84.62	14.58	87.88	.84	79.25
Teff	14.23	22.35	.19	1.15	8.99	35.52	.63	15.14	3.92	23.63	**	**
Barely	.85	1.34	**	**	.36	1.42	**	**	**	**	-	-
Wheat	13.44	21.11	.15	.91	4.29	16.95	**	**	6.64	40.02	**	**
Maize	12.13	19.05	1.30	7.86	6.85	27.06	.40	9.62	3.48	20.98	**	**
Sorghum	.56	.88	**	**	**	**	**	**	.21	1.27	-	-
Millet	.89	1.40	-	-	.65	2.57	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	1.86	2.92	.24	1.45	.86	3.40	**	**	.31	1.87	**	**
Horse Beans	1.14	1.79	.09	.54	.53	2.09	**	**	**	**	-	-
Chick Peas	.52	.82	**	**	**	**	**	**	**	**	-	-
Haricot Beans	.20	.31	**	**	.05	.20	**	**	.05	.30	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	**	**	-	-
Neug	**	**	**	**	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	8.62	13.54	3.70	22.38	2.98	11.77	.20	4.81	1.58	9.52	**	**
Fenugreek	**	**	**	**	**	.36	**	**	-	-	-	-
Spices	4.72	7.41	.61	3.69	2.68	10.59	**	**	1.22	7.35	**	**
Potatoes	.79	1.24	.22	1.33	**	**	**	**	**	**	**	**
Other Vegetables	2.99	4.70	2.87	17.36	**	**	**	**	**	**	**	**
ALL TEMPORARY	52.63	82.66	5.72	34.60	25.23	99.68	4.16	100.00	16.51	99.52	.99	93.40
Chat	1.15	1.81	1.11	6.72	**	**	-	-	**	**	**	**
Coffee	2.12	3.33	1.99	12.04	.06	.24	**	**	**	**	**	**
Enset	7.00	10.99	6.98	42.23	**	**	-	-	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	.02	.03	**	**	**	**	-	-	-	-	-	-
Fruits	.40	.63	.36	2.18	**	**	**	**	**	**	**	**
Other Permanent	.35	.55	.35	2.12	**	**	**	**	-	-	**	**
TOTAL PERMANENT	11.04	17.34	10.81	65.40	.08	.32	**	**	.08	.48	**	**
ALL CROPS	63.67	100.00	16.53	100.00	25.31	100.00	4.16	100.00	16.59	100.00	1.06	100.00

TABLE 2.9.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Sidama Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	12.70	14.63	1.56	2.43	8.30	64.24	.61	20.54	2.06	53.93	**	**
Teff	.47	.54	**	**	.34	2.63	-	-	**	**	-	-
Barely	**	**	**	**	**	**	-	-	-	-	-	-
Wheat	**	**	-	-	**	**	**	**	-	-	-	-
Maize	11.87	13.68	1.36	2.12	7.75	59.98	.60	20.20	1.99	52.09	**	**
Sorghum	**	**	-	-	**	**	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	3.89	4.48	.19	.30	**	**	**	**	**	**	**	**
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	3.87	4.46	**	**	**	**	**	**	**	**	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	3.03	3.49	2.41	3.75	.34	2.63	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	**	**	-	-
Other Vegetables	3.01	3.47	2.41	3.75	.34	2.63	**	**	**	**	**	**
ALL TEMPORARY	19.63	22.62	4.17	6.50	10.64	82.35	1.12	37.71	3.27	85.60	**	**
Chat	3.66	4.22	2.89	4.50	**	**	**	**	**	**	**	**
Coffee	12.84	14.79	9.49	14.78	1.38	10.68	1.14	38.38	**	**	**	**
Enset	47.35	54.56	44.97	70.05	.37	2.86	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	1.78	2.05	1.46	2.27	.21	1.63	**	**	**	**	**	**
Other Permanent	1.51	1.74	1.20	1.87	.07	.54	**	**	**	**	**	**
TOTAL PERMANENT	67.16	77.38	60.03	93.50	2.28	17.65	1.85	62.29	**	**	**	**
ALL CROPS	86.79	100.00	64.20	100.00	12.92	100.00	2.97	100.00	3.82	100.00	2.86	100.00

TABLE 2.9.5

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Gedio Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2.63	29.48	.95	14.71	**	**	.14	34.15	**	**	**	**
Teff	**	**	-	-	**	**	-	-	-	-	-	-
Barely	**	**	**	**	**	**	**	**	**	**	**	**
Wheat	**	**	-	-	-	-	-	-	**	**	-	-
Maize	**	**	**	**	**	**	**	**	**	**	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	.09	1.39	**	**	**	**	**	**	-	-
Horse Beans	**	**	.07	1.08	**	**	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	**	**	**	**	**	**	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.02	11.43	.75	11.61	**	**	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	1.02	11.43	.75	11.61	**	**	**	**	**	**	**	**
ALL TEMPORARY	3.87	43.39	1.80	27.86	**	**	**	**	**	**	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	1.72	19.28	1.39	21.52	**	**	**	**	**	**	-	-
Enset	3.18	35.65	3.15	48.76	-	-	**	**	**	**	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	**	**	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	5.05	56.61	4.66	72.14	**	**	**	**	**	**	-	-
ALL CROPS	8.92	100.00	6.46	100.00	.47	100.00	.41	100.00	**	**	**	**

TABLE 2.9.6

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Omo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	19.04	80.51	2.25	57.84	7.98	98.88	**	**
Teff	22.32	14.13	1.88	1.55	17.94	75.86	1.45	37.28	**	**	-	-
Barely	**	**	**	**	**	**	-	-	-	-	**	**
Wheat	3.05	1.93	**	**	**	**	.43	11.05	1.46	18.09	**	**
Maize	11.61	7.35	4.51	3.71	.85	3.59	.30	7.71	5.42	67.16	**	**
Sorghum	.98	.62	.86	.71	-	-	.07	1.80	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	9.21	5.83	3.00	2.47	4.49	18.99	1.32	33.93	**	**	**	**
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	-	-
Haricot Beans	6.64	4.20	2.49	2.05	2.44	10.32	1.32	33.93	**	**	**	**
Field Peas	**	**	**	**	**	**	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	18.07	11.44	17.77	14.64	**	**	.23	5.91	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	4.03	2.55	4.00	3.29	**	**	.01	.26	-	-	-	-
Other Vegetables	13.88	8.79	13.61	11.21	**	**	.22	5.66	-	-	-	-
ALL TEMPORARY	115.86	73.36	**	**	23.60	99.79	3.80	97.69	8.07	100.00	.88	100.00
Chat	**	**	**	**	-	-	.02	.51	-	-	-	-
Coffee	6.70	4.24	6.58	5.42	**	**	.06	1.54	-	-	**	**
Enset	34.19	21.65	34.19	28.16	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	.11	.07	**	**	-	-	-	-	-	-	-	-
Fruits	.39	.25	.39	.32	-	-	-	-	-	-	-	-
Other Permanent	.52	.33	.51	.42	-	-	.01	.26	-	-	-	-
TOTAL PERMANENT	42.08	26.64	41.93	34.54	**	**	.09	2.31	-	-	**	**
ALL CROPS	157.94	100.00	121.41	100.00	23.65	100.00	3.89	100.00	8.07	100.00	.88	100.00

TABLE 2.9.7

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Omo Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	1.12	68.29	**	**	**	**	.05	100.00	.74	100.00	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	-	-	**	**	**	**
Maize	.44	26.83	**	**	**	**	.05	100.00	.20	27.03	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	**	**	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	-	-	-	-
ALL TEMPORARY	1.15	70.12	**	**	**	**	.05	100.00	.74	100.00	**	**
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	-	-	-	-	-	-
ALL CROPS	1.64	100.00	.62	100.00	**	**	.05	100.00	.74	100.00	**	**

124
134

TABLE 2.9.8

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Keficho-Shekicho Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	4.17	50.67	**	**	3.38	99.12	.44	100.00	.33	100.00	-	-
Teff	2.23	27.10	**	**	1.77	51.91	.34	77.27	**	**	-	-
Barely	**	**	-	-	**	**	**	**	-	-	-	-
Wheat	1.15	13.97	-	-	.96	28.15	**	**	**	**	-	-
Maize	**	**	**	**	**	**	-	-	**	**	-	-
Sorghum	**	**	**	**	**	**	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.12	1.46	.12	2.96	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.12	1.46	.12	2.96	-	-	-	-	-	-	-	-
ALL TEMPORARY	4.31	52.37	.14	3.46	3.40	99.71	.44	100.00	.33	100.00	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	**	**	-	-	-	-	-	-	-	-
Enset	3.59	43.62	3.58	88.40	**	**	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	3.92	47.63	3.91	96.54	**	**	-	-	-	-	-	-
ALL CROPS	8.23	100.00	4.05	100.00	3.41	100.00	.44	100.00	.33	100.00	-	-

TABLE 2.9.9

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Bench-Maji Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.98	29.97	**	**	.41	100.00	**	**	.49	98.00	-	-
Teff	**	**	-	-	**	**	-	-	-	-	-	-
Barely	**	**	-	-	-	-	-	-	**	**	-	-
Wheat	.17	5.20	-	-	-	-	-	-	.17	34.00	-	-
Maize	.72	22.02	**	**	.38	92.68	**	**	.26	52.00	-	-
Sorghum	**	**	-	-	-	-	-	-	**	**	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	**	**	-	-	-	-
Horse Beans	**	**	-	-	-	-	**	**	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.36	11.01	.35	15.35	-	-	**	**	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.36	11.01	.35	15.35	-	-	**	**	-	-	-	-
ALL TEMPORARY	1.34	40.98	.36	15.79	.41	100.00	.08	100.00	.49	98.00	-	-
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.34	10.40	.33	14.47	**	**	-	-	**	**	-	-
Enset	1.45	44.34	1.45	63.60	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	.04	1.22	.04	1.75	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.93	59.02	1.92	84.21	**	**	-	-	**	**	**	**
ALL CROPS	3.27	100.00	2.28	100.00	.41	100.00	.08	100.00	.50	100.00	**	**

TABLE 2.9.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Yem Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	3.77	65.22	.11	5.45	2.57	96.62	.36	100.00	.71	98.61	**	**
Teff	2.84	49.13	**	**	2.20	82.71	.28	77.78	**	**	**	**
Barely	.09	1.56	**	**	.07	2.63	**	**	**	**	-	-
Wheat	.32	5.54	**	**	.15	5.64	**	**	.16	22.22	-	-
Maize	.48	8.30	.07	3.47	**	**	.06	16.67	.21	29.17	**	**
Sorghum	**	**	**	**	**	**	**	**	-	-	-	-
Millet	**	**	**	**	**	**	**	**	-	-	-	-
Oats	**	**	-	-	**	**	-	-	-	-	-	-
PULSES	.47	8.13	.38	18.81	.08	3.01	**	**	**	**	-	-
Horse Beans	.29	5.02	.27	13.37	**	**	**	**	**	**	-	-
Chick Peas	.17	2.94	**	**	**	**	-	-	**	**	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	.01	.17	**	**	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.12	2.08	.12	5.94	**	**	-	-	**	**	**	**
Fenugreek	**	**	**	**	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	.01	.17	.01	.50	-	-	-	-	-	-	-	-
Other Vegetables	.11	1.90	.11	5.45	**	**	-	-	**	**	**	**
ALL TEMPORARY	4.37	75.61	.61	30.20	2.66	100.00	.36	100.00	.72	100.00	**	**
Chat	.02	.35	.02	.99	-	-	-	-	-	-	-	-
Coffee	.02	.35	.02	.99	-	-	-	-	**	**	-	-
Enset	1.36	23.53	1.36	67.33	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	-	-	-	-
Other Permanent	.01	.17	.01	.50	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.41	24.39	1.41	69.80	-	-	**	**	**	**	-	-
ALL CROPS	5.78	100.00	2.02	100.00	2.66	100.00	.36	100.00	.72	100.00	**	**

TABLE 2.9.11

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Amaro Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.64	15.84	**	**	**	**	.03	100.00	.43	97.73	**	**
Teff	.42	10.40	**	**	**	**	**	**	.27	61.36	**	**
Barely	**	**	**	**	-	-	-	-	**	**	-	-
Wheat	.05	1.24	-	-	**	**	**	**	.04	9.09	-	-
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	.05	1.24	.05	1.45	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.05	1.24	.05	1.45	-	-	-	-	-	-	-	-
ALL TEMPORARY	.71	17.57	.13	3.78	**	**	.03	100.00	.43	97.73	**	**
Chat	.06	1.49	.05	1.45	-	-	-	-	**	**	-	-
Coffee	.73	18.07	.72	20.93	-	-	-	-	**	**	-	-
Enset	2.46	60.89	2.46	71.51	-	-	-	-	**	**	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.02	.50	.02	.58	-	-	-	-	-	-	-	-
Other Permanent	.06	1.49	.06	1.74	-	-	-	-	-	-	-	-
TOTAL PERMANENT	3.33	82.43	3.31	96.22	-	-	-	-	**	**	-	-
ALL CROPS	4.04	100.00	3.44	100.00	**	**	.03	100.00	.44	100.00	**	**

TABLE 2.9.12

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Burji Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.21	34.43	.13	24.53	**	**	.01	100.00	.02	100.00	**	**
Teff	**	**	**	**	**	**	**	**	**	**	-	-
Barely	.02	3.28	.02	3.77	**	-	**	**	**	**	-	-
Wheat	**	**	**	**	**	-	**	**	**	**	-	-
Maize	.10	16.39	.09	16.98	**	**	**	**	-	-	-	-
Sorghum	.04	6.56	**	**	**	**	**	**	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.03	4.92	.03	5.66	-	-	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.03	4.92	.03	5.66	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.01	1.64	.01	1.89	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	**	**	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	.01	1.64	.01	1.89	-	-	-	-	-	-	-	-
ALL TEMPORARY	.25	40.98	.17	32.08	**	**	.01	100.00	.02	100.00	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.03	4.92	.03	5.66	-	-	-	-	-	-	-	-
Enset	.33	54.10	.33	62.26	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.36	59.02	.36	67.92	-	-	-	-	-	-	-	-
ALL CROPS	.61	100.00	.53	100.00	**	**	.01	100.00	.02	100.00	**	**

TABLE 2.9.13

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Konso Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	5.40	80.84	5.21	80.90	.03	100.00	.15	88.24	-	-	**	**
Teff	.08	1.20	.05	.78	**	**	**	**	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.49	7.34	.45	6.99	**	**	**	**	-	-	-	-
Sorghum	4.83	72.31	4.71	73.14	**	**	.10	58.82	-	-	**	**
Millet	**	**	**	**	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.06	.90	.05	.78	-	-	**	**	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.06	.90	.05	.78	-	-	**	**	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	.01	.15	.01	.16	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	-	-	-	-	-	-
Other Vegetables	.14	2.10	.13	2.02	**	**	**	**	-	-	**	**
ALL TEMPORARY	6.28	94.01	6.06	94.10	.03	100.00	.16	94.12	-	-	**	**
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.21	3.14	**	**	-	-	**	**	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	**	**	-	-	**	**	-	-	-	-
ALL CROPS	6.68	100.00	6.44	100.00	.03	100.00	.17	100.00	-	-	**	**

TABLE 2.9.14

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Derashe Special Wereda Zone

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	**	**	**	**	**	**	-	-	-	-	-	-
Teff	**	**	**	**	-	-	-	-	-	-	-	-
Barely	**	**	**	**	-	-	-	-	-	-	-	-
Wheat	**	**	**	**	-	-	-	-	-	-	-	-
Maize	**	**	**	**	**	**	-	-	-	-	-	-
Sorghum	**	**	**	**	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	**	**	-	-	-	-	-	-
Horse Beans	**	**	**	**	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	-	-	-	-	-	-
Field Peas	**	**	**	**	**	**	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	**	**	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	-	-	-	-
ALL TEMPORARY	**	**	**	**	**	**	-	-	-	-	-	-
Chat	**	**	**	**	-	-	-	-	-	-	-	-
Coffee	.02	5.88	.02	8.00	-	-	-	-	-	-	-	-
Enset	.05	14.71	.05	20.00	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.07	20.59	.07	28.00	-	-	-	-	-	-	-	-
ALL CROPS	.34	100.00	**	**	**	**	-	-	-	-	-	-

TABLE 2.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Gambela

('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	**	**	-	-	**	**	.01	100.00	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	**	**	.01	100.00	-	-	-	-
ALL TEMPORARY	**	**	-	-	**	**	.01	100.00	-	-	-	-
Chat	**	**	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	-	-	-	-
ALL CROPS	**	**	-	-	**	**	.01	100.00	-	-	-	-

TABLE 2.11

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Harari

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	2.36	61.62	.88	59.86	.10	71.43	.57	62.64	.34	66.67	.47	61.04
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	.02	.52	**	**	**	**	**	**	**	**	**	**
Wheat	.07	1.83	**	**	**	**	.01	1.10	.03	5.88	**	**
Maize	.75	19.58	.27	18.37	.03	21.43	.18	19.78	.10	19.61	.17	22.08
Sorghum	1.52	39.69	.60	40.82	.05	35.71	.37	40.66	.21	41.18	.29	37.66
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	**	**	**	**	-	-	**	**	**	**	**	**
PULSES	.02	.52	.01	.68	**	**	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	**	**	-	-	-	-	-	-	**	**
Haricot Beans	.01	.26	.01	.68	-	-	-	-	**	**	**	**
Field Peas	**	**	**	**	-	-	-	-	**	**	-	-
Lentils	**	**	-	-	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.18	4.70	.12	8.16	**	**	.03	3.30	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.18	4.70	.12	8.16	**	**	.03	3.30	**	**	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.14	3.66	.08	5.44	**	**	.02	2.20	.01	1.96	.02	2.60
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	**	**	**	**	**	**	**	**
Other Vegetables	.13	3.39	.08	5.44	**	**	.02	2.20	.01	1.96	.02	2.60
ALL TEMPORARY	2.70	70.50	1.09	74.15	.10	71.43	.62	68.13	.36	70.59	.51	66.23
Chat	1.10	28.72	.36	24.49	.04	28.57	.29	31.87	.15	29.41	.26	33.77
Coffee	.01	.26	.01	.68	-	-	**	**	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	.02	.52	.01	.68	-	-	**	**	**	**	**	**
Other Permanent	**	**	**	**	**	**	-	-	-	-	**	**
TOTAL PERMANENT	1.13	29.50	.38	25.85	.04	28.57	.29	31.87	.15	29.41	.26	33.77
ALL CROPS	3.83	100.00	1.47	100.00	.14	100.00	.91	100.00	.51	100.00	.77	100.00

TABLE 2.12

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Addis Ababa

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	5.76	91.14	.03	100.00	.31	65.96	.03	12.00	5.33	97.09	**	**
Teff	3.62	57.28	**	**	.09	19.15	.02	8.00	3.46	63.02	**	**
Barely	**	**	**	**	**	**	**	**	.02	.36	**	**
Wheat	2.06	32.59	**	**	.18	38.30	.01	4.00	1.85	33.70	**	**
Maize	-	-	-	-	**	**	-	-	**	**	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.45	7.12	**	**	.13	27.66	**	**	.09	1.64	**	**
Horse Beans	.01	.16	**	**	**	**	**	**	**	**	-	-
Chick Peas	**	**	**	**	**	**	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**	-	-
Field Peas	.18	2.85	-	-	.05	10.64	**	**	.04	.73	-	-
Lentils	.06	.95	-	-	.02	4.26	**	**	.03	.55	**	**
Vetch	.20	3.16	**	**	.06	12.77	**	**	.02	.36	**	**
OILSEEDS	**	**	**	**	-	-	-	-	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.11	1.74	-	-	**	**	-	-	.07	1.28	**	**
Fenugreek	.03	.47	-	-	-	-	-	-	.02	.36	**	**
Spices	**	**	-	-	-	-	-	-	**	**	-	-
Potatoes	**	**	-	-	**	**	-	-	**	**	-	-
Other Vegetables	.08	1.27	-	-	**	**	**	**	.05	.91	-	-
ALL TEMPORARY	6.32	100.00	.03	100.00	.47	100.00	**	**	5.49	100.00	**	**
Chat	**	**	-	-	-	-	-	-	**	**	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-
Enset	**	**	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	**	**	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	**	**	-	-
TOTAL PERMANENT	-	-	**	**	-	-	-	-	**	**	-	-
ALL CROPS	6.32	100.00	.03	100.00	.47	100.00	**	**	5.49	100.00	**	**

TABLE 2.13

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Dire Dawa

('000 HA)

TYPE OF CROP	TOTAL		NATURAL		DAP		UREA		DAP+UREA		NAT+COMM	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
CEREALS	.81	75.00	.74	74.75	**	**	.01	100.00	.02	100.00	**	**
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.06	5.56	.06	6.06	-	-	-	-	-	-	**	**
Sorghum	.75	69.44	.68	68.69	**	**	.01	100.00	.02	100.00	**	**
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.01	.93	.01	1.01	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.01	.93	.01	1.01	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.07	6.48	.07	7.07	**	**	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.07	6.48	.07	7.07	**	**	-	-	-	-	-	-
ALL TEMPORARY	.89	82.41	.82	82.83	**	**	.01	100.00	.02	100.00	**	**
Chat	.10	9.26	.09	9.09	**	**	-	-	-	-	**	**
Coffee	.02	1.85	.02	2.02	-	-	-	-	-	-	-	-
Enset	**	**	**	**	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.19	17.59	.17	17.17	-	-	-	-	-	-	**	**
ALL CROPS	1.08	100.00	.99	100.00	.01	100.00	.01	100.00	.02	100.00	**	**

3. QUANTITY OF COMMERCIAL FERTILIZERS APPLIED BY

TYPE

As indicated in Summary Table C, the total quantity of fertilizers applied by the private peasant holders at national level was 3.9 million quintals. It is important to note that the information on fertilizer quantity was collected and estimated for commercial fertilizers only.

Summary Table C: Quantity of Commercial Fertilizers Applied by

Type

Fertilizer type	Quantity ('000 QT)	Percent
DAP	307.58	7.9
UREA	57.23	1.5
DAP + UREA	345.53	8.9
Natural + Commercial	3180.72	81.7
Total	3891.04	100.0

3.1 Quantity of DAP Applied

Out of the total quantity of fertilizer applied the quantity of DAP was 307 thousand quintals (7.9%). The total quantity of DAP applied on temporary and permanent crops was about 305 thousand and 3 thousand quintals, respectively. See the details in Table 3.1

3.2 Quantity of UREA Applied

Of the total quantity of commercial fertilizers applied, the quantity of UREA was 57 thousand quintals (1.5%) (Summary Table C). The total quantity of UREA applied on temporary and permanent crops was about 55 thousand and 2 thousand quintals, respectively.

3.3 Quantity of DAP and UREA Applied in Mix

Out of the total quantity of commercial fertilizers applied, the quantity of the mixture of DAP and UREA was 345 thousand quintals (8.9%). The quantity of the mixture of DAP and UREA applied to temporary and permanent crops was about 344 thousand and 2 thousand quintals, respectively.

3.4 Quantity of Commercial and Natural Fertilizers Applied in Mix

As observed from the survey result, application of a mixture of Commercial and Natural fertilizer is also practiced by private peasant holders. Unlike the previous year the quantity of Commercial and Natural Fertilizers applied in mix was large this year. It was estimated that about 3.2 million quintals of commercial fertilizer mixed with an unknown quantity of natural fertilizer was used.

TABLE 3.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

National

('000 GT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	2,563.72	65.89	254.82	82.85	43.08	75.28	322.43	93.31	1,943.38	61.10
Teff	512.47	13.17	72.98	23.73	15.70	27.43	128.38	37.15	295.41	9.29
Barely	410.00	10.54	46.56	15.14	5.74	10.03	23.51	6.80	334.20	10.51
Wheat	334.84	8.61	66.70	21.69	8.45	14.76	91.29	26.42	168.39	5.29
Maize	835.27	21.47	45.84	14.90	7.35	12.84	61.02	17.66	721.06	22.67
Sorghum	325.72	8.37	3.35	1.09	2.69	4.70	6.02	1.74	313.66	9.86
Millet	117.55	3.02	13.07	4.25	3.08	5.38	11.67	3.38	89.73	2.82
Oats	27.87	.72	6.32	2.05	**	**	.54	.16	20.93	.66
PULSES	516.48	13.27	29.24	9.51	6.09	10.64	10.16	2.94	471.00	14.81
Horse Beans	209.86	5.39	13.05	4.24	1.36	2.38	4.09	1.18	191.36	6.02
Chick Peas	98.59	2.53	8.46	2.75	**	**	1.88	.54	86.39	2.72
Haricot Beans	81.85	2.10	3.88	1.26	2.34	4.09	2.40	.69	73.23	2.30
Field Peas	48.14	1.24	**	**	.02	.03	**	**	47.35	1.49
Lentils	46.23	1.19	3.55	1.15	**	**	**	**	40.93	1.29
Vetch	31.81	.82	**	**	**	**	**	**	31.74	1.00
OILSEEDS	135.73	3.49	5.18	1.68	**	**	1.49	.43	128.70	4.05
Neug	52.24	1.34	**	**	**	**	**	**	51.51	1.62
Lin Seed	54.00	1.39	**	**	**	**	**	**	52.64	1.65
Rape seed	11.44	.29	4.29	1.39	**	**	**	**	6.88	.22
Ground Nuts	8.96	.23	**	**	.01	.02	**	**	8.74	.27
Sun Flower	1.34	.03	**	**	**	**	**	**	**	**
Sesame	7.75	.20	**	**	-	-	**	**	7.72	.24
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	330.75	8.50	15.59	5.07	5.26	9.19	9.79	2.83	300.12	9.44
Fenugreek	26.09	.67	**	**	.01	.02	**	**	24.37	.77
Spices	80.90	2.08	3.70	1.20	1.01	1.76	3.38	.98	72.81	2.29
Potatoes	87.26	2.24	6.43	2.09	**	**	2.64	.76	76.94	2.42
Other Vegetables	136.50	3.51	4.87	1.58	2.99	5.22	2.64	.76	126.00	3.96
ALL TEMPORARY	3,546.68	91.15	304.83	99.11	54.78	95.72	343.87	99.52	2,843.20	89.39
Chat	50.95	1.31	.41	.13	1.28	2.24	.74	.21	48.52	1.53
Coffee	185.53	4.77	1.34	.44	.81	1.42	.50	.14	182.89	5.75
Enset	63.37	1.63	**	**	.08	.14	**	**	62.67	1.97
Cotton	3.95	.10	**	**	**	**	**	**	3.89	.12
Tobacco	1.83	.05	**	**	-	-	-	-	1.83	.06
Fruits	14.35	.37	**	**	.12	.21	.09	.03	13.70	.43
Other Permanent	24.38	.63	.09	.03	.15	.26	**	**	24.02	.76
TOTAL PERMANENT	344.36	8.85	2.75	.89	2.45	4.28	1.66	.48	337.52	10.61
ALL CROPS	3,891.04	100.00	307.58	100.00	57.23	100.00	345.53	100.00	3,180.72	100.00

**FIG. 3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY
TYPE FOR MAJOR CROPS OF PRIVATE PEASANT HOLDINGS ,
NATIONAL, 1998/99(1991 E.C.)**

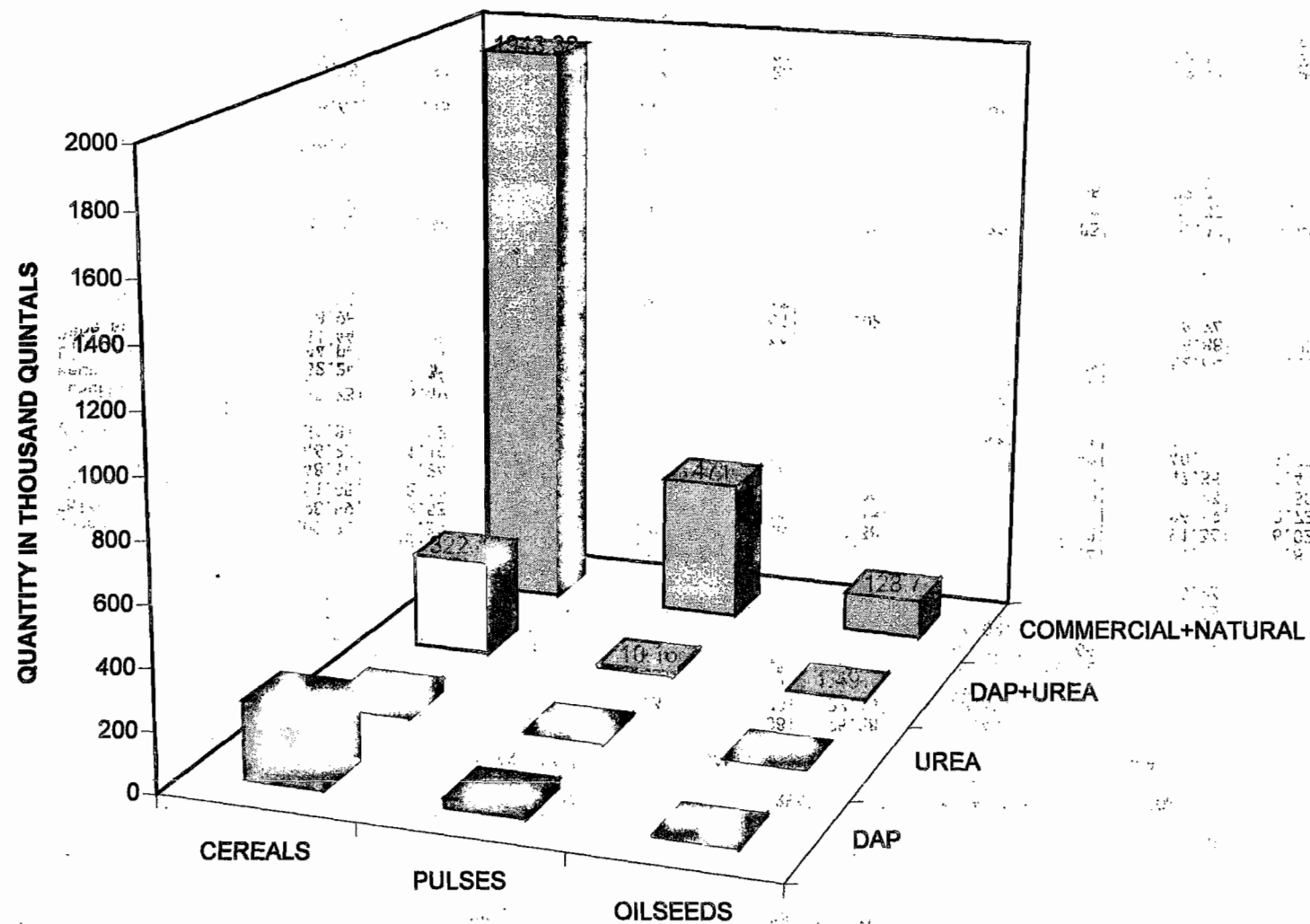


TABLE 3.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED AREA BY REGION AND BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS
1998/99(1991 E.C.)

(000'QT)

REGION	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
TIGRAY	282.92	7.27	3.47	1.13	2.81	4.91	52.98	15.33	223.66	7.03
AFAR	3.03	.08	.01	-	.02	.03	-	-	3.00	.09
AMHARA	1,521.31	39.10	50.29	16.35	20.73	36.22	85.70	24.80	1,364.59	42.90
OROMIYA	1,450.66	37.28	183.59	59.69	14.03	24.52	153.57	44.44	1,099.46	34.57
SOMALIE	22.70	.58	.04	.01	-	-	-	-	22.66	.71
BENSHANGUL-GUMUZ	30.60	.79	1.03	.33	.10	.17	.65	.19	28.82	.91
S.N.N.P.R.	572.77	14.72	68.94	22.41	19.08	33.34	51.64	14.95	433.10	13.62
GAMBELA	1.38	.04	.06	.02	-	-	-	-	1.32	.04
HARARI	3.12	.08	.07	.02	.44	.77	.26	.08	2.35	.07
ADDIS ABABA	1.12	.03	.09	.03	.01	.02	.73	.21	.29	.01
DIRE DAWA	1.45	.04	-	-	-	-	-	-	1.45	.05
TOTAL	3,891.05	100.00	307.59	100.00	57.23	100.00	345.53	100.00	3,180.70	100.00

**FIG. 4 ESTIMATES OF QUANTITY OF DAP AND UREA USED BY REGION,
1998/99(1991 E.C.)**

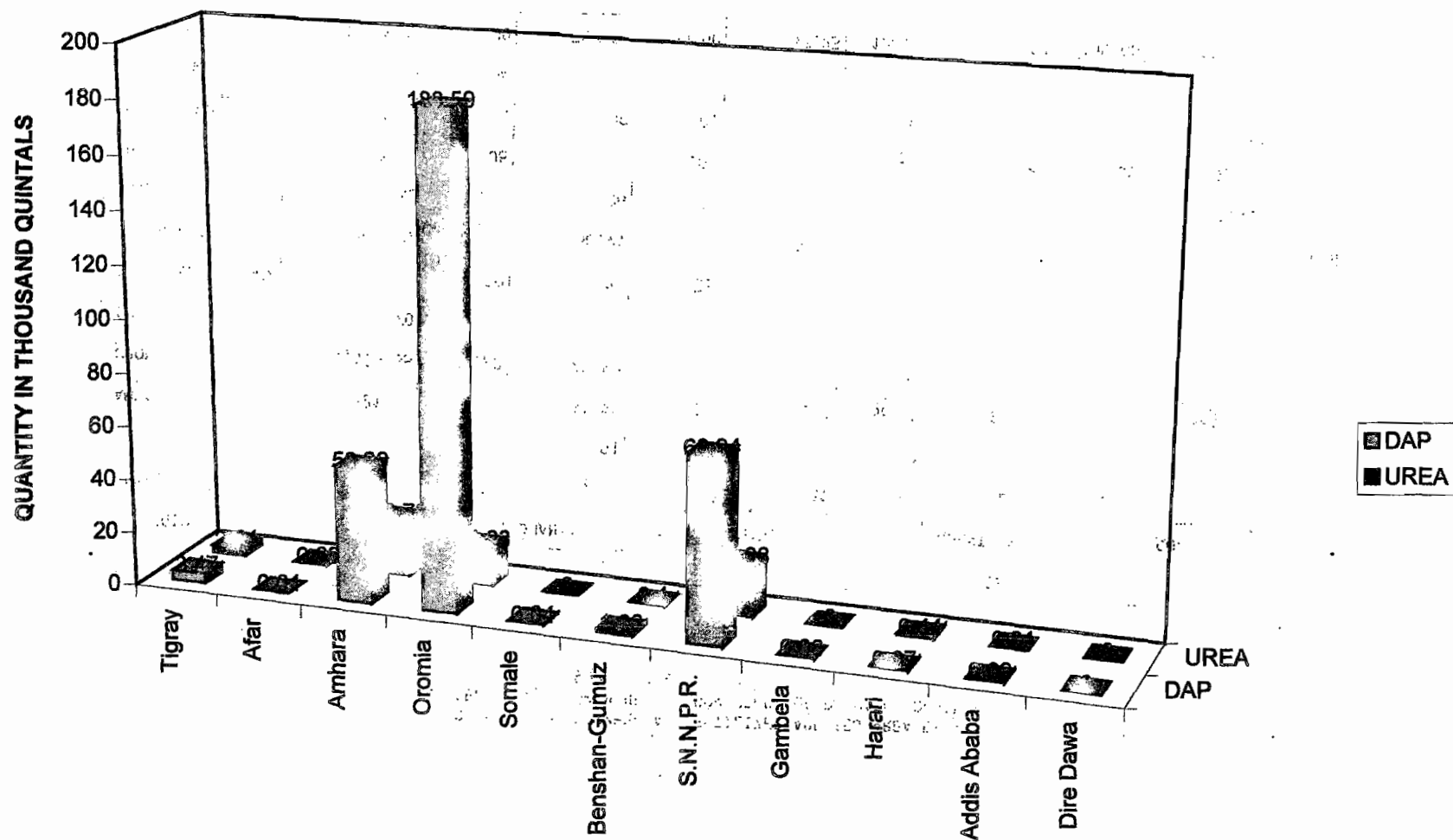


TABLE 3.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Tigray

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	235.45	83.22	3.47	100.00	2.80	99.64	52.04	98.21	177.14	79.20
Teff	58.06	20.52	.81	23.34	**	**	28.86	54.46	27.72	12.39
Barely	38.03	13.44	.44	12.68	**	**	5.06	9.55	32.08	14.34
Wheat	22.81	8.06	1.35	38.90	**	**	5.53	10.44	14000	6.59
Maize	54.91	19.41	.42	12.10	**	**	8.68	16.38	45.71	20.44
Sorghum	39.12	13.83	**	**	**	**	.99	1.87	38.09	17.03
Millet	22.52	7.96	**	**	**	**	2.92	5.51	18.80	8.41
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	35.14	12.42	**	**	**	**	**	**	34.78	15.55
Horse Beans	15.82	5.59	-	-	**	**	**	**	15.47	6.92
Chick Peas	3.69	1.30	**	**	-	-	-	-	3.69	1.65
Haricot Beans	5.97	2.11	-	-	-	-	**	**	5.97	2.67
Field Peas	4.05	1.43	-	-	-	-	-	-	4.05	1.81
Lentils	4.38	1.55	-	-	-	-	**	**	4.37	1.95
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	8.56	3.03	-	-	-	-	**	**	8.39	3.75
Neug	1.20	.42	-	-	-	-	**	**	1.06	.47
Lin Seed	3.49	1.23	-	-	-	-	**	**	3.46	1.55
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	3.69	1.30	-	-	-	-	-	-	3.69	1.65
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.11	1.10	-	-	-	-	**	**	2.67	1.19
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	282.26	99.76	3.47	100.00	2.81	100.00	52.98	99.98	222.98	99.70
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	.50	.18	**	**	**	**	**	**	.49	.22
TOTAL PERMANENT	.68	.24	**	**	**	**	**	**	.67	.30
ALL CROPS	282.94	100.00	3.47	100.00	2.81	100.00	52.99	100.00	223.65	100.00

TABLE 3.3.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	34.22	84.18	**	**	**	**	9.46	99.79	23.75	78.75
Teff	6.93	17.05	**	**	**	**	4.60	48.52	1.90	6.30
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	**	**	-	-
Maize	11.01	27.08	.27	42.19	**	**	3.57	37.66	7.08	23.47
Sorghum	9.24	22.73	-	-	**	**	**	**	8.80	29.18
Millet	6.94	17.07	**	**	**	**	.76	8.02	5.97	19.79
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	**	**
Horse Beans	**	**	-	-	-	-	**	**	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	4.01	9.86	-	-	-	-	**	**	3.99	13.23
Neug	.23	.57	-	-	-	-	-	-	**	**
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	3.58	8.81	-	-	-	-	-	-	3.58	11.87
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	40.47	99.56	**	**	**	**	9.48	100.00	29.98	99.40
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	40.65	100.00	**	**	**	**	9.48	100.00	30.16	100.00

TABLE 3.3.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Central Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	117.96	86.28	**	**	**	**	33.08	97.35	83.14	82.32
Teff	39.52	28.91	**	**	**	**	22.58	66.45	16.07	15.91
Barely	8.59	6.28	**	**	.01	1.27	1.53	4.50	6.96	6.89
Wheat	3.53	2.58	**	**	**	**	1.34	3.94	2.16	2.14
Maize	27.04	19.78	**	**	**	**	5.00	14.71	21.90	21.69
Sorghum	25.95	18.98	**	**	**	**	.54	1.59	25.39	25.14
Millet	13.33	9.75	**	**	**	**	2.09	6.15	10.66	10.56
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	15.93	11.65	-	-	**	**	**	**	15.59	15.44
Horse Beans	8.33	6.09	-	-	**	**	**	**	8.00	7.92
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	5.39	3.94	-	-	-	-	**	**	5.38	5.33
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	1.19	.87	-	-	-	-	**	**	1.06	1.05
Neug	.78	.57	-	-	-	-	**	**	**	**
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.40	1.02	-	-	-	-	**	**	.97	.96
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	136.48	99.82	**	**	**	**	33.98	100.00	100.76	99.77
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	**	**	**	**
TOTAL PERMANENT	**	**	-	-	-	-	**	**	**	**
ALL CROPS	136.72	100.00	**	**	.79	100.00	33.98	100.00	100.99	100.00

TABLE 3.3.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	47.11	78.36	**	**	**	**	4.34	100.00	40.03	75.50
Teff	5.70	9.48	**	**	-	-	**	**	5.32	10.03
Barely	19.02	31.64	**	**	**	**	1.50	34.56	16.93	31.93
Wheat	10.69	17.78	**	**	**	**	2.37	54.61	6.27	11.83
Maize	7.70	12.81	-	-	**	**	**	**	7.59	14.32
Sorghum	1.83	3.04	-	-	-	-	**	**	**	**
Millet	2.17	3.61	-	-	-	-	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	10.73	17.85	-	-	-	-	**	**	10.73	20.24
Horse Beans	4.48	7.45	-	-	-	-	**	**	4.48	8.45
Chick Peas	**	**	-	-	-	-	-	-	2.10	3.96
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	1.69	2.81	-	-	-	-	**	**	1.69	3.19
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	1.50	2.50	-	-	-	-	**	**	1.50	2.83
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	**	**	**	**
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	59.94	99.70	**	**	**	**	4.34	100.00	52.85	99.68
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	**	**	**	**
TOTAL PERMANENT	**	**	-	-	**	**	**	**	**	**
ALL CROPS	60.12	100.00	**	**	**	**	4.34	100.00	53.02	100.00

TABLE 3.3.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Tigray Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	36.17	79.58	**	**	**	**	5.16	99.61	30.23	76.55
Teff	5.92	13.03	**	**	**	**	1.40	27.03	4.43	11.22
Barely	10.42	22.93	**	**	**	**	2.03	39.19	8.19	20.74
Wheat	8.49	18.68	**	**	**	**	1.71	33.01	6.31	15.98
Maize	9.16	20.15	**	**	-	-	**	**	9.14	23.15
Sorghum	2.10	4.62	-	-	**	**	**	**	2.08	5.27
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	6.33	13.93	**	**	-	-	**	**	6.31	15.98
Horse Beans	2.55	5.61	-	-	-	-	**	**	2.54	6.43
Chick Peas	.75	1.65	**	**	-	-	-	-	.75	1.90
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	1.90	4.18	-	-	-	-	**	**	1.89	4.79
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	1.66	3.65	-	-	-	-	-	-	1.66	4.20
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	1.48	3.26	-	-	-	-	-	-	1.48	3.75
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	45.37	99.82	**	**	**	**	5.18	100.00	39.41	99.80
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	45.45	100.00	**	**	**	**	5.18	100.00	39.49	100.00

TABLE 3.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Afar

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	2.34	77.23	**	**	-	-	-	-	2.33	77.41
Teff	.52	17.16	**	**	-	-	**	**	.51	16.94
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	.34	11.22	**	**	-	-	-	-	.34	11.30
Sorghum	1.46	48.18	-	-	-	-	**	**	1.46	48.50
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	.02	100.00	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	.02	100.00	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	2.95	97.36	**	**	.02	100.00	-	-	2.93	97.34
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	3.03	100.00	**	**	.02	100.00	-	-	3.01	100.00

TABLE 3.4.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Zone 1 Zone

('000 QT)

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

TABLE 3.4.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Zone 3 Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1.92	75.00	**	100.00	-	-	-	-	1.91	75.20
Teff	.49	19.14	**	100.00	-	-	**	**	.48	18.90
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	**	**	**	**	-	-	-	-	**	**
Sorghum	1.16	45.31	-	-	-	-	**	**	1.16	45.67
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	.02	100.00	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	.02	100.00	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	2.48	96.88	**	**	.02	100.00	-	-	2.46	96.85
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	-	-	**	**
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	2.56	100.00	**	**	.02	100.00	-	-	2.54	100.00

TABLE 3.5

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Amhara

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1,020.70	67.09	45.62	90.71	18.03	86.98	82.42	96.17	874.63	64.10
Teff	215.66	14.18	17.69	35.18	8.19	39.51	36.98	43.15	152.80	11.20
Barely	190.76	12.54	4.30	8.55	1.36	6.56	2.97	3.47	182.14	13.35
Wheat	118.07	7.76	3.03	6.03	3.16	15.24	23.15	27.01	88.73	6.50
Maize	268.71	17.66	8.43	16.76	**	**	8.69	10.14	250.03	18.32
Sorghum	143.07	9.40	**	**	**	**	**	**	137.41	10.07
Millet	71.75	4.72	10.84	21.55	**	**	7.48	8.73	51.13	3.75
Oats	12.68	.83	-	-	-	-	**	**	12.39	.91
PULSES	258.35	16.98	1.54	3.06	**	**	**	**	254.32	18.64
Horse Beans	99.94	6.57	**	**	**	**	.08	.09	99.70	7.31
Chick Peas	59.35	3.90	1.38	2.74	**	**	**	**	56.30	4.13
Haricot Beans	25.89	1.70	**	**	-	-	**	**	25.76	1.89
Field Peas	31.35	2.06	-	-	-	-	**	**	30.89	2.26
Lentils	21.79	1.43	**	**	**	**	**	**	21.64	1.59
Vetch	20.03	1.32	-	-	-	-	-	-	20.03	1.47
OILSEEDS	60.42	3.97	**	**	**	**	.57	.67	57.75	4.23
Neug	31.89	2.10	**	**	**	**	**	**	31.34	2.30
Lin Seed	23.01	1.51	**	**	**	**	**	**	22.49	1.65
Rape seed	2.58	.17	**	**	**	**	**	**	**	**
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	**	**	**	**	**	**	**	**	**	**
Sesame	**	**	**	**	-	-	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	152.02	9.99	1.35	2.68	**	**	1.63	1.90	148.14	10.86
Fenugreek	16.82	1.11	-	-	-	-	-	-	16.82	1.23
Spices	49.66	3.26	**	**	**	**	**	**	47.34	3.47
Potatoes	58.85	3.87	**	**	**	**	**	**	58.01	4.25
Other Vegetables	26.69	1.75	**	**	**	**	**	**	25.97	1.90
ALL TEMPORARY	1,491.49	98.04	50.27	99.96	20.70	99.86	85.65	99.94	1,334.84	97.82
Chat	3.39	.22	-	-	-	-	**	**	3.39	.25
Coffee	9.44	.62	-	-	-	-	**	**	9.43	.69
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	**	**	**	**	**	**
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	1.69	.11	-	-	-	-	-	-	1.69	.12
Other Permanent	13.60	.89	**	**	**	**	-	-	13.57	.99
TOTAL PERMANENT	29.83	1.96	**	**	**	**	**	**	29.72	2.18
ALL CROPS	1,521.32	100.00	50.29	100.00	20.73	100.00	85.70	100.08	1,364.56	100.00

TABLE 3.5.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Gonder Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	153.32	72.80	**	**	**	**	6.82	98.98	140.91	71.13
Teff	26.41	12.54	**	**	.96	36.78	4.11	59.65	20.88	10.54
Barely	15.77	7.49	**	**	**	**	**	**	13.43	6.78
Wheat	7.36	3.49	**	**	**	**	**	**	6.22	3.14
Maize	39.85	18.92	**	**	**	**	**	**	37.67	19.02
Sorghum	48.32	22.95	-	-	-	-	**	**	48.31	24.39
Millet	15.36	7.29	**	**	**	**	.84	12.19	14.15	7.14
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	20.18	9.58	-	-	-	-	**	**	20.17	10.18
Horse Beans	9.13	4.34	-	-	-	-	**	**	9.12	4.60
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	3.05	1.45	-	-	-	-	-	-	3.05	1.54
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	9.55	4.53	-	-	-	-	-	-	9.55	4.82
Neug	5.92	2.81	-	-	-	-	-	-	5.92	2.99
Lin Seed	2.11	1.00	-	-	-	-	-	-	2.11	1.07
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	23.43	11.13	**	**	**	**	**	**	23.41	11.82
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	10.44	4.96	-	-	**	**	**	**	10.42	5.26
Potatoes	8.71	4.14	**	**	-	-	**	**	8.71	4.40
Other Vegetables	3.75	1.78	**	**	-	-	-	-	3.75	1.89
ALL TEMPORARY	206.48	98.05	**	**	**	**	6.85	99.42	194.04	97.96
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	-	-	**	**	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	**	**	**	**	-	-	**	**
TOTAL PERMANENT	4.11	1.95	**	**	**	**	**	**	4.05	2.04
ALL CROPS	210.59	100.00	**	**	**	**	6.89	100.00	198.09	100.00

TABLE 3.5.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Gonder Zone										
TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	212.55	67.52	2.33	99.57	**	**	19.74	94.95	187.78	64.99
Teff	50.61	16.08	**	**	**	**	9.63	46.32	37.86	13.10
Barely	38.31	12.17	**	**	**	**	**	**	37.15	12.86
Wheat	19.14	6.08	**	**	**	**	4.40	21.16	13.82	4.78
Maize	63.61	20.21	**	**	**	**	**	**	62.70	21.70
Sorghum	14.65	4.65	-	-	-	-	**	**	14.64	5.07
Millet	26.23	8.33	**	**	**	**	4.23	20.35	21.61	7.48
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	43.51	13.82	-	-	-	-	**	**	43.50	15.06
Horse Beans	15.54	4.94	-	-	-	-	**	**	15.53	5.38
Chick Peas	7.34	2.33	-	-	-	-	-	-	7.34	2.54
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	10.22	3.25	-	-	-	-	-	-	10.22	3.54
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	2.24	.71	-	-	-	-	-	-	2.24	.78
OilSEEDS	13.76	4.37	**	**	**	**	**	**	13.73	4.75
Neug	9.35	2.97	-	-	-	-	-	-	9.35	3.24
Lin Seed	3.96	1.26	**	**	-	-	-	-	3.96	1.37
Rape seed	**	**	-	-	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	42.93	13.64	**	**	-	-	**	**	41.86	14.49
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	8.21	2.61	**	**	-	-	**	**	7.19	2.49
Potatoes	30.56	9.71	**	**	-	-	**	**	30.53	10.57
Other Vegetables	3.35	1.06	-	-	-	-	**	**	3.33	1.15
ALL TEMPORARY	312.75	99.35	**	**	**	**	20.79	100.00	286.87	99.29
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	314.81	100.00	**	**	**	**	20.79	100.00	288.93	100.00

TABLE 3.5.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Wolo Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	106.59	65.45	.02	100.00	.74	100.00	8.38	100.00	97.45	63.40
Teff	22.53	13.83	**	**	**	**	**	**	20.56	13.38
Barely	34.26	21.04	-	-	**	**	**	**	33.65	21.89
Wheat	23.94	14.70	**	**	.47	63.51	5.45	65.04	18.00	11.71
Maize	12.54	7.70	**	**	-	-	**	**	11.93	7.76
Sorghum	10.10	6.20	-	-	-	-	**	**	10.09	6.56
Millet	**	**	**	**	-	-	-	-	**	**
Oats	2.19	1.34	-	-	-	-	-	-	2.19	1.42
PULSES	28.64	17.59	**	**	-	-	-	-	28.64	18.63
Horse Beans	11.92	7.32	**	**	-	-	-	-	11.92	7.75
Chick Peas	8.69	5.34	-	-	-	-	-	-	8.69	5.65
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	1.42	.87	-	-	-	-	-	-	1.42	.92
Lentils	4.04	2.48	-	-	-	-	-	-	4.04	2.63
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	6.07	3.73	-	-	**	**	-	-	6.07	3.95
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	5.63	3.46	-	-	-	-	-	-	5.63	3.66
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	**	**	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	18.94	11.63	**	**	-	-	-	-	18.94	12.32
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	10.40	6.39	-	-	-	-	-	-	10.40	6.77
Other Vegetables	4.77	2.93	**	**	-	-	-	-	4.77	3.10
ALL TEMPORARY	160.24	98.40	.02	100.00	.74	100.00	8.38	100.00	151.10	98.30
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	162.85	100.00	.02	100.00	.74	100.00	8.38	100.00	153.71	100.00

TABLE 3.5.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Wolo Zone										
('000 QT)										
TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	158.65	63.83	**	**	**	**	8.44	98.03	146.54	62.03
Teff	24.29	9.77	**	**	**	**	3.66	42.51	20.27	8.58
Barely	41.30	16.62	-	-	-	-	**	**	41.28	17.47
Wheat	25.72	10.35	**	**	**	**	1.71	19.86	23.12	9.79
Maize	27.87	11.21	-	-	**	**	**	**	27.84	11.78
Sorghum	27.90	11.23	**	**	**	**	**	**	22.76	9.63
Millet	**	**	-	-	-	-	-	-	**	**
Oats	8.66	3.48	-	-	-	-	**	**	8.36	3.54
PULSES	60.83	24.47	**	**	**	**	**	**	60.66	25.68
Horse Beans	27.91	11.23	-	-	**	**	-	-	27.90	11.81
Chick Peas	21.13	8.50	-	-	-	-	**	**	20.98	8.88
Haricot Beans	**	**	**	**	-	-	**	**	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	7.81	3.14	-	-	-	-	-	-	7.81	3.31
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	4.58	1.84	-	-	-	-	**	**	4.56	1.93
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	3.31	1.33	-	-	-	-	-	-	3.31	1.40
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	.17	.07	-	-	-	-	**	**	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	22.12	8.90	**	**	-	-	-	-	22.11	9.36
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	5.40	2.17	-	-	-	-	-	-	5.40	2.29
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	6.22	2.50	**	**	-	-	-	-	6.21	2.63
ALL TEMPORARY	246.18	99.05	**	**	**	**	8.61	100.00	233.87	99.00
Chara	**	**	-	-	-	-	-	-	**	**
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	2.37	.95	-	-	-	-	-	-	2.37	1.00
ALL CROPS	248.55	100.00	**	**	**	**	8.61	100.00	236.24	100.00

TABLE 3.5.5

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	92.47	69.97	**	**	.50	100.00	6.46	92.15	83.90	68.31
Teff	22.93	17.35	**	**	.32	64.00	3.06	43.65	19.23	15.66
Barely	26.08	19.73	**	**	**	**	**	**	25.07	20.41
Wheat	15.22	11.52	**	**	**	**	3.25	46.36	11.62	9.46
Maize	11.73	8.88	**	**	-	-	**	**	11.64	9.48
Sorghum	15.60	11.80	**	**	-	-	**	**	15.43	12.56
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	24.43	18.49	**	**	**	**	**	**	24.06	19.59
Horse Beans	11.97	9.06	**	**	**	**	**	**	11.96	9.74
Chick Peas	3.10	2.35	**	**	-	-	**	**	3.00	2.44
Haricot Beans	**	**	-	-	-	-	**	**	**	**
Field Peas	2.67	2.02	-	-	-	-	**	**	2.67	2.17
Lentils	**	**	**	**	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	1.44	1.09	**	**	-	-	**	**	1.44	1.17
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	1.44	1.09	-	-	-	-	-	-	1.44	1.17
Rape seed	**	**	**	**	-	-	**	**	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	7.18	5.43	**	**	**	**	**	**	6.78	5.52
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	-	-	**	**
ALL TEMPORARY	125.52	94.98	**	**	.50	100.00	7.01	100.00	116.18	94.59
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	3.02	2.29	-	-	-	-	-	-	3.02	2.46
TOTAL PERMANENT	6.64	5.02	-	-	-	-	-	-	6.64	5.41
ALL CROPS	132.16	100.00	**	**	.50	100.00	7.01	100.00	122.82	100.00

TABLE 3.5.6

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Gojam Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	100.04	64.19	12.16	93.90	2.04	61.45	18.38	96.28	67.46	55.97
Teff	31.43	20.17	8.47	65.41	1.88	56.63	10.03	52.54	11.05	9.17
Barely	16.89	10.84	.47	3.63	**	**	**	**	15.79	13.10
Wheat	18.03	11.57	1.77	13.67	**	**	7.20	37.72	8.99	7.46
Maize	28.88	18.53	**	**	**	**	**	**	26.83	22.26
Sorghum	4.52	2.90	-	-	-	-	**	**	4.51	3.74
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	34.83	22.35	**	**	**	**	**	**	33.18	27.53
Horse Beans	12.37	7.94	**	**	-	-	-	-	12.37	10.26
Chick Peas	4.72	3.03	**	**	**	**	-	-	3.52	2.92
Haricot Beans	**	**	**	**	-	-	-	-	**	**
Field Peas	**	**	-	-	**	**	**	**	**	**
Lentils	**	**	-	-	**	**	-	-	**	**
Vetch	7.89	5.06	-	-	-	-	-	-	7.89	6.55
OILSEEDS	6.82	4.38	**	**	**	**	**	**	6.32	5.24
Neug	4.16	2.67	**	**	**	**	**	**	3.93	3.26
Lin Seed	2.43	1.56	**	**	-	-	-	-	2.18	1.81
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	**	**	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	10.65	6.83	**	**	**	**	**	**	10.04	8.33
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	**	**	**	**	**	**	**	**
Potatoes	**	**	**	**	**	**	**	**	**	**
Other Vegetables	3.26	2.09	-	-	**	**	**	**	2.87	2.38
ALL TEMPORARY	152.34	97.74	12.94	99.92	3.32	100.00	19.09	100.00	117.00	97.08
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	-	-	**	**	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	1.47	.94	-	-	**	**	-	-	1.47	1.22
TOTAL PERMANENT	3.52	2.26	**	**	**	**	**	**	3.52	2.92
ALL CROPS	155.86	100.00	12.95	100.00	3.32	100.00	19.09	100.00	120.52	100.00

TABLE 3.5.7

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Gojam Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	110.21	62.94	20.03	87.47	5.41	80.15	12.35	95.22	72.41	54.69
Teff	24.30	13.88	5.08	22.18	**	**	4.50	34.70	11.82	8.93
Barely	7.71	4.40	**	**	**	**	**	**	6.34	4.79
Wheat	4.19	2.39	**	**	**	**	**	**	**	**
Maize	51.15	29.21	5.64	24.63	**	**	5.06	39.01	40.19	30.35
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	17.77	10.15	8.17	35.68	**	**	2.18	16.81	6.19	4.67
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	31.60	18.05	**	**	**	**	**	**	30.17	22.79
Horse Beans	7.40	4.23	.01	.04	-	-	**	**	7.33	5.54
Chick Peas	6.08	3.47	**	**	**	**	-	-	4.72	3.56
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	11.69	6.68	**	**	**	**	.49	3.78	9.59	7.24
Neug	7.43	4.24	**	**	-	-	**	**	7.10	5.36
Lin Seed	2.72	1.55	**	**	**	**	**	**	2.45	1.85
Rape seed	**	**	**	**	**	**	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	**	**	**	**	-	-
Sesame	**	**	**	**	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	16.59	9.47	**	**	**	**	**	**	15.28	11.54
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	13.18	7.53	**	**	**	**	**	**	12.54	9.47
Potatoes	1.69	.97	**	**	**	**	**	**	**	**
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	170.09	97.14	22.89	99.96	6.74	99.85	12.96	99.92	127.45	96.25
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	**	**	**	**	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	1.80	1.03	**	**	**	**	-	-	1.78	1.34
TOTAL PERMANENT	5.01	2.86	**	**	**	**	**	**	4.96	3.75
ALL CROPS	175.10	100.00	22.90	100.00	6.75	100.00	12.97	100.00	132.41	100.00

TABLE 3.5.8

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Waghamera Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	23.27	69.63	-	-	.28	100.00	**	**	22.89	69.30
Teff	3.20	9.58	-	-	.08	28.57	**	**	3.11	9.42
Barely	5.51	16.49	-	-	-	-	**	**	5.42	16.41
Wheat	2.99	8.95	-	-	-	-	-	-	2.99	9.05
Maize	3.38	10.11	-	-	-	-	-	-	3.38	10.23
Sorghum	8.02	24.00	-	-	.20	71.43	-	-	7.82	23.68
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	8.67	25.94	-	-	-	-	-	-	8.67	26.25
Horse Beans	1.68	5.03	-	-	-	-	-	-	1.68	5.09
Chick Peas	2.39	7.15	-	-	-	-	-	-	2.39	7.24
Haricot Beans	2.38	7.12	-	-	-	-	-	-	2.38	7.21
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	2.10	6.28	-	-	-	-	-	-	2.10	6.36
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	1.45	4.34	-	-	-	-	**	**	1.44	4.36
Neug	.35	1.05	-	-	-	-	-	-	.35	1.06
Lin Seed	.69	2.06	-	-	-	-	-	-	.69	2.09
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	**	**	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	33.42	100.00	-	-	.28	100.00	**	**	33.03	100.00
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-
ALL CROPS	33.42	100.00	-	-	.28	100.00	**	**	33.03	100.00

TABLE 3.5.9

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Agewawia Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	42.09	71.99	4.85	86.92	1.60	100.00	1.22	93.85	34.41	68.85
Teff	6.15	10.52	1.21	21.68	.47	29.38	**	**	4.28	8.56
Barely	4.78	8.18	**	**	**	**	**	**	3.83	7.66
Wheat	.86	1.47	**	**	**	**	**	**	**	**
Maize	22.38	38.28	.66	11.83	**	**	.59	45.38	21.01	42.04
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	6.65	11.37	2.14	38.35	**	**	**	**	3.45	6.90
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	2.78	4.75	**	**	-	-	-	-	2.44	4.88
Horse Beans	1.65	2.82	**	**	-	-	-	-	1.54	3.08
Chick Peas	1.13	1.93	**	**	-	-	-	-	.90	1.80
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	4.98	8.52	-	-	-	-	**	**	4.97	9.94
Neug	3.15	5.39	-	-	-	-	-	-	3.15	6.30
Lin Seed	.64	1.09	-	-	-	-	-	-	.64	1.28
Rape seed	**	**	-	-	-	-	**	**	**	**
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	8.13	13.90	**	**	**	**	**	**	7.67	15.35
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	**	**	**	**	**	**	.90	1.80
Potatoes	4.54	7.76	**	**	-	-	**	**	4.30	8.60
Other Vegetables	2.42	4.14	-	-	**	**	-	-	2.42	4.84
ALL TEMPORARY	57.98	99.16	5.58	100.00	1.60	100.00	1.30	100.00	49.49	99.02
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	58.47	100.00	5.58	100.00	1.60	100.00	1.30	100.00	49.98	100.00

TABLE 3.5.10

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Oromia Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	21.53	72.88	.14	100.00	-	-	**	**	20.84	72.24
Teff	3.81	12.90	**	**	-	-	**	**	3.73	12.93
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	7.32	24.78	-	-	-	-	**	**	6.84	23.71
Sorghum	8.14	27.56	**	**	-	-	**	**	8.01	27.76
Millet	1.33	4.50	-	-	-	-	-	-	1.33	4.61
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	2.85	9.65	-	-	-	-	-	-	2.85	9.88
Horse Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	.43	1.46	-	-	-	-	-	-	.43	1.49
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	**	**	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	**	**	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.01	6.80	-	-	-	-	-	-	2.01	6.97
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	1.91	6.47	-	-	-	-	-	-	1.91	6.62
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	26.48	89.64	.14	100.00	-	-	**	**	25.79	89.39
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	3.06	10.36	-	-	-	-	**	**	3.06	10.61
ALL CROPS	29.54	100.00	.14	100.00	-	-	**	**	28.85	100.00

TABLE 3.6

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Oromia

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	960.63	66.22	152.13	82.85	9.20	65.53	144.91	94.35	654.41	59.52
Teff	160.56	11.07	32.76	17.84	3.20	22.79	51.86	33.77	72.74	6.62
Barely	147.25	10.15	38.30	20.86	1.81	12.89	11.05	7.19	96.09	8.74
Wheat	155.11	10.69	53.20	28.97	1.35	9.62	49.53	32.25	51.03	4.64
Maize	371.66	25.62	18.58	10.12	2.01	14.32	29.18	19.00	321.90	29.28
Sorghum	93.82	6.47	**	**	.71	5.06	1.99	1.30	89.52	8.14
Millet	17.21	1.19	1.36	.74	.05	.36	1.06	.69	14.75	1.34
Oats	15.02	1.04	6.32	3.44	**	**	**	**	8.38	.76
PULSES	162.46	11.20	20.17	10.99	**	**	4.39	2.86	136.72	12.44
Horse Beans	74.76	5.15	10.39	5.66	**	**	**	**	62.19	5.66
Chick Peas	24.78	1.71	5.26	2.86	**	**	**	**	18.61	1.69
Haricot Beans	23.95	1.65	.93	.51	**	**	.43	.28	22.22	2.02
Field Peas	9.63	.66	-	-	-	-	**	**	9.53	.87
Lentils	19.38	1.34	3.52	1.92	**	**	**	**	14.27	1.30
Vetch	9.96	.69	**	**	-	-	-	-	9.90	.90
OILSEEDS	61.60	4.25	**	**	**	**	**	**	57.41	5.22
Neug	17.29	1.19	**	**	**	**	**	**	17.24	1.57
Lin Seed	26.94	1.86	**	**	**	**	**	**	26.13	2.38
Rape seed	8.71	.60	**	**	-	-	**	**	5.59	.51
Ground Nuts	**	**	-	-	-	-	**	**	**	**
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	69.50	4.79	7.00	3.81	**	**	2.71	1.76	57.24	5.21
Fenugreek	7.04	.49	**	**	**	**	**	**	6.11	.56
Spices	7.98	.55	**	**	**	**	**	**	7.55	.69
Potatoes	11.39	.79	**	**	**	**	**	**	7.68	.70
Other Vegetables	43.09	2.97	**	**	**	**	**	**	35.90	3.27
ALL TEMPORARY	1,254.19	86.46	182.72	99.52	12.95	92.24	152.77	99.47	905.78	82.38
Chat	30.16	2.08	.23	.13	.79	5.63	.52	.34	28.62	2.60
Coffee	133.31	9.19	**	**	**	**	.18	.12	132.54	12.05
Enset	15.63	1.08	**	**	**	**	**	**	15.58	1.42
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	8.00	.55	**	**	**	**	**	**	7.60	.69
Other Permanent	7.68	.53	**	**	-	-	**	**	7.67	.70
TOTAL PERMANENT	196.46	13.54	.89	.48	1.09	7.76	.81	.53	193.69	17.62
ALL CROPS	1,450.65	100.00	183.61	100.00	14.04	100.00	153.58	100.00	1,099.47	100.00

TABLE 3.6.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Welega Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	76.40	55.91	2.37	89.10	.15	100.00	6.20	98.57	67.69	53.06
Teff	4.86	3.56	.31	11.65	**	**	**	**	2.61	2.05
Barely	**	**	-	-	**	**	**	**	**	**
Wheat	**	**	**	**	-	-	**	**	**	**
Maize	53.85	39.40	.62	23.31	**	**	3.42	54.37	49.75	39.00
Sorghum	12.85	9.40	**	**	-	-	**	**	11.85	9.29
Millet	3.66	2.68	**	**	**	**	**	**	2.74	2.15
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	6.83	5.00	**	**	-	-	-	-	6.54	5.13
Horse Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	3.95	2.89	**	**	-	-	-	-	3.66	2.87
Field Peas	**	.14	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	**	**	**	**
Neug	**	**	**	**	-	-	**	**	**	**
Lin Seed	**	**	-	-	-	-	**	**	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	1.97	1.44	**	**	-	-	**	**	1.96	1.54
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	**	**	**	**
Other Vegetables	**	**	**	**	-	-	**	**	**	**
ALL TEMPORARY	85.50	62.56	2.66	100.00	.15	100.00	6.24	99.21	76.46	59.93
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	47.80	34.98	-	-	-	-	**	**	47.80	37.47
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	1.64	1.20	**	**	-	-	**	**	1.60	1.25
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	51.16	37.44	**	**	-	-	**	**	51.12	40.07
ALL CROPS	136.66	100.00	2.66	100.00	.15	100.00	6.29	100.00	127.58	100.00

TABLE 3.6.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Welega Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	69.44	70.25	8.19	94.46	**	**	8.45	99.18	51.84	64.25
Teff	14.76	14.93	5.37	61.94	**	**	2.53	29.69	6.54	8.11
Barely	1.70	1.72	**	**	**	**	**	**	.98	1.21
Wheat	4.96	5.02	**	**	-	-	**	**	3.65	4.52
Maize	37.95	38.40	1.45	16.72	**	**	4.53	53.17	31.73	39.33
Sorghum	5.09	5.15	-	-	-	-	**	**	5.09	6.31
Millet	4.71	4.77	.32	3.69	**	**	**	**	**	**
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	6.25	6.32	**	**	-	-	**	**	6.06	7.51
Horse Beans	3.86	3.91	**	**	-	-	**	**	3.68	4.56
Chick Peas	1.54	1.56	**	**	-	-	**	**	1.53	1.90
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	5.84	5.91	**	**	**	**	**	**	5.50	6.82
Neug	4.49	4.54	**	**	**	**	**	**	4.45	5.52
Lin Seed	**	**	**	**	-	-	-	-	**	**
Rape seed	**	**	**	**	-	-	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.54	4.59	**	**	**	**	**	**	4.51	5.59
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	1.86	1.88	-	-	**	**	-	-	1.86	2.31
Potatoes	**	**	-	-	-	-	**	**	**	**
Other Vegetables	**	**	**	**	-	-	**	**	**	**
ALL TEMPORARY	86.07	87.08	8.67	100.00	**	**	8.51	99.88	67.91	84.17
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	-	-	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	-	-	**	**	**	**
ALL CROPS	98.84	100.00	8.67	100.00	**	**	8.52	100.00	80.68	100.00

TABLE 3.6.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Illibabor Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	51.35	61.09	1.59	100.00	.47	77.05	11.37	100.00	37.91	53.80
Teff	11.59	13.79	1.13	71.07	**	**	3.64	32.01	6.44	9.14
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	**	**	-	-	**	**
Maize	32.21	38.32	.46	28.93	**	**	**	**	23.92	33.94
Sorghum	6.28	7.47	-	-	-	-	-	-	6.28	8.91
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	4.60	5.47	-	-	**	**	-	-	4.60	6.53
Horse Beans	1.64	1.95	-	-	**	**	-	-	1.64	2.33
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	1.33	1.58	-	-	-	-	-	-	1.33	1.89
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	.46	.55	-	-	-	-	-	-	.46	.65
Neug	.41	.49	-	-	-	-	-	-	.41	.58
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	56.76	67.53	1.59	100.00	.47	77.05	11.37	100.00	43.32	61.47
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	22.91	27.26	-	-	**	**	-	-	22.77	32.31
Enset	1.44	1.71	**	**	-	-	**	**	1.44	2.04
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	1.37	1.63	**	**	-	-	-	-	1.37	1.94
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	27.29	32.47	**	**	**	**	**	**	27.15	38.53
ALL CROPS	84.05	100.00	1.59	100.00	**	**	11.37	100.00	70.47	100.00

TABLE 3.6.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Jimma Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	86.03	60.22	12.17	92.76	1.00	100.00	4.96	99.80	67.89	54.86
Teff	20.04	14.03	7.25	55.26	**	**	**	**	11.25	9.09
Barely	6.97	4.88	**	**	-	-	-	-	6.50	5.25
Wheat	6.16	4.31	**	**	-	-	**	**	5.23	4.23
Maize	38.55	26.98	**	**	**	**	4.34	87.32	30.81	24.90
Sorghum	10.78	7.55	**	**	**	**	-	-	10.71	8.65
Millet	3.53	2.47	**	**	-	-	-	-	3.39	2.74
Oats	**	**	**	**	-	-	-	-	-	-
PULSES	11.33	7.93	**	**	-	-	-	-	10.46	8.45
Horse Beans	6.88	4.82	**	**	-	-	-	-	6.63	5.36
Chick Peas	1.61	1.13	**	**	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	2.66	1.86	**	**	-	-	-	-	2.65	2.14
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	**	**	**	**	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	3.43	2.40	-	-	-	-	-	-	3.43	2.77
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	3.43	2.40	-	-	-	-	-	-	3.43	2.77
ALL TEMPORARY	103.45	72.41	13.05	99.47	1.00	100.00	4.96	99.80	84.43	68.23
Chat	**	**	**	**	-	-	-	-	**	**
Coffee	27.13	18.99	**	**	-	-	**	**	27.07	21.87
Enset	6.50	4.55	**	**	-	-	**	**	6.49	5.24
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	-	-	**	**	**	**
Other Permanent	**	**	**	**	-	-	-	-	**	**
TOTAL PERMANENT	39.41	27.59	**	**	-	-	**	**	39.32	31.77
ALL CROPS	142.86	100.00	13.12	100.00	1.00	100.00	4.97	100.00	123.75	100.00

TABLE 3.6.5

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	165.66	69.33	23.12	83.68	1.21	70.76	52.31	95.18	88.99	57.56
Teff	41.08	17.19	5.52	19.98	**	**	21.88	39.81	13.31	8.61
Barely	31.81	13.31	**	**	**	**	9.79	17.81	13.80	8.93
Wheat	40.99	17.15	9.19	33.26	**	**	18.82	34.24	12.66	8.19
Maize	42.51	17.79	**	**	-	-	**	**	40.16	25.98
Sorghum	9.08	3.80	**	**	**	**	**	**	8.88	5.74
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	**	**	**	**
PULSES	43.71	18.29	**	**	**	**	2.51	4.57	36.76	23.78
Horse Beans	19.90	8.33	**	**	-	-	**	**	18.30	11.84
Chick Peas	**	**	**	**	-	-	**	**	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	8.18	3.42	**	**	**	**	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	12.06	5.05	**	**	-	-	**	**	12.01	7.77
Neug	3.92	1.64	-	-	-	-	-	-	3.92	2.54
Lin Seed	4.32	1.81	**	**	-	-	**	**	4.27	2.76
Rape seed	3.82	1.60	-	-	-	-	-	-	3.82	2.47
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	9.11	3.81	**	**	-	-	**	**	8.44	5.46
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	**	**	-	-	**	**	1.18	.76
Other Vegetables	**	**	**	**	-	-	-	-	5.74	3.71
ALL TEMPORARY	230.54	96.48	27.63	100.00	1.71	100.00	54.96	100.00	146.20	94.56
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	8.41	3.52	-	-	-	-	-	-	8.41	5.44
ALL CROPS	238.95	100.00	27.63	100.00	1.71	100.00	54.96	100.00	154.61	100.00

TABLE 3.6.6

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	120.40	80.31	2.36	100.00	**	**	15.80	98.57	101.74	77.65
Teff	22.24	14.83	**	**	**	**	8.34	52.03	12.29	9.38
Barely	50.24	33.51	**	**	-	-	**	**	49.89	38.08
Wheat	22.78	15.19	.75	31.78	**	**	7.27	45.35	14.53	11.09
Maize	11.05	7.37	-	-	-	-	-	-	11.05	8.43
Sorghum	13.32	8.88	-	-	-	-	-	-	13.32	10.17
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	**	**	.66	.50
PULSES	19.97	13.32	-	-	-	-	**	**	19.74	15.07
Horse Beans	8.96	5.98	-	-	-	-	**	**	8.73	6.66
Chick Peas	4.74	3.16	-	-	-	-	-	-	4.74	3.62
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	4.93	3.29	-	-	-	-	**	**	4.93	3.76
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	5.46	3.64	-	-	-	-	-	-	5.46	4.17
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	2.67	1.78	-	-	-	-	-	-	2.67	2.04
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.53	1.69	-	-	-	-	**	**	2.53	1.93
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	**	**	**	**
ALL TEMPORARY	148.36	98.96	2.36	100.00	**	**	16.03	100.00	129.47	98.81
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	149.92	100.00	2.36	100.00	**	**	16.03	100.00	131.03	100.00

TABLE 3.6.7

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Shewa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	48.34	68.87	5.35	58.09	.41	26.80	16.52	86.22	26.06	64.71
Teff	12.14	17.30	1.33	14.44	**	**	8.20	42.80	**	**
Barely	**	**	**	**	**	**	**	**	**	**
Wheat	9.47	13.49	1.00	10.86	**	**	7.34	38.31	1.09	2.71
Maize	20.77	29.59	2.63	28.56	**	**	.50	2.61	17.53	43.53
Sorghum	**	**	**	**	**	**	**	**	**	**
Millet	**	**	**	**	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	11.20	15.96	**	**	**	**	**	**	9.46	23.49
Horse Beans	2.49	3.55	**	**	-	-	**	**	1.77	4.40
Chick Peas	.81	1.15	**	**	**	**	**	**	**	**
Haricot Beans	4.35	6.20	**	**	**	**	**	**	4.09	10.16
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	2.03	2.89	**	**	**	**	**	**	1.54	3.82
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	**	**	**	**	**	**
Fenugreek	**	**	**	**	-	-	**	**	**	**
Spices	**	**	**	**	-	-	-	-	**	**
Potatoes	**	**	**	**	**	**	**	**	**	**
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	69.00	98.30	8.96	97.29	**	**	19.14	99.90	39.37	97.77
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	**	**	-	-	**	**	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	**	**	-	-	-	-	**	**	**	**
TOTAL PERMANENT	**	**	**	**	**	**	**	**	.90	2.23
ALL CROPS	70.19	100.00	9.21	100.00	**	**	19.16	100.00	40.27	100.00

TABLE 3.6.8

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Arsi Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	184.46	71.24	80.75	80.24	**	**	17.18	92.86	84.99	61.93
Teff	18.22	7.04	8.75	8.69	**	**	2.44	13.19	6.40	4.66
Barely	41.08	15.87	26.51	26.34	**	**	**	**	13.34	9.72
Wheat	54.41	21.01	34.10	33.88	**	**	14.05	75.95	6.19	4.51
Maize	58.66	22.65	7.42	7.37	**	**	**	**	50.93	37.11
Sorghum	5.73	2.21	.01	.01	-	-	-	-	5.72	4.17
Millet	-	-	-	-	-	-	-	-	-	-
Oats	6.36	2.46	**	**	-	-	-	-	**	**
PULSES	37.63	14.53	13.30	13.22	**	**	**	**	23.48	17.11
Horse Beans	23.35	9.02	8.72	8.66	**	**	**	**	13.90	10.13
Chick Peas	5.36	2.07	3.27	3.25	-	-	**	**	2.03	1.48
Haricot Beans	**	**	**	**	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	16.13	6.23	**	**	-	-	**	**	12.76	9.30
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	10.35	4.00	**	**	-	-	**	**	9.87	7.19
Rape seed	**	**	**	**	-	-	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	11.92	4.60	**	**	**	**	**	**	7.30	5.32
Fehugreek	**	**	-	-	-	-	**	**	-	-
Spices	**	**	**	**	**	**	-	-	**	**
Potatoes	**	**	**	**	-	-	-	-	**	**
Other Vegetables	**	**	**	**	**	**	**	**	4.92	3.59
ALL TEMPORARY	250.14	96.61	100.56	99.92	2.54	100.00	18.48	99.89	128.53	93.66
Chat	**	**	**	**	-	-	-	-	**	**
Coffee	**	**	**	**	-	-	**	**	**	**
Enset	**	**	**	**	-	-	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	**	**	-	-	-	-	**	**
TOTAL PERMANENT	**	**	**	**	-	-	**	**	**	**
ALL CROPS	258.93	100.00	100.64	100.00	2.54	100.00	18.50	100.00	137.23	100.00

TABLE 3.6.9

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

West Harerge Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	31.69	55.11	**	**	.11	32.35	2.71	82.37	28.15	53.36
Teff	**	**	**	**	**	**	**	**	**	**
Barely	2.09	3.63	-	-	**	**	**	**	2.07	3.92
Wheat	**	**	**	**	-	-	**	**	-	-
Maize	16.63	28.92	.29	25.89	.07	20.59	2.29	69.60	13.98	26.50
Sorghum	8.05	14.00	**	**	**	**	**	**	7.90	14.98
Millet	**	**	-	-	-	-	-	-	**	**
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	4.78	8.31	**	**	**	**	**	**	4.57	8.66
Horse Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	**	**	**	**	**	**	**	**
Field Peas	**	**	-	-	-	-	**	**	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.88	1.53	-	-	-	-	-	-	.88	1.67
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	5.91	10.28	**	**	-	-	.06	1.82	5.84	11.07
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Vegetables	**	**	**	**	-	-	**	**	**	**
ALL TEMPORARY	43.26	75.23	**	**	.12	35.29	2.96	89.97	39.44	74.77
Chat	7.83	13.62	**	**	**	**	**	**	7.37	13.97
Coffee	6.24	10.85	**	**	**	**	.14	4.26	5.79	10.98
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	14.24	24.77	**	**	**	**	.33	10.03	13.31	25.23
ALL CROPS	57.50	100.00	1.12	100.00	.34	100.00	3.29	100.00	52.75	100.00

TABLE 3.6.10

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

East Harerge Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	61.26	55.07	2.05	81.03	1.82	50.56	7.60	88.27	49.79	51.61
Teff	**	**	**	**	**	**	**	**	**	**
Barely	1.91	1.72	**	**	**	**	**	**	**	**
Wheat	2.85	2.56	**	**	**	**	**	**	2.36	2.45
Maize	33.10	29.76	.89	35.18	1.30	36.11	**	**	26.77	27.75
Sorghum	16.59	14.91	**	**	**	**	1.40	16.26	13.79	14.29
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	5.08	4.57	**	**	**	**	**	**	4.16	4.31
Horse Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	**	**	**	**	-	-	**	**
Haricot Beans	**	**	**	**	**	**	**	**	**	**
Field Peas	**	**	-	-	-	-	**	**	**	**
Lentils	**	**	**	**	**	**	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	8.47	7.61	-	-	**	**	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	**	**	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	**	**	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	**	**	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	13.35	12.00	.08	3.16	**	**	**	**	12.27	12.72
Fenugreek	**	**	**	**	**	**	-	-	**	**
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	**	**	**	**	**	**
Other Vegetables	9.54	8.58	**	**	**	**	**	**	9.01	9.34
ALL TEMPORARY	88.16	79.25	2.46	97.23	2.94	81.67	8.27	96.05	74.48	77.20
Chat	13.08	11.76	.07	2.77	**	**	.33	3.83	12.01	12.45
Coffee	10.00	8.99	**	**	-	-	**	**	9.99	10.35
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	23.08	20.75	.07	2.77	**	**	.34	3.95	22.00	22.80
ALL CROPS	111.24	100.00	2.53	100.00	3.60	100.00	8.61	100.00	96.48	100.00

TABLE 3.6.11

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Bale Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	47.57	61.03	12.80	95.81	.97	100.00	1.33	100.00	32.46	52.12
Teff	5.42	6.95	1.20	8.98	**	**	**	**	4.21	6.76
Barely	7.82	10.03	2.79	20.88	**	**	**	**	4.68	7.51
Wheat	12.48	16.01	6.11	45.73	**	**	.99	74.44	4.69	7.53
Maize	13.23	16.97	**	**	-	-	**	**	12.82	20.58
Sorghum	2.83	3.63	**	**	-	-	-	-	2.83	4.54
Millet	-	-	-	-	-	-	-	-	-	-
Oats	5.79	7.43	**	**	**	**	**	**	3.23	5.19
PULSES	10.46	13.42	**	**	**	**	-	-	10.24	16.44
Horse Beans	**	**	**	**	**	**	-	-	**	**
Chick Peas	**	**	**	**	-	-	-	-	**	**
Haricot Beans	**	**	**	**	-	-	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	**	**
Vetch	**	**	**	**	-	-	-	-	**	**
OILSEEDS	8.65	11.10	**	**	-	-	**	**	8.46	13.58
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	7.30	9.37	-	-	-	-	-	-	7.30	11.72
Rape seed	**	**	**	**	-	-	**	**	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	6.63	8.51	**	**	-	-	**	**	6.49	10.42
Fenugreek	1.24	1.59	-	-	-	-	-	-	1.23	1.97
Spices	**	**	**	**	-	-	-	-	**	**
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	4.25	5.45	-	-	-	-	**	**	4.25	6.82
ALL TEMPORARY	73.31	94.06	13.36	100.00	.97	100.00	1.33	100.00	57.65	92.57
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobaco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	4.63	5.94	-	-	-	-	-	-	4.63	7.43
ALL CROPS	77.94	100.00	13.36	100.00	.97	100.00	1.33	100.00	62.28	100.00

TABLE 3.6.12

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Borena Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	18.04	76.41	**	**	**	**	**	**	16.90	75.62
Teff	1.81	7.67	-	-	-	-	**	**	1.39	6.22
Barely	**	**	**	**	-	-	-	-	**	**
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	13.16	55.74	**	**	**	**	.07	13.46	12.46	55.75
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	1.03	4.36	**	**	**	**	-	-	1.02	4.56
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Vegetables	**	**	**	**	**	**	-	-	**	**
ALL TEMPORARY	19.71	83.48	**	**	**	**	**	**	18.56	83.04
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	1.29	5.46	**	**	**	**	-	-	1.27	5.68
Enset	**	1.74	-	-	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	3.90	16.52	**	**	**	**	**	**	3.79	16.96
ALL CROPS	23.61	100.00	**	**	**	**	**	**	22.35	100.00

TABLE 3.7

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Somale

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	17.54	77.27	**	**	-	-	-	-	17.51	77.27
Teff	**	**	-	-	-	-	-	-	**	**
Barely	3.01	13.26	-	-	-	-	-	-	3.01	13.28
Wheat	1.72	7.58	-	-	-	-	-	-	1.72	7.59
Maize	9.05	39.87	**	**	-	-	-	-	9.02	39.81
Sorghum	3.45	15.20	**	**	-	-	-	-	3.45	15.23
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	1.28	5.64	-	-	-	-	-	-	1.28	5.65
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	20.53	90.44	**	**	-	-	-	-	20.50	90.47
Chat	2.11	9.30	-	-	-	-	-	-	2.11	9.31
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	2.17	9.56	-	-	-	-	-	-	2.16	9.53
ALL CROPS	22.70	100.00	**	**	-	-	-	-	22.66	100.00

TABLE 3.7.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Shinela Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.12	31.58	-	-	-	-	-	-	.12	31.58
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.05	13.16	-	-	-	-	-	-	.05	13.16
Sorghum	.07	18.42	-	-	-	-	-	-	.07	18.42
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.03	7.89	-	-	-	-	-	-	.03	7.89
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.03	7.89	-	-	-	-	-	-	.03	7.89
ALL TEMPORARY	.15	39.47	-	-	-	-	-	-	.15	39.47
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.23	60.53	-	-	-	-	-	-	.23	60.53
ALL CROPS	.38	100.00	-	-	-	-	-	-	.38	100.00

TABLE 3.7.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Jijiga Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	16.04	77.86	.04	100.00	-	-	-	-	16.00	77.82
Teff	**	**	-	-	-	-	-	-	**	**
Barely	3.01	14.61	-	-	-	-	-	-	3.01	14.64
Wheat	1.72	8.35	-	-	-	-	-	-	1.72	8.37
Maize	7.65	37.14	.04	100.00	-	-	-	-	7.61	37.01
Sorghum	3.35	16.26	-	-	-	-	-	-	3.35	16.29
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	1.05	5.10	-	-	-	-	-	-	1.05	5.11
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	18.67	90.63	.04	100.00	-	-	-	-	18.63	90.61
Chat	1.93	9.37	-	-	-	-	-	-	1.93	9.39
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.93	9.37	-	-	-	-	-	-	1.93	9.39
ALL CROPS	20.60	100.00	.04	100.00	-	-	-	-	20.56	100.00

TABLE 3.7.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Moyale Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1.38	80.70	-	-	-	-	-	-	1.38	80.70
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	1.35	78.95	-	-	-	-	-	-	1.35	78.95
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	1.71	100.00	-	-	-	-	-	-	**	**
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	-	-
ALL CROPS	1.71	100.00	-	-	-	-	-	-	1.71	100.00

TABLE 3.8

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Benshangul-Gumuz

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	22.23	72.69	**	**	**	**	.58	90.63	20.82	72.27
Teff	2.68	8.76	**	**	**	**	**	**	2.16	7.50
Barely	**	**	**	**	-	-	**	**	**	**
Wheat	**	**	**	**	**	**	**	**	**	**
Maize	12.72	41.60	**	**	**	**	.49	76.56	12.13	42.10
Sorghum	4.52	14.78	-	-	-	-	-	-	4.52	15.69
Millet	1.94	6.34	**	**	**	**	-	-	1.86	6.46
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	2.44	7.98	**	**	-	-	**	**	2.38	8.26
Horse Beans	**	**	**	**	-	-	-	-	**	**
Chick Peas	**	**	**	**	-	-	-	-	**	**
Haricot Beans	1.63	5.33	-	-	-	-	**	**	1.63	5.66
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	2.09	6.83	-	-	-	-	-	-	2.09	7.25
Neug	.58	1.90	-	-	-	-	-	-	.58	2.01
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.52	1.70	-	-	-	-	-	-	.52	1.80
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	.99	3.24	-	-	-	-	-	-	.99	3.44
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.81	9.19	**	**	**	**	**	**	2.51	8.71
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	1.07	3.50	**	**	**	**	**	**	1.07	3.71
Potatoes	**	**	**	**	-	-	**	**	**	**
Other Vegetables	1.32	4.32	**	**	-	-	**	**	1.20	4.17
ALL TEMPORARY	29.57	96.70	**	**	**	**	.64	100.00	27.80	96.49
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	.57	1.86	**	**	-	-	**	**	.57	1.98
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	.10	.33	-	-	-	-	-	-	.10	.35
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	1.01	3.30	**	**	**	**	**	**	1.01	3.51
ALL CROPS	30.58	100.00	**	**	**	**	.64	100.00	28.81	100.00

TABLE 3.8.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Metekel Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	11.08	66.59	**	**	**	**	.37	88.10	9.99	65.77
Teff	1.18	7.09	**	**	-	-	**	**	.72	4.74
Barely	**	**	**	**	-	-	**	**	**	**
Wheat	**	**	**	**	**	**	**	**	**	**
Maize	5.91	35.52	**	**	**	**	.28	66.67	5.58	36.73
Sorghum	2.52	15.14	-	-	-	-	-	-	2.52	16.59
Millet	1.11	6.67	**	**	**	**	-	-	1.03	6.78
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.84	11.06	**	**	-	-	-	-	1.78	11.72
Horse Beans	**	**	**	-	-	-	-	-	**	**
Chick Peas	**	**	**	**	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	1.17	7.03	-	-	-	-	-	-	1.17	7.70
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	.50	3.00	-	-	-	-	-	-	**	**
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.19	13.16	**	**	-	-	**	**	1.89	12.44
Fenugreek	**	**	-	-	-	-	-	-	.05	.33
Spices	.69	4.15	-	-	-	-	-	-	.69	4.54
Potatoes	**	**	**	**	-	-	-	-	**	**
Other Vegetables	1.10	6.61	**	**	-	-	**	**	.98	6.45
ALL TEMPORARY	16.28	97.84	**	**	**	**	.42	100.00	14.83	97.63
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	.33	1.98	-	-	-	-	-	-	.33	2.17
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.36	2.16	-	-	-	-	-	-	.36	2.37
ALL CROPS	16.64	100.00	**	**	**	**	.42	100.00	15.19	100.00

TABLE 3.8.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Asosa Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	7.48	76.33	**	**	**	**	**	**	7.21	75.66
Teff	1.49	15.20	**	**	**	**	**	**	1.43	15.01
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	4.48	45.71	**	**	**	**	**	**	4.27	44.81
Sorghum	1.31	13.37	-	-	-	-	-	-	1.31	13.75
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.70	7.14	-	-	-	-	-	-	.70	7.35
Neug	.23	2.35	-	-	-	-	-	-	.23	2.41
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	.34	3.47	-	-	-	-	-	-	.34	3.57
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.59	6.02	**	**	**	**	**	**	.59	6.19
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	.37	3.78	**	**	**	**	**	**	.37	3.88
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.22	2.24	-	-	-	-	-	-	.22	2.31
ALL TEMPORARY	9.18	93.67	**	**	**	**	**	**	8.91	93.49
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	**	**	**	**	-	-	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	.62	6.33	**	**	**	**	**	**	.62	6.51
ALL CROPS	9.80	100.00	**	**	**	**	**	**	9.53	100.00

TABLE 3.8.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Kemeshi Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	3.66	88.41	-	-	-	-	.04	100.00	3.61	88.70
Teff	**	**	-	-	-	-	-	-	**	**
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	2.33	56.28	-	-	-	-	.04	100.00	2.28	56.02
Sorghum	.69	16.67	-	-	-	-	-	-	.69	16.95
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	.09	2.17	-	-	-	-	**	**	.09	2.21
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.22	5.31	-	-	-	-	-	-	.22	5.41
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	.15	3.62	-	-	-	-	-	-	.15	3.69
Castor Bean	-	-	-	-	-	-	**	**	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	**	**	-	-	-	-	**	**	**	**
Potatoes	**	**	-	-	-	-	**	**	-	-
Other Vegetables	**	**	-	-	-	-	**	**	**	**
ALL TEMPORARY	4.11	99.28	-	-	-	-	**	**	4.04	99.26
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	4.14	100.00	-	-	-	-	**	**	4.07	100.00

TABLE 3.9

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 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	300.10	52.40	52.70	76.44	12.64	66.21	41.64	80.60	193.14	44.59
Teff	74.43	12.99	21.28	30.87	3.59	18.81	10.27	19.88	39.30	9.07
Barely	30.75	5.37	3.48	5.05	2.10	11.00	4.37	8.46	20.80	4.80
Wheat	36.43	6.36	8.97	13.01	2.73	14.30	12.75	24.68	11.99	2.77
Maize	116.34	20.31	18.24	26.46	3.51	18.39	13.91	26.93	80.68	18.63
Sorghum	38.02	6.64	**	**	**	**	**	**	37.18	8.58
Millet	4.12	.72	**	**	**	**	**	**	**	**
Oats	**	**	**	**	-	-	-	-	**	**
PULSES	56.19	9.81	7.45	10.81	3.44	18.02	4.36	8.44	40.95	9.45
Horse Beans	18.85	3.29	2.52	3.66	1.04	5.45	1.79	3.46	13.50	3.12
Chick Peas	10.26	1.79	1.76	2.55	**	**	**	**	7.34	1.69
Haricot Beans	23.68	4.13	2.93	4.25	1.97	10.32	1.84	3.56	16.94	3.91
Field Peas	**	**	**	**	**	**	-	-	**	**
Lentils	**	**	**	**	-	-	**	**	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	**	**	-	-	**	**	**	**	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	**	**	**	**	**	**	**	**	**	**
Rape seed	**	**	**	**	-	-	-	-	**	**
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	**	**	**	**	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	101.23	17.67	6.98	10.12	1.77	9.27	4.91	9.50	87.59	20.22
Fenugreek	.77	.13	**	**	**	**	**	**	**	**
Spices	21.39	3.73	2.94	4.26	**	**	1.70	3.29	16.27	3.76
Potatoes	16.64	2.91	**	**	**	**	**	**	11.06	2.55
Other Vegetables	62.43	10.90	**	**	**	**	**	**	60.05	13.86
ALL TEMPORARY	459.80	80.28	67.13	97.37	17.85	93.50	50.91	98.55	323.94	74.79
Chat	14.33	2.50	**	**	**	**	.16	.31	13.61	3.14
Coffee	42.07	7.35	.97	1.41	**	**	**	**	40.21	9.28
Enset	47.73	8.33	**	**	**	**	**	**	47.08	10.87
Cotton	**	**	-	-	**	**	-	-	**	**
Tobacco	**	**	**	**	-	-	-	-	**	**
Fruits	**	**	**	**	.06	.31	.03	.06	**	**
Other Permanent	2.30	.40	.09	.13	**	**	**	**	1.98	.46
TOTAL PERMANENT	112.96	19.72	1.81	2.63	1.24	6.50	**	**	109.17	25.21
ALL CROPS	572.76	100.00	68.94	100.00	19.09	100.00	51.66	100.00	433.11	100.00

TABLE 3.9.1

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Gurage Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	66.95	50.98	12.34	68.78	3.32	70.79	10.34	69.03	40.94	43.69
Teff	11.68	8.89	3.00	16.72	**	**	**	**	5.62	6.00
Barely	9.13	6.95	2.18	12.15	**	**	2.61	17.42	2.87	3.06
Wheat	11.06	8.42	3.79	21.13	**	**	2.62	17.49	**	**
Maize	26.19	19.94	**	**	**	**	2.83	18.89	19.79	21.12
Sorghum	8.89	6.77	**	**	-	-	**	**	8.64	9.22
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	14.80	11.27	1.60	8.92	**	**	**	**	10.99	11.73
Horse Beans	7.63	5.81	1.19	6.63	**	**	**	**	5.16	5.51
Chick Peas	2.54	1.93	**	**	**	**	**	**	**	**
Haricot Beans	**	**	**	**	-	-	**	**	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	**	**	-	-	-	-	**	**
Vetch	**	**	-	-	-	-	-	-	**	**
OILSEEDS	**	**	**	**	-	-	-	-	**	**
Neug	**	**	-	-	-	-	-	-	**	**
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	-	-	-	-	-	-	**	**
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	27.50	20.94	4.00	22.30	**	**	3.11	20.76	19.69	21.01
Fenugreek	**	**	-	-	-	-	**	**	**	**
Spices	17.42	13.26	**	**	**	**	**	**	13.79	14.72
Potatoes	**	**	**	**	**	**	**	**	**	**
Other Vegetables	5.28	4.02	-	-	**	**	**	**	5.11	5.45
ALL TEMPORARY	110.93	84.47	17.94	100.00	4.69	100.00	14.98	100.00	73.30	78.23
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	4.04	3.08	-	-	**	**	-	-	4.04	4.31
Enset	8.99	6.85	-	-	**	**	**	**	8.99	9.59
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	20.40	15.53	-	-	**	**	**	**	20.40	21.77
ALL CROPS	131.33	100.00	17.94	100.00	4.69	100.00	14.98	100.00	93.70	100.00

TABLE 3.9.2

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Hadiya Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	52.31	74.53	12.83	79.25	4.49	83.77	17.16	92.21	17.83	59.41
Teff	9.56	13.62	2.94	18.16	1.55	28.92	5.01	26.92	**	**
Barely	4.37	6.23	1.06	6.55	**	**	**	**	1.55	5.16
Wheat	12.34	17.58	3.84	23.72	.94	17.54	7.43	39.92	**	**
Maize	20.20	28.78	4.96	30.64	**	**	**	**	10.68	35.59
Sorghum	4.56	6.50	.03	.19	**	**	**	**	4.52	15.06
Millet	**	**	**	**	**	**	**	**	**	**
Oats	**	**	**	**	-	-	-	-	-	-
PULSES	6.48	9.23	2.09	12.91	**	**	1.29	6.93	2.35	7.83
Horse Beans	3.26	4.64	.84	5.19	**	**	**	**	**	**
Chick Peas	1.79	2.55	1.18	7.29	**	**	**	**	**	**
Haricot Beans	1.43	2.04	**	**	**	**	**	**	**	**
Field Peas	**	**	-	-	**	**	-	-	-	-
Lentils	**	**	**	**	-	-	**	**	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	**	**	**	**	**	**	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	**	**	**	**	-	-
Rape seed	**	**	**	**	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.12	5.87	**	**	**	**	**	**	2.64	8.80
Fenugreek	**	**	**	**	-	-	-	-	-	-
Spices	**	**	**	**	**	**	**	**	-	-
Potatoes	.87	1.24	**	**	**	**	**	**	**	**
Other Vegetables	2.12	3.02	**	**	-	-	**	**	2.11	7.03
ALL TEMPORARY	62.91	89.63	16.13	99.63	5.35	99.81	18.60	99.95	22.82	76.04
Chat	**	**	**	**	-	-	**	**	**	**
Coffee	2.63	3.75	**	**	**	**	**	**	2.57	8.56
Enset	3.59	5.11	-	-	-	-	-	-	3.59	11.96
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	-	-	-	-	-	-	**	**
Fruits	**	**	**	**	-	-	**	**	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	7.28	10.37	**	**	**	**	**	**	7.19	23.96
ALL CROPS	70.19	100.00	16.19	100.00	5.36	100.00	18.61	100.00	30.01	100.00

TABLE 3.9.3

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Kembata Alaba Tembaro Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	24.95	67.14	8.14	84.27	3.03	77.30	4.53	76.39	9.26	52.49
Teff	8.38	22.55	4.29	44.41	**	**	1.96	33.05	1.56	8.84
Barely	**	**	**	**	**	**	**	**	**	**
Wheat	5.46	14.69	1.26	13.04	**	**	2.04	34.40	1.00	5.67
Maize	7.66	20.61	2.03	21.01	**	**	.24	4.05	4.67	26.47
Sorghum	**	**	**	**	**	**	**	**	1.22	6.92
Millet	1.05	2.83	**	**	**	**	**	**	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	3.17	8.53	.73	7.56	**	**	.47	7.93	1.58	8.96
Horse Beans	1.34	3.61	.48	4.97	**	**	**	**	**	**
Chick Peas	**	**	**	**	**	**	**	**	**	**
Haricot Beans	1.06	2.85	**	**	**	**	**	**	.79	4.48
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.97	13.37	.76	7.87	**	**	**	**	2.81	15.93
Fenugreek	**	**	**	**	**	**	-	-	-	-
Spices	1.11	2.99	.43	4.45	**	**	**	**	**	**
Potatoes	**	**	**	**	**	**	**	**	**	**
Other Vegetables	1.51	4.06	**	**	**	**	**	**	1.50	8.50
ALL TEMPORARY	33.09	89.05	9.63	99.69	3.92	100.00	5.89	99.33	13.65	77.38
Chat	**	**	**	**	-	-	**	**	**	**
Coffee	.51	1.37	**	**	**	**	**	**	**	**
Enset	2.36	6.35	**	**	-	-	**	**	2.36	13.38
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	**	**	**	**	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	**	**	**	**	**	**	-	-	**	**
TOTAL PERMANENT	4.07	10.95	.03	.31	**	**	**	**	3.99	22.62
ALL CROPS	37.16	100.00	9.66	100.00	3.92	100.00	5.93	100.00	17.64	100.00

TABLE 3.9.4

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Sidama Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	29.83	43.82	6.73	59.98	**	**	1.12	31.55	21.32	41.92
Teff	**	**	**	**	-	-	**	**	**	**
Barely	1.00	1.47	-	-	-	-	-	-	1.00	1.97
Wheat	**	**	**	**	**	**	-	-	-	-
Maize	28.68	42.13	6.68	59.54	**	**	1.05	29.58	20.30	39.91
Sorghum	**	**	**	**	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	5.99	8.80	**	**	**	**	**	**	2.58	5.07
Horse Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	5.84	8.58	**	**	**	**	**	**	2.43	4.78
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	4.17	6.13	**	**	**	**	**	**	2.41	4.74
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	4.17	6.13	**	**	**	**	**	**	2.41	4.74
ALL TEMPORARY	39.99	58.74	9.51	84.76	**	**	2.90	81.69	26.31	51.73
Chat	8.53	12.53	**	**	**	**	**	**	7.84	15.41
Coffee	14.40	21.15	**	**	**	**	**	**	12.67	24.91
Enset	4.00	5.88	**	**	**	**	**	**	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	**	**	.09	.80	**	**	**	**	**	**
TOTAL PERMANENT	28.09	41.26	1.71	15.24	1.18	48.76	**	**	24.55	48.27
ALL CROPS	68.08	100.00	11.22	100.00	2.42	100.00	3.55	100.00	50.86	100.00

TABLE 3.9.5

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Gedio Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1.59	21.26	**	**	**	**	**	**	1.07	15.55
Teff	**	**	**	**	-	-	-	-	-	-
Barely	**	**	**	**	-	-	**	**	**	**
Wheat	**	**	-	-	-	-	**	**	**	**
Maize	1.17	15.64	**	**	**	**	**	**	.77	11.19
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	**	**	**	**
Horse Beans	**	**	**	**	-	-	-	-	**	**
Chick Peas	**	**	**	**	-	-	-	-	-	-
Haricot Beans	**	**	**	**	-	-	**	**	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	**	**	**	**	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	**	**	**	**	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	**	**	**	**	**	**
ALL TEMPORARY	3.21	42.91	**	**	**	**	**	**	2.67	38.81
Chat	**	**	**	**	-	-	-	-	**	**
Coffee	3.12	41.71	**	**	**	**	**	**	3.10	45.06
Enset	.81	10.83	-	-	**	**	**	**	.80	11.63
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	**	**	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	4.27	57.09	**	**	**	**	**	**	4.21	61.19
ALL CROPS	7.48	100.00	**	**	**	**	**	**	6.88	100.00

TABLE 3.9.6

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

North Omo Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	90.72	46.59	**	**	**	**	7.29	99.73	71.74	41.44
Teff	37.31	19.16	**	**	**	**	**	**	26.09	15.07
Barely	**	**	**	**	-	-	-	-	**	**
Wheat	**	**	**	**	-	-	**	**	**	**
Maize	23.21	11.92	**	**	.04	1.81	6.20	84.82	16.18	9.35
Sorghum	11.91	6.12	-	-	**	**	**	**	11.65	6.73
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	15.85	8.14	**	**	**	**	**	**	13.64	7.88
Horse Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	11.26	5.78	**	**	**	**	**	**	9.27	5.35
Field Peas	**	**	**	**	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	54.65	28.06	**	**	**	**	-	-	54.24	31.33
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	**	**	-	-	**	**
Potatoes	9.02	4.63	-	-	-	-	-	-	9.02	5.21
Other Vegetables	44.80	23.01	**	**	**	**	-	-	44.39	25.64
ALL TEMPORARY	161.47	82.92	**	**	**	**	7.31	100.00	139.87	80.79
Chat	**	**	-	-	**	**	-	-	-	-
Coffee	13.90	7.14	**	**	**	**	-	-	13.89	8.02
Enset	16.85	8.65	-	-	-	-	-	-	16.85	9.73
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	**	**	-	-	**	**
TOTAL PERMANENT	33.26	17.08	**	**	**	**	-	-	33.25	19.21
ALL CROPS	194.73	100.00	**	**	**	**	7.31	100.00	173.12	100.00

TABLE 3.9.7

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

South Omo Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	5.86	62.74	.01	100.00	-	-	.10	100.00	5.75	62.30
Teff	.80	8.57	-	-	-	-	-	-	.80	8.67
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	**	**	**	**
Maize	1.32	14.13	.01	100.00	-	-	**	**	1.27	13.76
Sorghum	3.25	34.80	-	-	-	-	-	-	3.25	35.21
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	**	**
Horse Beans	**	**	-	-	-	-	-	-	**	**
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	**	**	-	-	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	**	**
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Vegetables	**	**	**	**	-	-	-	-	**	**
ALL TEMPORARY	7.36	78.80	.01	100.00	-	-	.10	100.00	7.25	78.55
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	1.52	16.27	-	-	-	-	-	-	1.52	16.47
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	1.98	21.20	-	-	-	-	-	-	1.98	21.45
ALL CROPS	9.34	100.00	.01	100.00	-	-	.10	100.00	9.23	100.00

TABLE 3.9.8

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Keficho-Shekicho Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	11.91	37.06	1.02	100.00	**	**	**	**	10.51	34.19
Teff	4.09	12.73	.49	48.04	**	**	**	**	3.31	10.77
Barely	1.15	3.58	**	**	-	-	-	-	1.14	3.71
Wheat	**	**	.04	3.92	-	-	-	-	**	**
Maize	2.68	8.34	**	**	-	-	**	**	2.10	6.83
Sorghum	2.35	7.31	**	**	-	-	-	-	2.35	7.64
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	7.51	23.37	-	-	-	-	-	-	7.51	24.43
Horse Beans	3.57	11.11	-	-	-	-	-	-	3.57	11.61
Chick Peas	2.73	8.49	-	-	-	-	-	-	2.73	8.88
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	2.31	7.19	-	-	-	-	-	-	2.31	7.51
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	**	**	-	-	-	-	-	-	**	**
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Vegetables	1.34	4.17	-	-	-	-	-	-	1.34	4.36
ALL TEMPORARY	21.86	68.01	1.02	100.00	**	**	**	**	20.46	66.56
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	1.18	3.67	-	-	-	-	-	-	1.18	3.84
Enset	8.84	27.50	**	**	-	-	-	-	8.84	28.76
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	10.28	31.99	**	**	-	-	-	-	10.28	33.44
ALL CROPS	32.14	100.00	1.02	100.00	**	**	**	**	30.74	100.00

TABLE 3.9.9

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Bench-Maji Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	3.03	50.42	.02	100.00	**	**	.15	100.00	2.86	49.40
Teff	.50	8.32	-	-	-	-	-	-	.50	8.64
Barely	.43	7.15	-	-	-	-	**	**	.43	7.43
Wheat	**	**	-	-	-	-	**	**	**	**
Maize	1.22	20.30	.02	100.00	**	**	.03	20.00	1.17	20.21
Sorghum	.66	10.98	-	-	-	-	-	-	.66	11.40
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.42	6.99	-	-	**	**	-	-	.38	6.56
Horse Beans	.27	4.49	-	-	**	**	-	-	**	**
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	3.92	65.22	.02	100.00	**	**	.15	100.00	3.71	64.08
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	1.64	27.29	**	**	-	-	**	**	1.63	28.15
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	2.09	34.78	-	-	-	-	**	**	2.08	35.92
ALL CROPS	6.01	100.00	**	**	**	**	.15	100.00	5.79	100.00

TABLE 3.9.10

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Yem Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	3.67	68.09	.60	92.31	.15	93.75	.11	100.00	2.82	62.95
Teff	.78	14.47	.41	63.08	.10	62.50	**	**	.24	5.36
Barely	.46	8.53	.02	3.08	**	**	-	-	.42	9.38
Wheat	.62	11.50	**	**	**	**	.01	9.09	.57	12.72
Maize	1.36	25.23	**	**	**	**	.07	63.64	1.14	25.45
Sorghum	.44	8.16	-	-	**	**	-	-	.44	9.82
Millet	**	**	**	**	**	**	-	-	-	-
Oats	**	**	-	-	-	-	-	-	**	**
PULSES	.88	16.33	**	**	**	**	-	-	.83	18.53
Horse Beans	.41	7.61	**	**	**	**	-	-	.40	8.93
Chick Peas	.41	7.61	**	**	-	-	-	-	.38	8.48
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	.06	1.11	**	**	-	-	-	-	.05	1.12
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	**	**	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	**	**	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.14	2.60	**	**	-	-	-	-	.14	3.13
Fenugreek	**	**	-	-	-	-	-	-	**	**
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	-	-	-	-	**	**
Other Vegetables	.12	2.23	**	**	-	-	-	-	.12	2.68
ALL TEMPORARY	4.70	87.20	.65	100.00	.15	93.75	.11	100.00	3.80	84.82
Chat	**	**	-	-	-	-	-	-	**	**
Coffee	.20	3.71	-	-	-	-	**	**	.20	4.46
Enset	.45	8.35	-	-	-	-	-	-	.45	10.04
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	**	**	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.69	12.80	-	-	**	**	**	**	.68	15.18
ALL CROPS	5.39	100.00	.65	100.00	.16	100.00	.11	100.00	4.48	100.00

TABLE 3.9.11

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Amaro Special Wereda Zone

(*000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.33	42.86	**	**	**	**	.04	100.00	.27	38.03
Teff	.17	22.08	**	**	**	**	**	**	.13	18.31
Barely	.06	7.79	-	-	-	-	-	-	.06	8.45
Wheat	.01	1.30	-	-	-	-	**	**	**	**
Maize	.05	6.49	**	**	-	-	**	**	**	**
Sorghum	.04	5.19	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.21	27.27	-	-	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	**	**
Haricot Beans	.12	15.58	-	-	-	-	**	**	**	**
Field Peas	.03	3.90	-	-	-	-	-	-	**	**
Lentils	.03	3.90	-	-	-	-	-	-	**	**
Vetch	.03	3.90	-	-	-	-	-	-	**	**
OILSEEDS	.02	2.60	-	-	-	-	-	-	**	**
Neug	.02	2.60	-	-	-	-	-	-	**	**
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.01	1.30	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.01	1.30	-	-	-	-	-	-	**	**
ALL TEMPORARY	.57	74.03	**	**	**	**	.04	100.00	**	**
Chat	.02	2.60	-	-	-	-	**	**	**	**
Coffee	.07	9.09	-	-	-	-	**	**	.07	9.86
Enset	.11	14.29	-	-	-	-	**	**	.11	15.49
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.20	25.97	-	-	-	-	**	**	.20	28.17
ALL CROPS	.77	100.00	**	**	**	**	.04	100.00	.71	100.00

TABLE 3.9.12

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Burji Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1.17	71.34	**	**	-	-	**	**	1.16	71.17
Teff	.16	9.76	**	**	**	**	**	**	.16	9.82
Barely	.22	13.41	**	**	-	-	**	**	.22	13.50
Wheat	.29	17.68	**	**	**	**	**	**	.28	17.18
Maize	.28	17.07	**	**	**	**	-	-	.28	17.18
Sorghum	.22	13.41	**	**	**	**	-	-	.22	13.50
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	.39	23.78	-	-	-	-	-	-	.39	23.93
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.35	21.34	-	-	-	-	-	-	.35	21.47
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	-	-	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	-	-	-	-	-	-	**	**
ALL TEMPORARY	1.61	98.17	**	**	-	-	**	**	1.60	98.16
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	1.64	100.00	**	**	-	-	**	**	1.63	100.00

TABLE 3.9.13

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Konso Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	5.77	91.88	-	-	.13	100.00	-	-	5.63	91.84
Teff	.57	9.08	**	**	**	**	-	-	.51	8.32
Barely	.13	2.07	-	-	-	-	-	-	.13	2.12
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	1.54	24.52	-	-	**	**	-	-	1.54	25.12
Sorghum	3.49	55.57	**	**	**	**	-	-	3.41	55.63
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	**	**	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	**	**	-	-	**	**
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	**	**	-	-	-	-	-	-	**	**
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.18	2.87	**	**	**	**	-	-	.17	2.77
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	**	**	-	-	-	-	**	**
Other Vegetables	.16	2.55	**	**	**	**	-	-	.15	2.45
ALL TEMPORARY	6.05	96.34	**	**	.13	100.00	-	-	5.90	96.25
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	**	**	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	**	**	-	-	**	**	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	**	**	-	-	**	**	-	-	**	**
ALL CROPS	6.28	100.00	**	**	.13	100.00	-	-	6.13	100.00

TABLE 3.9.14

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Derashe Special Wereda Zone

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1.99	89.24	**	**	-	-	-	-	1.99	89.24
Teff	.30	13.45	-	-	-	-	-	-	.30	13.45
Barely	.15	6.73	-	-	-	-	-	-	.15	6.73
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.77	34.53	**	**	-	-	-	-	.77	34.53
Sorghum	.77	34.53	-	-	-	-	-	-	.77	34.53
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	**	**	-	-	-	-	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	**	**	-	-	-	-	-	-	**	**
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	**	**	-	-	-	-	-	-	**	**
Lentils	**	**	-	-	-	-	-	-	**	**
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.05	2.24	-	-	-	-	-	-	.05	2.24
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	.05	2.24	-	-	-	-	-	-	.05	2.24
ALL TEMPORARY	2.11	94.62	**	**	-	-	-	-	2.11	94.62
Chat.	**	**	-	-	-	-	-	-	**	**
Coffee	.07	3.14	-	-	-	-	-	-	.07	3.14
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	**	**	-	-	-	-	-	-	**	**
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.12	5.38	-	-	-	-	-	-	.12	5.38
ALL CROPS	2.23	100.00	**	**	-	-	-	-	2.23	100.00

TABLE 3.10
ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Gambela

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.95	68.84	**	**	-	-	-	-	.89	67.42
Teff	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.68	49.28	**	**	-	-	-	-	.62	46.97
Sorghum	.26	18.84	-	-	-	-	-	-	.26	19.70
Millet	**	**	-	-	-	-	-	-	**	**
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.22	15.94	-	-	-	-	-	-	.22	16.67
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	.15	10.87	-	-	-	-	-	-	.15	11.36
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.16	11.59	**	**	-	-	-	-	.16	12.12
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	**	**	-	-	-	-	.16	12.12
Other Vegetables	.16	11.59	-	-	-	-	-	-	-	-
ALL TEMPORARY	1.33	96.38	**	**	-	-	-	-	1.27	96.21
Chat	-	-	-	-	-	-	-	-	-	-
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	**	**	-	-	-	-	-	-	**	**
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	**	**	-	-	-	-	-	-	**	**
ALL CROPS	1.38	100.00	**	**	-	-	-	-	1.32	100.00

TABLE 3.11

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Harari

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	1.96	62.42	.04	66.67	.32	74.42	.17	68.00	1.41	60.26
Teff	-	-	-	-	-	-	-	-	-	-
Barely	**	**	**	**	**	**	**	**	**	**
Wheat	.07	2.23	**	**	.02	4.65	**	**	.01	.43
Maize	.79	25.16	.01	16.67	.13	30.23	.06	24.00	.58	24.79
Sorghum	1.04	33.12	.03	50.00	.15	34.88	.06	24.00	.80	34.19
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	**	**	**	**	**	**
PULSES	**	**	**	**	-	-	**	**	**	**
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	**	**	**	**
Field Peas	**	**	-	-	-	-	**	**	**	**
Lentils	**	**	**	**	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	.24	7.64	**	**	.01	2.33	**	**	.23	9.83
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	.24	7.64	**	**	.01	2.33	**	**	.23	9.83
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	**	**	-	-	-	-	-	-
OTHERS	.12	3.82	**	**	**	**	.01	4.00	.08	3.42
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	**	**	-	-	**	**	**	**	**	**
Other Vegetables	.09	2.87	-	-	.01	2.33	.01	4.00	.07	2.99
ALL TEMPORARY	2.34	74.52	.04	66.67	.35	81.40	.18	72.00	1.73	73.93
Chat	.61	19.43	.02	33.33	.08	18.60	.06	24.00	.44	18.80
Coffee	**	**	-	-	**	**	**	**	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	**	**	**	**	**	**	**	**
Other Permanent	**	**	-	-	-	-	-	-	**	**
TOTAL PERMANENT	.80	25.48	.02	33.33	.08	18.60	.07	28.00	.61	26.07
ALL CROPS	3.14	100.00	.06	100.00	.43	100.00	.25	100.00	2.34	100.00

TABLE 3.12

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Addis Ababa

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.83	74.11	.04	50.00	-	-	.66	91.67	.11	37.93
Teff	.39	34.82	.02	25.00	**	**	.35	48.61	.01	3.45
Barely	.03	2.68	**	**	**	**	.01	1.39	.01	3.45
Wheat	.36	32.14	.02	25.00	**	**	.30	41.67	.04	13.79
Maize	.05	4.46	**	**	-	-	**	**	.05	17.24
Sorghum	**	**	-	-	-	-	-	-	**	**
Millet	-	-	-	-	-	-	-	-	-	-
Oats	**	**	-	-	-	-	**	**	-	-
PULSES	.18	16.07	.01	12.50	-	-	**	**	.14	48.28
Horse Beans	.08	7.14	**	**	**	**	**	**	.07	24.14
Chick Peas	.02	1.79	-	-	-	-	-	-	.02	6.90
Haricot Beans	**	**	-	-	-	-	-	-	**	**
Field Peas	.01	.89	-	-	**	**	**	**	**	**
Lentils	.05	4.46	-	-	**	**	**	**	**	**
Vetch	.01	.89	.01	12.50	**	**	**	**	**	**
OILSEEDS	**	**	-	-	-	-	**	**	**	**
Neug	-	-	-	-	-	-	-	-	-	-
Lin seed	**	**	-	-	-	-	**	**	-	-
Rape seed	**	**	-	-	-	-	-	-	**	**
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	.10	8.93	**	**	**	**	.04	5.56	.03	10.34
Fenugreek	-	-	-	-	**	**	**	**	**	**
Spices	**	**	-	-	-	-	**	**	-	-
Potatoes	**	**	-	-	-	-	**	**	-	-
Other Vegetables	.10	8.93	**	**	**	**	.04	5.56	.03	10.34
ALL TEMPORARY	1.12	100.00	.08	100.00	-	-	.72	100.00	.29	100.00
Chat	**	**	-	-	-	-	**	**	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-
Other Permanent	**	**	-	-	-	-	**	**	-	-
TOTAL PERMANENT	**	**	-	-	-	-	**	**	-	-
ALL CROPS	1.12	100.00	.08	100.00	-	-	.72	100.00	.29	100.00

TABLE 3.13

ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER BY TYPE
OF FERTILIZER FOR MEHER SEASON CROPS OF PRIVATE HOLDINGS IN
1998/99(1991 E.C.)

Dire Dawa

('000 QT)

TYPE OF CROP	TOTAL		DAP		UREA		DAP + UREA		COMM W/NAT	
	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%	QUANTITY	%
CEREALS	.98	67.59	**	**	-	-	-	-	.98	67.59
Teff	-	-	-	-	-	-	-	-	-	-
Barely	**	**	-	-	-	-	-	-	**	**
Wheat	**	**	-	-	-	-	-	-	**	**
Maize	**	**	-	-	-	-	-	-	**	**
Sorghum	.95	65.52	**	**	-	-	-	-	.95	65.52
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	**	**	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	**	**	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OILSEEDS	**	**	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	**	**	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-
OTHERS	**	**	**	**	-	-	-	-	**	**
Fenugreek	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-
Other Vegetables	**	**	**	**	-	-	-	-	**	**
ALL TEMPORARY	1.10	75.86	**	**	-	-	-	-	1.10	75.86
Chat	.33	22.76	**	**	-	-	-	-	.33	22.76
Coffee	**	**	-	-	-	-	-	-	**	**
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-
Fruits	**	**	-	-	-	-	-	-	**	**
Other Permanent	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	.35	24.14	**	**	-	-	-	-	.35	24.14
ALL CROPS	1.45	100.00	**	**	-	-	-	-	1.45	100.00

4. QUANTITY OF LOCAL AND IMPROVED SEEDS USED BY TYPE OF CROP

The total quantity of local and improved seeds used by the private peasant holders during 1998/99 Meher agricultural year was estimated to be about 6.1 million quintals, of which 138 thousand quintals was improved seeds of major crops. This result indicates that of the total quantity of seeds used, only 2.3 % was improved seeds, while the remaining 97.7% was local seeds. Hence, the use of improved seeds by private peasant holders is negligible and the reason for this observation needs further investigation.

Summary Table D. Quantity of Local and Improved Seeds Applied

Seed type	Quantity ('000 QT)	Percent
Local seeds	5933.35	97.7
Improved seeds	138.05	2.3
Total	6071.4	100.0

Table 4.1 Estimates of Quantity of Improved seeds and Local seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

National ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	137.17	4,877.63
Teff	8.57	1,028.48
Barley	**	1,284.94
Wheat	83.31	1,469.47
Maize	41.99	599.80
Sorghum	.11	271.53
Millet	**	158.36
Oats	-	65.05
Pulses	**	920.96
Horse Beans	**	400.29
Field Peas	**	161.34
Haricot Beans	**	87.05
Chick Peas	**	142.31
Lentils	-	36.64
Vetch	**	93.33
Others	**	134.76
Neug	-	40.05
Linseed	**	49.89
Rapeseed	-	**
Ground Nuts	**	10.46
Sunflower	-	**
Sesame	**	6.23
Fenugreek	-	16.41
All Crops	138.05	5,933.35

TABLE 4.2 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED BY REGIONS FOR PRIVATE PEASANT HOLDINGS 1998/99(1991 E.C.)

NATIONAL ('000 QUINTAL)

REGION	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
TIGRAY	6.05	368.17
AFAR	-	4.67
AMHARA	25.80	1803.97
OROMIA	74.88	3203.64
SOMALE	0.07	24.00
BENSHANGUL-GUMUZ	0.43	44.78
S.N.N.P.R.	30.39	467.64
GAMBELA	0.04	3.04
HARARI	0.14	3.90
ADDIS ABABA	0.16	8.31
DIRE DAWA	0.09	1.25
TOTAL	138.05	5933.37

**FIG. 5 ESTIMATES OF QUANTITY OF SEED BY TYPE OF SEED,
BY REGION, 1998/99(1991 E.C.)**

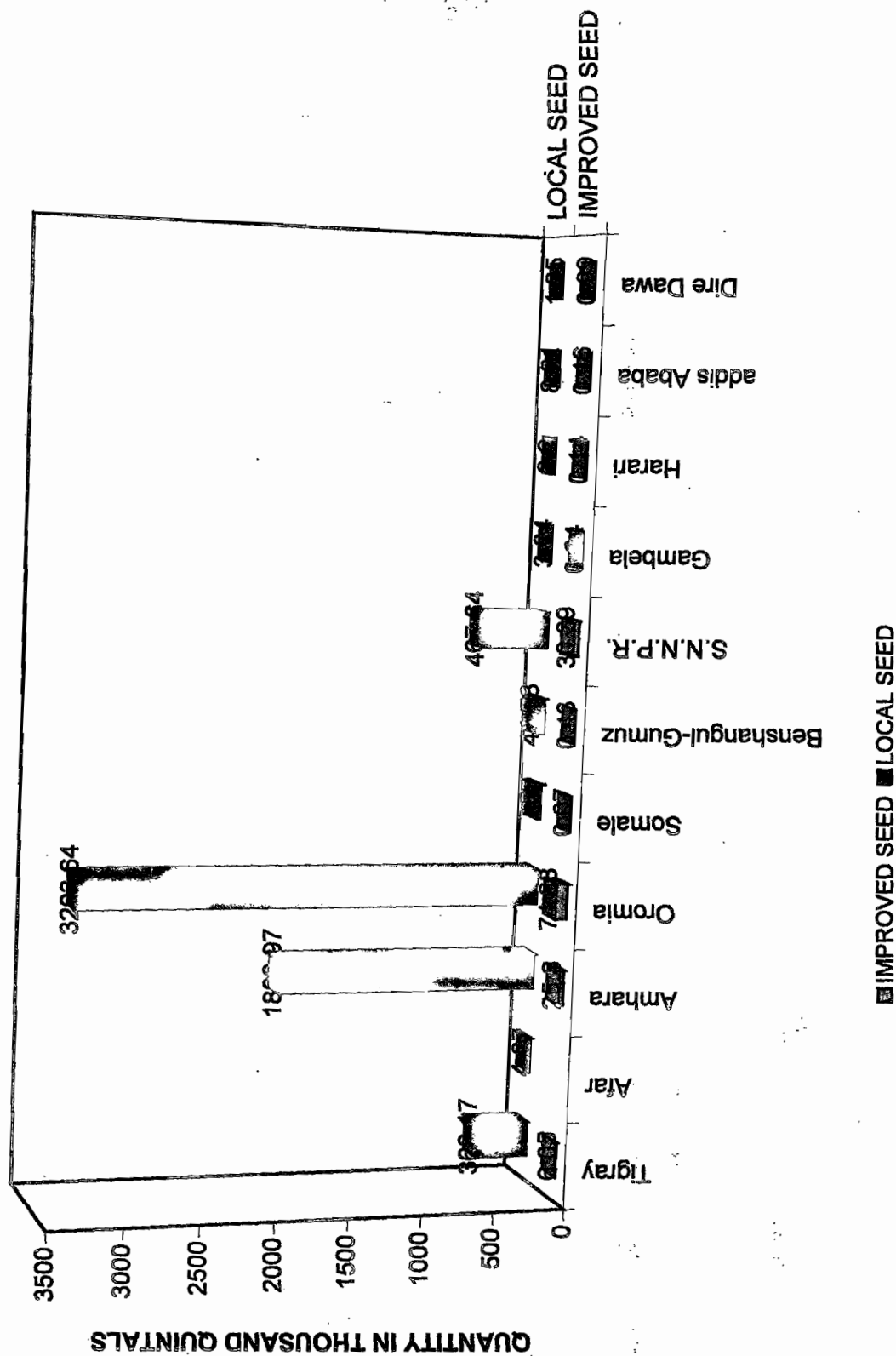


Table 4.3 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Tigray ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	6.05	330.76
Teff	**	51.31
Barley	**	112.22
Wheat	4.14	72.16
Maize	**	30.70
Sorghum	**	34.80
Millet	-	28.96
Oats	-	**
Pulses	-	31.30
Horse Beans	-	12.81
Field Peas	-	4.12
Haricot Beans	-	.59
Chick Peas	-	6.88
Lentils	-	2.10
Vetch	-	4.80
Others	-	6.11
Neug	-	1.21
Linseed	-	2.44
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	2.34
Fenugreek	-	.11
All Crops	6.05	368.17

Table 4.3.1 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

West Tigray Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	62.47
Teff	**	14.07
Barley	-	**
Wheat	-	**
Maize	**	9.48
Sorghum	**	17.08
Millet	-	19.23
Oats	-	-
Pulses	-	3.57
Horse Beans	-	.89
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	1.86
Lentils	-	-
Vetch	-	**
Others	-	3.18
Neug	-	.55
Linseed	-	.34
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	2.28
Fenugreek	-	-
All Crops	**	69.22

Table 4.3.2 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Central Tigray Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.76	88.79
Teff	**	21.64
Barley	**	20.19
Wheat	**	16.02
Maize	**	9.64
Sorghum	-	13.26
Millet	-	8.04
Oats	-	-
Pulses	-	5.78
Horse Beans	-	3.67
Field Peas	-	**
Haricot Beans	-	.40
Chick Peas	-	1.08
Lentils	-	**
Vetch	-	**
Others	-	1.12
Neug	-	.64
Linseed	-	.41
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	.76	95.69

Table 4.3.3 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

East Tigray Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	1.34	75.24
Teff	**	4.09
Barley	**	40.73
Wheat	1.21	22.87
Maize	**	4.37
Sorghum	-	1.22
Millet	-	1.53
Oats	-	**
Pulses	-	12.87
Horse Beans	-	4.47
Field Peas	-	1.74
Haricot Beans	-	-
Chick Peas	-	3.08
Lentils	-	.80
Vetch	-	2.78
Others	-	1.10
Neug	-	**
Linseed	-	1.06
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	1.34	89.21

Table 4.3.4 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

South Tigray Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	2.94	104.22
Teff	**	11.50
Barley	-	49.61
Wheat	2.81	32.33
Maize	-	7.20
Sorghum	-	3.24
Millet	-	.17
Oats	-	**
Pulses	-	9.10
Horse Beans	-	3.78
Field Peas	-	1.56
Haricot Beans	-	**
Chick Peas	-	.87
Lentils	-	1.14
Vetch	-	**
Others	-	.70
Neug	-	**
Linseed	-	.63
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	.03
All Crops	2.94	114.02

Table 4.4 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Afar ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	4.33
Teff	-	2.32
Barley	-	**
Wheat	-	**
Maize	-	1.12
Sorghum	-	.52
Millet	-	-
Oats	-	-
Pulses	-	.33
Horse Beans	-	-
Field Peas	-	**
Haricot Beans	-	.18
Chick Peas	-	.15
Lentils	-	-
Vetch	-	-
Others	-	.01
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	.01
Fenugreek	-	-
All Crops	-	4.67

Table 4.4.1 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Zone 1 ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	.78
Teff	-	-
Barley	-	-
Wheat	-	-
Maize	-	.76
Sorghum	-	**
Millet	-	-
Oats	-	-
Pulses	-	-
Horse Beans	-	-
Field Peas	-	-
Haricot Beans	-	-
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	-
All Crops	-	.78

Table 4.4.2 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Zone 3 ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	3.32
Teff	-	2.19
Barley	-	**
Wheat	-	**
Maize	-	.29
Sorghum	-	.47
Millet	-	-
Oats	-	-
Pulses	-	.32
Horse Beans	-	-
Field Peas	-	**
Haricot Beans	-	.18
Chick Peas	-	.14
Lentils	-	-
Vetch	-	-
Others	-	.01
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	.01
Fenugreek	-	-
All Crops	-	3.65

Table 4.5 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Amhara

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	25.78	1,356.75
Teff	4.61	374.73
Barley	-	376.41
Wheat	14.96	284.85
Maize	6.08	112.89
Sorghum	**	96.07
Millet	**	98.54
Oats	-	13.26
Pulses	**	398.83
Horse Beans	-	161.56
Field Peas	**	58.60
Haricot Beans	-	25.54
Chick Peas	-	80.26
Lentils	-	18.90
Vetch	-	53.97
Others	-	48.39
Neug	-	23.80
Linseed	-	9.32
Rapeseed	-	.89
Ground Nuts	-	**
Sunflower	-	.43
Sesame	-	**
Fenugreek	-	**
All Crops	25.80	1,803.97

Table 4.5.1 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

North Gonder Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	2.07	198.87
Teff	1.18	44.37
Barley	-	50.69
Wheat	**	24.15
Maize	**	13.31
Sorghum	-	45.35
Millet	-	19.99
Oats	-	**
Pulses	-	35.10
Horse Beans	-	17.14
Field Peas	-	6.23
Haricot Beans	-	**
Chick Peas	-	8.53
Lentils	-	**
Vetch	-	**
Others	-	14.17
Neug	-	4.41
Linseed	-	.93
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	**
All Crops	2.07	248.14

Table 4.5.2 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

South Gonder Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.12	220.23
Teff	**	62.45
Barley	-	71.50
Wheat	**	42.58
Maize	**	15.68
Sorghum	-	5.47
Millet	**	22.45
Oats	-	**
Pulses	-	64.60
Horse Beans	-	26.14
Field Peas	-	6.13
Haricot Beans	-	**
Chick Peas	-	19.17
Lentils	-	1.78
Vetch	-	6.64
Others	-	6.96
Neug	-	4.37
Linseed	-	1.92
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	.09
Sesame	-	-
Fenugreek	-	**
All Crops	3.12	291.79

Table 4.5.3 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

North Wolo Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.26	97.66
Teff	**	18.22
Barley	-	33.83
Wheat	3.21	32.93
Maize	**	5.43
Sorghum	-	4.63
Millet	-	.31
Oats	-	2.31
Pulses	-	35.56
Horse Beans	-	13.92
Field Peas	-	4.32
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	-	2.44
Neug	-	.03
Linseed	-	1.43
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	.88
All Crops	3.26	135.66

Table 4.5.4 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

South Wolo Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.92	122.20
Teff	-	19.35
Barley	-	32.43
Wheat	3.92	43.48
Maize	-	7.60
Sorghum	-	9.30
Millet	-	**
Oats	-	8.18
Pulses	-	73.52
Horse Beans	-	37.37
Field Peas	-	11.63
Haricot Beans	-	2.70
Chick Peas	-	8.36
Lentils	-	4.01
Vetch	-	9.45
Others	-	3.71
Neug	-	.28
Linseed	-	.42
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	2.61
All Crops	3.92	199.43

Table 4.5.5 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

North Shewa Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	4.00	124.60
Teff	**	31.55
Barley	-	32.35
Wheat	3.91	47.86
Maize	-	3.61
Sorghum	-	9.12
Millet	-	-
Oats	-	**
Pulses	**	48.05
Horse Beans	-	20.72
Field Peas	**	4.70
Haricot Beans	-	1.84
Chick Peas	-	10.61
Lentils	-	5.54
Vetch	-	4.64
Others	-	1.22
Neug	-	**
Linseed	-	.59
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	.08
Fenugreek	-	.26
All Crops	4.02	173.87

Table 4.5.6 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

East Gojam Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	4.79	255.89
Teff	1.91	90.24
Barley	-	73.32
Wheat	1.67	71.36
Maize	1.21	17.37
Sorghum	-	3.55
Millet	-	**
Oats	-	-
Pulses	-	89.56
Horse Beans	-	27.38
Field Peas	-	11.83
Haricot Beans	-	8.50
Chick Peas	-	18.93
Lentils	-	**
Vetch	-	22.20
Others	-	4.19
Neug	-	1.67
Linseed	-	2.19
Rapeseed	-	.14
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	.18
All Crops	4.79	349.64

Table 4.5.7 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

West Gojam Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.66	180.07
Teff	.26	66.83
Barley	-	33.71
Wheat	**	12.69
Maize	3.19	32.19
Sorghum	-	5.32
Millet	-	28.07
Oats	-	**
Pulses	-	37.42
Horse Beans	-	11.14
Field Peas	-	10.03
Haricot Beans	-	**
Chick Peas	-	6.35
Lentils	-	**
Vetch	-	5.27
Others	-	9.54
Neug	-	7.91
Linseed	-	1.24
Rapeseed	-	.30
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	**
All Crops	3.66	227.03

Table 4.5.8 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Waghamera Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	-	37.20
Teff	-	6.28
Barley	-	18.72
Wheat	-	6.46
Maize	-	.63
Sorghum	-	4.98
Millet	-	.12
Oats	-	**
Pulses	-	8.88
Horse Beans	-	4.86
Field Peas	-	1.51
Haricot Beans	-	1.08
Chick Peas	-	.20
Lentils	-	1.23
Vetch	-	-
Others	-	.57
Neug	-	.06
Linseed	-	.22
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	.07
Sesame	-	**
Fenugreek	-	**
All Crops	-	46.65

Table 4.5.9 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Agewawia Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.97	107.41
Teff	-	32.45
Barley	-	29.75
Wheat	**	3.12
Maize	.88	12.48
Sorghum	-	**
Millet	-	25.56
Oats	-	**
Pulses	-	4.86
Horse Beans	-	2.47
Field Peas	-	1.97
Haricot Beans	-	-
Chick Peas	-	.42
Lentils	-	-
Vetch	-	-
Others	-	5.47
Neug	-	4.82
Linseed	-	**
Rapeseed	-	.06
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	.02
All Crops	.97	117.74

Table 4.5.10 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Oromia Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	12.61
Teff	-	2.98
Barley	-	.11
Wheat	-	**
Maize	-	4.59
Sorghum	**	4.34
Millet	-	.13
Oats	-	**
Pulses	-	1.28
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	.11
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	.12
Neug	-	**
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	.07
Fenugreek	-	**
All Crops	**	14.01

Table 4.6 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Oromia ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	74.09	2,714.67
Teff	2.16	503.71
Barley	**	714.43
Wheat	48.76	967.39
Maize	20.76	353.95
Sorghum	**	100.75
Millet	-	23.64
Oats	-	50.80
Pulses	**	414.06
Horse Beans	-	196.91
Field Peas	-	76.26
Haricot Beans	-	44.32
Chick Peas	**	51.46
Lentils	-	11.54
Vetch	**	33.57
Others	**	74.91
Neug	-	13.47
Linseed	**	37.70
Rapeseed	-	**
Ground Nuts	-	**
Sunflower	-	**
Sesame	-	.12
Fenugreek	-	5.06
All Crops	74.88	3,203.64

Table 4.6.1 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

West Welega Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	4.37	99.24
Teff	.36	24.76
Barley	-	3.74
Wheat	**	8.91
Maize	3.17	31.34
Sorghum	**	17.46
Millet	-	12.96
Oats	-	**
Pulses	-	13.44
Horse Beans	-	5.83
Field Peas	-	.82
Haricot Beans	-	5.96
Chick Peas	-	**
Lentils	-	-
Vetch	-	.30
Others	-	1.38
Neug	-	1.33
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	4.37	114.06

Table 4.6.2 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

East Welega Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	8.53	161.08
Teff	-	73.83
Barley	-	21.92
Wheat	**	29.61
Maize	5.04	24.34
Sorghum	-	4.14
Millet	-	7.16
Oats	-	**
Pulses	-	24.35
Horse Beans	-	14.89
Field Peas	-	8.87
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	10.69
Neug	-	8.47
Linseed	-	1.97
Rapeseed	-	.09
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	.09
All Crops	8.53	196.12

Table 4.6.3 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Illibabor Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.20	49.78
Teff	**	19.18
Barley	-	.98
Wheat	-	.23
Maize	3.14	22.94
Sorghum	-	5.15
Millet	-	1.30
Oats	-	**
Pulses	-	6.95
Horse Beans	-	2.64
Field Peas	-	1.80
Haricot Beans	-	2.19
Chick Peas	-	**
Lentils	-	-
Vetch	-	**
Others	-	.25
Neug	-	.19
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	**
All Crops	3.20	56.98

Table 4.6.4 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Jimma Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.24	157.45
Teff	-	71.01
Barley	-	16.87
Wheat	**	19.08
Maize	2.69	40.88
Sorghum	-	7.27
Millet	-	**
Oats	-	**
Pulses	-	19.87
Horse Beans	-	14.55
Field Peas	-	3.66
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	.77
Neug	-	**
Linseed	-	.27
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	3.24	178.09

Table 4.6.5 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

West Shewa Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	13.55	464.77
Teff	**	135.70
Barley	**	127.51
Wheat	10.60	171.46
Maize	**	22.65
Sorghum	-	6.77
Millet	-	-
Oats	-	**
Pulses	**	90.20
Horse Beans	-	39.62
Field Peas	-	**
Haricot Beans	-	.07
Chick Peas	**	19.82
Lentils	-	1.99
Vetch	-	**
Others	-	**
Neug	-	1.07
Linseed	-	4.77
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	13.90	567.65

Table 4.6.6 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

North Shewa Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	6.32	228.16
Teff	-	40.80
Barley	-	95.79
Wheat	6.32	80.86
Maize	-	2.00
Sorghum	-	8.07
Millet	-	-
Oats	-	64
Pulses	-	69.44
Horse Beans	-	31.55
Field Peas	-	11.07
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	6.26
Vetch	-	7.63
Others	-	3.87
Neug	-	1.09
Linseed	-	2.36
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	**
All Crops	6.32	301.47

Table 4.6.7 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

East Shewa Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	8.74	262.74
Teff	-	70.90
Barley	-	19.32
Wheat	6.74	100.19
Maize	2.00	69.06
Sorghum	-	2.96
Millet	-	**
Oats	-	**
Pulses	-	56.54
Horse Beans	-	8.40
Field Peas	-	5.88
Haricot Beans	-	18.02
Chick Peas	-	15.83
Lentils	-	2.00
Vetch	-	**
Others	-	**
Neug	-	-
Linseed	-	.07
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	**
All Crops	8.74	322.23

Table 4.6.8 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Arsi Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	12.41	850.22
Teff	-	48.69
Barley	**	320.60
Wheat	10.31	405.01
Maize	-	56.71
Sorghum	-	3.16
Millet	-	**
Oats	-	15.90
Pulses	-	98.53
Horse Beans	-	64.61
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	**	22.51
Neug	-	**
Linseed	**	20.08
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	12.60	971.26

Table 4.6.9 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

West Harerge Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	1.31	55.28
Teff	**	2.80
Barley	-	4.62
Wheat	**	**
Maize	1.22	29.50
Sorghum	-	16.66
Millet	-	.45
Oats	-	.73
Pulses	**	8.60
Horse Beans	-	4.03
Field Peas	-	**
Haricot Beans	-	3.42
Chick Peas	**	.23
Lentils	-	.26
Vetch	-	**
Others	-	.56
Neug	-	-
Linseed	-	.12
Rapeseed	-	-
Ground Nuts	-	**
Sunflower	-	**
Sesame	-	**
Fenugreek	-	.36
All Crops	1.33	64.44

Table 4.6.10 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

East Harerge Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	80.40
Teff	-	2.07
Barley	-	6.08
Wheat	**	10.34
Maize	1.40	32.02
Sorghum	-	27.39
Millet	-	-
Oats	-	**
Pulses	**	10.77
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	2.14
Chick Peas	-	**
Lentils	-	.16
Vetch	**	**
Others	-	**
Neug	-	-
Linseed	-	.14
Rapeseed	-	-
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	.25
All Crops	**	99.76

Table 4.6.11 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Bale Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	7.93	280.97
Teff	**	10.90
Barley	-	90.03
Wheat	7.25	139.50
Maize	**	9.98
Sorghum	-	1.41
Millet	-	-
Oats	-	29.15
Pulses	-	14.51
Horse Beans	-	3.73
Field Peas	-	6.64
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	.36
Vetch	-	**
Others	**	10.71
Neug	-	**
Linseed	**	7.87
Rapeseed	-	**
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	-
Fenugreek	-	2.74
All Crops	8.15	306.19

Table 4.6.12 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Borena Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	24.57
Teff	-	**
Barley	-	6.98
Wheat	**	**
Maize	**	12.54
Sorghum	-	**
Millet	-	-
Oats	-	-
Pulses	-	.87
Horse Beans	-	.26
Field Peas	-	**
Haricot Beans	-	.29
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	**	25.44

Table 4.7 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Somale

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	23.31
Teff	-	**
Barley	**	4.05
Wheat	**	2.51
Maize	**	9.69
Sorghum	**	6.95
Millet	-	-
Oats	-	.07
Pulses	-	.27
Horse Beans	-	-
Field Peas	-	**
Haricot Beans	-	.08
Chick Peas	-	.18
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	**	24.00

Table 4.7.1 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Shinele Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	.12
Teff	-	-
Barley	-	-
Wheat	-	-
Maize	**	.05
Sorghum	**	.07
Millet	-	-
Oats	-	-
Pulses	-	**
Horse Beans	-	**
Field Peas	-	-
Haricot Beans	-	-
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	-
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	**
Fenugreek	-	-
All Crops	**	.12

Table 4.7.2 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Jijiga Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	22.47
Teff	-	**
Barley	**	4.05
Wheat	**	2.50
Maize	**	8.94
Sorghum	-	6.87
Millet	-	-
Oats	-	.07
Pulses	-	.23
Horse Beans	-	-
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	.18
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	**
Sunflower	-	-
Sesame	-	**
Fenugreek	-	**
All Crops	**	23.12

Table 4.7.3 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Moyale Zone

('000 QT)

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

Table 4.8 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Benshangul-Gumuz

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.43	37.43
Teff	-	9.00
Barley	-	**
Wheat	-	**
Maize	.43	7.19
Sorghum	-	10.39
Millet	-	5.99
Oats	-	**
Pulses	-	4.35
Horse Beans	-	.95
Field Peas	-	**
Haricot Beans	-	2.39
Chick Peas	-	.10
Lentils	-	**
Vetch	-	-
Others	-	3.00
Neug	-	1.46
Linseed	-	.03
Rapeseed	-	**
Ground Nuts	-	.86
Sunflower	-	**
Sesame	-	.64
Fenugreek	-	-
All Crops	.43	44.78

Table 4.8.1 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Metekel Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.24	25.40
Teff	-	7.19
Barley	-	**
Wheat	-	**
Maize	.24	2.43
Sorghum	-	5.85
Millet	-	5.44
Oats	-	**
Pulses	-	3.45
Horse Beans	-	.75
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	1.44
Neug	-	.63
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	**
Sunflower	-	**
Sesame	-	.33
Fenugreek	-	**
All Crops	.24	30.29

Table 4.8.2 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Asosa Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.12	8.48
Teff	-	1.27
Barley	-	**
Wheat	-	**
Maize	.12	3.13
Sorghum	-	3.58
Millet	-	.15
Oats	-	-
Pulses	-	.52
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	.34
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	1.45
Neug	-	.76
Linseed	-	.02
Rapeseed	-	**
Ground Nuts	-	.39
Sunflower	-	**
Sesame	-	.28
Fenugreek	-	-
All Crops	.12	10.45

Table 4.8.3 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Kemeshi Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	3.56
Teff	-	**
Barley	-	**
Wheat	-	-
Maize	**	**
Sorghum	-	.96
Millet	-	**
Oats	-	-
Pulses	-	**
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	.11
Neug	-	**
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	.01
Sunflower	-	-
Sesame	-	.03
Fenugreek	-	**
All Crops	**	4.04

Table 4.9 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

(S.N.N.P.R)

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	30.34	396.84
Teff	.78	84.58
Barley	**	75.25
Wheat	15.24	136.40
Maize	13.87	81.10
Sorghum	-	18.12
Millet	-	1.21
Oats	-	**
Pulses	**	69.92
Horse Beans	**	27.95
Field Peas	-	21.45
Haricot Beans	**	13.88
Chick Peas	-	2.43
Lentils	-	**
Vetch	-	**
Others	-	.88
Neug	-	**
Linseed	-	.37
Rapeseed	-	.02
Ground Nuts	-	**
Sunflower	-	.06
Sesame	-	**
Fenugreek	-	.29
All Crops	30.39	467.64

Table 4.9.1 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Gurage Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	10.05	103.55
Teff	**	16.05
Barley	**	35.24
Wheat	4.73	29.27
Maize	4.49	20.40
Sorghum	-	2.59
Millet	-	**
Oats	-	-
Pulses	**	24.63
Horse Beans	**	9.37
Field Peas	-	7.98
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	-	.21
Neug	-	**
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	**
All Crops	10.07	128.39

Table 4.9.2 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Hadiya Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	5.60	106.61
Teff	**	11.78
Barley	-	8.73
Wheat	4.41	70.21
Maize	**	12.67
Sorghum	-	3.03
Millet	-	**
Oats	-	**
Pulses	-	11.89
Horse Beans	-	6.53
Field Peas	-	4.71
Haricot Beans	-	.52
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	.10
Neug	-	-
Linseed	-	.09
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	5.60	118.60

Table 4.9.3 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Kembata Alaba Tembaro Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	2.66	60.35
Teff	**	9.25
Barley	**	2.28
Wheat	**	27.03
Maize	1.76	19.99
Sorghum	-	.93
Millet	-	.87
Oats	-	-
Pulses	**	2.45
Horse Beans	-	1.63
Field Peas	-	.48
Haricot Beans	**	.32
Chick Peas	-	-
Lentils	-	**
Vetch	-	**
Others	-	.34
Neug	-	-
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	2.67	63.14

Table 4.9.4 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Sidama Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	3.23	14.57
Teff	**	.86
Barley	-	3.12
Wheat	**	**
Maize	2.96	9.81
Sorghum	-	**
Millet	-	-
Oats	-	-
Pulses	**	4.88
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	**	4.22
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	3.25	19.45

Table 4.9.5 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Gedio Zone ('000 QT)		
QUANTITY OF		
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	**	4.63
Teff	-	**
Barley	-	**
Wheat	**	**
Maize	**	2.49
Sorghum	-	-
Millet	-	-
Oats	-	-
Pulses	-	1.06
Horse Beans	-	.77
Field Peas	-	**
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	-
All Crops	**	5.69

Table 4.9.6 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

North Omo Zone ('000 QT)		
QUANTITY OF		
CROP TYPE	IMPROVED SEED	LOCAL SEED
Cereals	4.98	53.18
Teff	**	25.82
Barley	-	13.52
Wheat	2.28	3.08
Maize	2.61	6.63
Sorghum	-	3.93
Millet	-	**
Oats	-	**
Pulses	-	10.83
Horse Beans	-	2.27
Field Peas	-	**
Haricot Beans	-	4.88
Chick Peas	-	**
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	**
All Crops	4.98	64.09

Table 4.9.7 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

South Omo Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	7.33
Teff	-	.72
Barley	-	2.10
Wheat	**	**
Maize	**	2.37
Sorghum	-	1.89
Millet	-	.02
Oats	-	-
Pulses	-	.75
Horse Beans	-	.32
Field Peas	-	**
Haricot Beans	-	.28
Chick Peas	-	-
Lentils	-	**
Vetch	-	-
Others	-	.05
Neug	-	**
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	**
Sunflower	-	.04
Sesame	-	**
Fenugreek	-	-
All Crops	**	8.13

Table 4.9.8 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Keficho-Shekicho Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	1.51	28.77
Teff	**	15.63
Barley	**	5.07
Wheat	**	3.02
Maize	**	2.37
Sorghum	-	2.62
Millet	-	**
Oats	-	-
Pulses	-	10.03
Horse Beans	-	5.04
Field Peas	-	3.70
Haricot Beans	-	1.29
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	**
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	**
All Crops	1.51	38.86

Table 4.9.9 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Bench-Maji Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.48	4.70
Teff	-	1.21
Barley	-	1.02
Wheat	**	.02
Maize	.32	1.44
Sorghum	-	1.00
Millet	-	**
Oats	-	-
Pulses	**	.56
Horse Beans	**	.28
Field Peas	-	**
Haricot Beans	-	.09
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	**
Neug	-	-
Linseed	-	-
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	.49	5.26

Table 4.9.10 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Yem Special Wereda Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.25	6.28
Teff	**	1.89
Barley	-	1.37
Wheat	.18	2.16
Maize	.06	.69
Sorghum	-	.16
Millet	-	**
Oats	-	**
Pulses	-	1.84
Horse Beans	-	1.18
Field Peas	-	.62
Haricot Beans	-	**
Chick Peas	-	**
Lentils	-	.04
Vetch	-	-
Others	-	**
Neug	-	**
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	-
Sunflower	-	-
Sesame	-	-
Fenugreek	-	-
All Crops	.25	8.13

Table 4.9.11 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Amaro Special Wereda Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	1.39
Teff	-	.60
Barley	-	.41
Wheat	**	.21
Maize	**	**
Sorghum	-	**
Millet	-	**
Oats	-	**
Pulses	-	.33
Horse Beans	-	.07
Field Peas	-	.08
Haricot Beans	-	.06
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	-	**
Neug	-	**
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	**
All Crops	**	1.72

Table 4.9.12 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Burji Special Wereda Zone

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	.76
Teff	-	.15
Barley	-	.13
Wheat	**	.25
Maize	-	.16
Sorghum	-	.07
Millet	-	**
Oats	-	-
Pulses	-	.26
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	.22
Chick Peas	-	.03
Lentils	-	-
Vetch	-	**
Others	-	-
Neug	-	-
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	**
All Crops	**	1.02

Table 4.9.13 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Konso Special Wereda Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	2.85
Teff	-	.44
Barley	-	.03
Wheat	**	**
Maize	**	1.05
Sorghum	-	1.33
Millet	-	**
Oats	-	-
Pulses	-	.21
Horse Beans	-	**
Field Peas	-	-
Haricot Beans	-	.20
Chick Peas	-	**
Lentils	-	**
Vetch	-	-
Others	-	-
Neug	-	-
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	-
All Crops	**	3.06

Table 4.9.14 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Derashe Special Wereda Zone ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	1.82
Teff	**	.15
Barley	-	.21
Wheat	-	.05
Maize	-	.88
Sorghum	-	.53
Millet	-	-
Oats	-	-
Pulses	-	.21
Horse Beans	-	**
Field Peas	-	**
Haricot Beans	-	.13
Chick Peas	-	**
Lentils	-	**
Vetch	-	**
Others	-	**
Neug	-	-
Linseed	-	-
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	**
Fenugreek	-	-
All Crops	**	2.03

Table 4.10 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Gambella ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	**	2.98
Teff	-	**
Barley	-	-
Wheat	-	-
Maize	**	2.00
Sorghum	-	.96
Millet	-	**
Oats	-	-
Pulses	-	**
Horse Beans	-	-
Field Peas	-	-
Haricot Beans	-	**
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	**	.06
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	**	.01
Sunflower	-	-
Sesame	**	**
Fenugreek	-	-
All Crops	**	3.04

Table 4.11 Estimates of Quantity of Improved seeds and Local Seeds by type of Crop for Private Peasant Holdings 1998/99 (1991 E.C.)

Harari ('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.14	2.97
Teff	-	**
Barley	-	.03
Wheat	.05	.06
Maize	.09	1.08
Sorghum	**	1.79
Millet	-	-
Oats	-	**
Pulses	**	.03
Horse Beans	-	-
Field Peas	-	**
Haricot Beans	**	.03
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	.90
Neug	-	-
Linseed	-	-
Rapeseed	-	-
Ground Nuts	-	.90
Sunflower	-	-
Sesame	-	**
Fenugreek	-	-
All Crops	.14	3.90

Table 4.12 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Addis Ababa

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.16	6.41
Teff	**	2.80
Barley	-	**
Wheat	.15	3.35
Maize	-	.02
Sorghum	-	.01
Millet	-	-
Oats	-	**
Pulses	-	1.84
Horse Beans	-	**
Field Peas	-	.02
Haricot Beans	-	-
Chick Peas	-	.84
Lentils	-	.13
Vetch	-	.73
Others	-	.06
Neug	-	**
Linseed	-	**
Rapeseed	-	**
Ground Nuts	-	-
Sunflower	-	**
Sesame	-	-
Fenugreek	-	.05
All Crops	.16	8.31

Table 4.13 Estimates of Quantity of Improved seeds
and Local Seeds by type of Crop for Private
Peasant Holdings 1998/99 (1991 E.C.)

Dire Dawa

('000 QT)

CROP TYPE	QUANTITY OF	
	IMPROVED SEED	LOCAL SEED
Cereals	.08	1.22
Teff	-	-
Barley	-	**
Wheat	-	**
Maize	.01	.06
Sorghum	.07	1.16
Millet	-	-
Oats	-	-
Pulses	.01	.02
Horse Beans	**	**
Field Peas	-	-
Haricot Beans	.01	.02
Chick Peas	-	-
Lentils	-	-
Vetch	-	-
Others	-	.01
Neug	-	-
Linseed	-	**
Rapeseed	-	-
Ground Nuts	-	.01
Sunflower	-	-
Sesame	-	**
Fenugreek	-	-
All Crops	.09	1.25

5. NUMBER OF HOLDERS APPLYING AGRICULTURAL INPUTS

BY THEIR EDUCATIONAL ATTAINMENT

The survey indicates that there were about 9.6 million holders at country level. Most of these holders (73.5%) were illiterate while 15.3% had attended higher education.

Of all holders, 2.0%, 1.3%, 2.4%, and 40.3% applied improved seeds, used irrigation, applied pesticides and fertilizer during the 1998/99 agricultural activities, respectively. Out of all holders who applied improved seeds, used irrigation, applied pesticides and fertilizers 57.2%, 67.1%, 66.8%, and 69.0% of them were illiterate in that order. For details, refer to Table 5.1

Summary Table E. Number of Holders Applying Agricultural Inputs

Practice type	Number of Holders Applying ('000)
Improved seeds	195.09
Irrigation	125.95
Pesticides	225.05
Fertilizer	3853.93

TABLE 5.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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	7,035.26	73.51	111.56	57.18	84.52	67.13	150.32	66.79	2,659.74	69.01
GRADES 1 - 3	1,331.39	13.91	37.66	19.30	20.00	15.89	35.24	15.66	573.57	14.88
GRADES 4 - 6	745.56	7.79	27.21	13.95	11.79	9.36	24.45	10.86	380.82	9.88
GRADES 7 - 8	278.57	2.91	9.30	4.77	5.44	4.32	7.89	3.51	141.27	3.67
GRADES 9 - 11	119.74	1.25	5.13	2.63	3.28	2.61	4.50	2.00	62.47	1.62
GRADE 12 COMPLETE	44.14	.46	2.46	1.26	**	**	**	**	26.46	.69
HIGHER EDUCATION	15.34	.16	1.78	.91	**	**	**	**	9.61	.25
TOTAL	9,570.00	100.00	195.09	100.00	125.90	100.00	225.05	100.00	3,853.93	100.00

TABLE 5.2 NUMBER OF HOLDERS BY EDUCATIONAL ATTAINMENT AND REGION
1998/99(1991 E.C.)

NUMBER IN THOUSANDS ('000)

REGION	EDUCATIONAL ATTAINMENT IN GRADES							TOTAL HOLDERS
	ILLITERATE	1 - 3	4 - 6	7 - 8	9 - 11	12 COMPLETE	HIGHER EDUCATION	
TIGRAY	488.12	89.91	15.44	3.55	1.31	-	-	598.33
AFAR	29.06	1.53	.33	.09	.06	-	-	31.08
AMHARA	2,172.69	467.34	97.37	38.97	14.24	9.51	1.41	2,801.52
ROMIYA	2,690.87	465.83	330.80	127.96	64.31	20.29	6.90	3,706.96
SOMALIE	70.05	13.40	2.08	.58	.31	.05	.11	86.59
BENSHANGUL-GUMUZ	90.95	11.47	10.61	3.73	1.21	.63	.26	118.86
S.N.N.P.R.	1,450.06	275.47	283.04	101.72	37.75	13.22	6.45	2,167.69
GAMBELA	16.91	3.70	4.17	1.40	.15	.11	.08	26.52
HARARI	10.24	1.27	.91	.23	.12	.07	.04	12.88
ADDIS ABABA	3.70	.64	.34	.29	.28	.18	.08	5.50
DIRE DAWA	12.63	.83	.47	.06	-	.08	.02	14.08
TOTAL	7,035.26	1,331.39	745.56	278.57	119.74	44.14	15.34	9,570.01

TABLE 5.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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	488.12	81.58	6.16	72.56	4.55	77.12	6.77	86.46	203.57	79.17
GRADES 1 - 3	89.91	15.03	**	**	**	**	1.06	13.54	44.20	17.19
GRADES 4 - 6	15.44	2.58	**	**	**	**	-	-	7.01	2.73
GRADES 7 - 8	3.55	.59	**	**	**	**	-	-	1.71	.67
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	598.33	100.00	8.49	100.00	5.90	100.00	7.83	100.00	257.14	100.00

TABLE 5.3.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

West Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	110.20	76.66	**	**	**	**	**	**	45.53	74.21
GRADES 1 - 3	28.29	19.68	**	**	-	-	-	-	13.35	21.76
GRADES 4 - 6	4.46	3.10	-	-	-	-	-	-	**	**
GRADES 7 - 8	**	**	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	143.75	100.00	**	100.00	**	**	**	**	61.35	100.00

TABLE 5.3.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Central Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	167.03	82.33	-	-	**	**	**	**	98.51	82.24
GRADES 1 - 3	28.18	13.89	-	-	-	-	**	**	17.68	14.76
GRADES 4 - 6	5.87	2.89	-	-	**	**	-	-	3.00	2.50
GRADES 7 - 8	**	**	-	-	**	**	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	202.89	100.00	-	-	**	**	5.03	100.00	119.79	100.00

TABLE 5.3.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

East Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	93.94	81.99	1.19	87.50	**	**	.84	100.00	41.68	79.28
GRADES 1 - 3	17.95	15.67	-	-	-	-	-	-	8.69	16.53
GRADES 4 - 6	1.68	1.47	-	-	-	-	-	-	1.37	2.61
GRADES 7 - 8	.83	.72	**	**	-	-	-	-	.66	1.26
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	114.57	100.00	1.36	100.00	**	**	.84	100.00	52.57	100.00

TABLE 5.3.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

South Tigray Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	116.95	85.29	2.17	70.68	**	**	**	**	17.86	76.23
GRADES 1 - 3	15.49	11.30	**	**	**	**	**	**	4.48	19.12
GRADES 4 - 6	3.44	2.51	**	**	**	**	-	-	**	**
GRADES 7 - 8	**	**	**	**	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	137.12	100.00	3.07	100.00	**	**	**	**	23.43	100.00

TABLE 5.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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
ILLITERATE	29.06	93.50	-	-	2.15	94.30	**	**	.92	84.40
GRADES 1 - 3	1.53	4.92	-	-	.10	4.39	-	-	**	**
GRADES 4 - 6	**	**	-	-	**	**	-	-	-	-
GRADES 7 - 8	**	**	-	-	**	**	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	31.08	100.00	-	-	2.28	100.00	**	**	1.09	100.00

TABLE 5.4.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Zone 1 Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	5.81	94.93	-	-	1.87	94.92	**	**	-	-
GRADES 1 - 3	.27	4.41	-	-	.07	3.55	-	-	**	**
GRADES 4 - 6	**	**	-	-	.02	1.02	-	-	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	6.12	100.00	-	-	1.97	100.00	**	**	**	**

TABLE 5.4.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Zone 3 Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	22.10	93.01	-	-	**	**	**	**	.92	85.19
GRADES 1 - 3	1.22	5.13	-	-	**	**	-	-	**	**
GRADES 4 - 6	**	**	-	-	-	-	-	-	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	23.76	100.00	-	-	**	**	**	**	1.08	100.00

TABLE 5.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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	2,172.69	77.55	26.68	70.54	11.04	54.49	14.08	69.22	554.93	70.89
GRADES 1 - 3	467.34	16.68	8.05	21.29	5.88	29.02	3.10	15.24	161.88	20.68
GRADES 4 - 6	97.37	3.48	**	**	1.69	8.34	2.15	10.57	33.76	4.31
GRADES 7 - 8	38.97	1.39	**	**	**	**	**	**	16.20	2.07
GRADES 9 - 11	14.24	.51	-	-	-	-	**	**	7.78	.99
GRADE 12 COMPLETE	9.51	.34	**	**	-	-	-	-	7.29	.93
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
TOTAL	2,801.52	100.00	37.82	100.00	20.26	100.00	20.34	100.00	782.76	100.00

**TABLE 5.5.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)**

North Gonder Zone

NUMBER IN THOUSANDS ('000)

[illegible]

TABLE 5.5.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

South Gonder Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	286.34	79.59	**	**	**	**	5.71	90.92	59.17	72.86
GRADES 1 - 3	59.96	16.67	**	**	**	**	**	**	17.32	21.33
GRADES 4 - 6	8.36	2.32	-	-	-	-	-	-	**	**
GRADES 7 - 8	**	**	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	359.79	100.00	3.33	100.00	**	**	6.28	100.00	81.21	100.00

North Wolo Zone

NUMBER IN THOUSANDS ('000)

[illegible]

TABLE 5.5.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

North Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	243.02	78.09	4.12	79.08	**	**	4.47	83.09	46.98	68.00
GRADES 1 - 3	43.98	14.13	**	**	**	**	**	**	12.85	18.60
GRADES 4 - 6	14.39	4.62	-	-	**	**	**	**	4.78	6.92
GRADES 7 - 8	6.53	2.10	-	-	-	-	-	-	1.48	2.14
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	**	**	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	311.19	100.00	5.21	100.00	6.78	100.00	5.38	100.00	69.09	100.00

TABLE 5.5.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

East Gojam Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	270.16	68.22	5.16	63.63	-	-	**	**	89.28	63.31
GRADES 1 - 3	95.76	24.18	**	**	-	-	**	**	36.82	26.11
GRADES 4 - 6	16.53	4.17	**	**	-	-	-	-	6.62	4.69
GRADES 7 - 8	5.98	1.51	**	**	**	**	-	-	3.69	2.62
GRADES 9 - 11	4.16	1.05	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	396.01	100.00	8.11	100.00	**	**	1.72	100.00	141.01	100.00

TABLE 5.5.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

HIGHER EDUCATION West Gojam Zone GRADE 12 COMPLETE		1998/99(1991 E.C.)								
		NUMBER IN THOUSANDS ('000)								
GRADE 12 - 13 EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	260.08	75.14	4.69	70.10	**	**	**	**	125.68	70.11
GRADES 1 - 3	65.11	18.81	**	**	-	-	**	**	37.83	21.10
GRADES 4 - 6	12.02	3.47	-	-	**	**	**	**	8.12	4.53
GRADES 7 - 8	7.97	2.30	**	**	-	-	**	**	6.68	3.73
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
TOTAL	346.13	100.00	6.69	100.00	**	**	1.78	100.00	179.26	100.00

TABLE 5.5.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Waghamera Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	61.52	89.71	-	-	-	-	**	**	5.76	93.20
GRADES 1 - 3	6.86	10.00	-	-	-	-	-	-	**	**
GRADES 4 - 6	**	**	-	-	-	-	-	-	-	-
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	68.58	100.00	-	-	-	-	**	**	6.18	100.00

TABLE 5.5.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Agewawia Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	109.59	76.58	.90	56.96	**	**	**	**	54.35	73.84
GRADES 1 - 3	26.68	18.64	**	**	**	**	**	**	16.06	21.82
GRADES 4 - 6	3.64	2.54	-	-	**	**	-	-	2.12	2.88
GRADES 7 - 8	1.71	1.19	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
TOTAL	143.10	100.00	1.58	100.00	**	**	**	**	73.61	100.00

TABLE 5.5.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Oromia Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	77.68	92.60	-	-	**	**	**	**	11.23	87.33
GRADES 1 - 3	4.92	5.86	-	-	-	-	-	-	**	**
GRADES 4 - 6	1.04	1.24	-	-	**	**	**	**	**	**
GRADES 7 - 8	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	83.89	100.00	-	-	**	**	**	**	12.86	100.00

TABLE 5.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Oromia

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	2,690.87	72.59	45.09	50.43	46.59	69.53	98.88	68.29	1,058.65	69.09
GRADES 1 - 3	465.83	12.57	19.06	21.32	9.98	14.89	23.18	16.01	204.56	13.35
GRADES 4 - 6	330.80	8.92	13.56	15.16	6.05	9.03	13.21	9.12	167.13	10.91
GRADES 7 - 8	127.96	3.45	4.87	5.45	**	**	5.69	3.93	60.53	3.95
GRADES 9 - 11	64.31	1.73	4.37	4.89	**	**	2.40	1.66	29.26	1.91
GRADE 12 COMPLETE	20.29	.55	**	**	**	**	**	**	9.17	.60
HIGHER EDUCATION	6.90	.19	1.32	1.48	-	-	**	**	3.03	.20
TOTAL	3,706.96	100.00	89.42	100.00	67.01	100.00	144.80	100.00	1,532.32	100.00

TABLE 5.6.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

West Welega Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	201.61	65.50	6.28	52.07	**	**	3.27	58.29	58.06	60.49
GRADES 1 - 3	43.21	14.04	**	**	-	-	**	**	13.23	13.78
GRADES 4 - 6	38.33	12.45	2.48	20.56	**	**	**	**	14.91	15.53
GRADES 7 - 8	15.78	5.13	**	**	-	-	**	**	5.99	6.24
GRADES 9 - 11	5.42	1.76	**	**	-	-	-	-	2.76	2.88
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	1.55	.50	**	**	-	-	-	-	**	**
TOTAL	307.80	100.00	12.06	100.00	**	**	5.61	100.00	95.98	100.00

TABLE 5.6.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

East Welega Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	161.86	65.50	7.21	48.10	**	**	5.29	81.64	54.05	62.70
GRADES 1 - 3	35.75	14.47	**	**	**	**	**	**	13.55	15.72
GRADES 4 - 6	21.67	8.77	**	**	-	-	**	**	8.12	9.42
GRADES 7 - 8	16.99	6.88	1.62	10.81	-	-	-	-	4.94	5.73
GRADES 9 - 11	6.70	2.71	**	**	-	-	**	**	2.58	2.99
GRADE 12 COMPLETE	3.25	1.32	**	**	-	-	-	-	2.08	2.41
HIGHER EDUCATION	**	**	**	**	-	-	-	-	**	**
TOTAL	247.10	100.00	14.99	100.00	**	**	6.48	100.00	86.21	100.00

TABLE 5.6.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Illibabor Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	136.44	73.51	5.01	64.48	**	**	1.78	82.41	27.30	76.09
GRADES 1 - 3	24.43	13.16	**	**	-	-	**	**	4.07	11.34
GRADES 4 - 6	16.31	8.79	**	**	-	-	-	-	3.44	9.59
GRADES 7 - 8	4.92	2.65	**	**	-	-	-	-	**	**
GRADES 9 - 11	2.45	1.32	**	**	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	**	**	**	**
TOTAL	185.60	100.00	7.77	100.00	**	**	2.16	100.00	35.88	100.00

TABLE 5.6.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Jimma Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	326.16	82.05	**	**	**	**	25.62	90.43	132.45	79.21
GRADES 1 - 3	40.23	10.12	**	**	-	-	**	**	19.38	11.59
GRADES 4 - 6	23.83	5.99	**	**	-	-	**	**	11.78	7.05
GRADES 7 - 8	4.78	1.20	**	**	-	-	-	-	**	**
GRADES 9 - 11	2.05	.52	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	397.53	100.00	13.17	100.00	1.57	100.00	28.33	100.00	167.21	100.00

TABLE 5.6.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

West Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	320.46	68.91	**	**	**	**	16.01	67.55	184.27	68.02
GRADES 1 - 3	57.35	12.33	**	**	**	**	5.88	24.81	33.42	12.34
GRADES 4 - 6	47.71	10.26	**	**	**	**	**	**	30.62	11.30
GRADES 7 - 8	21.37	4.60	-	-	**	**	**	**	14.86	5.49
GRADES 9 - 11	17.02	3.66	**	**	**	**	-	-	7.72	2.85
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	465.01	100.00	6.52	100.00	**	**	23.70	100.00	270.90	100.00

TABLE 5.6.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

North Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	201.32	84.46	1.69	63.06	**	**	4.74	80.89	66.51	81.38
GRADES 1 - 3	22.60	9.48	**	**	**	**	**	**	**	**
GRADES 4 - 6	10.18	4.27	**	**	**	**	**	**	4.13	5.05
GRADES 7 - 8	2.00	.84	-	-	-	-	-	-	**	**
GRADES 9 - 11	**	**	**	**	-	-	-	-	**	**
GRADE 12 COMPLETE	1.32	.55	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	238.37	100.00	2.68	100.00	**	**	5.86	100.00	81.73	100.00

TABLE 5.6.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

East Shewa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	178.23	74.27	3.30	50.38	**	**	9.05	61.44	77.10	70.27
GRADES 1 - 3	25.30	10.54	-	-	**	**	2.22	15.07	11.74	10.70
GRADES 4 - 6	23.12	9.63	2.68	40.92	**	**	2.75	18.67	12.90	11.76
GRADES 7 - 8	5.98	2.49	-	-	-	-	**	**	**	**
GRADES 9 - 11	4.30	1.79	**	**	**	**	-	-	2.73	2.49
GRADE 12 COMPLETE	2.72	1.13	**	**	**	**	-	-	2.16	1.97
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	239.96	100.00	6.55	100.00	**	**	14.73	100.00	109.72	100.00

TABLE 5.6.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Arsi Zone
38906 15 COMPLET

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	307.22	62.41	**	**	**	**	19.57	53.31	211.67	61.84
GRADES 1 - 3	73.81	15.00	-	-	**	**	6.98	19.01	49.89	14.58
GRADES 4 - 6	70.63	14.35	-	-	**	**	4.72	12.86	53.18	15.54
GRADES 7 - 8	25.11	5.10	-	-	-	-	3.00	8.17	16.25	4.75
GRADES 9 - 11	9.64	1.96	-	-	**	**	**	**	7.27	2.12
GRADE 12 COMPLETE	4.60	.93	**	**	-	-	**	**	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
TOTAL	492.23	100.00	**	**	4.77	100.00	36.71	100.00	342.28	100.00

TABLE 5.6.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

West Harerge Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	213.26	82.02	3.36	42.86	**	**	**	**	41.72	75.76
GRADES 1 - 3	32.00	12.31	**	**	**	**	**	**	9.16	16.63
GRADES 4 - 6	10.25	3.94	**	**	-	-	**	**	**	**
GRADES 7 - 8	2.11	.81	**	**	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	260.01	100.00	7.84	100.00	**	**	2.07	100.00	55.07	100.00

TABLE 5.6.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

East Harerge Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	291.97	77.95	**	**	15.68	67.53	2.25	45.00	132.53	75.99
GRADES 1 - 3	40.64	10.85	**	**	4.65	20.03	**	**	24.65	14.13
GRADES 4 - 6	23.03	6.15	**	**	**	**	**	**	11.76	6.74
GRADES 7 - 8	10.09	2.69	-	-	**	**	-	-	4.49	2.57
GRADES 9 - 11	6.34	1.69	-	-	**	**	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	374.55	100.00	**	**	23.22	100.00	**	**	174.41	100.00

TABLE 5.6.11 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Bale Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	157.75	67.04	**	**	-	-	6.79	69.50	49.62	63.37
GRADES 1 - 3	39.14	16.63	**	**	-	-	1.15	11.77	11.77	15.03
GRADES 4 - 6	22.91	9.74	-	-	-	-	1.51	15.46	8.94	11.42
GRADES 7 - 8	9.09	3.86	**	**	-	-	-	-	4.33	5.53
GRADES 9 - 11	4.13	1.76	-	-	-	-	**	**	**	**
GRADE 12 COMPLETE	2.00	.85	-	-	-	-	-	-	1.25	1.60
HIGHER EDUCATION	**	**	**	**	-	-	-	-	-	-
TOTAL	235.32	100.00	**	**	-	-	9.77	100.00	78.30	100.00

TABLE 5.6.12 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

HIGHER EDUCATION		1998/99(1999 E.C.)								
Borena Zone		NUMBER IN THOUSANDS ('000)								
EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	194.58	73.84	**	**	-	-	**	**	23.37	67.48
GRADES 1 - 3	31.38	11.91	**	**	-	-	**	**	4.44	12.82
GRADES 4 - 6	22.86	8.68	1.69	32.44	-	-	**	**	4.55	13.14
GRADES 7 - 8	9.75	3.70	**	**	-	-	-	-	**	**
GRADES 9 - 11	3.86	1.46	**	**	-	-	**	**	**	**
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	263.50	100.00	5.21	100.00	-	-	**	**	34.63	100.00

TABLE 5.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Somale

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	70.05	80.90	.08	32.00	**	**	.08	100.00	2.46	69.10
GRADES 1 - 3	13.40	15.48	**	**	**	**	-	-	**	**
GRADES 4 - 6	2.08	2.40	**	**	**	**	-	-	**	**
GRADES 7 - 8	.58	.67	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	**	**	-	-	**	**
GRADE 12 COMPLETE	.05	.06	-	-	**	**	**	**	-	-
HIGHER EDUCATION	**	**	-	-	**	**	-	-	-	-
TOTAL	86.59	100.00	**	**	**	**	.08	100.00	**	**

TABLE 5-7.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99 (1991 E.C.)

		NUMBER OF HOLDERS WHO APPLIED										NUMBER IN THOUSANDS ('000)			
EDUCATIONAL STATUS OF HOLDERS	HIGHER EDUCATION Shinele Zone GRADE 12 COMPLETE	TOTAL		PERCENT		IMPROVED SEED		IRRIGATION		PERCENT		PESTICIDE		FERTILIZER PERCENT	
		TOTAL		PERCENT		IMPROVED SEED		IRRIGATION		PERCENT		PESTICIDE		FERTILIZER PERCENT	
ILLITERATE GRADE 1 - 3		4.60	91.82	.08	80.00	1.02	87.93	.05	100.00	**	**	**	**	**	**
GRADES 1 - 3 ILLITERATE		.23	4.59	**	**	.10	8.62	-	-	-	-	-	-	-	-
GRADES 4 - 6		**	**	-	-	**	**	-	-	-	-	-	-	-	-
GRADES 7 - 11		**	**	-	-	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE HIGHER EDUCATION		**	**	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL		5.01	100.00	.10	100.00	1.16	100.00	.05	100.00	**	**	**	**	**	**

TABLE 5.7.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Jijiga Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	54.18	90.53	-	-	-	-	-	-	**	**
GRADES 1 - 3	3.85	6.43	-	-	-	-	-	-	**	**
GRADES 4 - 6	1.12	1.87	**	**	-	-	-	-	**	**
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	59.85	100.00	**	**	-	-	-	-	**	**

TABLE 5.7.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Moyale Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	11.27	51.89	-	-	**	**	**	**	-	-
GRADES 1 - 3	9.33	42.96	-	-	**	**	-	-	**	**
GRADES 4 - 6	.88	4.05	-	-	**	**	-	-	-	-
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	21.72	100.00	-	-	**	**	**	**	**	**

TABLE 5.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Benshangul-Gumuz

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	90.95	76.52	.63	64.29	**	**	.59	71.08	19.82	80.44
GRADES 1 - 3	11.47	9.65	**	**	**	**	**	**	1.59	6.45
GRADES 4 - 6	10.61	8.93	**	**	**	**	**	**	1.88	7.63
GRADES 7 - 8	3.73	3.14	**	**	-	-	**	**	.98	3.98
GRADES 9 - 11	1.21	1.02	**	**	-	-	**	**	**	**
GRADE 12 COMPLETE	.63	.53	**	**	-	-	**	**	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	118.86	100.00	.98	100.00	.64	100.00	.83	100.00	24.64	100.00

TABLE 5.8.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Metekel Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	35.85	73.40	.30	68.18	**	**	**	**	8.47	74.89
GRADES 1 - 3	5.67	11.61	-	-	**	**	-	-	1.14	10.08
GRADES 4 - 6	4.47	9.15	**	**	**	**	-	-	.63	5.57
GRADES 7 - 8	1.83	3.75	**	**	-	-	-	-	.77	6.81
GRADES 9 - 11	.78	1.60	-	-	-	-	**	**	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	48.84	100.00	.44	100.00	.64	100.00	**	**	11.31	100.00

TABLE 5.8.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Asosa Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	39.47	80.55	**	**	-	-	.37	82.22	9.14	83.70
GRADES 1 - 3	3.74	7.63	-	-	-	-	-	-	.36	3.30
GRADES 4 - 6	4.08	8.33	-	-	-	-	-	-	1.15	10.53
GRADES 7 - 8	1.18	2.41	-	-	-	-	**	**	**	**
GRADES 9 - 11	**	**	**	**	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	49.00	100.00	**	**	-	-	.45	100.00	10.92	100.00

TABLE 5.8.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Kemeshi Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	**	**	**	**	-	-	-	-	**	**
GRADES 1 - 3	2.07	9.85	**	**	-	-	**	**	**	**
GRADES 4 - 6	2.06	9.80	**	**	-	-	**	**	**	**
GRADES 7 - 8	.72	3.43	-	-	-	-	**	**	-	-
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	**	**	-	-	**	**	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	21.02	100.00	**	**	-	-	**	**	**	**

TABLE 5.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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	1,450.06	66.89	29.36	55.06	14.96	63.80	28.52	57.56	809.14	65.29
GRADES 1 - 3	275.47	12.71	8.32	15.60	2.86	12.20	7.81	15.76	159.13	12.84
GRADES 4 - 6	283.04	13.06	11.14	20.89	2.60	11.09	9.01	18.18	169.82	13.70
GRADES 7 - 8	101.72	4.69	2.55	4.78	**	**	1.61	3.25	61.57	4.97
GRADES 9 - 11	37.75	1.74	**	**	**	**	**	**	24.22	1.95
GRADE 12 COMPLETE	13.22	.61	**	**	**	**	**	**	9.78	.79
HIGHER EDUCATION	6.45	.30	**	**	-	-	**	**	5.60	.45
TOTAL	2,167.69	100.00	53.32	100.00	23.45	100.00	49.55	100.00	1,239.25	100.00

TABLE 5.9.1 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Garage Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	240.50	75.59	10.11	62.41	**	**	5.80	77.13	162.80	73.50
GRADES 1 - 3	39.86	12.53	4.30	26.54	-	-	**	**	26.53	11.98
GRADES 4 - 6	24.58	7.73	**	**	-	-	**	**	19.82	8.95
GRADES 7 - 8	8.91	2.80	**	**	-	-	-	-	8.44	3.81
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	**	**	-	-	-	-	**	**
TOTAL	318.18	100.00	16.20	100.00	**	**	7.52	100.00	221.51	100.00

TABLE 5.9.2 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Hadiya Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	121.09	65.74	1.39	50.92	**	**	6.57	45.72	99.95	65.14
GRADES 1 - 3	19.26	10.46	**	**	-	-	2.66	18.51	16.41	10.69
GRADES 4 - 6	24.01	13.04	**	**	-	-	3.17	22.06	20.36	13.27
GRADES 7 - 8	10.33	5.61	-	-	-	-	**	**	8.15	5.31
GRADES 9 - 11	4.99	2.71	**	**	-	-	**	**	4.28	2.79
GRADE 12 COMPLETE	3.56	1.93	-	-	-	-	**	**	3.33	2.17
HIGHER EDUCATION	.95	.52	-	-	-	-	**	**	.95	.62
TOTAL	184.19	100.00	2.73	100.00	**	**	14.37	100.00	153.44	100.00

TABLE 5.9.3 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Kembata Alaba Tembaro Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	87.73	65.81	1.54	59.69	**	**	4.08	55.66	60.15	62.66
GRADES 1 - 3	15.05	11.29	-	-	-	-	2.19	29.88	10.93	11.39
GRADES 4 - 6	16.12	12.09	**	**	**	**	.71	9.69	13.79	14.36
GRADES 7 - 8	7.35	5.51	**	**	**	**	-	-	5.62	5.85
GRADES 9 - 11	3.13	2.35	**	**	-	-	-	-	2.45	2.55
GRADE 12 COMPLETE	3.43	2.57	-	-	**	**	**	**	2.56	2.67
HIGHER EDUCATION	**	**	-	-	-	-	**	**	**	**
TOTAL	133.30	100.00	**	**	**	**	7.33	100.00	96.00	100.00

TABLE 5.9.4 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Sidama Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	246.28	56.26	**	**	**	**	**	**	180.99	57.61
GRADES 1 - 3	76.37	17.44	**	**	**	**	**	**	53.23	16.94
GRADES 4 - 6	77.06	17.60	**	**	**	**	**	**	54.69	17.41
GRADES 7 - 8	24.62	5.62	**	**	-	-	**	**	15.97	5.08
GRADES 9 - 11	11.64	2.66	-	-	**	**	**	**	8.01	2.55
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
TOTAL	437.78	100.00	**	**	**	**	7.24	100.00	314.16	100.00

TABLE 5.9.5 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Gedio Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	73.23	62.15	-	-	-	-	1.11	63.43	20.47	63.81
GRADES 1 - 3	17.17	14.57	**	**	**	**	-	-	4.83	15.06
GRADES 4 - 6	17.59	14.93	**	**	-	-	-	-	4.63	14.43
GRADES 7 - 8	7.29	6.19	**	**	-	-	**	**	1.34	4.18
GRADES 9 - 11	2.00	1.70	-	-	-	-	**	**	.54	1.68
GRADE 12 COMPLETE	.56	.48	-	-	-	-	-	-	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	117.83	100.00	**	**	**	**	1.75	100.00	32.08	100.00

TABLE 5.9.6 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

North Omo Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	394.71	66.53	7.82	56.46	**	**	**	**	225.93	65.68
GRADES 1 - 3	65.16	10.98	**	**	**	**	**	**	38.30	11.13
GRADES 4 - 6	89.99	15.17	**	**	**	**	**	**	50.45	14.67
GRADES 7 - 8	29.18	4.92	-	-	**	**	-	-	19.17	5.57
GRADES 9 - 11	11.18	1.88	-	-	-	-	-	-	7.44	2.16
GRADE 12 COMPLETE	**	**	**	**	**	**	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	**	**
TOTAL	593.25	100.00	13.85	100.00	**	**	**	**	343.98	100.00

TABLE 5.9.7 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

South Omo Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	66.20	85.02	.30	33.71	**	**	**	**	**	**
GRADES 1 - 3	5.79	7.44	**	**	-	-	-	-	**	**
GRADES 4 - 6	3.90	5.01	**	**	-	-	-	-	**	**
GRADES 7 - 8	1.25	1.61	**	**	-	-	-	-	**	**
GRADES 9 - 11	**	**	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	77.86	100.00	.89	100.00	**	**	**	**	**	**

TABLE 5.9.8 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Keficho-Shekicho Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	100.46	68.82	**	**	-	-	**	**	14.72	69.40
GRADES 1 - 3	16.12	11.04	**	**	-	-	**	**	2.89	13.63
GRADES 4 - 6	18.79	12.87	**	**	-	-	**	**	1.94	9.15
GRADES 7 - 8	8.18	5.60	-	-	-	-	-	-	**	**
GRADES 9 - 11	1.60	1.10	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	145.98	100.00	**	**	-	-	**	**	21.21	100.00

TABLE 5.9.9 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Bench-Maji Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	59.16	74.47	1.59	77.18	**	**	.47	87.04	16.24	79.96
GRADES 1 - 3	11.44	14.40	-	-	-	-	**	**	2.43	11.96
GRADES 4 - 6	4.92	6.19	**	**	-	-	-	-	1.12	5.51
GRADES 7 - 8	2.39	3.01	**	**	-	-	-	-	.40	1.97
GRADES 9 - 11	.91	1.15	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	**	**	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	79.44	100.00	2.06	100.00	**	**	.54	100.00	20.31	100.00

TABLE 5.9.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Yem Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	10.50	76.59	**	**	-	-	**	**	5.77	74.74
GRADES 1 - 3	1.18	8.61	.04	21.05	-	-	-	-	.52	6.74
GRADES 4 - 6	1.20	8.75	**	**	-	-	-	-	.79	10.23
GRADES 7 - 8	.40	2.92	**	**	-	-	-	-	.34	4.40
GRADES 9 - 11	.29	2.12	**	**	-	-	-	-	.19	2.46
GRADE 12 COMPLETE	**	**	-	-	-	-	**	**	**	**
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-
TOTAL	13.71	100.00	.19	100.00	-	-	.40	100.00	7.72	100.00

TABLE 5.9.11 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Amaro Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITERATE	11.19	64.61	**	**	3.35	57.86	**	**	6.61	67.38
GRADES 1 - 3	2.81	16.22	**	**	.88	15.20	-	-	1.41	14.37
GRADES 4 - 6	2.04	11.78	**	**	1.01	17.44	-	-	1.18	12.03
GRADES 7 - 8	.76	4.39	**	**	.40	6.91	-	-	.42	4.28
GRADES 9 - 11	.39	2.25	-	-	**	**	-	-	.19	1.94
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	17.32	100.00	**	**	5.79	100.00	**	**	9.81	100.00

TABLE 5.9.12 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Burji Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	5.12	75.07	**	**	**	**	.07	87.50	2.28	73.31
GRADES 1 - 3	.70	10.26	**	**	-	-	-	-	.36	11.58
GRADES 4 - 6	.58	8.50	-	-	-	-	**	**	.27	8.68
GRADES 7 - 8	.23	3.37	-	-	-	-	-	-	.13	4.18
GRADES 9 - 11	.13	1.91	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	6.82	100.00	**	**	**	**	.08	100.00	3.11	100.00

TABLE 5.9.13 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Konso Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	22.80	84.13	-	-	.33	86.84	-	-	8.74	84.69
GRADES 1 - 3	2.46	9.08	-	-	-	-	-	-	.76	7.36
GRADES 4 - 6	1.08	3.99	-	-	**	**	-	-	.47	4.55
GRADES 7 - 8	.52	1.92	-	-	-	-	-	-	.22	2.13
GRADES 9 - 11	**	**	-	-	-	-	-	-	**	**
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	**	**
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	27.10	100.00	-	-	.38	100.00	-	-	10.32	100.00

TABLE 5.9.14 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 E.C.)

Derashe Special Wereda Zone

NUMBER IN THOUSANDS ('000)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED									
	TOTAL	PERCENT	IMPROVED SEED	PERCENT	IRRIGATION	PERCENT	PESTICIDE	PERCENT	FERTILIZER	PERCENT
ILLITRATE	11.08	74.26	-	-	**	**	**	**	1.10	79.14
GRADES 1 - 3	2.11	14.14	-	-	**	**	-	-	**	**
GRADES 4 - 6	1.18	7.91	-	-	-	-	-	-	.13	9.35
GRADES 7 - 8	**	**	-	-	-	-	-	-	-	-
GRADES 9 - 11	.17	1.14	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	14.92	100.00	-	-	**	**	**	**	1.39	100.00

TABLE 5.10 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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	16.91	63.76	.54	45.38	**	**	.37	66.07	**	**
GRADES 1 - 3	3.70	13.95	**	**	-	-	**	**	**	**
GRADES 4 - 6	4.17	15.72	**	**	-	-	**	**	**	**
GRADES 7 - 8	1.40	5.28	**	**	-	-	**	**	-	-
GRADES 9 - 11	.15	.57	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	**	**	-	-	-	-	-	-	-	-
HIGHER EDUCATION	**	**	-	-	-	-	-	-	-	-
TOTAL	26.52	100.00	1.19	100.00	**	**	.56	100.00	.16	100.00

TABLE 5.11 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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	10.24	79.50	.24	51.06	.51	66.23	.13	92.86	5.80	78.91
GRADES 1 - 3	1.27	9.86	**	**	.09	11.69	**	**	.68	9.25
GRADES 4 - 6	.91	7.07	**	**	**	14.29	-	-	.61	8.30
GRADES 7 - 8	.23	1.79	**	**	**	3.90	-	-	.14	1.90
GRADES 9 - 11	.12	.93	**	**	-	-	-	-	**	**
GRADE 12 COMPLETE	.07	.54	-	-	**	**	-	-	**	**
HIGHER EDUCATION	**	**	-	-	**	**	-	-	**	**
TOTAL	12.88	100.00	.47	100.00	.77	100.00	.14	100.00	7.35	100.00

TABLE 5.12 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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
ILLITERATE	3.70	67.27	.09	39.13	**	**	.12	85.71	2.41	70.47
GRADES 1 - 3	.64	11.64	**	**	**	**	.01	7.14	.40	11.70
GRADES 4 - 6	.34	6.18	**	**	-	-	.01	7.14	.17	4.97
GRADES 7 - 8	.29	5.27	**	**	**	**	-	-	.15	4.39
GRADES 9 - 11	.28	5.09	**	**	**	**	-	-	.20	5.85
GRADE 12 COMPLETE	.18	3.27	**	**	-	-	-	-	.08	2.34
HIGHER EDUCATION	.08	1.45	**	**	**	**	-	-	**	**
TOTAL	5.50	100.00	.23	100.00	**	**	.14	100.00	3.42	100.00

TABLE 5.13 NUMBER OF HOLDERS WHO APPLIED AGRICULTURAL PRACTICES IN THEIR FIELDS
BY EDUCATIONAL ATTAINMENT FOR PRIVATE PEASANT HOLDINGS
1998/99(1991 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	12.63	89.70	2.70	92.78	2.10	78.95	**	**	1.93	86.55
GRADES 1 - 3	.83	5.89	.11	3.78	.35	13.16	-	-	.16	7.17
GRADES 4 - 6	.47	3.34	**	**	.18	6.77	-	-	.11	4.93
GRADES 7 - 8	**	**	**	**	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-
GRADE 12 COMPLETE	.08	.57	**	**	**	**	-	-	**	**
HIGHER EDUCATION	**	**	-	-	**	**	-	-	**	**
TOTAL	14.08	100.00	2.91	100.00	2.66	100.00	**	**	2.23	100.00

APPENDIX I

ESTIMATION PROCEDURES AND FORMULATIONS FOR ESTIMATES OF TOTALS AND VARIANCE

100-1000

100-1000

100-1000

100-1000

100-1000

100-1000

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 the 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.

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:

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

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

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

APPENDIX II

ESTIMATES OF THE STANDARD ERRORS WITH THE CORRESPONDING COEFFICIENT OF VARIATION

1000 1000 1000

1000 1000

1000 1000

1000

1000

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
1998/99(1991 E.C.)

National

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	6,743.88	176.83	2.62	218.01	15.51	7.11	30.11	5.03	16.72	360.27	32.28	8.96	2,936.86	156.18	5.32
Teff	2,090.89	83.59	4.00	22.41	4.12	18.40	2.89	0.77	26.49	143.07	13.95	9.75	1,074.29	67.14	6.25
Barely	830.15	70.59	8.50	*	*	*	3.58	1.26	35.06	35.13	6.12	17.41	368.27	62.87	17.07
Wheat	987.05	73.61	7.46	59.33	5.65	9.52	2.57	0.73	28.31	138.15	25.50	18.46	648.78	67.64	10.43
Maize	1,302.91	49.19	3.78	131.78	14.12	10.72	13.65	2.46	18.06	20.75	2.89	13.91	499.93	27.76	5.55
Sorghum	1,042.28	51.99	4.99	1.99	0.39	19.57	7.24	3.04	41.92	17.89	4.36	24.37	126.75	16.04	12.66
Millet	446.63	70.43	15.77	-	-	-	*	*	*	4.13	1.17	28.36	201.38	62.05	30.81
Oats	43.97	6.54	14.88	-	-	-	*	*	*	1.15	0.35	30.22	17.45	4.61	26.41
PULSES	875.36	36.71	4.19	*	*	*	2.67	0.82	30.65	7.39	1.11	15.03	123.75	15.58	12.59
Horse Beans	293.41	17.01	5.80	*	*	*	*	*	*	3.39	0.74	21.80	57.98	9.28	16.00
Chick Peas	141.95	11.72	8.25	*	*	*	1.48	0.67	45.50	0.79	0.35	44.68	4.65	1.54	33.05
Haricot Beans	129.45	14.07	10.87	*	*	*	0.57	0.22	38.12	0.93	0.30	32.60	20.35	3.41	16.74
Field Peas	167.65	17.29	10.31	*	*	*	*	*	*	1.28	0.36	28.50	35.60	8.12	22.82
Lentils	47.85	6.07	12.69	*	*	*	-	-	-	*	*	*	3.94	1.13	28.77
Vetch	95.05	11.83	12.45	-	-	-	*	*	*	*	*	*	1.24	0.36	28.94
OILSEEDS	374.82	25.63	6.84	*	*	*	*	*	*	2.89	0.66	22.75	26.87	4.54	16.90
Neug	221.11	20.91	9.46	-	-	-	-	-	-	1.01	0.44	43.62	9.66	2.58	26.74
Lin Seed	90.44	10.18	11.26	*	*	*	*	*	*	1.48	0.47	32.02	5.95	2.10	35.27
Rape seed	10.42	2.42	23.21	-	-	-	-	-	-	*	*	*	6.46	1.88	29.02
Ground Nuts	15.03	5.45	36.24	-	-	-	0.06	0.03	42.95	0.01	-	41.54	2.71	1.33	49.21
Sun Flower	5.58	1.46	26.07	-	-	-	*	*	*	*	*	*	*	*	*
Sesame	32.20	7.49	23.25	-	-	-	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
OTHERS	254.30	12.42	4.88	1.72	0.69	40.39	8.83	2.26	25.64	3.12	1.00	32.14	91.91	7.05	7.67
Fenugreek	21.43	3.49	16.26	-	-	-	*	*	*	*	*	*	1.42	0.32	22.15
Spices	54.05	5.97	11.04	*	*	*	1.12	0.30	26.46	0.54	0.20	37.00	17.60	2.25	12.76
Potatoes	50.95	6.53	12.81	-	-	-	1.53	0.56	36.70	*	*	*	26.45	4.71	17.81
Other Vegetables	127.87	7.47	5.84	1.70	0.69	40.64	5.96	2.08	34.96	*	*	*	46.43	4.35	9.36
ALL TEMPORARY	8,248.37	195.43	2.37	221.83	15.52	7.00	41.84	6.43	15.36	373.67	32.33	8.65	3,179.39	161.89	5.09
Chat	94.33	5.90	6.25	-	-	-	7.10	1.22	17.11	2.99	0.80	26.78	32.95	3.51	10.65
Coffee	251.31	20.32	8.09	16.13	3.24	20.06	3.98	0.75	18.84	4.36	1.12	25.68	42.75	4.21	9.85
Enset	257.91	15.38	5.96	-	-	-	1.71	0.32	18.88	3.54	0.98	27.71	173.64	11.89	6.85
Cotton	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
Tobacco	2.12	0.43	20.33	*	*	*	0.01	0.01	45.00	-	-	-	0.48	0.11	24.03
Fruits	24.09	3.08	12.80	*	*	*	*	*	*	*	*	*	6.26	0.98	15.64
Other Permanent	29.52	2.40	8.11	*	*	*	4.09	1.05	25.71	*	*	*	7.72	0.81	10.48
TOTAL PERMANENT	675.90	31.82	4.71	17.19	3.31	19.28	21.37	3.10	14.52	11.22	1.74	15.49	265.44	14.88	5.60
ALL CROPS	8,924.27	195.58	2.19	239.02	15.97	6.68	63.21	8.02	12.68	384.89	32.34	8.40	3,444.83	163.23	4.74

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
1998/99(1991 E.C.)

Tigray

	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
TYPE OF CROP	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	522.34	36.03	6.90	7.54	2.45	32.50	5.39	1.78	33.04	5.39	1.67	31.06	193.74	19.07	9.84
Teff	140.64	18.42	13.10	2.51	1.22	48.51	*	*	*	1.72	0.60	35.21	58.55	7.23	12.36
Barely	78.40	9.17	11.70	*	*	*	0.56	0.25	44.18	*	*	*	29.49	4.58	15.55
Wheat	54.94	7.07	12.86	2.45	0.61	24.79	1.12	0.44	39.05	*	*	*	21.27	2.97	13.95
Maize	69.87	8.66	12.40	*	*	*	1.82	0.78	42.66	0.69	0.32	45.72	34.01	5.24	15.41
Sorghum	108.69	17.01	15.65	*	*	*	*	*	*	*	*	*	29.78	8.76	29.40
Millet	69.36	11.42	16.47	-	-	-	*	*	*	*	*	*	20.48	4.63	22.62
Oats	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
PULSES	34.13	3.44	10.08	-	-	-	*	*	*	*	*	*	3.33	0.66	19.93
Horse Beans	9.85	1.58	16.02	-	-	-	*	*	*	*	*	*	2.04	0.50	24.63
Chick Peas	3.44	0.86	25.08	-	-	-	*	*	*	-	-	-	*	*	*
Haricot Beans	2.34	0.93	39.94	-	-	-	*	*	*	*	*	*	0.16	0.07	43.26
Field Peas	10.35	2.45	23.71	-	-	-	-	-	-	-	-	-	0.46	0.15	33.69
Lentils	2.68	0.68	25.50	-	-	-	-	-	-	-	-	-	0.11	0.05	45.58
Vetch	5.46	1.65	30.18	-	-	-	-	-	-	*	*	*	*	*	*
OILSEEDS	23.23	5.65	24.33	-	-	-	*	*	*	*	*	*	0.53	0.20	38.16
Neug	4.92	1.48	30.15	-	-	-	-	-	-	-	-	-	*	*	*
Lin Seed	6.03	1.10	18.31	-	-	-	*	*	*	-	-	-	0.15	0.05	36.78
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	12.26	5.45	44.49	-	-	-	-	-	-	*	*	*	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.12	0.27	24.31	-	-	-	0.17	0.06	35.93	-	-	-	*	*	*
Fenugreek	0.33	0.14	43.94	-	-	-	-	-	-	-	-	-	*	*	*
Spices	0.41	0.17	39.81	-	-	-	*	*	*	-	-	-	*	*	*
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Other Vegetables	0.35	0.10	28.41	-	-	-	*	*	*	-	-	-	*	*	*
ALL TEMPORARY	580.81	37.12	6.39	7.54	2.45	32.50	6.76	2.40	35.51	5.65	1.69	29.95	197.91	19.21	9.71
Chat	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.02	0.01	42.70	-	-	-	*	*	*	-	-	-	-	-	-
Other Permanent	1.06	0.41	38.93	-	-	-	*	*	*	-	-	-	*	*	*
TOTAL PERMANENT	1.72	0.57	33.06	-	-	-	*	*	*	-	-	-	0.35	0.17	48.07
ALL CROPS	582.54	37.10	6.37	7.55	2.45	32.47	6.99	2.44	34.90	5.65	1.69	29.95	198.26	19.22	9.69

TABLE 1.3 ESTIMATES OF TOTAL AREA, IMPROVED SEED, IRRIGATION, PESTICIDE AND FERTILIZER APPLIED AREA
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99 (1997 E.C.)

TYPE OF CROP	Total Area		Improved Seed Applied		Irrigation applied		Pesticide Applied		Fertilizer Applied	
	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS										
Teff	14.16	3.05	21.56	0.40	20.80	0.95	0.41	0.60	0.22	36.75
Barely	5.28	1.62	30.73	0.16	43.48	0.38	0.16	*	*	*
Wheat	3.39	0.50	14.85	0.37	22.14	*	*	0.12	0.06	47.34
Sorghum	5.14	1.30	25.28	1.69	*	*	*	0.20	0.07	37.19
Millet	55.27	3.10	19.30	-	-	-	-	-	-	-
Other Cereals	10.87	5.03	58.88	-	-	-	-	-	-	-
PULSES										
Moong Beans	0.89	0.40	44.82	-	-	*	*	*	*	*
Chick Peas	15.05	0.30	49.81	-	-	-	-	-	-	-
Haricot Beans	0.60	0.13	46.51	-	-	-	-	-	-	-
Field Peas	0.28	0.06	30.15	-	-	-	-	-	-	-
Lentils	53.18	5.35	15.17	-	-	-	-	-	-	-
Vetches	10.17	0.06	33.99	-	-	*	*	*	*	*
OILSEEDS										
Neug	21.55	0.15	10.95	-	-	-	-	-	-	-
Lin Seed	51.53	0.15	15.57	-	-	-	-	-	-	-
Rape seed	38.52	0.15	11.57	-	-	-	-	-	-	-
Ground Nuts	20.13	0.15	31.08	-	-	-	-	-	-	-
Sun Flower	20.13	0.15	11.11	-	-	*	*	*	*	*
Sesame	132.28	10.03	8.11	-	-	*	*	*	*	*
Castor Bean	101.20	0.01	43.73	-	-	-	-	-	-	-
OTHERS										
Fenugreek	0.02	0.01	43.73	-	-	-	-	-	-	-
Spices	0.02	0.01	43.73	-	-	-	-	-	-	-
Potatoes	20.13	-	-	-	-	-	-	-	-	-
Other Vegetables										
ALL TEMPORARY	345.24	3.39	22.22	1.95	20.77	0.97	0.42	0.64	0.25	38.16
Chat	0.27	0.13	49.37	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-
Cotton	-	0.01	44.34	-	-	-	-	-	-	-
Tobacco	-	0.01	44.34	-	-	-	-	-	-	-
Fruits	-	0.01	44.34	-	-	-	-	-	-	-
Other Permanent	-	0.01	44.34	-	-	-	-	-	-	-
TOTAL PERMANENT	0.30	0.13	45.33	2.00	46.03	*	*	*	*	*
ALL CROPS	15.54	3.43	22.06	0.40	20.15	0.98	0.41	0.64	0.25	38.16

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
1998/99(1991 E.C.)

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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
1998/99(1991 E.C.)

Oromia

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	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	3,011.86	107.90	3.58	111.28	13.17	11.83	12.37	4.05	32.74	287.20	31.64	11.02	1,562.57	102.86	6.58
Teff	867.62	55.34	6.38	5.93	2.59	43.58	0.43	0.16	37.12	113.20	13.45	11.88	547.68	51.32	9.37
Barely	383.45	47.79	12.46	*	*	*	*	*	*	32.29	6.08	18.83	221.76	41.11	18.54
Wheat	599.14	68.66	11.46	32.14	4.67	14.54	*	*	*	115.56	25.29	21.88	455.15	65.14	14.31
Maize	702.64	39.98	5.69	70.73	12.09	17.09	5.36	1.70	31.77	13.96	2.64	18.92	240.03	20.86	8.69
Sorghum	351.24	26.62	7.58	*	*	*	*	*	*	9.90	3.29	33.23	60.04	10.73	17.87
Millet	74.36	10.54	14.18	-	-	-	*	*	*	*	*	*	21.67	7.26	33.52
Oats	33.41	6.12	18.31	-	-	-	*	*	*	1.14	0.35	30.48	16.25	4.58	28.20
PULSES	355.80	25.68	7.22	*	*	*	*	*	*	4.60	0.91	19.77	70.09	14.42	20.57
Horse Beans	137.23	13.37	9.74	-	-	-	-	-	-	2.79	0.70	25.01	37.78	8.97	23.75
Chick Peas	61.69	9.20	14.91	*	*	*	*	*	*	*	*	*	1.26	0.58	45.91
Haricot Beans	56.02	10.23	18.26	-	-	-	*	*	*	0.54	0.25	46.81	7.73	1.67	21.65
Field Peas	52.85	12.51	23.67	-	-	-	-	-	-	0.60	0.25	41.23	21.26	7.59	35.71
Lentils	17.28	3.70	21.44	-	-	-	-	-	-	*	*	*	1.57	0.38	24.18
Vetch	30.73	6.45	21.00	-	-	-	-	-	-	*	*	*	0.48	0.24	49.14
OILSEEDS	152.04	16.18	10.64	*	*	*	*	*	*	1.88	0.56	29.56	12.03	2.71	22.53
Neug	73.35	10.85	14.79	-	-	-	-	-	-	*	*	*	1.77	0.81	45.94
Lin Seed	59.59	9.69	16.26	*	*	*	-	-	-	1.13	0.42	37.50	5.09	2.08	40.94
Rape seed	5.25	1.66	31.72	-	-	-	-	-	-	*	*	*	2.71	0.86	31.66
Ground Nuts	11.73	5.39	45.94	-	-	-	*	*	*	-	-	-	*	*	*
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	92.59	7.44	8.04	*	*	*	5.87	2.12	36.05	2.20	0.98	44.78	32.50	4.96	15.27
Fenugreek	9.34	2.19	23.39	-	-	-	*	*	*	*	*	*	1.11	0.30	26.84
Spices	12.29	2.99	24.35	*	*	*	0.35	0.16	44.62	*	*	*	2.63	0.75	28.65
Potatoes	17.64	4.56	25.88	-	-	-	0.52	0.19	36.81	*	*	*	11.27	4.02	35.69
Other Vegetables	53.33	4.18	7.85	*	*	*	4.98	2.07	41.62	*	*	*	17.49	2.80	16.00
ALL TEMPORARY	3,612.30	123.59	3.42	113.88	13.19	11.58	18.75	5.27	28.11	295.88	31.66	10.70	1,677.20	109.02	6.50
Chat	66.90	4.82	7.21	-	-	-	6.12	1.19	19.39	1.47	0.53	35.99	20.11	3.00	14.91
Coffee	154.36	17.48	11.32	12.66	3.03	23.97	1.44	0.41	28.75	2.31	0.83	35.74	11.46	2.39	20.90
Enset	70.86	10.12	14.28	-	-	-	0.49	0.22	44.73	1.55	0.76	48.93	33.40	6.06	18.15
Cotton	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	1.07	0.32	29.49	-	-	-	0.01	0.01	45.00	-	-	-	0.20	0.07	36.46
Fruits	10.77	1.83	17.02	*	*	*	*	*	*	*	*	*	2.21	0.69	31.30
Other Permanent	11.12	1.77	15.91	*	*	*	2.37	0.93	39.28	-	-	-	2.27	0.44	19.31
TOTAL PERMANENT	315.10	24.20	7.68	13.45	3.11	23.15	11.66	1.87	16.06	5.57	1.36	24.50	69.65	7.98	11.46
ALL CROPS	3,927.40	122.14	3.11	127.32	13.67	10.74	30.41	6.39	21.02	301.45	31.65	10.50	1,746.84	109.39	6.26

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
1998/99(1991 E.C.)

Somale

	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
TYPE OF CROP	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	44.75	9.41	21.02	*	*	*	0.37	0.16	43.62	*	*	*	*	*	*
Teff	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Barely	5.12	1.58	30.90	-	-	-	-	-	-	*	*	*	*	*	*
Wheat	1.77	0.59	33.18	*	*	*	-	-	-	*	*	*	*	*	*
Maize	21.96	4.60	20.96	*	*	*	0.33	0.16	48.91	*	*	*	*	*	*
Sorghum	15.76	4.91	31.17	0.02	0.01	49.46	*	*	*	-	-	-	0.10	0.04	44.23
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	0.85	0.27	31.73	-	-	-	*	*	*	*	*	*	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Haricot Beans	0.32	0.09	28.41	-	-	-	*	*	*	-	-	-	-	-	-
Field Peas	0.48	0.24	49.79	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.22	0.60	48.96	-	-	-	0.07	0.03	35.48	*	*	*	*	*	*
Fenugreek	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.95	0.43	45.15	-	-	-	0.07	0.03	35.48	*	*	*	*	*	*
ALL TEMPORARY	47.20	9.64	20.43	*	*	*	0.46	0.18	38.64	0.21	0.09	44.12	*	*	*
Chat	4.50	1.69	37.42	-	-	-	*	*	*	-	-	-	*	*	*
Coffee	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.21	0.08	40.21	-	-	-	0.21	0.07	34.43	-	-	-	*	*	*
Other Permanent	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	4.90	1.68	34.28	-	-	-	0.25	0.09	35.30	-	-	-	*	*	*
ALL CROPS	52.10	10.25	19.67	*	*	*	0.71	0.20	27.45	0.21	0.09	44.12	*	*	*

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
1998/99(1991 E.C.)

Benshangul-Gumuz

	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
TYPE OF CROP	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	132.49	17.62	13.30	1.05	0.28	26.60	*	*	*	0.76	0.19	24.94	14.83	4.36	29.38
Teff	21.64	4.85	22.42	*	*	*	-	-	-	*	*	*	3.69	1.82	49.23
Barely	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Wheat	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Maize	29.01	5.89	20.29	1.03	0.28	27.32	*	*	*	0.30	0.08	26.34	5.32	0.93	17.56
Sorghum	52.14	6.16	11.81	-	-	-	-	-	-	*	*	*	*	*	*
Millet	26.44	7.67	29.01	-	-	-	-	-	-	*	*	*	1.83	0.73	39.87
Oats	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
PULSES	6.38	1.37	21.46	-	-	-	-	-	-	*	*	*	*	*	*
Horse Beans	1.19	0.45	37.90	-	-	-	-	-	-	-	-	-	*	*	*
Chick Peas	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Haricot Beans	4.03	1.06	26.18	-	-	-	-	-	-	-	-	-	0.09	0.04	48.82
Field Peas	0.38	0.17	43.41	-	-	-	-	-	-	-	-	-	*	*	*
Lentils	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	18.11	3.09	17.07	-	-	-	-	-	-	*	*	*	0.47	0.23	49.94
Neug	11.47	2.78	24.26	-	-	-	-	-	-	*	*	*	*	*	*
Lin Seed	0.16	0.07	44.12	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Ground Nuts	1.57	0.58	37.26	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	4.88	1.14	23.35	-	-	-	-	-	-	*	*	*	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	4.34	0.79	18.08	*	*	*	*	*	*	*	*	*	0.78	0.24	30.77
Fenugreek	0.01	-	41.24	-	-	-	-	-	-	-	-	-	-	-	-
Spices	1.38	0.31	22.25	-	-	-	-	-	-	*	*	*	0.25	0.08	33.13
Potatoes	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Other Vegetables	2.58	0.67	26.01	*	*	*	*	*	*	*	*	*	0.25	0.08	32.83
ALL TEMPORARY	161.32	20.26	12.56	1.10	0.28	25.24	0.07	0.03	44.09	0.96	0.21	21.93	16.69	4.96	29.74
Chat	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Coffee	1.27	0.61	48.45	0.13	0.05	33.82	*	*	*	-	-	-	0.13	0.05	36.57
Enset	0.01	0.01	41.66	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	0.07	0.02	29.82	-	-	-	-	-	-	-	-	-	*	*	*
Tobacco	0.04	0.01	37.80	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.77	0.31	40.46	-	-	-	0.10	0.03	34.78	-	-	-	0.06	0.02	33.08
Other Permanent	0.15	0.04	27.40	-	-	-	0.03	0.01	45.47	-	-	-	*	*	*
TOTAL PERMANENT	2.39	0.71	29.54	0.14	0.05	33.58	*	*	*	-	-	-	0.23	0.06	26.74
ALL CROPS	163.71	20.29	12.39	1.24	0.27	21.61	*	*	*	0.97	0.21	21.85	16.92	4.96	29.30

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
1998/99(1991 E.C.)

(S.N.N.P.R)

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	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	596.58	59.26	9.93	46.25	5.90	12.76	2.18	0.53	24.39	38.90	4.54	11.68	310.53	50.98	16.42
Teff	167.36	20.68	12.36	1.90	0.85	44.64	0.48	0.17	35.89	16.52	2.85	17.23	90.70	13.12	14.47
Barely	98.63	47.08	47.73	*	*	*	*	*	*	1.17	0.30	25.75	*	*	*
Wheat	82.34	9.46	11.49	10.87	2.07	19.03	*	*	*	18.08	3.05	16.84	68.45	8.57	12.52
Maize	162.66	17.23	10.59	33.29	5.71	17.15	1.24	0.40	32.53	1.78	0.75	42.14	70.20	9.36	13.34
Sorghum	82.91	8.83	10.66	*	*	*	0.21	0.07	35.41	1.05	0.29	27.39	8.73	2.11	24.23
Millet	2.60	0.78	30.01	-	-	-	-	-	-	*	*	*	1.11	0.43	39.01
Oats	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
PULSES	73.81	7.91	10.71	0.09	0.04	49.16	0.17	0.07	39.96	1.16	0.35	30.13	30.25	5.05	16.70
Horse Beans	21.68	2.58	11.90	*	*	*	-	-	-	*	*	*	8.76	1.67	19.03
Chick Peas	19.66	3.61	18.37	*	*	*	-	-	-	-	-	-	*	*	*
Haricot Beans	25.87	4.50	17.40	*	*	*	0.14	0.06	45.77	0.20	0.10	47.62	11.32	2.94	26.00
Field Peas	5.80	2.30	39.66	-	-	-	*	*	*	0.58	0.26	45.06	7.89	2.16	27.43
Lentils	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Vetch	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	2.01	0.62	30.97	-	-	-	-	-	-	-	-	-	0.22	0.06	29.40
Neug	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Lin Seed	0.61	0.18	29.41	-	-	-	-	-	-	-	-	-	0.12	0.05	38.49
Rape seed	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	0.39	0.09	22.97	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	85.44	7.86	9.20	*	*	*	0.36	0.17	46.68	0.74	0.18	24.47	40.66	4.41	10.86
Fenugreek	0.61	0.30	48.26	-	-	-	-	-	-	-	-	-	*	*	*
Spices	17.36	3.59	20.69	-	-	-	*	*	*	0.19	0.09	47.51	7.61	1.62	21.25
Potatoes	10.69	2.44	22.82	-	-	-	*	*	*	*	*	*	7.06	1.61	22.73
Other Vegetables	56.78	5.86	10.31	*	*	*	*	*	*	0.36	0.11	30.25	25.80	3.29	12.74
ALL TEMPORARY	757.84	63.96	8.44	46.81	5.92	12.64	2.70	0.61	22.42	40.80	4.68	11.47	381.65	52.35	13.72
Chat	18.08	2.88	15.91	-	-	-	*	*	*	1.44	0.60	41.66	9.87	1.60	16.20
Coffee	83.11	8.63	10.38	3.00	1.09	36.48	0.86	0.21	24.83	1.68	0.68	40.68	29.97	3.44	11.47
Enset	186.81	11.58	6.20	-	-	-	1.21	0.24	19.51	1.98	0.62	31.33	140.23	10.22	7.29
Cotton	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
Tobacco	0.64	0.19	29.28	*	*	*	-	-	-	-	-	-	0.26	0.09	34.11
Fruits	10.13	2.42	23.94	-	-	-	*	*	*	*	*	*	3.46	0.67	19.28
Other Permanent	8.51	1.14	13.36	-	-	-	0.26	0.10	38.79	*	*	*	3.48	0.60	17.14
TOTAL PERMANENT	310.70	17.35	5.58	3.06	1.10	35.80	4.92	2.32	47.27	5.15	1.03	19.93	187.48	12.48	6.66
ALL CROPS	1,068.54	68.74	6.43	49.87	6.00	12.04	7.62	2.86	37.57	45.95	4.80	10.45	569.13	55.64	9.78

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
1998/99(1991 E.C.)

Gambela

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS															
Teff	10.86	2.12	19.51	*	*	*	*	*	*	0.48	0.22	44.92	*	*	*
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	6.62	1.60	24.14	*	*	*	*	*	*	0.45	0.22	49.46	*	*	*
Sorghum	4.18	1.05	25.09	*	*	*	*	*	*	*	*	*	*	*	*
Millet	0.06	0.03	49.80	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES															
Horse Beans	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OilSEEDS															
Neug	0.31	0.15	49.26	-	-	-	-	-	-	*	*	*	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.04	0.02	36.29	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS															
Fenugreek	0.93	0.31	33.28	*	*	*	-	-	-	-	-	-	*	*	*
Spices	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.89	0.31	34.48	-	-	-	-	-	-	-	-	-	*	*	*
ALL TEMPORARY	12.10	2.26	18.70	*	*	*	-	-	-	0.54	0.22	40.32	*	*	*
Chat	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	1.42	0.48	33.93	*	*	*	-	-	-	-	-	-	-	-	-
Eneet	0.22	0.09	39.58	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.32	0.13	38.99	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	0.07	0.02	29.60	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	2.06	0.61	29.68	*	*	*	-	-	-	-	-	-	-	-	-
ALL CROPS	14.16	2.49	17.57	*	*	*	-	-	-	0.54	0.22	40.27	*	*	*

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
1998/99(1991 E.C.)

Harari

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
CEREALS	4.52	0.29	6.53	0.17	0.05	29.05	0.22	0.04	17.56	0.07	0.02	28.14	2.37	0.30	12.60
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	0.02	0.01	44.90	-	-	-	-	-	-	-	-	-	0.02	0.01	47.77
Wheat	0.08	0.03	35.28	0.03	0.01	45.36	-	-	-	-	-	-	0.07	0.03	34.56
Maize	1.14	0.11	9.53	0.12	0.05	40.03	0.07	0.01	21.11	0.04	0.01	36.20	0.75	0.11	14.78
Sorghum	3.26	0.26	7.96	*	*	*	0.15	0.04	22.75	0.03	0.01	31.96	1.52	0.20	13.00
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	0.03	0.01	27.25	-	-	-	-	-	-	-	-	-	0.02	0.01	30.42
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*
Haricot Beans	0.02	0.01	30.71	-	-	-	-	-	-	-	-	-	0.01	-	29.57
Field Peas	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.95	0.22	22.78	-	-	-	0.03	0.01	35.22	0.01	-	44.90	0.18	0.05	27.64
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.95	0.22	22.77	-	-	-	0.03	0.01	35.22	0.01	-	44.90	0.18	0.05	27.64
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.35	0.04	12.10	-	-	-	0.02	-	28.62	-	-	-	0.14	0.02	17.28
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	0.02	0.01	47.05	-	-	-	-	-	-	-	-	-	*	*	*
Other Vegetables	0.33	0.04	12.93	-	-	-	0.02	-	31.14	-	-	-	0.13	0.02	18.34
ALL TEMPORARY	5.85	0.39	6.59	0.17	0.05	29.01	0.27	0.05	17.24	0.08	0.02	23.16	2.70	0.31	11.49
Chat	2.06	0.21	10.40	-	-	-	0.18	0.04	19.51	0.05	0.02	41.15	1.10	0.17	15.26
Coffee	0.02	0.01	32.90	-	-	-	-	-	-	-	-	-	0.01	-	46.72
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.15	0.05	30.89	-	-	-	*	*	*	-	-	-	0.02	0.01	32.62
Other Permanent	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
TOTAL PERMANENT	2.25	0.20	8.84	-	-	-	0.25	0.05	20.06	0.05	0.02	40.39	1.13	0.17	14.74
ALL CROPS	8.09	0.46	5.70	0.17	0.05	29.01	0.52	0.09	16.95	0.13	0.03	25.00	3.83	0.46	11.98

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
1998/99(1991 E.C.)

Addis Ababa

TYPE OF CROP	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	5.95	0.62	10.47	0.11	0.03	29.27	-	-	-	0.22	0.06	25.40	5.76	0.63	10.92
Teff	3.65	0.50	13.78	*	*	*	-	-	-	0.15	0.05	30.93	3.62	0.50	13.93
Barely	0.14	0.06	45.25	-	-	-	-	-	-	*	*	*	*	*	*
Wheat	2.12	0.20	9.37	0.09	0.02	24.64	-	-	-	0.06	0.02	27.95	2.06	0.20	9.75
Maize	0.02	-	25.61	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	0.01	-	36.02	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	1.37	0.22	15.72	-	-	-	-	-	-	0.01	-	48.04	0.44	0.17	37.85
Horse Beans	0.07	0.03	43.16	-	-	-	-	-	-	*	*	*	0.01	-	40.81
Chick Peas	0.01	-	26.66	-	-	-	-	-	-	-	-	-	0.18	0.07	38.23
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	0.57	0.10	17.04	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	0.13	0.01	11.42	-	-	-	-	-	-	-	-	-	0.06	0.01	20.22
Vetch	0.59	0.13	22.37	-	-	-	-	-	-	-	-	-	0.20	0.10	48.14
OILSEEDS	0.01	-	35.37	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	0.01	-	42.03	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.18	0.05	24.53	0.07	0.03	42.57	*	*	*	-	-	-	0.11	0.03	29.67
Fenugreek	0.07	0.01	19.23	-	-	-	-	-	-	-	-	-	0.03	0.01	24.92
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.10	0.04	36.65	0.07	0.03	42.57	*	*	*	-	-	-	0.08	0.03	39.11
ALL TEMPORARY	7.51	0.80	10.68	0.18	0.04	20.70	*	*	*	0.23	0.06	23.85	6.32	0.76	12.01
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	0.01	-	30.43	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.01	-	25.82	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	7.52	0.80	10.67	0.18	0.04	20.70	*	*	*	0.23	0.06	23.85	6.32	0.76	12.01

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
1998/99(1991 E.C.)

Dire Dawa

	Total Area			Improved Seed Applied			Irrigation applied			Pesticide Applied			Fertilizer Applied		
TYPE OF CROP	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
CEREALS	5.12	0.47	9.15	1.41	0.27	19.50	0.49	0.10	20.09	*	*	*	0.81	0.19	23.60
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.18	0.04	22.98	0.07	0.03	40.63	0.08	0.03	32.73	-	-	-	0.06	0.02	33.40
Sorghum	4.94	0.46	9.40	1.34	0.27	19.80	0.41	0.09	20.89	0.02	0.01	50.00	0.75	0.18	24.35
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	0.14	0.04	26.49	0.07	0.03	42.45	-	-	-	-	-	-	0.01	0.01	47.35
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	0.14	0.04	26.49	0.07	0.03	42.45	-	-	-	-	-	-	0.01	0.01	47.35
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	0.02	0.01	44.88	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.02	0.01	48.91	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	0.40	0.05	12.54	*	*	*	0.11	0.02	19.18	-	-	-	0.07	0.01	20.80
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.40	0.05	12.55	*	*	*	0.11	0.02	19.39	-	-	-	0.07	0.01	20.80
ALL TEMPORARY	5.68	0.48	8.51	1.49	0.29	19.38	0.61	0.11	18.29	0.02	0.01	44.47	0.89	0.20	21.99
Chat	0.55	0.10	18.62	-	-	-	0.17	0.04	21.33	-	-	-	0.10	0.03	29.11
Coffee	0.08	0.03	35.54	-	-	-	0.06	0.02	35.71	-	-	-	0.02	0.01	42.75
Enset	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	0.12	0.06	47.99	-	-	-	*	*	*	*	*	*	*	*	*
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.76	0.11	14.49	-	-	-	0.35	0.07	19.54	*	*	*	0.18	0.05	27.04
ALL CROPS	6.44	0.49	7.62	1.49	0.29	19.34	0.96	0.16	17.11	0.04	0.01	32.17	1.08	0.22	20.60

TABLE 2.1
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1983/84 (1991 E.C.)

National

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	2,936.86	156.18	5.32	473.47	53.63	11.33	1,050.42	86.86	8.27	130.11	11.84	9.10	1,272.34	88.11	7.27	70.52	7.12	10.10
Teff	1,074.29	67.14	6.25	32.34	3.77	11.66	383.02	35.18	9.18	65.45	9.47	14.47	571.78	44.14	7.72	21.70	3.14	14.49
Barely	388.27	62.87	17.07	18.54	2.75	14.83	192.30	37.72	19.62	10.25	1.77	17.28	68.15	9.67	14.19	4.70	1.10	23.39
Wheat	648.78	67.64	10.43	28.15	14.86	6.51	278.99	53.16	19.08	23.11	4.93	21.33	316.52	14.86	10.75	12.03	2.65	22.01
Maize	499.93	27.76	5.55	28.92	13.33	14.99	96.33	10.02	10.40	16.23	2.47	15.19	138.24	4.51	24.78	20.98	2.78	13.23
Sorghum	128.75	16.04	12.66	11.77	2.96	25.15	8.31	1.43	17.24	4.74	1.49	31.47	17.33	0.69	36.53	7.41	2.79	37.66
Millet	201.38	62.05	30.81	0.86	0.34	39.85	77.96	14.42	18.50	9.97	3.35	33.58	1.89	0.69	36.53	3.27	0.99	30.25
Oats	17.45	4.61	26.41				13.91	4.24	30.46									*
RILSES	123.75	15.58	12.59	33.31	3.13	9.40	63.91	11.70	18.30	7.83	1.76	22.53	16.05	2.80	17.44	2.65	0.90	33.91
Horse Beans	57.98	9.28	16.00	20.62	2.48	12.01	28.49	6.90	24.21	2.05	0.83	40.49	5.95	1.72	28.96	0.87	0.34	39.07
Chick Peas	4.65	1.54	33.05	3.93	0.74	18.81	24.32	6.79	27.91				4.78	1.26	26.35			*
Haricot Beans	20.35	3.41	16.74	6.52	1.22	18.79	7.14	1.72	24.11	2.93	0.98	33.32	2.32	0.75	32.47	1.44	0.69	47.86
Field Peas	35.60	8.12	22.82	1.30	0.36	27.76	1.48	0.47	32.04	0.57	0.17	45.18	0.96	0.38	39.19			*
Lentils	3.94	1.13	28.77	0.39	0.13	32.81	0.23	0.10	41.57				1.71	0.85	49.76			*
Vetch	1.24	0.36	28.94	0.56	0.24	42.19		0.10										*
OILSEEDS	26.87	4.54	16.90	10.10	1.87	18.47	11.02	2.79	25.32	1.34	0.56	41.61	4.12	1.40	34.02	0.29	0.13	43.44
Nalg	9.66	2.58	26.74	3.74	1.09	29.07	3.27	1.49	45.55				2.07	0.98	47.25			*
Lin Seed	5.95	2.10	35.27	0.87	0.40	45.79	4.12	1.81	43.93				0.64	0.28	43.52			*
Rape seed	6.46	1.88	29.02	2.24	0.66	29.65	3.17	1.30	41.17									*
Ground Nuts	2.71	1.33	49.21							0.05	0.01	34.10						*
Sun Flower	*	*	1*	0.10	0.04	41.50	*	*	*									*
Sesame	*	*	*	0.57	0.17	30.09	*	*	*									*
Castor Bean	*	*	*															*
OTHERS	91.91	7.05	7.67	60.67	4.72	7.78	17.14	4.00	23.32	4.49	1.05	23.27	7.97	1.22	15.28	1.64	0.42	25.84
Fenugreek	1.42	0.32	22.15	0.45	0.11	25.05	0.42	0.16	37.09				0.48	0.21	43.93			*
Spices	17.60	2.25	12.76	8.16	1.11	13.99	4.76	1.18	24.76	0.91	0.29	32.22	3.28	0.76	23.07	0.50	0.19	38.40
Potatoes	26.45	4.71	17.81	14.29	2.29	16.01	8.48	3.71	43.77	1.06	0.34	51.85	1.95	0.45	23.16			*
Other Vegetables	46.43	4.35	9.36	37.77	3.48	9.21	3.48	1.07	30.84	2.48	0.86	34.74	2.27	0.88	36.64	0.43	0.12	28.19
ALL TEMPORARY	3,179.39	161.89	5.09	577.55	54.88	9.50	1,142.49	92.08	8.06	143.78	12.52	8.71	1,240.48	88.91	7.17	75.09	7.33	9.76
Orat	32.95	3.51	10.65	26.01	2.80	10.75	0.94	0.26	27.51	2.35	0.84	35.64	1.73	0.47	27.23	1.92	0.65	33.72
Coffee	42.75	4.21	9.85	36.37	3.27	9.00	2.73	0.66	24.04	1.89	0.50	26.56	0.64	0.21	32.17	1.12	0.56	49.96
Erset	173.64	11.89	6.85	170.86	11.23	6.57	0.53	0.20	37.07	0.33	0.16	48.44	*	*	*	*	*	*
Cotton	*	*	*	0.50	0.16	31.47	*	*	*									*
Tobacco	0.48	0.11	24.05	0.47	0.11	24.11	*	*	*									*
Fruits	6.28	0.98	15.64	5.08	0.76	14.96	*	*	*	0.18	0.07	39.23	0.12	0.05	39.67	0.13	0.05	48.70
Other Permanent	7.72	0.81	10.48	7.22	0.77	10.65	0.08	0.03	32.36	0.17	0.07	41.03	*	*	*	*	*	*
TOTAL PERMANENT	265.44	14.88	5.60	246.52	13.14	5.33	5.11	1.05	20.49	5.00	1.10	22.07	3.82	1.02	26.78	4.99	1.59	31.94
ALL CROPS	3,444.83	163.23	4.74	824.07	57.93	7.03	1,147.60	92.04	8.02	148.78	12.72	8.55	1,244.31	88.88	7.14	80.08	7.81	9.75

TABLE 2.2
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
(1998/99-1991 E.C.)

Tigray																		
	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
TYPE OF CROP	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	193.74	19.07	9.84	73.41	12.69	17.28	8.41	1.60	19.00	5.85	0.87	14.82	93.09	7.95	8.52	12.99	2.07	15.92
Teff	58.55	7.23	12.36	6.16	1.29	20.99	3.34	1.06	31.66	2.38	0.52	21.64	43.79	6.18	14.12	2.88	0.82	28.46
Barely	29.49	4.58	15.55	11.52	2.82	24.49	1.31	0.61	46.58	1.34	0.50	37.13	13.86	2.42	17.49	1.46	0.43	29.38
Wheat	21.27	2.97	13.95	4.36	0.84	19.28	1.41	0.53	37.76	1.09	0.36	32.46	12.63	2.00	15.84	1.78	0.53	29.77
Maize	34.01	5.24	15.41	19.33	3.33	17.49	*	*	*	0.45	0.22	49.23	9.88	2.41	24.42	3.20	0.84	26.28
Sorghum	29.78	8.76	29.40	24.24	8.21	33.89	*	*	*	*	*	*	3.59	1.44	40.04	1.41	0.53	37.91
Millet	20.48	4.63	22.62	7.80	2.63	33.65	*	*	*	0.49	0.21	43.15	9.18	2.00	21.74	2.26	0.85	37.46
Oats	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*	-	-	-
PULSES	3.33	0.66	19.93	2.79	0.60	21.59	*	*	*	*	*	*	0.39	0.17	43.22	*	*	*
Horse Beans	2.04	0.50	24.63	1.66	0.42	25.52	*	*	*	*	*	*	0.35	0.17	47.27	*	*	*
Chick Peas	*	*	*	0.39	0.14	36.52	*	*	*	-	-	-	*	*	*	*	*	*
Haricot Beans	0.16	0.07	43.26	0.15	0.07	45.85	-	-	-	-	-	-	*	*	*	-	-	-
Field Peas	0.46	0.15	33.69	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Lentils	0.11	0.05	45.58	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Vetch	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
OILSEEDS	0.53	0.20	38.16	0.44	0.20	44.98	*	*	*	-	-	-	*	*	*	*	*	*
Noug	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Lin Seed	0.15	0.05	36.78	0.10	0.05	47.84	*	*	*	-	-	-	*	*	*	*	*	*
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Spices	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	197.91	19.21	9.71	76.83	12.91	16.80	8.53	1.63	19.10	5.87	0.87	14.77	93.62	7.95	8.49	13.05	2.08	15.89
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	0.35	0.17	48.07	0.30	0.15	49.99	-	-	-	*	*	*	*	*	*	*	*	*
ALL CROPS	198.26	19.22	9.69	77.13	12.91	16.74	8.54	1.63	19.10	5.87	0.87	14.76	93.65	7.95	8.49	13.07	2.08	15.89

TABLE 2.3

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

After

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS																		
Teff	0.40	0.22	36.75	0.49	0.19	39.25	0.06	0.02	30.27	0.01	24.61	10.85	0.02	*	*	-	-	-
Barely	*	*	*	*	*	*	0.05	0.02	35.94	*	*	*	*	*	*	-	-	-
Wheat	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.12	0.06	47.34	0.12	0.06	46.82	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	0.20	0.07	37.19	0.17	0.07	42.18	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RUSS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Onion Peas	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS																		
Neig	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS																		
Peru greck	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soyabean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	0.64	0.25	38.16	0.53	0.21	39.88	0.06	0.02	30.27	0.01	37.08	10.85	0.02	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Erag	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.64	0.25	38.16	0.53	0.21	39.88	0.06	0.02	30.27	0.01	37.08	10.85	0.02	-	-	-	-	-
ALL CROPS																		

TABLE 2.4
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1977/88(1990 E.C.)

Amhara

TYPE OF CROP	Total			Natural Fertilizer			DIP			UREA			DP + UREA			NIT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS	863.97	104.05	12.33	134.97	13.56	10.05	245.98	36.89	15.00	55.58	9.51	17.11	381.89	68.12	17.84	25.55	4.10	16.05
Teff	359.83	40.58	10.97	14.72	2.40	16.27	132.65	25.24	19.03	32.66	8.06	24.69	179.75	20.56	11.44	10.07	2.18	21.60
Barley	44.38	7.98	17.97	15.53	3.48	22.38	14.30	3.65	25.52	2.04	0.65	31.88	11.05	3.19	28.96	*	*	*
Wheat	101.01	15.77	15.61	4.72	1.09	22.99	13.06	3.82	29.26	8.96	4.16	46.50	70.59	12.61	17.87	3.68	1.50	40.65
Maize	148.01	14.78	9.98	81.34	8.39	10.32	21.07	4.78	22.68	4.26	1.02	23.96	32.87	6.43	19.57	8.47	1.98	23.36
Sorghum	23.47	7.55	32.15	15.14	5.24	34.63	*	*	*	7.05	2.83	40.12	*	*	*	*	*	*
Millet	156.30	61.44	39.31	2.93	1.28	43.59	63.87	13.84	21.67	*	*	*	*	*	*	*	*	*
Oats	0.98	0.47	47.46	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RUSES	18.98	2.95	15.57	8.48	1.34	15.75	5.27	1.68	31.81	*	*	*	2.65	1.00	37.97	*	*	*
Horse Beans	9.02	1.57	17.37	5.87	1.21	20.54	2.09	0.65	31.11	*	*	*	0.49	0.20	40.70	*	*	*
Chick Peas	0.96	0.31	32.64	1.01	0.30	30.05	2.66	1.21	45.36	*	*	*	*	*	*	*	*	*
Haricot Beans	1.01	0.35	34.61	0.64	0.25	39.17	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	5.85	1.90	32.40	0.64	0.23	36.29	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OILSEEDS	13.38	3.63	27.13	4.05	1.04	25.69	5.27	2.05	38.98	0.99	0.47	47.35	2.86	1.35	47.25	*	*	*
Nalg	7.50	2.45	32.65	2.44	0.93	33.07	3.15	1.49	47.59	*	*	*	*	*	*	*	*	*
Lin Seed	0.59	0.22	37.36	0.18	0.08	48.24	*	*	*	*	*	*	*	*	*	*	*	*
Rape seed	3.67	1.67	45.42	1.19	0.50	42.53	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	17.20	2.34	13.61	12.06	1.84	15.30	1.72	0.59	34.12	0.84	0.30	36.01	1.77	0.55	31.32	0.81	0.35	41.22
Fenugreek	0.08	0.04	47.52	0.04	0.01	32.52	*	*	*	*	*	*	*	*	*	*	*	*
Spices	6.90	1.35	19.63	4.57	0.79	17.35	0.45	0.20	45.34	*	*	*	1.20	0.52	43.21	*	*	*
Potatoes	7.82	1.84	23.52	6.21	1.46	26.78	0.77	0.33	42.90	*	*	*	0.33	0.16	49.04	0.03	0.02	49.90
Other Vegetables	2.40	0.51	21.37	1.24	0.19	15.58	*	*	*	*	*	*	*	*	*	*	*	*
ALL TEMPORARY	883.53	105.76	11.84	159.56	14.85	9.31	238.24	38.15	14.77	59.61	9.97	16.72	339.15	68.65	17.59	26.97	4.27	15.84
Citric	0.56	0.21	38.20	0.55	0.21	37.91	*	*	*	*	*	*	*	*	*	*	*	*
Coffee	1.16	0.44	37.75	1.14	0.43	37.80	*	*	*	*	*	*	*	*	*	*	*	*
Erset	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cotton	*	*	*	0.18	0.07	39.28	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fruits	0.40	0.18	46.20	0.40	0.18	46.11	*	*	*	*	*	*	*	*	*	*	*	*
Other Permanent	1.69	0.29	16.92	1.62	0.27	16.55	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	5.16	1.08	20.86	3.90	0.70	17.93	*	*	*	*	*	*	*	*	*	0.01	0.01	48.66
ALL CROPS	888.69	105.76	11.77	163.46	14.93	9.13	238.33	38.15	14.77	59.75	10.00	16.74	330.17	68.41	17.53	26.98	4.27	15.84

TABLE 2.5

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

Oromia

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	1,562.57	102.86	6.58	175.92	16.94	9.63	668.16	77.36	11.58	49.67	6.42	12.93	641.40	54.62	8.52	27.42	5.38	19.63
Teff	547.68	51.32	9.37	8.24	2.44	29.64	188.82	22.06	11.68	23.65	4.77	20.18	319.41	38.23	11.97	7.56	2.06	27.27
Barely	221.76	41.11	18.54	13.71	4.07	29.66	166.44	37.43	22.49	5.07	1.43	28.28	35.01	8.14	23.25	1.54	0.53	34.65
Wheat	455.15	65.14	14.31	7.95	2.21	27.73	236.83	52.85	22.32	7.09	1.83	25.82	197.32	26.24	13.30	5.95	2.10	35.36
Maize	240.03	20.86	8.69	105.76	11.20	10.59	45.68	6.77	14.82	7.74	2.07	26.72	73.67	12.60	17.10	7.18	1.63	22.65
Sorghum	60.04	10.73	17.87	39.61	8.63	21.80	5.15	1.12	21.83	3.41	1.45	42.43	6.99	2.43	34.72	*	*	*
Millet	21.67	7.26	33.52	0.41	0.20	49.73	11.38	3.99	35.02	*	*	*	7.50	2.85	38.04	*	*	*
Oats	16.23	4.58	28.20	0.24	0.09	38.39	13.86	4.24	30.57	*	*	*	1.50	0.65	43.56	*	*	*
PULSES	70.09	14.42	20.57	16.36	2.47	15.09	41.12	11.07	26.92	1.59	0.42	26.58	9.33	2.43	26.08	1.68	0.82	48.54
Horse Beans	37.78	8.97	23.75	11.10	2.07	18.69	22.11	6.79	30.69	0.48	0.21	43.73	3.69	1.62	43.98	*	*	*
Chick Peas	1.26	0.58	45.91	2.14	0.64	29.75	15.34	6.42	41.83	*	*	*	3.42	1.19	34.72	*	*	*
Haricot Beans	7.73	1.64	21.65	2.71	0.62	22.80	2.30	0.84	36.40	0.97	0.37	38.03	*	*	*	*	*	*
Field Peas	21.26	7.59	35.71	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	1.57	0.38	24.18	*	*	*	0.84	0.28	33.12	*	*	*	0.52	0.23	44.46	-	-	-
Vetch	0.48	0.24	49.14	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
OILSEEDS	12.03	2.71	22.53	4.91	1.52	30.92	5.65	1.89	33.40	*	*	*	1.14	0.37	32.77	*	*	*
Naug	1.77	0.81	45.94	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-
Lin Seed	5.09	2.08	40.94	*	*	*	3.98	1.81	45.40	*	*	*	*	*	*	*	*	*
Rape seed	2.71	0.86	31.66	1.02	0.43	42.17	1.52	0.71	46.37	-	-	-	*	*	*	-	-	-
Ground Nuts	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	32.50	4.96	15.27	16.96	1.98	11.65	9.74	3.77	38.70	2.65	0.95	36.02	2.75	0.88	32.07	*	*	*
Fenugreek	1.11	0.30	26.84	0.40	0.11	27.93	0.30	0.13	43.70	*	*	*	*	*	*	-	-	-
Spices	2.63	0.75	28.65	2.25	0.72	31.95	0.24	0.11	47.06	*	*	*	*	*	*	-	-	-
Potatoes	11.27	4.02	35.69	2.65	0.55	20.73	*	*	*	0.79	0.31	39.50	0.80	0.27	34.31	*	*	*
Other Vegetables	17.49	2.80	16.00	11.65	1.65	14.18	2.36	0.99	41.95	1.74	0.81	46.70	*	*	*	0.21	0.09	42.30
ALL TEMPORARY	1,677.20	109.02	6.50	214.14	18.80	8.78	724.68	82.38	11.37	54.23	6.69	12.35	654.63	55.42	8.47	29.52	5.51	18.65
Chat	20.11	3.00	14.91	14.81	2.24	15.10	0.62	0.21	33.68	1.74	0.82	47.27	1.44	0.47	32.42	1.51	0.63	41.78
Coffee	11.46	2.39	20.90	9.19	1.86	20.28	0.89	0.33	37.05	*	*	*	0.29	0.13	42.95	*	*	*
Enset	33.40	6.06	18.15	33.06	5.80	17.54	*	*	*	*	*	*	*	*	*	*	*	*
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	0.20	0.07	36.46	0.20	0.07	36.41	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	2.21	0.69	31.30	1.50	0.41	27.23	*	*	*	*	*	*	*	*	*	*	*	*
Other Permanent	2.27	0.44	19.31	2.22	0.43	19.44	*	*	*	-	-	-	*	*	*	-	-	-
TOTAL PERMANENT	69.65	7.98	11.46	60.98	7.06	11.58	2.18	0.65	29.95	2.43	0.87	35.87	1.91	0.54	28.49	2.14	0.83	38.71
ALL CROPS	1,746.84	109.39	6.26	275.12	20.95	7.61	726.86	82.34	11.33	56.66	6.98	12.31	666.54	55.43	8.44	31.67	5.97	18.84

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

TABLE 2.6
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1997/98 (1990 E.C.)

Sample

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Millet	0.10	0.04	44.23	0.10	0.04	44.94	-	-	-	-	-	-	-	-	-	-	-	
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LEGUMES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Neig	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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
1977/78 (1990 E.C.)

Bersergel-0.muz

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS																		
Teff	14.85	4.36	29.38	7.10	2.84	40.00	5.12	2.20	42.91	0.10	0.04	40.44	2.05	0.71	34.53	*	*	*
Barely	3.69	1.82	49.23	0.27	0.12	45.84	2.52	1.15	45.73	*	*	*	*	*	*	*	*	*
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Melize	5.32	0.93	17.56	3.85	0.88	22.89	*	*	*	*	*	*	1.09	0.28	25.98	*	*	*
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Millet	1.85	0.73	39.87	*	*	*	1.20	0.53	44.13	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PULSES																		
Horse Beans	*	*	*	0.44	0.20	45.79	*	*	*	*	*	*	*	*	*	*	*	*
Chick Peas	*	*	*	0.27	0.13	48.22	*	*	*	*	*	*	*	*	*	*	*	*
Haricot Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	0.09	0.04	48.82	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OILSEEDS																		
Neig	0.47	0.23	49.94	0.47	0.23	49.97	*	*	*	*	*	*	*	*	*	*	*	*
Lin Seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rape seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS																		
Perugreek	0.78	0.24	30.77	0.58	0.16	28.28	*	*	*	*	*	*	*	*	*	*	*	*
Spices	0.25	0.08	33.13	0.20	0.08	39.57	*	*	*	*	*	*	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Vegetables	0.25	0.08	32.85	0.20	0.07	36.71	*	*	*	*	*	*	*	*	*	*	*	*
ALL TEMPORARY	16.69	4.96	29.74	8.59	3.19	37.12	5.38	2.42	45.01	0.12	0.04	31.48	2.12	0.71	33.33	*	*	*
Orat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Coffee	0.13	0.05	36.57	0.11	0.04	40.12	*	*	*	*	*	*	*	*	*	*	*	*
Bract	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fruits	0.05	0.02	33.08	0.05	0.02	32.60	*	*	*	*	*	*	*	*	*	*	*	*
Other Permanent	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	0.23	0.05	26.74	0.21	0.05	27.81	*	*	*	*	*	*	*	*	*	*	*	*
ALL CROPS	16.92	4.96	29.30	8.80	3.18	36.17	5.40	2.42	44.86	0.12	0.04	30.28	2.12	0.71	33.30	*	*	*

TABLE 2.8
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1997/98 (1990 E.C.)

(S.N.N.P.R.)

TYPE OF CROP	Total			Natural Fertilizer			DIP			UREA			DIP + UREA			NIT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CREALS	310.53	50.98	16.42	*	0.91	32.63	122.07	13.86	11.36	18.27	2.78	15.23	88.17	8.70	9.87	3.56	0.80	22.56
Teff	90.70	13.12	14.47	*	*	*	55.57	2.84	19.01	6.73	1.28	18.99	24.79	5.12	20.67	0.83	0.37	44.38
Barely	68.45	8.57	12.52	*	*	*	26.63	4.25	29.96	1.78	0.44	36.00	7.93	3.32	41.92	*	*	*
Wheat	70.20	9.36	13.34	*	3.47	21.40	27.97	5.59	15.97	5.91	1.88	31.51	34.00	5.00	14.72	0.60	0.26	43.38
Maize	8.73	2.11	24.23	*	2.00	32.10	1.63	0.61	37.24	3.55	0.84	23.77	20.63	3.86	18.71	1.84	0.66	36.09
Sorghum	1.11	0.43	39.01	*	*	*	0.76	0.35	45.57	0.22	0.09	40.15	0.64	0.23	36.09	*	*	*
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RUBES	30.25	5.05	16.70	5.21	1.23	23.65	17.12	3.38	19.76	3.77	1.23	32.54	3.60	0.94	26.18	*	*	*
Horse Beans	8.76	1.67	19.03	1.72	0.43	25.14	4.21	1.06	25.15	1.42	0.23	47.67	1.42	0.52	36.81	*	*	*
Chick Peas	*	*	*	0.31	0.16	49.94	6.21	1.85	29.85	0.48	0.23	47.67	0.89	0.32	36.15	*	*	*
Haricot Beans	11.32	2.94	26.00	2.92	1.02	35.07	4.72	1.50	31.76	1.92	0.90	47.23	1.27	0.60	46.98	*	*	*
Field Peas	7.89	2.16	27.43	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OILSEEDS	0.22	0.05	23.40	0.05	0.02	39.35	0.08	0.04	48.77	*	*	*	*	*	*	*	*	*
Nalg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lin Seed	0.12	0.05	38.49	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pepe seed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Castor Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	40.66	4.41	10.86	30.60	3.86	12.65	5.54	1.20	21.59	0.95	0.30	31.88	3.23	0.63	19.41	0.35	0.15	42.34
Faragreek	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Spices	7.61	1.62	21.25	1.03	0.26	25.13	4.06	1.16	28.44	0.37	0.16	43.04	1.93	0.35	27.69	*	*	*
Potatoes	7.05	1.61	22.73	5.23	1.47	28.05	0.79	0.25	32.19	*	*	*	0.91	0.33	36.15	*	*	*
Other Vegetables	25.80	3.29	12.74	24.34	3.05	12.54	0.57	0.18	32.28	*	*	*	0.30	0.13	42.67	0.16	0.08	48.72
ALL TEMPORARY	381.65	52.35	13.72	114.33	47.53	41.58	144.81	15.13	10.45	23.00	3.63	14.95	95.05	9.15	9.62	4.46	0.88	19.73
Orat	9.87	1.60	16.20	8.99	1.44	16.01	*	*	*	*	*	*	0.14	0.05	41.97	*	*	*
Corffee	29.97	3.44	11.47	25.90	2.66	10.26	1.82	0.57	31.10	1.29	0.39	29.88	0.33	0.16	49.31	0.63	0.31	48.97
Erest	140.23	10.22	7.29	137.79	9.61	6.98	0.38	0.14	37.36	*	*	*	*	*	*	*	*	*
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	0.26	0.09	34.11	0.25	0.09	34.39	*	*	*	*	*	*	*	*	*	*	*	*
Fruits	3.46	0.67	19.28	3.04	0.61	20.19	0.23	0.09	38.69	0.05	0.02	42.61	0.04	0.02	46.31	*	*	*
Other Permanent	3.48	0.60	17.14	3.16	0.56	17.76	0.07	0.03	38.64	*	*	*	*	*	*	*	*	*
TOTAL PERMANENT	187.48	12.48	6.66	179.34	11.02	6.15	2.78	0.82	29.35	2.10	0.67	31.89	0.71	0.33	47.18	*	*	*
ALL CROPS	569.13	55.64	9.78	288.67	50.14	17.07	147.59	15.12	10.24	25.10	3.51	14.00	95.76	9.15	9.56	7.01	1.64	23.41

TABLE 2.9:
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
'1997/98' (1990 E.C.)

Gambela

TYPE OF CROP	Total			Natural Fertilizer			DIP			UREA			DIP + UREA			NIT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS	*	*	*	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neig	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	*	*	*	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Erset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	*	*	*	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-

TABLE 2.10
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1977/88 (1990 E.C.)

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
ALL CROPS	3.85	0.46	11.98	1.47	0.20	13.87	0.15	0.03	21.92	0.92	0.14	15.36	0.51	0.12	22.79	0.78	0.24	30.34
ALL PERMANENT	1.15	0.17	14.74	0.38	0.06	16.14	0.04	0.01	25.85	0.29	0.06	19.94	0.15	0.04	24.99	0.27	0.08	29.56
Other Permanent	0.02	0.01	32.62	0.01	0.01	41.65	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eucalypt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	0.01	-	46.72	0.01	-	47.25	-	-	-	-	-	-	-	-	-	-	-	-
Orchard	1.10	0.17	15.26	0.36	0.06	17.06	0.04	0.01	26.28	0.29	0.06	20.05	0.15	0.04	25.12	0.26	0.08	29.91
ALL TEMPORARY	2.70	0.31	11.49	1.09	0.16	14.68	0.10	0.03	24.13	0.63	0.09	15.01	0.36	0.08	23.19	0.51	0.16	30.55
Other Temporary	0.13	0.02	18.34	0.08	0.02	19.92	-	-	-	0.02	-	25.45	0.01	-	39.90	0.02	0.01	42.85
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferriyreek	0.14	0.02	17.28	0.08	0.02	19.68	-	-	-	0.02	0.01	24.31	0.01	-	37.85	0.02	0.01	39.71
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.18	0.05	27.64	0.12	0.04	35.17	-	-	-	0.05	0.01	36.64	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nalg	0.18	0.05	27.64	0.12	0.04	35.17	-	-	-	0.05	0.01	36.64	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Levelling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Beans	0.01	-	29.57	0.01	-	43.82	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	0.02	0.01	30.42	0.01	-	37.86	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	0.02	0.01	47.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	0.07	0.03	34.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.75	0.11	14.78	0.27	0.04	13.26	0.05	0.01	32.23	0.18	0.04	23.20	0.10	0.02	23.48	0.17	0.06	36.92
Sorghum	1.52	0.20	13.00	0.60	0.10	17.51	0.05	0.01	28.41	0.37	0.06	16.28	0.21	0.06	29.42	0.29	0.09	30.95
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Cereals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	2.57	0.30	12.60	0.88	0.14	15.38	0.10	0.02	24.95	0.58	0.09	15.48	0.34	0.08	24.20	0.47	0.15	31.78

TABLE 2.11

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

Addis Ababa

TYPE OF CROP	Total			Natural Fertilizer			DP			UREA			DAP + UREA			NPT + COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS																		
Teff	5.76	0.63	10.92	0.02	0.01	43.79	0.31	0.03	26.28	0.03	0.01	33.19	5.34	0.61	11.51	*	*	*
Barely	3.62	0.50	13.55	*	*	*	0.09	0.05	31.53	0.02	0.01	44.24	3.46	0.50	14.45	*	*	*
Wheat	2.05	0.20	9.75	*	*	*	0.18	0.05	30.87	0.01	-	33.63	0.02	0.01	45.03	*	*	*
Maize	-	-	-	-	-	-	-	-	-	-	-	-	1.55	0.20	10.54	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES																		
Horse Beans	0.44	0.17	37.85	-	-	-	0.13	0.04	28.51	*	*	*	0.09	0.02	25.27	*	*	*
Chick Peas	0.01	0.07	40.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	0.18	-	38.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	0.05	0.01	20.22	-	-	-	0.05	0.02	33.82	*	*	*	0.04	0.01	29.92	-	-	-
Vetch	0.20	0.10	48.14	-	-	-	0.05	0.02	33.10	*	*	*	0.05	0.01	29.76	-	-	-
OILSEEDS																		
Neaj	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS																		
Fenugreek	0.11	0.03	29.67	-	-	-	*	*	*	-	-	-	0.08	0.02	25.78	-	-	-
Spices	0.03	0.01	24.92	-	-	-	-	-	-	-	-	-	0.02	0.01	28.99	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.08	0.05	39.11	-	-	-	*	*	*	-	-	-	0.05	0.02	31.64	-	-	-
ALL TEMPORARY	6.32	0.76	12.01	0.03	0.01	40.53	0.46	0.03	17.16	*	*	*	5.51	0.62	11.30	*	*	*
Orbit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eucalypt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Docton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	6.32	0.76	12.01	0.03	0.01	39.00	0.46	0.03	17.16	*	*	*	5.51	0.62	11.30	*	*	*

TABLE 2.12

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

Dire Data

TYPE OF CROP	Total			Natural Fertilizer			DAP			UREA			DAP + UREA			NAT + UREA		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS																		
Teff	0.81	0.19	23.60	0.73	0.17	22.70	*	*	*	0.01	*	*	0.02	*	*	*	*	*
Barely	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	0.05	0.02	33.40	0.03	0.02	34.34	*	*	*	0.01	*	*	0.02	*	*	*	*	*
Sorghum	0.75	0.18	24.35	0.68	0.16	23.40	*	*	*	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLSES																		
Horse Beans	0.01	0.01	47.35	0.01	-	39.97	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	0.01	0.01	47.35	0.01	-	39.97	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS																		
Nalg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS																		
Fenugreek	0.07	0.01	20.80	0.07	0.01	20.81	*	*	*	0.02	*	*	0.02	*	*	*	*	*
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	0.07	0.01	20.80	0.07	0.01	20.81	*	*	*	0.02	*	*	0.02	*	*	*	*	*
ALL TEMPORARY	0.69	0.20	21.99	0.81	0.17	21.07	*	*	*	0.02	*	*	0.02	*	*	*	*	*
Chat	0.10	0.03	23.11	0.09	0.02	27.92	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	0.02	0.01	42.75	0.02	0.01	42.75	-	-	-	-	-	-	-	-	-	-	-	-
Eneet	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.18	0.05	27.04	0.17	0.04	26.05	-	-	-	0.03	-	-	-	-	-	*	*	*
ALL CROPS	1.03	0.22	20.60	0.98	0.19	19.68	*	*	*	0.05	-	-	0.02	-	-	*	*	*

TABLE 3.1

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

National

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	2,563.71	78.10	3.05	254.85	23.40	9.18	43.09	4.73	10.98	322.43	20.22	6.27	1,943.37	65.08	3.35
Teff	512.47	25.30	4.94	72.98	8.69	11.91	15.70	2.76	17.55	128.38	10.33	8.04	295.41	16.98	5.75
Barely	410.00	32.44	7.91	46.56	8.06	17.31	5.74	1.41	24.53	23.51	4.99	21.24	334.20	29.70	8.89
Wheat	334.84	22.92	6.85	66.70	11.48	17.21	8.45	1.82	21.51	91.29	8.88	9.72	168.39	13.23	7.86
Maize	885.27	35.33	4.23	45.84	5.69	12.40	7.35	1.64	22.34	61.02	8.10	13.27	721.06	32.52	4.51
Sorghum	325.72	20.99	6.45	3.35	1.41	42.08	2.69	1.34	49.86	6.02	2.15	35.72	313.66	19.66	6.27
Millet	117.55	10.96	9.32	13.07	3.36	25.68	3.08	1.21	39.41	11.67	2.37	20.28	89.73	9.25	10.31
Oats	27.87	5.73	20.55	6.32	2.54	40.09	*	*	*	0.54	0.25	46.44	20.93	4.80	22.92
PULSES	516.49	29.28	5.67	29.24	5.73	19.59	6.10	1.66	27.21	10.15	2.12	20.92	471.00	27.65	5.87
Horse Beans	209.86	15.07	7.18	13.05	3.44	26.33	1.36	0.53	38.79	4.09	1.35	32.96	191.36	13.94	7.28
Chick Peas	98.59	9.46	9.60	8.46	2.26	26.71	*	*	*	1.88	0.87	46.44	86.39	8.75	10.13
Haricot Beans	81.85	9.21	11.26	3.88	1.36	35.03	2.34	0.99	42.36	2.40	0.80	33.50	73.23	8.64	11.80
Field Peas	48.14	8.31	17.25	*	*	*	0.02	*	7.22	*	*	*	47.35	8.28	17.48
Lentils	46.23	6.26	13.55	3.55	1.41	39.62	*	*	*	*	*	*	40.93	5.79	14.14
Vetch	31.81	6.46	20.30	*	*	*	-	-	-	-	-	-	31.74	6.45	20.32
OILSEEDS	135.72	11.37	8.38	5.18	2.03	39.17	*	*	*	1.49	0.57	37.99	128.70	11.12	8.64
Neug	52.24	6.63	12.69	*	*	*	*	*	*	*	*	*	51.51	6.60	12.82
Lin Seed	54.00	6.75	12.51	*	*	*	*	*	*	*	*	*	52.64	6.68	12.70
Rape seed	11.44	2.99	26.17	4.29	1.99	46.52	*	*	*	*	*	*	6.88	2.17	31.61
Ground Nuts	8.95	4.34	48.46	-	-	-	0.01	-	32.55	*	*	*	8.74	4.25	48.64
Sun Flower	1.34	0.65	48.45	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	7.75	2.18	28.09	-	-	-	-	-	-	*	*	*	7.72	2.18	28.17
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	330.75	24.87	7.52	15.59	3.53	22.67	5.25	1.64	31.13	9.79	2.14	21.84	300.12	23.50	7.83
Fenugreek	26.09	6.39	24.49	*	*	*	0.01	-	47.68	*	*	*	24.37	6.27	25.73
Spices	80.90	10.51	12.99	3.70	1.34	36.26	1.01	0.50	49.37	3.38	1.16	34.34	72.81	9.47	13.01
Potatoes	87.26	12.72	14.57	6.43	2.29	35.60	*	*	*	2.64	1.17	44.22	76.94	12.17	15.81
Other Vegetables	136.50	16.35	11.98	4.87	2.24	45.93	2.99	1.36	45.72	2.64	1.20	45.54	126.00	15.40	12.22
ALL TEMPORARY	3,546.68	105.07	2.99	304.84	28.16	9.24	54.79	5.82	10.62	343.86	21.31	6.20	2,883.19	89.73	3.16
Chat	50.95	6.71	13.18	0.41	0.14	34.82	1.28	0.47	36.65	0.74	0.18	24.16	48.52	6.65	13.66
Coffee	185.53	20.12	10.84	1.34	0.53	39.33	0.81	0.36	44.40	0.50	0.19	38.28	182.89	20.04	10.96
Enset	65.37	8.53	13.46	*	*	*	0.08	0.04	46.30	*	*	*	62.67	8.49	13.54
Cotton	3.95	1.63	41.27	*	*	*	*	*	*	*	*	*	3.89	1.63	41.88
Tobacco	1.83	0.89	48.49	-	-	-	-	-	-	-	-	-	1.83	0.89	48.50
Fruits	14.35	3.23	22.52	*	*	*	0.12	0.04	34.59	0.09	0.05	49.43	13.70	3.17	23.13
Other Permanent	24.38	3.82	15.66	0.09	0.04	44.03	0.15	0.07	46.79	*	*	*	24.02	3.81	15.86
TOTAL PERMANENT	344.37	26.05	7.57	2.74	0.94	34.29	2.44	0.61	24.92	1.67	0.45	27.03	337.51	25.88	7.67
ALL CROPS	3,891.05	111.69	2.87	307.59	28.14	9.15	57.23	5.90	10.32	345.53	21.32	6.17	3,180.70	95.61	3.01

TABLE 3.2
ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
AND THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99 (1991 E.C.)

Type of Crop	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS															
Teff	255.45	26.28	11.16	3.46	1.10	31.73	2.80	1.22	43.65	52.04	7.86	15.11	177.15	22.07	12.46
Barely	38.06	8.86	15.25	0.81	0.39	48.33	*	*	*	28.86	5.59	19.37	27.72	4.56	16.45
Wheat	33.03	9.18	24.15	0.44	0.19	43.35	*	*	*	5.05	1.00	19.75	32.03	9.00	28.05
Maize	22.81	4.30	18.85	1.35	0.59	43.31	*	*	*	5.53	1.25	22.66	14.74	2.65	17.99
Sorghum	54.91	7.16	13.04	0.42	0.20	46.78	*	*	*	8.68	2.72	31.30	45.71	6.27	13.72
Millet	39.12	8.84	22.60	*	*	*	*	*	*	0.99	0.35	35.33	38.09	8.81	23.13
Oats	22.52	4.68	20.78	*	*	*	*	*	*	2.92	1.07	36.60	18.80	4.20	22.35
PLANTS															
Horse Beans	35.15	6.26	17.83	-	-	-	*	*	*	*	*	*	34.79	6.26	18.00
Chick Peas	15.82	3.48	21.98	-	-	-	*	*	*	*	*	*	15.47	3.46	22.34
Haricot Beans	5.97	1.23	33.30	-	-	-	-	-	-	-	-	-	3.69	1.23	33.32
Field Peas	4.05	2.46	41.26	-	-	-	-	-	-	-	-	-	5.97	2.46	41.29
Lentils	4.33	1.76	40.29	-	-	-	-	-	-	-	-	-	4.05	1.76	43.29
Vetch	*	1.33	30.37	-	-	-	-	-	-	-	-	-	4.37	1.33	30.43
OILSEEDS															
Noug	8.55	2.05	24.09	-	-	-	-	-	-	-	-	-	8.40	2.05	24.56
Lin Seed	1.20	0.46	38.55	-	-	-	-	-	-	-	-	-	1.05	0.44	41.87
Rape seed	3.49	1.03	29.64	-	-	-	-	-	-	-	-	-	3.46	1.03	29.84
Sun Flower	*	-	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	3.69	1.75	47.33	-	-	-	-	-	-	-	-	-	3.69	1.75	47.33
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS															
Fenugreek	3.11	1.24	39.98	-	-	-	-	-	-	-	-	-	2.67	1.16	43.55
Spices	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Potatoes	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Other Vegetables	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
ALL TEMPORARY	282.25	30.72	10.88	3.47	1.10	31.71	2.80	1.22	43.53	52.98	8.00	15.11	223.00	26.15	11.73
PERMANENT															
Chat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Breast	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	0.50	0.23	46.97	-	-	-	-	-	-	-	-	-	0.49	0.23	47.33
TOTAL PERMANENT	0.67	0.23	42.92	-	-	-	-	-	-	-	-	-	0.66	0.23	43.23
ALL CROPS	282.92	30.77	10.88	3.47	1.10	31.71	2.80	1.22	43.52	52.98	8.00	15.11	223.66	26.18	11.71

TABLE 3.3
ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99 (1997 E.C.)

Afar

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NIT & COM		
	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)	Estimate ('000HA)	S.E. ('000)	C.V. (%)
CEREALS	2.34	0.53	22.82	*	*	*	*	*	*	*	*	*	2.33	0.52	22.16
Teff	0.52	0.17	33.34	*	*	*	*	*	*	*	*	*	0.51	0.17	33.31
Barely	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	0.34	0.16	47.68	*	*	*	*	*	*	*	*	*	0.34	0.16	47.63
Sorghum	1.46	0.47	31.95	*	*	*	*	*	*	*	*	*	1.46	0.46	31.45
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neig	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL TEMPORARY	2.96	0.77	26.05	*	*	*	*	*	*	*	*	*	2.98	0.75	25.70
Oat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Erset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL CROPS	3.03	0.79	26.14	*	*	*	*	*	*	*	*	*	3.00	0.77	25.77

TABLE 3.4

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Arihara

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	1,020.70	45.26	4.43	45.63	7.37	16.16	18.03	3.63	20.13	82.42	8.00	9.71	874.62	41.20	4.71
Teff	215.66	16.04	7.44	17.69	3.61	20.43	8.19	2.44	29.78	36.98	5.00	13.53	152.80	11.95	7.82
Barely	190.76	21.08	11.05	4.30	1.63	38.00	1.36	0.63	46.38	2.97	0.78	26.17	182.14	20.75	11.39
Wheat	118.07	11.96	10.13	3.03	0.89	29.48	3.16	1.19	37.78	23.15	4.24	18.31	88.73	9.88	11.13
Maize	268.71	22.06	8.21	8.43	2.41	28.56	*	*	*	8.69	1.80	20.73	250.03	21.42	8.57
Sorghum	143.07	15.78	11.03	*	*	*	*	*	*	*	*	*	137.41	14.24	10.36
Millet	71.75	8.98	12.51	10.84	3.27	30.11	*	*	*	7.48	2.05	27.45	51.13	7.17	14.03
Oats	12.68	4.30	33.90	-	-	-	-	-	-	*	*	*	12.39	4.18	33.75
PULSES	258.34	22.13	8.57	1.54	0.74	47.74	*	*	*	*	*	*	254.33	21.34	8.59
Horse Beans	99.94	10.62	10.63	*	*	*	*	*	*	0.08	0.04	49.64	99.70	10.56	10.59
Chick Peas	59.35	7.57	12.76	1.38	0.69	49.82	*	*	*	*	*	*	56.30	7.32	13.01
Haricot Beans	25.89	6.15	23.74	*	*	*	-	-	-	*	*	*	25.76	6.14	23.83
Field Peas	31.35	7.07	22.56	-	-	-	-	-	-	*	*	*	30.89	7.05	22.81
Lentils	21.79	4.35	19.98	*	*	*	-	-	-	*	*	*	21.64	4.35	20.10
Vetch	20.03	5.23	26.10	-	-	-	-	-	-	-	-	-	20.03	5.22	26.05
OILSEEDS	60.42	6.14	10.16	*	*	*	*	*	*	0.56	0.25	44.91	57.77	6.01	10.40
Must	31.89	4.76	14.92	*	*	*	*	*	*	*	*	*	31.34	4.73	15.08
Lin Seed	23.01	3.29	14.30	*	*	*	*	*	*	*	*	*	22.49	3.26	14.48
Rape seed	2.58	1.23	47.57	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	152.02	15.16	9.97	1.35	0.55	40.78	*	*	*	1.63	0.78	47.91	148.14	14.99	10.12
Fenugreek	16.82	5.98	35.52	-	-	-	-	-	-	-	-	-	16.82	5.97	35.50
Spices	49.66	6.99	14.08	*	*	*	*	*	*	*	*	*	47.34	6.75	14.25
Potatoes	58.85	11.32	19.24	*	*	*	*	*	*	*	*	*	58.01	11.29	19.47
Other Vegetables	26.69	3.89	14.56	*	*	*	*	*	*	*	*	*	25.97	3.85	14.83
ALL TEMPORARY	1,491.49	64.42	4.32	50.27	7.90	15.71	20.70	3.97	19.20	85.65	8.30	9.69	1,334.86	59.44	4.45
Chat	3.39	1.48	43.75	-	-	-	-	-	-	-	-	-	3.39	1.48	43.75
Coffee	9.44	3.02	32.03	-	-	-	-	-	-	*	*	*	9.43	3.02	32.04
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*
Tobacco	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Fruits	1.69	0.73	42.91	-	-	-	-	-	-	-	-	-	1.69	0.73	42.90
Other Permanent	13.60	3.12	22.95	-	-	-	*	*	*	-	-	-	13.57	3.12	22.97
TOTAL PERMANENT	29.82	5.17	17.34	*	*	*	*	*	*	*	*	*	29.72	5.16	17.36
ALL CROPS	1,521.31	65.15	4.28	50.29	7.90	15.70	20.73	3.98	19.18	85.70	8.30	9.68	1,364.59	60.17	4.41

TABLE 3.5
ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99 (1991 E.C.)

Oromia

TYPE OF CROP	Total			DIP			UREA			DIP + UREA			NAT & COM		
	Estimate ('000H)	S.E ('000)	C.V. (%)	Estimate ('000H)	S.E ('000)	C.V. (%)	Estimate ('000H)	S.E ('000)	C.V. (%)	Estimate ('000H)	S.E ('000)	C.V. (%)	Estimate ('000H)	S.E ('000)	C.V. (%)
CRENS	90.63	50.43	5.25	152.12	20.68	13.60	9.20	1.48	16.05	144.91	15.39	10.62	654.40	38.54	5.89
Teff	160.56	13.64	8.50	32.76	4.60	14.05	3.20	0.76	23.63	51.86	6.54	12.62	72.74	7.88	10.85
Barely	147.25	21.75	14.77	38.30	7.84	20.47	1.81	0.72	39.91	11.05	4.60	41.65	18.11	18.84	18.84
Wheat	155.11	18.34	11.84	53.20	11.27	21.19	1.35	0.54	39.97	49.53	7.27	14.68	51.03	7.63	14.95
Maize	371.66	22.26	5.99	18.58	3.44	18.50	2.01	0.59	23.19	29.18	6.37	21.84	321.90	20.66	6.42
Sorghum	98.82	9.21	9.82	*	*	*	0.71	0.34	47.79	1.99	0.66	33.29	8.89	9.95	9.95
Millet	17.21	3.66	21.28	1.36	0.62	45.70	0.05	0.02	45.80	1.05	0.65	42.28	14.75	3.55	24.05
Oats	15.02	3.78	25.18	6.32	2.54	40.10	*	*	*	*	*	*	8.38	2.35	27.98
PEASES	162.47	16.64	10.24	20.17	5.42	26.87	*	*	*	4.39	1.46	33.18	136.73	14.70	10.75
Horse Beans	74.76	9.43	12.62	10.39	3.38	32.55	*	*	*	*	*	*	62.19	7.94	12.77
Chick Peas	24.78	5.05	20.39	5.26	2.05	39.22	*	*	*	0.43	0.19	45.27	18.61	4.16	22.37
Haricot Beans	23.95	4.50	18.81	0.93	0.43	46.43	*	*	*	*	*	*	22.22	4.40	19.78
Field Peas	9.63	3.78	39.25	-	-	-	-	-	-	-	-	-	9.53	3.78	39.65
Lentils	19.38	4.29	22.12	3.52	1.41	40.02	*	*	*	*	*	*	14.27	3.56	24.95
Vetch	9.96	3.69	37.06	*	*	*	-	-	-	-	-	-	9.90	3.69	37.30
OILSEEDS	61.61	9.23	14.99	*	*	*	*	*	*	*	*	*	57.41	9.01	15.70
Noug	17.29	4.41	25.52	*	*	*	*	*	*	*	*	*	17.24	4.41	25.59
Lin Seed	26.94	5.80	21.51	*	*	*	-	-	-	*	*	*	26.13	5.73	21.95
Rape seed	8.71	2.75	31.30	*	*	*	-	-	-	*	*	*	5.59	2.08	37.22
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	69.50	9.05	13.05	7.00	2.63	37.61	*	*	*	2.70	1.23	45.33	57.24	6.96	12.16
Perugreek	7.04	2.07	29.38	*	*	*	-	-	-	-	-	-	6.11	1.77	28.94
Soyas	7.98	1.73	21.70	*	*	*	-	-	-	-	-	-	7.55	1.69	22.45
Potatoes	11.39	3.33	29.23	*	*	*	*	*	*	*	*	*	7.68	2.21	28.72
Other Vegetables	43.09	7.61	17.66	*	*	*	*	*	*	*	*	*	35.90	5.75	16.02
ALL TEMPORARY	1,234.21	67.12	5.35	182.71	23.30	13.85	12.94	2.29	17.69	152.77	16.15	10.57	905.79	52.11	5.75
Orat	30.16	5.19	17.21	0.23	0.10	42.75	0.79	0.35	44.60	0.52	0.16	31.19	28.62	5.18	18.10
Coffee	133.31	18.85	14.13	*	*	*	*	*	*	0.18	0.07	38.84	132.54	18.77	14.16
Erset	15.63	4.14	26.48	*	*	*	*	*	*	-	-	-	15.58	4.14	26.57
Cotton	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Tobacco	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Fruits	8.00	2.09	26.19	*	*	*	-	-	-	*	*	*	7.60	2.00	26.33
Other Permanent	7.68	2.00	26.10	-	-	-	-	-	-	*	*	*	7.67	2.00	26.11
TOTAL PERMANENT	196.45	22.37	11.39	0.89	0.37	41.22	1.08	0.38	34.80	0.80	0.20	24.85	193.68	22.30	11.51
ALL CROPS	1,430.66	72.60	5.00	183.59	23.28	13.77	14.03	2.47	17.65	153.57	16.16	10.53	1,099.46	58.24	5.30

TABLE 3.6
ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1988/89 (1991 E.C.)

Somalia

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS															
Teff	17.54	3.47	19.78	*	*	*							17.50	3.45	19.73
Barely	*	*	*	-	-	-							*	*	*
Wheat	3.01	1.02	33.78	-	-	-							3.01	1.02	33.78
Maize	1.72	0.59	34.09	-	-	-							1.72	0.59	34.09
Sorghum	9.05	1.89	20.82	*	*	*							9.02	1.87	20.71
Millet	3.45	1.30	37.60	-	-	-							3.45	1.30	37.60
Oats	*	*	*	-	-	-							*	*	*
RLSES															
Horse Beans	1.28	0.51	40.02	-	-	-							1.28	0.51	40.02
Chick Peas	*	*	*	-	-	-							*	*	*
Haricot Beans	*	*	*	-	-	-							*	*	*
Field Peas	*	*	*	-	-	-							*	*	*
Lentils	-	-	-	-	-	-							-	-	-
Vetch	-	-	-	-	-	-							-	-	-
OILSEEDS															
Nalg	*	*	*	-	-	-							*	*	*
Lin Seed	*	*	*	-	-	-							*	*	*
Rape seed	-	-	-	-	-	-							-	-	-
Ground Nuts	-	-	-	-	-	-							-	-	-
Sun Flower	-	-	-	-	-	-							-	-	-
Sesame	-	-	-	-	-	-							-	-	-
Castor Bean	-	-	-	-	-	-							-	-	-
OTHERS															
Fenugreek	*	*	*	-	-	-							*	*	*
Spices	-	-	-	-	-	-							-	-	-
Potatoes	-	-	-	-	-	-							-	-	-
Other Vegetables	*	*	*	-	-	-							*	*	*
ALL TEMPORARY	20.53	4.35	21.18	*	*	*							20.49	4.34	21.16
Oat															
Coffee	2.11	0.65	30.85	-	-	-							2.11	0.65	30.85
Ebict	*	*	*	-	-	-							*	*	*
Cotton	-	-	-	-	-	-							-	-	-
Tobacco	-	-	-	-	-	-							-	-	-
Fruits	*	*	*	-	-	-							*	*	*
Other Permanent	-	-	-	-	-	-							-	-	-
TOTAL PERMANENT	2.17	0.65	29.89	-	-	-							2.17	0.65	29.99
ALL CROPS	22.70	4.72	20.80	*	*	*							22.66	4.71	20.79

TABLE 3.7

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Banshangul-Gumuz

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	22.23	2.80	12.59	*	*	*	*	*	*	0.58	0.15	25.84	20.82	2.72	13.04
Teff	2.68	0.80	29.82	*	*	*	*	*	*	*	*	*	2.16	0.70	32.45
Barely	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*
Wheat	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*
Maize	12.72	1.74	13.67	*	*	*	*	*	*	0.49	0.15	31.01	12.13	1.70	14.05
Sorghum	4.52	0.80	17.78	*	*	*	-	-	-	-	-	-	4.52	0.80	17.78
Millet	1.94	0.77	39.60	*	*	*	-	-	-	-	-	-	1.86	0.74	39.70
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	2.45	0.73	29.77	*	*	*	-	-	-	*	*	*	2.38	0.71	29.94
Horse Beans	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Chick Peas	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*
Haricot Beans	1.63	0.66	40.51	-	-	-	-	-	-	*	*	*	1.63	0.66	40.71
Field Peas	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Lentils	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	2.09	0.45	21.32	-	-	-	-	-	-	-	-	-	2.09	0.45	21.32
Neug	0.58	0.20	34.45	-	-	-	-	-	-	-	-	-	0.58	0.20	34.45
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.52	0.22	41.95	-	-	-	-	-	-	-	-	-	0.52	0.22	41.95
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	0.99	0.28	27.79	-	-	-	-	-	-	-	-	-	0.99	0.28	27.79
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	2.82	0.90	31.80	*	*	*	-	-	-	*	*	*	2.52	0.68	27.14
Fenugreek	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Spices	1.07	0.28	25.81	-	-	-	-	-	-	-	-	-	1.07	0.28	25.90
Potatoes	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*
Other Vegetables	1.32	0.56	42.11	*	*	*	-	-	-	*	*	*	1.20	0.49	40.68
ALL TEMPORARY	29.59	3.73	12.59	*	*	*	*	*	*	0.65	0.15	22.90	27.81	3.45	12.41
Chat	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Coffee	0.57	0.22	38.75	-	-	-	-	-	-	-	-	-	0.57	0.22	38.76
Enset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Fruits	0.10	0.05	47.98	-	-	-	-	-	-	-	-	-	0.10	0.05	47.98
Other Permanent	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
TOTAL PERMANENT	1.01	0.33	33.08	-	-	-	-	-	-	-	-	-	1.01	0.33	33.09
ALL CROPS	30.60	3.74	12.21	*	*	*	*	*	*	0.65	0.15	22.89	28.82	3.46	12.01

TABLE 3.8

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1997 E.C.)

(S.N.N.P.R)

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	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. (%)
CEREALS	300.11	28.22	9.40	52.70	8.00	15.18	12.63	2.35	18.62	41.63	6.78	16.29	193.15	23.35	12.09
Teff	74.43	10.85	14.58	21.28	6.41	30.13	3.99	0.95	25.83	10.27	2.75	26.78	39.30	7.88	20.05
Barely	30.75	7.04	22.91	3.48	0.87	25.09	2.10	1.00	47.54	4.37	1.46	33.41	20.80	6.48	31.15
Wheat	36.43	5.14	14.11	8.97	1.89	21.05	2.73	0.96	35.03	12.75	2.52	19.75	11.99	3.45	28.77
Maize	116.34	14.42	12.39	18.24	3.83	21.00	3.51	1.15	32.85	13.91	3.78	27.19	80.68	11.23	13.92
Sorghum	38.02	5.09	13.40	*	*	*	*	*	*	*	*	*	37.18	4.96	13.34
Millet	4.12	1.90	46.05	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
PULSES	56.19	7.09	12.62	7.45	1.70	22.79	3.44	1.16	33.71	4.35	1.44	32.98	40.94	5.56	13.57
Horse Beans	18.85	3.62	19.18	2.52	0.59	23.44	1.04	0.45	43.38	1.79	0.78	43.84	13.50	2.77	20.49
Chick Peas	10.26	2.25	21.96	1.76	0.61	34.81	*	*	*	*	*	*	7.34	2.01	27.41
Haricot Beans	23.68	4.49	18.95	2.93	1.29	43.89	1.97	0.97	49.18	1.84	0.77	41.97	16.94	3.32	19.62
Field Peas	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*
Lentils	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*
Vetch	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
OILSEEDS	*	*	*	0.01	-	46.56	-	-	-	-	-	-	*	*	*
Neug	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Lin Seed	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Rape seed	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	101.24	17.41	17.20	6.97	2.28	32.73	1.78	0.80	44.99	4.91	1.54	31.32	87.58	16.62	18.97
Fenugreek	0.77	0.37	48.67	*	*	*	-	-	-	-	-	-	*	*	*
Spices	21.39	7.64	35.70	2.94	1.29	43.85	*	*	*	1.70	0.84	49.30	16.27	6.42	39.45
Potatoes	16.64	4.72	28.38	*	*	*	*	*	*	*	*	*	11.06	3.95	35.71
Other Vegetables	62.43	13.88	22.24	*	*	*	*	*	*	*	*	*	60.05	13.71	22.83
ALL TEMPORARY	489.80	40.23	8.75	67.13	9.42	14.03	17.85	3.37	18.85	50.90	7.76	15.26	323.93	32.97	10.18
Chat	14.33	3.94	27.48	*	*	*	*	*	*	0.16	0.07	47.83	13.61	3.80	27.89
Coffee	42.07	6.39	15.19	0.97	0.48	49.18	*	*	*	*	*	*	40.21	6.31	15.69
Enset	47.73	7.45	15.62	*	*	*	*	*	*	*	*	*	47.08	7.41	15.74
Cotton	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Tobacco	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Fruits	*	*	*	*	*	*	0.06	0.02	42.05	0.03	0.01	47.86	*	*	*
Other Permanent	2.30	0.84	36.47	0.09	0.04	46.26	*	*	*	*	*	*	1.98	0.82	41.36
TOTAL PERMANENT	112.97	12.28	10.87	1.81	0.87	47.78	1.23	0.48	38.61	*	*	*	109.18	12.05	11.03
ALL CROPS	572.77	44.45	7.76	68.94	9.41	13.65	19.08	3.38	17.71	51.64	7.78	15.06	433.10	37.53	8.67

TABLE 3.9
ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1988/89(1991 E.C.)

Caribela

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS															
Teff	0.95	0.25	26.25	*	*	*							0.89	0.23	25.38
Barely	-	-	-	-	-	-							-	-	-
Wheat	-	-	-	-	-	-							-	-	-
Maize	0.68	0.24	34.98	*	*	*							0.62	0.21	33.80
Sorghum	0.26	0.08	30.18	-	-	-							0.26	0.08	30.18
Millet	*	*	*	-	-	-							*	*	*
Oats	-	-	-	-	-	-							-	-	-
RLSES															
Horse Beans	-	-	-	-	-	-							-	-	-
Chick Peas	-	-	-	-	-	-							-	-	-
Haricot Beans	-	-	-	-	-	-							-	-	-
Field Peas	-	-	-	-	-	-							-	-	-
Lentils	-	-	-	-	-	-							-	-	-
Vetch	-	-	-	-	-	-							-	-	-
OILSEEDS															
Nalg	0.22	0.08	37.30	-	-	-							0.22	0.08	37.30
Lin Seed	-	-	-	-	-	-							-	-	-
Pepe seed	*	*	*	-	-	-							*	*	*
Ground Nuts	-	-	-	-	-	-							-	-	-
Sun Flower	0.15	0.08	49.98	-	-	-							0.15	0.08	49.98
Sesame	-	-	-	-	-	-							-	-	-
Castor Bean	-	-	-	-	-	-							-	-	-
OTHERS															
Perigreek	0.16	0.06	38.34	-	-	-							0.16	0.06	38.34
Spices	-	-	-	-	-	-							-	-	-
Potatoes	-	-	-	-	-	-							-	-	-
Other Vegetables	0.16	0.06	38.34	-	-	-							0.16	0.06	38.34
ALL TEMPORARY	1.33	0.30	22.96	*	*	*							1.26	0.29	22.70
Orch	-	-	-	-	-	-							-	-	-
Coffee	*	*	*	-	-	-							*	*	*
Eneet	*	*	*	-	-	-							*	*	*
Cotton	-	-	-	-	-	-							-	-	-
Tobacco	-	-	-	-	-	-							-	-	-
Fruits	-	-	-	-	-	-							-	-	-
Other Permanent	-	-	-	-	-	-							-	-	-
TOTAL PERMANENT	*	*	*	-	-	-							*	*	*
ALL CROPS	1.33	0.30	21.58	*	*	*							1.32	0.28	21.27

TABLE 3.10
HARARI
ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1997 E.C.)

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E ('000)	C.V. %	Estimate ('000HA)	S.E ('000)	C.V. %	Estimate ('000HA)	S.E ('000)	C.V. %	Estimate ('000HA)	S.E ('000)	C.V. %	Estimate ('000HA)	S.E ('000)	C.V. %
CEREALS															
Teff	1.95	0.37	18.98	0.04	0.01	28.64	0.32	0.07	23.02	0.17	0.04	24.28	1.41	0.36	25.29
Barely	*	*	*	-	-	-	*	*	*	-	*	*	*	*	*
Wheat	0.07	0.02	34.96	-	-	-	0.02	0.01	49.17	-	-	-	0.01	0.01	45.07
Maize	0.79	0.23	28.96	0.01	-	29.74	0.13	0.03	21.17	0.06	0.01	23.12	0.59	0.23	39.50
Sorghum	1.04	0.19	18.06	0.03	0.01	44.15	0.15	0.04	28.38	0.06	0.01	22.97	0.80	0.18	22.42
Millet	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
RLSES	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Haricot Beans	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS															
Noug	0.24	0.08	32.38	-	-	-	0.01	-	32.93	-	-	-	0.23	0.08	34.52
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	0.24	0.08	32.38	-	-	-	0.01	-	32.93	-	-	-	0.23	0.08	34.52
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS															
Fenugreek	0.12	0.05	23.10	-	-	-	*	*	*	0.01	-	-	0.08	0.02	26.73
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
Other Vegetables	0.09	0.02	22.51	-	-	-	0.01	-	30.90	0.01	-	-	0.07	0.02	27.32
ALL TEMPORARY	2.33	0.40	16.99	0.05	0.01	28.13	0.36	0.08	22.80	0.19	0.04	22.73	1.74	0.39	22.43
Chest	0.61	0.13	20.96	0.02	0.01	33.43	0.08	0.02	21.01	0.06	0.02	23.42	0.44	0.12	27.72
Coffee	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Eriact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.79	0.17	21.12	0.02	0.01	33.03	0.08	0.02	20.68	0.07	0.02	24.11	0.61	0.17	27.07
ALL CROPS	3.12	0.54	17.17	0.07	0.02	23.29	0.44	0.09	20.99	0.26	0.06	22.03	2.35	0.53	22.48

TABLE 3.12

ESTIMATES OF QUANTITY OF FERTILIZER APPLIED BY TYPE OF FERTILIZER,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1988/89 (1991 E.C.)

Dire Dawa

TYPE OF CROP	Total			DAP			UREA			DAP + UREA			NAT & COM		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
CEREALS	0.98	0.18	18.77	-	-	-	-	-	-	-	-	-	0.98	0.18	18.79
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barely	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	0.95	0.18	18.50	-	-	-	-	-	-	-	-	-	0.95	0.18	18.53
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OILSEEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nalg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Vegetables	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
ALL TEMPORARY	1.09	0.19	17.44	-	-	-	-	-	-	-	-	-	1.09	0.19	17.47
Chat	0.33	0.12	37.32	-	-	-	-	-	-	-	-	-	0.33	0.12	37.41
Coffee	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Eneet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PERMANENT	0.36	0.12	34.56	-	-	-	-	-	-	-	-	-	0.36	0.12	34.64
ALL CROPS	1.45	0.21	14.42	-	-	-	-	-	-	-	-	-	1.45	0.21	14.46

4.1 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

National

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate (⁰⁰⁰ HA)	S.E (⁰⁰⁰)	C.V. (%)	Estimate (⁰⁰⁰ HA)	S.E (⁰⁰⁰)	C.V. (%)
CEREALS	137.18	10.31	7.52	4,877.63	156.55	3.21
Teff	8.57	1.61	18.77	1,028.48	41.88	4.07
Barely	*	*	*	1,284.94	92.51	7.20
Wheat	83.31	9.07	10.88	1,469.47	122.15	8.31
Maize	41.99	4.04	9.62	599.80	25.34	4.22
Sorghum	0.11	0.02	22.16	271.53	12.60	4.64
Millet	*	*	*	158.36	12.74	8.05
Oats	-	-	-	65.05	9.40	14.44
PULSES	*	*	*	920.96	43.70	4.75
Horse Beans	*	*	*	400.29	26.86	6.71
Field Peas	*	*	*	161.34	16.35	10.13
Haricot Beans	*	*	*	87.05	10.86	12.48
Chick Peas	*	*	*	142.31	16.75	11.77
Lentils	-	-	-	36.64	5.86	16.01
Vetch	*	*	*	93.33	14.61	15.65
Others	*	*	*	134.76	13.19	9.79
Neug	-	-	-	40.05	4.52	11.29
Lin Seed	*	*	*	49.89	6.60	13.23
Rape seed	-	-	-	*	*	*
Ground Nuts	-	-	-	10.46	5.00	47.83
Sun Flower	-	-	-	*	*	*
Sesame	-	-	-	6.23	2.20	35.37
Fenugreek	-	-	-	16.41	5.93	36.16
ALL CROPS	138.06	10.38	7.52	5,933.35	175.93	2.97

TABLE 4.2 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Tigray

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate (⁰⁰⁰ HA)	S.E (⁰⁰⁰)	C.V. (%)	Estimate (⁰⁰⁰ HA)	S.E (⁰⁰⁰)	C.V. (%)
CEREALS	6.05	1.33	22.02	330.75	19.88	6.01
Teff	*	*	*	51.31	3.74	7.29
Barely	*	*	*	112.22	12.12	10.80
Wheat	4.14	1.05	25.43	72.16	8.70	12.06
Maize	*	*	*	30.70	3.30	10.76
Sorghum	*	*	*	34.80	4.55	13.07
Millet	-	-	-	28.96	3.83	13.21
Oats	-	-	-	*	*	*
PULSES	-	-	-	31.30	2.99	9.54
Horse Beans	-	-	-	12.81	2.37	18.48
Field Peas	-	-	-	4.12	1.11	26.93
Haricot Beans	-	-	-	0.59	0.22	37.35
Chick Peas	-	-	-	6.88	1.49	21.62
Lentils	-	-	-	2.10	0.47	22.67
Vetch	-	-	-	4.80	1.44	29.98
Others	-	-	-	6.10	1.01	16.49
Neug	-	-	-	1.21	0.39	32.19
Lin Seed	-	-	-	2.44	0.45	18.62
Rape seed	-	-	-	*	*	*
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	2.34	0.80	34.37
Fenugreek	-	-	-	0.11	0.04	38.30
ALL CROPS	6.05	1.33	22.02	368.15	20.78	5.64

TABLE 4.3 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Afar

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	-	-	-	4.33	0.75	17.20
Teff	-	-	-	2.32	0.64	27.41
Barely	-	-	-	*	*	*
Wheat	-	-	-	*	*	*
Maize	-	-	-	1.12	0.20	17.74
Sorghum	-	-	-	0.52	0.07	12.61
Millet	-	-	-	-	-	-
Oats	-	-	-	-	-	-
PULSES	-	-	-	0.33	0.14	42.44
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	-	-	-	0.18	0.08	43.46
Chick Peas	-	-	-	0.15	0.06	44.07
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	0.01	-	37.53
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	0.01	-	41.53
Fenugreek	-	-	-	-	-	-
ALL CROPS	-	-	-	4.67	0.83	17.78

TABLE 4.4 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Anihara

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	25.79	3.36	13.02	1,356.76	50.39	3.71
Teff	4.61	1.29	28.07	374.73	24.14	6.44
Barely	-	-	-	376.41	29.22	7.76
Wheat	14.96	2.88	19.23	284.85	28.23	9.91
Maize	6.08	1.15	18.88	112.89	6.84	6.06
Sorghum	-	-	-	96.07	8.38	8.73
Millet	*	*	*	98.54	11.37	11.54
Oats	-	-	-	13.26	2.87	21.65
PULSES	*	*	*	398.85	23.51	5.89
Horse Beans	-	-	-	161.56	14.18	8.78
Field Peas	*	*	*	58.60	6.40	10.92
Haricot Beans	-	-	-	25.54	5.93	23.23
Chick Peas	-	-	-	80.26	10.40	12.96
Lentils	-	-	-	18.90	3.54	18.72
Vetch	-	-	-	53.97	8.66	16.05
Others	-	-	-	48.39	7.39	15.28
Neug	-	-	-	23.80	3.74	15.73
Lin Seed	-	-	-	9.32	1.46	15.66
Rape seed	-	-	-	0.89	0.26	28.88
Ground Nuts	-	-	-	*	*	*
Sun Flower	-	-	-	0.43	0.11	25.05
Sesame	-	-	-	*	*	*
Fenugreek	-	-	-	*	*	*
ALL CROPS	25.81	3.36	13.01	1,803.97	62.29	3.45

TABLE 4.5 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Oromia

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	74.08	8.85	11.95	2,714.64	144.62	5.33
Teff	2.16	0.75	34.55	508.71	32.73	6.50
Barely	*	*	*	714.43	85.98	12.03
Wheat	48.76	7.98	16.36	987.39	117.42	12.14
Maize	20.76	3.10	14.92	353.95	22.17	6.26
Sorghum	*	*	*	100.75	7.73	7.67
Millet	-	-	-	23.64	4.01	16.98
Oats	-	-	-	50.80	8.93	17.59
PULSES	*	*	*	414.06	35.66	8.61
Horse Beans	-	-	-	195.91	22.37	11.36
Field Peas	-	-	-	76.26	14.25	18.69
Haricot Beans	-	-	-	44.32	8.63	19.48
Chick Peas	*	*	*	51.46	13.00	25.26
Lentils	-	-	-	11.54	2.65	22.93
Vetch	*	*	*	33.57	11.68	34.78
Others	*	*	*	74.92	10.85	14.49
Neug	-	-	-	13.47	2.48	18.43
Lin Seed	*	*	*	37.70	6.42	17.03
Rape seed	-	-	-	*	*	*
Ground Nuts	-	-	-	*	*	*
Sun Flower	-	-	-	*	*	*
Sesame	-	-	-	0.12	0.05	46.12
Fenugreek	-	-	-	5.06	1.32	26.05
ALL CROPS	74.87	8.93	11.93	3,203.62	160.44	5.01

TABLE 4.6 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Somali

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	*	*	*	23.31	3.21	13.78
Teff	-	-	-	*	*	*
Barely	-	-	-	4.05	1.03	25.42
Wheat	*	*	*	2.51	1.12	44.58
Maize	*	*	*	9.69	1.48	15.29
Sorghum	-	-	-	6.95	1.81	26.07
Millet	-	-	-	-	-	-
Oats	-	-	-	0.07	0.03	46.21
PULSES	-	-	-	0.28	0.08	29.05
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	*	*	*
Haricot Beans	-	-	-	0.08	0.03	32.11
Chick Peas	-	-	-	0.18	0.08	41.59
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	*	*	*
Neug	-	-	-	-	-	-
Lin Seed	-	-	-	*	*	*
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	*	*	*
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	*	*	*
ALL CROPS	*	*	*	24.01	3.28	13.65

TABLE 4.7 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Bershangul-Gumuz

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	0.43	0.14	31.40	37.43	5.94	15.86
Teff	-	-	-	9.00	2.53	28.10
Barely	-	-	-	*	*	*
Wheat	-	-	-	*	*	*
Maize	0.43	0.14	31.40	7.19	1.01	13.98
Sorghum	-	-	-	10.39	1.36	13.04
Millet	-	-	-	5.99	1.48	24.76
Oats	-	-	-	*	*	*
PULSES	-	-	-	4.34	1.34	30.91
Horse Beans	-	-	-	0.95	0.37	39.02
Field Peas	-	-	-	*	*	*
Haricot Beans	-	-	-	2.39	1.08	45.25
Chick Peas	-	-	-	0.10	0.04	36.50
Lentils	-	-	-	*	*	*
Vetch	-	-	-	-	-	-
Others	-	-	-	3.00	0.51	16.98
Neug	-	-	-	1.46	0.33	22.45
Lin Seed	-	-	-	0.03	0.01	40.12
Rape seed	-	-	-	*	*	*
Ground Nuts	-	-	-	0.86	0.33	37.97
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	0.64	0.17	26.15
Fenugreek	-	-	-	-	-	-
ALL CROPS	0.43	0.14	31.40	44.77	7.06	15.77

TABLE 4.8 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

(S.N.N.P.R)

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	30.34	3.86	12.71	396.83	24.75	6.24
Teff	0.78	0.31	39.80	84.58	8.89	10.51
Barely	*	*	*	75.25	12.69	16.87
Wheat	15.24	3.02	19.84	136.40	16.04	11.76
Maize	13.87	2.29	16.48	81.10	9.46	11.67
Sorghum	-	-	-	18.12	1.70	9.38
Millet	-	-	-	1.21	0.32	26.03
Oats	-	-	-	*	*	*
PULSES	*	*	*	69.93	8.65	12.37
Horse Beans	*	*	*	27.95	3.76	13.47
Field Peas	-	-	-	21.45	4.64	21.64
Haricot Beans	*	*	*	13.88	2.65	19.05
Chick Peas	-	-	-	2.43	1.10	45.29
Lentils	-	-	-	*	*	*
Vetch	-	-	-	*	*	*
Others	-	-	-	0.88	0.20	23.31
Neug	-	-	-	*	*	*
Lin Seed	-	-	-	0.37	0.12	33.39
Rape seed	-	-	-	0.02	0.01	45.99
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	0.06	0.02	37.47
Sesame	-	-	-	*	*	*
Fenugreek	-	-	-	0.29	0.12	41.05
ALL CROPS	30.40	3.85	12.68	467.64	28.89	6.18

TABLE 4.9 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Gambela

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
CEREALS	*	*	*	2.98	0.61	20.35
Teff	-	-	-	-	-	-
Barely	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	*	*	*	2.00	0.47	23.47
Sorghum	-	-	-	0.96	0.32	33.07
Millet	-	-	-	*	*	*
Oats	-	-	-	-	-	-
PULSES	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	0.06	0.03	49.88
Naug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	0.01	-	36.44
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	*	*	*
Fenugreek	-	-	-	-	-	-
ALL CROPS	*	*	*	3.05	0.61	20.13

TABLE 4.10 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Harari

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
CEREALS	0.14	0.05	32.38	2.97	0.24	7.95
Teff	-	-	-	-	-	-
Barely	-	-	-	0.03	0.02	49.85
Wheat	0.05	0.02	40.25	0.06	0.02	36.94
Maize	0.09	0.04	47.85	1.08	0.12	10.85
Sorghum	-	-	-	1.79	0.15	8.48
Millet	-	-	-	-	-	-
Oats	-	-	-	*	*	*
PULSES	-	-	-	0.04	0.01	32.16
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	-	-	-	0.03	0.01	33.68
Chick Peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	0.90	0.21	23.48
Naug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	0.90	0.21	23.47
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
ALL CROPS	0.14	0.05	32.30	3.92	0.31	7.89

TABLE 4.11 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Addis Ababa

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
CEREALS	0.16	0.05	33.12	6.40	0.65	10.09
Teff	*	*	*	2.80	0.31	11.05
Barely	-	-	-	*	*	*
Wheat	0.15	0.05	32.52	3.35	0.46	13.73
Maize	-	-	-	0.02	0.01	35.69
Sorghum	-	-	-	0.01	-	39.89
Millet	-	-	-	-	-	-
Oats	-	-	-	*	*	*
PULSES	-	-	-	1.84	0.33	17.74
Horse Beans	-	-	-	*	*	*
Field Peas	-	-	-	0.02	-	28.62
Haricot Beans	-	-	-	-	-	-
Chick Peas	-	-	-	0.84	0.18	21.36
Lentils	-	-	-	0.13	0.02	15.29
Vetch	-	-	-	0.73	0.17	23.54
Others	-	-	-	0.05	0.01	19.22
Naug	-	-	-	-	-	-
Lin Seed	-	-	-	*	*	*
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	0.05	0.01	22.28
ALL CROPS	0.16	0.05	33.12	8.30	0.95	11.44

TABLE 4.12 ESTIMATES OF QUANTITY OF IMPROVED SEED AND LOCAL SEED
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION
FOR PRIVATE HOLDINGS 1998/99(1991 E.C.)

Dire Dawa

TYPE OF CROP	IMPROVED SEED			LOCAL SEED		
	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
CEREALS	0.08	0.01	17.46	1.22	0.14	11.17
Teff	-	-	-	-	-	-
Barely	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	0.01	-	30.98	0.05	0.01	23.60
Sorghum	0.07	0.01	17.38	1.16	0.13	11.27
Millet	-	-	-	-	-	-
Oats	-	-	-	-	-	-
PULSES	0.01	-	34.50	0.02	0.01	30.68
Horse Beans	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-
Haricot Beans	0.01	-	34.90	0.02	0.01	30.94
Chick Peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Others	-	-	-	0.01	-	45.47
Naug	-	-	-	-	-	-
Lin Seed	-	-	-	-	-	-
Rape seed	-	-	-	-	-	-
Ground Nuts	-	-	-	0.01	-	45.88
Sun Flower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
ALL CROPS	0.09	0.02	17.63	1.25	0.14	10.98

TABLE 5.1

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

National

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
ILLITERATE	7,035.26	97.73	1.39	111.56	11.38	10.20	84.52	13.94	16.49	150.31	12.26	8.16	2,659.74	87.88	3.30
GRADES 1 - 3	1,331.39	35.74	2.68	37.66	5.60	14.87	20.00	3.73	18.67	35.24	4.62	13.10	573.57	25.50	4.45
GRADES 4 - 6	745.56	30.28	4.06	27.21	4.41	16.20	11.79	2.80	23.74	24.45	3.88	15.86	380.82	21.36	5.61
GRADES 7 - 8	278.56	15.08	5.41	9.30	1.97	21.24	5.44	1.86	34.28	7.89	1.92	24.38	141.27	10.75	7.61
GRADES 9 - 11	119.74	9.81	8.19	5.13	1.44	28.10	3.28	1.38	42.18	4.50	1.45	32.16	62.47	6.12	9.80
GRADES 12 COMPLETE	44.14	5.06	11.46	2.46	1.10	44.85	*	*	*	*	*	*	26.46	3.98	15.04
HIGHER EDUCATION	15.34	2.69	17.53	1.78	0.79	44.58	*	*	*	*	*	*	9.61	2.30	23.95
TOTAL	9,570.00	126.85	1.33	195.09	18.03	9.24	125.89	18.82	14.95	225.05	16.56	7.36	3,853.98	120.64	3.13

TABLE 5.2

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Tigray

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
ILLITERATE	488.11	20.28	4.15	6.16	2.24	36.41	4.55	1.99	43.71	6.77	2.29	33.81	235.57	19.18	9.42
GRADES 1 - 3	89.91	8.51	9.47	*	*	*	*	*	*	1.06	0.53	49.96	44.20	5.73	12.96
GRADES 4 - 6	15.44	2.19	14.20	*	*	*	*	*	*	-	-	-	7.01	1.49	21.23
GRADES 7 - 8	3.55	0.97	27.41	*	*	*	*	*	*	-	-	-	1.71	0.56	32.94
GRADES 9 - 11	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
GRADES 12 COMPLETE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	598.33	22.11	3.70	8.48	3.18	37.49	5.90	2.70	45.71	7.83	2.36	30.09	257.14	22.78	8.86

TABLE 5.3

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1988/89(1991 E.C.)

Afar

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED											
	Total			Improved Seed			Irrigation			Pesticide		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
ILLITERATE	29.06	3.40	11.72	-	-	-	2.15	0.58	26.96	*	*	*
GRADES 1 - 3	1.53	0.52	34.05	-	-	-	0.10	0.04	40.54	-	-	-
GRADES 4 - 6	*	*	*	-	-	-	*	*	*	-	-	-
GRADES 7 - 8	*	*	*	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	*	*	*	-	-	-	-	-	-	-	-	-
GRADES 12 COMPLETE HIGHER EDUCATION	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	31.08	3.52	11.32	-	-	-	2.28	0.59	25.81	*	*	*
										1.09	0.43	39.19

TABLE 5.4

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1988/89(1991 E.C.)

Ainara

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED											
	Total			Improved Seed			Irrigation			Pesticide		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
ILLITERATE	2,172.69	39.92	1.84	26.68	5.21	19.54	11.04	3.24	29.38	14.08	3.29	23.38
GRADES 1 - 3	467.34	20.41	4.37	8.05	2.10	26.04	5.88	1.85	31.52	3.10	1.20	38.57
GRADES 4 - 6	97.37	9.12	9.36	*	*	*	1.69	0.80	47.20	2.15	1.02	47.35
GRADES 7 - 8	38.97	5.09	13.07	*	*	*	*	*	*	*	*	*
GRADES 9 - 11	14.24	2.96	20.81	-	-	-	-	-	-	*	*	*
GRADES 12 COMPLETE HIGHER EDUCATION	9.51	2.90	30.52	*	*	*	-	-	-	-	-	-
	*	*	*	-	-	-	-	-	-	-	-	-
TOTAL	2,801.52	38.51	1.37	37.82	6.71	17.74	20.26	4.78	23.98	20.34	4.17	20.50
										782.76	48.35	6.18

TABLE 5.5

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Oromia

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
ILLITERATE	2,690.87	61.19	2.27	45.09	7.28	16.15	46.59	11.66	25.03	98.88	10.28	10.40	1,058.65	55.24	5.22
GRADES 1 - 3	465.88	21.13	4.54	19.06	4.38	22.97	9.98	2.96	29.63	23.18	4.06	17.50	204.56	15.65	7.65
GRADES 4 - 6	330.80	18.08	5.47	13.56	2.68	19.78	6.05	2.42	39.97	13.21	2.96	22.44	167.13	13.88	8.28
GRADES 7 - 8	127.96	10.36	8.09	4.86	1.52	31.29	*	*	*	5.69	1.71	30.11	60.53	7.36	12.16
GRADES 9 - 11	64.31	7.37	11.46	4.37	1.38	31.46	*	*	*	2.40	1.10	45.67	29.26	4.14	14.16
GRADES 12 COMPLETE	20.29	3.39	16.72	*	*	*	*	*	*	*	*	*	9.17	2.00	21.79
HIGHER EDUCATION	6.90	1.78	25.76	1.32	0.66	49.65	-	-	-	*	*	*	3.03	1.21	39.98
TOTAL	3,706.96	76.37	2.06	89.42	12.12	13.56	67.01	15.33	22.87	144.80	13.90	9.60	1,532.32	76.81	5.01

TABLE 5.6

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Somali

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
ILLITERATE	70.05	9.63	13.74	0.03	0.03	39.05	*	*	*	0.03	0.04	48.41	2.46	1.21	49.35
GRADES 1 - 3	13.40	4.31	32.13	*	*	*	*	*	*	-	-	-	*	*	*
GRADES 4 - 6	2.03	0.71	34.15	*	*	*	*	*	*	-	-	-	*	*	*
GRADES 7 - 8	0.58	0.25	43.26	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
GRADES 12 COMPLETE	0.05	0.03	49.12	-	-	-	-	-	-	-	-	-	-	-	-
HIGHER EDUCATION	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-
TOTAL	86.59	10.96	12.66	*	*	*	*	*	*	0.03	0.04	46.20	*	*	*

TABLE 5.7

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Bershangul-Gumuz

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
ILLITERATE	90.95	10.78	11.85	0.63	0.21	34.04	*	*	*	0.59	0.24	41.05	19.82	4.17	21.02
GRADES 1 - 3	11.47	1.28	11.19	*	*	*	*	*	*	*	*	*	1.59	0.45	28.10
GRADES 4 - 6	10.61	1.31	12.36	*	*	*	*	*	*	*	*	*	1.88	0.61	32.31
GRADES 7 - 8	3.73	0.63	16.96	*	*	*	-	-	-	*	*	*	0.98	0.35	35.51
GRADES 9 - 11	1.21	0.34	28.06	*	*	*	-	-	-	*	*	*	*	*	*
GRADES 12 COMPLETE	0.63	0.22	34.31	*	*	*	-	-	-	*	*	*	*	*	*
HIGHER EDUCATION	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	118.86	11.69	9.84	0.98	0.31	31.57	0.64	0.27	41.50	0.83	0.29	34.28	24.64	4.85	19.68

TABLE 5.8

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

(S.N.N.P.R)

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)	Estimate (¹ 000HA)	S.E (¹ 000)	C.V. (%)
ILLITERATE	1,450.06	61.00	4.21	29.36	6.63	22.58	14.96	6.47	43.28	28.52	5.33	18.68	809.14	53.46	6.61
GRADES 1 - 3	275.47	18.02	6.54	8.32	2.57	30.90	2.85	1.28	44.69	7.81	1.77	22.67	159.13	14.55	9.15
GRADES 4 - 6	283.04	22.34	7.89	11.14	3.37	30.24	2.60	1.03	39.50	9.01	2.28	25.32	169.82	15.56	9.16
GRADES 7 - 8	101.71	9.63	9.47	2.55	1.00	39.37	*	*	*	1.61	0.76	47.15	61.57	7.32	11.89
GRADES 9 - 11	37.75	5.70	15.11	*	*	*	*	*	*	*	*	*	24.22	3.89	16.07
GRADES 12 COMPLETE	13.22	2.37	17.95	*	*	*	*	*	*	*	*	*	9.78	2.12	21.70
HIGHER EDUCATION	6.45	1.87	29.08	*	*	*	-	-	-	*	*	*	5.60	1.85	32.95
TOTAL	2,167.69	90.70	4.18	53.32	11.06	20.73	23.45	9.29	39.63	49.54	7.60	15.35	1,239.25	76.25	6.15

TABLE 5.9
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1988/89(1991 E.C.)

Garbela

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED											
	Total			Improved Seed			Irrigation			Pesticide		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
ILLITERATE	16.91	1.77	10.45	0.54	0.21	39.74	*	*	*	0.37	0.16	43.25
GRADES 1 - 3	3.70	0.84	22.80	*	*	*	-	-	-	*	*	*
GRADES 4 - 6	4.17	0.82	19.70	*	*	*	-	-	-	*	*	*
GRADES 7 - 8	1.39	0.21	15.37	*	*	*	-	-	-	*	*	*
GRADES 9 - 11	0.15	0.06	40.75	-	-	-	-	-	-	-	-	-
GRADES 12 COMPLETE HIGHER EDUCATION	*	*	*	-	-	-	-	-	-	-	-	-
TOTAL	26.52	3.07	11.56	1.19	0.52	43.40	*	*	*	0.55	0.18	33.33

TABLE 5.10
NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1988/89(1991 E.C.)

Harari

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED											
	Total			Improved Seed			Irrigation			Pesticide		
	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %	Estimate ('000HA)	S.E. ('000)	C.V. %
ILLITERATE	10.24	0.47	4.56	0.24	0.08	34.43	0.51	0.14	28.22	0.13	0.04	32.39
GRADES 1 - 3	1.27	0.18	14.27	*	*	*	0.09	0.04	39.57	*	*	*
GRADES 4 - 6	0.91	0.14	15.29	*	*	*	*	*	*	-	-	-
GRADES 7 - 8	0.23	0.08	34.37	*	*	*	*	*	*	-	-	-
GRADES 9 - 11	0.12	0.05	41.53	*	*	*	-	-	-	-	-	-
GRADES 12 COMPLETE HIGHER EDUCATION	0.07	0.03	44.81	-	-	-	*	*	*	-	-	-
TOTAL	12.88	0.42	3.25	0.47	0.17	35.39	0.77	0.19	24.37	0.14	0.05	33.58

TABLE 5.11

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Achis Akaba

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
ILLITERATE	3.70	0.43	11.71	0.09	0.04	44.04	*	*	*	0.12	0.03	24.67	2.41	0.33	13.60
GRADES 1 - 3	0.64	0.19	30.38	*	*	*	*	*	*	*	*	*	0.40	0.15	36.70
GRADES 4 - 6	0.34	0.07	20.01	*	*	*	-	-	-	*	*	*	0.17	0.04	24.19
GRADES 7 - 8	0.29	0.08	27.77	*	*	*	*	*	*	-	-	-	0.15	0.04	27.53
GRADES 9 - 11	0.28	0.06	23.42	*	*	*	*	*	*	-	-	-	0.20	0.06	30.17
GRADES 12 COMPLETE	0.18	0.06	31.01	*	*	*	-	-	-	-	-	-	0.08	0.02	26.67
HIGHER EDUCATION	0.07	0.03	34.42	*	*	*	*	*	*	-	-	-	*	*	*
TOTAL	5.50	0.72	13.09	0.23	0.10	43.61	*	*	*	0.14	0.03	22.63	3.42	0.50	14.69

TABLE 5.12

NUMBER OF HOLDERS BY AGRICULTURAL PRACTICES AND EDUCATIONAL ATTAINMENT,
THEIR STANDARD ERROR AND COEFFICIENT OF VARIATION FOR PRIVATE HOLDINGS
1998/99(1991 E.C.)

Dire Dawa

EDUCATIONAL STATUS OF HOLDERS	NUMBER OF HOLDERS WHO APPLIED														
	Total			Improved Seed			Irrigation			Pesticide			Fertilizer		
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
ILLITERATE	12.63	0.69	5.50	2.70	0.48	17.62	2.10	0.49	23.14	*	*	*	1.93	0.44	22.74
GRADES 1 - 3	0.83	0.19	23.49	0.11	0.05	48.87	0.35	0.13	35.91	-	-	-	0.16	0.07	43.73
GRADES 4 - 6	0.47	0.15	32.69	*	*	*	0.18	0.07	39.98	-	-	-	0.11	0.04	39.69
GRADES 7 - 8	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
GRADES 9 - 11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GRADES 12 COMPLETE	0.07	0.03	44.85	*	*	*	*	*	*	-	-	-	*	*	*
HIGHER EDUCATION	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*
TOTAL	14.08	0.70	4.95	2.91	0.50	17.21	2.66	0.61	22.93	*	*	*	2.23	0.51	22.72

