

THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

CENTRAL STATISTICAL AUTHORITY

*AGRICULTURAL SAMPLE SURVEY
2000/2001 (1993 E.C.)*

REPORT ON

*FARM MANAGEMENT PRACTICES
OF BELG SEASON CROPS*

*FOR
2000/2001 (1993 E.C)*

(Private Peasant Holdings)

VOLUME VII

*Addis Ababa
June, 2002*

CONTENTS

	<u>PAGE</u>
LIST OF TABLES	iii
LIST OF SUMMARY TABLES.....	vii
LIST OF FIGURES.....	viii
PART I. INTRODUCTION AND OBJECTIVES OF THE SURVEY.....	1
1. INTRODUCTION.....	1
2. OBJECTIVES OF THE SURVEY.....	2
PART II. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING	3
1. SCOPE AND COVERAGE OF THE SURVEY.....	3
2. SAMPLE DESIGN.....	5
3. FIELD ORGANIZATION.....	6
4. TRAINING OF FIELD STAFF.....	6
5. METHOD OF DATA COLLECTION.....	7
6. DATA PROCESSING	8
7. BASIC CONCEPTS AND DEFINITIONS.....	9
PART III. SUMMARY OF THE RESULTS OF THE 2000/2001 (1993 E.C.) FARM MANAGEMENT PRACTICES OF BELG SEASON SURVEY.....	13
APPENDIX I- ESTIMATION PROCEDURES OF TOTAL, AND SAMPLING ERROR	93
APPENDIX II-STANDARD ERROR AND COEFFICIENT OF VARIATION FOR ESTIMATES.. . . . .	.99
APPENDIX III- SURVEY QUESTIONNAIRES.	163

SECTION 1:1.1	TOTAL AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICES.....	15
1.2	TOTAL AREA UNDER FERTILIZER BY TYPE.....	33
A.	USE OF NATURAL FERTILIZER	34
B.	USE OF COMMERCIAL FERTILIZER	34
1.3	TOTAL QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE	47
SECTION 2:2.1	TOTAL AREA AND DISTRIBUTION OF AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICES BY AREA SIZE GROUPS.....	55
2.2	THE DISTRIBUTION OF AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICES BY AREA SIZE GROUPS.....	69
SECTION 3:3.1	TOTAL NUMBER OF BELG CROP PRODUCING HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE	76

PREPARED AND PRINTED BY
 CENTRAL STATISTICAL AUTHORITY
 WILMOT HOUSE, BRISTOL
 ENGLAND

LIST OF TABLES

PAGE

Table 1 Estimates of Area under improved farm management practices for Belg season crops of private holdings, 2000/2001 (1993 E.C.)	
1.A Ethiopia by crop.....	20
1.B Ethiopia by Region.....	21
1.1 Tigray.....	22
1.2 Afar.....	23
1.3 Amhara.....	24
1.4 Oromiya.....	25
1.5 Somali.....	26
1.6 Benshangul-Gumuz.....	27
1.7 S.N.N.P.R.....	28
1.8 Gambela.....	29
1.9 Harari.....	30
1.10 Addis Ababa.....	31
1.11 Dire Dawa.....	32
Table 2 Estimates of Fertilizer applied area by type of fertilizer for Belg season crops of private holdings, 2000/2001 (1993 E.C.)	
2. Ethiopia by crop.....	36
2.1 Tigray	37
2.2 Afar	38
2.3 Amhara	39
2.4 Oromiya	40
2.5 Somali.....	41
2.6 Benshangul-Gumuz.....	42
2.7 S.N.N.P.R.....	43

2.8 Gambela.....	44
2.9 Harari.....	45
2.10 Dire Dawa.....	46

Table 3 Estimates of Quantity of commercial fertilizer applied by type of fertilizer for Belg season crops of private holdings, 2000/2001 (1993 E.C.)

3. Ethiopia by crop.....	48
3.1 Tigray	49
3.2 Amhara	50
3.3 Oromiya	51
3.4 S.N.N.P.R.....	52
3.5 Gambela.....	53
2.6 Harari.....	54

Table 4 Estimates of Area by area size groups for Belg season crops of private holdings, 2000/2001(1993 E.C.)

4.A Ethiopia by crop.....	56
4.B Ethiopia by Region.....	57
4.1 Tigray.....	58
4.2 Afar.....	59
4.3 Amhara.....	60
4.4 Oromiya.....	61
4.5 Somali.....	62
4.6 Benshangul-Gumuz.....	63
4.7 S.N.N.P.R.....	64
4.8 Gambela.....	65
4.9 Harari.....	66
4.10 Addis Ababa.....	67
4.11 Dire Dawa.....	68

Table 5 Estimates of Area under improved farm management practices by area size groups for Belg season crops of private holdings, 2000/2001 (1993 E.C.)

5.	Ethiopia	70
5.1	Tigray.....	70
5.2	Afar	71
5.3	Amhara.....	71
5.4	Oromiya.....	72
5.5	Somali.....	72
5.6	Benshangul-Gumuz.....	73
5.7	S.N.N.P.R.....	73
5.8	Gambela	74
5.9	Harari	74
5.10	Dire Dawa.....	75

Table 6 Estimates of total number of holder and type of holding during 2000/2001 (1993 E.C.) Belg crop production season for private holdings.

6.A	Ethiopia	78
6.B	Ethiopia by Region.....	79
6.1	Tigray.....	80
6.2	Afar.....	81
6.3	Amhara.....	81
6.4	Oromiya.....	82
6.5	Somali.....	82
6.6	Benshangul-Gumz.....	83
6.7	S.N.N.P.R.....	83
6.8	Gambela.....	84
6.9	Harari.....	84
6.10	Addis Ababa	85

Table 7 Estimates of total number of Belg crop producing Holders reporting use of improved farm management practices by age for Belg season crops of private holdings, 2000/2001 (1993 E.C.)

7. Ethiopia	86
7.1 Tigray.....	86
7.2 Afar.....	87
7.3 Amhara.....	87
7.4 Oromiya.....	88
7.5 Somali.....	88
7.6 Benshangul-Gumuz.....	89
7.7 S.N.N.P.R.....	89
7.8 Gambela.....	90
7.9 Harari.....	90
7.10 Dire Dawa.....	91

	<u>PAGE</u>
SUMMARY TABLE A: - Summary of the survey results	13
SUMMARY TABLE B: - Estimates of total area under improved farm management practices for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C.)	15
SUMMARY TABLE C:- Estimates of total area under improved farm management practices for Belg season crops of private holdings in Ethiopia 2000/2001 (1993 E.C.) by crop type.....	16
SUMMARY TABLE D:- Estimates of total area under improved farm management practices for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C.) by Region.....	18
SUMMARY TABLE E:- Estimates of total area under fertilizer by type of fertilizer for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C.).....	33
SUMMARY TABLE F:- Estimates of total area under Improved farm management practices by area size groups for Belg season crops of private holdings in Ethiopia, 2000/2001(1993 E.C.)	69
SUMMARY TABLE G:- Estimates of total number of Belg crop producing Holders reporting use of farm management practices by age for Belg season crops of private holdings in Ethiopia, 2000/2001(1993 E.C.).....	77

6.11 Dire Dawa	85
----------------------	----

Table 7 Estimates of total number of Belg crop producing Holders reporting use of improved farm management practices by age for Belg season crops of private holdings, 2000/2001 (1993 E.C.)

7. Ethiopia	86
7.1 Tigray.....	86
7.2 Afar.....	87
7.3 Amhara.....	87
7.4 Oromiya.....	88
7.5 Somali.....	88
7.6 Benshangul-Gumuz.....	89
7.7 S.N.N.P.R.....	89
7.8 Gambela.....	90
7.9 Harari.....	90
7.10 Dire Dawa.....	91

	<u>PAGE</u>
SUMMARY TABLE A: - Summary of the survey results	13
SUMMARY TABLE B: - Estimates of total area under improved farm management practices for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C.)	15
SUMMARY TABLE C:- Estimates of total area under improved farm management practices for Belg season crops of private holdings in Ethiopia 2000/2001 (1993 E.C.) by crop type.....	16
SUMMARY TABLE D:- Estimates of total area under improved farm management practices for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C.) by Region.....	18
SUMMARY TABLE E:- Estimates of total area under fertilizer by type of fertilizer for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C.).....	33
SUMMARY TABLE F:- Estimates of total area under Improved farm management practices by area size groups for Belg season crops of private holdings in Ethiopia, 2000/2001(1993 E.C.)	69
SUMMARY TABLE G:- Estimates of total number of Belg crop producing Holders reporting use of farm management practices by age for Belg season crops of private holdings in Ethiopia, 2000/2001(1993 E.C.).....	77

	<u>PAGE</u>
Figure 1 Estimates of total area under improved farm management practices for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C)	17
Figure 2 Estimates of area under improved farm management practices for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C) by region.....	19
Figure 3 Estimates of fertilizer applied area by type for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C.).....	34
Figure 4 Estimates of total quantity of commercial fertilizer applied by type for Belg season crops of private holdings in Ethiopia, 2000/2001 (1993 E.C).....	47
Figure 5 Estimate of total area under Belg season crops by area size groups for private holdings in Ethiopia, 2000/2001 (1993 E.C.).....	55

ABBREVIATIONS

PART I

INTRODUCTION AND OBJECTIVE OF THE SURVEY

- CSA - CENTRAL STATISTICAL AUTHORITY
- EC - ETHIOPIAN CALENDAR
- CV - COEFFICIENT OF VARIATION
- SE - STANDARD ERROR
- HA - HECTARE
- QT - QUINTAL
- S.N.N.P.R - SOUTHERN NATION, NATIONALITIES

AND PEOPLES REGION

The report of adopting modern agricultural practices, such as utilization of fertilizers, irrigation, pesticides and improved seeds, by the traditional peasant farmers can be considered as important indicators for estimating the rate of adoption of modern technologies.

This report presents qualitative information about the use of modern agricultural inputs for Belg season crops of 2000/2001 (1999 A.C.) of the private peasant holdings in the country and regions as it was obtained from the results of the Belg agricultural sample survey conducted in May 2001 by the Central Statistical Authority (CSA). The report is subdivided into three sections:

Section 1, deals with estimates of total area under different farm management practices, total area under fertilizer application by type of fertilizer and quantity of commercial fertilizer in 2000/2001 (1999 A.C.) Belg season.

Section 2, deals with estimates of total area under Belg season crops and the distribution of area under different farm

PART I

INTRODUCTION AND OBJECTIVE OF THE SURVEY

1. INTRODUCTION

Agriculture is the backbone of the Ethiopian economy. The country's economic development highly depends on the development of the agricultural sector. Farmers' interest in the adoption and acceptance of new innovations, modern agricultural techniques and technologies, such as use of fertilizers, irrigation, improved seeds and pesticides, do have influencing impact on the development of the agricultural sector as a whole.

The extent of adopting modern agricultural practices, such as utilization of fertilizer, irrigation, pesticides and improved seeds, by the traditional peasant farmers can be considered as important indicators for estimating the rate of adoption of modern technologies.

This report presents quantitative information about the use of modern agricultural inputs for Belg season crops of 2000/2001(1993 E.C.) of the private peasant holdings for the country and regions as it was obtained from the results of the Belg agricultural sample survey conducted in May 2001 by the Central Statistical Authority (CSA). The report is subdivided into three sections;

Section 1. deals with estimates of total area under different farm management practices, total area under fertilizer application by type of fertilizer and quantity of commercial fertilizer in 2000/2001(1993 E.C.) Belg season.

Section 2. deals with estimates of total area under Belg season crops and the distribution of area under different farm

management practices by area size groups in 2000/2001(1993 E.C.) Belg season.

Section 3. deals with estimates of total number of Belg crop producing holders reporting the use of improved farm management practices by age in 2000/2001(1993 E.C.) Belg season.

2. OBJECTIVE OF THE SURVEY

The general objective of the survey is to collect basic quantitative information on Ethiopia's agriculture. This information is essential for development planning and socio-economic policy formulation.

In a micro-perspective, the objectives of this Survey are to estimate the total cultivated land; total production and yield per hectare of major crops for both the Meher and Belg Seasons. Data on area under different land uses; and quantity of agricultural inputs by type for both seasons is also collected. From the sample, the number of livestock and poultry by type, purpose, sex and age; and, number of beehives in the private peasant holdings are estimated at the national, regional and zonal levels.

PART II

SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

1. SCOPE AND COVERAGE OF THE SURVEY

The 2000/2001 (1993 E.C.) annual Agricultural Sample Survey covers only sedentary rural agricultural population in all regions of the country. A total of 55 zones and 412 Weredas were covered in the survey. The area coverage of the survey is given in the next page.

A total of 1,430 enumeration areas were selected to be covered in the survey in all regions. However, during the data collection stage the survey succeeded to cover only 1,421 enumeration areas (EAs) for Belg Season Survey. In each EA a sample of 40 agricultural households were selected where only the first 25 sample agricultural households were used for obtaining information on farm management practices.

AREA COVERAGE OF THE 2000/2001 (1993 E.C.)

AGRICULTURAL SAMPLE SURVEY

REGION	NUMBER OF ZONES		NUMBER OF WEREDAS
	Total	COVERED IN THE SURVEY	COVERED IN THE SURVEY
TIGRAY ¹	5	4	33
AFAR ²	5	2	5
AMHARA	11	10	92
OROMIYA	12	12	170
SOMALIE ³	9	3	9
BENISHANGUL-GUMUZ	3	3	18
S.N.N.P.R	14	14	73
GAMBELA	4	3	5
HARARI	1	1	1
ADDIS ABABA ⁴	6	2	5
DIRE DAWA	1	1	1
TOTAL	71	55	412

Notes

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

2. SAMPLE DESIGN

A two-stage stratified sample design is used for the 2000/2001 (1993 E.C.) Annual Agricultural Sample Survey. All regions except Harari, Addis Ababa, Dire Dawa and Gambella are broken into zones and treated as strata/reporting levels for survey summarization purposes, but for the four mentioned regions, the reporting levels are the regions themselves. The sample design first-stage consists of primary sampling units (PSUs) in all strata which are enumeration areas (EAs). The second-stage sampling units are agricultural households selected as the secondary level sampling units. The survey questionnaires are administered to all agricultural holders in the sampled agricultural households.

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

Information was collected from the first twenty-five agricultural households except for crop-cutting data which is collected from only the last 15 agricultural households, starting from the 11th selected agricultural households. Data is collected on separate questionnaires from each holder within these twenty-five sampled

agricultural households.

The estimation formulation procedures for totals and ratios of the agricultural variables estimated and the measure of their precision are presented in the **Appendix I**.

3. FIELD ORGANIZATION

The Central Statistical Authority, Branch Statistical Office heads, field supervisors and enumerators, other support staff and drivers were all involved in the conduct of the AgSS area and production survey data collection effort. To accomplish the data collection all field enumerators were equipped with the necessary survey equipment i.e. compass, protractor, ruler, measuring tape, balance scale, poles, ropes, sample bags,...etc.) at the completion of training. To assist with the field work and data collection activities all available four-wheel drive vehicles were used for supervision and collection of completed questionnaires.

4. TRAINING OF FIELD STAFF

The field staff training program was carried out in two stages. The first-stage consisted of trainees from the head office, Branch Statistical Office heads and some of the field supervisors being given training for one week at CSA's headquarters complex in Addis Ababa.

Many of those trained in the first-stage conducted similar training for field supervisors and enumerators for 10 days in all of CSA's 22 branch offices which are distributed around the country. During this second-stage training, the field staff were given detailed classroom instruction on the objectives and uses of the AgSS, concepts and definitions of terms used, the method

of area measurement, method of crop cutting, as well as correct interviewing procedures,... etc. The enumerator training also included a field practice to reinforce the concepts discussed in the classroom with regard to field measurement and crop cutting data collection.

5. METHOD OF DATA COLLECTION

The information on agricultural practices (use of fertilizer, use of pesticides, use of improved seeds and use of irrigation), area and production of major Belg season crops were collected subjectively by interviewing the holders in the sampled households.

There are two well known crop production seasons in Ethiopia Meher (Main) and Belg seasons. According to generally accepted definitions, Meher season refers to long rainy season, which normally occurs from June to September. While "Belg Season" refers to small rainy season, which normally occurs from February to May. In most cases during Belg period long maturing crops are planted and their harvest can extend to December or January. Most of the time, short maturing crops are planted during Belg period and are harvested in June or July.

However, due to the heterogeneity of Belg practices in different parts of the country and the overlapping nature of sowing time for some Meher season crops the reports on Belg season crops in the past faced problem of identification. Hence, in order to report the two seasons crops separately and also not to overlook or miss agricultural practices performed all the year round, either through irrigation, use of soil moisture from dried swampy or marshy areas the following definition has been adopted since 1987/88.

Belg season crops were defined as any crops that are harvested during the months of March to August, while those crops that are harvested during September to February are considered as main (Meher) season crops.

6. DATA PROCESSING

a. EDITING, CODING AND VERIFICATION.

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

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

b. DATA ENTRY, CLEANING AND TABULATION

Before starting data entry of the questionnaire data, experts in agricultural statistics 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 the IMPS software on personal computers. The data was then checked and cleaned using the edit specifications prepared earlier for this purpose. Thirty data encoders were involved in this total

process and it took seven days to complete the job. Finally, tabulation was done on personal computers to produce results as indicated in the tabulation plan.

7. BASIC CONCEPTS AND DEFINITIONS

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

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

Households: A household may be either

- a) a one person household, that is a person who makes provision for his own food or other essentials for living without combining with any other person to form part of a multi person household, or
- b) a multi person household, that is, a group of two or more persons who live together and make common provision for food or other essentials for living. The persons in the group may pool their incomes and have a common budget to greater or lesser extent. They may be related or unrelated persons, or a combination of both.

Holder: A holder is a person who exercises management control over the operations of the agricultural holding and takes the major decision regarding the utilization of the available resources. He has technical and economic responsibility for the holding. He may operate the holding directly as an owner or as a manager.

Under conditions of traditional agricultural holding the holder may be regarded as the person, who with or without 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 right to determine the utilization of the products.

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

Area size groups: In this report area size group is determined by total area under major Belg season crops which is mainly land area under temporary crops.

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

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

Belg season crops: are defined as any crops that are harvested during the months of March (Megabit) to August (Nehase).

Meher season crops: crops that are harvested during the months of

September (Meskerem) to February (Yekatit) are considered as main (Meher) season crops.

Irrigated area: refers to the area of land purposely and actually provided with water, other than by rain, for improving the production of crops. The uncontrolled flooding of land by the over flow of rivers or streams is not categorized as irrigation practice although sometimes farmers use this incidence for production.

Improved Seed: is defined as crop variety which gives significantly higher yield, better quality and/or better benefit compared to traditional varieties of seeds, and usually produced by the Ethiopian Seed Enterprise (ESE) in Ethiopia.

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

Pesticides: Pesticides are chemicals useful for the mitigation, control or elimination of pests which are trouble some or harmful to crops. Insecticides, herbicides and fungicides are all considered as pesticides.

NOTE

1. If in some tables figures do not add up to total it is due to rounding.
2. Those estimates designated by "***" in all tables could not be reported because of high coefficient of variation i.e. they are consolidated in total estimates.
3. In all tables "-" labeled for data not available and "0.00" indicates the value is insignificant.

PART III

SUMMARY OF THE RESULTS OF THE 2000/2001(1993 E.C) FARM MANAGEMENT PRACTICES OF BELG SEASON SURVEY

As mentioned earlier, the results of the 2000/2001 (1993 E.C.) agricultural sample survey on Belg season farm management practices are presented in three sections. In each section short descriptive analysis and tables with numerical results for the country and regional levels are presented.

According to 2000/2001(1993 E.C.) annual agricultural sample survey results, it was estimated that Belg season major crops covered 927.65 thousand hectares of land. In which 6834.24 thousand holders were engaged in the production activity. Of the total area under Belg season major crops 330.75 thousand hectares (35.65%) was under the use of improved farm management practices in which 2711.93(39.68%) thousand Belg crop producing holders reported to be involved in applying different agricultural inputs.

Moreover, in 2000/2001 (1993 E.C) it was estimated that a total of 58,550 quintals of commercial fertilizers was utilized for Belg season crop production. The details in each of the above mentioned variables are discussed in the following sub-sections.

SUMMARY TABLE A : SUMMARY OF THE SURVEY RESULTS

Belg Crop Area ('000 ha)	927.65
Number of Belg Crop Producing Holders(in million)	6.83
Improved Farm Management Practices('000ha)	330.75
Number of holders reporting the use of farm management practices(in million)	2.71
Quantity of commercial fertilizer('000qt)	58.55

As indicated in tables of results, one can easily observe the relative good performance of the 2000/2001(1993 E.C.) Belg season farm management practice when compared to the previous year i.e 1999/2000(1992 E.C.) Belg season farm management practice. For instance, the total crop area and area under improved farm management practices of major Belg season crops showed an increase of 46.73% and 28.32% when compared with that of 1999/2000(1992 E.C.) Belg season farm management practice estimates, respectively. From this one can easily conclude that the performance of the 2000/2001(1993 E.C.) Belg season farm management practice was relatively better when compared to the previous year i.e. 1999/2000(1992 E.C.).

Survey results, it was estimated that Belg season crop area covered 851.05 thousand hectares of land in which 604.15 thousand holders were engaged in the production activity. Of the total area under Belg season major crops 530.75 thousand hectares (62.25%) was under the use of improved farm management practices in which 374,981 (70.88%) thousand Belg crop producing holders reported to be involved in applying different agricultural inputs.

Moreover, in 2000/2001 (1993 E.C.) it was estimated that a total of 56,850 quintals of commercial fertilizers was utilized for Belg season crop production. The details in each of the above mentioned variables are discussed in the following sub-sections.

SUMMARY TABLE A : RESULTS OF THE SURVEY RESULTS

2000/2001	1999/2000	Change (%)
851.05	580.00	46.73
604.15	430.00	40.00
530.75	410.00	29.45
374.981	290.00	29.31
56,850	45,000	26.33

SECTION 1.

1.1 TOTAL AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICES

According to the 2000/2001(1993 E. C.) agricultural sample survey results, it was estimated that Belg season major crops covered about 927.65 thousand hectares of land. Of this total 330.75 hectares (35.65% of the total) was under the use of improved farm management practices. Moreover, of the above mentioned total area under improved farm inputs, 229.99 thousand hectares (69.54%) was under fertilizer (both natural and commercial), 38.60 thousand hectares (11.67%) was under irrigation and 39.67 thousand hectares (11.99%) was treated with pesticides. The coverage of the above mentioned farm management practices accounted for 24.79%, 4.16% and 4.28% of the total area under Belg season crops, respectively. However, the coverage of area under improved seeds farm management practices was not reported due to unreliability of the data (see summary Table B).

SUMMARY TABLE B: ESTIMATES OF TOTAL AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001 (1993 E.C.)

TYPE OF IMPROVED FARM MANAGEMENT PRACTICES	AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE (000' ha)	% FROM TOTAL BELG FARM MANAGEMENT AREA	% FROM TOTAL BELG CROP AREA
IRRIGATION	38.60	11.67	4.16
IMPROVED SEEDS	*	*	*
FERTILIZER	229.99	69.54	24.79
PESTICIDES	39.67	11.99	4.28
TOTAL	330.75	100	35.65

The estimates of total land area under different farm management practices for Belg season crops of 2000/2001(1993 E.C.) is presented in Summary Table C. As it is indicated in the summary

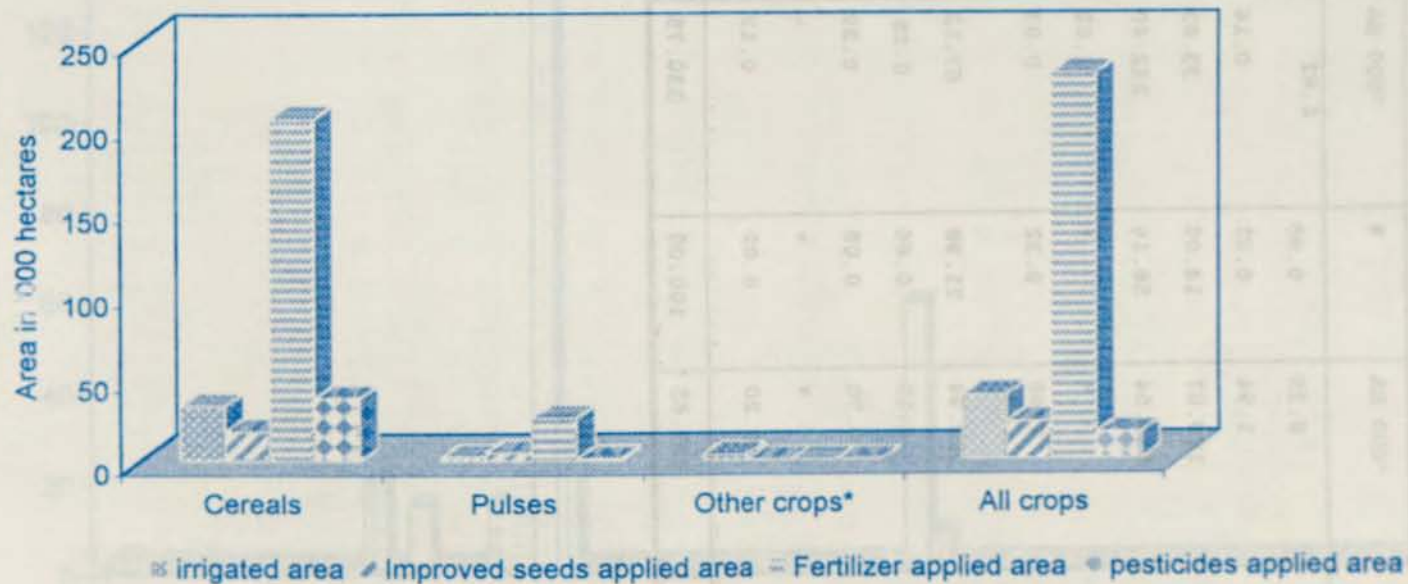
table, the highest proportion of crop area covered by different farm management practices was reported to Belg cereals, which accounted for 292.90 thousand hectares (88.56%) and about 34.80 thousand hectares (10.52%) was accounted for Belg pulses. The remaining crop area could not be reported because of the data was unreliable.

SUMMARY TABLE C: ESTIMATES OF TOTAL AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001 (1993 E.C.)

CROP TYPE	TOTAL BELG CROP AREA		AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES	
	'000 HA	%	'000 HA	%
CEREALS	786.00	84.73	292.90	88.56
PULSES	136.31	14.69	34.80	10.52
OTHERS	5.35	0.58	*	*
TOTAL	927.66	100	330.75	100

In almost all Belg producing regions of the country, improved farm inputs were utilized for Belg crop production. As indicated in Summary Table D, the largest area under Belg season crops and area under farm inputs were reported by Oromiya Region, covering 58.16% (539,540 hectares) and 67.24% (222,400 hectares), respectively. The second and third were S.N.N.P and Amhara regions with the coverage of 21.98% (203,930 hectares), 20.29% (67,130 hectares) and 14.00% (129,870 hectares), 10.23% (33,830), respectively.

Figure 1. Estimates of total area under improved farm management practices for Belg season crops by private holdings in Ethiopia, 2000/2001(1993 E.C.)



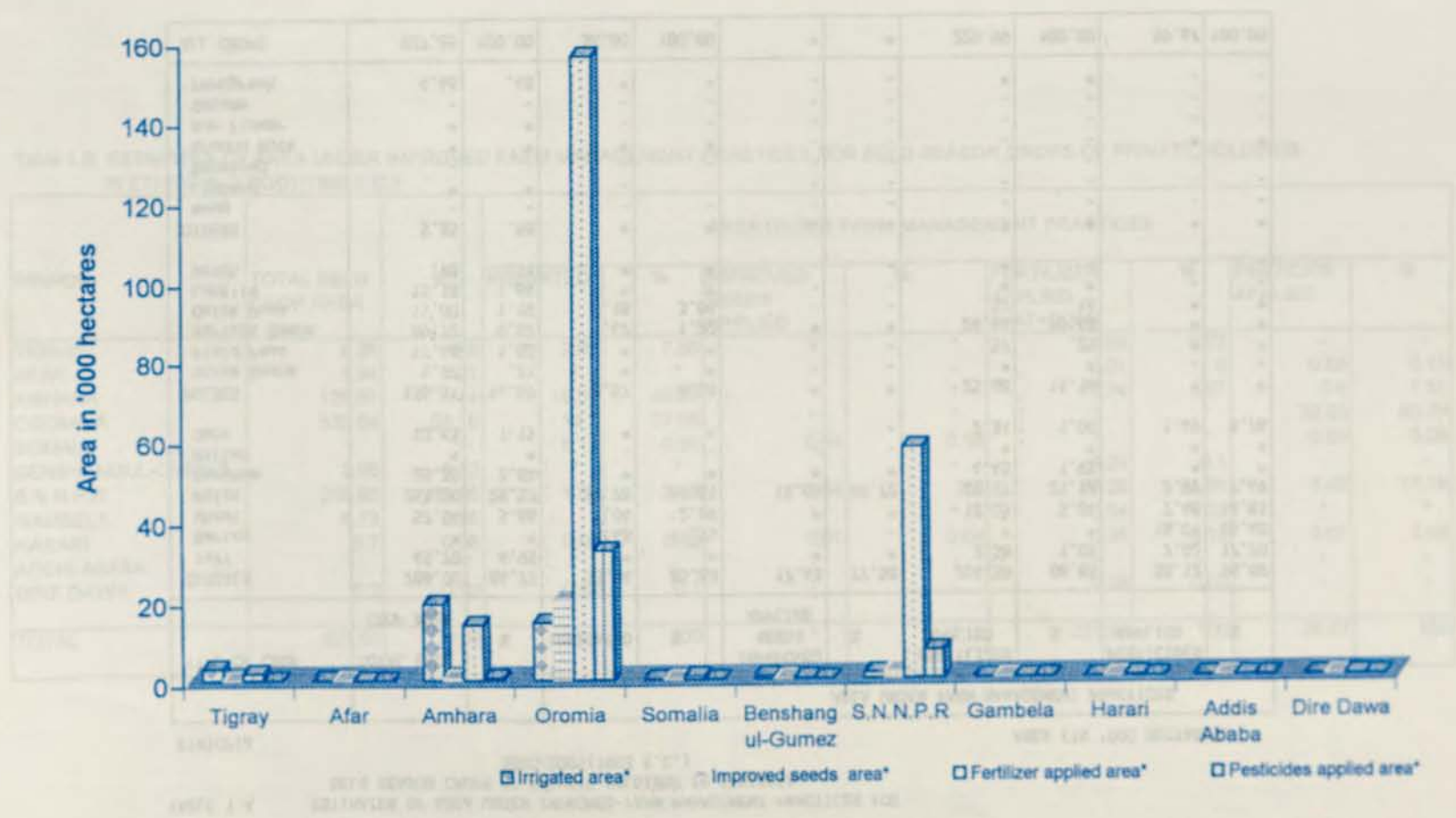
Note:

* The value of Other crops has got a high coefficient of variation, therefore, users are advised to use the estimates with caution.

SUMMARY TABLE D: ESTIMATES OF TOTAL AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001 (1993 E.C.)

REGION	TOTAL BELG CROP AREA		AREA UNDER FARM MANAGEMENT PRACTICES	
	'000 HA	%	'000 HA	%
TIGRAY	8.35	0.90	4.62	1.39
AFAR	1.94	0.21	0.16	0.05
AMHARA	129.87	14.00	33.83	10.23
OROMIYA	539.54	58.16	222.40	67.24
SOMALIE	*	*	1.02	0.31
BENSHANGUL-GUMUZ	2.98	0.32	0.93	0.28
S.N.N.P.R	203.94	21.98	67.13	20.29
GAMBELA	6.13	0.66	0.15	0.05
HARARI	0.70	0.08	0.39	0.12
ADDIS ARABA	*	*	-	-
DIRE DAWA	0.20	0.02	0.12	0.04
TOTAL	927.65	100.00	330.75	100.00

Figure 2. Estimates of area under improved farm management practices for Belg Season crops of private holdings in Ethiopia, 2000/01(1993 E.C.)



Note: * some of the values of those inputs have got high coefficient of variation, therefore, users are advised to use the estimates with caution

TABLE 1.A ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

ETHIOPIA

AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	786.00	84.73	33.04	85.60	17.43	77.58	204.30	88.83	38.12	96.09
Teff	45.70	4.93	*	*	*	*	2.38	1.03	7.02	17.70
Barley	*	*	4.46	11.55	-	-	*	*	18.01	45.40
Wheat	52.54	5.66	1.04	2.69	*	*	12.05	5.24	7.46	18.81
Maize	263.20	28.37	23.78	61.61	13.65	60.72	48.57	21.12	2.97	7.49
Sorghum	26.30	2.84	*	*	*	*	4.43	1.93	*	*
Millet	*	*	-	-	-	-	*	*	*	*
Oats	10.63	1.15	*	*	-	-	2.31	1.00	1.49	3.76
PULSES	136.31	14.69	2.57	6.66	*	*	25.66	11.16	*	*
Horse Beans	1.97	.21	*	*	-	-	*	*	-	-
Field Peas	17.46	1.88	*	*	-	-	.57	.25	*	*
Haricot Beans	89.72	9.67	.47	1.22	*	*	24.44	10.63	*	*
Chick Peas	11.00	1.19	1.18	3.06	-	-	.37	.16	*	*
Lentils	15.18	1.64	*	*	-	-	*	*	-	-
Vetch	.98	.11	*	*	-	-	*	*	-	-
OTHERS	5.35	.58	*	*	-	-	*	*	*	*
Neug	-	-	-	-	-	-	-	-	-	-
LinSeed	*	*	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	*	-	-	-	-	*	*
Sun Flower	*	*	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Fenugreek	4.46	.48	*	*	-	-	*	*	-	-
ALL CROPS	927.65	100.00	38.60	100.00	*	*	229.99	100.00	39.67	100.00

Table 1.B ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/01(1993 E.C.)

REGION	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED (NAT+COM)	%	PESTICIDE APPLIED	%
TIGRAY	8.35	0.9	2.92	7.56	*	*	1.68	0.73	-	-
AFAR	1.94	0.21	*	*	-	-	0.01	0	0.05	0.13
AMHARA	129.87	14	19.01	49.25	*	*	13.74	5.97	0.6	1.51
OROMIYA	539.54	58.16	14.3	37.05	*	*	*	*	32.05	80.79
SOMALI	*	*	0.11	0.28	0.04	0.18	*	*	0.03	0.08
BENSHANGUL-GUMUZ	2.98	0.32	*	*	-	-	0.24	0.1	-	-
S.N.N.P.R	203.93	21.98	1.38	3.58	1.64	7.3	57.29	24.91	6.82	17.19
GAMBELA	6.13	0.66	-	-	*	*	0.04	0.02	*	*
HARARI	0.7	0.08	0.02	0.05	0.01	0.04	0.35	0.15	0.01	0.03
ADDIS ABABA	*	*	-	-	-	-	-	-	-	-
DIRE DAWA	0.2	0.02	0.04	0.1	-	-	0.08	0.03	-	-
TOTAL	927.65	100	38.6	100	*	*	229.99	100	39.67	100

TABLE 1.1

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
 BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)

TIGRAY

AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	7.26	86.95	2.06	70.31	*	*	1.66	98.81	-	-
Teff	*	*	-	-	-	-	*	*	-	-
Barley	1.43	17.13	*	*	-	-	*	*	-	-
Wheat	*	*	*	*	*	*	*	*	-	-
Maize	1.80	21.56	1.59	54.27	-	-	1.03	61.31	-	-
Sorghum	*	*	*	*	-	-	*	*	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	1.07	12.81	.87	29.69	-	-	*	*	-	-
Horse Beans	*	*	*	*	-	-	*	*	-	-
Field Peas	*	*	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	*	*	*	*	-	-	-	-	-	-
Lentils	*	*	*	*	-	-	*	*	-	-
Vetch	*	*	*	*	-	-	-	-	-	-
OTHERS	*	*	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
LinSeed	*	*	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
ALL CROPS	8.35	100.00	2.93	100.00	*	*	1.68	100.00	-	-

TABLE 1.2		ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA 2000/2001(1993 E.C.)										AREA (IN '000 HECTARES)		
AFAR														
TYPE OF CROP	TOTAL BELG CROP AREA	%	IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS														
Teff	.75	38.66	*	*	-	-	.01	100.00	.04	80.00				
Barley	.59	30.41	-	-	-	-	.01	100.00	.04	80.00				
Wheat	*	*	*	*	-	-	-	-	-	-				
Maize	*	*	*	*	-	-	-	-	-	-				
Sorghum	*	*	*	*	-	-	-	-	-	-				
Millet	*	*	*	*	-	-	-	-	-	-				
Oats	-	-	-	-	-	-	-	-	-	-				
PULSES														
Horse Beans	1.19	61.34	-	-	-	-	-	-	-	-				
Field Peas	-	-	-	-	-	-	-	-	-	-				
Haricot Beans	.20	10.31	-	-	-	-	-	-	-	-				
Chick Peas	.99	51.03	-	-	-	-	-	-	-	-				
Lentils	-	-	-	-	-	-	-	-	-	-				
Vetch	-	-	-	-	-	-	-	-	-	-				
OTHERS														
Neug	-	-	-	-	-	-	-	-	-	-				
LinSeed	-	-	-	-	-	-	-	-	-	-				
Rapeseed	-	-	-	-	-	-	-	-	-	-				
Ground Nuts	-	-	-	-	-	-	-	-	-	-				
Sun Flower	-	-	-	-	-	-	-	-	-	-				
Sesame	-	-	-	-	-	-	-	-	-	-				
Fenugreek	-	-	-	-	-	-	-	-	-	-				
ALL CROPS	1.94	100.00	*	*	-	-	.01	100.00	.05	100.00				

TABLE 1.3
 AMIHARA
 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
 BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)
 AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	87.51	67.38	14.56	76.59	*	*	13.16	95.78	.61	100.00
Teff	25.15	19.37	*	*	*	*	1.42	10.33	*	*
Barley	42.65	32.84	3.50	18.41	*	*	8.69	63.25	*	*
Wheat	5.09	3.92	.98	5.16	*	*	.91	6.62	.03	4.92
Maize	10.81	8.32	6.56	34.51	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*	*	*	*	*
Millet	*	*	*	*	*	*	*	*	*	*
Oats	3.74	2.88	*	*	*	*	*	*	*	*
PULSES	39.05	30.07	1.47	7.73	*	*	.57	4.15	*	*
Horse Beans	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*
Haricot Beans	*	*	*	*	*	*	*	*	*	*
Chick Peas	8.39	6.46	*	*	*	*	.37	2.69	*	*
Lentils	10.25	7.89	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*
OTHERS	*	*	*	*	*	*	*	*	*	*
Neug	*	*	*	*	*	*	*	*	*	*
LinSeed	*	*	*	*	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*	*	*	*	*
ALL CROPS	129.87	100.00	19.01	100.00	*	*	13.74	100.00	.61	100.00

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES						AREA (IN '000 HECTARES)	
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	490.82	90.97	14.19	99.16	*	*	*	30.59	95.44	
Teff	9.85	1.83	-	-	*	.43	.28	16.51	51.51	
Barley	-	-	.63	4.40	-	-	6.81	7.27	22.68	
Wheat	42.71	7.92	-	-	*	10.60	10.15	*	*	
Maize	101.29	18.77	13.54	94.62	*	15.81	*	*	*	
Sorghum	5.50	1.02	-	-	*	-	-	-	-	
Millet	-	-	-	-	-	-	-	-	-	
Oats	6.88	1.28	-	-	-	1.85	1.19	1.49	4.65	
PULSES	46.96	8.70	*	*	*	4.55	2.93	*	*	
Horse Beans	-	-	-	-	-	-	-	-	-	
Field Peas	11.15	2.07	-	-	-	-	-	-	-	
Haricot Beans	28.26	5.24	*	*	*	3.95	2.54	*	*	
Chick Peas	-	-	-	-	-	-	-	-	-	
Lentils	-	-	-	-	-	-	-	-	-	
Vetch	.38	.07	-	-	-	-	-	-	-	
OTHERS	1.76	.33	-	-	-	-	-	-	-	
Neug	-	-	-	-	-	-	-	-	-	
LinSeed	-	-	-	-	-	-	-	-	-	
Rapeseed	-	-	-	-	-	-	-	-	-	
Ground Nuts	-	-	-	-	-	-	-	-	-	
Sun Flower	-	-	-	-	-	-	-	-	-	
Sesame	-	-	-	-	-	-	-	-	-	
Fenugreek	-	-	-	-	-	-	-	-	-	
ALL CROPS	539.54	100.00	14.31	100.00	*	*	*	32.05	100.00	

TABLE 1.5 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	*	*	.11	100.00	.04	100.00	*	*	.03	100.00
Teff	-	-	-	-	-	-	-	-	-	-
Barley	*	*	-	-	-	-	-	-	-	-
Wheat	*	*	-	-	-	-	-	-	-	-
Maize	*	*	.11	100.00	.04	100.00	*	*	.03	100.00
Sorghum	*	*	-	-	-	-	-	-	-	-
Millet	*	*	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	-	-	-	-	*	*	-	-
Horse Beans	*	*	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	-	-	-	-	*	*	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
ALL CROPS	*	*	.11	100.00	.04	100.00	*	*	.03	100.00

TABLE 1.6
ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)
BENSHANGUL-GUMUZ
AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES								
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%	
CEREALS	1.14	38.26	*	*	-	-	-	.07	29.17	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-
Barley	*	*	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-
Maize	1.07	35.91	*	*	-	-	-	.07	29.17	-	-
Sorghum	*	*	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-
PULSES	1.84	61.74	*	*	-	-	-	.17	70.83	-	-
Horse Beans	*	*	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	1.82	61.07	*	*	-	-	-	.17	70.83	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	2.98	100.00	*	*	-	-	-	.24	100.00	-	-

TABLE 1.7

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	159.10	78.02	1.30	94.89	1.57	95.73	37.39	65.28	6.75	98.83
Teff	6.48	3.18	-	-	-	-	.44	.77	3.72	54.47
Barley	16.01	7.85	-	-	-	-	-	-	-	-
Wheat	1.61	.79	-	-	-	-	-	-	.16	2.34
Maize	112.72	55.27	1.16	84.67	1.53	93.29	29.15	50.89	.95	13.91
Sorghum	20.06	9.84	-	-	-	-	4.14	7.23	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	44.57	21.86	-	-	-	-	19.89	34.72	-	-
Horse Beans	.43	.21	-	-	-	-	-	-	-	-
Field Peas	.67	.33	-	-	-	-	-	-	-	-
Haricot Beans	43.38	21.27	-	-	-	-	19.87	34.69	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OTHERS	.26	.13	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
ALL CROPS	203.93	100.00	1.37	100.00	1.64	100.00	57.28	100.00	6.83	100.00

TABLE 1.8
ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)
GAMBELA

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	6.13	100.00	-	-	-	-	.04	100.00	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	5.98	97.55	-	-	-	-	.04	100.00	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
ALL CROPS	6.13	100.00	-	-	-	-	.04	100.00	-	-

TABLE 1.9

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA

2000/2001(1993 E.C.)

AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES										
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%			
CEREALS													
Teff	*	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	*	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES													
Horse Beans	.62	88.57	*	*	*	*	*	.33	94.29	.01	100.00		
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.62	88.57	*	*	*	*	*	.33	94.29	.01	100.00		
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS													
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.70	100.00	.02	100.00	.01	100.00	.35	100.00	.01	100.00			

TABLE 1.10 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA 2000/2001(1993 E.C.)

ADDIS ABABA AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES									
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%		
CEREALS												
Teff	*	*	-	-	-	-	-	-	-	-	-	-
Barley	*	*	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES												
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS												
Neug	-	-	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	*	*	-	-	-	-	-	-	-	-	-	-

TABLE 1.11 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES FOR
 BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)

DIRE DAWA

TYPE OF CROP	TOTAL BELG CROP AREA	%	AREA UNDER FARM MANAGEMENT PRACTICES							
			IRRIGATED	%	IMPROVED SEEDS APPLIED	%	FERTILIZER APPLIED	%	PESTICIDES APPLIED	%
CEREALS	.20	100.00	.04	100.00	-	-	.08	88.89	-	-
Teff	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Maize	.14	70.00	.04	100.00	-	-	.05	55.56	-	-
Sorghum	.06	30.00	-	-	-	-	.03	33.33	-	-
Millet	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-
Newg	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.20	100.00	.04	100.00	-	-	.09	100.00	-	-

1.2 TOTAL AREA UNDER FERTILIZER BY TYPE

The results of the survey indicate that land area under both natural and commercial fertilizers were estimated to be 299.99 thousand hectares, covering 24.79% of the total area under Belg seasons crops of the private holdings. Of the total fertilized area 92.62 thousand hectares (40.27%) was reported to be under natural fertilizers. The coverage of commercial fertilizers, DAP, was estimated to be 88.78 thousand hectares (66.18%) and 41.84 thousand hectares (31.19%) was the mixture of the two fertilizers (DAP+UREA). However, the coverage of area under UREA was not presented due to unreliability of the data. Moreover, 3,220 hectares (1.40%) was reported to be the area under the mixture of natural and commercial fertilizers (for details see Summary Table E.).

SUMMARY TABLE E: ESTIMATES OF TOTAL AREA UNDER FERTILIZER BY TYPE OF FERTILIZER OF BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

SR.NO	TYPE OF FERTILIZER	FERTILIZER APPLIED AREA		PERCENTAGE FROM TOTAL BELG CROP AREA
		000' HA	%	
1	NATURAL	92.62	40.27	9.98
2	COMMERCIAL	*	*	*
2.1	DAP	88.78	66.18	9.57
2.2	UREA	*	*	*
2.3	DAP+UREA	41.84	31.19	4.51
3	BOTH (COM+NAT)	3.22	1.40	0.35
	TOTAL	229.99	100	24.79

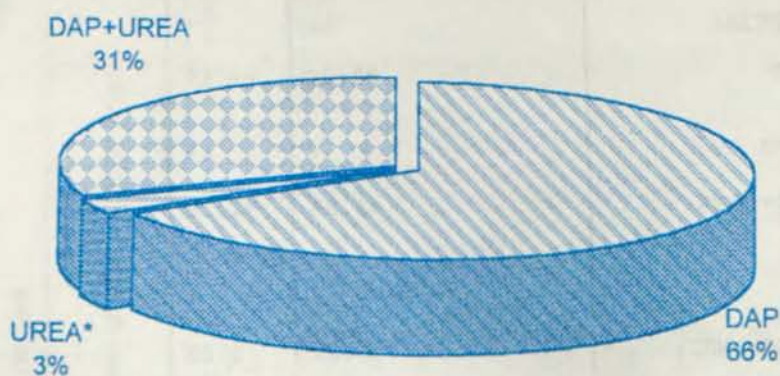
A. USE OF NATURAL FERTILIZERS

In general the application of natural fertilizers for Belg season crops in 2000/2001(1993 E.C.), varies from crop to crop. Of the total area under natural fertilizer, the highest proportion was reported for maize crop which was estimated at 37.31 thousand hectares (40.28%). The fertilized area (natural fertilizer) under haricot beans was second about 14.49 thousand hectares (15.64%). While area under sorghum stood third about 4.32 thousand hectares (4.66%), see Table 2.

B. USE OF COMMERCIAL FERTILIZERS

Out of the total land area under commercial fertilizers in 2000/2001(1993 E.C.) Belg season, the area under DAP was the highest which accounted for 66.18% and the mixture of the two fertilizers (DAP+UREA) was covering 31.19% of the Belg crop area. Area under UREA has got a high coefficient of variation, therefore, it is advised to users to take caution for the estimates. See figure 3.

Figure 3. Estimates of commercial fertilizer applied area by type for Belg season crops of private holdings in Ethiopia, 2000/2001(1993 E.C.)



Note

* The value of UREA has got a high coefficient of variation, therefore, users are advised to use the estimate with caution.

Similarly, the application of commercial fertilizers varied from crop to crop. Of the total area under commercial fertilizers the highest area was reported for maize at 10.01 thousand hectares (7.42%). The second highest area reported under commercial fertilizers was for wheat i.e. 9.84 thousand hectares (7.34%). The regional distribution of both natural and commercial fertilizers application varied from region to region. For instance, of the total area under both (Natural + Commercial) fertilizers, the highest was reported for S.N.N.P.R Region which accounted for 57,280 hectares (24.90% of the total) and Amhara and Tigray Regions were the second and third to report the highest area under both (Natural and Commercial) fertilizers which were estimated to be 13,760 hectares (5.98%) and 1,680 hectares (0.73%), respectively.

Crop	Area (thousand hectares)	Commercial Fertilizer (thousand hectares)	Natural Fertilizer (thousand hectares)	Total (thousand hectares)	% of Total
Maize	10.01	10.01	0	10.01	7.42
Wheat	9.84	9.84	0	9.84	7.34
Other Cereals	...	...	...	...	...
Legumes	...	...	...	...	...
Oilseeds	...	...	...	...	...
Industrial Crops	...	...	...	...	...
Forest	...	...	...	...	...
Barren	...	...	...	...	...
Water	...	...	...	...	...
Other	...	...	...	...	...
Total	133.76	100.00	33.76	133.76	100.00

TABLE 2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

Ethiopia

AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL (COMM+NAT)	%	NATURAL	%	COMME- RICIAL	%	DAP	%	UREA	%	DAP+UREA	%	BOTH NAT+COM.	%
CEREALS	204.30	88.83	77.32	83.48	*	*	81.18	91.44	*	*	40.86	97.66	2.54	78.88
Teff	2.38	1.03	1.73	1.87	.65	.48	.59	.66	.04	1.13	*	*	-	-
Barley	*	*	*	*	*	*	*	*	*	*	39.01	93.24	*	*
Wheat	12.05	5.24	1.99	2.15	9.84	7.34	9.72	10.95	-	-	*	*	*	*
Maize	48.57	21.12	37.31	40.28	10.01	7.42	6.53	7.36	*	*	1.71	4.09	1.25	38.82
Sorghum	4.43	1.93	4.32	4.66	*	*	*	*	*	*	-	-	*	*
Millet	*	*	*	*	-	-	-	-	-	-	-	-	*	*
Oats	2.31	1.00	.52	.56	1.75	1.30	1.75	1.97	-	-	-	-	*	*
PULSES	25.66	11.16	15.29	16.51	9.68	7.22	7.56	8.52	*	*	.98	2.34	.68	21.12
Horse Beans	*	*	*	*	*	*	*	*	*	*	-	-	*	*
Field Peas	.57	.25	.37	.40	*	*	*	*	*	*	-	-	*	*
Haricot Beans	24.44	10.63	14.49	15.64	9.38	6.99	7.28	8.20	*	*	.98	2.34	.57	17.70
Chick Peas	.37	.16	.37	.40	*	*	*	*	*	*	-	-	-	-
Lentils	*	*	*	*	*	*	*	*	*	*	-	-	-	-
Vetch	*	*	-	-	*	*	*	*	*	*	-	-	-	-
OTHERS	*	*	-	-	*	*	*	*	*	*	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	*	*	*	*	*	*	-	-	-	-
Fenugreek	*	*	-	-	*	*	*	*	*	*	-	-	-	-
ALL CROPS	229.99	100.00	92.62	100.00	*	*	88.78	100.00	*	*	41.84	100.00	3.22	100.00

TABLE 2.1
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

TIGRAY

AREA (IN '000 HECTARES)

TYPE OF CROP	TOTAL (COMM+NAT)	%	NATURAL	%	COMM- RICIAL	%	DAP	%	UREA	%	DAP+UREA	%	BOTH NAT+COM.	%
CEREALS	1.66	98.81	.46	100.00	1.13	98.26	*		.04	100.00	*		*	
Teff	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barley	*	*	.25	54.35	*	*	*	*	*	*	*	*	*	*
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	1.03	61.31	*	*	*	*	*	*	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PULSES	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Horse Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Haricot Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chick Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Neug	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LinSeed	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL CROPS	1.68	100.00	.46	100.00	1.15	100.00	*	*	.04	100.00	*	*	*	*

TABLE 2.2
 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
 BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)

TYPE OF CROP	TOTAL (COMM+NAT)	%	NATURAL	%	COMME- RICAL	%	DAP	%	UREA	%	DAP+UREA	%	BOTH NAT+COM.	%	AREA (IN '000 HECTARES)	
																%
CEREALS	.01	100.00	.01	100.00	-	-	-	-	-	-	-	-	-	-	-	-
Teff	.01	100.00	.01	100.00	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.01	100.00	.01	100.00	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 2.3

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

AMHARA

TYPE OF CROP	TOTAL (COMM+ NAT)	%	NATURAL	%	COMME- RICAL	%	DAP	%	UREA	%	DAP+UREA	%	AREA (IN '000 HECTARES)	
													BOTH NAT+COM.	%
CEREALS	13.16	95.78	8.87	93.96	3.96	100.00	3.01	100.00			.56	100.00	.34	100.00
Teff	1.42	10.33	1.42	15.04	-	-	-	-	-	-	-	-	-	-
Barley	8.69	63.25	5.12	54.24	3.41	86.11	2.62	87.04			.43	76.79		
Wheat	.91	6.62	.78	8.26										
Maize														
Sorghum														
Millet														
Oats														
PULSES	.57	4.15	.57	6.04										
Horse Beans														
Field Peas														
Haricot Beans														
Chick Peas	.37	2.69	.37	3.92										
Lentils														
Vetch														
OTHERS														
Newg														
LinSeed														
Rapeseed														
Ground Nuts														
Sun Flower														
Sesame														
Fenugreek														
ALL CROPS	13.74	100.00	9.44	100.00	3.96	100.00	3.01	100.00			.56	100.00	.34	100.00

TABLE 2.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

TYPE OF CROP	TOTAL (COMM+NAT)	%	NATURAL	%	COMM- RICIAL	%	DAP	%	UREA	%	DAP+UREA	%	AREA (IN '000 HECTARES)		
													BOTH NAT+COM.	%	
CEREALS															
Teff	.43	*	*	*	.37	*	.37	*	.16	*	38.39	99.79	*		*
Barley		.28	*	*		*									
Wheat	10.60	6.81	.82	1.93	9.60	8.59	9.60	13.14	.16		38.04	98.88	*		*
Maize	15.81	10.15	14.27	33.58									*		*
Sorghum													*		*
Millet													*		*
Oats	1.85	1.19	.10	.24	1.75	1.57	1.75	2.40					*		*
PULSES														.38	25.50
Horse Beans	4.55	2.93	3.27	7.69	.91	.81	.78	1.07					*		*
Field Peas		*	*	*	*	*	*	*					*		*
Haricot Beans	3.95	2.54	3.04	7.15	.65	.58	.52	.71					*		*
Chick Peas		*	*	*	*	*	*	*					*		*
Lentils		*	*	*	*	*	*	*					*		*
Vetch		*	*	*	*	*	*	*					*		*
OTHERS															
Neug		*	*	*	*	*	*	*					*		*
LinSeed		*	*	*	*	*	*	*					*		*
Rapeseed		*	*	*	*	*	*	*					*		*
Ground Nuts		*	*	*	*	*	*	*					*		*
Sun Flower		*	*	*	*	*	*	*					*		*
Sesame		*	*	*	*	*	*	*					*		*
Fenugreek		*	*	*	*	*	*	*					*		*
ALL CROPS		*	*	*	*	*	*	*	.21	100.00	38.47	100.00	*	1.49	100.00

TABLE 2.5
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

TYPE OF CROP	TOTAL (COMM+NAT)	%	NATURAL	%	COMM- RICIAL	%	DAP	%	UREA	%	DAP+UREA	%	BOTH NAT+COM.	%	AREA (IN '000 HECTARES)	
SOMALI																
CEREALS	*		*													
Teff	-		-													
Barley	-		-													
Wheat	-		-													
Maize	*		*													
Sorghum	*		*													
Millet	-		-													
Oats	-		-													
PULSES	*		*													
Horse Beans	-		-													
Field Peas	-		-													
Haricot Beans	*		*													
Chick Peas	-		-													
Lentils	-		-													
Vetch	-		-													
OTHERS	*		*													
Neug	-		-													
LinSeed	-		-													
Rapeseed	-		-													
Ground Nuts	-		-													
Sun Flower	-		-													
Sesame	-		-													
Fenugreek	-		-													
ALL CROPS	*		*													

TABLE 2.6

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

TYPE OF CROP	TOTAL (COMH+NAT)	%	NATURAL	%	COMME- RICAL	%	DAP	%	UREA	%	DAP+UREA	%	AREA (IN '000 HECTARES)	
													BOTH NAT+COM.	%
CERIALS	.07	29.17	*	*	*	*	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.07	29.17	*	*	*	*	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.17	70.83	.16	80.00	*	*	-	-	.01	100.00	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.17	70.83	.16	80.00	*	*	-	-	.01	100.00	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.24	100.00	.20	100.00	*	*	-	-	.01	100.00	-	-	-	-

TABLE 2.7
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

S.N.N.P.R	TYPE OF CROP	AREA (IN '000 HECTARES)												
		TOTAL (COMM+NAT)	%	NATURAL	%	COMME- RICIAL	%	DAP	%	UREA	%	DAP+UREA	%	BOTH NAT+COM.
	CEREALS	37.39	65.28	27.90	71.80	8.49	49.56	5.52	45.13	1.13	55.94	1.01	78.29	
	Teff	.44	.77	.16	.41	.28	1.63	.22	1.80					
	Barley					.79	4.61	.44	3.60	.32	15.84			
	Wheat													
	Maize	29.15	50.89	20.95	53.91	7.32	42.73	4.77	39.00	.79	39.11	.87	67.44	
	Sorghum	4.14	7.23	4.05	10.42									
	Millet													
	Oats													
	PULSES	19.89	34.72			8.65	50.50	6.71	54.87	.88	43.56			
	Horse Beans													
	Field Peas													
	Haricot Beans	19.87	34.69			8.63	50.38	6.71	54.87	.88	43.56			
	Chick Peas													
	Lentils													
	Vetch													
	OTHERS													
	Neug													
	LinSeed													
	Rapeseed													
	Ground Nuts													
	Sun Flower													
	Sesame													
	Fenugreek													
	ALL CROPS	57.28	100.00	38.86	100.00	17.13	100.00	12.23	100.00	2.02	100.00	1.29	100.00	

TABLE 2.8

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
 BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)

GAMBELA

TYPE OF CROP	TOTAL (COMM+NAT)	%	NATURAL	%	COMME- RICAL	%	DAP	%	UREA	%	DAP+UREA	%	AREA (IN '000 HECTARES)	
													BOTH NAT+COM.	%
CEREALS	.04	100.00	-	-	.04	100.00	.04	100.00	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	.04	100.00	-	-	.04	100.00	.04	100.00	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.04	100.00	-	-	.04	100.00	.04	100.00	-	-	-	-	-	-

TABLE 2.9
ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

		AREA (IN '000 HECTARES)												
TYPE OF CROP	TOTAL (COM+NAT)	%	NATURAL	%	COMME- RICIAL	%	DAP	%	UREA	%	DAP+UREA	%	BOTH NAT+COM.	%
CEREALS														
Teff														
Barley														
Wheat														
Maize														
Sorghum														
Millet														
Oats														
PULSES	.33	94.29	.22	95.65	.09	90.00		100.00	.03	100.00	.02	100.00	.02	66.67
Horse Beans														
Field Peas														
Haricot Beans	.33	94.29	.22	95.65	.09	90.00		100.00	.03	100.00	.02	100.00	.02	66.67
Chick Peas														
Lentils														
Vetch														
OTHERS														
Neug														
LinSeed														
Rapeseed														
Ground Nuts														
Sun Flower														
Sesame														
Fenugreek														
ALL CROPS	.35	100.00	.25	100.00	.10	100.00		100.00	.03	100.00	.02	100.00	.03	100.00

TABLE 2.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER FOR
 BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)

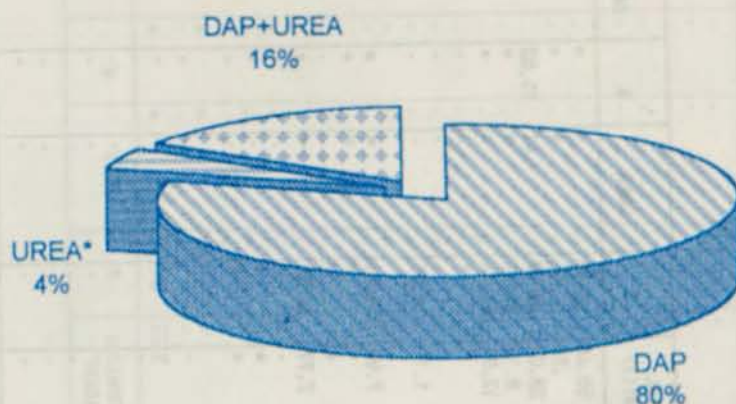
DIRE DAMA

TYPE OF CROP	TOTAL (COMM+NAT)	%	NATURAL	%	COMME- RICIAL	%	DAP	%	UREA	%	DAP+UREA	%	BOTH NAT+COM.	%	AREA (IN '000 HECTARES)	
																%
CEREALS	.08	88.89	.08	100.00	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.05	55.56	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	.03	33.33	.03	37.50	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.09	100.00	.08	100.00	-	-	-	-	-	-	-	-	-	-	-	-

1.3 TOTAL QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE

In 2000/2001(1993 E.C) the total quantity of commercial fertilizer used for Belg season crop production was estimated at 58,550 quintals. Of this total, the share of DAP was the highest accounting for 79.09% (46,310 quintals). Whereas, the mixture of the two types of fertilizers (DAP+UREA) was accounting for 16.43% (9,620 quintals). Quantity of UREA has got a high coefficient of variation hence the data was unreliable, however, it incorporated into totals and showed in figure 4.

Figure 4. Estimates of total quantity of commercial fertilizer applied by type for Belg season crops of private holdings in Ethiopia, 2000/2001(1993 E.C.)



Note

- * The value of UREA has got a high coefficient of variation, therefore, users are advised to use the estimate with caution.

TABLE 3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED
BY TYPE OF FERTILIZER FOR BELG SEASON CROPS OF
PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

Ethiopia

QUANTITY (IN '000 QUINTAL)

TYPE OF CROP	TOTAL QUANTITY	%	UREA	%	DAP	%	DAP + UREA	%
CEREALS	50.40	86.38	*	*	40.51	87.48	7.88	83.12
Teff	.55	.94	*	*	.48	1.04	.02	.21
Barley	28.02	48.02	.41	15.83	25.77	55.65	1.83	19.30
Wheat	8.15	13.97	*	*	7.87	16.99	*	*
Maize	12.51	21.44	*	*	5.24	11.32	5.74	60.55
Sorghum	*	*	-	-	*	*	*	*
Millet	-	-	-	-	-	-	-	-
Oats	1.14	1.95	-	-	1.14	2.46	-	-
PULSES	7.94	13.61	*	*	5.80	12.52	1.59	16.77
Horse Beans	*	*	*	*	*	*	-	-
Field Peas	*	*	-	-	*	*	-	-
Haricot Beans	7.77	13.32	*	*	5.64	12.18	1.59	16.77
Chick Peas	-	-	-	-	-	-	-	-
Lentils	*	*	-	-	*	*	-	-
Vetch	*	*	-	-	*	*	-	-
OTHERS	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
ALL CROPS	58.35	100.00	*	*	46.31	100.00	9.48	100.00

TABLE 3.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZER FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

TYPE OF CROP	TOTAL QUANTITY	%	UREA	%	DAP	%	DAP + UREA	%	QUANTITY (IN '000 QUINTAL)	
									QUANTITY	%
CEREALS	2.55	96.96					2.19	100.00		
Teff										
Barley										
Wheat										
Maize										
Sorghum										
Millet										
Oats										
PULSES										
Horse Beans										
Field Peas										
Haricot Beans										
Chick Peas										
Lentils										
Vetch										
OTHERS										
Neug										
Linsseed										
Rapeseed										
Ground Nuts										
Sun Flower										
Sesame										
Fenugreek										
ALL CROPS	2.63	100.00					2.19	100.00		

TABLE 3.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED
BY TYPE OF FERTILIZER FOR BELG SEASON CROPS OF
PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

AMHARA

QUANTITY (IN '000 QUINTAL)

TYPE OF CROP	TOTAL QUANTITY	%	UREA	%	DAP	%	DAP + UREA	%
CEREALS	3.41	100.00	*	*	1.69	100.00	1.49	100.00
Teff	*	*	*	*	-	-	-	-
Barley	2.05	60.12	*	*	-	-	-	-
Wheat	*	*	-	-	1.59	94.08	.29	19.46
Maize	*	*	-	-	*	*	*	*
Sorghum	-	-	.02	9.09	*	*	*	*
Millet	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
ALL CROPS	3.41	100.00	*	*	1.69	100.00	1.49	100.00

TABLE 3.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED
BY TYPE OF FERTILIZER FOR BELG SEASON CROPS OF
PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

TYPE OF CROP	TOTAL QUANTITY	%	UREA	%	DAP	%	QUANTITY (IN '000 QUINTAL)		
							DAP + UREA	%	%
CEREALS	34.91	97.22	*	*	33.55	97.93	1.21	81.76	
Teff	*	*	-	-	*	*	*	*	
Barley	24.49	68.20	*	*	23.74	69.29	.60	40.54	
Wheat	7.76	21.61	-	-	7.76	22.65	*	*	
Maize	1.28	3.56	-	-	.67	1.96	*	*	
Sorghum	-	-	-	-	-	-	-	-	
Millet	-	-	-	-	-	-	-	-	
Oats	1.14	3.17	-	-	1.14	3.33	-	-	
PULSES	.99	2.76	*	*	.71	2.07	*	*	
Horse Beans	-	-	-	-	-	-	-	-	
Field Peas	*	*	-	-	*	*	*	*	
Haricot Beans	.91	2.53	*	*	.63	1.84	*	*	
Chick Peas	-	-	-	-	-	-	-	-	
Lentils	*	*	-	-	*	*	-	-	
Vetch	*	*	-	-	*	*	-	-	
OTHERS	-	-	-	-	-	-	-	-	
Neug	-	-	-	-	-	-	-	-	
LinSeed	-	-	-	-	-	-	-	-	
Rapeseed	-	-	-	-	-	-	-	-	
Ground Nuts	-	-	-	-	-	-	-	-	
Sun Flower	-	-	-	-	-	-	-	-	
Sesame	-	-	-	-	-	-	-	-	
Fenugreek	-	-	-	-	-	-	-	-	
ALL CROPS	35.91	100.00	*	*	34.26	100.00	1.48	100.00	

TABLE 3.4 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED
BY TYPE OF FERTILIZER FOR BELG SEASON CROPS OF
PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

S.N.N.P.R

TYPE OF CROP	TOTAL QUANTITY		QUANTITY (IN '000 QUINTAL)					
	QUANTITY	%	UREA	%	DAP	%	DAP + UREA	%
CEREALS	9.47	58.31	*	*	4.97	49.90	2.92	66.51
Teff	.29	1.79	.02	.97	.24	2.41	.02	.46
Barley	.79	4.86	*	*	.44	4.42	.33	7.52
Wheat	*	*	*	*	*	*	-	-
Maize	8.32	51.23	*	*	4.22	42.37	2.57	58.54
Sorghum	*	*	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-
PULSES	6.77	41.69	*	*	4.99	50.10	1.47	33.49
Horse Beans	*	*	*	*	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-
Haricot Beans	6.76	41.63	*	*	4.99	50.10	1.47	33.49
Chick Peas	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
ALL CROPS	16.24	100.00	*	*	9.96	100.00	4.39	100.00

TABLE 3.5 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZER FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1995 E.C.)

TYPE OF CROP	TOTAL QUANTITY	QUANTITY (IN '000 QUINTAL)					
		%	UREA	%	DAP	%	DAP + UREA
CEREALS	.04	100.00	-	.04	100.00	-	-
Teff	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-
Maize	.04	100.00	-	.04	100.00	-	-
Sorghum	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
ALL CROPS	.04	100.00	-	.04	100.00	-	-

TABLE 3.6 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED
BY TYPE OF FERTILIZER FOR BELG SEASON CROPS OF
PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

HARARI

TYPE OF CROP	QUANTITY (IN '000 QUINTAL)							
	TOTAL QUANTITY	%	UREA	%	DAP	%	DAP + UREA	%
CEREALS	*	*	-	-	-	-	-	*
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	*	*	-	-	-	-	-	*
Sorghum	*	*	-	-	-	-	-	*
Millet	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-
PULSES	.10	76.92	.04	100.00	.02	100.00	.03	50.00
Horse Beans	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-
Haricot Beans	.10	76.92	.04	100.00	.02	100.00	.03	50.00
Chick Peas	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
ALL CROPS	.13	100.00	.04	100.00	.02	100.00	.03	50.00

SECTION 2.

2.1 TOTAL AREA AND DISTRIBUTION OF AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICE BY AREA SIZE GROUPS.

For the purpose of a systematic presentation of this report, total Belg crop area have been classified in to seven area size groups. These groupings are:

- Group 1 - under 0.10 hectare
- Group 2 - 0.10 - 0.50 hectare
- Group 3 - 0.51 - 1.00 hectare
- Group 4 - 1.01 - 2.00 hectares
- Group 5 - 2.01 - 5.00 hectares
- Group 6 - 5.01 - 10.00 hectares
- Group 7 - 10.01 and above hectares

According to the survey results, in 2000/2001(1993 E.C) it was estimated that a total of 927.65 thousand hectares was under Belg season major crops. By these groupings, as presented in Figure 5 the highest Belg crop area 38.12% fall in area size group 2 which followed by group 7(28.02%) and group 1(14.73%). For details see summary table F and Table 4.

Figure 5. Estimates of total area under Belg season crops by size groups of private holdings in Ethiopia, 2000/2001 (1993 E.C.)

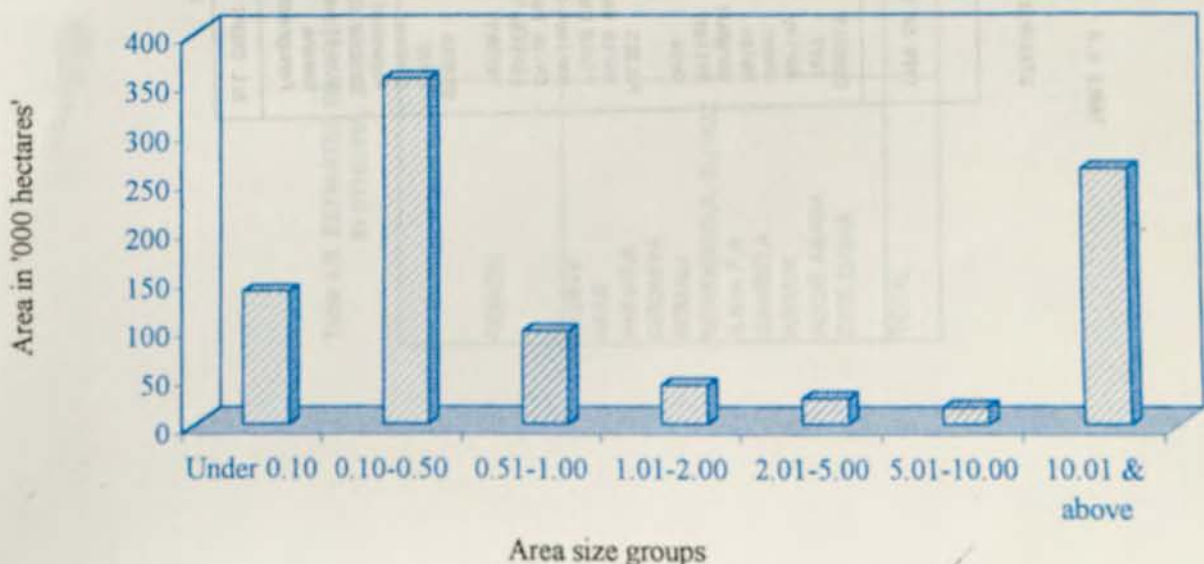


TABLE 4.A

 ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
 CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)

ETHIOPIA

AREA (IN '000 HECTARES)

TYPE OF CROP	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS	97.27	286.60	78.68	31.36	20.88	16.77	254.44
Teff	5.00	24.28	5.83	2.40	.37	-	7.81
Barley	31.52	98.96	16.70	3.23	2.35	1.79	230.88
Wheat	5.80	24.40	12.32	4.42	2.77	2.83	-
Maize	47.75	118.13	37.58	19.28	13.70	11.01	15.75
Sorghum	3.20	13.59	5.80	2.03	*	-	-
Millet	.37	.63	*	-	-	*	-
Oats	3.63	6.62	*	-	-	-	-
PULSES	38.31	63.20	16.06	8.33	4.91	-	5.50
Horse Beans	1.20	*	-	-	-	-	-
Field Peas	3.77	9.87	2.04	.62	*	-	-
Haricot Beans	27.30	35.12	11.89	7.15	2.76	-	5.50
Chick Peas	1.74	6.60	*	*	*	-	-
Lentils	3.96	10.35	*	-	-	-	-
Vetch	.34	.50	*	-	-	-	-
OTHERS	1.05	3.83	*	-	-	-	-
Neug	-	-	-	-	-	-	-
LinSeed	.10	.34	*	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	*	*	-	-	-	-	-
Sun Flower	*	*	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	.84	3.35	*	-	-	-	-
ALL CROPS	136.63	353.63	95.20	39.69	25.79	16.77	259.94

Table 4.B ESTIMATES OF AREA BY SIZE OF HOLDING AND REGION FOR BELG SEASON CROPS OF PRIVATE HOLDINGS
IN ETHIOPIA, 2000/01(1993 E.C.)

REGION	TOTAL BELG CROP AREA	SIZE OF HOLDING IN HECTARES							
		AREA IN '000 HECTARES	UNDER 0.1	0.1-0.5	0.51-1.0	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
TIGRAY	8.35	1.71	4.77	0.47	-	-	-	-	
AFAR	1.94	0.34	1.01	0.23	0.28	0.08	-	-	
AMHARA	129.87	28.64	71.38	13.79	4.35	3.4	0.49	7.81	
OROMIYA	539.54	54.99	173.88	50.12	17.61	9.96	2.09	230.88	
SOMALI	.	0.49	4.72	4.41	3.56	.	6.84	9.8	
BENSHANGUL-GUMUZ	2.98	1	1.5	0.33	0.15	-	-	-	
S.N.N.P.R	203.93	48.91	94.76	23.72	11.93	6.44	6.72	11.45	
GAMBELA	6.13	0.23	1.16	1.09	1.28	.	.	-	
HARARI	0.7	0.2	0.35	0.09	0.06	-	-	-	
ADDIS ABABA	.	-	0.01	0.01	-	-	-	-	
DIRE DAWA	0.2	0.11	0.07	0.02	-	-	-	-	
TOTAL	927.65	136.63	353.63	95.2	39.69	25.79	16.77	259.94	

TABLE 4.1

ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

TIGRAY

TYPE OF CROP	AREA (IN '000 HECTARES)						
	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS							
Teff	1.52 *	4.03 *	1.25 *	.47	-	-	-
Barley	.03 *	.72 *	.03 *	.47	-	-	-
Wheat	.03 *	.03 *	.03 *	-	-	-	-
Maize	.63 *	1.04 *	.03 *	-	-	-	-
Sorghum	.03 *	.03 *	.03 *	-	-	-	-
Millet	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-
PULSES							
Horse Beans	.03 *	.74 *	.03 *	-	-	-	-
Field Peas	.03 *	.03 *	.03 *	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-
Chick Peas	.03 *	.03 *	.03 *	-	-	-	-
Lentils	.03 *	.03 *	.03 *	-	-	-	-
Vetch	.03 *	.20 *	.03 *	-	-	-	-
OTHERS							
Neug	.03 *	-	-	-	-	-	-
LinSeed	.03 *	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
ALL CROPS	1.71	4.77	1.40	.47	-	-	-

TABLE 4.2
ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

TYPE OF CROP	AREA (IN '000 HECTARES)						
	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS							
Teff	.18	.43					
Barley	.17	.40					
Wheat							
Maize							
Sorghum							
Millet							
Oats							
PULSES							
Horse Beans	.16	.58	.16	.21	.08		
Field Peas							
Maricot Beans							
Chick Peas	.13	.49	.12	.17	.08		
Lentils							
Vetch							
OTHERS							
Newg							
LirSeed							
Rapeseed							
Ground Nuts							
Sun Flower							
Sesame							
Fenugreek							
ALL CROPS	.34	1.01	.23	.28	.08		

TABLE 4.3

ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

AMHARA

AREA (IN '000 HECTARES)

TYPE OF CROP	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS	21.30	50.28	5.46	2.16	-	.49	7.81
Teff	3.15	11.66	2.06	*	-	-	7.81
Barley	11.03	28.05	2.80	*	-	-	-
Wheat	2.58	2.51	-	-	-	-	-
Maize	2.35	6.45	.60	*	-	.49	-
Sorghum	*	*	-	-	-	-	-
Millet	-	-	-	-	-	-	-
Oats	2.16	1.57	-	-	-	-	-
PULSES	6.81	18.59	*	*	3.40	-	-
Horse Beans	*	*	-	-	-	-	-
Field Peas	1.65	2.53	*	-	*	-	-
Haricot Beans	.45	*	*	*	*	-	-
Chick Peas	1.37	4.93	*	*	*	-	-
Lentils	3.06	6.32	*	-	-	-	-
Vetch	*	*	-	-	-	-	-
OTHERS	*	*	*	-	-	-	-
Neug	-	-	-	-	-	-	-
LinSeed	*	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	*	*	*	-	-	-	-
ALL CROPS	28.64	71.38	13.79	4.35	3.40	.49	7.81

TABLE 4.4
ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

CROPIYA	AREA (IN '000 HECTARES)						
	TYPE OF CROP	SIZE OF HOLDING IN HECTARES					
		UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS	40.43	146.93	46.01	14.52	9.96	2.09	230.88
Teff	.86	6.75					
Barley	14.52	62.12	13.20	2.12	1.75		230.88
Wheat	2.89	20.83	11.73	3.51	1.66	2.09	
Maize	19.60	49.20	17.88	8.06	6.55		
Sorghum	1.11	2.98					
Millet							
Oats	1.45	5.04					
PULSES	14.19	25.76	3.92	3.09			
Horse Beans	.77						
Field Peas	1.90	6.83	1.80	.62			
Haricot Beans	10.41	13.46	1.93				
Chick Peas							
Lentils							
Vetch							
OTHERS							
Neug							
LinSeed		.34					
Rapeseed							
Ground Nuts							
Sun Flower							
Sesame							
Fenugreek							
ALL CROPS	54.99	173.88	50.12	17.61	9.96	2.09	230.88

TABLE 4.5

ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

SOMALI	AREA (IN '000 HECTARES)						
	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS	.44	4.51	4.02	3.21	*	6.84	9.80
Teff	-	-	-	-	-	-	-
Barley	-	-	*	-	*	-	-
Wheat	*	*	*	*	*	.74	-
Maize	.37	4.27	3.74	2.47	*	6.10	9.80
Sorghum	*	*	-	-	-	-	-
Millet	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-
PULSES	.05	*	*	*	-	-	-
Horse Beans	-	*	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-
Haricot Beans	.05	*	*	*	-	-	-
Chick Peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
ALL CROPS	.49	4.72	4.41	3.56	*	6.84	9.80

TABLE 4.6 ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

BENSHANGUL-GUMUZ

AREA (IN '000 HECTARES)

TYPE OF CROP	SIZE OF HOLDING IN HECTARES							
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE	
CEREALS								
Teff	.36	.50	*	.15	-	-	-	-
Barley	-	*	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	.32	.46	*	.15	-	-	-	-
Sorghum	*	*	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-
PULSES								
Horse Beans	.65	1.01	.19	-	-	-	-	-
Field Peas	*	-	-	-	-	-	-	-
Haricot Beans	.63	1.00	.19	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-
OTHERS								
Neug	-	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
ALL CROPS	1.00	1.50	.33	.15	-	-	-	-

TABLE 4.7

ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

S.N.N.P.R

AREA (IN '000 HECTARES)

TYPE OF CROP	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS	32.68	78.64	20.62	9.48	5.01	6.72	5.95
Teff	.73	3.44	1.31	.63	.37	-	-
Barley	5.24	8.03	*	*	-	1.79	-
Wheat	.26	.87	*	*	-	-	-
Maize	24.15	55.58	13.93	6.38	2.95	3.78	5.95
Sorghum	1.93	10.09	4.39	1.96	*	-	-
Millet	.37	.63	*	-	-	*	-
Oats	*	-	-	-	-	-	-
PULSES	16.11	15.99	3.09	*	1.43	-	5.50
Horse Beans	.29	.14	-	-	-	-	-
Field Peas	.22	.41	*	-	-	-	-
Haricot Beans	15.56	15.38	3.05	*	1.43	-	5.50
Chick Peas	.02	*	-	-	-	-	-
Lentils	*	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
OTHERS	*	*	-	-	-	-	-
Neug	-	-	-	-	-	-	-
LinSeed	*	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	*	*	-	-	-	-	-
Sun Flower	*	*	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
ALL CROPS	48.91	94.76	23.72	11.93	6.44	6.72	11.45

TABLE 4.8 ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

GAMBELA	TYPE OF CROP	AREA (IN '000 HECTARES)						
		SIZE OF HOLDING IN HECTARES						
		UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
	CEREALS	.23	1.16	1.09	1.28			
	Teff	-	-	-	-	-	-	-
	Barley	-	-	-	-	-	-	-
	Wheat	-	-	-	-	-	-	-
	Maize	.23	1.08	1.09	1.21			
	Sorghum	-	-	-	-	-	-	-
	Millet	-	-	-	-	-	-	-
	Oats	-	-	-	-	-	-	-
	PULSES	-	-	-	-	-	-	-
	Horse Beans	-	-	-	-	-	-	-
	Field Peas	-	-	-	-	-	-	-
	Haricot Beans	-	-	-	-	-	-	-
	Chick Peas	-	-	-	-	-	-	-
	Lentils	-	-	-	-	-	-	-
	Vetch	-	-	-	-	-	-	-
	OTHERS	-	-	-	-	-	-	-
	Neug	-	-	-	-	-	-	-
	Linseed	-	-	-	-	-	-	-
	Rapeseed	-	-	-	-	-	-	-
	Ground Nuts	-	-	-	-	-	-	-
	Sun Flower	-	-	-	-	-	-	-
	Sesame	-	-	-	-	-	-	-
	Fenugreek	-	-	-	-	-	-	-
	ALL CROPS	.23	1.16	1.09	1.28			

TABLE 4.9

ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

HARARI	AREA (IN '000 HECTARES)						
	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS	*	*	-	*	-	-	-
Teff	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-
Maize	*	*	-	*	-	-	-
Sorghum	*	*	-	-	-	-	-
Millet	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-
PULSES	.17	.33	.09	*	-	-	-
Horse Beans	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-
Haricot Beans	.17	.33	.09	*	-	-	-
Chick Peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
ALL CROPS	.20	.35	.09	.06	-	-	-

TABLE 4.10
 ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
 CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
 2000/2001(1993 E.C.)

TYPE OF CROP	SIZE OF HOLDING IN HECTARES						10.01 & ABOVE
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	
CEREALS							
Teff	-	.01	.01	-	-	-	-
Barley	-	-	-	-	-	-	-
Wheat	-	.01	.01	-	-	-	-
Maize	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-
PULSES							
Horse Beans	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
OTHERS							
Newg	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
ALL CROPS	-	.01	.01	-	-	-	-

ADDIS ABABA

AREA (IN '000 HECTARES)

TABLE 4.11

ESTIMATE OF AREA BY SIZE OF HOLDING FOR BELG SEASON
CROPS OF PRIVATE HOLDINGS IN ETHIOPIA
2000/2001(1993 E.C.)

DIRE DAWA		AREA (IN '000 HECTARES)					
TYPE OF CROP	SIZE OF HOLDING IN HECTARES						
	UNDER 0.10	0.10-0.50	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	10.01 & ABOVE
CEREALS	.11	.07	.02	-	-	-	-
Teff	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-
Maize	.08	.03	.02	-	-	-	-
Sorghum	.03	.04	-	-	-	-	-
Millet	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-
LinSeed	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
ALL CROPS	.11	.07	.02	-	-	-	-

2.2 THE DISTRIBUTION OF AREA UNDER DIFFERENT FARM MANAGEMENT PRACTICES BY AREA SIZE GROUPS.

According to the survey results, the total land area under different farm management practices was estimated to be 330.74 thousand hectares (35.65% of the total Belg crops area). Of this total, the highest 37.74% land area under improved farm management practices was exercised by area size group 2. Second and third by rank were area size groups 7 and 1, covering 30.86% and 15.80%, respectively (for details see Summary Table F.).

SUMMARY TABLE F: ESTIMATES OF TOTAL AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES BY AREA SIZE GROUPS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

Area size groups in hectare	Total Belg crop area		Area under improved farm Management practices	
	'000 ha	%	'000 ha	%
Under 0.10	136.63	14.73	52.24	15.80
0.10-0.50	353.63	38.12	124.82	37.74
0.51-1.00	95.20	10.26	34.92	10.56
1.01-2.00	39.69	4.28	9.59	2.90
2.01-5.00	25.80	2.78	6.61	2.00
5.01-10.00	16.77	1.81	0.49	0.15
10.01 & above	259.94	28.02	*	*
TOTAL	927.65	100.00	330.75	100.00

TABLE 5 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES BY SIZE OF HOLDINGS FOR BELG SEASON OF PRIVATE HOLDINGS IN ETHIOPIA 2000/2001(1993 E.C.)

Ethiopia

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA			
					FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA			
					TOTAL	%	NATURAL	%	COMMER.	%	NAT + COM	%	PESTICIDES APPLIED AREA	%
UNDER 0.10	9.36	24.25	1.77	7.87	38.22	16.61	26.97	29.08	10.14	7.56	1.11	34.47	3.00	7.56
0.10 - 0.50	23.81	61.68	*	*	64.47	28.02	28.27	30.49	34.23	25.52	1.97	61.18	23.88	60.20
0.51 - 1.00	3.62	9.38	*	*	15.37	6.68	5.57	6.01	9.66	7.20	*	*	9.32	23.49
1.01 - 2.00	*	*	*	*	3.87	1.68	*	*	*	*	*	*	*	*
2.01 - 5.00	*	*	-	-	*	*	*	*	*	*	*	*	*	*
5.01 - 10.00	.49	1.27	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	*	*	*	*	*	*	*	*	*	*
TOTAL	38.60	100.00	*	*	230.10	100.00	92.73	100.00	*	*	3.22	100.00	39.67	100.00

TABLE 5.1 TTIGRAY

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA			
					FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA			
					TOTAL	%	NATURAL	%	COMMER.	%	NAT + COM	%	PESTICIDES APPLIED AREA	%
UNDER 0.10	.87	29.69	.04	100	.69	41.07	.35	76.09	.30	26.09	.03	42.86	-	-
0.10 - 0.50	1.79	61.09	-	-	.86	51.19	*	*	.71	61.74	.04	57.14	-	-
0.51 - 1.00	*	*	-	-	*	*	-	-	*	*	-	-	-	-
1.01 - 2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	2.95	100.00	.04	100	1.68	100.00	.46	100.00	1.15	100.00	.07	100.00	-	-

TABLE 5.2 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES BY SIZE OF HOLDINGS FOR BELG SEASON OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1995 E.C.)

AFAR

AREA (IN '000 HECTARES)

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA					PESTICIDES APPLIED AREA				
					TOTAL	%	NATURAL	%	COMMER.	%	NAT + COM	%	PESTICIDES APPLIED AREA	%
UNDER 0.10	-	-	-	-	.02	100	.02	-	-	-	-	-	-	-
0.10 - 0.50	.01	10	-	-	-	-	-	-	-	-	-	-	-	.05 100.00
0.51 - 1.00	*	*	-	-	-	-	-	-	-	-	-	-	-	-
1.01 - 2.00	*	*	-	-	-	-	-	-	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 -10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	.02	100	.02	100	-	-	-	-	-	.05 100.00
TOTAL	*	*	-	-	.02	100	.02	100	-	-	-	-	-	.05 100.00

TABLE 5.3 AMHARA

AREA (IN '000 HECTARES)

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA					PESTICIDES APPLIED AREA				
					TOTAL	%	NATURAL	%	COMMER.	%	NAT + COM	%	PESTICIDES APPLIED AREA	%
UNDER 0.10	4.95	26.04	*	*	2.77	20.16	2.40	25.42	.24	6.06	*	.08	13.11	
0.10 - 0.50	12.28	64.60	*	*	9.36	68.12	5.71	60.49	3.44	86.87	*	61.76	*	
0.51 - 1.00	*	*	-	-	1.60	11.64	*	*	*	*	*	-	-	
1.01 - 2.00	*	*	-	-	-	-	-	-	-	-	-	-	-	
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.01 -10.00	.49	2.58	-	-	-	-	-	-	-	-	-	-	-	
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	19.01	100.00	*	*	13.74	100.00	9.44	100.00	3.96	100.00	.34	100.00	.61 100.00	

TABLE 5.4 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES BY SIZE OF HOLDINGS FOR BELG SEASON OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

OROMIYA

SIZE OF HOLDING (IN HECTARES)	AREA (IN '000 HECTARES)													
	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA	%		
					TOTAL	%	NATURAL	%	COMMER.	%			NAT + COM	%
UNDER 0.10	3.29	22.99	*	*	11.84	7.61	7.73	18.17	3.70	3.31	.42	28.19	2.39	7.46
0.10 - 0.50	8.72	60.94	*	*	30.65	19.68	8.64	20.31	20.94	18.74	*	*	19.84	61.90
0.51 - 1.00	*	*	*	*	9.70	6.23	*	*	8.84	7.91	-	-	7.81	24.37
1.01 - 2.00	*	*	*	*	*	*	*	*	*	*	-	-	*	*
2.01 - 5.00	-	-	-	-	*	*	*	*	*	*	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	*	*	*	*	*	*	-	-	-	-
TOTAL	14.31	100.00	*	*	*	*	*	*	*	*	1.49	100.00	32.05	100.00

TABLE 5.5 SOMALI

SIZE OF HOLDING (IN HECTARES)	AREA (IN '000 HECTARES)													
	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA	%		
					TOTAL	%	NATURAL	%	COMMER.	%			NAT + COM	%
UNDER 0.10	.02	18.18	-	-	*	*	*	*	*	*	-	-	-	-
0.10 - 0.50	.08	72.73	.04	100.00	*	*	*	*	*	*	-	-	-	-
0.51 - 1.00	*	*	-	-	*	*	*	*	*	*	-	-	.02	66.67
1.01 - 2.00	-	-	-	-	*	*	*	*	*	*	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	.11	100.00	.04	100.00	*	*	*	*	*	*	-	-	.03	100.00

TABLE 5.6 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES BY SIZE OF HOLDINGS FOR BELG SEASON OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

BENSHANGUL-GUMUZ

AREA (IN '000 HECTARES)

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA			
					TOTAL	%	NATURAL	%	COMMER.	%	NAT + COM	%	PESTICIDES APPLIED AREA	%
UNDER 0.10	.10	14.29	-	-	.17	70.83	*	.17	85.00	*	-	-	-	-
0.10 - 0.50	*	*	-	-	.07	29.17	*	*	*	*	-	-	-	-
0.51 - 1.00	*	*	-	-	-	-	-	-	-	-	-	-	-	-
1.01 - 2.00	*	*	-	-	-	-	-	-	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	*	*	-	-	.24	100.00	*	.20	100.00	*	-	-	-	-

TABLE 5.7 S.N.N.P.R

AREA (IN '000 HECTARES)

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	%	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA			
					TOTAL	%	NATURAL	%	COMMER.	%	NAT + COM	%	PESTICIDES APPLIED AREA	%
UNDER 0.10	.09	6.57	.49	29.88	22.48	39.18	16.10	41.35	5.87	34.27	.52	40.31	.50	7.32
0.10 - 0.50	.58	42.34	1.05	64.02	22.77	39.69	13.11	33.67	9.02	52.66	.64	49.61	3.39	49.63
0.51 - 1.00	.48	35.04	*	*	3.74	6.52	3.20	8.22	*	*	*	*	1.49	21.82
1.01 - 2.00	*	*	-	-	*	*	.53	1.36	*	*	-	-	1.05	15.37
2.01 - 5.00	*	*	-	-	*	*	*	*	*	*	-	-	*	*
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	1.37	100.00	1.64	100.00	57.57	100.00	38.94	100.00	17.13	100.00	1.29	100.00	6.83	100.00

TABLE 5.8 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES BY SIZE OF HOLDINGS FOR BELG SEASON OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

GAMBELA

AREA (IN '000 HECTARES)

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA					PESTICIDES APPLIED AREA	%
				TOTAL	%	NATURAL	%	COMMER.			%	NAT + COM	%
UNDER 0.10	-	*	*	-	-	-	-	-	.03	27.27
0.10 - 0.50	-	-	-	.04	100.00	-	-	.04	100.00	*
0.51 - 1.00	-	-	-	-	-	-	-	-	-	-
1.01 - 2.00	-	-	-	-	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	*	.04	100.00	-	-	.04	100.00	*
TOTAL	-	-	*	.04	100.00	-	-	.04	100.00	*

HAWARI

AREA (IN '000 HECTARES)

SIZE OF HOLDING (IN HECTARES)	IRRIGATED AREA	IMPROVED SEEDS APPLIED AREA	%	FERTILIZER APPLIED AREA					PESTICIDES APPLIED AREA	%	
				TOTAL	%	NATURAL	%	COMMER.			%	NAT + COM	%
UNDER 0.10	.01	50.00	*	.11	31.43	.08	34.78	*	.01	33.33	100
0.10 - 0.50	-	-	100.00	.18	51.43	.12	52.17	.05	.01	33.33	-
0.51 - 1.00	*	*	-	.04	11.43	*	*	-	*	*	-
1.01 - 2.00	-	-	-	*	*	-	-	*	*	*	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-
TOTAL	.02	100.00	100.00	.35	100.00	.23	100.00	.10	.03	100.00	.01
											100.00

TABLE 5.10 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICES BY SIZE OF HOLDINGS FOR BELG SEASON OF PRIVATE HOLDERS IN ETHIOPIA, 2000/2001 (1993 E.C.)

SIZE OF HOLDING IRRIGATED (IN HECTARES)	IMPROVED SEEDS APPLIED AREA %	%	FERTILIZER APPLIED AREA						PESTICIDES APPLIED AREA				
			TOTAL	%	NATURAL	%	COMMER.	%	NAT + COM	%	%		
												AREA (IN '000 HECTARES)	
UNDER 0.10	.05	75.00	.03	33.33	.03	37.50	-	-	-	-	-	-	-
0.10 - 0.50	*	*	.03	33.33	.03	37.50	-	-	-	-	-	-	-
0.51 - 1.00	-	-	*	*	*	*	-	-	-	-	-	-	-
1.01 - 2.00	-	-	-	-	-	-	-	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	.04	100.00	.09	100.00	.06	100.00	-	-	-	-	-	-	-

SECTION 3.

3.1 TOTAL NUMBER OF BELG CROP PRODUCING HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE.

For the purpose of preparing this report Belg crop producing holders' ages have been categorized in to nine groups, as follows:-

The group categories by age

group 1	-	under 18 years
group 2	-	18 - 20 years
group 3	-	21 - 24 years
group 4	-	25 - 29 years
group 5	-	30 - 39 years
group 6	-	40 - 49 years
group 7	-	50 - 59 years
group 8	-	60 years & above
group 9	-	not stated

Based on the survey results, a total of 6.83 million holders were engaged in the over all Belg season agricultural activities in 2000/2001 (1993 E.C.) Belg season. As mentioned above, these holders are categorized in to nine age groups based on the age of the holder. Accordingly, the highest number 1,761,230 (25.77%) of holders were estimated to fall in the age group 30 - 39. The second (23.36%) and third (17.42%) highest number of holders fall in the age groups 40 - 49 and 60 and above, respectively. Moreover, it was estimated that a total of 2,711,930 Belg crop producing holders (about 39.68% of the total) reported the use of improved farm management practices. Among Belg producing holders the highest number of holders 48.44% reported the use of natural

fertilizers while 21.45% and 16.00% of them reported to use commercial fertilizer and irrigation, respectively (see summary Table G and Table 7)

SUMMARY TABLE G: ESTIMATES OF TOTAL NUMBER OF BELG CROP PRODUCING HOLDERS REPORTING USE OF FARM MANAGEMENT PRACTICES BY AGE FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/20001 (1993 E.C.)

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF BELG CROP PRODUCING HOLDERS IN		NUMBER OF BELG CROP PRODUCING HOLDERS REPORTING USE OF FARM MANAGEMENT PRACTICES	
	'000	%	'000	%
UNDER 18	19.44	0.28	11.46	0.42
18 - 20	94.26	1.38	26.61	0.98
21 - 24	265.60	3.89	88.38	3.26
25 - 29	817.76	11.97	302.71	11.16
30 - 39	1761.23	25.77	738.26	27.22
40 - 49	1596.91	23.37	649.28	23.94
50 - 59	1088.45	15.93	425.80	15.70
60 & ABOVE	1190.40	17.42	469.42	17.31
NOT STATED	*	*	-	-
TOTAL	6834.24	100.00	2711.93	100.00

TABLE 6.A ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDER AND TYPE OF HOLDING DURING 2000/2001(1993 E.C.)
 BELEG CROP PRODUCTION SEASON FOR PRIVATE HOLDINGS IN ETHIOPIA

ETHIOPIA

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		%
UNDER 18	2.30	.50	.09	1.70	17.05	.27	19.44	.28
18 - 20	15.22	3.33	-	-	79.04	1.24	94.26	1.38
21 - 24	33.99	7.44	.15	2.84	231.46	3.63	265.60	3.89
25 - 29	63.39	13.88	*	*	754.27	11.84	817.76	11.97
30 - 39	135.36	29.63	*	*	1,624.83	25.50	1,761.23	25.77
40 - 49	74.05	16.21	*	*	1,521.05	23.87	1,596.91	23.37
50 - 59	60.69	13.28	*	*	1,026.80	16.11	1,088.45	15.93
60 & ABOVE	71.84	15.73	*	*	1,117.43	17.54	1,190.40	17.42
NOT STATED	-	-	-	-	*	*	*	*
TOTAL	456.84	100.00	5.29	100.00	6,372.11	100.00	6,834.24	100.00

Table 6.B ESTIMATES OF TOTAL NUMBER OF HOLDERS BY TYPE OF HOLDING AND REGION FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/01(1993 E.C.)

NUMBER IN THOUSANDS

REGION	TOTAL NUMBER OF HOLDERS	NUMBER OF HOLDERS					
		WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP AND LIVESTOCK	%
TIGRAY	71.83	*	*	1.16	21.93	65.82	1.03
AFAR	14.02	1.49	0.33	-	-	12.53	0.2
AMHARA	1295.8	89.13	19.51	0.36	6.81	1206.3	18.93
OROMIYA	2795.12	218.07	47.73	3.16	59.74	2573.89	40.39
SOMALI	48.46	*	*	-	-	45.71	0.72
BENSHANGUL-GUMUZ	36.2	3.2	0.7	-	-	33	0.52
S.N.N.P.R	2536.71	130.46	28.56	0.19	3.59	2406.05	37.76
GAMBELA	25.47	6.38	1.4	*	*	18.69	0.29
HARARI	7	0.43	0.09	0.02	0.38	6.55	0.1
ADDIS ABABA	*	-	-	-	-	*	*
DIRE DAWA	3.55	0.09	0.02	-	-	3.46	0.05
TOTAL	6834.24	456.84	100	5.29	100	6372.11	100

TABLE 6.1 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDER AND TYPE OF HOLDING DURING 2000/2001(1995 E.C.)
 BELG CROP PRODUCTION SEASON FOR PRIVATE HOLDINGS IN ETHIOPIA

TIGRAY

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	%
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		
UNDER 18	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	-	-
21 - 24	-	-	-	-	2.23	3.39	2.23	3.10
25 - 29	*	*	-	-	5.05	7.67	5.22	7.27
30 - 39	1.70	35.12	*	*	18.48	28.08	20.52	28.57
40 - 49	*	*	-	-	12.42	18.87	13.58	18.91
50 - 59	*	*	-	-	12.20	18.54	13.61	18.95
60 & ABOVE	*	*	*	*	15.44	23.46	16.66	23.19
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	*	*	1.16	100.00	65.82	100.00	71.83	100.00

TABLE 6.2 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDER AND TYPE OF HOLDING DURING 2000/2001(1995 E.C.)
BELEG CROP PRODUCTION SEASON FOR PRIVATE HOLDINGS IN ETHIOPIA

AFAR

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	%
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		
UNDER 18	-	-	-	-	*	*	*	*
18 - 20	-	-	-	-	*	*	*	*
21 - 24	.16	10.74	-	-	*	*	.50	3.57
25 - 29	.33	22.15	-	-	1.32	10.53	1.65	11.77
30 - 39	*	*	-	-	1.50	11.97	1.69	12.05
40 - 49	*	*	-	-	3.38	26.98	3.54	25.25
50 - 59	*	*	-	-	2.42	19.31	2.71	19.33
60 & ABOVE	.35	23.49	-	-	3.43	27.37	3.78	26.96
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	1.49	100.00	-	-	12.53	100.00	14.02	100.00

TABLE 6.3 AMHARA

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	%
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		
UNDER 18	*	*	-	-	*	*	4.51	.35
18 - 20	6.03	6.77	-	-	8.31	.69	14.34	1.11
21 - 24	*	*	-	-	26.94	2.23	30.53	2.36
25 - 29	7.32	8.21	-	-	99.10	8.22	106.42	8.21
30 - 39	14.46	16.22	-	-	259.30	21.50	273.76	21.13
40 - 49	19.33	21.69	.36	100.00	295.78	24.52	315.47	24.35
50 - 59	12.89	14.46	-	-	257.90	21.38	270.79	20.90
60 & ABOVE	24.69	27.70	-	-	255.29	21.16	279.98	21.61
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	89.13	100.00	.36	100.00	1,206.30	100.00	1,255.80	100.00

TABLE 6.4 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDER AND TYPE OF HOLDING DURING 2000/2001(1995 E.C.)
BELG CROP PRODUCTION SEASON FOR PRIVATE HOLDINGS IN ETHIOPIA

OROMYA

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		%
UNDER 18	*	*	-	-	7.81	.30	8.81	.32
18 - 20	5.18	2.38	-	-	45.41	1.76	50.59	1.81
21 - 24	17.27	7.92	-	-	110.76	4.30	128.02	4.58
25 - 29	27.60	12.66	-	-	298.65	11.60	326.25	11.67
30 - 39	67.42	30.92	*	*	657.65	25.55	725.67	25.96
40 - 49	32.38	14.85	*	*	604.48	23.49	638.26	22.83
50 - 59	31.54	14.46	*	*	393.34	15.28	425.79	15.23
60 & ABOVE	35.67	16.36	*	*	455.79	17.71	491.72	17.59
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	218.07	100.00	3.16	100.00	2,573.89	100.00	2,795.12	100.00

TABLE 6.5 SOMALI

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		%
UNDER 18	-	-	-	-	-	-	-	-
18 - 20	*	*	-	-	*	*	*	*
21 - 24	*	*	-	-	2.24	4.90	2.80	5.78
25 - 29	*	*	-	-	5.16	11.29	5.18	10.69
30 - 39	*	*	-	-	10.47	22.91	11.40	23.52
40 - 49	*	*	-	-	12.25	26.80	13.01	26.85
50 - 59	*	*	-	-	6.99	15.29	7.25	14.96
60 & ABOVE	*	*	-	-	8.08	17.68	8.28	17.09
NOT STATED	-	-	-	-	*	*	*	*
TOTAL	*	*	-	-	45.71	100.00	48.46	100.00

TABLE 6.6 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDER AND TYPE OF HOLDING DURING 2000/2001(1995 E.C.)
 BELG CROP PRODUCTION SEASON FOR PRIVATE HOLDINGS IN ETHIOPIA
 BENSHELL-G.M.2

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		%
UNDER 18	*	*	-	-	*	*	.51	1.41
18 - 20	.32	10.00	-	-	.37	1.12	.69	1.91
21 - 24	.59	18.44	-	-	.78	2.36	1.38	3.81
25 - 29	.28	8.75	-	-	5.52	16.73	5.80	16.02
30 - 39	*	*	-	-	8.58	26.00	8.97	24.78
40 - 49	.63	19.69	-	-	7.76	23.52	8.39	23.18
50 - 59	*	*	-	-	5.19	15.73	5.63	15.55
60 & ABOVE	*	*	-	-	4.63	14.08	4.84	13.37
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	3.20	100.00	-	-	33.00	100.00	36.20	100.00

TABLE 6.7 S.N.N.P.R

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		%
UNDER 18	*	*	.09	47.37	5.33	.22	5.54	.22
18 - 20	3.37	2.58	-	-	24.36	1.01	27.73	1.09
21 - 24	11.47	8.79	.10	52.63	86.32	3.99	97.89	3.86
25 - 29	26.59	20.38	-	-	334.81	13.92	361.40	14.25
30 - 39	48.57	37.23	-	-	661.06	27.47	709.62	27.97
40 - 49	17.86	13.69	-	-	577.94	24.02	595.79	23.49
50 - 59	12.98	9.95	-	-	344.42	14.31	357.40	14.09
60 & ABOVE	9.50	7.28	-	-	371.83	15.45	381.33	15.03
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	130.46	100.00	.19	100.00	2,406.05	100.00	2,536.71	100.00

TABLE 6.8 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDER AND TYPE OF HOLDING DURING 2000/2001(1993 E.C.)
BELG CROP PRODUCTION SEASON FOR PRIVATE HOLDINGS IN ETHIOPIA

GAMBELA

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	%
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		
UNDER 18	-	-	-	-	-	-	-	-
18 - 20	*	*	-	-	*	*	.39	1.53
21 - 24	.31	4.86	.05	12.20	1.57	8.40	1.93	7.58
25 - 29	1.00	15.67	*	*	3.10	16.59	4.20	16.49
30 - 39	1.54	24.14	*	*	5.21	27.88	6.86	26.93
40 - 49	1.69	26.49	*	*	4.46	23.86	6.20	24.34
50 - 59	.82	12.85	*	*	2.45	13.11	3.33	13.07
60 & ABOVE	.71	11.13	*	*	1.81	9.68	2.55	10.01
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	6.38	100.00	*	*	18.69	100.00	25.47	100.00

TABLE 6.9 HARARI

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	%
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		
UNDER 18	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	*	*	*	*
21 - 24	*	*	-	-	.14	2.14	.17	2.43
25 - 29	*	*	-	-	.93	14.20	1.00	14.29
30 - 39	*	*	-	-	1.53	23.36	1.62	23.14
40 - 49	*	*	-	-	1.98	30.23	2.05	29.29
50 - 59	*	*	-	-	1.31	20.00	1.36	19.43
60 & ABOVE	.11	25.58	.02	100.00	.63	9.62	.75	10.71
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	.43	100.00	.02	100.00	6.55	100.00	7.00	100.00

TABLE 6.10 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDER AND TYPE OF HOLDING DURING 2000/2001(1995 E.C.)
BELG CROP PRODUCTION SEASON FOR PRIVATE HOLDINGS IN ETHIOPIA

ADDIS ABABA

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	%
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		
UNDER 18	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	-	-
21 - 24	-	-	-	-	-	-	-	-
25 - 29	-	-	-	-	*	*	*	*
30 - 39	-	-	-	-	*	*	*	*
40 - 49	-	-	-	-	*	*	*	*
50 - 59	-	-	-	-	*	*	*	*
60 & ABOVE	-	-	-	-	*	*	*	*
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	*	*	*	*

TABLE 6.11 DIRE DATA

NUMBER IN THOUSANDS

AGE OF HOLDERS IN YEARS	TOTAL NUMBER OF HOLDERS ENGAGED						TOTAL NUMBER OF HOLDERS	%
	WITH CROP ONLY	%	WITH LIVESTOCK ONLY	%	WITH CROP & LIVESTOCK	%		
UNDER 18	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	*	*	*	*
21 - 24	-	-	-	-	*	*	*	*
25 - 29	-	-	-	-	.61	17.63	.61	17.18
30 - 39	.06	66.67	-	-	1.05	30.35	1.11	31.27
40 - 49	-	-	-	-	.59	17.05	.59	16.62
50 - 59	*	*	-	-	.54	15.61	.55	15.49
60 & ABOVE	*	*	-	-	.47	13.58	.48	13.52
NOT STATED	-	-	-	-	-	-	-	-
TOTAL	.09	100.00	-	-	3.46	100.00	3.55	100.00

TABLE 7 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES
BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1995 E.C.)
ETHIOPIA

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	*	*	2.65	*	-	*
18 - 20	6.15	*	9.99	6.41	*	3.80
21 - 24	11.14	*	39.14	24.23	*	8.79
25 - 29	47.93	9.90	149.74	66.28	6.06	22.79
30 - 39	111.45	*	342.33	165.89	15.29	65.86
40 - 49	95.68	26.30	334.93	132.50	7.75	52.11
50 - 59	91.02	13.12	197.37	84.40	8.00	31.88
60 & ABOVE	68.00	26.27	237.58	98.02	5.01	34.54
NOT STATED	-	-	-	-	-	-
TOTAL	433.86	115.98	1,313.74	581.75	46.77	219.82

TABLE 7.1 TIGRAY

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-
21 - 24	*	*	-	*	-	-
25 - 29	2.51	-	-	*	*	-
30 - 39	12.40	-	*	5.35	*	-
40 - 49	8.71	*	*	3.90	1.18	-
50 - 59	7.09	*	2.72	2.56	*	-
60 & ABOVE	7.95	*	2.27	3.31	*	-
NOT STATED	-	-	-	-	-	-
TOTAL	39.77	*	7.12	15.82	*	-

TABLE 7.2 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001 (1995 E.C.)

AFR

NUMBER IN THOUSANDS

AGE OF HOLDERS' IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-
21 - 24	*	-	-	-	-	-
25 - 29	*	-	.06	-	-	-
30 - 39	*	-	-	-	-	-
40 - 49	-	-	.06	-	-	*
50 - 59	-	-	-	-	-	.45
60 & ABOVE	*	-	.06	-	-	*
NOT STATED	-	-	-	-	-	-
TOTAL	*	-	.19	-	-	.59

TABLE 7.3 AMVRA

NUMBER IN THOUSANDS

AGE OF HOLDERS' IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	*	-	-	-	-	-
18 - 20	*	-	*	-	-	*
21 - 24	2.90	-	*	-	*	-
25 - 29	22.08	*	10.77	2.37	*	-
30 - 39	62.09	1.24	16.06	6.30	*	*
40 - 49	50.56	*	30.41	5.81	*	.95
50 - 59	55.91	*	19.13	4.83	*	*
60 & ABOVE	33.94	*	29.85	5.68	-	*
NOT STATED	-	-	-	-	-	-
TOTAL	231.80	*	110.70	24.99	3.70	4.72

TABLE 7.4 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES
BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1995 E.C.)
OROMIYA

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	*	*	*	-	-
18 - 20	4.05	-	4.42	5.24	-	*
21 - 24	6.70	-	13.47	11.41	*	8.03
25 - 29	21.28	5.52	28.65	23.00	*	18.73
30 - 39	31.82	*	86.92	84.47	5.56	54.68
40 - 49	32.37	18.77	79.73	59.87	2.47	44.08
50 - 59	25.36	9.36	50.05	45.97	*	26.92
60 & ABOVE	24.64	*	45.32	44.32	*	27.96
NOT STATED	-	-	-	-	-	-
TOTAL	146.23	*	309.40	275.52	15.40	183.11

TABLE 7.5 SOMALI

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-
21 - 24	*	-	*	-	-	-
25 - 29	*	-	*	-	-	-
30 - 39	.27	-	*	-	-	-
40 - 49	*	.16	1.97	-	-	.10
50 - 59	.22	-	*	-	-	-
60 & ABOVE	*	-	*	-	-	-
NOT STATED	-	-	-	-	-	-
TOTAL	1.62	.16	6.30	-	-	.10

TABLE 7.6 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1995 E.C.) BENSHEKEL-G.M.U.Z

NUMBER IN THOUSANDS

AGE OF HOLDERS' IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	*	-	-	-
18 - 20	*	-	-	-	-	-
21 - 24	*	.02	*	-	-	-
25 - 29	.79	-	.78	-	-	-
30 - 39	1.73	-	1.17	*	-	-
40 - 49	1.52	-	1.03	*	-	-
50 - 59	*	-	1.22	-	-	-
60 & ABOVE	.64	-	1.07	-	-	-
NOT STATED	-	-	-	-	-	-
TOTAL	5.27	.02	5.57	.14	-	-

TABLE 7.7 S.N.N.P.R

NUMBER IN THOUSANDS

AGE OF HOLDERS' IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	*	*	1.72	*	-	*
18 - 20	*	*	2.75	*	*	*
21 - 24	*	*	23.39	12.21	*	.70
25 - 29	.74	2.53	108.09	40.57	3.51	3.89
30 - 39	2.64	5.88	233.85	69.51	8.69	10.02
40 - 49	1.75	*	220.08	62.63	*	6.51
50 - 59	*	*	122.67	30.87	*	3.21
60 & ABOVE	.46	*	157.89	44.67	*	5.53
NOT STATED	-	-	-	-	-	-
TOTAL	7.65	20.10	870.44	264.41	24.71	29.99

TABLE 7.8 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

GAMBELA

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	*	-	-	-	-
18 - 20	-	*	-	-	-	*
21 - 24	-	*	-	.08	-	*
25 - 29	-	*	-	-	-	.17
30 - 39	-	*	-	-	-	.26
40 - 49	-	*	-	.12	-	.39
50 - 59	-	*	-	-	-	*
60 & ABOVE	-	.13	-	-	-	.15
NOT STATED	-	-	-	-	-	-
TOTAL	-	.64	-	.20	-	1.26

TABLE 7.9 HARARI

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	-	-	-	-
18 - 20	*	-	*	-	-	-
21 - 24	-	*	*	*	*	*
25 - 29	*	*	.40	.16	*	-
30 - 39	*	*	.62	.17	*	-
40 - 49	*	*	.94	*	*	-
50 - 59	*	.04	.58	*	.14	*
60 & ABOVE	*	*	.32	*	*	*
NOT STATED	-	-	-	-	-	-
TOTAL	.22	*	2.95	.57	.33	.05

TABLE 7.10 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES
BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1995 E.C.)
DIRE DAWA

NUMBER IN THOUSANDS

AGE OF HOLDERS' IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	-	-	-	-
18 - 20	-	-	*	-	-	-
21 - 24	-	-	-	-	-	-
25 - 29	*	-	*	-	-	-
30 - 39	.44	.05	.36	*	-	-
40 - 49	.23	-	.27	-	-	-
50 - 59	.19	*	.19	*	-	-
60 & ABOVE	*	-	*	-	-	-
NOT STATED	-	-	-	-	-	-
TOTAL	1.15	.05	1.07	.10	-	-

ESTIMATION PROCEDURES OF TOTAL SAMPLING ERROR

TABLE 7.8 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES
BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1993 E.C.)

GAMBELA

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	*	-	-	-	-
18 - 20	-	*	-	-	-	*
21 - 24	-	*	-	.08	-	*
25 - 29	-	*	-	-	-	.17
30 - 39	-	*	-	-	-	.26
40 - 49	-	*	-	.12	-	.39
50 - 59	-	*	-	-	-	*
60 & ABOVE	-	.13	-	-	-	.15
NOT STATED	-	-	-	-	-	-
TOTAL	-	.64	-	.20	-	1.26

TABLE 7.9 HARARI

NUMBER IN THOUSANDS

AGE OF HOLDERS/ IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	-	-	-	-
18 - 20	*	-	*	-	-	-
21 - 24	-	*	*	*	*	*
25 - 29	*	*	.40	.16	*	-
30 - 39	*	*	.62	.17	*	-
40 - 49	*	*	.94	*	*	-
50 - 59	*	.04	.58	*	.14	*
60 & ABOVE	*	*	.32	*	*	*
NOT STATED	-	-	-	-	-	-
TOTAL	.22	*	2.95	.57	.33	.05

TABLE 7.10 ESTIMATE OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES
 BY AGE OF HOLDERS FOR BELG SEASON CROPS OF PRIVATE HOLDINGS IN ETHIOPIA, 2000/2001(1995 E.C.)
 DIRE DAWA

NUMBER IN THOUSANDS

AGE OF HOLDERS' IN YEARS	NUMBER OF HOLDERS REPORTING USE OF					
	IRRIGATION	IMPROVED SEEDS	NATURAL FERTILIZERS	COMMER. FERTILIZERS	BOTH NAT + COM	PESTICIDES
UNDER 18	-	-	-	-	-	-
18 - 20	-	-	*	-	-	-
21 - 24	-	-	-	-	-	-
25 - 29	*	-	*	-	-	-
30 - 39	.44	.03	.36	*	-	-
40 - 49	.23	-	.27	-	-	-
50 - 59	.19	*	.19	*	-	-
60 & ABOVE	*	-	*	-	-	-
NOT STATED	-	-	-	-	-	-
TOTAL	1.15	.05	1.07	.10	-	-

ESTIMATION PROCEDURES OF TOTAL SAMPLING ERROR

ESTIMATION OF SOURCES OF TOTAL AND SAMPLING ERRORS

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

Note: All information on daily season agricultural activities were collected using subjective methods by interviewing each holder in the sample 25 agricultural households. Hence the data on area for major Belg maize crops were mainly reported in local units. Therefore one has to note that before applying the estimation procedure defined here below, the reported area under a specific crop where a certain agricultural input was applied has to be converted in to standard units using conversion equivalents.

1. Estimating Area

APPENDIX – I

ESTIMATION PROCEDURES OF TOTAL AND SAMPLING ERROR

in which

$$W_k = \frac{N_k M_k}{n_k N_k M_k}$$

is the weight

where

k represents the stream

n_k is the total number of EAs selected in k^{th} stream

N_k is the measure of size of the k^{th} stream obtained from the sampling frame.

N_{kr} is the measure of size of the r^{th} sample EA in the k^{th} stream obtained from the sampling frame.

ESTIMATION PROCEDURES OF TOTAL AND SAMPLING ERRORS

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

Note:- All information on Belg season agricultural activities were collected using subjective methods, by interviewing each holder in the sample 25 agricultural households. Hence the data on area for major Belg season crops were usually reported in local units. Therefore one has to note that before applying the estimation procedures defined here below, the reported area under a specific crop where a certain agricultural input was applied has to be converted in to standard units using conversion equivalents.

1. Estimating Area

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

in which

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

is the weight

where

h represents the stratum

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

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

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

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

m_{hi} is number of sampled agricultural households of the i^{th} 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 sampling variance by the above formula, selection of EAs within a stratum is assumed to be with replacement. By so doing the variance estimate may be slightly over estimated but it greatly simplifies the estimation procedures. Further more the finite population correction (fpc) is ignored in the formula. This is due to the fact that its effect is negligible

4. Estimation Coefficient of Variance

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 characteristics and sampling variance are obtained by aggregating the respective stratum totals.

TABLE 1 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

ETHIOPIA

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	786.00	232.06	29.52	33.04	5.37	16.27	17.43	8.48	48.65	204.30	96.83	47.40	38.12	6.53	17.12
Teff	45.70	9.92	21.70	*	*	*	*	*	*	2.38	.63	26.53	7.02	2.03	28.89
Barley	*	*	*	4.46	1.70	38.06	-	-	-	*	*	*	18.01	4.54	25.23
Wheat	52.54	11.91	22.66	1.04	.44	42.24	*	*	*	12.05	3.93	32.58	7.46	2.27	30.39
Maize	263.20	27.21	10.34	23.78	4.37	18.36	13.65	6.65	48.75	48.57	8.44	17.38	2.97	1.40	47.16
Sorghum	26.30	4.04	15.38	*	*	*	*	*	*	4.43	1.00	22.51	*	*	*
Millet	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Oats	10.63	2.10	19.72	*	*	*	-	-	-	2.31	.80	34.72	1.49	.51	34.44
PULSES	136.31	15.55	11.41	2.57	.79	30.65	*	*	*	25.66	6.09	23.75	*	*	*
Horse Beans	1.97	.73	37.23	*	*	*	-	-	-	*	*	*	-	-	-
Field Peas	17.46	3.83	21.92	*	*	*	-	-	-	.57	.23	39.84	*	*	*
Haricot Bean	89.72	14.03	15.64	.47	.23	49.80	*	*	*	24.44	6.08	24.90	*	*	*
Chick Peas	11.00	2.66	24.15	1.18	.53	45.07	-	-	-	.37	.17	47.57	*	*	*
Lentils	15.18	4.78	31.47	*	*	*	-	-	-	*	*	*	-	-	-
Vetch	.98	.32	32.72	*	*	*	-	-	-	*	*	*	-	-	-
OTHERS	5.35	2.00	37.42	*	*	*	*	*	*	*	*	*	*	*	*
Neug	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
linseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	4.46	1.95	43.68	*	*	*	-	-	-	*	*	*	-	-	-
ALL CROPS	927.65	232.90	25.11	38.60	6.24	16.16	*	*	*	229.99	97.06	42.20	39.67	6.85	17.27

TABLE 1.1
 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR
 AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

TIGRAY

TYPE OF CROPS	TYPE OF INPUTS																			
	TOTAL BELG CROP AREA				IRRIGATED				IMPROVED SEEDS				FERTILIZER APPLIED				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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)		
CEREALS																				
Teff	7.26	2.16	29.75	2.06	.58	28.25	*	*	*	*	*	1.66	.51	30.62	*	*	*	*		
Barley	1.43	.66	46.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Maize	1.80	.63	34.97	1.59	.59	36.74	*	*	*	*	*	1.03	.44	42.74	*	*	*	*		
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
PULSES																				
Horse Beans	1.07	.44	41.38	.87	.42	48.51	*	*	*	*	*	*	*	*	*	*	*	*		
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Haricot Bean	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Chick Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
OTHERS																				
Neug	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Linseed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Rapeseed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
ALL CROPS	8.35	2.17	25.98	2.93	.85	28.85	*	*	*	*	*	1.68	.52	31.02	*	*	*	*		

TABLE 1.2 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS															
Teff	.75	.19	25.99	*	*	*	-	-	-	-	-	-	.04	.01	19.28
Barley	.59	.16	27.80	-	-	-	-	-	-	-	-	-	.04	.01	19.28
Wheat	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Millet	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES															
Horse Beans	1.19	.35	29.46	-	-	-	-	-	-	-	-	-	*	*	*
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	.20	.09	43.84	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	.99	.28	28.16	-	-	-	-	-	-	-	-	-	*	*	*
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS															
Newg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linsseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	1.94	.45	23.36	*	*	*	-	-	-	-	-	-	.01	.01	4.49

TABLE 1.3 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

AMHARA

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	87.51	11.68	13.34	14.56	3.42	23.46	*	*	*	13.16	2.42	18.38	.61	.28	46.86
Teff	25.15	8.98	35.71	*	*	*	*	*	*	1.42	.59	41.16	*	*	*
Barley	42.65	7.43	17.43	3.50	1.66	47.40	-	-	-	8.69	2.47	28.39	-	-	-
Wheat	5.09	1.15	22.51	.98	.43	44.30	*	*	*	.91	.34	37.57	.03	-	4.73
Maize	10.81	2.27	20.99	6.56	1.79	27.20	*	*	*	*	*	*	*	*	*
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	3.74	1.27	33.87	*	*	*	-	-	-	*	*	*	-	-	-
PULSES	39.05	11.53	29.53	1.47	.65	44.57	-	-	-	.57	.19	34.06	-	-	-
Horse Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Field Peas	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
Haricot Bean	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Chick Peas	8.39	2.52	30.04	*	*	*	-	-	-	-	-	-	-	-	-
Lentils	10.25	3.15	30.77	*	*	*	-	-	-	.37	.17	47.57	-	-	-
Vetch	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-
OTHERS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Neug	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Linseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
ALL CROPS	129.87	16.86	12.98	19.01	4.63	24.36	*	*	*	13.74	2.40	17.45	.61	.28	46.86

TABLE 1.4

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

OROMIYA

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	490.82	230.21	46.90	14.19	4.07	28.66	*	*	*	*	*	*	30.59	6.38	20.84
Teff	9.85	3.35	34.00	-	-	-	*	*	*	.43	.18	42.53	*	*	*
Barley	*	*	*	.63	.28	43.71	-	-	-	*	*	*	16.51	4.48	27.12
Wheat	42.71	11.52	26.97	-	-	-	*	*	*	10.60	3.90	36.78	7.27	2.27	31.17
Maize	101.29	15.30	15.10	13.54	3.90	28.81	*	*	*	15.81	5.45	34.47	*	*	*
Sorghum	5.50	2.36	42.99	-	-	-	*	*	*	*	*	*	*	*	*
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	6.88	1.67	24.28	*	*	*	-	-	-	1.85	.77	41.55	1.49	.51	34.44
PULSES	46.96	7.60	16.19	*	*	*	*	*	*	4.55	.87	19.15	*	*	*
Horse Beans	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Field Peas	11.15	2.62	23.55	-	-	-	-	-	-	*	*	*	*	*	*
Haricot Bean	28.26	5.71	20.19	*	*	*	*	*	*	3.95	.84	21.25	*	*	*
Chick Peas	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Vetch	.38	.19	49.76	*	*	*	-	-	-	*	*	*	-	-	-
OTHERS	1.76	.82	46.42	-	-	-	-	-	-	*	*	*	-	-	-
Newg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
ALL CROPS	539.54	230.58	42.74	14.31	4.05	28.29	*	*	*	*	*	*	32.05	6.71	20.93

TABLE 1.5 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

SOMALI

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	*	*	*	.11	.04	33.90	.04	-	-	*	*	*	.03	-	10.08
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	.11	.04	33.23	.04	-	-	*	*	*	-	-	-
Sorghum	*	*	*	-	-	-	-	-	-	*	*	*	.03	-	10.08
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Horse Beans	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Field Peas	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	*	*	*	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	*	*	*	.11	.04	33.90	.04	-	-	*	*	*	.03	-	10.08

TABLE 1.6

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

BENSHANGUL-GUMUZ

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	1.14	.45	39.10	*	*	*	-	-	-	.07	.03	48.28	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	1.07	.44	41.33	*	*	*	-	-	-	.07	.03	48.28	-	-	-
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	1.84	.39	21.19	*	*	*	-	-	-	.17	.06	36.15	-	-	-
Horse Beans	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	1.82	.39	21.47	*	*	*	-	-	-	.17	.06	36.15	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	2.98	.53	17.84	*	*	*	-	-	-	.24	.06	26.37	-	-	-

TABLE 1.7

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

S.N.N.P.R

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	159.10	15.18	9.54	1.30	.39	29.83	1.57	.40	25.24	37.39	6.59	17.62	6.75	1.36	20.14
Teff	6.48	1.25	19.36	*	*	*	*	*	*	.44	.12	28.36	3.72	.95	25.45
Barley	16.01	3.85	24.05	-	-	-	-	-	-	*	*	*	*	*	*
Wheat	1.61	.40	25.09	-	-	-	-	-	-	*	*	*	*	*	*
Maize	112.72	12.47	11.06	1.16	.36	30.72	1.53	.40	25.88	29.15	6.35	21.78	.95	.32	33.30
Sorghum	20.06	3.27	16.31	*	*	*	*	*	*	4.14	.98	23.59	*	*	*
Millet	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
Oats	*	*	*	-	-	-	-	-	-	*	*	*	*	*	*
PULSES	44.57	7.09	15.90	*	*	*	*	*	*	19.89	6.03	30.30	*	*	*
Horse Beans	.43	.12	26.84	-	-	-	-	-	-	*	*	*	-	-	-
Field Peas	.67	.25	37.64	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	43.38	7.07	16.31	*	*	*	*	*	*	19.87	6.02	30.32	*	*	*
Chick Peas	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	.26	.13	49.64	*	*	*	*	*	*	*	*	*	*	*	*
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Sun Flower	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	203.93	16.96	8.32	1.37	.40	28.93	1.64	.42	25.25	57.28	9.60	16.76	6.83	1.36	19.97

TABLE 1.8 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

GAMBELA															
TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	6.13	2.54	41.46	-	-	-	*	*	*	.04	.01	14.79	*	*	*
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	5.98	2.54	42.47	-	-	-	*	*	*	.04	.01	14.79	*	*	*
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	6.13	2.54	41.46	-	-	-	*	*	*	.04	.01	14.79	*	*	*

TABLE 1.9 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

HARARI

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.62	.11	18.22	*	*	*	*	*	*	.33	.05	16.58	.01	-	32.93
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	.62	.11	18.22	*	*	*	*	*	*	.33	.05	16.58	.01	-	32.93
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.70	.11	16.13	.02	.01	39.42	.01	.01	47.35	.35	.06	16.25	.01	-	32.93

TABLE 1.10

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

ADDIS ABABA

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 1.11

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE AND ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

DIRE DAWA

TYPE OF CROPS	TYPE OF INPUTS														
	TOTAL BELG CROP AREA			IRRIGATED			IMPROVED SEEDS			FERTILIZER APPLIED			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	.20	.07	35.05	.04	.01	21.15	-	-	-	.08	.03	33.75	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.14	.07	48.83	.04	.01	21.54	-	-	-	-	-	-	-	-	-
Sorghum	.06	.03	45.74	-	-	-	-	-	-	.05	.03	49.84	-	-	-
Millet	-	-	-	-	-	-	-	-	-	.03	.01	46.53	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.20	.07	35.57	.04	.01	21.15	-	-	-	.09	.03	34.79	-	-	-

TABLE 2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

ETHIOPIA

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	204.30	96.83	47.40	77.32	22.07	28.55	*	*	*	81.18	38.57	47.51	*	*	*	40.86	1.72	4.21	2.54	.72	28.26
Teff	2.38	.63	26.53	1.73	.60	34.59	.65	.19	29.74	.59	.19	32.43	.04	.02	47.15	*	*	*	-	-	-
Barley	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	39.01	1.64	4.22	*	*	*
Wheat	12.05	3.93	32.58	1.99	.49	24.60	9.84	3.53	35.83	9.72	3.52	36.26	-	-	-	*	*	*	*	*	*
Maize	48.57	8.44	17.38	37.31	6.78	18.18	10.01	2.97	29.66	6.53	1.91	29.20	*	*	*	1.71	.53	30.97	1.25	.35	27.73
Sorghum	4.43	1.00	22.51	4.32	.98	22.63	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*
Millet	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	2.31	.80	34.72	.52	.23	44.07	1.75	.75	42.89	1.75	.75	42.89	-	-	-	-	-	-	*	*	*
PULSES	25.66	6.09	23.75	15.29	5.71	37.36	9.68	2.12	21.90	7.56	1.72	22.69	*	*	*	.98	.33	33.50	.68	.22	32.04
Horse Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Field Peas	.57	.23	39.84	.37	.17	45.17	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*
Haricot Beans	24.44	6.08	24.90	14.49	5.71	39.40	9.38	2.11	22.48	7.28	1.71	23.51	*	*	*	.98	.33	33.50	.57	.21	36.58
Chick Peas	.37	.17	47.57	.37	.17	47.57	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Vetch	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	229.99	97.06	42.20	92.62	22.75	24.57	*	*	*	88.78	38.63	43.51	*	*	*	41.84	1.72	4.11	3.22	.71	22.11

TABLE 2.1

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
TIGRAY																					
CEREALS	1.66	.51	30.62	.46	.16	34.88	1.13	.45	39.90	*	*	*	.04	.01	29.04	*	*	*	*	*	*
Teff	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barley	*	*	*	.25	.12	46.89	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	1.03	.44	42.74	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PULSES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Horse Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Haricot Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chick Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS																					
Neug																					
linseed																					
Rapeseed																					
Ground Nuts																					
Sun Flower																					
Sesame																					
Fenugreek																					
ALL CROPS	1.68	.52	31.02	.46	.16	34.88	1.15	.46	39.91	*	*	*	.04	.01	29.04	*	*	*	*	*	*

TABLE 2.2

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	.01	-	4.49	.01	-	4.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teff	.01	-	4.49	.01	-	4.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.01	-	4.49	.01	-	4.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 2.3 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	13.16	2.42	18.38	8.87	1.74	19.64	3.96	1.07	27.12	3.01	1.00	33.27	*	*	*	.56	.05	9.84	.34	.13	39.31
Teff	1.42	.59	41.16	1.42	.59	41.16	-	-	-	-	-	-	*	*	*	-	-	-	-	-	-
Barley	8.69	2.47	28.39	5.12	1.69	33.11	3.41	1.20	35.29	2.62	1.12	42.61	*	*	*	-	-	-	-	-	-
Wheat	.91	.34	37.57	.78	.29	37.14	*	*	*	*	*	*	*	*	*	.43	-	-	*	*	*
Maize	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	*	*	*
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.57	.19	34.06	.57	.19	34.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	.37	.17	47.57	.37	.17	47.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	13.74	2.40	17.45	9.44	1.73	18.31	3.96	1.07	27.12	3.01	1.00	33.27	*	*	*	.56	.05	9.84	.34	.13	39.31

TABLE 2.4

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

TYPE OF CROPS	OROMIYA																					
	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)			
	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. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)	
CEREALS	*	*	*	*	*	*	*	*	*	*	*	*	.16	.08	47.17	38.39	1.78	4.62	*	*	*	
Teff	.43	.18	42.53	*	*	*	.37	.17	47.34	.37	.17	47.34	-	-	-	-	-	-	-	-	-	
Barley	*	*	*	*	*	*	*	*	*	*	*	*	.16	.08	47.17	38.04	1.76	4.62	*	*	*	
Wheat	10.60	3.90	36.78	.82	.28	33.77	9.60	3.52	36.71	9.60	3.52	36.71	-	-	-	-	-	-	-	-	-	
Maize	15.81	5.45	34.47	14.27	5.40	37.80	*	*	*	*	*	*	-	-	-	*	*	*	*	*	*	
Sorghum	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Oats	1.85	.77	41.55	.10	.05	47.29	1.75	.75	42.89	1.75	.75	42.89	-	-	-	-	-	-	-	-	-	
PULSES	4.55	.87	19.15	3.27	.75	22.88	.91	.29	31.63	.78	.23	30.10	*	*	*	*	*	*	*	.38	.17	43.89
Horse Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
Haricot Beans	3.95	.84	21.25	3.04	.73	24.09	.65	.26	40.57	.52	.20	38.46	*	*	*	*	*	*	*	*	*	
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
ALL CROPS	*	*	*	*	*	*	*	*	*	*	*	*	.21	.05	22.28	38.47	1.77	4.59	1.49	.58	39.24	

TABLE 2.5 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
SOMALI																					
CEREALS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 2.6 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

BENSHANGUL-GUMZ																					
TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	.07	.03	48.28	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.07	.03	48.28	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.17	.06	36.15	.16	.06	35.44	*	*	*	-	-	-	.01	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.17	.06	36.15	.16	.06	35.44	*	*	*	-	-	-	.01	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.24	.06	26.37	.20	.06	29.24	*	*	*	-	-	-	.01	-	-	-	-	-	-	-	-

TABLE 2.7 ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.
	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)
CEREALS	37.39	6.59	17.62	27.90	4.38	15.70	8.49	2.83	33.34	5.52	1.78	32.35	*	*	*	1.13	.27	24.00	1.01	.34	33.39
Teff	.44	.12	28.36	.16	.07	43.77	.28	.08	29.84	.22	.08	35.36	.04	.02	47.14	*	*	*	*	*	*
Barley	*	*	*	*	*	*	.79	.24	30.66	.44	.14	31.29	*	*	*	.32	.14	41.84	*	*	*
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	29.15	6.35	21.78	20.95	4.05	19.33	7.32	2.82	38.54	4.77	1.78	37.31	*	*	*	*	*	*	*	*	*
Sorghum	4.14	.98	23.59	4.05	.96	23.66	*	*	*	*	*	*	*	*	*	.79	.24	30.57	.87	.27	30.47
Millet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oats	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PULSES	19.89	6.03	30.30	*	*	*	8.65	2.10	24.28	6.71	1.70	25.32	*	*	*	.88	.32	36.14	*	*	*
Horse Beans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Field Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Haricot Beans	19.87	6.02	30.32	*	*	*	8.63	2.09	24.23	6.71	1.70	25.32	*	*	*	.88	.32	36.14	*	*	*
Chick Peas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lentils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vetch	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Neug	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Linseed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ground Nuts	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sun Flower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sesame	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL CROPS	57.28	9.60	16.76	38.86	7.08	18.23	17.13	4.22	24.64	12.23	2.62	21.40	*	*	*	2.02	.33	16.15	1.29	.38	29.23

TABLE 2.8

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)					
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)			
GAMBELA																								
CEREALS	.04	.01	14.79	-	-	-	.04	.01	14.79	.04	.01	14.79	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.04	.01	14.79	-	-	-	.04	.01	14.79	.04	.01	14.79	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.04	.01	14.79	-	-	-	.04	.01	14.79	.04	.01	14.79	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 2.9

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

HARARI

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.33	.05	16.58	.22	.04	18.85	.09	.03	28.70	*	*	*	.03	.01	33.37	.02	.01	48.50	.02	.01	29.23
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.33	.05	16.58	.22	.04	18.85	.09	.03	28.70	*	*	*	.03	.01	33.37	.02	.01	48.50	.02	.01	29.23
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.35	.06	16.25	.23	.04	16.94	.10	.03	29.55	*	*	*	.03	.01	33.37	.02	.01	41.88	.03	.01	31.39

TABLE 2.10

ESTIMATES OF FERTILIZER APPLIED AREA BY TYPE OF FERTILIZER, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

DIRE DAWA

TYPE OF CROPS	TOTAL (COMM+NAT)			NATURAL			COMMERCIAL			DAP			UREA			DAP+UREA			BOTH(NAT+COMM)		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	.08	.03	33.75	.08	.03	33.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.05	.03	49.84	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	.03	.01	46.53	.03	.01	45.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.09	.03	34.79	.08	.03	34.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 3 ESTIMATES OF QUANTITY OF COMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZERS AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

ETHIOPIA												
TYPE OF CROPS	TYPE OF FERTILIZERS											
	TOTAL QUANTITY			UREA			DAP			DAP + 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. (%)
CEREALS	50.40	7.80	15.47	*	*	*	40.51	7.21	17.81	7.88	1.57	19.92
Teff	.55	.16	29.28	*	*	*	.48	.15	32.51	.02	-	12.21
Barley	28.02	5.78	20.61	.41	.20	47.47	25.77	5.58	21.67	1.83	.66	36.24
Wheat	8.15	2.69	32.95	*	*	*	7.87	2.68	34.01	*	*	*
Maize	12.51	3.00	23.97	*	*	*	5.24	1.15	21.87	5.74	1.54	26.80
Sorghum	*	*	*	-	-	-	*	*	*	*	*	*
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	1.14	.39	33.92	-	-	-	1.14	.39	33.92	-	-	-
PULSES	7.94	1.41	17.75	*	*	*	5.80	.94	16.14	1.59	.41	25.81
Horse Beans	*	*	*	*	*	*	*	*	*	-	-	-
Field Peas	*	*	*	-	-	-	*	*	*	-	-	-
Haricot Beans	7.77	1.40	18.08	*	*	*	5.64	.93	16.54	1.59	.41	25.81
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	-	-	-	*	*	*	-	-	-
Vetch	*	*	*	-	-	-	*	*	*	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	58.35	8.10	13.89	*	*	*	46.31	7.28	15.71	9.48	1.59	16.83

TABLE 3.1 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZERS AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TIGRAY												
TYPE OF CROPS	TYPE OF FERTILIZERS											
	TOTAL QUANTITY			UREA			DAP			DAP + 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. (%)
CEREALS	2.55	1.10	43.16	*	*	*	*	*	*	2.19	1.02	46.48
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barley	*	*	*	*	*	*	*	*	*	*	*	*
Wheat	*	*	*	-	-	-	-	-	-	*	*	*
Maize	*	*	*	*	*	*	*	*	*	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	*	*	*	-	-	-	*	*	*	-	-	-
Horse Beans	*	*	*	-	-	-	*	*	*	-	-	-
Field Peas	*	*	*	-	-	-	*	*	*	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	-	-	-	*	*	*	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Noug	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	2.63	1.15	43.68	*	*	*	*	*	*	2.19	1.02	46.48

TABLE 3.2 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZERS AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

AMHARA												
TYPE OF CROPS	TYPE OF FERTILIZERS											
	TOTAL QUANTITY			UREA			DAP			DAP + 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. (%)
CEREALS	3.41	.91	26.60	*	*	*	1.69	.72	42.38	1.49	.70	47.12
Teff	*	*	*	*	*	*	-	-	-	-	-	-
Barley	2.05	.84	40.87	*	*	*	-	-	-	-	-	-
Wheat	*	*	*	*	*	*	1.59	.74	46.72	.29	-	-
Maize	*	*	*	-	-	-	*	*	*	*	*	*
Sorghum	-	-	-	.02	-	24.57	*	*	*	*	*	*
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	3.41	.91	26.60	*	*	*	1.69	.72	42.38	1.49	.70	47.12

TABLE 3.3 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZERS AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TYPE OF FERTILIZERS											
	TOTAL QUANTITY			UREA			DAP			DAP + 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. (%)
CEREALS	34.91	7.17	20.55	*	*	*	33.55	7.09	21.13	1.21	.43	35.44
Teff	*	*	*	-	-	-	*	*	*	-	-	-
Barley	24.49	5.67	23.13	*	*	*	23.74	5.53	23.30	.60	.25	41.19
Wheat	7.76	2.68	34.47	-	-	-	7.76	2.68	34.47	-	-	-
Maize	1.28	.64	49.63	-	-	-	.67	.33	48.66	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	1.14	.39	33.92	-	-	-	1.14	.39	33.92	-	-	-
PULSES	.99	.38	38.50	*	*	*	.71	.27	37.35	*	*	*
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	*	*	*	-	-	-	*	*	*	-	-	-
Haricot Beans	.91	.38	42.08	*	*	*	.63	.26	42.12	*	*	*
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	-	-	-	*	*	*	-	-	-
Vetch	*	*	*	-	-	-	*	*	*	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	35.91	7.14	19.88	*	*	*	34.26	7.08	20.66	1.48	.34	22.88

TABLE 3.4 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZERS AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

S.N.N.P.R												
TYPE OF CROPS	TYPE OF FERTILIZERS											
	TOTAL QUANTITY			UREA			DAP			DAP + 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. (%)
CEREALS	9.47	2.70	28.55	*	*	*	4.97	1.12	22.63	2.92	.87	29.80
Teff	.29	.10	35.07	.02	.01	43.51	.24	.10	39.44	.02	-	12.21
Barley	.79	.29	36.24	*	*	*	.44	.17	38.60	.33	.14	42.63
Wheat	*	*	*	*	*	*	*	*	*	-	-	-
Maize	8.32	2.66	32.00	*	*	*	4.22	1.08	25.71	2.57	.86	33.49
Sorghum	*	*	*	-	-	-	*	*	*	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	6.77	1.35	20.02	*	*	*	4.99	.89	17.93	1.47	.37	25.40
Horse Beans	*	*	*	*	*	*	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	6.76	1.35	19.99	*	*	*	4.99	.89	17.93	1.47	.37	25.40
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	16.24	3.54	21.82	*	*	*	9.96	1.52	15.29	4.39	.89	20.16

TABLE 3.5 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZERS AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

GAMBELA												
TYPE OF CROPS	TYPE OF FERTILIZERS											
	TOTAL QUANTITY			UREA			DAP			DAP + 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. (%)
CEREALS	.04	-	-	-	-	-	.04	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.04	-	-	-	-	-	.04	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.04	-	-	-	-	-	.04	-	-	-	-	-

TABLE 3.6 ESTIMATES OF QUANTITY OF COMMERCIAL FERTILIZER APPLIED BY TYPE OF FERTILIZERS AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

HARARI												
TYPE OF CROPS	TYPE OF HOLDING											
	TOTAL QUANTITY			UREA			DAP			DAP + 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. (%)
CEREALS	*	*	*	-	-	-	-	-	-	*	*	*
Teff	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	-	-	-	-	-	-	*	*	*
Millet	-	-	-	-	-	-	-	-	-	*	*	*
Oats	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.10	.02	21.84	.04	.01	37.06	.02	.01	36.82	.03	.01	31.95
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Beans	.10	.02	21.84	.04	.01	37.06	.02	.01	36.82	.03	.01	31.95
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.13	.05	38.05	.04	.01	37.06	.02	.01	36.27	*	*	*

TABLE 4 ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

ETHIOPIA																					
TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	97.27	5.68	5.84	286.60	17.29	6.03	78.68	6.90	8.77	31.36	3.05	9.71	20.88	3.54	16.94	16.77	.78	4.66	254.44	3.48	1.37
Teff	5.00	.77	15.48	24.28	4.20	17.29	5.83	1.35	23.18	2.40	.77	32.05	.37	.14	38.35	-	-	-	7.81	-	-
Barley	31.52	3.16	10.01	98.96	10.37	10.48	16.70	3.13	18.73	3.23	1.22	37.87	2.35	.60	25.55	1.79	-	-	230.88	3.47	1.50
Wheat	5.80	.86	14.88	24.40	4.81	19.72	12.32	4.01	32.51	4.42	1.68	38.02	2.77	1.11	40.00	2.83	.17	5.93	-	-	-
Maize	47.75	3.66	7.67	118.13	10.27	8.69	37.58	4.86	12.92	19.28	2.85	14.77	13.70	1.86	13.56	11.01	1.48	13.46	15.75	.22	1.43
Sorghum	3.20	.56	17.45	13.59	1.88	13.84	5.80	1.72	29.61	2.03	.63	31.26	*	*	*	-	-	-	-	-	-
Millet	.37	.16	42.95	.63	.26	41.58	*	*	*	-	-	-	-	-	-	*	*	*	-	-	-
Oats	3.63	.79	21.78	6.62	1.49	22.58	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	38.31	2.93	7.65	63.20	7.33	11.60	16.06	5.59	34.79	8.33	2.83	33.96	4.91	.40	8.10	-	-	-	5.50	-	-
Horse Beans	1.20	.39	32.20	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	3.77	.77	20.33	9.87	1.95	19.74	2.04	.68	33.18	.62	.07	10.67	*	*	*	-	-	-	-	-	-
Haricot Bean	27.30	2.46	9.01	35.12	5.42	15.43	11.89	5.74	48.31	7.15	2.85	39.85	2.76	1.33	48.30	-	-	-	5.50	-	-
Chick Peas	1.74	.43	24.53	6.60	1.53	23.14	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-
Lentils	3.96	.84	21.09	10.35	4.00	38.67	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	.34	.14	39.96	.50	.19	37.75	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	1.05	.37	34.89	3.83	1.56	40.74	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	.10	.04	44.48	.34	.17	49.81	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	.84	.35	41.50	3.35	1.53	45.67	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	136.63	7.05	5.16	353.63	20.29	5.74	95.20	8.51	8.94	39.69	3.73	9.40	25.79	3.56	13.80	16.77	.78	4.66	259.94	3.48	1.34

TABLE 4.2

ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TYPE OF CROPS	AFAR			AFAR			AFAR			AFAR			AFAR									
	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE			
	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. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)	
CEREALS	.18	.04	24.03	.43	.13	30.47	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-
Teff	.17	.04	26.76	.40	.13	32.09	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.16	.02	15.89	.58	.18	30.22	.16	.05	30.92	.21	.06	30.16	.08	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-
Chick Peas	.13	.03	22.83	.49	.14	27.83	.12	.02	15.30	.17	.03	16.39	.08	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.34	.05	14.33	1.01	.21	20.43	.23	.11	48.90	.28	.13	45.52	.08	-	-	-	-	-	-	-	-	-

TABLE 4.3 ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

AMHARA																						
TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE			
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	
	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	
CEREALS	21.30	2.92	13.73	50.28	5.66	11.25	5.46	1.30	23.74	2.16	.68	31.40	-	-	-	-	-	-	-	-	-	-
Teff	3.15	.71	22.49	11.66	3.19	27.38	2.06	.91	44.20	*	*	*	-	-	-	.49	-	-	7.81	-	-	
Barley	11.03	1.88	17.02	28.05	4.94	17.61	2.80	.99	35.37	*	*	*	-	-	-	-	-	-	7.81	-	-	
Wheat	2.58	.65	25.20	2.51	.64	25.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Maize	2.35	.59	25.33	6.45	1.69	26.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sorghum	*	*	*	*	*	*	.60	.29	48.88	*	*	*	-	-	-	-	-	-	-	-	-	
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.49	-	-	-	-	-	
Oats	2.16	.73	33.90	1.57	.60	38.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PULSES	6.81	1.16	16.98	18.59	3.93	21.13	*	*	*	*	*	*	3.40	.36	10.46	-	-	-	-	-	-	
Horse Beans	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Field Peas	1.65	.61	37.27	2.53	1.05	41.45	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
Haricot Bean	.45	.20	45.03	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	
Chick Peas	1.37	.40	29.55	4.93	1.41	28.60	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	
Lentils	3.06	.65	21.31	6.32	2.57	40.61	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	
Vetch	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OTHERS	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Linseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fenugreek	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
ALL CROPS	28.64	3.30	11.53	71.38	7.13	9.99	13.79	5.15	37.31	4.35	1.47	33.72	3.40	.36	10.46	.49	-	-	7.81	-	-	

TABLE 4.4

ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

OROMIYA																					
TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE		
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.
	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)
CEREALS	40.43	3.11	7.69	146.93	13.90	9.46	46.01	6.05	13.16	14.52	2.11	14.52	9.96	.15	1.47	2.09	-	-	230.88	3.05	1.32
Teff	.86	.28	32.66	6.75	2.30	34.14	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Barley	14.52	1.82	12.54	62.12	8.90	14.33	13.20	2.95	22.34	2.12	.89	42.16	1.75	-	-	-	-	-	230.88	3.05	1.32
Wheat	2.89	.56	19.54	20.83	4.76	22.86	11.73	4.00	34.07	3.51	1.51	42.95	1.66	.07	4.38	2.09	-	-	-	-	-
Maize	19.60	2.09	10.66	49.20	6.72	13.66	17.88	4.08	22.82	8.06	2.35	29.21	6.55	.13	1.94	-	-	-	-	-	-
Sorghum	1.11	.42	37.40	2.98	1.05	35.20	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	1.45	.29	20.14	5.04	1.37	27.13	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	14.19	1.70	11.99	25.76	5.77	22.39	3.92	1.07	27.28	3.09	1.30	42.16	-	-	-	-	-	-	-	-	-
Horse Beans	.77	.36	46.52	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	1.90	.45	23.75	6.83	1.63	23.86	1.80	.65	35.90	.62	.07	10.70	-	-	-	-	-	-	-	-	-
Haricot Bean	10.41	1.31	12.59	13.46	4.35	32.34	1.93	.93	48.25	*	*	*	-	-	-	-	-	-	-	-	-
Chick Peas	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	*	*	*	.34	.17	49.81	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	54.99	3.95	7.18	173.88	16.64	9.57	50.12	6.03	12.03	17.61	2.23	12.68	9.96	.15	1.47	2.09	-	-	230.88	3.05	1.32

TABLE 4.5 ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

SOMALI																					
TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE		
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.
	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)
CEREALS	.44	.12	26.39	4.51	1.63	36.04	4.02	1.63	40.47	3.21	1.17	36.41	*	*	*	6.84	.04	.61	9.80	.20	2.02
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maize	.37	.10	27.82	4.27	1.47	34.33	3.74	1.61	43.08	2.47	.76	30.58	*	*	*	.74	.10	13.74	-	-	-
Sorghum	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	6.10	.11	1.85	9.80	.20	2.02
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.05	.02	44.28	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	.05	.02	44.28	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.49	.12	24.52	4.72	1.63	34.49	4.41	1.67	37.78	3.56	1.29	36.35	*	*	*	6.84	.04	.61	9.80	.20	2.02

TABLE 4.6

ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

BENSHANGUL-GUMUZ																						
TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE			
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	
	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	
CEREALS	.36	.10	27.31	.50	.19	37.21	*	*	*	.15	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.32	.09	27.95	.46	.18	39.87	*	*	*	.15	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.65	.12	18.66	1.01	.24	23.54	.19	.06	33.40	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	.63	.12	19.03	1.00	.24	23.70	.19	.06	33.40	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	1.00	.16	15.61	1.50	.25	16.74	.33	.09	26.66	.15	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4.7

ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

S.N.N.P.R

TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE			
	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. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)	
CEREALS	32.68	3.71	11.37	78.64	8.32	10.58	20.62	2.52	12.22	9.48	1.67	17.59	5.01	1.40	28.02	6.72	.70	10.42	5.95	-	-	-
Teff	.73	.12	16.83	3.44	.47	13.56	1.31	.42	32.12	.63	.23	36.02	.37	.14	38.35	-	-	-	-	-	-	-
Barley	5.24	1.72	32.80	8.03	1.94	24.21	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-
Wheat	.26	.05	17.90	.87	.21	24.10	*	*	*	*	*	*	*	*	*	1.79	-	-	-	-	-	-
Maize	24.15	2.94	12.16	55.58	7.42	13.34	13.93	2.04	14.65	6.38	1.23	19.33	2.95	.44	15.01	3.78	1.43	37.83	5.95	-	-	-
Sorghum	1.93	.37	19.20	10.09	1.54	15.31	4.39	.99	22.50	1.96	.63	32.24	*	*	*	-	-	-	-	-	-	-
Millet	.37	.16	42.95	.63	.26	41.58	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-
Oats	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	-	-	-	-
PULSES	16.11	2.08	12.93	15.99	2.20	13.75	3.09	.83	26.75	*	*	*	1.43	.18	12.50	-	-	-	5.50	-	-	-
Horse Beans	.29	.09	31.14	.14	.06	41.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	.22	.08	37.65	.41	.17	40.63	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-
Haricot Bean	15.56	2.07	13.29	15.38	2.21	14.35	3.05	.83	27.15	*	*	*	1.43	.18	12.50	-	-	-	-	-	-	-
Chick Peas	.02	.01	43.69	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	5.50	-	-	-
Lentils	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	48.91	4.78	9.78	94.76	8.90	9.39	23.72	2.58	10.86	11.93	2.20	18.47	6.44	1.41	21.97	6.72	.70	10.42	11.45	-	-	-

TABLE 4.8

ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

GAMBELA

TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	.23	.05	21.74	1.16	.17	14.88	1.09	.24	21.79	1.28	.47	36.78	*	*	*	*	*	*	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.23	.05	21.99	1.08	.16	14.87	1.09	.24	21.79	1.21	.48	39.25	*	*	*	*	*	*	-	-	-
Sorghum	-	-	-	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.23	.05	21.74	1.16	.17	14.88	1.09	.24	21.79	1.28	.47	36.78	*	*	*	*	*	*	-	-	-

TABLE 4.9 ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

HARARI																						
TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE			
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	
	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	('000HA)	('000)	(%)	
CEREALS	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	-
Sorghum	*	*	*	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	.17	.02	13.25	.33	.06	18.07	.09	.03	33.16	*	*	*	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	.17	.02	13.25	.33	.06	18.07	.09	.03	33.16	*	*	*	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.20	.03	14.57	.35	.06	17.06	.09	.03	33.16	.06	-	.60	-	-	-	-	-	-	-	-	-	-

TABLE 4.10

ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

ADDIS ABABA

TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00			1.01-2.0			2.01-5.00			5.01-10.00			10.01 & ABOVE		
	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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
CEREALS	-	-	-	.01	-	8.66	.01	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	.01	-	8.66	.01	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	-	-	-	.01	-	8.66	.01	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4.11

ESTIMATES OF AREA BY SIZE OF HOLDING, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

DIRE DATA																		
TYPE OF CROPS	UNDER 0.10			0.10-0.50			0.51-1.00		1.01-2.0		2.01-5.00			5.01-10.00		10.01 & ABOVE		
	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. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)
CEREALS	.11	.03	32.22	.07	.02	22.60	.02	-	-	-	-	-	-	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize	.08	.03	41.88	.03	.01	36.80	.02	-	-	-	-	-	-	-	-	-	-	-
Sorghum	.03	.01	47.05	.04	.02	44.02	-	-	-	-	-	-	-	-	-	-	-	-
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PULSES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse Beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chick Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sun Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALL CROPS	.11	.04	33.27	.07	.02	22.60	.02	-	-	-	-	-	-	-	-	-	-	-

TABLE 5 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

ETHIOPIA

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED					
							TOTAL			NATURAL			COMMER.			NAT + COMM								
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.			
(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	
UNDER 0.10	9.36	1.83	19.60	1.77	.64	36.18	38.22	3.50	9.17	26.97	2.50	9.29	10.14	1.42	14.01	1.11	.25	22.59	3.00	.53	17.53			
0.10 - 0.50	23.81	3.89	16.35	*	*	*	64.47	8.28	12.85	28.27	3.07	10.85	34.23	6.34	18.54	1.97	.72	36.69	23.88	3.99	16.71			
0.51 - 1.00	3.62	1.24	34.29	*	*	*	15.37	2.94	19.10	5.57	1.54	27.60	9.66	2.30	23.82	*	*	*	9.32	2.20	23.65			
1.01 - 2.00	*	*	*	*	*	*	3.87	1.84	47.54	*	*	*	*	*	*	-	-	-	*	*	*			
2.01 - 5.00	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*			
5.01 - 10.00	.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
TOTAL	38.60	6.13	15.88	*	*	*	230.10	96.95	42.13	92.73	22.62	24.39	*	*	*	3.22	.70	21.84	39.67	6.56	16.55			

TABLE 5.1 TIGRAY

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED					
							TOTAL			NATURAL			COMMER.			NAT + COMM								
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.			
(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	
UNDER 0.10	.87	.32	36.48	.04	-	-	.69	.26	38.34	.35	.14	41.34	.30	.13	42.63	.03	-	-	-	-	-	-	-	-
0.10 - 0.50	1.79	.49	27.20	-	-	-	.86	.32	37.35	*	*	*	.71	.32	44.38	.04	-	-	-	-	-	-	-	-
0.51 - 1.00	*	*	*	-	-	-	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
1.01 - 2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	2.93	.82	28.02	.04	-	-	1.68	.50	29.51	.46	.16	34.88	1.15	.43	37.65	.07	-	-	-	-	-	-	-	-

TABLE 5.2 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

AFAR

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED						
							TOTAL				NATURAL				COMMER.				NAT + COMM						
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	
(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)		
UNDER 0.10	-	-	-	-	-	-	.02	-	-	.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0.10 - 0.50	.01	-	18.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	4.73	
0.51 - 1.00	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.01 - 2.00	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	*	*	*	-	-	-	.02	-	-	.02	-	-	-	-	-	-	-	-	-	-	-	.05	-	1.39	

TABLE 5.3 AMHARA

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED						
							TOTAL				NATURAL				COMMER.				NAT + COMM						
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	
(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)	(^{'000} HA)	(^{'000})	(%)		
UNDER 0.10	4.95	1.53	30.90	*	*	*	2.77	.84	30.39	2.40	.75	31.14	.24	.06	23.80	*	*	*	.08	.02	22.83	-	-	-	
0.10 - 0.50	12.28	2.90	23.65	*	*	*	9.36	1.91	20.36	5.71	1.19	20.88	3.44	1.14	33.08	.21	.11	49.78	*	*	*	-	-	-	
0.51 - 1.00	*	*	*	-	-	-	1.60	.76	47.50	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	
1.01 - 2.00	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.01 - 10.00	.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	19.01	4.52	23.76	*	*	*	13.74	2.30	16.71	9.44	1.65	17.46	3.96	1.06	26.72	.34	.13	39.31	.61	.27	44.16	-	-	-	

TABLE 5.4 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

OROMIYA																							
SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED				
							TOTAL			NATURAL			COMMER.			NAT + COMM							
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.		
(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)
UNDER 0.10	3.29	.96	29.26	*	*	*	11.84	1.99	16.82	7.73	1.21	15.68	3.70	.95	25.75	.42	.16	38.19	2.39	.52	21.87		
0.10 - 0.50	8.72	2.53	29.00	*	*	*	30.65	6.63	21.65	8.64	1.54	17.78	20.94	5.54	26.44	*	*	*	19.84	3.94	19.87		
0.51 - 1.00	*	*	*	*	*	*	9.70	2.50	25.77	*	*	*	8.84	2.26	25.61	-	-	-	7.81	2.15	27.54		
1.01 - 2.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*		
2.01 - 5.00	-	-	-	-	-	-	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-		
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10.01 AND OVER	-	-	-	-	-	-	*	*	*	*	*	*	*	*	*	-	-	-	-	-	-		
TOTAL	14.31	4.02	28.11	*	*	*	*	*	*	*	*	*	*	*	*	1.49	.58	39.21	32.05	6.42	20.02		

TABLE 5.5 SOMALI

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED				
							TOTAL			NATURAL			COMMER.			NAT + COMM							
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.		
(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)	(¹ '000HA)	(¹ '000)	(%)
UNDER 0.10	.02	.01	26.71	-	-	-	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-		
0.10 - 0.50	.08	.03	39.63	.04	-	-	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-		
0.51 - 1.00	*	*	*	-	-	-	*	*	*	*	*	*	-	-	-	-	-	-	.02	-	-		
1.01 - 2.00	-	-	-	-	-	-	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-		
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	.11	.03	30.44	.04	-	-	*	*	*	*	*	*	-	-	-	-	-	-	.02	-	-		

TABLE 5.6 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

BENSHANGUL-GUMUZ

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED								PESTICIDE APPLIED							
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	TOTAL			NATURAL			COMMER.			NAT + COMM			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. (%)
UNDER 0.10	.10	.03	27.54	-	-	-	.17	.05	29.30	.17	.05	28.42	*	*	*	-	-	-	-	-	-	-
0.10 - 0.50	*	*	*	-	-	-	.07	.03	48.13	*	*	*	*	*	*	-	-	-	-	-	-	-
0.51 - 1.00	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.01 - 2.00	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	*	*	*	-	-	-	.24	.06	26.34	.20	.06	29.21	*	*	*	-	-	-	-	-	-	-

TABLE 5.7 S.N.N.P.R

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED								PESTICIDE APPLIED						
	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	TOTAL			NATURAL			COMMER.			NAT + COMM			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. (%)			
UNDER 0.10	.09	.03	28.23	.49	.13	25.43	22.48	2.74	12.20	16.10	2.05	12.76	5.87	1.05	17.81	.52	.17	33.76	.50	.06	12.64
0.10 - 0.50	.58	.26	44.11	1.05	.39	37.63	22.77	4.56	20.03	13.11	2.36	17.97	9.02	2.87	31.79	.64	.32	49.98	3.39	.57	16.79
0.51 - 1.00	.48	.20	42.11	*	*	*	3.74	1.33	35.48	3.20	1.29	40.21	*	*	*	*	*	*	1.49	.49	32.82
1.01 - 2.00	*	*	*	-	-	-	*	*	*	.53	.25	47.55	*	*	*	-	-	-	1.05	.39	37.48
2.01 - 5.00	*	*	*	-	-	-	*	*	*	*	*	*	*	*	*	-	-	-	*	*	*
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-
TOTAL	1.37	.38	27.40	1.64	.41	24.89	57.37	9.27	16.15	38.94	6.83	17.55	17.13	4.10	23.93	1.29	.37	28.54	6.83	1.36	19.90

TABLE 5.8

ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE, ITS STANDARD ERROR
AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

GAMBELA

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED						
							TOTAL				NATURAL				COMMER.				NAT + COMM						
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	
(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)		
UNDER 0.10	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.01	35.54	
0.10 - 0.50	-	-	-	-	-	-	.04	-	-	-	-	-	-	-	.04	-	-	-	-	-	-	*	*	*	
0.51 - 1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.01 - 2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	-	-	-	*	*	*	.04	-	-	-	-	-	-	-	.04	-	-	-	-	-	-	*	*	*	

TABLE 5.9 HARARI

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED												PESTICIDE APPLIED						
							TOTAL				NATURAL				COMMER.				NAT + COMM						
	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	Estimate	S.E	C.V.	
(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)	(('000HA)('000)	(%)	(%)		
UNDER 0.10	.01	.02	48.73	*	*	*	.11	.02	21.26	.08	.01	13.85	*	*	*	.01	.01	49.18	.01	.03	32.57	-	-	-	
0.10 - 0.50	-	-	-	.01	.02	49.36	.18	.03	18.40	.12	.03	24.23	.05	.02	29.68	.01	.02	43.88	-	-	-	-	-	-	
0.51 - 1.00	*	*	*	-	-	-	.04	.02	42.39	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	
1.01 - 2.00	-	-	-	-	-	-	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	.02	.01	38.81	.01	.01	46.63	.35	.06	15.84	.23	.04	16.55	.10	.03	29.27	.03	.01	30.97	.01	.03	32.57	-	-	-	

TABLE 5.10 ESTIMATES OF AREA UNDER IMPROVED FARM MANAGEMENT PRACTICE, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

DIRE DAWA

SIZE OF HOLDING (HECTARES)	IRRIGATED AREA			IMPROVED SEEDS APPLIED			FERTILIZERS APPLIED						PESTICIDE APPLIED					
							TOTAL		NATURAL		COMMER.		NAT + COMM					
	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. (%)
UNDER 0.10	.03	.01	19.08	-	-	-	.03	.01	18.23	.03	.01	18.04	-	-	-	-	-	-
0.10 - 0.50	*	*	*	-	-	-	.03	.01	18.23	.03	.01	18.04	-	-	-	-	-	-
0.51 - 1.00	-	-	-	-	-	-	.03	.01	44.92	*	*	44.07	-	-	-	-	-	-
1.01 - 2.00	-	-	-	-	-	-	*	*	*	*	*	*	-	-	-	-	-	-
2.01 - 5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.01 - 10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01 AND OVER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	.04	.01	20.42	-	-	-	.09	.03	33.74	.08	.03	33.66	-	-	-	-	-	-

TABLE 6 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDERS AND TYPE OF HOLDING AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

ETHIOPIA												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	2.30	1.03	44.83	.09	-	-	17.05	3.85	22.58	19.44	3.96	20.37
18 - 20	15.22	3.57	23.43	-	-	-	79.04	11.36	14.37	94.26	11.93	12.65
21 - 24	33.99	5.25	15.45	.15	.01	6.18	231.46	20.13	8.70	265.60	21.08	7.94
25 - 29	63.39	7.10	11.19	*	*	*	754.27	42.93	5.69	817.76	44.25	5.41
30 - 39	135.36	11.77	8.69	*	*	*	1,624.83	78.28	4.82	1,761.23	82.73	4.70
40 - 49	74.05	7.42	10.02	*	*	*	1,521.05	75.54	4.97	1,596.91	77.30	4.84
50 - 59	60.69	7.75	12.77	*	*	*	1,026.80	55.85	5.44	1,088.45	58.02	5.33
60 & ABOVE	71.84	7.95	11.07	*	*	*	1,117.43	79.67	7.13	1,190.40	80.34	6.75
NOT STATED	-	-	-	-	-	-	*	*	*	*	*	*
TOTAL	456.84	22.81	4.99	5.29	.94	17.70	6,372.11	267.84	4.20	6,834.24	278.07	4.07

TABLE 6.1 TIGRAY

TIGRAY												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	-	-	-	-	-	-
21 - 24	-	-	-	-	-	-	2.23	.98	43.96	2.23	.98	43.96
25 - 29	*	*	*	*	*	*	5.05	1.73	34.31	5.22	1.75	33.55
30 - 39	1.70	.81	47.30	*	*	*	18.48	5.06	27.39	20.52	5.70	27.79
40 - 49	*	*	*	*	*	*	12.42	2.71	21.83	13.58	3.06	22.54
50 - 59	*	*	*	*	*	*	12.20	3.02	24.73	13.61	3.43	25.20
60 & ABOVE	*	*	*	*	*	*	15.44	3.89	25.22	16.66	4.28	25.66
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	*	*	*	1.16	.30	26.11	65.82	13.27	20.16	71.83	15.76	21.95

TABLE 6 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDERS AND TYPE OF HOLDING AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

NATIONAL												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	2.30	1.03	44.83	.09	-	-	17.05	3.85	22.58	19.44	3.96	20.37
18 - 20	15.22	3.57	23.43	-	-	-	79.04	11.36	14.37	94.26	11.93	12.65
21 - 24	33.99	5.25	15.45	.15	.01	6.18	231.46	20.13	8.70	265.60	21.08	7.94
25 - 29	63.39	7.10	11.19	*	*	*	754.27	42.93	5.69	817.76	44.25	5.41
30 - 39	135.36	11.77	8.69	*	*	*	1,624.83	78.28	4.82	1,761.23	82.73	4.70
40 - 49	74.05	7.42	10.02	*	*	*	1,521.05	75.54	4.97	1,596.91	77.30	4.84
50 - 59	60.69	7.75	12.77	*	*	*	1,026.80	55.85	5.44	1,088.45	58.02	5.33
60 & ABOVE	71.84	7.95	11.07	*	*	*	1,117.43	79.67	7.13	1,190.40	80.34	6.75
NOT STATED	-	-	-	-	-	-	*	*	*	*	*	*
TOTAL	456.84	22.81	4.99	5.29	.94	17.70	6,372.11	267.84	4.20	6,834.24	278.07	4.07

TABLE 6.1 TIGRAY

TIGRAY												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	-	-	-	-	-	-
21 - 24	-	-	-	-	-	-	2.23	.98	43.96	2.23	.98	43.96
25 - 29	*	*	*	-	-	-	5.05	1.73	34.31	5.22	1.75	33.55
30 - 39	1.70	.81	47.30	*	*	*	18.48	5.06	27.39	20.52	5.70	27.79
40 - 49	*	*	*	-	-	-	12.42	2.71	21.83	13.58	3.06	22.54
50 - 59	*	*	*	-	-	-	12.20	3.02	24.73	13.61	3.43	25.20
60 & ABOVE	*	*	*	*	*	*	15.44	3.89	25.22	16.66	4.28	25.66
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	*	*	*	1.16	.30	26.11	65.82	13.27	20.16	71.83	15.76	21.95

TABLE 6.2 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDERS AND TYPE OF HOLDING AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	-	-	-	-	-	-	*	*	*	*	*	*
18 - 20	-	-	-	-	-	-	*	*	*	*	*	*
21 - 24	.16	.08	49.39	-	-	-	*	*	*	.50	.17	33.49
25 - 29	.33	.11	33.26	-	-	-	1.32	.37	28.12	1.65	.42	25.14
30 - 39	*	*	*	-	-	-	1.50	.33	22.29	1.69	.30	17.98
40 - 49	*	*	*	-	-	-	3.38	.73	21.61	3.54	.74	20.93
50 - 59	*	*	*	-	-	-	2.42	.57	23.70	2.71	.68	25.01
60 & ABOVE	.35	.16	45.35	-	-	-	3.43	1.10	31.97	3.78	1.23	32.71
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	1.49	.35	23.26	-	-	-	12.53	2.13	17.00	14.02	2.42	17.25

TABLE 6.3 AMHARA

TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	*	*	*	-	-	-	*	*	*	4.51	2.22	49.35
18 - 20	6.03	2.66	44.10	-	-	-	8.31	3.33	40.14	14.34	4.16	29.00
21 - 24	*	*	*	-	-	-	26.94	6.66	24.72	30.53	7.02	22.99
25 - 29	7.32	2.70	36.87	-	-	-	99.10	12.65	12.77	106.42	12.52	11.76
30 - 39	14.46	3.68	25.44	-	-	-	259.30	23.06	8.89	273.76	24.22	8.85
40 - 49	19.33	3.95	20.45	.36	-	-	295.78	30.03	10.15	315.47	31.04	9.84
50 - 59	12.89	3.19	24.73	-	-	-	257.90	30.30	11.75	270.79	31.34	11.57
60 & ABOVE	24.69	5.16	20.88	-	-	-	255.29	35.18	13.78	279.98	35.21	12.57
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	89.13	8.82	9.89	.36	-	-	1,206.30	96.55	8.00	1,295.80	100.15	7.73

TABLE 6.4 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDERS AND TYPE OF HOLDING AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

OROMIYA												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	*	*	*	-	-	-	7.81	2.56	32.76	8.81	2.61	29.61
18 - 20	5.18	1.81	34.92	-	-	-	45.41	7.59	16.72	50.59	7.84	15.51
21 - 24	17.27	3.91	22.63	-	-	-	110.76	12.38	11.18	128.02	13.49	10.53
25 - 29	27.60	4.90	17.76	-	-	-	298.65	24.17	8.09	326.25	25.30	7.75
30 - 39	67.42	9.15	13.57	*	*	*	657.65	53.34	8.11	725.67	56.82	7.83
40 - 49	32.38	5.22	16.12	*	*	*	604.48	41.47	6.86	638.26	43.41	6.80
50 - 59	31.54	5.87	18.61	*	*	*	393.34	29.42	7.48	425.79	31.18	7.32
60 & ABOVE	35.67	5.73	16.08	*	*	*	455.79	39.41	8.65	491.72	40.73	8.28
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	218.07	17.20	7.89	3.16	.83	26.37	2,573.89	155.04	6.02	2,795.12	164.48	5.88

TABLE 6.5 SOMALI

SOMALI												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	*	*	*	-	-	-	*	*	*	*	*	*
21 - 24	*	*	*	-	-	-	*	*	*	*	*	*
25 - 29	*	*	*	-	-	-	2.24	.77	34.50	2.80	.99	35.40
30 - 39	*	*	*	-	-	-	5.16	1.59	30.79	5.18	1.59	30.74
40 - 49	*	*	*	-	-	-	10.47	2.29	21.85	11.40	2.70	23.63
50 - 59	*	*	*	-	-	-	12.25	2.55	20.79	13.01	2.97	22.87
60 & ABOVE	*	*	*	-	-	-	6.99	1.58	22.52	7.25	1.58	21.74
NOT STATED	-	-	-	-	-	-	8.08	2.19	27.12	8.28	2.24	27.03
TOTAL	*	*	*	-	-	-	45.71	9.66	21.13	48.46	10.94	22.57

TABLE 6.6 ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDERS AND TYPE OF HOLDING AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

BENSHANGUL-GUMUZ

TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK			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. (%)			
UNDER 18	*	*	*	-	-	-	*	*	*	.51	.24	46.70
18 - 20	.32	.15	45.18	-	-	-	.37	.14	39.12	.69	.25	36.77
21 - 24	.59	.21	35.17	-	-	-	.78	.30	37.76	1.38	.36	26.07
25 - 29	.28	.13	45.41	-	-	-	5.52	1.18	21.37	5.80	1.19	20.54
30 - 39	*	*	*	-	-	-	8.58	1.70	19.86	8.97	1.72	19.17
40 - 49	.63	.25	39.89	-	-	-	7.76	1.41	18.12	8.39	1.50	17.91
50 - 59	*	*	*	-	-	-	5.19	.99	19.16	5.63	1.12	19.85
60 & ABOVE	*	*	*	-	-	-	4.63	1.09	23.52	4.84	1.09	22.52
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	3.20	.61	18.99	-	-	-	33.00	4.89	14.81	36.20	5.25	14.51

TABLE 6.7 S.N.N.P.R

TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK			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. (%)			
UNDER 18	*	*	*	.09	-	-	5.33	1.96	36.83	5.54	1.97	35.47
18 - 20	3.37	1.52	45.15	-	-	-	24.36	7.76	31.84	27.73	7.95	28.69
21 - 24	11.47	2.93	25.59	.10	-	-	86.32	14.34	16.61	97.89	14.52	14.84
25 - 29	26.59	4.35	16.35	-	-	-	334.81	33.03	9.86	361.40	33.96	9.40
30 - 39	48.57	6.34	13.05	-	-	-	661.06	52.11	7.88	709.62	54.63	7.70
40 - 49	17.86	3.18	17.82	-	-	-	577.94	55.39	9.58	595.79	55.73	9.35
50 - 59	12.98	3.83	29.51	-	-	-	344.42	36.38	10.56	357.40	37.35	10.45
60 & ABOVE	9.50	1.89	19.93	-	-	-	371.83	59.44	15.99	381.33	59.42	15.58
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	130.46	11.70	8.97	.19	-	-	2,406.05	195.12	8.11	2,536.71	199.58	7.87

TABLE 6.8

ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDERS AND TYPE OF HOLDING AND COEFFICIENT OF VARIATION, 2000/2001(1995 E.C.) BELG SEASON CROPS

GAMBELA												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	*	-	*	-	-	-	-	-	-	-	-	-
18 - 20	*	*	*	*	*	*	*	*	*	*	*	*
21 - 24	.31	.15	47.46	.05	.01	19.96	1.57	.54	34.50	1.93	.60	31.08
25 - 29	1.00	.22	22.23	*	*	*	3.10	.66	21.32	4.20	.79	18.88
30 - 39	1.54	.39	24.94	*	*	*	5.21	.71	13.58	6.86	1.04	15.19
40 - 49	1.69	.34	20.01	*	*	*	4.46	.66	14.69	6.20	.79	12.82
50 - 59	.82	.27	32.64	*	*	*	2.45	.41	16.76	3.33	.54	16.11
60 & ABOVE	.71	.22	30.55	*	*	*	1.81	.45	25.03	2.55	.52	20.45
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	6.38	.92	14.43	*	*	*	18.69	2.14	11.46	25.47	2.81	11.02

TABLE 6.9 HARARI

HARARI												
TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK					
	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. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	*	*	*	*	*	*	*	*	*	*	*	*
21 - 24	*	*	*	*	*	*	*	*	*	*	*	*
25 - 29	*	*	*	*	*	*	.14	.04	30.43	.17	.05	28.17
30 - 39	*	*	*	*	*	*	.93	.16	17.51	1.00	.18	18.08
40 - 49	*	*	*	*	*	*	1.53	.23	15.39	1.62	.25	15.31
50 - 59	*	*	*	*	*	*	1.98	.31	15.65	2.05	.32	15.73
60 & ABOVE	.11	.03	31.16	.02	-	-	1.31	.32	24.16	1.36	.32	23.39
NOT STATED	-	-	-	-	-	-	.63	.15	24.24	.75	.15	20.47
TOTAL	.43	.07	15.78	.02	-	-	6.55	.85	12.93	7.00	.90	12.84

TABLE 6.11

ESTIMATES OF TOTAL NUMBER OF HOLDERS BY AGE OF HOLDERS AND TYPE OF HOLDING AND COEFFICIENT OF VARIATION, 2000/2001(1993 E.C.) BELG SEASON CROPS

ADDIS ABABA

TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK			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. (%)			
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	-	-	-	-	-	-
21 - 24	-	-	-	-	-	-	*	*	*	*	*	*
25 - 29	-	-	-	-	-	-	*	*	*	*	*	*
30 - 39	-	-	-	-	-	-	*	*	*	*	*	*
40 - 49	-	-	-	-	-	-	*	*	*	*	*	*
50 - 59	-	-	-	-	-	-	*	*	*	*	*	*
60 & ABOVE	-	-	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	*	*	*	*	*	*

TABLE 6.12 DIRE DAWA

TYPE OF CROPS	TOTAL NUMBER OF HLDERS ENGAGED									TOTAL NUMBER OF HOLDERS		
	WITH CROP ONLY			WITH LIVESTOCK ONLY			WITH CROP & LIVESTOCK			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. (%)			
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	*	*	*	*	*	*
21 - 24	-	-	-	-	-	-	*	*	*	*	*	*
25 - 29	-	-	-	-	-	-	.61	.23	37.93	.61	.23	37.93
30 - 39	.06	.01	12.62	-	-	-	1.05	.32	30.37	1.11	.34	30.59
40 - 49	-	-	-	-	-	-	.59	.16	26.94	.59	.16	26.94
50 - 59	*	*	*	-	-	-	.54	.13	24.21	.55	.14	24.65
60 & ABOVE	*	*	*	-	-	-	.47	.19	41.70	.48	.19	40.22
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	.09	.02	25.35	-	-	-	3.46	.89	25.70	3.55	.91	25.56

TABLE 7 ESTIMATES OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION 2000/2001(1993 E.C.) BELG SEASON CROPS

ETHIOPIA

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	*	*	*	*	*	*	2.65	.99	37.36	*	*	*	-	-	-	*	*	*
18 - 20	6.15	2.30	37.38	*	*	*	9.99	3.10	30.99	6.41	2.08	32.36	*	*	*	3.80	1.78	46.83
21 - 24	11.14	3.15	28.30	*	*	*	39.14	7.90	20.19	24.23	5.42	22.36	*	*	*	8.79	3.11	35.43
25 - 29	47.93	7.11	14.83	9.90	3.45	34.85	149.74	19.55	13.06	66.28	10.73	16.19	6.06	1.69	27.86	22.79	5.76	25.30
30 - 39	111.45	16.47	14.78	*	*	*	342.33	30.10	8.79	165.89	22.56	13.60	15.29	3.75	24.49	65.86	13.82	20.99
40 - 49	95.68	15.96	16.68	26.30	8.39	31.90	334.93	36.81	10.99	132.50	18.02	13.60	7.75	2.09	26.90	52.11	9.17	17.60
50 - 59	91.02	19.08	20.96	13.12	4.04	30.81	197.37	21.68	10.98	84.40	12.89	15.27	8.00	3.08	38.48	31.88	7.46	23.40
60 & ABOVE	68.00	12.83	18.88	26.27	12.18	46.36	237.58	33.57	14.13	98.02	20.74	21.16	5.01	2.48	49.47	34.54	5.43	15.72
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	433.86	57.50	13.25	115.98	46.67	40.24	1,313.74	103.13	7.85	581.75	64.90	11.16	46.77	7.91	16.92	219.82	30.14	13.71

TABLE 7.1 TIGRAY

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 - 24	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
25 - 29	2.51	1.24	49.48	-	-	-	-	-	-	*	*	*	-	-	-	-	-	-
30 - 39	12.40	4.91	39.60	-	-	-	-	-	-	*	*	*	*	*	*	*	*	*
40 - 49	8.71	2.90	33.25	*	*	*	*	*	*	5.35	1.80	33.69	*	*	*	-	-	-
50 - 59	7.09	2.56	36.03	*	*	*	*	*	*	3.90	1.74	44.46	1.18	.01	.96	-	-	-
60 & ABOVE	7.95	3.42	43.02	*	*	*	2.72	1.32	48.36	2.56	.94	36.72	*	*	*	-	-	-
NOT STATED	-	-	-	-	-	-	2.27	1.03	45.50	3.31	1.24	37.53	*	*	*	-	-	-
TOTAL	39.77	14.20	35.69	*	*	*	7.12	2.53	35.55	15.82	4.60	29.06	*	*	*	-	-	-

TABLE 7.2 ESTIMATES OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION 2000/2001(1993 E.C.) BELG SEASON CROPS

AFAR

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			PESTICIDE		
	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. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 - 24	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 - 29	*	*	*	-	-	-	.06	-	-	-	-	-	-	-	-	-	-	-
30 - 39	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40 - 49	-	-	-	-	-	-	.06	-	-	-	-	-	-	-	.45	.19	41.50	-
50 - 59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	-
60 & ABOVE	*	*	*	-	-	-	.06	-	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	*	*	*	-	-	-	.19	-	-	-	-	-	-	-	.59	.20	34.08	-

TABLE 7.3 AMHARA

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			PESTICIDE		
	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. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)
UNDER 18	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
21 - 24	2.90	1.12	38.52	-	-	-	10.77	3.77	35.03	2.37	.96	40.27	*	*	*	-	-	-
25 - 29	22.08	4.90	22.18	*	*	*	16.06	3.34	20.76	6.30	1.85	29.44	*	*	*	-	-	-
30 - 39	62.09	14.67	23.63	1.24	.28	22.37	30.41	6.21	20.43	5.81	1.42	24.46	*	*	*	.95	.14	14.34
40 - 49	50.56	13.80	27.29	*	*	*	19.13	6.97	36.44	4.83	1.70	35.24	*	*	*	*	*	*
50 - 59	55.91	17.99	32.18	*	*	*	29.85	7.91	26.49	5.68	2.06	36.24	-	-	-	-	-	-
60 & ABOVE	33.94	8.04	23.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	231.80	47.44	20.47	*	*	*	110.70	25.39	22.94	24.99	4.50	18.01	3.70	1.49	40.28	4.72	1.25	26.38

TABLE 7.4 ESTIMATES OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION 2000/2001(1993 E.C.) BELG SEASON CROPS

OROMIYA

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	-	-	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18 - 20	4.05	1.75	43.24	-	-	-	4.42	1.96	44.44	5.24	1.95	37.16	-	-	-	-	-	-
21 - 24	6.70	2.87	42.84	-	-	-	13.47	4.15	30.83	11.41	3.92	34.40	-	-	-	-	-	-
25 - 29	21.28	4.98	23.41	5.52	2.69	48.68	28.65	5.87	20.48	23.00	5.72	24.89	*	*	*	8.03	3.10	38.66
30 - 39	31.82	5.58	17.52	*	*	*	86.92	13.07	15.04	84.47	19.65	23.26	*	*	*	18.73	5.73	30.58
40 - 49	32.37	7.43	22.96	18.77	7.63	40.62	79.73	9.89	12.41	59.87	13.17	22.00	5.56	1.93	34.64	54.68	13.69	25.05
50 - 59	25.36	5.74	22.61	9.36	3.80	40.60	50.05	8.96	17.90	45.97	10.12	22.01	2.47	1.10	44.82	44.08	9.11	20.67
60 & ABOVE	24.64	9.40	38.13	*	*	*	45.32	6.70	14.78	44.32	8.51	19.19	*	*	*	26.92	7.40	27.48
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.96	5.16	18.47
TOTAL	146.23	29.11	19.91	*	*	*	309.40	36.10	11.67	275.52	46.82	16.99	15.40	3.20	20.81	183.11	29.91	16.33

TABLE 7.5 SOMALI

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 - 24	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
25 - 29	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
30 - 39	.27	.07	26.11	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
40 - 49	*	*	*	.16	-	-	1.97	.89	44.97	-	-	-	-	-	-	-	-	-
50 - 59	.22	.06	26.17	-	-	-	*	*	*	-	-	-	-	-	-	.10	-	-
60 & ABOVE	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	1.62	.40	24.84	.16	-	-	6.30	2.91	46.26	-	-	-	-	-	-	.10	-	-

TABLE 7.6 ESTIMATES OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION 2000/2001(1995 E.C.) BELG SEASON CROPS

BENSHANGUL-GUMUZ

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	-	-	-	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
18 - 20	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 - 24	*	*	*	.02	-	-	*	*	*	-	-	-	-	-	-	-	-	-
25 - 29	.79	.31	40.04	-	-	-	.78	.31	39.31	-	-	-	-	-	-	-	-	-
30 - 39	1.73	.53	30.71	-	-	-	1.17	.25	21.12	*	*	*	-	-	-	-	-	-
40 - 49	1.52	.60	39.78	-	-	-	1.03	.31	30.12	*	*	*	-	-	-	-	-	-
50 - 59	*	*	*	-	-	-	1.22	.43	35.63	-	-	-	-	-	-	-	-	-
60 & ABOVE	.64	.24	38.09	-	-	-	1.07	.53	49.31	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	5.27	1.61	30.62	.02	-	-	5.57	1.40	25.18	.14	.01	5.20	-	-	-	-	-	-

TABLE 7.7 S.N.N.P.R

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	*	*	*	*	*	*	1.72	.76	44.23	*	*	*	-	-	-	*	*	*
18 - 20	*	*	*	*	*	*	2.75	1.03	37.65	*	*	*	-	-	-	*	*	*
21 - 24	*	*	*	*	*	*	23.39	6.65	28.44	12.21	3.72	30.46	*	*	*	.70	.27	38.50
25 - 29	.74	.24	31.87	2.53	1.25	49.66	108.09	18.25	16.88	40.57	9.02	22.24	3.51	1.07	30.55	3.89	.65	16.77
30 - 39	2.64	.87	33.01	5.88	2.66	45.26	233.85	26.88	11.50	69.51	10.77	15.49	8.69	3.13	36.05	10.02	1.80	17.93
40 - 49	1.75	.46	26.07	*	*	*	220.08	34.89	15.85	62.63	12.09	19.30	*	*	*	6.51	1.01	15.56
50 - 59	*	*	*	*	*	*	122.67	18.40	15.00	30.87	7.74	25.06	*	*	*	3.21	.74	23.04
60 & ABOVE	.46	.17	38.00	*	*	*	157.89	31.90	20.21	44.67	18.76	41.99	*	*	*	5.53	1.59	28.77
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	7.65	1.96	25.63	20.10	3.99	19.83	870.44	93.11	10.70	264.41	44.48	16.82	24.71	6.93	28.05	29.99	3.50	11.65

TABLE 7.8 ESTIMATES OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION 2000/2001(1993 E.C.) BELG SEASON CROPS

GAMBELA

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
21 - 24	-	-	-	*	*	*	-	-	-	.08	-	-	-	-	-	*	*	*
25 - 29	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	.17	.06	33.29
30 - 39	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	.26	.10	37.10
40 - 49	-	-	-	*	*	*	-	-	-	.12	-	-	-	-	-	.39	.11	26.99
50 - 59	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-	*	*	*
60 & ABOVE	-	-	-	.13	.05	40.90	-	-	-	-	-	-	-	-	-	.15	.05	33.27
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	.64	.17	25.99	-	-	-	.20	-	-	-	-	-	1.26	.27	21.52

TABLE 7.9 HARARI

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			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. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)	Estimate ('000HA)	S.E ('000)	C.V. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	*	*	*
21 - 24	-	-	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25 - 29	*	*	*	*	*	*	.40	.13	31.01	.16	.07	45.17	*	*	*	-	-	-
30 - 39	*	*	*	*	*	*	.62	.11	18.12	.17	.06	36.51	*	*	*	-	-	-
40 - 49	*	*	*	*	*	*	.94	.18	18.89	*	*	*	*	*	*	-	-	-
50 - 59	*	*	*	.04	.02	48.24	.58	.15	25.36	*	*	*	.14	.07	49.77	*	*	*
60 & ABOVE	*	*	*	*	*	*	.32	.12	39.06	*	*	*	*	*	*	*	*	*
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	.22	.10	46.81	*	*	*	2.95	.38	12.85	.57	.22	38.65	.33	.13	39.71	.05	.01	27.61

TABLE 7.10 ESTIMATES OF TOTAL NUMBER OF HOLDERS REPORTING USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE OF HOLDERS, ITS STANDARD ERROR AND COEFFICIENT OF VARIATION 2000/2001(1993 E.C.) BELG SEASON CROPS

DIRE DAWA

AGE OF HOLDERS	TOTAL NUMBER OF HLDERS ENGAGE																	
	IRRIGATION			IMPROVED SEEDS			NATURAL FERTILIZERS			COMMERCIAL FERTILIZERS			BOTH NAT + COMM.			PESTICIDE		
	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. (%)	Estimate (^{'000} HA)	S.E (^{'000})	C.V. (%)
UNDER 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - 20	-	-	-	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
21 - 24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 - 29	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
30 - 39	.44	.10	22.58	.03	-	11.69	.36	.11	30.03	*	*	*	-	-	-	-	-	-
40 - 49	.23	.08	33.72	-	-	-	.27	.06	23.72	-	-	-	-	-	-	-	-	-
50 - 59	.19	.09	44.75	*	*	*	.19	.06	32.24	*	*	*	-	-	-	-	-	-
60 & ABOVE	*	*	*	-	-	-	*	*	*	-	-	-	-	-	-	-	-	-
NOT STATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	1.15	.23	19.62	.05	.02	41.35	1.07	.18	16.62	.10	.03	29.72	-	-	-	-	-	-

APPENDIX – III
SURVEY QUESTIONNAIRES

CENTRAL STATISTICAL AUTHORITY
 NATIONAL INTEGRATED HOUSEHOLD SURVEY PROGRAM
 AGRICULTURAL SAMPLE SURVEY -2000/2001(1993 E.C.)

FORM ASS - 937

PRIVATE HOLDINGS

PART 1 IDENTIFICATION PARTICULARS

JOB ID			ZONE			WEREDA			FARMER'S ASSOCIATION			ENUMERATION AREA		HOUSEHOLD ID NUMBER			HOLDER ID NUMBER		HOLDER'S NAME			SEX			AGE			EDUCATIONAL STATUS GRADE COMPLETED			NUMBER OF MEMBERS OF HOLDER'S HOUSEHOLD			TYPE OF AGRICUL. CROP					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37			
KILLIL																																							

PART 2 LIST OF FIELDS AND AGRICULTURAL PRACTICES FOR 2000/2001(1993 E.C.) BELG SEASON

LINE NO.	SERIAL NUMBER OF PARCEL FIELD		CROP NAME (TEMPORARY)	CODE	TYPE OF SEED USED	USE OF INORGANIC FERTILIZERS				USE OF COMMERCIAL FERTILIZERS				USE OF FERTICIDES	WAS CROP DAMAGED?				REMARK																																																															
	1	2				3	4	5	6	7	8	9	10		11	12	13	14		15	16	17																																																												
																							IF YES				IF COMMERCIAL				IF YES REASON FOR DAMAGE																																																			
																							QUANTITY USED				PERCENT OF DAMAGED																																																							
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

NOTE - IN PART 1 COLUMN 11:

- ELITERATE - 1
- GRADES 1-3 COMPLETED - 2
- GRADES 4-6 COMPLETED - 3
- GRADES 7-8 COMPLETED - 4
- GRADES 9-11 COMPLETED - 5
- GRADES 12 COMPLETED - 6
- ABOVE GRADE 12 COMPLETED - 7

NOTE - THIS FORM SHOULD BE FILLED OUT ONLY FOR TEMPORARY PORE STALK CROPS AND TEMPORARY WITH OTHER MIXED STALK CROPS
 IN PART 1 THE INFORMATION ABOUT AREA AND PRODUCTION SHOULD BE FILLED OUT IF AND ONLY IF THE TEMPORARY CROPS HARVESTED BEFORE SEPTEMBER 1, 1993 E.C.

