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REPORT ON AREA AND PRODUCTION OF BELG SEASON CROPS FOR PRIVATE PEASANT HOLDINGS

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1. INTRODUCTION AND OBJECTIVES OF THE SURVEY

1.1 INTRODUCTION

As it is true in most developing countries, in Ethiopia agriculture is the dominant sector of the economy. As a result of this, Ethiopian agriculture contributes the lion share of the Gross Domestic Product (GDP) and foreign currency earnings of the country from the sell of agricultural outputs abroad as well as it creates employment opportunity to the majority of the country's population. Hence, agriculture is the major sector expected to play a dominant role to bring about an overall sustainable economic growth to the country, if strenuous efforts are made to modernize the farm activity of the sector as a whole.

Among the number of efforts that should be made by the concerned stakeholders to meet the desired goal mentioned above, the availability of reliable, comprehensive and timely statistical information on the overall performance of the sector is considered essential for use as a primary input to the planning, monitoring and evaluation of agricultural development.

In order to minimize the existing data gap, therefore, for the past three decades, the Central Statistical Agency (CSA) has been conducting the agricultural sample survey under which four integrated sample surveys designed for the collection of agricultural information on the performances of the sector were launched all over the country on annual basis. Hence, through conducting these surveys, CSA has been disseminating the results obtained from these surveys to ultimate users annually. The 2005/06 (1998 E.C.) Belg Season Crop Production Sample Survey, for which this report is meant for, is among the four integrated sample surveys launched on annual basis under the umbrella of the agricultural sample survey all over the country.

This report, which is Volume V of the six series of reports, presents quantitative results on crop land area, production, and yield of major Belg crops, grown during the 2005/06 Belg season by private peasant holdings as obtained from the results of the year 2005/06 (1998 E.C.) Belg Season Crop Production Sample Survey.

1.2 Objectives of the Survey

The objectives of the **2005/65 (1998 E.C.)** Belg Season Crop Production Sample Survey is to produce basic quantitative information on cropland area, production and yield of major Belg season crops, as well as to provide quantitative information on:-

- cropland area, production and yield of major belg season crops, and
- the extent and use of different farm management practices on belg season crops such as fertilized crop land area and quantity of fertilizer used by crop and fertilizer type, irrigated crop land area under improved seed, pesticide treated cropland area … etc.

The adequate and timely supply of this information to ultimate users is therefore, important for use as a primary input in the process of policy formulation, designing developmental agricultural projects and programmmes. This report therefore presents quantitative information on the above-mentioned major variables at country and regional levels.

2. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

2.1 Coverage

The 2005/6 (1998 E.C) Annual Agricultural Sample Survey (Belg Season) covered the entire rural parts of the country except all zones of Gambella Region, and the non-sedentary population of three zones of Afar & six zones of Somali regions. Accordingly the survey took into account of all parts of Harari, Addis Ababa and Dire Dawa, and 58 additional Zones / Special Weredas (that are treated as zones) of other regions

Initially, a total of 2,024 enumeration areas were selected to be covered by the survey, and the survey was successfully carried out in 2,012 EAs (99.41 %). As regard to the ultimate sampling unit, it was planned to conduct the survey on 60,720 agricultural

households and 60,045 (98.89 %) households were actually covered by the Belg season Agricultural Sample Survey. The overall distribution of the number of sampling units (planned and covered) by region is presented in Table 2.1 below.

Table 2.1. Number of Zones / Strata Covered, Planned and Covered Enumeration Areas & Households by Region.

Reporting level	Number of Zones Covered	Enumeration Areas		Households	
		Planned	Covered	Planned	Covered
Tigray	5	165	165	4950	4931
Afar	2	48	43	1440	1280
Amhara	10	406	402	12180	12044
Oromia	14	573	573	17190	17073
Somali	3	72	72	2160	2123
Benishangul-Gumuz	3	80	78	2400	2333
SNNP	21	612	611	18360	18233
Harari*	1	24	24	720	717
Addis Ababa*	1	20	20	600	600
Dire Dawa*	1	24	24	720	711
Total	**61**	**2024**	**2012**	**60720**	**60045**

** = Values for these regions refer only the number of strata (domain of estimation)*

Sampling Frame

The list containing EAs of all regions and their respective agricultural households obtained from the 2001/02 Ethiopian Agricultural Sample Enumeration (EASE) was used as the sampling frame in order to select the primary sampling units (EAs). Consequently, all sample EAs were selected from this frame based on the design proposed for the survey. The second stage sampling units, households, were selected from a fresh list of households that were prepared for each EA at the beginning of the survey.

Sample design

In order to select the sample a stratified two-stage cluster sample design was implemented. Enumeration areas (EAs) were taken to be the primary sampling units (PSUs) and the secondary sampling units (SSUs) were agricultural households.

In 2005/06, unlike the years before, in order to obtain a fairly representative number of extension program participant households the CSA categorized listed agricultural households in each EAs in to two strata, i.e. households that are and that are not participants of extension program. The stratification was done on the basis of the six major crops where by the extension program is mostly exercised in the country. The crops are maize, teff, wheat, barley, sorghum and finger millet.

The sample size for the 2005/06 agricultural sample survey (Belg Season) was determined by taking into account of both the required level of precision for the most important estimates within each domain and the amount of resources allocated to the survey. In order to reduce non-sampling errors manageability of the survey in terms of quality and operational control was also in addition considered.

Except Harari, Addis Ababa and Dire Dawa, where each region as a whole was taken to be the domain of estimation; each zone of a region / special wereda was adopted as a stratum for which major findings of the survey are reported.

2.2 Selection scheme

Enumeration areas from each stratum were selected systematically using probability proportional to size sampling technique; size being number of agricultural households obtained from the 1994 Population & Housing Census and adjusted for the sub-sampling effect. From the fresh list of households prepared at the beginning of the survey 30 agricultural households within each sample EA were selected systematically. Twenty of the households were selected from non extension

participant agricultural households while the rest 10 households were selected from extension participant agricultural households. Information on area under crops and Belg season production of crops, were obtained from the 30 households that were ultimately selected.

Estimation procedure of totals, ratios, sampling error and the measurement of precision of estimates (CV) are given in Appendix-I and II respectively.

2.3 Field Organization

The Central Statistical Agency (CSA) branch statistical office heads, field supervisors and enumerators, other supporting staff and drivers were all involved in the field operation activities of the 2005/06 (1998 E.C.) Belg season Crop Production Sample survey. To accomplish the data collection activities, all field enumerators were equipped with the necessary survey equipment (i.e. compass, programmable calculator, measuring tape, sample bags…etc). To assist with the fieldwork and data collection activities all available four-wheel drive vehicles were used for supervision and collection of completed questionnaires.

2.4 Training of Field Staff

At the beginning of the survey year, 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, statisticians and some of the field supervisors for one week at CSA's headquarters in Addis Ababa. Those trained in the first stage conducted similar training for field supervisors and enumerators for 10 days in the 24 branch statistical offices, which are distributed all over the country. During the second stage training, the field staff were given detailed classroom instruction on the objectives and uses of the Agricultural Sample Survey (AgSS), concepts, and definitions of terms used, the method of area measurement, interviewing procedures, … etc. The enumerators' and supervisors' training also included a field practice to reinforce the procedures discussed in the classroom with regard to field area measurement, use of the programmable calculator and crop-cutting techniques.

2.5 Methods of Data Collection.

Except cropland area of major Belg Season crop, the data of which collected objectively using compasses and measuring tape, the information on production of major Belg Season crops and agricultural practices (uses of fertilizer, pesticide, improved seed and irrigation) were subjectively collected by interviewing the holders of sampled households. Appendix II**,** illustrates the total number of EAs and households reporting for the 2005/06 (1998 E.C.)Belg crop production by region.

A major characteristic of Ethiopian agriculture is the existence of two well-known crop production seasons referred to as the Meher (or main) and Belg Seasons. The generally accepted definition of the Meher season is that of the long rainy season, which normally occurs from June to September. The Belg Season most often refers to small but timely rainy season, which normally occurs from February to May but in limited areas of the country. Generally, the Meher Season rainy period provides ideal growing conditions for the longer maturing crops. Planting and harvest of Meher crops can extend to December or January in some areas. Most of the time holders rely on short maturing crops for planting during the Belg rainy period and harvest of the crops is in June or July.

A point of contention arises with respect to the pure definition of the Belg crop. Belg cropping practices are heterogeneous across different portions of the country. The nature of the sowing period also overlaps with some of the Meher Season crops. Consequently, the report on Belg Season crops in the past faced a problem of a clearly defined growing period. It is important not to overlook or miss agricultural practices performed all year round due to use of irrigation or soil moister from sufficiently dried areas that from time-to-time are swampy or marshy. To help clarify the two-crop season, the following definition has been in use 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 Meher (or main) season crops.

This report consists of estimates of area, production and yield per hectare of major Belg Season crops for the year 2005/06 (1998 E.C.) The data collection period for obtaining the area, production and agricultural practices of the Belg season crops ranged from 'Ginbot' 15-30, 1998 E.C. (i.e**.** From May 23 to June 7, 2006). Data on area under Belg season crop are collected objectively using compass and measuring tapes, while data on production of belg season crops were using subjective method based on face-to-face interviewing of the holder by the enumerator. Data on production of belg season crops are usually reported in local production measuring units that require conversion to an equivalent metric unit using the conversion factors available for local units at Wereda level prepared by CSA. The conversion factors have been constructed from experimentally derived data using actual holder production data associated with each local unit.

2.6 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 seventeen editors, data coders and verifiers were trained for one day to edit, code and verify the data using the aforementioned manual as a reference and teaching aid.

The enumerator completed edited and coded questionnaires sent to the head office were thoroughly verified by trained verifiers on a 100% basis before the questionnaires were sent to the data entry unit. The editing, coding, verification and data entry of all questionnaires was completed in thirty-one days.

b. Data Entry, Cleaning and Tabulation

Before starting data entry computer edit specifications were prepared 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 computer edit specifications prepared earlier for this purpose. Fifty-six data encoders were involved in this total process and it took fourteen days to complete the job. Finally, tabulation was done on personal computers to produce results as indicated in the tabulation plan.

2.7 Basic concepts and definitions

For better understanding and ultimate use of the data presented in this report, the definitions of concepts and terminology used for the collection of all types of data of the **2005/06 (1998 E.C.)** Belg Seasons Crop Production Sample Survey is presented here below: -

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

Household:- A household may be either;

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

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

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 helps, 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.

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: - are those crops that are harvested during 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 crop. Insecticides, herbicides and fungicides are all considered as pesticides.

III. SUMMARY OF THE MAJOR FINDINGS OF THE SURVEY.

In this part of the report the estimates of total Belg cropland area and production of the 2005/06 (1998 E.C.) Belg season are presented. The following are discussions on the major findings of the 2005/06(1998 E.C) Belg season crop production survey.

According to the 2005/06 (1998 E.C.) Belg season crop production sample survey results, it is estimated that major Belg crops covered about 1125.38 thousand hectares of land and a total production of 10291.46 thousand quintals at country level. Out of this total cropland area under Belg crops, the highest which is about 922.06 thousand hectares (81.93%) were under cereals followed by pulses that covered about 196.49 thousand hectares (17.46%), and about 6.83 thousand hectares (0.61%) were covered by oilseed crops.

From the above-mentioned total cropland area, an estimated production of about 9062.23 thousand quintals (88.06%) and 1200.50 thousand quintals (11.66%) of cereals and pulses are obtained at country level, respectively.

Summary Table A. Estimates of Total Area and Production of Major Belg Season Crops for Private Peasant Holdings in Ethiopia, 2005/06 (1998 E.C.)

Crop Type	Total Area		Total Production	
	In thousands (ha.)	%	In thousands (Ql.)	%
Cereal	922.06	81.93	9062.58	88.04
Pulses	196.49	17.46	1202.92	11.69
Oilseeds	6.83	0.61	*	*
Total	1125.38	100.00	10294.23	100.00

3.1. General Over-view on the Performance of Crop Production Activities of the 2005/06(1998 E.C) Belg Season as Compared to the 2004/05(1997 E.C.)

In this section of the report an attempt is made to compare the performance of Belg seasons of the year 2004/05 (1997 E.C.) with that of the 2005/06 (1998 E.C.)Belg Season in terms of total cropland area, production and yield of major Belg season crops. (See Tables 1 and 2).

As indicated in Table 1, one can easily observe that the 2005/06 (1998 E.C.) Belg season crop production activities is better, by 14.51% for area and by 54.32% for production, when compared to the 2004/05 (1997 E.C.) Belg season cropland area and production estimates. A very clear indicator for this is that in the year 2005/06 Belg season crop production activities, Belg crops were grown on a total area of 1125.38 thousand hectares with a corresponding production of 10294.23 thousand quintals; where as the estimates of area and production for the year 2004/05 were 982.80 thousand hectares and 6670.91 thousand quintals, respectively.

A close evaluation of the performance of each Belg crop have indicated that some of the Belg crops like, teff,, haricot beans, barley and maize have shown an increase in crop production, i.e. 15.50% increase in crop area and 224.29% increase in production for teff, through 3.75% increase in crop area and 12.28% increase in production for maize. On the other hand, there is a decrease in cropland area for sorghum (23.73%), field peas (3.34%), chick peas(22.42%) and lentils(6.54%) as compared to the 2004/05(1997 E.C) Belg season crop production. But all the above mentioned crops have shown an increase in production. (For details see Table 1)

As it can be observed from the comparison made in both tables (Tables 1 and 2), one can easily conclude that both the total area covered by Belg Season crops and the respective

volume of production produced in the year 2005/06(1998 E.C) has shown relatively significant increase compared to that of the year 2004/05 (1997 E.C).

3.2 Estimates of the 2005/06(1998 E.C) Total Area and Production under Major Crops for Private Peasant Holdings in Ethiopia, both Seasons(Meher and Belg)

In this section of the report, an attempt is made to present the total cropland area and production of major crops obtained during the year 2005/06 (1998 E.C.) both season harvest. Accordingly, Summary Table B, C and D present the estimates of area and production of major crops for both Meher and Belg seasons.

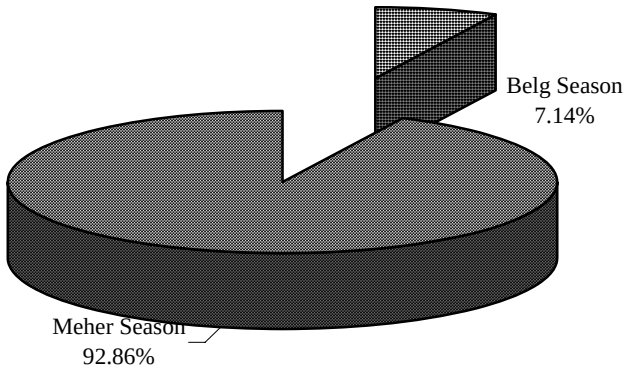
The total area and production of major crops in 2005/06 (1998 E.C.) both seasons, was estimated to be 11.30 million hectares and 144.11 million quintals, respectively.

Out of the above mentioned totals, 1.13 (10.00%) million hectares and 10.29(7.14%) million quintals was the contribution of Belg season. (For the details see Figs 1 and 2, and Summary Tables B and C).

Figure 1. Estimates of total area under major crops for private holdings in Ethiopia for both seasons **2005/06(1998 E.C.)**

Out of the total output of major crops (both Meher and Belg Seasons) of 2005/06 (1998 E.C.) the total area under cereals accounted for about 9.00 million hectares (79.64%) with a production of 125.30 million quintals (86.95%).

Figure2. Estimates of total production of major crops for private holdings in Ethiopia for both seasons **2005/06 (1998 E.C)**



About 1.49 million hectares (13.19%) with a production of 13.91 million quintals (9.65%) accounted for pulses, and 0.81 million hectares (7.17%) with a production of 4.90 million quintals (3.40%) accounted for oil seeds. For details see summary Table B).

Summary Tabel B. Total Area and Production of Major Crops for Private Peasant Holdings in Ethiopia Both Seasons, 2005/06 (1998 E.C.)

CROPTYPE	AREA IN MILLION HECTARES					
	MEHER	%	BELG	%	BOTH	%
CEREALS	8.08	79.45	0.92	81.42	9.00	79.64
PULSES	1.29	12.68	0.20	17.70	1.49	13.19
OILSEEDS	0.80	7.87	0.01	0.88	0.81	7.17
Total	10.17	100.00	1.13	100.00	11.30	100.00
PRODUCTION IN MILLION QUINTALS						
CEREALS	116.24	86.86	9.06	88.05	125.30	86.95
PULSES	12.71	9.50	1.20	11.66	13.91	9.65
OILSEEDS	4.87	3.64	0.03	0.29	4.90	3.40
Total	133.82	100.00	10.29	100.00	144.11	100.00

3.3 Comparison of 2004/05 and 2005/06 of Both Seasons (Meher and Belg) Area and production of Major Crops

Comparison of the total area and production of 2004/05 (1997E.C.) and 2005/06 (1998 E.C.) was made for both seasons and Belg season separately, in summary Tables C and D, respectively.

Summary Table C. Total Cropland area and Production of Major Crops for Private Peasant Holdings in Ethiopia (Both seasons), 2004/05 (1997 E.C.) and 2005/06 (1998 E.C.)

TYPE OF CROP	AREA IN MILLION HECTARES			PROD. IN MILLION QUINTALS		
	2004/05 (1997 E.C)	2005/06 (1998 E.C)	% age CHANGE	2004/05 (1997 E.C)	2005/06 (1998 E.C)	% age CHANGE
CEREALS	8.44	9.00	6.64	106.55	125.30	17.60
PULSES	1.45	1.49	2.76	13.92	13.91	-(0.01)
OILSEEDS	0.83	0.81	-(2.4)	*	4.90	*
TOTAL	10.72	11.30	5.41	125.75	144.11	14.60

Accordingly, the 2005/06 (1998 E.C.) both seasons' total outputs of the major crops have increased by 5.41% in area, and by 14.60% in production as compared to the 2004/05(1997 E.C) results. Similarly, the 2005/06 (1998 E.C.) total area and production for major Belg Season crops has increased by 14.14**%** and 54.27**%,** respectively, as compared to the 2004/05 (1997 E.C) Belg Season crops. For details refer to Summary Table D.

Summary Table D. Total Cropland Area and Production of Major Belg Season Crops For Private Peasant Holdings in Ethiopia, 2004/05 (1997 E.C.) and 2005/06 (1998 E.C.) Belg Season

TYPE OF CROP	BELG SEASONS					
	AREA IN MILLION HECTARES			PRODUCTION IN MILLION QUINTALS		
	2004/05 (1997 E.C)	2005/06 (1998 E.C)	% age CHANGE	2004/05 (1997 E.C))	2005/06 (1998 E.C)	% age CHANGE
CEREALS	0.80	0.92	15.00	6.24	9.06	45.19
PULSES	0.18	0.20	11.11	0.42	1.20	185.71
OILSEEDS	0.01	0.01	0.00	*	0.03	*
TOTAL	0.99	1.13	14.14	6.67	10.29	54.27

Comparison of the total area and production of 2004/05 (1997E.C.) and 2005/06 (1998 E.C.) was made for Belg reporting regions, and is presented in Table 2.

A general comparison of the national figure shows an increasing trend in both crop land area and production of major crops. An independent observation of each region actually shows a decrease of area for Tigray(14.05%) and Harari(42.11%) regions and a similar decrease of production for S.N.N.P(26.14%) has been observed too. Apart from this, there is a general increase in crop land area ranging from 80.02% for Somali region to 1.76% for S.N.N.P region. Similarly, there is a general increase in production ranging from 748.00% for Dire Dawa administrative council to 111.83% for Somali region.

NOTES: -

1. *Some estimates in all reporting levels are excluded due to high coefficient of variations. Nevertheless, they are incorporated in the total estimates. Hence the sum of the specific estimates may not be equal to the total estimates.*

2. *Users are also advised to use those estimates with 30-50% coefficient of variation* (CV) *cautiously*

3. *Even though area is reported for some crops in some reporting levels, no production data is available such cases are designated by Not Stated* (NS). *On the other hand, in all tables "-" labeled for data not available totally.*

4. *All Estimates Exclude Gambella Region*

Table 1. Estimates of 2004/05 (1997 E.C.) and 2005/06 (1998 E.C.) Area, Production and Yield of Major Belg Season Crops for PrivatePeasant Holdings, in Ethiopia

Crop Type	Total Area ('000 Ha)			Total Production ('000 Qt)			Yield		
	2004/05 (1997 E.C.)	2005/06 (1998E.C.)	% Change	2004/05 (1997 E.C.)	2005/06 (1998 E.C.)	% Change	2004/05 (1997 E.C.)	2005/06 (1998 E.C.)	% Change
Grain Crop	**982.80**	**1125.38**	**14.51**	**6670.91**	**10294.23**	54.32			
Cereals	**796.49**	**922.06**	**15.77**	**6236.55**	**9062.58**	45.31			
Teff	97.89	113.07	15.50	221.65	718.78	224.29	2.26	6.36	181.42
Barley	159.35	210.76	32.26	474.7	1277.15	169.04	2.98	6.06	103.36
Wheat	59.28	110.65	86.65	*	877.87	*	*	7.93	*
Maize	408.65	423.99	3.75	5121.52	5750.74	12.29	12.53	13.56	8.22
Sorghum	57.84	44.11	-23.73	19.57	266.42	1261.37	*	6.04	*
Finger Millet	1.62	1.96	*	0.87	3.88	*	*	1.98	*
Oats/'Aja'	11.78	17.35	47.27	11.32	167.74	*	*	9.67	*
Rice	*	*	*	*	*	*	*	*	*
Pulses	**176.64**	**196.49**	**11.24**	**421.41**	**1202.92**	185.45			
Fabab Beans	2.16	3.66	69.37	*	33.83	*	*	9.25	*
Field Peas	20.68	19.99	-3.34	16.19	147.53	*	*	7.38	*
Haricot Beans	125.39	147.96	18.00	327.05	888.71	171.74	2.61	6.01	130.27
Chick Peas	13.51	10.48	-22.42	12.63	63.52	*	*	6.06	*
Lentils	12.29	11.49	-6.54	5.58	57.54	*	*	5.01	*
Grass Peas	*	1.43	*	*	6.72	*	*	4.71	*
Soya Bean	*	0.01	*	-	*	*	-	*	*
Fenugreek	*	1.45	*	0.46	5.03	*	*	3.48	*
Gibto	*	*	*	*	*	*	*	*	*
Oilseeds	**9.67**	**6.83**	**-29.37**	*	*	*			
Neug	*	*	*	*	*	*	*	*	*
Line Seed	5.77	*	*	*	*	*	*	*	*
Groundnuts	*	*	*	*	*	*	*	*	*
Sufflower	0.31	0.18	*	*	*	*	*	*	*
Sesame	*	0.31	*	*	*	*	*	*	*
Rapeseed	0.34	0.19	*	*	*	*	*	*	*

* Excluding Gambella Region

Table 2. Estimates of 2004/05(1997 E.C.) and 2005/06(1998 E.C.) Area and Production of Major Belg Season Crops for Private Peasant Holdings in Ethiopia, by Region

Region	Area under major crops ('000 Ha)			Production under major crops ('000 Qt)		
	2004/05 (1997 E.C)	2005/06 (1998 E.C)	% Change	2004/05 (1997 E.C)	2005/06 (1998 E.C)	% Change
Tigray	22.56	19.39	-14.05	33.36	97.02	190.83
Afar	1.23	2.06	67.48	*	*	*
Amhara	132.91	143.56	8.01	170.44	906.94	432.12
Oromiya	473.46	592.03	25.04	1943.51	5706.61	193.62
Somali	11.61	20.9	80.02	59.58	126.21	111.83
Benshangul-Gumz	1.16	1.72	48.28	*	15.72	*
S.N.N.P	339.34	345.31	1.76	4452.42	3288.57	-26.14
Gambela	NA	NA	NA	-	-	-
Harari	0.38	0.22	-42.11	*	2.77	*
Addis Ababa	-	-	-	-	-	-
Dire Dawa	0.15	0.18	20.00	0.25	2.12	748.00
All Regions	**982.8**	**1125.38**	**14.51**	**6670.91**	**10294.23**	**54.32**

Table 3. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Ethiopia

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**4127579.00**	**1125375.09**	**100.00**	**10294233.67**	**100.00**	
Cereals..... .	**3561433.00**	**922056.79**	**81.93**	**9062583.19**	**88.04**	
Teff..... .	392862.00	113065.85	10.05	718783.18	6.98	6.36
Barley..... .	865574.00	210763.84	18.73	1277148.66	12.41	6.06
Wheat..... .	339549.00	110645.65	9.83	877872.47	8.53	7.93
Maize..... .	2619055.00	423989.72	37.68	5750736.80	55.86	13.56
Sorghum..... .	164136.00	44113.89	3.92	266420.23	2.59	6.04
Finger millet..... .	18903.00	1962.86	0.17	3878.52	0.04	1.98
Oats/'Aja'..... .	112740.00	17347.82	1.54	167743.34	1.63	9.67
Rice..... .	*	*	*	-	-	-
Pulses..... .	**2087600.00**	**196488.16**	**17.46**	**1202919.25**	**11.69**	
Faba Beans	90503.00	3658.30	0.33	33831.57	0.33	9.25
Field peas..... .	148927.00	19989.84	1.78	147525.02	1.43	7.38
Haricot beans..... .	1823286.00	147961.92	13.15	888714.54	8.63	6.01
Chick-peas..... .	75843.00	10480.77	0.93	63518.17	0.62	6.06
Lentils..... .	97226.00	11486.66	1.02	57544.64	0.56	5.01
Grass Peas	22409.00	1427.12	0.13	6724.44	0.07	4.71
Soya beans..... .	814.00	11.14	*	*	*	*
Fenugreek..... .	25293.00	1447.80	0.13	5034.44	0.05	3.48
Gibto..... .	917.00	*	*	-	-	-
Oilseeds..... .	**59694.00**	**6830.13**	**0.61**	*****	*****	
Neug..... .	1369.00	*	*	*	*	*
Linseed..... .	27543.00	*	*	*	*	*
Groundnuts..... .	10845.00	*	*	*	*	*
Sufflower..... .	6989.00	180.58	0.02	*	*	*
Sesame..... .	3468.00	312.37	0.03	*	*	*
Rapeseed..... .	10204.00	191.48	0.02	*	*	*

Table 4. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Tigray Region

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**63624.00**	**19385.99**	**100.00**	**97023.92**	**100.00**	
Cereals..... .	**60463.00**	**18725.35**	**96.59**	**92542.03**	**95.38**	
Teff..... .	25034.00	13923.45	71.82	*	*	*
Barley..... .	14833.00	1733.77	8.94	10128.83	10.44	5.84
Wheat..... .	*	*	*	*	*	*
Maize..... .	26118.00	2174.60	11.22	20806.22	21.44	9.57
Sorghum..... .	*	*	*	*	*	*
Finger millet..... .	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-
Pulses..... .	**5086.00**	**660.64**	**3.41**	**4481.89**	**4.62**	
Faba Beans	*	*	*	-	-	-
Field peas..... .	853.00	*	*	*	*	*
Haricot beans..... .	-	-	-	-	-	-
Chick-peas..... .	*	*	*	*	*	*
Lentils..... .	*	*	*	*	*	*
Grass Peas	*	*	*	*	*	*
Soya beans..... .	-	-	-	-	-	-
Fenugreek..... .	*	*	*	*	*	*
Gibto..... .	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	
Neug..... .	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-
Sufflower..... .	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-

Table 5. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Afar Region

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**4228.00**	**2062.05**	**100.00**	*****	*****	
Cereals..... .	**3992.00**	**1468.35**	**71.21**	*****	*****	
Teff..... .	2887.00	780.95	37.87	1932.97	*	2.48
Barley..... .	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-
Maize..... .	*	*	*	*	*	*
Sorghum..... .	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-
Pulses..... .	**1467.00**	**592.98**	**28.76**	*****	*****	
Faba beans..... .	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-
Haricot beans..... .	981.00	330.60	16.03	*	*	*
Chick-peas..... .	968.00	262.37	12.72	*	*	*
Lentils..... .	-	-	-	-	-	-
Grass Peas	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-
Oilseeds..... .	*****	*****	*****	-	-	
Neug..... .	*	*	*	-	-	-
Linseed..... .	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-
Sufflower..... .	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-

Table 6. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Amhara Region

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**526730.00**	**143561.14**	**100.00**	**1041111.07**	**100.00**	
Cereals..... .	**473657.00**	**108955.08**	**75.89**	**906939.55**	**87.11**	
Teff..... .	152732.00	26982.43	18.80	242134.15	23.26	8.97
Barley..... .	228261.00	58279.04	40.60	405359.70	38.94	6.96
Wheat..... .	66476.00	8929.61	6.22	76764.52	7.37	8.60
Maize..... .	137402.00	13179.39	9.18	170935.62	16.42	12.97
Sorghum..... .	*	*	*	*	*	*
Finger millet..... .	*	*	*	-	-	-
Oats/'Aja'..... .	20239.00	1468.35	1.02	11660.33	1.12	7.94
Rice..... .	-	-	-	-	-	-
Pulses..... .	**162104.00**	**34141.93**	**23.78**	**131916.22**	**12.67**	
Faba beans..... .	*	*	*	*	*	*
Field peas..... .	19790.00	1172.31	0.82	6697.73	0.64	5.71
Haricot beans..... .	56220.00	*	*	42066.01	4.04	*
Chick-peas..... .	59734.00	8529.91	5.94	46011.85	4.42	5.39
Lentils..... .	52659.00	5680.47	3.96	24797.38	2.38	4.37
Grass Peas	18187.00	*	*	5685.19	0.55	*
Soya beans..... .	-	-	-	-	-	-
Fenugreek..... .	11775.00	501.74	0.35	2701.67	0.26	5.38
Gibto..... .	*	*	*	-	-	-
Oilseeds..... .	**15690.00**	**464.14**	**0.32**	*****	*****	
Neug..... .	-	-	-	-	-	-
Linseed..... .	13664.00	*	*	*	*	*
Groundnuts..... .	-	-	-	-	-	-
Sufflower..... .	*	*	*	*	*	*
Sesame..... .	-	-	-	-	-	-
Rapeseed..... .	*	*	*	*	*	*

Table 7. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Oromia Region

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**1844559.00**	**592026.54**	**100.00**	**5706610.03**	**100.00**	
Cereals..... .	**1546698.00**	**505129.46**	**85.32**	**5137717.54**	**90.03**	
Teff..... .	149429.00	53425.46	9.02	328484.09	5.76	6.15
Barley..... .	475971.00	135065.93	22.81	792494.69	13.89	5.87
Wheat..... .	253166.00	99521.04	16.81	790804.80	13.86	7.95
Maize..... .	1066705.00	185377.85	31.31	2964986.54	51.96	15.99
Sorghum..... .	51769.00	15614.98	2.64	104534.94	1.83	6.69
Finger millet..... .	*	*	*	*	*	*
Oats/'Aja'..... .	91373.00	15858.20	2.68	156052.43	2.73	9.84
Rice..... .	*	*	*	-	-	-
Pulses..... .	**850869.00**	**81983.73**	**13.85**	**547281.62**	**9.59**	
Faba beans..... .	35872.00	1357.36	0.23	13262.83	0.23	9.77
Field peas..... .	98879.00	17048.09	2.88	130121.37	2.28	7.63
Haricot beans..... .	723648.00	55914.25	9.44	356014.98	6.24	6.37
Chick-peas..... .	10159.00	1085.62	0.18	*	*	*
Lentils..... .	42119.00	5632.87	0.95	32110.18	0.56	5.70
Grass Peas	3355.00	122.67	0.02	800.98	0.01	6.53
Soya beans..... .	*	*	*	-	-	-
Fenugreek..... .	7528.00	*	*	*	*	*
Gibto..... .	-	-	-	-	-	-
Oilseeds..... .	**21292.00**	*****	*****	*****	*****	
Neug..... .	*	*	*	*	*	*
Linseed..... .	11550.00	*	*	*	*	*
Groundnuts..... .	*	*	*	-	-	-
Sufflower..... .	*	*	*	-	-	-
Sesame..... .	*	*	*	*	*	*
Rapeseed..... .	*	*	*	*	*	*

Table 8. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Somale Region

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**34310.00**	**20904.61**	**100.00**	**126258.73**	**100.00**	
Cereals..... .	**33858.00**	**20536.47**	**98.24**	**126206.85**	**99.96**	
Teff..... .	-	-	-	-	-	-
Barley..... .	660.00	*	*	*	*	*
Wheat..... .	4316.00	564.59	2.70	2367.81	1.88	4.19
Maize..... .	33486.00	19548.04	93.51	121799.64	96.47	6.23
Sorghum..... .	1656.00	364.28	1.74	1951.08	1.55	5.36
Finger millet..... .	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-
Pulses..... .	**3971.00**	**324.49**	**1.55**	*****	*****	
Faba beans..... .	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-
Haricot beans..... .	3971.00	324.49	1.55	*	*	*
Chick-peas..... .	*	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-
Grass Peas	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-
Oilseeds..... .	**470.00**	*****	*****	-	-	
Neug..... .	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-
Sufflower..... .	-	-	-	-	-	-
Sesame..... .	*	*	*	-	-	-
Rapeseed..... .	*	*	*	-	-	-

Table 9. Cropland Area, Production and Yield of Major Belg Crops For Private peasant Holdings For Belg Season 2005/06(1998E.C.)

Benshangul-Gumuz Region

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**13824.00**	**1724.30**	**100.00**	**15718.55**	**100.00**	
Cereals..... .	**6217.00**	**453.08**	**26.28**	**6920.52**	**44.03**	
Teff..... .	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-
Maize..... .	6217.00	453.08	26.28	6920.52	44.03	15.27
Sorghum..... .	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-
Pulses..... .	**12875.00**	**1271.23**	**73.72**	**8798.02**	**55.97**	
Faba beans..... .	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-
Haricot beans..... .	12875.00	1271.23	73.72	8798.02	55.97	6.92
Chick-peas..... .	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-
Grass Peas	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	
Neug..... .	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-
Sufflower..... .	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-

Table 10. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

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

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**1632861.00**	**345306.00**	**100.00**	**3288568.31**	**100.00**	
Cereals..... .	**1432880.00**	**266563.94**	**77.20**	**2776975.27**	**84.44**	
Teff..... .	62780.00	17953.55	5.20	98064.25	2.98	5.46
Barley..... .	145829.00	15625.15	4.53	69077.13	2.10	4.42
Wheat..... .	11588.00	987.86	0.29	2653.06	0.08	2.69
Maize..... .	1344563.00	202403.89	58.62	2452187.31	74.57	12.12
Sorghum..... .	106840.00	27742.39	8.03	151444.48	4.61	5.46
Finger millet..... .	17437.00	1810.14	0.52	3518.47	0.11	1.94
Oats/'Aja'..... .	1129.00	*	*	*	*	*
Rice..... .	*	*	*	-	-	-
Pulses..... .	**1047343.00**	**77334.08**	**22.40**	**506727.99**	**15.41**	
Faba beans..... .	50647.00	2039.50	0.59	16612.34	0.51	8.15
Field peas..... .	29404.00	1723.32	0.50	10377.00	0.32	6.02
Haricot beans..... .	1021707.00	73201.23	21.20	478518.15	14.55	6.54
Chick-peas..... .	2007.00	191.26	0.06	796.97	0.02	4.17
Lentils..... .	1990.00	114.20	0.03	316.64	0.01	2.77
Grass Peas	*	*	*	-	-	-
Soya beans..... .	744.00	11.08	*	*	*	*
Fenugreek..... .	4650.00	28.48	0.01	*	*	*
Gibto..... .	*	*	*	-	-	-
Oilseeds..... .	**22122.00**	**1407.98**	**0.41**	**4865.04**	**0.15**	
Neug..... .	*	*	*	*	*	*
Linseed..... .	2306.00	39.03	0.01	*	*	*
Groundnuts..... .	8945.00	*	*	*	*	*
Sufflower..... .	6062.00	153.06	0.04	*	*	*
Sesame..... .	1936.00	*	*	*	*	*
Rapeseed..... .	2998.00	*	*	*	*	*

Table 11. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Harari Region

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**4083.00**	**221.37**	**100.00**	**2773.97**	**100.00**	
Cereals..... .	*****	*****	*****	*****	*****	
Teff..... .	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-
Maize..... .	*	*	*	*	*	*
Sorghum..... .	*	*	*	-	-	-
Finger millet..... .	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-
Pulses..... .	**3735.00**	**178.40**	**80.59**	**2422.03**	**87.31**	
Faba beans..... .	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-
Haricot beans..... .	3735.00	178.40	80.59	2422.03	87.31	13.58
Chick-peas..... .	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-
Grass Peas	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	
Neug..... .	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-
Sufflower..... .	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-

Table 12. Cropland Area, Production and Yield of Major Belg Crops For Private Peasant Holdings For Belg Season 2005/06(1998E.C.)

Dire Dawa

Crop Name	Number Of Holders	Cropland Area In Hectares	%	Production In Quintals	%	Yield QT/HA
Grain Crops	**3358.00**	**183.09**	**100.00**	**2118.13**	**100.00**	
Cereals..... .	**3235.00**	**182.11**	**99.46**	**2108.17**	**99.53**	
Teff..... .	-	-	-	-	-	-
Barley..... .	*	*	*	-	-	-
Wheat..... .	-	-	-	-	-	-
Maize..... .	3065.00	129.93	70.97	1860.64	87.84	14.32
Sorghum..... .	880.00	50.72	27.70	*	*	*
Finger millet..... .	*	*	*	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-
Pulses..... .	*****	*****	*****	*****	*****	
Faba beans..... .	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-
Haricot beans..... .	*	*	*	*	*	*
Chick-peas..... .	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-
Grass Peas	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-
Oilseeds..... .	*****	*****	*****	-	-	
Neug..... .	-	-	-	-	-	-
Linseed..... .	*	*	*	-	-	-
Groundnuts..... .	-	-	-	-	-	-
Sufflower..... .	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-

APPENDIX II Standard Errors and Coefficient of variations for the Estimates of Number of Holders, Area and Production of Major Crops, 2005/6 (1998 E.C) Agricultural Sample Survey, Belg Season

Table 1 Estimates for National

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	4127579	93281.2		2.26	1125375.1	58033.73		5.16	10294233.7	576208.79		5.6
Cereals.....	3561433	91049.85		2.56	922056.79	52456.99		5.69	9062583.19	548235.71		6.05
Teff.....	392862	37145.3		9.46	113065.85	14633.52		12.94	718783.18	132050.65		18.37
Barley.....	865574	59595.43		6.89	210763.84	24629.62		11.69	1277148.66	161740.79		12.66
Wheat.....	339549	39069.09		11.51	110645.65	23345.56		21.1	877872.47	220777.59		25.15
Maize.....	2619055	76009.35		2.9	423989.72	21850.68		5.15	5750736.8	342811.71		5.96
Sorghum.....	164136	14531.89		8.85	44113.89	6435.85		14.59	266420.23	50473.56		18.95
Finger millet.....	18903	3361.27		17.78	1962.86	401.29		20.44	3878.52	1664.96		42.93
Oats/'Aja'.....	112740	19053.25		16.9	17347.82	4566.73		26.32	167743.34	45332.35		27.02
Rice.....	926	543.13		58.64	167.17	147.01		87.94	-	-		-
Pulses.....	2087600	66363.69		3.18	196488.16	13848.77		7.05	1202919.25	87208.27		7.25
Horse.beans.....	90503	11123.72		12.29	3658.3	598.5		16.36	33831.57	7231.77		21.38
Field.peas.....	148927	21614.52		14.51	19989.84	4097.19		20.5	147525.02	44580.36		30.22
Haricot beans.....	1823286	60990.03		3.35	147961.92	12266.46		8.29	888714.54	60850.82		6.85
Chick-peas.....	75843	13376.62		17.64	10480.77	1985.55		18.94	63518.17	13778.99		21.69
Lentils.....	97226	17097.85		17.59	11486.66	2522.63		21.96	57544.64	15385.00		26.74
Vetch.....	22409	5154.19		23	1427.12	654.91		45.89	6724.44	2564.20		38.13
Soya beans.....	814	349.42		42.9	11.14	5.49		49.25	26.44	24.65		93.24
Fenugreek.....	25293	5201.01		20.56	1447.8	583.86		40.33	5034.44	1861.63		36.98
Gibto.....	917	440.69		48.06	24.6	19.48		79.2	-	-		-
Oilseeds.....	59694	9340.34		15.65	6830.13	2903.78		42.51	28731.22	14471.47		50.37
Neug.....	1369	661.59		48.34	112.5	65.69		58.39	211.15	132.03		62.53
Linseed.....	27543	7437.21		27	4896.92	2835.42		57.9	21858.36	14235.77		65.13
Groundnuts.....	10845	3708.45		34.2	1136.28	630.55		55.49	3628.98	2340.90		64.51
Sufflower.....	6989	1528.83		21.88	180.58	53.81		29.8	1090.39	568.81		52.17
Sesame.....	3468	1107.57		31.94	312.37	125.03		40.02	1184.59	779.40		65.8
Rapeseed.....	10204	3852.56		37.76	191.48	89.23		46.6	757.74	620.96		81.95

Table 2 Estimates for Tigray Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	63624	11161.83		17.54	19385.99	7412.22		38.23	97023.92	30927.99		31.88
Cereals.....	60463	11014.21		18.22	18725.35	7423.77		39.65	92542.03	30871.96		33.36
Teff.....	25034	9213.31		36.8	13923.45	6632.36		47.63	48167.72	26170.26		54.33
Barley.....	14833	4835.05		32.6	1733.77	700.02		40.38	10128.83	4138.91		40.86
Wheat.....	4003	2533.7		63.3	642.55	405.89		63.17	5282.28	3679.03		69.65
Maize.....	26118	5723.1		21.91	2174.6	476.05		21.89	20806.22	4952.98		23.81
Sorghum.....	1734	1705.02		98.33	250.98	247.01		98.42	8156.97	8027.85		98.42
Finger millet.....	-	-		-	-	-		-	-	-		-
Oats/'Aja'.....	-	-		-	-	-		-	-	-		-
Rice.....	-	-		-	-	-		-	-	-		-
Pulses.....	5086	1885.26		37.07	660.64	277.09		41.94	4481.89	2220.73		49.55
Horse.beans.....	159	159.46		100.11	6.06	6.07		100.11	-	-		-
Field.peas.....	853	426.06		49.95	46.12	24.22		52.52	328.92	199.27		60.58
Haricot beans.....	-	-		-	-	-		-	-	-		-
Chick-peas.....	2894	1661.86		57.42	411.61	240.36		58.39	3311.71	2106.73		63.61
Lentils.....	458	330.28		72.16	59.13	46.2		78.14	320.45	300.46		93.76
Vetch.....	367	259.08		70.58	42.93	31.29		72.87	238.28	171.21		71.85
Soya beans.....	-	-		-	-	-		-	-	-		-
Fenugreek.....	1339	696.34		52	94.78	67.25		70.95	282.54	170.99		60.52
Gibto.....	-	-		-	-	-		-	-	-		-
Oilseeds.....	-	-		-	-	-		-	-	-		-
Neug.....	-	-		-	-	-		-	-	-		-
Linseed.....	-	-		-	-	-		-	-	-		-
Groundnuts.....	-	-		-	-	-		-	-	-		-
Sufflower.....	-	-		-	-	-		-	-	-		-
Sesame.....	-	-		-	-	-		-	-	-		-
Rapeseed.....	-	-		-	-	-		-	-	-		-

Table 3 Estimates for Afar Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	4228	1195.01		28.27	2062.05	578.49		28.05	14050.97	7336.20		52.21
Cereals.....	3992	1171.54		29.35	1468.35	472.93		32.21	12821.33	7322.38		57.11
Teff.....	2887	1050.27		36.38	780.95	280.26		35.89	1932.97	776.79		40.19
Barley.....	-	-		-	-	-		-	-	-		-
Wheat.....	-	-		-	-	-		-	-	-		-
Maize.....	1130	678.95		60.11	687.39	420.56		61.18	10888.36	7375.99		67.74
Sorghum.....	-	-		-	-	-		-	-	-		-
Finger millet.....	-	-		-	-	-		-	-	-		-
Oats/'Aja'.....	-	-		-	-	-		-	-	-		-
Rice.....	-	-		-	-	-		-	-	-		-
Pulses.....	1467	510.55		34.8	592.98	231.36		39.02	1229.64	757.67		61.62
Horse.beans.....	-	-		-	-	-		-	-	-		-
Field.peas.....	-	-		-	-	-		-	-	-		-
Haricot beans.....	981	328.11		33.44	330.6	135.57		41.01	833.5	548.42		65.8
Chick-peas.....	968	409.83		42.32	262.37	119.27		45.46	396.14	218.13		55.06
Lentils.....	-	-		-	-	-		-	-	-		-
Vetch.....	-	-		-	-	-		-	-	-		-
Soya beans.....	-	-		-	-	-		-	-	-		-
Fenugreek.....	-	-		-	-	-		-	-	-		-
Gibto.....	-	-		-	-	-		-	-	-		-
Oilseeds.....	97	66.47		68.82	0.73	0.51		70.64	-	-		-
Neug.....	97	66.47		68.82	0.73	0.51		70.64	-	-		-
Linseed.....	-	-		-	-	-		-	-	-		-
Groundnuts.....	-	-		-	-	-		-	-	-		-
Sufflower.....	-	-		-	-	-		-	-	-		-
Sesame.....	-	-		-	-	-		-	-	-		-
Rapeseed.....	-	-		-	-	-		-	-	-		-

Table 4 Estimates for Amhara Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	526730	42777.95		8.12	143561.14	18724.77		13.04	1041111.07	147779.47		14.19
Cereals.....	473657	41230.74		8.7	108955.08	14894.33		13.67	906939.55	136890.78		15.09
Teff.....	152732	25919.06		16.97	26982.43	6253.4		23.18	242134.15	74342.41		30.7
Barley.....	228261	32462.13		14.22	58279.04	12195.01		20.93	405359.7	89336.51		22.04
Wheat.....	66476	16698.65		25.12	8929.61	3460.72		38.76	76764.52	31873.16		41.52
Maize.....	137402	21201.78		15.43	13179.39	2962.08		22.48	170935.62	54983.69		32.17
Sorghum.....	1190	688.17		57.82	83.12	67.46		81.16	85.23	84.85		99.55
Finger millet.....	664	373.26		56.2	33.13	28.13		84.89	-	-		-
Oats/'Aja'.....	20239	5911.36		29.21	1468.35	455.45		31.02	11660.33	3890.60		33.37
Rice.....	-	-		-	-	-		-	-	-		-
Pulses.....	162104	21925.41		13.53	34141.93	10509.88		30.78	131916.22	27806.97		21.08
Horse.beans.....	3825	2534.47		66.26	255.38	228.06		89.3	3956.4	3639.97		92
Field.peas.....	19790	5350.63		27.04	1172.31	427.92		36.5	6697.73	2817.60		42.07
Haricot beans.....	56220	15122.64		26.9	16741.02	9914.98		59.23	42066.01	18046.89		42.9
Chick-peas.....	59734	12454.64		20.85	8529.91	1898.59		22.26	46011.85	11797.82		25.64
Lentils.....	52659	12565.59		23.86	5680.47	1711.15		30.12	24797.38	8890.68		35.85
Vetch.....	18187	4967.75		27.31	1260.67	651.86		51.71	5685.19	2531.44		44.53
Soya beans.....	-	-		-	-	-		-	-	-		-
Fenugreek.....	11775	3557.6		30.21	501.74	204.8		40.82	2701.67	1150.59		42.59
Gibto.....	277	274.37		99.22	0.43	0.43		99.22	-	-		-
Oilseeds.....	15690	5786.47		36.88	464.14	231.46		49.87	2255.3	1565.98		69.44
Neug.....	-	-		-	-	-		-	-	-		-
Linseed.....	13664	5657.56		41.4	439.99	224.2		50.96	2109.59	1521.00		72.1
Groundnuts.....	-	-		-	-	-		-	-	-		-
Sufflower.....	371	257.56		69.37	5.24	4.98		94.96	26.87	26.37		98.17
Sesame.....	-	-		-	-	-		-	-	-		-
Rapeseed.....	1948	1001.08		51.4	18.91	11.04		58.41	118.85	86.22		72.55

Table 5 Estimates for Oromia Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	1844559	70510.23		3.82	592026.54	51847.33		8.76	5706610.03	521553.72		9.14
Cereals.....	1546698	67102.57		4.34	505129.46	47473.18		9.4	5137717.54	497729.12		9.69
Teff.....	149429	23983.63		16.05	53425.46	11183.55		20.93	328484.09	104751.23		31.89
Barley.....	475971	47270.2		9.93	135065.93	21244.05		15.73	792494.69	134101.17		16.92
Wheat.....	253166	35127.59		13.88	99521.04	23082.35		23.19	790804.8	218430.33		27.62
Maize.....	1066705	56044.61		5.25	185377.85	17064.69		9.21	2964986.54	288936.99		9.74
Sorghum.....	51769	10355.7		20	15614.98	5273.08		33.77	104534.94	40600.04		38.84
Finger millet.....	779	565.92		72.67	118.53	86.35		72.85	360.05	357.16		99.2
Oats/'Aja'.....	91373	18106.34		19.82	15858.2	4543.95		28.65	156052.43	45165.08		28.94
Rice.....	680	483.95		71.2	147.48	145.69		98.79	-	-		-
Pulses.....	850869	50870.57		5.98	81983.73	7932.88		9.68	547281.62	74071.46		13.53
Horse.beans.....	35872	7116.14		19.84	1357.36	379.85		27.98	13262.83	4624.05		34.86
Field.peas.....	98879	20083.56		20.31	17048.09	4034.72		23.67	130121.37	44338.76		34.07
Haricot beans.....	723648	46457.34		6.42	55914.25	5942.67		10.63	356014.98	45950.55		12.91
Chick-peas.....	10159	4540.86		44.7	1085.62	513.22		47.27	13001.49	6790.95		52.23
Lentils.....	42119	11581.86		27.5	5632.87	1852.68		32.89	32110.18	12552.09		39.09
Vetch.....	3355	1279.61		38.14	122.67	54.82		44.68	800.98	370.98		46.32
Soya beans.....	71	70.22		99.29	0.06	0.06		99.29	-	-		-
Fenugreek.....	7528	3198.54		42.49	822.81	542.46		65.93	1969.8	1452.35		73.73
Gibto.....	-	-		-	-	-		-	-	-		-
Oilseeds.....	21292	6044.9		28.39	4913.35	2824.14		57.48	21610.87	14183.41		65.63
Neug.....	1068	645.59		60.45	100.84	65		64.46	181.84	128.99		70.94
Linseed.....	11550	4755.47		41.17	4417.63	2826.51		63.98	19673.47	14154.22		71.95
Groundnuts.....	1900	1172.83		61.74	80.17	66.41		82.83	-	-		-
Sufflower.....	555	332.44		59.87	22.27	20.18		90.58	-	-		-
Sesame.....	1150	598.91		52.09	201.72	117.46		58.23	1139.35	778.42		68.32
Rapeseed.....	5170	3411.79		65.99	90.71	65.92		72.68	616.21	614.77		99.77

Table 6 Estimates for Somali Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	34310	5890.83		17.17	20904.61	5290.79		25.31	126258.73	43553.36		34.5
Cereals.....	33858	5857.46		17.3	20536.47	5276.89		25.7	126206.85	43548.37		34.51
Teff.....	-	-		-	-	-		-	-	-		-
Barley.....	660	311.9		47.29	59.56	36.39		61.09	88.31	71.02		80.41
Wheat.....	4316	1963.18		45.49	564.59	248.66		44.04	2367.81	1111.61		46.95
Maize.....	33486	5864.31		17.51	19548.04	5029.55		25.73	121799.64	42722.26		35.08
Sorghum.....	1656	584.04		35.26	364.28	142.67		39.16	1951.08	935.69		47.96
Finger millet.....	-	-		-	-	-		-	-	-		-
Oats/'Aja'.....	-	-		-	-	-		-	-	-		-
Rice.....	-	-		-	-	-		-	-	-		-
Pulses.....	3971	1072.37		27.01	324.49	102.05		31.45	51.88	30.11		58.04
Horse.beans.....	-	-		-	-	-		-	-	-		-
Field.peas.....	-	-		-	-	-		-	-	-		-
Haricot beans.....	3971	1072.37		27.01	324.49	102.05		31.45	51.88	30.11		58.04
Chick-peas.....	79	82.09		103.65	-	-		-	-	-		-
Lentils.....	-	-		-	-	-		-	-	-		-
Vetch.....	-	-		-	-	-		-	-	-		-
Soya beans.....	-	-		-	-	-		-	-	-		-
Fenugreek.....	-	-		-	-	-		-	-	-		-
Gibto.....	-	-		-	-	-		-	-	-		-
Oilseeds.....	470	228.51		48.64	43.66	24.54		56.21	-	-		-
Neug.....	-	-		-	-	-		-	-	-		-
Linseed.....	-	-		-	-	-		-	-	-		-
Groundnuts.....	-	-		-	-	-		-	-	-		-
Sufflower.....	-	-		-	-	-		-	-	-		-
Sesame.....	382	210.6		55.17	43.2	24.54		56.81	-	-		-
Rapeseed.....	88	88.7		100.7	0.47	0.47		100.7	-	-		-

Table 7 Estimates for Benshangul-Gumuz Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	13824	4095.03		29.62	1724.3	528.14		30.63	15718.55	4852.01		30.87
Cereals.....	6217	2452.01		39.44	453.08	174.34		38.48	6920.52	3295.03		47.61
Teff.....	-	-		-	-	-		-	-	-		-
Barley.....	-	-		-	-	-		-	-	-		-
Wheat.....	-	-		-	-	-		-	-	-		-
Maize.....	6217	2452.01		39.44	453.08	174.34		38.48	6920.52	3295.03		47.61
Sorghum.....	-	-		-	-	-		-	-	-		-
Finger millet.....	-	-		-	-	-		-	-	-		-
Oats/'Aja'.....	-	-		-	-	-		-	-	-		-
Rice.....	-	-		-	-	-		-	-	-		-
Pulses.....	12875	3994.17		31.02	1271.23	485.43		38.19	8798.02	3316.69		37.7
Horse.beans.....	-	-		-	-	-		-	-	-		-
Field.peas.....	-	-		-	-	-		-	-	-		-
Haricot beans.....	12875	3994.17		31.02	1271.23	485.43		38.19	8798.02	3316.69		37.7
Chick-peas.....	-	-		-	-	-		-	-	-		-
Lentils.....	-	-		-	-	-		-	-	-		-
Vetch.....	-	-		-	-	-		-	-	-		-
Soya beans.....	-	-		-	-	-		-	-	-		-
Fenugreek.....	-	-		-	-	-		-	-	-		-
Gibto.....	-	-		-	-	-		-	-	-		-
Oilseeds.....	-	-		-	-	-		-	-	-		-
Neug.....	-	-		-	-	-		-	-	-		-
Linseed.....	-	-		-	-	-		-	-	-		-
Groundnuts.....	-	-		-	-	-		-	-	-		-
Sufflower.....	-	-		-	-	-		-	-	-		-
Sesame.....	-	-		-	-	-		-	-	-		-
Rapeseed.....	-	-		-	-	-		-	-	-		-

Table 8 Estimates for SNNP Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	1632861	41484.93		2.54	345306	15671.57		4.54	3288568.31	187688.90		5.71
Cereals.....	1432880	43860.87		3.06	266563.94	13891.61		5.21	2776975.27	176561.78		6.36
Teff.....	62780	6839.06		10.89	17953.55	2428.21		13.52	98064.25	15883.13		16.2
Barley.....	145829	15488		10.62	15625.15	2469.64		15.81	69077.13	13371.99		19.36
Wheat.....	11588	1824.28		15.74	987.86	130.92		13.25	2653.06	517.53		19.51
Maize.....	1344563	45964.61		3.42	202403.89	12318.35		6.09	2452187.31	170576.10		6.96
Sorghum.....	106840	10004.65		9.36	27742.39	3678.08		13.26	151444.48	28876.53		19.07
Finger millet.....	17437	3292.11		18.88	1810.14	390.88		21.59	3518.47	1626.21		46.22
Oats/'Aja'.....	1129	492.36		43.63	21.26	11.46		53.89	30.58	21.66		70.81
Rice.....	247	246.53		100	19.7	19.7		100	-	-		-
Pulses.....	1047343	36247.78		3.46	77334.08	4245.09		5.49	506727.99	36445.61		7.19
Horse.beans.....	50647	8163.87		16.12	2039.5	402.34		19.73	16612.34	4203.25		25.3
Field.peas.....	29404	5918.38		20.13	1723.32	569.47		33.05	10377	3674.80		35.41
Haricot beans.....	1021707	36260.37		3.55	73201.23	4071.41		5.56	478518.15	35407.52		7.4
Chick-peas.....	2007	509.84		25.4	191.26	48.92		25.58	796.97	262.56		32.94
Lentils.....	1990	440.46		22.14	114.2	33.12		29	316.64	95.18		30.06
Vetch.....	500	427.23		85.5	0.85	0.72		84.6	-	-		-
Soya beans.....	744	342.3		46.02	11.08	5.49		49.52	26.44	24.65		93.24
Fenugreek.....	4650	1917.93		41.24	28.48	12.66		44.45	80.44	56.95		70.80
Gibto.....	641	344.86		53.84	24.17	19.48		80.59	-	-		-
Oilseeds.....	22122	4142.54		18.73	1407.98	634.02		45.03	4865.04	2408.71		49.51
Neug.....	204	128.45		62.91	10.94	9.46		86.46	29.32	28.19		96.15
Linseed.....	2306	830.07		36	39.03	13.84		35.47	75.3	41.51		55.13
Groundnuts.....	8945	3518.11		39.33	1056.11	627.04		59.37	3628.98	2340.90		64.51
Sufflower.....	6062	1469.85		24.25	153.06	49.63		32.43	1063.52	568.20		53.43
Sesame.....	1936	907.55		46.87	67.45	35.11		52.05	45.24	39.19		86.65
Rapeseed.....	2998	1480.49		49.39	81.4	59.1		72.61	22.68	14.58		64.27

Table 9 Estimates for Harari Region

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	4083	872.56	21.37		221.37	60.79	27.46		2773.97	844.88	30.46	
Cereals.....	434	259.35	59.76		42.97	28.14	65.48		351.93	288.7	82.03	
Teff.....	-	-	-		-	-	-		-	-	-	
Barley.....	-	-	-		-	-	-		-	-	-	
Wheat.....	-	-	-		-	-	-		-	-	-	
Maize.....	368	256	69.52		35.55	27.76	78.07		351.93	288.7	82.03	
Sorghum.....	66	46.04	70.04		7.41	6.1	82.35		-	-	-	
Finger millet.....	-	-	-		-	-	-		-	-	-	
Oats/'Aja'.....	-	-	-		-	-	-		-	-	-	
Rice.....	-	-	-		-	-	-		-	-	-	
Pulses.....	3735	878	23.51		178.4	53.28	29.87		2422.03	827.39	34.16	
Horse.beans.....	-	-	-		-	-	-		-	-	-	
Field.peas.....	-	-	-		-	-	-		-	-	-	
Haricot beans.....	3735	878	23.51		178.4	53.28	29.87		2422.03	827.39	34.16	
Chick-peas.....	-	-	-		-	-	-		-	-	-	
Lentils.....	-	-	-		-	-	-		-	-	-	
Vetch.....	-	-	-		-	-	-		-	-	-	
Soya beans.....	-	-	-		-	-	-		-	-	-	
Fenugreek.....	-	-	-		-	-	-		-	-	-	
Gibto.....	-	-	-		-	-	-		-	-	-	
Oilseeds.....	-	-	-		-	-	-		-	-	-	
Neug.....	-	-	-		-	-	-		-	-	-	
Linseed.....	-	-	-		-	-	-		-	-	-	
Groundnuts.....	-	-	-		-	-	-		-	-	-	
Sufflower.....	-	-	-		-	-	-		-	-	-	
Sesame.....	-	-	-		-	-	-		-	-	-	
Rapeseed.....	-	-	-		-	-	-		-	-	-	

Table 10 Estimates for Dire Dawa Administrative Council

Crop	Holder				Area				Production			
	Estimate	S.E.	C.V	In %	Hectares	S.E.	C.V	In %	Quintals	S.E.	C.V	In %
TOTAL	3358	699.8	20.84		183.09	50.11	27.37		2118.13	935.97	44.19	
Cereals.....	3235	704.02	21.76		182.11	50.2	27.56		2108.17	936.66	44.43	
Teff.....	-	-	-		-	-	-		-	-	-	
Barley.....	21	22.21	105.39		0.39	0.42	105.39		-	-	-	
Wheat.....	-	-	-		-	-	-		-	-	-	
Maize.....	3065	693.23	22.61		129.93	42.14	32.43		1860.64	893.35	48.01	
Sorghum.....	880	344.1	39.11		50.72	22.34	44.04		247.53	185.00	74.74	
Finger millet.....	24	24.24	101.53		1.06	1.08	101.53		-	-	-	
Oats/'Aja'.....	-	-	-		-	-	-		-	-	-	
Rice.....	-	-	-		-	-	-		-	-	-	
Pulses.....	150	95.31	63.62		0.71	0.47	65.86		9.96	8.49	85.27	
Horse.beans.....	-	-	-		-	-	-		-	-	-	
Field.peas.....	-	-	-		-	-	-		-	-	-	
Haricot beans.....	150	95.31	63.62		0.71	0.47	65.86		9.96	8.49	85.27	
Chick-peas.....	-	-	-		-	-	-		-	-	-	
Lentils.....	-	-	-		-	-	-		-	-	-	
Vetch.....	-	-	-		-	-	-		-	-	-	
Soya beans.....	-	-	-		-	-	-		-	-	-	
Fenugreek.....	-	-	-		-	-	-		-	-	-	
Gibto.....	-	-	-		-	-	-		-	-	-	
Oilseeds.....	23	24.49	107.13		0.27	0.29	107.13		-	-	-	
Neug.....	-	-	-		-	-	-		-	-	-	
Linseed.....	23	24.49	107.13		0.27	0.29	107.13		-	-	-	
Groundnuts.....	-	-	-		-	-	-		-	-	-	
Sufflower.....	-	-	-		-	-	-		-	-	-	
Sesame.....	-	-	-		-	-	-		-	-	-	
Rapeseed.....	-	-	-		-	-	-		-	-	-	

Form CPSS 98/8A

APPENDIX_IV: Questionnaires used for the 2005/06 (1998E.C) Belg Season Crop Production Sample Servey

Crop Production Sample Survey
Assessment of Belg Crop Conditions- 2005/0

NOTE:- This Form Should be Filled Out For Mixed Crops According to their Type in pure Stands

Part I – Identification Particulars

1	2	3	4	5	6
Region	Zone	wereda	Farmers' Association / Settlement	Enumeration Area /village	Crop Name

Part II - Assessment of Crop Conditions (For Belg Season)

1	2	3	4	5	6	7	8	9	10	11
Sr. No.	Name of Holder	Household ID Numb	Holder ID Number	Number Of Fields	Belg Season Crop Productivity Compared to This Year Meher Season: Increase = 1, Equal/ No change = 2, Decrease = 3 (Code)	If Increase: Quantity in Percent	If Increase: One Major Reason for Increase (Code)	If Decrease: Quantity in Percent	If Decrease: One Major Reason for Decrease (Code)	Change In Percent
01										
02										
03										
04										
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										

Form BCPSS98/8B

Questionnaires used for the 2005/06(1998E.C) Belg Season Crop Production Sample Survey Assessment of Belg crop condition

Part I –Identification Particulars

1	2	3	4	5
Region	**Zone**	**Wereda**	**Farmers' Association / Settlement**	**Enumeration Area/ village**

Part II - Assessment of Crop Conditions (For Belg Season)

1	2	3		4			5		
Crop Name	**Code**	**Expected Belg Crop Productivity Compared to Last Year Meher Season Crop**							
		Increase = 1 Equal/No Change = 2 Decrease = 3		**If increase/Decrease Quantity of increase/Decrease In percent**			**Expected Quantity of Productivity Change In Percent**		
			Code						
Teff	07								
Barley	01								
Wheat	08								
Maize	02								
Sorghum	06								
Finger millet	03								
Oats/'aja'	04								
Rice	05								
Horse beans	13								
Field peas	15								
Haricot beans	12								
Chick peas	11								
Lentils	14								
Grass peas/vetch	16								
Fenugreek	36								
Gibto	17								
Niger seed	25								
Lin seed/flax	23								
Ground nuts	24								
Sufflower	28								
Sesame	27								
Rape seed	26								
Soya beans	18								

	Name	**Date**	**Signature**
Development Agent (Respondent)			
Data Collector			
Supervisor			

✹ Data in this questionnaire should be collected from the Development Agent only by interview method.

Form BCPSS 98/8C

Questionnaires used for the 2005/06(1998E.C)
Belg Season Crop Production Sample Survey
Assessment of Belg crop condition

Part I –Identification Particulars

1	2	3	4	5
Region	**Zone**	**Wereda**	**Farmers' Association / Settlement**	**Enumeration Area /village**

Part II - Assessment of Crop Conditions (For Belg Season)

1	2	3	4	5					
Crop Name	**Code**	**Expected Belg Crop Productivity Compared to Last Year Meher Season Crop**							
		Increase = 1 Equal/No change = 2 Decrease = 3		**If increase/Decrease Quantity of increase/Decrease In percent**			**Expected Quantity of Productivity Change In Percent**		
			Code						
Teff	07								
Barley	01								
Wheat	08								
Maize	02								
Sorghum	06								
Finger millet	03								
Oats/'aja'	04								
Rice	05								
Horse beans	13								
Field peas	15								
Haricot beans	12								
Chick peas	11								
Lentils	14								
Grass peas/vetch	16								
Fenugreek	36								
Gibto	17								
Niger seed	25								
Lin seed/flax	23								
Ground nuts	24								
Sufflower	28								
Sesame	27								
Rape seed	26								
Soya beans	18								

	Name	**Date**	**Signature**
Chairman of Farmers' Association / Settlement (Respondent)			
Data Collector			
Supervisor			

✹ Data in this questionnaire should be collected from the Farmers' Association/settlement chair person by interview method.