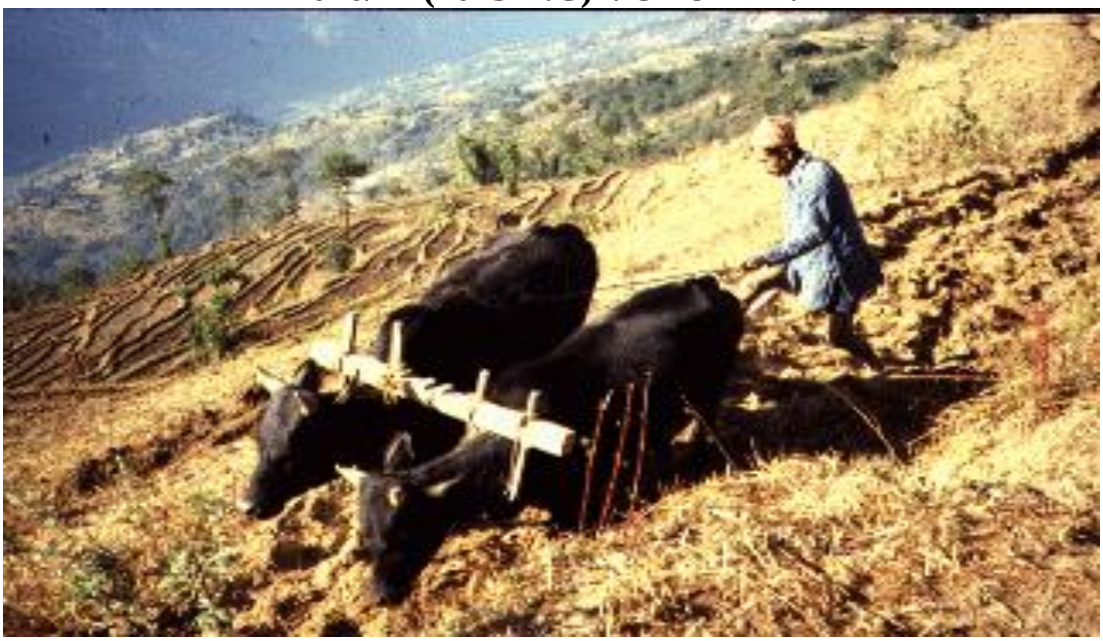
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

CENTRAL STATISTICAL AGENCY

AGRICULTURAL SAMPLE SURVERY
2020/21 (2013 E.C) VOLUME V



REPORT ON AREA, PRODUCTION AND FARM MANAGEMENT PRACTICE OF BELG SEASON CROPS FOR PRIVATE PEASANT HOLDINGS

ADDIS ABABA
AUGUST, 2021

---

578 STATISTICAL BULLETIN 578

Table of Contents

Table of Content……I
List of Tables……..II
List of Figures……..…….III
Abbreviations……...IV

CHAPTER I 1

1 INTRODUCTION AND OBJECTIVES OF THE SURVEY 1
1.1 INTRODUCTION 1
1.2 OBJECTIVES OF THE SURVEY 2
1.3 NUMBER OF EA'S AND HOUSEHOLDS COVERED IN BELG, 2013 EC (2020/21) SURVEY 2

CHAPTER II 3

2. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING 3
2.1 COVERAGE 3
2.2 SAMPLING FRAME 3
2.3 SAMPLE DESIGN AND SELECTION SCHEME 3
2.4 FIELD ORGANIZATION 4
2.5 TRAINING OF THE FIELD STAFF 4
2.6 METHODS OF DATA COLLECTION 5
2.7 DATA PROCESSING 6
2.8 BASIC CONCEPTS AND DEFINITIONS 8

CHAPTER III 11

3 SUMMARY OF MAJOR FINDINGS OF THESURVEY 11
3.1 AREA AND PRODUCTION 11
3.2 ESTIMATES OF THE 2020/21 (2013 E.C) TOTAL CROP LAND AREA AND PRODUCTION OF MAJOR CROPS, MEHER AND BELG SEASONS 13

CHAPTER IV 33

4 FARM MANAGEMENT PRACTISES OF THE 2020/21 (2013 E.C) BELG SEASON .. 33
4.1 INTRODUCTION 33
4.2 SUMMARY OF THE FARM MANAGEMENT PRACTICES OF THE 2020/21 (2013 E.C.) BELG SEASON AGRICULTURAL SAMPLE SURVEY 34
4.3 FERTLIZER APPLIED AREA AND FERTLIZER TYPE USED 36
4.4 THE USE OF NATURAL FERTLIZER 38
4.5. THE USE OF COMMERCIAL FERTLIZERS 38
4.6. ALL CROPLAND AREA AND TRENDS OF THE USE OF COMMERCIAL 42
FERTLIZERS 42
4.7. THE USE OF IMPROVED SEEDS 43
4.8 NUMBER OF HOLDERS REPORTING CROP DAMAGE BY CAUSES OF DAMAGE .. 46

APPENDIX I 115

APPENDIX II 119

APPENDIX III 131

APPENDIX IV 138

List of Tables

Table 0.Number of EA's and Households Covered in Belg, 2020/21 (2013 E.C) Survey……2

Summary Table 1: Cropland Area and Production of Major Belg Crops: Private PeasantHoldings, 2020/21 (2013 E.C) ……11

Summary Table 2: Summary of National Grain Cropland Area and Production of Meher season, Belg Season and Commercial Farms during 2020/21 (2013 E.C) 11

Summary Table 3. Cropland Area under Major Crops for Private Peasant Holdings For 2020/21 (2013 E.C)Both seasons ..……..12

Summary Table 4. Total Production of Major Crops Harvested by Private Peasant Holdings,2020/21 (2013 E.C)Both Seasons ……...14

Summary Table 5. Estimates of Total Cropland Area and Production for the Meher (main) and Belg (seasons) and Commercial Farms for the Crop Production Year of 2020/21 (2013 E.C)…….19

Table 6. Total Cropland Area and Number of Holders Engaged in 2020/21 (2013 E.C) Belg Season Crop Production ……..…….....32

Table 7. Belg Season Cropland Areas under .. Farm Management Practices for the Production Year of 2018/19 (2011 E.C,) National Level……..…....33

Table 8. Summary of Cropland Area under Improved Farm Management Practices for Private Peasant Holdings, 2020/21 (2013 E.C) Belg season, National…….33

Table 9. Summary of Fertilizer Applied Cropland Area for Private Holdings of 2020/21 (2013 E.C) Belg season, National…….34

Table 10. Number of Holders,Inputs Applied Area and Quantity of Inputs used.....44

Table 21: Holders Applying Inputs by Age Group……...87

Table 22. Holders Applying Inputs by Educational Status……..……91

Table 23. Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage…….……...96

List of Figures

Figure 1 ***Estimates of Total Area under Major Crops for Private peasant Holdings in Ethiopia for Both Seasons 2020/21 (2013 E.C)……13***

Figure 2 ***Estimates of Total Production of Major Crops for Private Holdings in Ethiopia for Both Seasons of 2020/21 (2013 E.C) ….……15***

Figure 3: ***Percentage of Area under Major Belg Season Crops in 2020/21 (2013 E.C), National…….....16***

Figure 4: ***AgSS Belg Season Agriculture Grain Crops Area and Production Over Time…….....17***

Figure 5 ***Percentage Distribution of Chemical Fertilizer Applied Cropland Area by Fertilizer Type for Private Holdings of Belg 2020/21 (2013 E.C)..…...36***

Figure 6. ***Percentage Distribution of Quantity of Chemical Fertilizers Applied by Fertilizer Type for Private Holding of 2020/21 (2013 E.C) Belg season, National ……..37***

Figure 7: All Belg Cropland Area, All Fertilizer Applied Area and Quantity of Commercial Applied Fertilizer Over Time ……..……...38

Figure 8. ***Graphical Representation of Number of Holders Using Inputs by Age 2020/21 (2013 E.C) …….40***

Figure 9. ***Number of Holders Using Different Inputs by Educational status, 2020/21 (2013 E.C), Belg Season…..…….....41***

Figure 10. ***Damaged Cropland Area by Causes of Damage and Crop Category….42***

List of Acronyms

AgSS	***Agricultural Sample Survey***
CSA	***Central Statistical Agency***
CV	***Coefficienct of Varietion***
DAP	***Di Amonium Phosphate***
SE	***Standard Errors***
EA's	***Enumeration Areas***
E.C	***Ethiopian Calencder***
G.C	***Gregorian Calencder***
Ha	***Hectare***
LSF	***Large Scale Farms (Commercial Farms)***
NPS	***Nitrogen, Phosphurs and Sulfure***
Qt	***Quintal***
SNNPR	***Southern Nation Nationalities and Peoples Region***

CHAPTER I

1 INTRODUCTION AND OBJECTIVES OF THE SURVEY

1.1 INTRODUCTION

Agriculture is a dominant sector of Ethiopian economy which makes a lion share contribution to the Gross Domestic Product, employment and foreign exchange earnings. Agriculture is still believed to remain a sector that plays an important role in stimulating the overall economic development of the country in the years to come. This would be realized if and only if strenuous efforts are made by the government and other concerned stakeholders including farmers to increase agricultural production and productivity.Several factors can influence agricultural production and productivity improvement. Among other factors, the increased use of modern farm inputs,modernization of farming activities by using improved farm implementsas well as introduction of modern farming technologies to the sector are the major ones. In order identify, plan, implement and monitor agricultural projects and programs, availability of reliable, comprehensive and timely statistical data on the overall performance of the sector is essential.

Central Statistical Agency (CSA) of Ethiopia has been conducting integrated annual agricultural sample surveys and has been providing the survey results to the ultimate data users for more than three decades. Out of the annual agricultural sample surveys carried out by the CSA, Belg season agricultural sample survey is the one that generates data on crop cultivated area, production and farm management practice for the major Belg season crops for the private peasant holdings annually. In the previous years, two reports were use to be generated from the Belg agricultural sample survey nearly simultaneously which are named as a report on area and production and report on farm management practices. Since the year 2013/14 (2006 E.C.), the Belg season agricultural sample survey findings are compliled and produced in only one report with the basic idea of making the report user friendly and handy. The report contained the data on crop cultivated area and production as well as farm management practices of the private peasant holdings of the major Belg crops.The findings of the 2020/21 (2013 E.C) Belg survey are summarized and presented using tables and graphs at national and regional levels.

1.2 OBJECTIVES OF THE SURVEY

There are two main objectives of the 2020/21 (2013 E.C) Belg season agricultural sample survey. These are to generate basic quantitative information on:

- Crop cultivated area, production and yield of major Belg season crops and
- The use of different farm management practices that includes fertilizer applied area by crop type, the type and quantity of fertilizers used, areas applied with improved seeds and indegineous seeds, areas applied with pesticide, areas under irrigation, and areas under extension package by crop type and category.

Given the objectives, the survey findings are presented in such a way that, first crop cultivated area and production is discussed and then followed by farm management practice findings, subsequently.

1.3 Number of EA's and Households Covered in Belg, 2013 EC (2020/21) Survey

A slight variation on the number of planned and covered EA's of Belg, 2013 EC (2020/21) Survey was observed. This is mainly due to Belg season agricultural activity is highly dependent on the wetheather and the rain fall conditions of the area where Belg crop growing EA's are located.

Table 0. Number of EA's and Households Covered in Belg, 2013 EC (2020/21) Survey

No.	REG	Number of EA'S Planned	Number of EA Covered	Number of Households Covered
1	Afar	22	14	255
2	Amhara	192	168	5,660
3	Oromia	502	453	16,660
4	Somale	20	2	89
5	Benishangul-Gumuz	31	25	1,074
6	SNNP	494	482	26,268
7	Sidama	43	40	1,951
8	Gambela	75	70	1,630
9	Harari	7	4	75
10	Diredewa	8	8	177
	Total covered	**1,394**	**1,266**	**53,839**

CHAPTER II

2. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

2.1 COVERAGE

The 2020/21 (2013 E.C) Annual Agricultural Sample Survey of the Belg season covered the entire rural parts of the country. The survey was planned to cover a total of nearly **1,394** Enumeration Areas (EAs). However, in 128 EAs among the selected EAs, the survey was not successful due to various reasons (mainly due to wheather related conditions). Therefore, the survey was successfully accomplished involving only **1,266** EAs (for detailed information of covered EA's see Table 0 above).

2.2 SAMPLING FRAME

The list of Enumeration Areas (EAs) was obtained from the planned but was not excuted 2018 Population and Housing Census Map (Carthographic) work. From the list of the EAs, a set of sampled EAs were selected based on the sample design proposed for the survey. Once the selection of the sampled EAs was accomplished,a fresh list of households within each selected EA was carried out. The list of agricultural households in each EA was used as a sampling frame from which the agricultural households are finally selected as sources of data.

2.3 SAMPLE DESIGN AND SELECTION SCHEME

In order to select the survey sample, a stratified two-stage cluster sample design was implemented. Enumeration areas are the primary sampling units (PSUs) whereas the agricultural households are the Secondary Sampling Units (SSUs). The sample size for the 2020/21 agricultural sample survey was determined by considering 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 the non-sampling errors, considerable effort was allocated to manage the survey in terms of quality and operational control. With the exception of Harari, and Dire

Dawa, each region was taken to be the domain of estimation. Each zone of the regions / special woredas was adopted as a stratum for which major findings of the survey are reported.

Enumeration areas from each stratum were selected systematically using a probability proportional to size sampling technique (PPS); size being the number of agricultural households. From the fresh list of households prepared at the beginning of the survey, 20 agricultural households within each sampled EA are selected systematically. The estimation procedures of totals, ratios, sampling error and the measurements of precision of estimates (CV) of the survey are given in Appendix-I, II and III.

2.4 FIELD ORGANIZATION

The Central Statistical Agency (CSA) has 25 statistical branch offices located in different parts of the country. Each branch office has its respective branch head, statisticians, field supervisors, enumerators, other supporting staffs and drivers. By the year 2020/21 (2013 E.C), 21 Branch offices are involved in the field operation activities of agricultural sample survey of the Belg season. In order to accomplish the data collection activities, field enumerators are equipped with the necessary survey equipmentssuch as GPS, compass, Tablet, measuring tape, questionnaire, etc. To facilitate the field work of data collection and for field supervision, the branch offices used the available four-wheel drive vehicles. The Addis Ababa, Jijiga and Shire statistical branch offices did not take part on the 2020/21 (2013 E.C) Belg season agricultural sample survey as Belg season farming activities by small holder private holdings are not practiced in the EAs of the branch offices. The 2020/21 (2013 E.C) Belg season agricultural sample survey was not also carried out in the teritery of Mekele CSA branch office due to the war and conflict firedout in the area.

2.5 TRAINING OF THE FIELD STAFF

At the beginning of the survey year, the field staff-training program was carried out for the survey in two-stages. The first stage training was the training of the trainers which was carried out at Central Statistics Agency Head Quarterin Addis Abeba for eight consecutive days. In the first stage training, the trainers and the trainees were the staff from the head office who in turn trained the CSA branch office fieldworkers as of statisticians, field

supervisors and enumerators. That is, the head office proffesionals/experts who were trained in the first stage inturn provided similar trainings for statisticians, field supervisors and enumerators for 13 days in the sewlected Statistical Branch Offices as the center for the second round training. During the second-stage training, the trainee were given detailed classroom training on theobjectives and uses of the AgriculturalSample Survey (AgSS), concepts and definitions of terms used, the method of area measurement, interviewing procedures, etc. The second stage training also included a field practice to reinforce the procedures discussed in the classroom, to identify the boundaries of the households included in the EAs and to practice interviewing, area measurement using GPS and compass rope techniques, etc.

2.6 METHODS OF DATA COLLECTION

The agricultural data for 2020/21 (2013 E.C) Belg season crops were collected from the selected rural agricultural households by interviewing the respondents (subjectively) supported by questionnaire and by measuring physically (objectively) the farm fields (areas) for the selected agricultural households using the modern technologies/equipment and software namely Tablet and Measure Software.

A major characteristic of Ethiopian agriculture is the existence of two well-known crop production seasons named as Meher (main) and Belg (short rain) seasons. Meher is a long rainy season which normally occurs from June to September. The Belg season most often refers to small rainy season which normally occurs from February to May mostly in limited areas of the country. Generally, the Meher season rain provides ideal crop growing moisture for the longer maturing crops.

A point of contention arises with respect to the pure definition of Belg crops. Belg cropping practices are heterogeneous across different parts 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. To help clarify the two-crop season, the following definitions have been used since 1987/88. Belg Season Crops are defined as crops that are harvested during the months of March to August, while crops that are harvested during September to February are considered as Meher season crops.

The time period for data collection on area, production and agricultural practices of the Belg season was from 'Megabit 1 to Ginbot' 30/2011 E.C. (March 8 to June 7, 2019GC). Crop cultivated area data are collected objectively using measurer software that was uploaded on the Tablets, while production data were collected subjectively by interviewing the agricultural holders by questionnaire based personal interview. The percentage change of crop yield expected this year relative to the previous year's yield (condition factor) is collected from both agricultural holders and Development Agents (DAs) within each EA to estimate this year's crop yield subjectively. Data on production of Belg season crops are then, computed by the use of the crop cultivated area estimates and the yield data collected from the sampled holders and DAs.

2.7 DATA PROCESSING

Census and Survey Processing System (CSPro) software was used by data processing experts to design the tablet-based field data collection applications based on the questionnaires prepared for each survey module by subject matter specialits. Validity checks such as ranges, skips and consistencies were included in the application to maintain the quality and field level consistency checking of the data. Computer Assisted Personal Interviewing (CAPI) using tablets technology was used to conduct face-to-face interview, cropland area measurement and others data collection . The collected data was then transferred to the supervisors' tablets using Bluetooth. After checking the quality of data collected by enumerator, supervisors transferred the collected data to the server located at the head office using VPN network connection.

At the head office, further validity checks were done on each question and consistencies between questions. If error is observed during the validity checks, the data were sent back to the field with error repots for correction. After the corrected data was sent back to the head office, further processing was done on the completed survey data. The final stage of the data processing was to summarize the data and produce statistical tables. Estimation of the statistical tables was done using CSPro and the tabulation component of IMPS (Integrated Microcomputer Processing System) software.

a. Data Entry, Editing, Coding and Verification

To insure the quality of the collected data,data editing, coding and verification tasks are very important. For this effect, thiese actitivitires were carriedout during the fieldwork through tablet enabled logical relationship and programmed edit specification programe prepared and and installed on the Ta blet.Therefore, the data editing, coding, entry and verification tasks are accomplished at field during data capturing/collection activities. Further more, data consistency checking activities were handled at head quarter during data analysis.

b. Data Cleaning and Tabulation

Computer edit specifications and logical relationships among different questions/varaibles are prepared for use on Tablet and CSPro software was used for the purpose of data consistency checking. The filled in questionnaire data were entered into personal computers by data encoders of CSA through the use of CSPro. The data enrty task was carriedout/accomplished at field lrvrl during data collection using (that have fully operational data entry system). After the data capturing/entry was accomplished, the data were checked for consistency and cleaned using the data cleaning specifications prepared for this purpose. Finally, tabulation was done on personal computers to produce results as indicated in the tabulation plan.

2.8 BASIC CONCEPTS AND DEFINITIONS

For a better understanding of the data presented in this report, the basic concepts and definitions of some technical terms and terminologies used in the collection of the agricultural sample survey data for 2020/21 (2013 E.C) Belg season are indicatedas follows.

Enumeration Area (EA): An Enumeration Area in the rural parts of the country is a locality that is in most cases less than and in some cases equal to a farmers' association in geographical area and usually it consists of 100 to 150 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 provisions for food or other essentials for living. The persons in the group may pool their incomes and have a common budget. They may be related or unrelated persons, or a combination of both. These persons are taken as members of the household.

Agricultural Household:A household is considered 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.

Holding: A holding is all the land and /or livestock kept, which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone, or with others, regardless of the title, legal form, size or location.

Holder: A holder is a person who exercises management and control over the operations of the agricultural holding and that makes the major decision regarding the utilization of the available resources. The holder has primary technical and economic responsibility for the holding. The holder may operate the holding directly as an owner or as a manager. Under conditions of traditional agricultural holding, a person may be regarded as a holder when the

person operates land or raises livestock in his own right, with or without getting helps from others. In other words, a holder is a person who decides on what, when, where and how to grow crops or raise livestock and the one who has the right to determine the utilization of the products.

Parcel: A parcel of a holding is any piece of land entirely surrounded by land, water, road, forest, etc., which are not part of the holding. A parcel may consist of 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 or mixed crops or any other form of private holding.

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

Meher Season Crops: are thosecrops that are harvested during September (Meskerem) to February (Yekatit).

Irrigated area: refers to the area of land that is purposefully and actually provided with water artificially, 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 crop 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 applied to the soil that is intended to increase the amount of plant nutrients available for crop growth. Fertilizers are usuallycategorized into two which include natural and chemical fertilizers. Examples of natural fertilizers are farmyard manure and wood ashes while that of the chemical 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 harmful to crop. Insecticides, herbicides and fungicides are all considered as pesticides**.**

CHAPTER III

3 SUMMARY OF MAJOR FINDINGS OF THESURVEY

3.1 AREA AND PRODUCTION

The general overview of the 2020/21 (2013 E.C) Belg season agricultural sample survey estimate indicates a total cropland area estimates of about 2,124,387.28 hectare and production of 52,661,970.96 quintal, which includes grain crops, vegetables and root crops in the estimation. It is important to note that a crop named Mung bean/"Masho" was used to be reported as a cereal crop in the previous reports. In this report it is categorized as a pulse crop which is its proper category. With this background, the main findings of the 2020/21 (2013 E.C) Belg season crop production sample survey are presented in this Chapter**.**

3.1.1 Grain Crops: refer to a major crop category that includes cereals, pulses and oil seeds, which are not only the major food crops of country and but also are the main sources of household income and sources of the foreign currency earnings. 2020/21 (2013 E.C) Belg season agricultural sample survey result indicates that a total land area of about 1,748,457.62 hectare was cultivated by the major Belg crops (grains) from which a total grain production of about 14,754,984.98 quintals was estimated at national level. As compared to the production (the most past recent Belg season production) year of the 2018/19 (2011 E.C.) grain cultivated area has decreased by 8.27% and the total production has also decreased by 30.46%. Out of the total Belg season grain cropland area and production, cereals accounted for the largest percentage interms of both crop cultivated area and production.

Cereals accounted for about 1,335,905.95 hectares (76.40%) of the national Belg grain cropland area) and about 12,129,875.99 quintals (82.21% of the total Belg grain production). Following cereals is pulse crops which accounted for about 401,362.65 hectares (22.96% of the total grain area) and about 2,581,034.58 quintals production (which is 17.49% of the total grain production). Moreover, oilseeds are the other category of grain crops produced which accounted for an area of 11,189.03 hectares (0.64% of the total grain area) and 44,074.41 quintals of production (0.30% of total grain produced during the Belg season). (Formore details, see Summary Table 1).

Summary Table 1: Cropland Area and Production of Major Belg Crops: Private Peasant Holdings, 2018/19 (2011 E.C.),Country Level

Crop Category	Total Cropland Area		Total Production	
	in Hectare	%	In Quintals	%
Cereal……	**1,335,905.95**	***76.40***	**12,129,875.99**	***82.21***
Pulses……	**401,362.65**	***22.96***	**2,581,034.58**	***17.49***
Oilseeds……	**11,189.03**	***0.64***	**44,074.41**	***0.30***
Grain crops……	**1,748,457.62**	***100.00***	**14,754,984.98**	***100.00***

Inorder to illustrate the overall performance of the 2020/21 (2013 E.C) crop production year, the total estimated cropland area and production of grain crops for private peasant holders for seasons of Belg, Meher as well as forcommercial farms are presented in the Summary Table 2. By the year 2020/21 (2013 E.C) the overall grain cultivated area estimate is about 15,399,011.00 hectare (Meher, Belg and Commercial farms).

Summary Table 2: Summary of National Grain Cropland Area and Production of Meher season, Belg Season and Commercial Farms during 2020/21 (2013 E.C) **Country Level**

	Grain crops Area (Ha)	%	Grain Production(Qt)	%
Meher season private holdings	**12,979,459.91**	***84.29***	**341,828,693.39**	***92.21***
Belg season private holdings	**1,748,457.62**	***11.35***	**14,754,984.98**	***3.98***
Commercial Farms	**671,093.47**	***4.36***	**14,125,163.50**	***3.81***
Grand total	***15,399,011.00***	***100.00***	***370,708,841.87***	***100.00***

Out of the total grain area estimated, Belg season grain area accounted for about 1,748,457.62 hectares (11.35% of total grain area) where as Meher season grain area accounted for about 12,979,459.91 hectare (84.29% of the total grain area cultivated). Commercial farms grain cultivated area is about 671,093.47 hectares (*4.36*% of the total grain area cultivated).

The total grain crops produced during 2020/21 (2013 E.C) amounts 370,708,841.87 quintals which is increased by 6.37% from the 2018/19 (2011 E.C) total production considering Meher, Belg and commercial farms. Meher season, Belg season and commercial farms

account for about 341,828,693.39 Quintals (92.21%), 14,754,984.98 Quintals (3.98%) and 14,125,163.50 Quintals (3.81%) of the total grain production, respectively for the year 2020/21 (2013 E.C).

3.2 ESTIMATES OF THE 2020/21 (2013 E.C) TOTAL CROP LAND AREA AND PRODUCTION OF MAJOR CROPS, MEHER AND BELG SEASONS

For the year 2020/21 (2013 E.C), the total cropland area cultivated of major crops (grains) of the private peasant holdings during both seasons was estimated to be 14,727,917.54 hectares (commercial not included). Meher season accounts for 12,979,459.91 (88.13%) while Belg season accounts for 1,748,457.63 (11.87%) of grain crops area cultivated during both seasons. The estimated area of grain crops cultivated during both seasons is given in Summary Table 3.

Summary Table 3. Cropland Area under Major Crops for Private Peasant Holdings 2020/21 (2013 E.C), Both Seasons:Country Level

	Total Grain Cropland Area in Hectares during					
	Meher Season		***Belg Season***		***Both seasons Total***	
Crop Type	***Area in Ha***	***%***	***Area in Ha***	***%***	***Area in Ha***	***%***
Cereal	***10,538,341.91***	***81.19***	***1,335,905.95***	***76.40***	***11,874,247.86***	***80.62***
Pulses	***1,674,950.34***	***12.90***	***401,362.65***	***22.96***	***2,076,312.99***	***14.10***
Oilseeds	***766,167.66***	***5.90***	***11,189.03***	***0.64***	***777,356.69***	***5.28***
Total	***12,979,459.91***	***100.00***	***1,748,457.63***	***100.00***	***14,727,917.54***	***100.00***

As indicated in Summary Table 3, cereals accounted for about 11,874,247.86 hectares (80.62% of the total grain cultivated area) while Pulses and Oil crops accounted for about 2,076,312.99 hectare (14.10%) and 777,356.69 hectares (5.28%) of the total grain cropland area, respectively, in both seasons. Graphical representation of the estimates of total area under major crops for private holdings in Ethiopia for both seasons during 2020/21 (2013 E.C), is indicated using Figure 1 as follows.

Figure 1: Estimate of Total Area under Major Crops for Private Peasnt Holdings in Ethiopia for Both Seasons 2020/21 (2013 EC), National Level

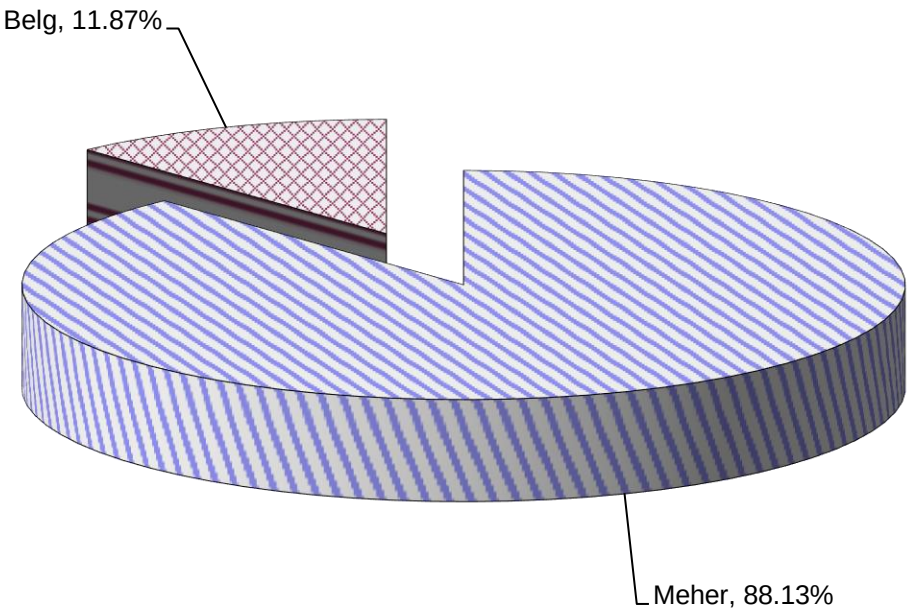


Figure 1 shows that out of the total major crops cultivated area by private peasant holdings during both seasons of 2020/21 (2013 E.C), Belg and Meher seasons account for 11.87% and 88.13%, respectively. Likewise, the overall performance of the major grain crops production estimates for both seasons is illustrated in Summary Table 4.

Summary Table 4. Total Production of Major Crops Harvested by Private Peasant Holdings, 2018/19 (2011 E.C.), Both Seasons: Country Level

Crop Type	*Total Production in Quintals, Harvested during*					
	Meher Season		**Belg Season**		**Both seasons**	
	Production in		**Production in**		**Production in**	
	Quintals	**%**	**Quintals**	**%**	**Quintals**	**%**
Cereal	**302,054,260.58**	***88.36***	**12,129,875.99**	***82.21***	**314,184,136.57**	***88.11***
Pulses	**31,999,988.65**	***9.36***	**2,581,034.58**	***17.49***	**34,581,023.23**	***9.70***
Oil crops	**7,774,444.17**	***2.27***	**44,074.41**	***0.30***	**7,818,518.58**	***2.19***
Total	***341,828,693.40***	***100.00***	**14,754,984.98**	***100.00***	***356,583,678.38***	***100.00***

The Summary Table 4 indicate that cereals production accounted for a bout **314,184,136.57** quintals (88.11% of the total grain crops) produced in both seasons. Pulses and Oil crops account for about **34,581,023.23** quintals (9.70%) and **7,818,518.58** (2.19%), respectively of the total sum of both seasons.

Moreover, the graphical representation of the estimates of the total production of major crops for private holdings in Ethiopia for both seasons during 2020/21 (2013 E.C),is indicated using Figure 2 bellow.

Figure 2: Estimates of Total Production of Major Crops for Private Holdings in Ethiopia for Both Seasons of 2020/21 (2013 EC), National Level

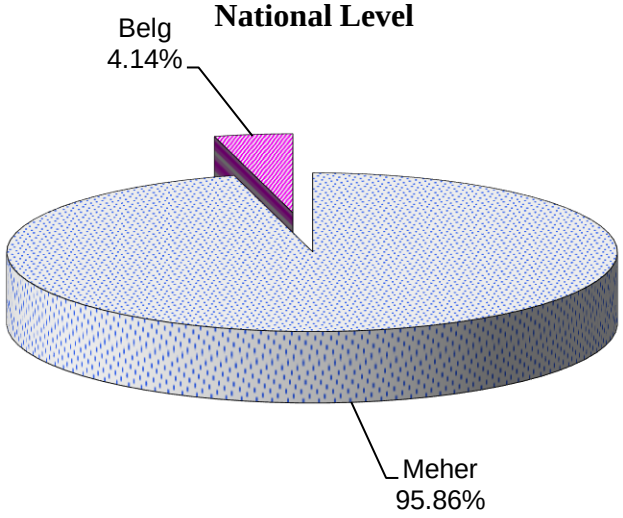
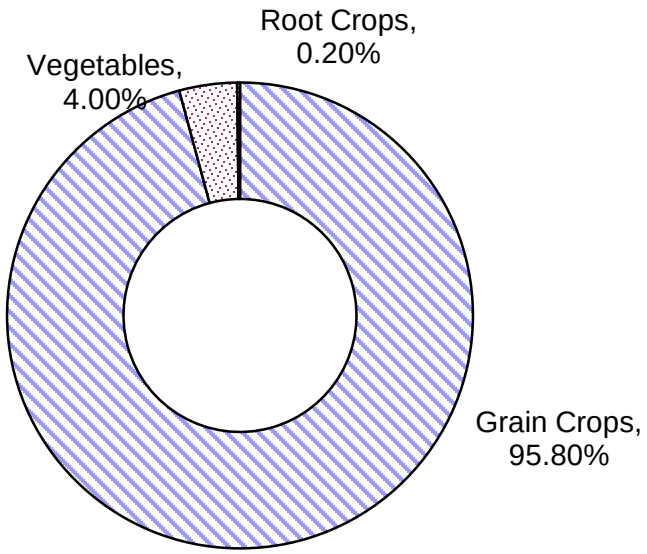


Figure 2 indicates that out of the total of major grain crops produced by private peasant holdings during both seasons of 2020/21 (2013 E.C), Belg accounts for 4.14% (which is about 14,754,984.98 quintals) whereas Meher accounts for 95.86% (about ***341,828,693.40*** quintals).

3.1.3<u>Vegetables</u>: holders living near to urban centres largely practice vegetable farming. Vegetable farms are not commonly practiced by the rural private peasant holders which is evidenced by the small volume of production recorded as indicated by the survey result. This is better indicated in Figure 3. Vegetables account about 3.44% of the area under all crops at national levelduring the Belg season. Out of the total area under vegetables, 85.97% and

5.82% are accounted for Ethiopian Cabbage and Head Cabbage respectively (See Statistical Table 5.1).

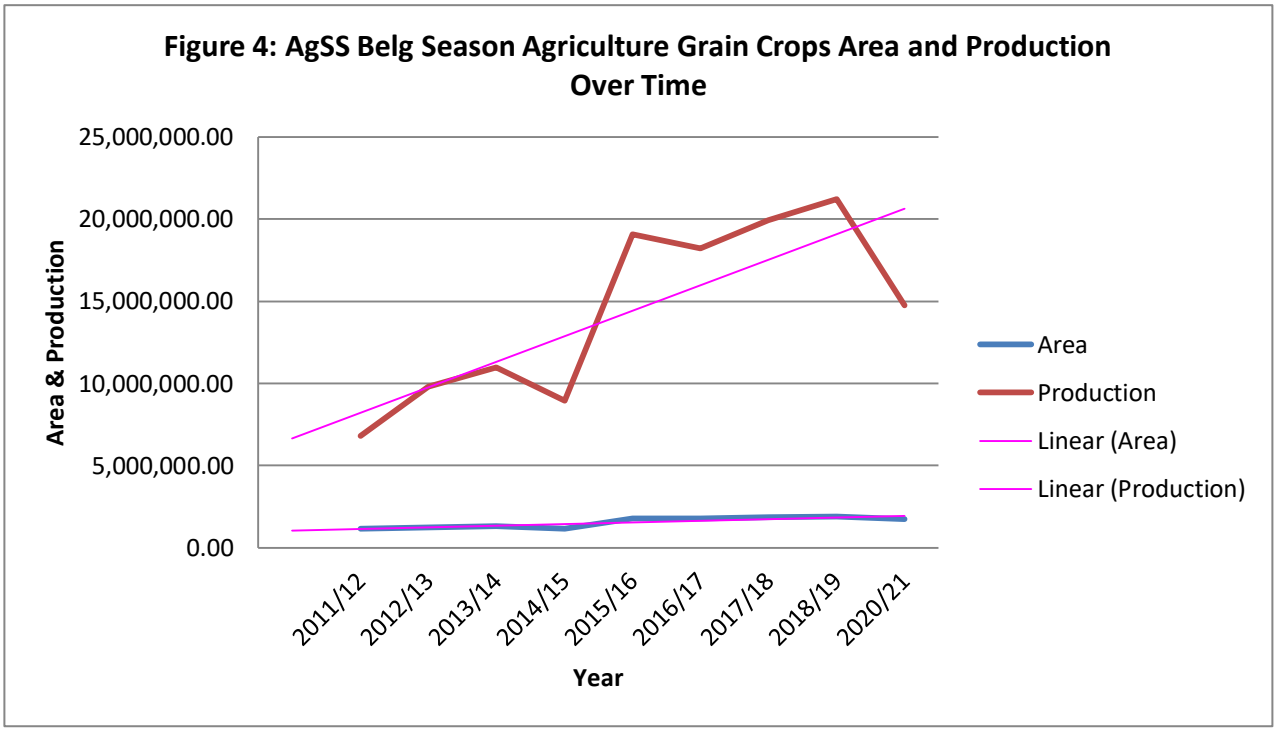
Figure 3: Percentage Distribution of Area under Major Belg Season Crops in 2020/21 (20013EC), National Level



3.1.4. <u>Root Crops</u>: - Root crops such as onion and garlic are indispensable to improve the taste and scent of the food we eat. Other crops like potatoes, sweet potatoes and taro/ Godere are among the major root crops that are consumed in the country. The economic importances of these crops prompt the peasant farm holders to grow many of the root crops as shown in the survey results. For more details, see the statistical Table 5.1. Root crops covered nearly 14.26% of the area under all Belg crops in the country. Potatoes, garlic and onion accounted for 82.30%, 5,29% and 4.04% of the total root crop area cultivated respectively. Interms of production, potatoes, sweet potatoes and onion accounted for 91.26%, 3.68% and 2.55% of the total root crop production respectively.

3.1.5 Trends of Grian Crops Area and Production

Figure 4 below displays trends of Belg season grain crops area and production for the period 2011/12 to 2020/21 (2004-2013EC) for the purpose of comparision and understanding the changes over time. Thus, the trend exhibits, annualy on average, increasing trend in area (by about 6.43%) and production (by about 16.44%) of Belg season agriculture over the past eight years.



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, there might be no production data is available for some crops. Such cases are designated by Not Stated (NS).In all tables,if the data are not available, it is labeledas "-".

Statistical Tables Presenting Area and Production Results at National and Regional Levels

Summary Table 5: Estimates of total Grain Cropland area and production for Meher (main), Belag (minor) Large Scale Farms (LSF) for 2020/21 (2013EC)

CROP TYPE	Total Cropland Area (In Hectare)			Total Cropland area (In Ha)	Total Production (In Quntal)			Total Production (In Quintal)
	BELG	MEHER	LSF		BELG	MEHER	LSF	
Grain Crops	**1,748,457.62**	**12,979,459.91**	**671,093.47**	**15,399,011.00**	**14,754,984.98**	**341,828,693.39**	**14,125,163.50**	**370,708,841.87**
Cereals.....	**1,335,905.95**	**10,538,341.91**	**325,924.06**	**12,200,171.92**	**12,129,875.99**	**302,054,260.58**	**10,411,293.59**	**324,595,430.16**
Teff.....	133,997.77	2,928,206.26	7,694.50	3,069,898.53	1,190,613.23	55,099,615.14	116,641.04	56,406,869.41
Barley.....	220,740.20	926,106.90	3,434.04	1,150,281.14	1,554,331.88	23,391,098.80	99,014.42	25,044,445.10
Wheat.....	126,850.75	1,897,405.05	108,666.32	2,132,922.12	908,061.76	57,801,305.96	3,620,415.02	62,329,782.74
Maize.....	798,174.54	2,526,212.36	94,621.19	3,419,008.09	8,102,248.68	105,570,935.92	3,702,092.59	117,375,277.19
Sorghum.....	44,358.82	1,679,277.06	107,010.28	1,830,646.16	304,058.23	45,173,502.18	2,756,473.06	48,234,033.47
Finger millet.....	109.75	480,343.25	399.50	480,852.50	794.40	12,030,164.02	9,806.04	12,040,764.46
Oats/'Aja'.....	5,124.50	15,502.18	1,255.33	21,882.01	50,976.73	305,403.43	25,150.20	381,530.36
Rice.....	6,549.60	85,288.87	2,842.90	94,681.37	18,791.10	2,682,235.14	81,701.22	2,782,727.46
Pulses.....	**401,362.65**	**1,674,950.34**	**58,646.66**	**2,134,959.65**	**2,581,034.58**	**31,999,988.65**	**1,280,915.36**	**35,861,938.59**
Horse beans.....	6,558.90	504,569.99	779.50	511,908.39	55,209.11	10,706,365.38	21,051.30	10,782,625.79
Field peas.....	30,824.63	219,927.59	125.68	250,877.90	204,146.04	3,762,368.83	3,746.50	3,970,261.37
Haricot beans white.	24,571.08	103,288.55	8,897.83	136,757.46	178,111.36	1,855,340.69	227,343.41	2,260,795.46
Haricot beans red...	231,716.04	208,295.03	4,272.99	444,284.06	1,703,982.38	3,670,300.05	2,323.99	5,376,606.42
Chick-peas.....	4,196.20	177,546.76	-	181,742.96	15,360.19	3,740,361.89	-	3,755,722.08
White Chick-peas....	3,950.73	43,172.44	8,274.35	55,397.52	-	832,831.81	133,613.57	966,445.38
Lentils.....	13,009.15	84,511.63	1.30	97,522.08	67,194.29	1,130,178.82	21.52	1,197,394.63
Vetch.....	4,612.47	143,893.57	13.92	148,519.96	13,260.10	2,899,174.75	247.16	2,912,682.01
Soya beans.....	122.43	83,797.17	24,868.39	108,787.99	-	2,086,763.89	624,024.06	2,710,787.95
Fenugreek.....	717.15	42,344.28	3.90	43,065.33	5,168.55	507,472.35	38.80	512,679.70
Mung bean/"Masho"...	81,083.89	48,022.34	11,408.79	140,515.02	338,602.58	515,686.55	268,505.06	1,122,794.19
Gibto.....	-	15,580.99	-	15,580.99	-	293,143.63	-	293,143.63
Oilseeds.....	**11,189.03**	**766,167.66**	**286,522.75**	**1,063,879.44**	**44,074.41**	**7,774,444.17**	**2,432,954.55**	**10,251,473.13**
Neug.....	67.04	191,766.00	527.60	192,360.64	-	2,147,979.02	5,352.96	2,153,331.98
Linseed.....	331.56	78,921.37	335.34	79,588.27	344.65	804,566.42	7,407.09	812,318.16
Groundnuts.....	5,296.55	113,514.95	1,299.10	120,110.60	37,288.51	2,050,686.50	16,160.24	2,104,135.25
Sunflower.....	63.14	4,150.55	334.25	4,547.94	949.76	42,878.01	7,959.10	51,786.87
Sesame.....	4,749.30	369,897.32	280,330.12	654,976.74	5,423.03	2,602,576.33	2,331,185.73	4,939,185.09
Rapeseed.....	681.45	7,917.47	3,696.34	12,295.26	68.47	125,757.89	64,889.43	190,715.79
Vegetables.....	**72,992.76**	**243,568.75**	**8,614.15**	**325,175.66**	**6,022,756.15**	**9,067,870.78**	**880,123.43**	**15,970,750.36**
Lettuce.....	34.27	1,236.32	289.75	1,560.34	1,815.14	5,538.01	88,699.59	96,052.74
Head Cabbage.....	4,537.23	6,649.67	214.97	11,401.87	216,292.30	561,042.34	53,709.20	831,043.84
Ethiopian Cabbag....	63,374.38	44,464.46	17.39	107,856.23	5,698,113.85	4,330,244.89	1,493.74	10,029,852.48
Tomatoes.....	2,946.51	6,433.73	1,684.04	11,064.28	43,422.76	419,482.70	555,696.46	1,018,601.92
Green peppers.....	1,866.50	14,690.91	367.44	16,924.85	63,037.25	740,077.22	83,933.27	887,047.74
Red peppers.....	217.91	168,345.57	6,019.87	174,583.35	74.85	2,959,805.08	77,996.56	3,037,876.49
Swiss chard.....	15.96	1,748.09	20.69	1,784.74	-	51,680.54	18,594.61	70,275.15
Root Crops.....	302,936.89	**307,295.80**	**1,601.34**	**611,834.03**	31,884,229.83	**56,216,815.32**	**379,592.34**	**88,480,637.49**
Beetroot.....	3,621.79	3,149.13	0.43	**6,771.35**	**132,935.61**	266,274.75	17.51	399,227.87
Carrot.....	1,280.44	3,717.22	0.61	**4,998.27**	27,159.12	196,487.07	115.85	223,762.04
Onion.....	12,244.90	38,952.58	1,418.76	**52,616.24**	393,618.34	3,460,480.88	355,571.21	4,209,670.43
Potatoes.....	249,302.45	85,988.43	71.60	**335,362.48**	29,098,461.10	11,418,717.25	12,101.69	40,529,280.04
Yam/'Boye'.....	4,332.18	4,874.13		**9,206.31**	69,001.01	457,300.94		526,301.95
Garlic.....	16,019.16	15,979.54	81.70	**32,080.40**	814,172.01	1,149,446.97	542.56	1,964,161.54
Taro/'Godere'.....	4,714.93	92,518.21	-	**97,233.14**	175,840.54	23,279,722.57	-	23,455,563.11
Sweet potatoes.....	11,421.04	62,116.56	28.24	**73,565.84**	1,173,042.11	15,988,384.91	11,243.53	17,172,670.55

Table 5.1. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

National

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**8,620,142**	**1,748,457.62**	**100.00**	**14,754,984.98**	**100.00**	
Cereals.....	**6,990,865**	**1,335,905.95**	**76.40**	**12,129,875.99**	**82.21**	
Teff.....	480,336	133,997.77	7.66	1,190,613.23	8.07	8.89
Barley.....	1,030,136	220,740.20	12.62	1,554,331.88	10.53	7.04
Wheat.....	364,638	126,850.75	7.26	908,061.76	6.15	7.16
Maize.....	5,625,753	798,174.54	45.65	8,102,248.68	54.91	10.15
Sorghum.....	234,237	44,358.82	2.54	304,058.23	2.06	6.85
Finger millet.....	10,351	109.75	0.01	794.40	0.01	7.24
Oats/'Aja'.....	68,465	5,124.50	0.29	50,976.73	0.35	9.95
Rice.....	7,507	6,549.60	0.37	18,791.10	0.13	2.87
Pulses.....	**4,606,041**	**401,362.65**	**22.96**	**2,581,034.58**	**17.49**	
Horse beans.....	180,664	6,558.90	0.38	55,209.11	0.37	8.42
Field peas.....	211,773	30,824.63	1.76	204,146.04	1.38	6.62
White Haricot beans.	391,669	24,571.08	1.41	178,111.36	1.21	7.25
Red Haricot beans...	3,907,749	231,716.04	13.25	1,703,982.38	11.55	7.35
Red Chick-peas.....	21,924	4,196.20	0.24	15,360.19	0.10	3.66
White Chick-peas....	1,269	3,950.73	0.23	-	-	-
Lentils.....	80,619	13,009.15	0.74	67,194.29	0.46	5.17
Vetch.....	28,609	4,612.47	0.26	13,260.10	0.09	2.87
Soya beans.....	1,207	122.43	0.01	-	-	-
Fenugreek.....	34,438	717.15	0.04	5,168.55	0.04	7.21
Mung bean/"Masho"...	37,555	81,083.89	4.64	338,602.58	2.29	4.18
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**174,008**	**11,189.03**	**0.64**	**44,074.41**	**0.30**	
Neug.....	802	67.04	*	-	-	-
Linseed.....	5,331	331.56	0.02	344.65	*	1.04
Groundnuts.....	55,228	5,296.55	0.30	37,288.51	0.25	7.04
Sunflower.....	10,907	63.14	*	949.76	0.01	15.04
Sesame.....	47,669	4,749.30	0.27	5,423.03	0.04	1.14
Rapeseed.....	57,201	681.45	0.04	68.47	-	0.10
Vegetables.....	**3,275,231**	**72,992.76**	**100.00**	**6,022,756.15**	**100.00**	
Lettuce.....	9,216	34.27	0.05	1,815.14	0.03	52.97
Head Cabbage.....	82,640	4,537.23	6.22	216,292.30	3.59	47.67
Ethiopian Cabbag....	3,011,477	63,374.38	86.82	5,698,113.85	94.61	89.91
Tomatoes.....	112,805	2,946.51	4.04	43,422.76	0.72	14.74
Green peppers.....	182,507	1,866.50	2.56	63,037.25	1.05	33.77
Red peppers.....	23,622	217.91	0.30	74.85	-	0.34
Swiss chard.....	15,132	15.96	0.02	-	-	-
Root Crops.....	**4,750,942**	**302,936.89**	**100.00**	**31,884,229.83**	**100.00**	**105.25**
Beetroot.....	68,508	3,621.79	1.20	132,935.61	0.42	36.70
Carrot.....	44,342	1,280.44	0.42	27,159.12	0.09	21.21
Onion.....	468,270	12,244.90	4.04	393,618.34	1.23	32.15
Potatoes.....	3,687,963	249,302.45	82.30	29,098,461.10	91.26	116.72
Yam/'Boye'.....	134,441	4,332.18	1.43	69,001.01	0.22	15.93
Garlic.....	317,299	16,019.16	5.29	814,172.01	2.55	50.82
Taro/'Godere'.....	253,438	4,714.93	1.56	175,840.54	0.55	37.29
Sweet potatoes.....	324,208	11,421.04	3.77	1,173,042.11	3.68	102.71

Table 5.2. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Afar

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**1,830**	**1,855.10**	**100.00**	**13,628.75**	**100.00**	
Cereals.....	**1,805**	**1,782.88**	**96.11**	**13,628.75**	**100.00**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	1,752	1,738.59	93.72	13,628.75	100.00	7.84
Sorghum.....	105	44.30	2.39	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**96**	**68.42**	**3.69**	**-**	**-**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	-	-	-	-	-	-
Red Haricot beans...	71	21.90	1.18	-	-	-
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	25	46.53	2.51	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**26**	**3.79**	**0.20**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	26	3.79	0.20	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**278**	**223.26**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	49	44.47	19.92	-	-	-
Ethiopian Cabbag....	9	1.47	0.66	-	-	-
Tomatoes.....	171	130.76	58.57	-	-	-
Green peppers.....	53	39.89	17.87	-	-	-
Red peppers.....	29	6.68	2.99	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**347**	**453.60**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	343	451.27	99.49	-	-	-
Potatoes.....	-	-	-	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	5	2.33	0.51	-	-	-

Table 5.3. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Amhara

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**1,049,541**	**280,616.44**	**100.00**	**1,613,382.35**	**100.00**	
Cereals.....	**989,350**	**177,610.15**	**63.29**	**1,190,403.73**	**73.78**	
Teff.....	97,839	24,898.01	8.87	257,101.78	15.94	10.33
Barley.....	532,001	124,299.96	44.30	671,625.64	41.63	5.40
Wheat.....	102,468	5,211.26	1.86	33,288.60	2.06	6.39
Maize.....	381,817	20,063.12	7.15	214,603.41	13.30	10.70
Sorghum.....	11,049	580.22	0.21	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	36,188	2,557.59	0.91	13,784.30	0.85	5.39
Rice.....	-	-	-	-	-	-
Pulses.....	**202,147**	**102,695.87**	**36.60**	**422,737.25**	**26.20**	
Horse beans.....	22,582	437.51	0.16	6,408.34	0.40	14.65
Field peas.....	48,584	4,647.65	1.66	12,584.53	0.78	2.71
White Haricot beans.	12,998	2,356.63	0.84	6,175.19	0.38	2.62
Red Haricot beans...	35,895	1,247.29	0.44	4,693.38	0.29	3.76
Red Chick-peas.....	21,285	3,801.22	1.35	15,360.19	0.95	4.04
White Chick-peas....	-	-	-	-	-	-
Lentils.....	69,416	12,633.13	4.50	66,477.14	4.12	5.26
Vetch.....	28,609	4,612.47	1.64	13,260.10	0.82	2.87
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	11,690	46.05	0.02	260.24	0.02	5.65
Mung bean/"Masho"...	12,426	72,913.92	25.98	297,518.14	18.44	4.08
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**6,597**	**310.42**	**0.11**	**241.36**	**0.01**	
Neug.....	-	-	-	-	-	-
Linseed.....	4,075	288.32	0.10	241.36	0.01	0.84
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	2,521	22.09	-	-	-	-
Vegetables.....	**198,182**	**1,940.86**	**100.00**	**40,213.13**	**100.00**	**20.72**
Lettuce.....	4,931	7.92	0.41	-	-	-
Head Cabbage.....	20,753	96.93	4.99	4,868.93	12.11	50.23
Ethiopian Cabbag....	79,833	282.27	14.54	16,371.89	40.71	58.00
Tomatoes.....	44,856	1,071.06	55.18	10,787.06	26.82	10.07
Green peppers.....	78,435	427.06	22.00	8,110.39	20.17	18.99
Red peppers.....	12,554	55.21	2.84	74.85	0.19	1.36
Swiss chard.....	4,379	0.42	0.02	-	-	-
Root Crops.....	**1,832,908**	**50,092.06**	**100.00**	**3,782,890.41**	**100.00**	**75.52**
Beetroot.....	7,847	16.15	0.03	-	-	-
Carrot.....	3,353	58.66	0.12	18.95	-	0.32
Onion.....	223,476	4,997.42	9.98	139,825.70	3.70	27.98
Potatoes.....	1,599,822	43,557.90	86.96	3,620,170.32	95.70	83.11
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	87,739	667.73	1.33	22,875.44	0.60	34.26
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	9,816	794.20	1.59	-	-	-

Table 5.4. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Oromiya

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**2,349,539**	**660,163.31**	**100.00**	**5,884,381.83**	**100.00**	
Cereals.....	**1,927,040**	**553,518.72**	**83.85**	**5,046,225.15**	**85.76**	
Teff.....	260,281	80,539.29	12.20	762,474.46	12.96	9.47
Barley.....	288,512	78,220.87	11.85	725,169.52	12.32	9.27
Wheat.....	261,019	118,094.62	17.89	854,750.14	14.53	7.24
Maize.....	1,362,249	262,362.27	39.74	2,555,704.78	43.43	9.74
Sorghum.....	87,930	11,734.76	1.78	110,933.81	1.89	9.45
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	32,277	2,566.92	0.39	37,192.43	0.63	14.49
Rice.....	-	-	-	-	-	-
Pulses.....	**1,063,845**	**103,072.18**	**15.61**	**833,353.12**	**14.16**	
Horse beans.....	27,811	1,688.28	0.26	12,378.91	0.21	7.33
Field peas.....	102,800	23,129.27	3.50	179,912.42	3.06	7.78
White Haricot beans.	215,038	13,883.67	2.10	108,760.78	1.85	7.83
Red Haricot beans...	716,337	56,467.77	8.55	488,372.04	8.30	8.65
Red Chick-peas.....	517	381.89	0.06	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	7,807	263.30	0.04	551.19	0.01	2.09
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	16,601	638.62	0.10	4,839.62	0.08	7.58
Mung bean/"Masho"...	12,458	6,619.38	1.00	38,538.16	0.65	5.82
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**26,749**	**3,572.41**	**0.54**	**4,803.57**	**0.08**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	4,508	968.61	0.15	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	15,914	2,525.73	0.38	4,803.57	0.08	1.90
Rapeseed.....	6,327	78.07	0.01	-	-	-
Vegetables.....	**554,986**	**11,607.54**	**100.00**	**2,811,756.33**	**100.00**	**242.24**
Lettuce.....	1,892	18.15	0.16	1,815.14	0.06	100.01
Head Cabbage.....	23,847	982.93	8.47	70,770.82	2.52	72.00
Ethiopian Cabbag....	496,299	9,288.98	80.03	2,671,643.30	95.02	287.61
Tomatoes.....	20,244	385.60	3.32	21,276.70	0.76	55.18
Green peppers.....	41,380	923.60	7.96	46,250.37	1.64	50.08
Red peppers.....	7,884	4.40	0.04	-	-	-
Swiss chard.....	4,524	3.88	0.03	-	-	-
Root Crops.....	**839,837**	**82,101.14**	**100.00**	**6,538,904.19**	**100.00**	**79.64**
Beetroot.....	28,751	3,265.69	3.98	117,368.53	1.79	35.94
Carrot.....	17,476	1,187.72	1.45	26,083.87	0.40	21.96
Onion.....	115,120	3,577.69	4.36	92,058.55	1.41	25.73
Potatoes.....	636,639	57,808.67	70.41	5,452,701.48	83.39	94.32
Yam/'Boye'.....	924	28.06	0.03	-	-	-
Garlic.....	92,477	13,538.83	16.49	709,965.89	10.86	52.44
Taro/'Godere'.....	6,722	759.10	0.92	-	-	-
Sweet potatoes.....	7,995	1,935.37	2.36	140,725.87	2.15	72.71

Table 5.5. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Somali

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**1,490**	**241.07**	**100.00**	**1,164.39**	**100.00**	
Cereals.....	**1,490**	**241.07**	**100.00**	**1,164.39**	**100.00**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	1,490	241.07	100.00	1,164.39	100.00	4.83
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**-**	**-**	**-**	**-**	**-**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	-	-	-	-	-	-
Red Haricot beans...	-	-	-	-	-	-
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**3,002**	**197.11**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	-	-	-	-	-	-
Ethiopian Cabbag....	-	-	-	-	-	-
Tomatoes.....	3,002	191.48	97.14	-	-	-
Green peppers.....	378	5.62	2.85	-	-	-
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**3,168**	**305.62**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	3,168	300.51	98.33	-	-	-
Potatoes.....	-	-	-	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	95	3.07	1.00	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	95	2.04	0.67	-	-	-

Table 5.6. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Benishangul Gumuz

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**106,463**	**7,750.22**	**100.00**	**65,436.95**	**100.00**	
Cereals.....	**87,432**	**4,120.64**	**53.17**	**23,858.43**	**36.46**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	87,249	3,982.44	51.38	23,858.43	36.46	5.99
Sorghum.....	183	138.20	1.78	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**99,524**	**3,629.58**	**46.83**	**41,578.52**	**63.54**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	2,113	109.97	1.42	1,357.50	2.07	12.34
Red Haricot beans...	97,752	3,511.25	45.31	40,221.02	61.47	11.45
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	51	8.36	0.11	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**44,226**	**744.94**	**100.00**	**35,710.23**	**100.00**	**47.94**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	366	1.44	0.19	-	-	-
Ethiopian Cabbag....	38,921	570.98	76.65	31,693.49	88.75	55.51
Tomatoes.....	1,688	54.23	7.28	2,096.68	5.87	38.66
Green peppers.....	4,411	117.84	15.82	1,920.06	5.38	16.29
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	61	0.44	0.06	-	-	-
Root Crops.....	**24,001**	**2,475.57**	**100.00**	**314,794.49**	**100.00**	**127.16**
Beetroot.....	311	2.64	0.11	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	748	46.97	1.90	130.56	0.04	2.78
Potatoes.....	22,301	2,418.97	97.71	314,649.41	99.95	130.08
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	2,142	1.69	0.07	6.22	-	3.68
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	213	5.29	0.21	8.30	-	1.57

Table 5.7. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

SNNP

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**4,188,641**	**757,091.10**	**100.00**	**6,763,817.72**	**100.00**	
Cereals.....	**3,202,174**	**570,015.55**	**75.29**	**5,533,947.66**	**81.82**	
Teff.....	122,216	28,560.47	3.77	171,036.99	2.53	5.99
Barley.....	209,623	18,219.37	2.41	157,536.71	2.33	8.65
Wheat.....	1,151	3,544.87	0.47	20,023.02	0.30	5.65
Maize.....	3,009,710	481,251.15	63.57	4,972,641.03	73.52	10.33
Sorghum.....	134,970	31,861.35	4.21	193,124.42	2.86	6.06
Finger millet.....	10,351	109.75	0.01	794.40	0.01	7.24
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	7,312	6,468.58	0.85	18,791.10	0.28	2.90
Pulses.....	**2,690,006**	**180,284.01**	**23.81**	**1,190,963.64**	**17.61**	
Horse beans.....	127,809	4,411.55	0.58	36,328.15	0.54	8.23
Field peas.....	60,388	3,047.70	0.40	11,649.09	0.17	3.82
White Haricot beans.	132,533	7,837.45	1.04	59,291.74	0.88	7.57
Red Haricot beans...	2,523,155	159,260.17	21.04	1,080,913.72	15.98	6.79
Red Chick-peas.....	121	13.09	*	-	-	-
White Chick-peas....	1,269	3,950.73	0.52	-	-	-
Lentils.....	3,395	112.72	0.01	165.96	*	1.47
Vetch.....	-	-	-	-	-	-
Soya beans.....	1,156	114.06	0.02	-	-	-
Fenugreek.....	6,147	32.48	*	68.69	*	2.11
Mung bean/"Masho"...	12,646	1,504.06	0.20	2,546.28	0.04	1.69
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**115,444**	**6,791.55**	**0.90**	**38,906.42**	**0.58**	
Neug.....	802	67.04	0.01	-	-	-
Linseed.....	1,256	43.23	0.01	103.29	*	2.39
Groundnuts.....	50,127	4,243.36	0.56	37,233.91	0.55	8.77
Sunflower.....	10,907	63.14	0.01	949.76	0.01	15.04
Sesame.....	31,411	1,989.93	0.26	619.46	0.01	0.31
Rapeseed.....	24,055	384.85	0.05	-	-	-
Vegetables.....	**1,770,683**	**50,431.62**	**100.00**	**2,897,700.12**	**100.00**	**57.46**
Lettuce.....	2,393	8.21	0.02	-	-	-
Head Cabbage.....	34,156	3,287.53	6.52	138,148.12	4.77	42.02
Ethiopian Cabbag....	1,720,568	45,998.95	91.21	2,745,380.99	94.74	59.68
Tomatoes.....	22,908	812.67	1.61	9,262.32	0.32	11.40
Green peppers.....	43,409	168.85	0.33	4,908.69	0.17	29.07
Red peppers.....	3,151	151.49	0.30	-	-	-
Swiss chard.....	5,813	3.94	-	-	-	-
Root Crops.....	**1,818,455**	**162,420.11**	**100.00**	**20,805,899.41**	**100.00**	**128.10**
Beetroot.....	31,599	337.30	0.21	15,567.07	0.07	46.15
Carrot.....	23,513	34.06	0.02	1,056.30	-	31.01
Onion.....	82,349	2,244.42	1.38	161,603.53	0.78	72.00
Potatoes.....	1,265,574	141,681.07	87.23	19,298,584.64	92.76	136.21
Yam/'Boye'.....	125,240	4,195.06	2.58	67,257.92	0.32	16.03
Garlic.....	131,540	1,773.18	1.09	80,599.90	0.39	45.46
Taro/'Godere'.....	243,730	3,920.82	2.41	173,949.79	0.84	44.37
Sweet potatoes.....	291,635	8,234.19	5.07	1,007,280.26	4.84	122.33

Table 5.8. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Sidama

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**890,381**	**35,809.42**	**100.00**	**364,958.39**	**100.00**	
Cereals.....	**749,623**	**24,181.89**	**67.53**	**273,509.74**	**74.94**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	749,623	24,181.89	67.53	273,509.74	74.94	11.31
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**548,964**	**11,426.67**	**31.91**	**91,325.58**	**25.02**	
Horse beans.....	2,033	9.37	0.03	93.70	0.03	10.00
Field peas.....	-	-	-	-	-	-
White Haricot beans.	28,408	322.94	0.90	2,526.14	0.69	7.82
Red Haricot beans...	534,062	11,094.36	30.98	88,705.75	24.31	8.00
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**24,643**	**200.86**	**0.56**	**123.06**	**0.03**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	345	4.42	0.01	54.60	0.01	12.35
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	24,298	196.44	0.55	68.47	0.02	0.35
Vegetables.....	**680,152**	**7,305.12**	**100.00**	**235,520.42**	**100.00**	**32.24**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	2,196	48.14	0.66	2,504.43	1.06	52.02
Ethiopian Cabbag....	675,417	7,190.31	98.43	231,168.88	98.15	32.15
Tomatoes.....	712	8.32	0.11	-	-	-
Green peppers.....	7,095	58.34	0.80	1,847.11	0.78	31.66
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**209,022**	**4,614.65**	**100.00**	**441,741.33**	**100.00**	**95.73**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	35,436	343.05	7.43	-	-	-
Potatoes.....	151,223	3,786.58	82.06	412,355.25	93.35	108.90
Yam/'Boye'.....	8,277	109.05	2.36	1,743.09	0.39	15.98
Garlic.....	2,598	24.04	0.52	724.57	0.16	30.14
Taro/'Godere'.....	2,986	35.01	0.76	1,890.74	0.43	54.01
Sweet potatoes.....	11,389	316.92	6.87	25,027.68	5.67	78.97

Table 5.9. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Gambela

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**24,484**	**4,646.91**	**100.00**	**46,193.11**	**100.00**	
Cereals.....	**24,178**	**4,163.18**	**89.59**	**45,116.64**	**97.67**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	24,089	4,082.16	87.85	45,116.64	97.67	11.05
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	195	81.02	1.74	-	-	-
Pulses.....	**1,031**	**173.73**	**3.74**	**1,076.47**	**2.33**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	579	60.42	1.30	-	-	-
Red Haricot beans...	478	113.31	2.44	1,076.47	2.33	9.50
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**548**	**310.00**	**6.67**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	249	80.15	1.72	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	317	229.85	4.95	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**471**	**53.27**	**100.00**	**1,855.92**	**100.00**	**34.84**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	-	-	-	-	-	-
Ethiopian Cabbag....	431	41.43	77.77	1,855.30	99.97	44.78
Tomatoes.....	24	11.67	21.91	-	-	-
Green peppers.....	13	0.03	0.06	0.62	0.03	20.67
Red peppers.....	4	0.14	0.26	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**5**	**1.49**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-
Potatoes.....	-	-	-	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	5	1.49	100.00	-	-	-

Table 5.10. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Hareri

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**3,432**	**140.88**	**100.00**	**784.18**	**100.00**	
Cereals.....	**3,432**	**128.69**	**91.35**	**784.18**	**100.00**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	3,432	128.69	91.35	784.18	100.00	6.09
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**429**	**12.19**	**8.65**	**-**	**-**	
Horse beans.....	429	12.19	8.65	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	-	-	-	-	-	-
Red Haricot beans...	-	-	-	-	-	-
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**13,363**	**370.16**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	1,064	20.18	5.45	-	-	-
Ethiopian Cabbag....	-	-	-	-	-	-
Tomatoes.....	9,705	232.07	62.69	-	-	-
Green peppers.....	6,943	110.64	29.89	-	-	-
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	355	7.28	1.97	-	-	-
Root Crops.....	**3,748**	**63.86**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	896	17.32	27.12	-	-	-
Potatoes.....	429	5.62	8.80	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	709	10.61	16.61	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	1,714	30.31	47.46	-	-	-

Table 5.11. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2021 (2013 E.C)

Dire Dawa

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**4,341**	**143.16**	**100.00**	**1,237.33**	**100.00**	
Cereals.....	**4,341**	**143.16**	**100.00**	**1,237.33**	**100.00**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	4,341	143.16	100.00	1,237.33	100.00	8.64
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**-**	**-**	**-**	**-**	**-**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	-	-	-	-	-	-
Red Haricot beans...	-	-	-	-	-	-
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**9,888**	**118.88**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	210	55.61	46.78	-	-	-
Ethiopian Cabbag....	-	-	-	-	-	-
Tomatoes.....	9,496	48.64	40.92	-	-	-
Green peppers.....	392	14.62	12.30	-	-	-
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**19,451**	**408.78**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	6,734	266.26	65.14	-	-	-
Potatoes.....	11,976	43.63	10.67	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	1,342	98.89	24.19	-	-	-

CHAPTER IV

4 FARM MANAGEMENT PRACTISES OF THE 2020/21 (2013 E.C) BELG SEASON

4.1 INTRODUCTION

The observed experiences indicate that farmers' attitude and tendency towards adoption and acceptance of new innovations, modern agricultural techniques and technologies such as the use of fertilizers, irrigation and improved seeds have positive impact on the development of agricultural sector as a whole. In this regard, the extent of adoption of modern agricultural practices such as utilization of fertilizer, irrigation, pesticides and improved seeds by the private peasant farm holders is often used as important indicators for estimating the rate and extent of modern technologies used in the country's agriculture. The magnitude and level of modern/improved farm management practices in the agricultural sector are used to be the sole indicators of the transformation rate of the country's traditional agriculture to modern agriculture.

The overview of the 2020/21 (2013 E.C) Belg season farm management practice of the country indicates that the total quantity of chemical fertlizers applied during the season has slightly increased 52.02% (from 1,124, 955 quintals in 2011 E.C to 2,345,903 quintals in the 2013 E.C), at national level. Similarly, the total improved seed applied area has also increased by about 52.17% (from 136,193 hectares in 2011 E.C to about **285,963.00** hectares in 2011 E.C). Interms of quantity as well, the total improved seeds applied has increased by 63.62% which is a change from 71,542 quintals in 2011 E.C to **196,666.00** quintals in 2013 E.C).

Given this background, in Chapter four, the quantitative information about the use of modern agricultural inputs for Belg season crops of 2020/21 (2013 E.C.) of the private peasant holdings are presented both at country and regional levels. Furthermore, the general composition of the farm holders Surveyed applying inputs interms of age group, holders applying inputs by educational status and the number of holders and the damaged crop land area in hectare are summarized and and presented in this Chapter. The data are generated from the findings of Belg season agricultural sample survey conducted by the Central Statistical Agency of Ethiopia in May 2019.

4.2 SUMMARY OF THE FARM MANAGEMENT PRACTICES OF THE 2020/21 (2013 E.C.) BELG SEASON AGRICULTURAL SAMPLE SURVEY

According to the 2020/21 (2013 E.C.) Belg Season Crop Production Sample Survey, total cropland area estimated is about 2,124,387 hectares of land while the estimated number of holders engaged in crop production activity is about 12,168,676 at national level. For more illustration see summary Table 6 bellow.

Table 6.Total Cropland Area and Number of Holders Engaged in 2020/21 (2013 E.C.) Belg Season Crop Production

Background Characteristics	Statistical Figures
Total Belg Cropland Area in Hectare	**2,124,387**
Number of Belg Crop Producing Holders	**12,168,676**
Improved Farm Management practiced Area (in Hectare)	**2,290,889**
Quantity of Commercial Fertilizer Applied (Quintals)	**2,345,435**

As indicated Table 6, during 2020/21(2013 E.C.), out of the total area under Belg season crops, 2,290,889 hectares (107.84 % of the total cropland area), (which is the sum of individual area that was covered by each type of improved farm management practice as of chemical fertilizer, improved seeds, pesticides, etc.), was under the use of improved farm management practices that includes fertilizer, improved seed, pesticides, irrigation and extension services. Moreover, it was estimated that about 2,345,435 quintals of chemical fertilizer was utilized for crop production nationally. The total cropland areas categorized into different types of farm management practices for the season are summarized in Table 7.

Table 7.Belg Season Cropland Area under Different Farm Management Practices for Production Year of 2020/21 (2013 E.C), National Level

Farm Management Practice Category	Cropland Area Under Different Farm Management Practices (Hectare)	Percentage from Total Cropland Area
Fertilizer	803,762.00	37.84
Improved Seeds	285,963.00	13.46
Pesticides	232,881.00	10.96
Irrigation	125,948.00	5.93
Extension	842,335.00	39.65
Total Belg Cropland Area	**2,124,387.00**	**100.00**

As shown in Table 7 above, the total crop land area estimated is 803,762 hectare for fertilizer, 285,963 hectare for improved seed, 232,881 hectare for pesticide, 125,948 hectare for irrigation and 842,335 hectare for extension. Out of the total Belg cropland area, the percentage distribution is 37.84% for fertilizer, 13.46% for improved seed, 10.96 % for pesticides 5.93 %for irrigation and 39.65 % for extension serveces. Furthermore, the survey findings indicate that cereals account for the largest share of the different farm management practices observed as summarized in Table 8.

Table 8. Summary of Cropland Area under Improved Farm Management Practices for Private Peasant Holdings, 2020/21 (2013 E.C.) Belg season, National

Crop Category	**Cropland Area**			
	Total Area		**Area under Improved Farm Management Practice**	
	Hectare	**%**	**Hectare**	**%**
All crops	**2,124,387.00**			
Cereals	**1,335,906.00**	**62.88**	**1,497,183.00**	**58.31**
Pulses	**401,363.00**	**18.89**	**310,392.00**	**18.89**
Oil crops	**11,189.00**	**0.53**	**7,021.00**	**0.53**
Vegetables	**72,993.00**	**3.44**	**31,455.00**	**3.44**
Root Crops	**302,937.00**	**14.26**	**444,839.00**	**14.26**
Total	**2,124,388.00**	**100.00**		**58.31**

As indicated in summary Table 8 above, estimates of total cropland area under different farm management practices shows that cereals accounted 1,497,183.00 hectares (**62.88** % of the total all cropland areal), followed by pulses with 310,392.00 hectares (18.89% from the total all cropland area). Root corps, vegetables and oil crops accounted for 444,839.00 hectare (14.26 %), 31,455.00 hectares (3.44 %) and 7,021 hectare (0.53%), respectively. Out of the total cereal cultivated cropland area, 1,497,183.00 hectare (58.31 % of the total cropland area) is cultivated with improved farm management practices (includes all fertilizer, improved seed, pesticides and irrigation).The respective numbers are 310,392 hectare (18.89 %) for pulses , 444,839hectare (14.26%) for root crops, 7,021 hectare (0.53%) for oil crops. The corresponding figure for vegetables can be refered as 31,455 hectare (3.44%).

4.3 FERTLIZER APPLIED AREA AND FERTLIZER TYPE USED

The results of the survey indicate that Belg season cropland area under both natural and chemical fertilizers were estimated to be 1,195,442 hectares, covering 56.27% of the total area under Belg seasons crops of the private holdings. The percentage of different fertilizers applied is given using summary Table 9 as follows.

Table 9. Summary of Fertilizer Applied Cropland Area for Private Holdings of 2020/21 (2013 E.C.) Belg season, National

Fertilizer Type	Fertilizer Applied Area		Percentage from Total Belg Cropland Area
	Hectare	Percentage of Fertilizer Applied Area	
Natural Fertilizer	**391,680.00**	**32.76**	**18.44**
Commercial/Chemical Fertilizers			
DAP	32,610.00	2.73	1.54
Urea	57,969.00	4.85	2.73
Urea + DAP	7,580.00	0.63	0.36
NPS	412,608.00	34.52	19.42
NPS + Urea	215,534.00	18.03	10.15
Mixed (Blended)	34,332.00	2.87	1.62
Mixed (Blended)+Urea	43,129.00	3.61	2.03
Total Fertilizer Area	**1,195,442.00**	**100.00**	**56.27**
Total Cropland Area	**2,124,387.00**		**100.00**

As indicated in Summary Table 9, nearly 391,680.00 hectares (32.76% of the total fertilizer applied cropland area) is applied with natural fertilizer. This accounts 18.44% of the total Belg cropland area. The coverage of chemical fertilizers is estimated to be 803,762.00 hectares (40.20% from the total fertilizer applied area and 37.84% from the total cropland area). The application of DAP, UREA and the mixture of DAP and Urea, NPS and the mixture of NPS and Urea, Mixed (Blended) and the mixture of Mixed (Blended) and Urea ,collectively, called as commercial fertilizers, constitute 2.14%, 3.07%, 2.47%, 34.46 %, and 19.43 % of the total fertilizer applied cropland area, respectively. The percentages of DAP, UREA, the mixture of DAP and Urea, NPS and the mixture of NPS Mixed (Blended) and the mixture of Mixed (Blended) and Urea applied out of the total cropland area of the Belg season are: 1.54, 2.73, 0.36, 19.42, 10.15, 1.62 and 2.03 respectively.

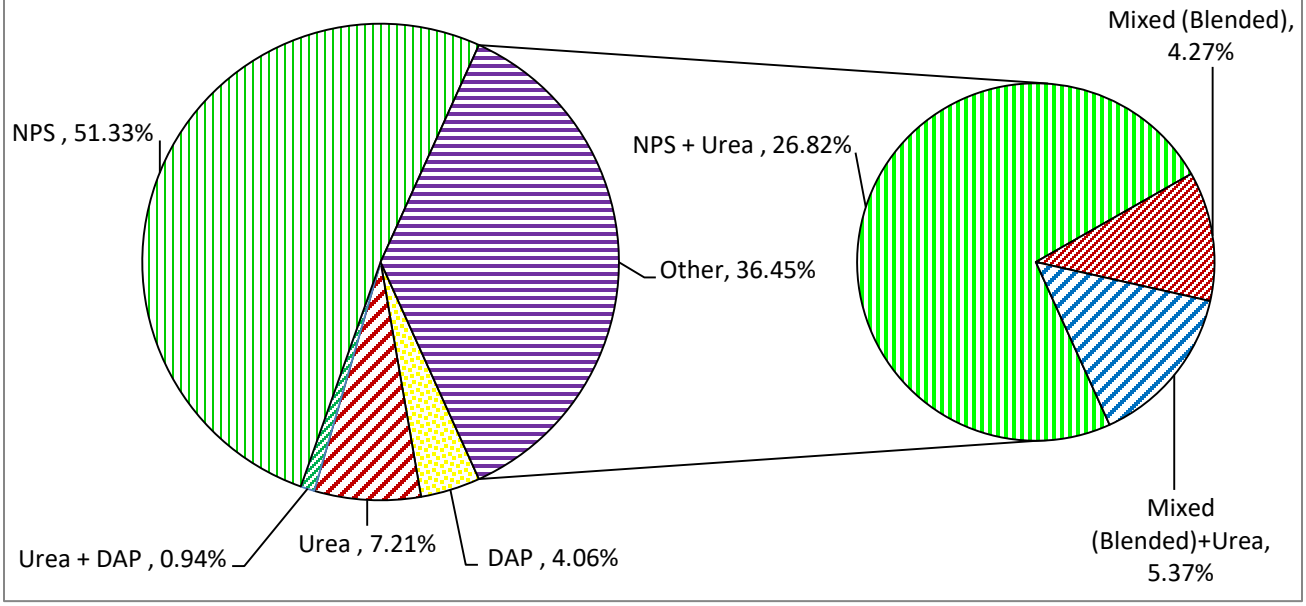
4.4 THE USE OF NATURAL FERTLIZER

In general, the application of natural fertilizers for Belg season crops in 2020/21 (2013 E.C.) vary from crop to crop. Of the total area under natural fertilizer, the highest proportion was reported for maize crop, which was estimated at 161,237 hectares (41%). The fertilized area (natural fertilizer) under red haricot beans stood second with 55,600 hectare (14.14%) while Potatoes stands third accounting for 37,981 hectare (9.66%) of the total country level natural fertilizer applied of Belg season cropland area.

4.5. THE USE OF COMMERCIAL FERTLIZERS

The total cropland area under commercial fertilizers is about 2020/21 (2013 E.C.) hectare (67.24% of total fertilizer applied cropland area), in 2020/21 (2013 E.C.) Belg season. Out of this, NPS is the most used fertilizer which accounted forabout 412, 608 hectare (51.33% of the commercial fertilizer applied area). The second most applied commercial fertilizer is the mixture of NPS and Urea (NPS + UREA) covering 215,534 hectare (accounting for 26.82%) while the use of UREA stands in the third position applied on 57, 969 hectare (7.21) of the total commercial fertilizer applied area. This is more indicated using graph and presented as follows:-

Figure 4: Percentage Distribution of Chemical Fertilizer Applied Cropland Area by Fertilizer Type for Private Holdings of Belg 2020/21 (2013 E.C)



The commercial fertilizers applied area vary between crops. The highest area is reported for potatoes accounting for 737,815 hectares (223.55%) followed by maize which is 412,146 hectares (22.19% of commercial fertilizer applied area), which is more illustrated in the statistical table below.

Table 10. Summary of Fertilizer Chemical Fertilizer Applied Cropland Area Rank for the Major Three Crops for Private Holdings of 2020/21 (2013 E.C.) Belg season, National

Crop type	Chemical fertilizer Applied Area		Rank
	Hectare	Percentage	
Potatoes	189,305	23.55	1st
Maize	178,360	22.19	2nd
Barley	128,882	15.29	3rd

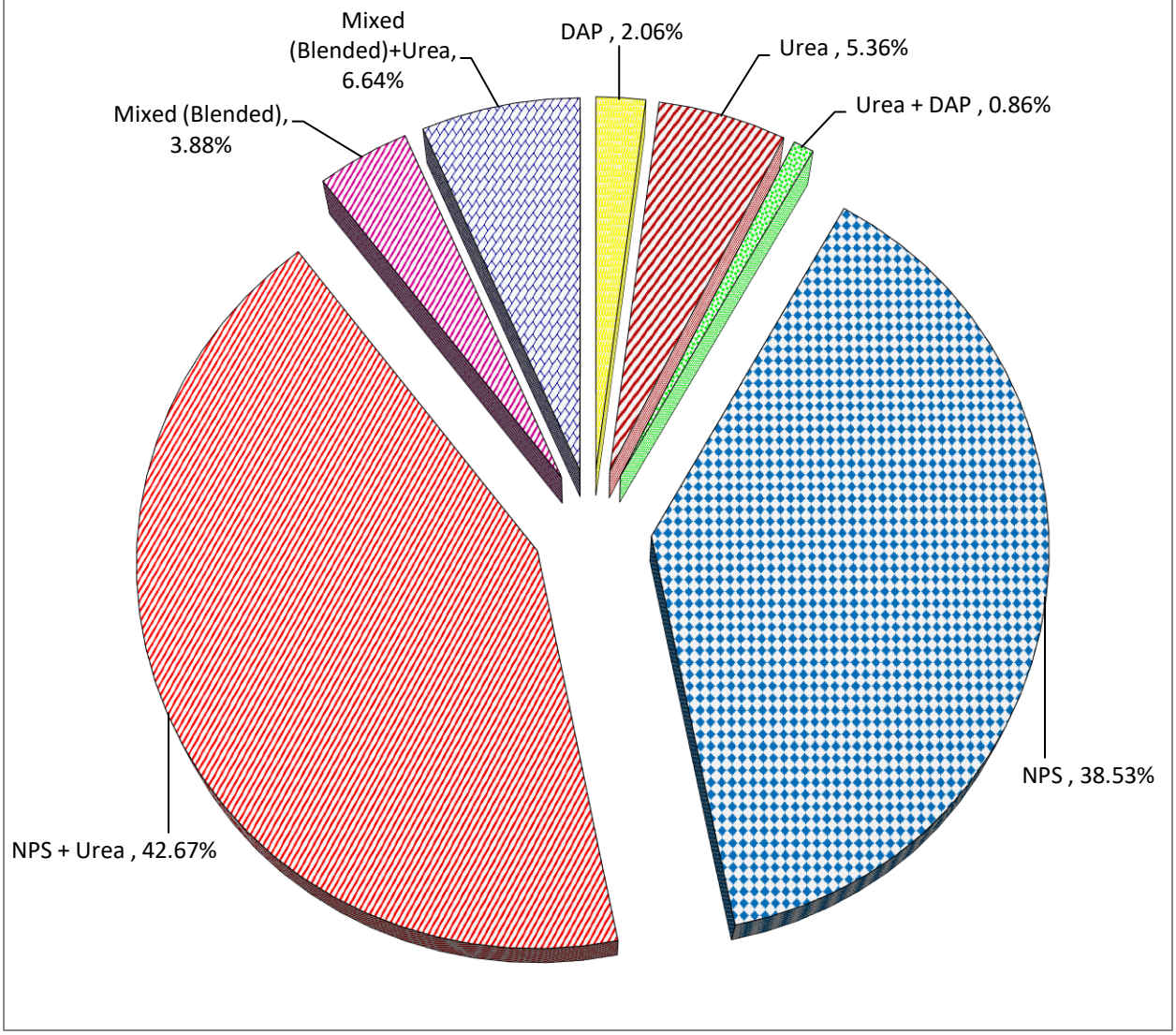
Region-wise, the distribution of both natural and commercial fertilizers applied varies from region to region. For instance, of the total area under both (Natural + Commercial) fertilizers, the highest was reported for S.N.N.P region accounting for nearly 479,492 hectare (41.62% of total fertilized area). Oromia region accounted for 470,280 hectares (39.34%) of the total country level of both natural and commercial fertilizers applied cropland area) while Amhara region accounted nearly 174,170 hectare (14.57%).

Table 11. Summary of Chemical Fertilizer Applied Cropland Area Rank By Region for Private Holdings of 2020/21 (2013 E.C.) Belg season, National

Region	Crop type	All Fertilizer			
		Area Hectare			Quintal
		Estimate	%	Rank	Estimate
National	All	1,195,442.00			2,345,435.00
SNNP	All	497,492.00	41.62	1ST	518,180.00
Oromia	All	470,286.00	39.34	2nd	773,352.00
Amhara	All	174,170.00	14.57	3rd	846,203.00
Sidama	All	43,905.00	3.67	4th	200,828.00
Benishangul Gumuz	All	7,479.00	0.63	5th	1,333.00
Dire Dawa	All	630.00	0.05	6th	2,718.00
Hareri	All	553.00	0.05	7th	1,264.00
Afar	All	483.00	0.04	8th	393.00
Somali	All	340.00	0.03	9th	963.00
Gambela	All	104.00	0.01	10th	200.00

In terms of quantity, the total commercial fertilizer applied is 2,345,435 quintals. Out of this,the mixture of NPS and Urea is the most applied commercial fertilizer accounting for 1,000,7718 quintals (42.67%). The percentage distribution of the chemical fertilizers applied during the production season is more indicated by Figure 6.

Figure 6. Percentage Distribution of Quantity of Chemical Fertilizers Applied by Fertilizer Type for Private Holding of 2020/21 (2013 E.C) Belg Season, National

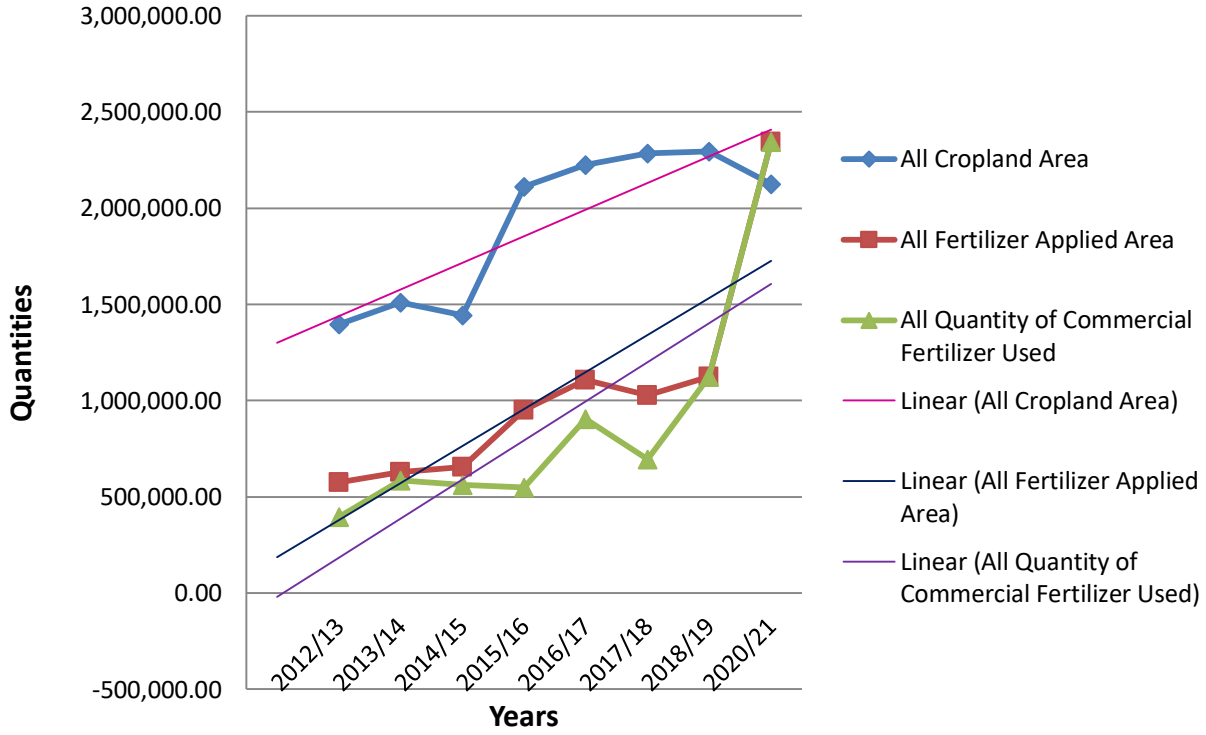


As indicated in Figure 6, the mixture of NPS and Urea (NPS + Urea) is the first most applied chemical fertilizer (1,000,771qt, 42.62%), applicaton of NPS is the second most applied fertilizer type which is about 903,748 quintals (38.535%) while Urea+DAP is the leas type of chemical fertilizer applied accounting about 20, 134 quintals (0.86%).

4.6. ALL CROPLAND AREA AND TRENDS OF THE USE OF COMMERCIAL FERTLIZERS

Figure 7 shows the trends of (the summary results of the previous seven consecutative surveys undertaken on yearly bases) all cropland area, total fertilizer applied area and total amount of commercial fertilizer applied over the period 2012/13 up to 2017/18. The examination of the consequetive belg season agricultural sample survey results display an increasing trend of all crop land area (about by 7.30%), fertilizer applied area (nearly by 26.55%) and amount of chemical fertilizer (by 36.15%) used over time.

Figure 7: Trends of All Belg Cropland Area, All Fertilizer Applied Area and Quantity of Commercial Applied Fertilizer and Production Over Time

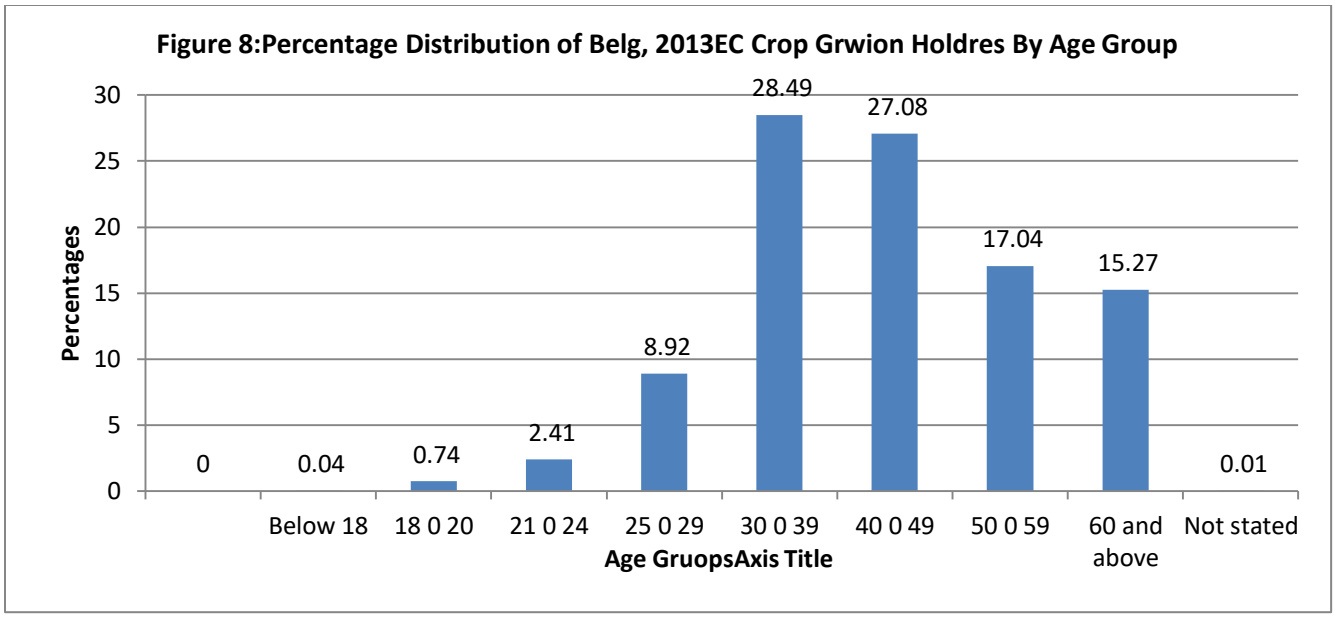


4.7. THE USE OF IMPROVED SEEDS

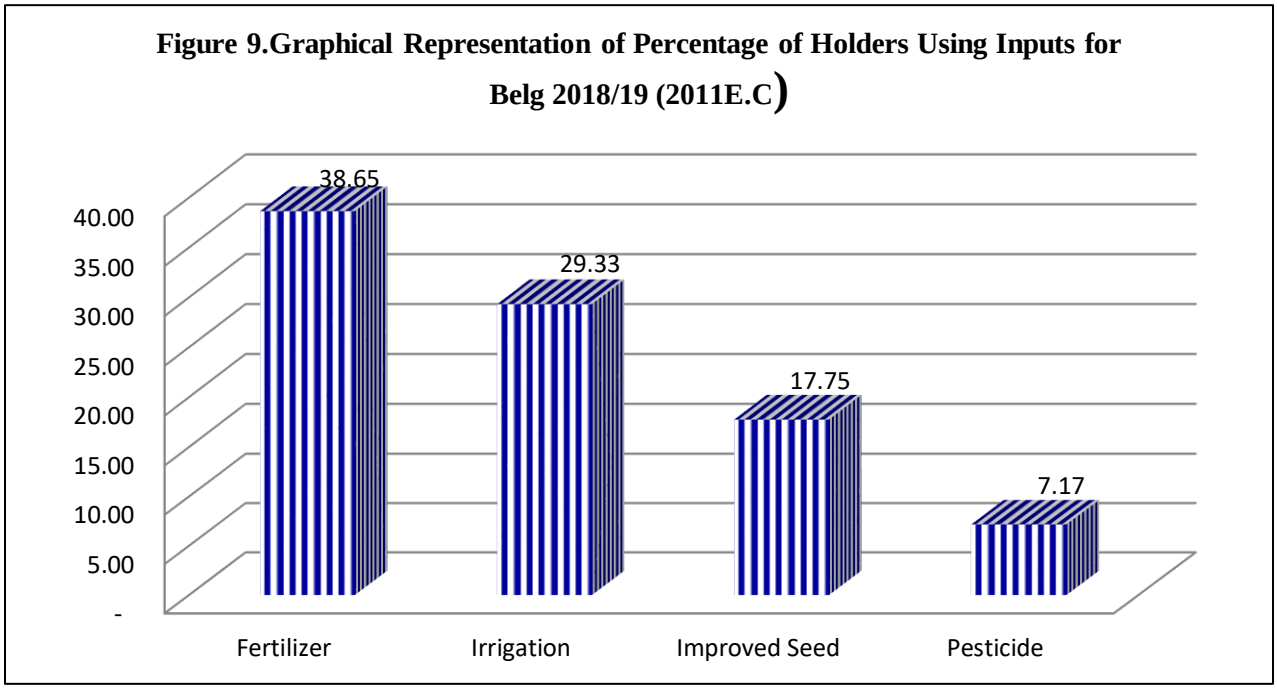
Better application of improved variety seeds helps to harvest higher yield compared to the use of traditional variety seeds. The survey findings indicate that the total crop area applied with improved seed is nearly 285,363 hectare while total quantity used is 200, 963 quintals, at country level. The area applied with improved seed is about 13.46% of the total Belg 2011E.C cropland area. The total quantity of improved seeds used is nearly 11.19% of the total seeds used during the season.

4.8. NUMBER OF BELG CROP PRODUCING HOLDERS REPORTING THE USE OF IMPROVED FARM MANAGEMENT PRACTICES BY AGE

To easily identify the age category of the holders who used to earn the economic benefits generated from practicing the use of modern farm management practices on their holdings, Belg crop producing holders' have been categorized into nine groups. These areage groups below 18 years, 18 to 20 years, 21 to 24 years, 25 to 29 years, 30 to 39 years, 40 to 49 years, 50 to 59 years, 60 years and above as well as not stated holders groups. The survey result shows that a total of 12,168,676 holders were engaged in the overall Belg season agricultural activities in 2020/21 (2013 E.C.). Accordingly, the category with the largest number of holders is in the age group 30-39, with 3,466,948 holders (which is 28.49% of the total holders). The age group of 40 to 49 stands second with 3,295,152 holders (27.08% of total holders). The percentage distribution and number of Belg crop producing holders reporting the use of farm inputs by age group for private holding is given in Figure 8 and Table 21.

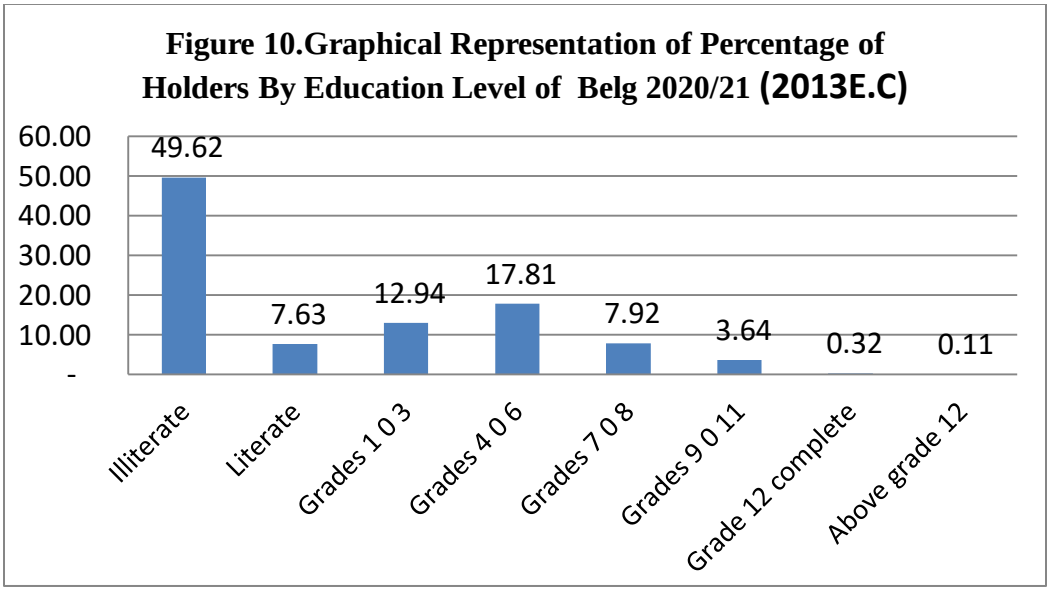


Moreover, 4,703,104 holders (38.65 % of total holders) used fertilizer and 2,160,336 holders (45.93 %) used improved seeds.Likewise, 872,028.00 holders (7.17%) applied pesticides and 1,379,263 holders (7.17 %) used irrigation at national level for 2020/21 (2013 E.C.). Belg season, in order to obtain higher crop yield (See Figure 8 below and Table 21).



4.7 NUMBER OF BELG CROP PRODUCING HOLDERS REPORTING THE USE OF IMPROVEDFARM MANAGEMENT PRACTICES BY EDUCATIONAL STATUS

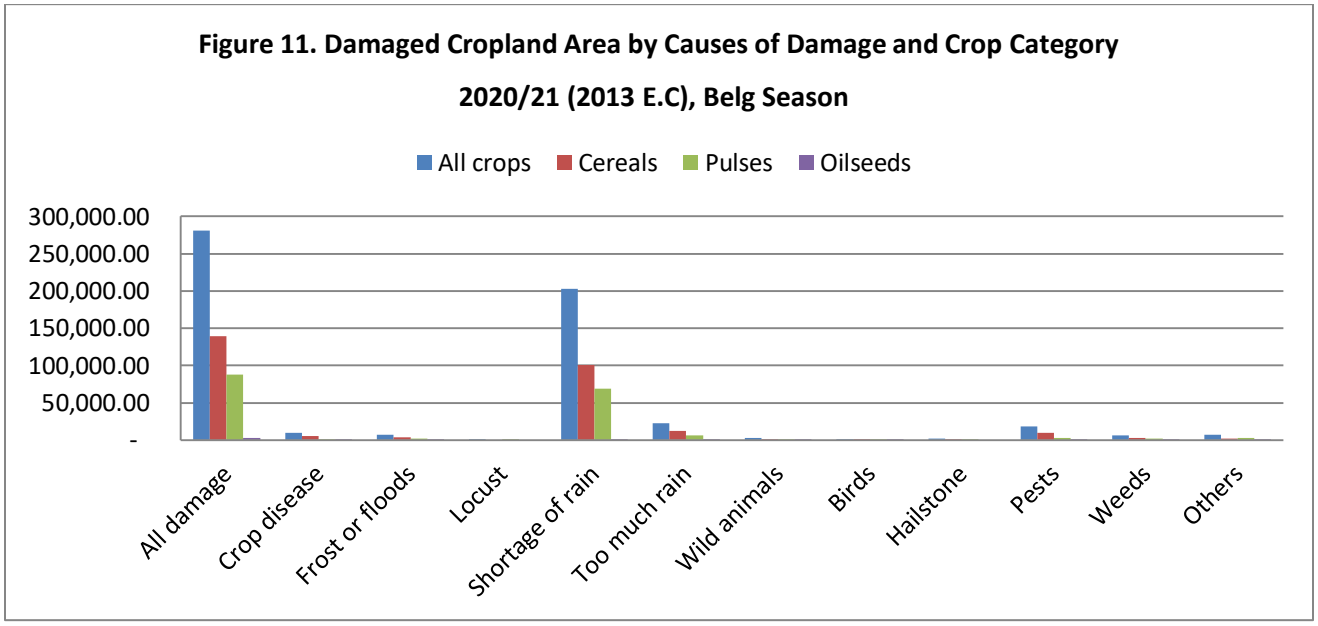
Holders educational status play important role in the adoption of new and improved farming technologies. Therefore, in this report, an attempt is made to categorize holders reporting the use of modern farming practices during the 2020/21 (2013 E.C) Belg season crop production based on their educational status.Based on their education level, holders are categorized in to eight groups consisting of illiterate, literate, grade 1 to 3, grade 4 to 6, grade 7 to 8, grade 9 to 11, grade 12 complete and above grade.The number of Belg crop producing holders using different farm inputs based on education is graphically presented in Figure 9.



According to the results of the 2020/21 (2013 E.C) Belg season crop production sample survey, out of the total number of holders (12,168,676), the largest category of the holders number is under the illiterate category in which the number of all crop holders is 6,037,684 (which accounts for 49.62 % of total holders) (See Figure 10). Under this category, 2,186,199 holder are reported for using fertilizer, 9,176,54 holders using improved seeds, 366,155using pesticides and 75,3815 using irrigation. The second largest category of the number of holders lies on education level of grade four to six. Within this category, the number of holders reported for using all cropland is 1,398,211. The respective number of holders is 881,973 for fertilizer, 480,916 for improved seeds, 191,115 for pesticides and 152,100 for irrigation in the education category.

4.8 NUMBER OF HOLDERS REPORTING CROP DAMAGE BY CAUSES OF DAMAGE

The total number of Belg crop producing private peasant holders who reported crop damage and the cause of damage during the year 2020/21 (2013 E.C), Belg season are estimated to be about 2,124,387 and the damaged cropland area was estimated to be 280,766 hectares. For illustration purpose, the total cropland area affected by crop damage of different crop types in hectare and the various causes of crop damage are presented graphically in Figure 11.



As indicated in Figure 11, the highest cropland area damaged was reported for cereals which is 139,610 hectares, followed by pulses with about 87,976 hectares and oil crops with 2,540 hectares. With regard to the causes of crop damage, it is reported that 203,102 hectares (72.34%) was damaged due to shortage of rain. The second highest cause of crop damage is too much rain with estimated crop damaged area of 23,000 hectares (8.19%), while others cuases of crop damage stands third position in damaging 47629 hectare (16.96%) cropland area (For further details, see Figure 11).

National and Regional Statistical Tables of Farm Management Practices

Table 10: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2013 EC (2020/21GC)
National

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**2,124,387**	**1,195,442**	**2,345,435**	**4,955,319**	**391,680**	**148,152**	**32,610**	**48,377**
Cereals	**1,335,906**	**697,710**	**955,031**	**2,512,208**	**221,599**	**107,414**	**26,863**	**34,696**
Teff	133,998	80,934	95,192	61,507	18,330	*	*	*
Barley	220,740	153,968	184,246	260,192	31,085	5,400	*	*
Wheat	126,851	107,916	228,409	32,203	2,668	*	*	*
Maize	798,175	339,595	412,146	2,216,758	161,237	*	8,597	12,837
Sorghum	44,359	10,921	3,934	73,714	8,231	*	*	*
Finger millet	*	*	-	*	*	-	-	-
Oats/ 'Aja'	*	*	*	*	*	*	-	*
Rice	*	*	*	-	-	-	-	-
Pulse	**401,363**	**178,873**	**272,432**	**1,778,886**	**76,028**	**37,199**	**2,482**	**4,977**
Horse/Faba beans	6,559	1,961	3,400	50,605	1,028	-	-	-
Field peas	30,825	6,506	4,385	44,439	3,419	*	*	*
White Haricot beans	24,571	11,535	9,227	209,061	8,433	*	*	*
Red Haricot beans	231,716	148,326	250,200	1,519,833	55,600	*	*	3,984
Red Chick peas	4,196	*	*	*	*	*	-	*
White Chick peas	*	-	-	-	-	-	-	-
Lentiles	13,009	*	*	*	*	-	-	-
Vetch/Grass peas	4,612	*	-	*	*	-	-	-
Soya beans	*	*	-	*	*	-	-	-
Fenugreek	717	*	*	7,158	*	-	-	-
Mung bean/"Masho"	*	*	*	*	*	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**11,189**	**2,286**	**2,587**	**56,647**	**1,610**	*****	*****	*****
Nueg	*	-	-	-	-	-	-	-
Linseed	*	*	-	*	*	-	-	-
Ground nuts	*	*	*	12,698	*	-	-	-
Safflower	*	*	*	*	*	-	-	-
Sesame	4,749	*	*	*	*	*	*	*
Rapeseed	681	604	*	38,981	427	-	-	-
Vegetables.....	**72,993**	**49,675**	**84,986**	**1,990,665**	**39,343**	*****	*****	*****
Lettuce.....	*	*	*	*	15	-	-	-
Head Cabbage....	4,537	3,167	6,381	30,267	610	*	*	*
Ethiopian Cabbage	63,374	43,736	50,520	1,893,271	37,752	*	*	*
Tomatoes.....	2,947	1,345	*	39,203	457	*	*	*
Green peppers...	1,867	1,285	*	77,038	436	*	*	*
Red peppers.....	218	102	*	7,661	*	-	-	-
Swiss chard.....	*	*	*	11,707	*	-	-	-
Root Crops.....	**302,937**	**266,898**	**1,030,398**	**1,508,528**	**53,100**	**34,432**	*****	**6,345**
Beetroot.....	3,622	2,943	6,665	31,804	553	-	-	-
Carrot.....	1,280	1,043	3,098	12,543	*	*	*	*
Onion.....	12,245	9,423	189,957	113,580	1,079	3,247	64	*
Potatoes.....	249,302	227,285	737,815	973,323	37,981	30,693	*	5,856
Yam.....	4,332	3,488	2,223	87,331	3,074	*	*	*
Garlic.....	16,019	13,233	87,658	141,138	1,797	*	*	*
Taro/'Godere'...	4,715	3,040	2,054	147,172	2,772	-	-	-
Sweet potatoes..	11,421	6,444	*	215,845	5,771	-	-	-

Table 10 (Cont'd)
National

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**370,541**	**57,969**	**125,669**	**89,590**	**7,580**	**20,134**	**11,364,261**	**1,836,673**	**1,594,160**
Cereals	**250,704**	**45,047**	**71,436**	**29,721**	**5,215**	**10,639**	**5,570,853**	**1,109,127**	**1,201,141**
Teff	39,954	*	*	*	*	*	459,220	129,134	80,101
Barley	32,518	8,558	13,407	*	*	*	995,588	216,223	452,463
Wheat	14,434	5,350	9,058	*	*	*	251,518	91,468	251,559
Maize	174,521	17,270	31,442	25,528	3,136	*	4,278,692	617,172	348,704
Sorghum	*	*	*	*	*	*	214,682	43,421	20,179
Finger millet	-	-	-	-	-	-	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*	67,438	*	43,027
Rice	-	-	-	-	-	-	*	*	*
Pulse	**80,723**	**4,579**	**12,707**	*****	*****	*****	**4,381,017**	**377,691**	**383,284**
Horse/Faba beans	*	*	*	-	-	-	178,080	6,542	14,921
Field peas	*	*	*	-	-	-	209,405	30,344	62,550
White Haricot beans	*	*	*	*	*	*	374,819	23,976	22,500
Red Haricot beans	74,337	3,131	10,690	*	*	*	3,696,735	209,709	255,273
Chick peas	-	-	-	-	-	-	19,725	3,965	*
White Chick peas	-	-	-	-	-	-	*	*	-
Lentiles	*	*	*	-	-	-	80,619	13,009	12,792
Vetch/Grass peas	-	-	-	-	-	-	27,896	4,531	5,181
Soya beans	-	-	-	-	-	-	*	*	*
Fenugreek	*	*	*	-	-	-	33,725	715	2,495
Mung bean/"Masho"	-	-	-	-	-	-	36,874	*	4,866
Gibto	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	*	*	*	-	-	-	172,039	10,634	9,735
Nueg	-	-	-	-	-	-	*	*	-
Linseed	-	-	-	-	-	-	*	*	*
Ground nuts	-	-	-	-	-	-	54,510	*	3,675
Safflower	-	-	-	-	-	-	10,907	*	*
Sesame	-	-	-	-	-	-	47,669	4,749	5,834
Rapeseed	*****	*****	*****	**-**	**-**	**-**	**55,952**	**661**	*****
Vegetables.....	58,304	1,156	7,541	3,008	*	521	3,175,649	69,583	-
Lettuce.....	*	*	*	-	-	-	8,502	*	-
Head Cabbage....	1,279	*	*	-	-	-	68,225	3,434	-
Ethiopian Cabbage	*	615	*	*	*	*	2,949,826	62,098	-
Tomatoes.....	*	*	*	2,369	40	*	89,537	2,105	-
Green peppers...	5,060	*	*	-	-	-	170,764	1,693	-
Red peppers.....	*	*	*	-	-	-	22,652	209	-
Swiss chard.....	**827**	*****	**26**	**-**	**-**	**-**	**11,040**	*****	**-**
Root Crops.....	114,762	7,185	33,946	65,828	2,105	8,335	4,463,646	269,637	-
Beetroot.....	-	-	-	-	-	-	50,528	1,649	-
Carrot.....	156	5	8	-	-	-	27,405	639	-
Onion.....	42,955	1,152	20,052	*	*	388	391,583	8,824	-
Potatoes.....	57,414	3,201	10,191	*	1,920	7,941	3,472,833	222,303	-
Yam.....	-	-	-	-	-	-	134,344	4,330	-
Garlic.....	10,932	*	*	-	-	-	312,702	15,865	-
Taro/'Godere'...	-	-	-	-	-	-	253,438	4,715	-
Sweet potatoes..	**3,461**	*****	*****	*****	*****	*****	**322,653**	**11,312**	**-**

Table 10 (Cont'd)
National

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**2,160,850**	**285,963**	**196,666**	**873,264**	**232,881**	**1,385,838**	**125,948**	**4,638,290**	**842,335**
Cereals	**1,663,862**	**225,329**	**177,280**	**513,890**	**186,498**	**670,122**	**88,392**	**2,370,533**	**520,853**
Teff	24,896	4,864	*	140,549	48,272	61,933	*	184,229	56,105
Barley	26,401	4,518	*	106,924	36,961	67,385	6,313	379,913	102,464
Wheat	114,891	35,383	67,490	150,229	68,780	87,110	12,738	251,756	94,231
Maize	1,496,053	179,579	100,719	164,782	25,351	482,446	46,497	1,708,613	254,390
Sorghum	*	*	*	7,812	1,334	*	*	53,143	4,837
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	*	*	-	*	*	*	*	*	*
Rice	*	*	-	*	*	-	-	*	*
Pulse	**270,290**	**23,671**	**17,949**	**60,954**	**10,639**	**87,089**	**8,161**	**1,388,637**	**165,076**
Horse/Faba beans	*	*	*	2,820	*	7,641	*	42,286	1,339
Field peas	*	*	*	*	*	*	*	48,707	9,646
White Haricot beans	*	595	*	*	*	*	*	44,690	2,196
Red Haricot beans	247,291	22,007	17,029	22,596	1,998	22,428	499	1,246,473	80,973
Red Chickpeas	*	*	-	*	*	*	*	*	*
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	*	*	8,502	*	14,237	2,624
Vetch/Grass peas	*	*	-	10,489	2,413	*	*	*	*
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	-	*	*	9,460	*	12,678	*
Mung bean/"Masho"	*	*	*	*	*	*	*	*	*
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	*****	*****	*****	*****	*****	*****	*****	**40,628**	*****
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	*	*	*	-	-	-	-	*	*
Safflower	-	-	-	-	-	-	-	*	*
Sesame	-	-	-	*	*	*	*	*	*
Rapeseed	*	*	-	*	*	*	*	*	*
Vegetables.....	**101,208**	**3,166**	**-**	**54,612**	**2,290**	**254,038**	**5,108**	**512,567**	**10,559**
Lettuce.....	*	*	-	*	*	*	*	*	*
Head Cabbage....	14,414	*	-	5,605	*	30,792	*	36,142	2,323
Ethiopian Cabbage	52,171	*	-	17,466	*	78,894	893	377,722	6,212
Tomatoes.....	23,452	842	-	20,689	803	80,021	2,042	58,008	*
Green peppers...	11,730	173	-	*	*	97,420	917	65,081	547
Red peppers.....	*	*	-	*	*	12,591	58	8,718	50
Swiss chard.....	4,092	*	-	-	-	*	*	*	*
Root Crops.....	**347,140**	**33,241**	**-**	**364,450**	**32,439**	**806,911**	**24,278**	**2,193,988**	**141,083**
Beetroot.....	17,980	1,973	-	2,029	718	18,444	1,707	23,788	2,706
Carrot.....	16,937	*	-	*	*	10,366	*	22,231	1,023
Onion.....	77,437	3,421	-	170,492	6,328	278,089	8,249	245,368	7,040
Potatoes.....	241,541	26,980	-	165,512	22,498	495,979	12,341	1,835,134	125,441
Yam.....	*	*	-	-	-	-	-	31,001	909
Garlic.....	4,566	154	-	43,621	*	91,886	1,117	102,033	1,741
Taro/'Godere'...	-	-	-	*	*	-	-	38,273	772
Sweet potatoes..	*	*	-	-	-	5,521	336	34,245	1,453

Table 10 (Cont'd)
National

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**2,776,776**	**412,608**	**903,748**	**1,565,871**	**215,534**	**1,000,771**
Cereals	**1,329,479**	**237,593**	**406,741**	**580,144**	**111,933**	**357,738**
Teff	79,172	19,385	20,378	68,146	19,363	*
Barley	242,141	70,206	99,925	57,061	11,034	28,050
Wheat	131,991	46,812	75,542	90,251	31,690	108,685
Maize	939,373	98,616	198,573	389,624	47,001	152,777
Sorghum	13,705	*	*	8,290	*	*
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	19,661	*	*	*	*	*
Rice	*	*	*	-	-	-
Pulse	**1,144,373**	**77,520**	**196,510**	**237,274**	**15,949**	**54,490**
Horse/Faba beans	17,454	551	1,789	4,219	*	*
Field peas	10,050	*	*	*	*	*
White Haricotbeans	35,438	2,108	5,688	4,074	*	*
Red Haricot beans	1,094,532	70,941	184,882	223,316	14,236	47,242
Red Chick peas	*	*	*	*	*	*
White Chick peas	-	-	-	-	-	-
Lentiles	*	*	*	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	-	-	-	-	-	-
Oile seeds	**11,766**	*****	*****	*****	*****	*****
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	-	-	-
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	**300,819**	**5,279**	**37,795**	**111,918**	**3,267**	**36,556**
Lettuce	-	-	-	*	*	*
Head Cabbage	7,046	*	*	15,368	*	5,458
Ethiopian Cabbage	268,435	3,969	34,480	54,739	863	7,679
Tomatoes	6,344	61	720	18,645	658	*
Green peppers	20,115	196	1,975	24,346	330	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	1,259	*	*
Root crops	**1,126,810**	**91,917**	**261,582**	**1,015,908**	**84,372**	**551,792**
Beet root	5,207	727	472	9,788	1,650	3,550
Carrot	6,820	*	*	6,775	255	1,889
Onion	35,300	1,102	9,323	128,159	4,161	117,365
Potatoes	1,046,203	84,823	240,482	850,918	73,464	354,106
Yam	*	*	*	9,361	*	1,719
Garlic	23,920	*	8,202	55,043	*	72,325
Taro 'Godere'	13,674	164	*	5,207	*	*
Sweet potatoes	7,899	*	*	*	*	*

Table 10 (Cont'd)
National

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**327,869**	**34,332**	**91,060**	**299,188**	**43,129**	**155,676**
Cereals	**61,595**	**19,221**	**23,691**	**92,208**	**30,239**	**50,090**
Teff	*	*	*	*	*	*
Barley	41,234	*	12,249	62,803	21,633	27,370
Wheat	*	*	*	*	*	*
Maize	15,949	*	3,014	21,156	1,538	5,345
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	**12,173**	*****	*****	*****	*****	*****
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	10,550	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*****	*****	*****	*****	*****	*****
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*****	*****	*****	*****	*****	*****
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	**275,592**	**13,552**	**65,154**	**243,037**	**11,979**	**103,244**
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	274,121	13,145	64,056	197,966	10,160	55,183
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.1 Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2013 EC (20220/21GC)
Afar

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**2,532**	**483**	**393**	*	*	*	*	*
Cereals	**1,783**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	1,739	-	-	-	-	-	-	-
Sorghum	*	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	*	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-
Red Haricot beans	*	-	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	*	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	*	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	*	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	*	*	*	-	-	-	-	-
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	*	-	-	-	-	-
Ethiopian Cabbage	*	*	*	-	-	-	-	-
Tomatoes.....	131	*	*	-	-	-	-	-
Green peppers...	*	*	*	-	-	-	-	-
Red peppers.....	*	*	*	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**454**	**364**	**344**	*	*	*	*	*
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	451	362	344	*	*	*	*	*
Potatoes.....	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	-	*	*	-	-	-

Table 10.1 (Cont'd)
Afar

	UREA			UREA + DAP			Indigenous seed		
Crop type	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**350**	**329**	**243**	*****	*****	*****	**1,479**	**1,778**	**621**
Cereals	**-**	**-**	**-**	**-**	**-**	**-**	**1,149**	**1,511**	**611**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	1,097	1,467	592
Sorghum	-	-	-	-	-	-	*	*	*
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**-**	**-**	**-**	**-**	**-**	**-**	*****	*****	*****
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	*	*	*
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	*	*	*
Gibto	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	-	-	-	-	-	-	*	*	*
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	*	*	*
Rapeseed	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables.....	*	*	*	-	-	-	*	*	-
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	*	-	-	-	*	*	-
Ethiopian Cabbage	*	*	*	-	-	-	*	*	-
Tomatoes.....	*	*	*	-	-	-	*	*	-
Green peppers...	*	*	*	-	-	-	*	*	-
Red peppers.....	*	*	*	-	-	-	*	*	-
Swiss chard.....	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Root Crops.....	175	214	206	*	*	*	*	*	-
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	175	214	206	*	*	*	*	*	-
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	*****	*****	-

Table 10 .1 (Cont'd)
Afar

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**1,008**	**754**	**97**	**378**	**413**	**2,383**	**2,320**	*	*
Cereals	**656**	**271**	**96**	-	-	**1,747**	**1,604**	*	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	656	271	96	-	-	1,694	1,560	*	*
Sorghum	-	-	-	-	-	*	*	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	*	*	*	*	*	*	*	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	*	*	-	-
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	*	*	*	*	*	*	*	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	*	*	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	*	*	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	-	*	*	*	*	*	*
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	*	*	*	*	-	-
Ethiopian Cabbage	-	-	-	*	*	*	*	*	*
Tomatoes.....	*	*	-	*	*	*	131	*	*
Green peppers...	*	*	-	*	*	*	*	-	-
Red peppers.....	*	*	-	*	*	*	*	*	*
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops....	**306**	**407**	-	*	*	**331**	**437**	*	*
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	306	407	-	*	*	326	435	*	*
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	*	*	-	-

Table 10 .1 (Cont'd)

Afar

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	-	-	-	*	-	-
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	-	-	-	*	-	-
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	-	-	-	*	-	-
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	*	-	-
Gibto	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	*	*	*	*	*	*
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-
Tomatoes	*	*	*	*	*	*
Green peppers	-	-	-	-	-	-
Red papers	*	*	*	*	*	*
Swiss chard	-	-	-	-	-	-
Root crops	-	-	-	*	*	*
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	*	*	*
Potatoes	-	-	-	-	-	-
Yam	-	-	-	-	-	-
Garlic	-	-	-	-	-	-
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-

Table 10 .1 (Cont'd)

Afar

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.2: (cont'd) Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2013 EC (2020/21 GC)
Amhara

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**332,649**	**174,170**	**846,203**	**571,610**	**40,779**	**9,219**	*	*
Cereals	**177,610**	**117,507**	**267,677**	**202,405**	**24,154**	*	*	*
Teff	*	*	*	*	*	*	*	*
Barley	124,300	76,578	82,150	136,563	20,616	*	*	*
Wheat	5,211	3,690	*	*	*	-	-	-
Maize	20,063	15,036	85,263	53,849	*	-	-	-
Sorghum	*	*	-	*	*	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	*	*	*	*	*	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	*	*	*	**47,699**	*	*	*	*
Horse/Faba beans	*	*	*	*	*	-	-	-
Field peas	4,648	762	*	8,889	*	*	*	*
White Haricot beans	*	*	*	*	*	-	-	-
Red Haricot beans	1,247	*	*	*	*	-	-	-
Red Chick peas	3,801	*	*	*	*	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	12,633	*	*	*	*	-	-	-
Vetch/Grass peas	4,612	*	-	*	*	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	46	*	*	*	*	-	-	-
Mung bean/"Masho"	*	*	-	*	*	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	*	*	*	*	*	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	*	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	*	*	*	*	*	-	-	-
Vegetables.....	**1,941**	**885**	**20,438**	**81,421**	**281**	*	*	*
Lettuce.....	*	*	-	*	*	-	-	-
Head Cabbage....	*	*	*	*	*	-	-	-
Ethiopian Cabbage	282	*	*	*	*	-	-	-
Tomatoes.....	*	310	3,311	8,078	*	-	-	-
Green peppers...	*	*	*	*	*	*	*	*
Red peppers.....	55	*	*	*	*	-	-	-
Swiss chard.....	*	*	-	*	*	-	-	-
Root Crops.....	**50,092**	**47,049**	**554,317**	**362,211**	**8,644**	*	*	*
Beetroot.....	*	*	*	*	*	-	-	-
Carrot.....	*	*	*	*	*	-	-	-
Onion.....	4,997	4,862	144,827	6,397	*	*	*	*
Potatoes.....	43,558	41,132	342,060	350,633	8,445	*	*	*
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	668	598	63,129	9,609	22	*	*	*
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	*	*	*	-	-	-

Table 10.2 (Cont'd)

Amhara

	UREA			UREA + DAP			Indigenous seed		
Crop type	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**146,763**	**18,999**	**58,192**	*****	*****	*****	**2,405,869**	**319,668**	**341,605**
Cereals	**96,230**	**17,366**	**32,600**	*****	*****	*****	**846,478**	**166,780**	**305,324**
Teff	*	*	*	-	-	-	95,749	*	*
Barley	*	*	*	*	*	*	509,510	123,802	236,402
Wheat	-	-	-	-	-	-	74,630	3,742	*
Maize	58,698	*	10,019	-	-	-	253,688	12,226	19,469
Sorghum	-	-	-	-	-	-	*	*	*
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	*	*	*
Rice	-	-	-	-	-	-	-	-	-
Pulse	*****	*****	*****	**-**	**-**	**-**	**200,239**	*****	**36,206**
Horse/Faba beans	-	-	-	-	-	-	*	*	*
Field peas	-	-	-	-	-	-	48,584	4,648	*
White Haricot beans	-	-	-	-	-	-	*	*	*
Red Haricot beans	-	-	-	-	-	-	35,895	1,247	1,820
Chick peas	-	-	-	-	-	-	19,086	3,570	*
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	*	*	*	-	-	-	69,416	12,633	*
Vetch/Grass peas	-	-	-	-	-	-	27,896	4,531	5,181
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	-	-	-	10,977	44	294
Mung bean/"Masho"	-	-	-	-	-	-	*	*	*
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	*****	*****	*****
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	*	*	*
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	*	*	-
Vegetables.....	5,458	14	*	-	-	-	186,511	*	-
Lettuce.....	-	-	-	-	-	-	*	*	-
Head Cabbage....	*	*	*	-	-	-	16,038	*	-
Ethiopian Cabbage	*	*	*	-	-	-	79,833	282	-
Tomatoes.....	-	-	-	-	-	-	40,775	*	-
Green peppers...	*	*	*	-	-	-	74,257	*	-
Red peppers.....	*	*	*	-	-	-	11,702	48	-
Swiss chard.....	-	-	-	-	-	-	*	*	-
Root Crops.....	**61,442**	**1,521**	**24,818**	*****	*****	*****	**1,774,653**	**48,485**	**-**
Beetroot.....	-	-	-	-	-	-	*	*	-
Carrot.....	-	-	-	-	-	-	*	*	-
Onion.....	36,092	*	18,280	*	*	*	185,935	4,536	-
Potatoes.....	22,408	818	*	*	*	*	1,572,932	42,480	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	2,043	*	*	-	-	-	85,372	659	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	*	-	-	-	*	*	-

Table 10.2 (Cont'd)

Amhara

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**260,756**	**12,981**	**12,851**	**262,301**	**27,896**	**955,014**	**68,332**	**1,618,697**	**184,544**
Cereals	**177,652**	**10,830**	**12,851**	**120,537**	**18,755**	**429,966**	**45,814**	**555,719**	**82,873**
Teff	*	*	*	*	*	61,101	*	59,450	13,957
Barley	*	*	*	*	*	62,087	*	201,291	47,922
Wheat	29,046	1,469	*	*	*	50,916	*	66,707	4,090
Maize	133,350	7,837	3,166	64,692	*	300,505	16,300	277,625	14,412
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	*	*	-	*	*	*	*	*	*
Rice	-	-	-	-	-	-	-	-	-
Pulse	*****	*****	**-**	**17,842**	**4,245**	**50,286**	**7,200**	**49,912**	*****
Horse/Faba beans	-	-	-	-	-	*	*	*	*
Field peas	-	-	-	-	-	*	*	4,968	411
White Haricot beans	-	-	-	-	-	*	*	-	-
Red Haricot beans	-	-	-	-	-	*	*	*	*
Red Chickpeas	*	*	-	*	*	*	*	*	*
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	*	*	8,502	*	*	*
Vetch/Grass peas	*	*	-	10,489	2,413	*	*	*	*
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	-	-	-	8,620	*	*	*
Mung bean/"Masho"	-	-	-	-	-	-	-	*	*
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	**14,100**	*****	**-**	**25,315**	*****	**151,595**	*****	**116,415**	*****
Lettuce.....	*	*	-	-	-	*	*	*	*
Head Cabbage....	*	*	-	*	*	20,753	*	*	*
Ethiopian Cabbage	-	-	-	*	*	*	*	*	*
Tomatoes.....	*	*	-	11,281	*	42,843	*	35,334	*
Green peppers...	*	*	-	*	*	73,522	*	48,158	*
Red peppers.....	*	*	-	*	*	12,305	52	7,953	45
Swiss chard.....	*	*	-	-	-	*	*	*	*
Root Crops.....	**79,426**	**1,607**	**-**	**171,109**	**4,490**	**651,576**	**13,573**	**1,279,232**	**31,325**
Beetroot.....	*	*	-	-	-	*	*	*	*
Carrot.....	*	*	-	-	-	*	*	*	*
Onion.....	37,963	461	-	140,088	3,881	217,509	4,828	184,294	4,263
Potatoes.....	38,577	1,078	-	11,604	*	411,168	7,892	1,082,167	26,013
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	*	9	-	35,396	473	84,333	651	73,165	595
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	*	*	*	*

Table 10.2 (Cont'd)

Amhara

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**540,631**	**35,529**	**140,821**	**627,624**	**37,155**	**472,376**
Cereals	**158,203**	**27,274**	**48,606**	**176,062**	**21,980**	**147,482**
Teff	*	*	*	*	*	*
Barley	65,279	*	*	25,095	*	*
Wheat	15,603	*	*	*	*	*
Maize	80,701	2,509	13,872	97,223	5,095	55,553
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	*	*	*	*	*	*
Rice	-	-	-	-	-	-
Pulse	**6,405**	*****	**1,330**	*****	*****	*****
Horse/Faba beans	*	*	*	-	-	-
Field peas	-	-	-	*	*	*
White Haricotbeans	*	*	*	-	-	-
Red Haricot beans	*	*	*	-	-	-
Red Chick peas	*	*	*	*	*	*
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	*	*	*
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	*****	*****	*****	**-**	**-**	**-**
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	*	*	*	-	-	-
Vegetables	**19,164**	**66**	**1,965**	**37,856**	*****	*****
Lettuce	-	-	-	-	-	-
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	8,702	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	-	-	-	-	-	-
Root crops	**420,953**	**7,701**	**88,891**	**500,089**	**14,420**	**305,618**
Beet root	-	-	-	*	*	*
Carrot	*	*	*	*	*	*
Onion	16,013	157	*	100,067	2,382	80,257
Potatoes	404,734	7,524	83,728	387,470	11,501	165,785
Yam	-	-	-	-	-	-
Garlic	*	*	*	42,619	509	*
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	**-**	**-**	**-**	**-**	**-**	**-**

Table 10.2 (Cont'd)

Amhara

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**444,157**	**21,339**	**87,040**	**455,855**	**57,001**	**236,672**
Cereals	**70,516**	**4,246**	**6,740**	**154,644**	**41,833**	**60,237**
Teff	*	*	*	*	*	*
Barley	29,621	4,002	5,906	115,580	19,408	44,961
Wheat	*	*	*	*	*	*
Maize	*	*	*	20,193	1,392	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	**403,077**	**13,393**	**69,317**	**379,977**	**14,280**	**175,143**
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	401,147	13,303	68,656	300,187	10,891	82,465
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.3: (cont'd) Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2009 EC (2016/17 GC)
Oromia

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**753,872**	**470,286**	**773,352**	**1,056,174**	**132,894**	**66,103**	**26,743**	**35,862**
Cereals	**553,519**	**346,995**	**411,228**	**592,248**	**97,569**	**53,114**	**24,013**	**29,730**
Teff	80,539	42,319	29,521	46,063	15,853	*	*	*
Barley	78,221	65,974	96,667	38,024	3,084	*	*	*
Wheat	118,095	104,226	197,779	7,805	*	*	*	*
Maize	262,362	127,565	73,507	516,901	73,417	*	*	*
Sorghum	11,735	5,107	*	31,978	3,342	*	*	*
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	2,567	1,805	*	*	*	*	-	*
Rice	-	-	-	-	-	-	-	-
Pulse	**103,072**	**47,070**	**43,609**	**439,853**	**22,141**	**10,717**	*	**2,432**
Horse/Faba beans	1,688	699	*	5,359	*	-	-	-
Field peas	23,129	4,188	*	*	*	*	*	*
White Haricot beans	13,884	5,167	5,674	113,526	2,905	*	*	*
Red Haricot beans	56,468	33,997	29,684	319,517	17,075	*	*	*
Red Chick peas	*	-	*	-	-	*	-	*
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	*	*	-	*	*	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	639	*	*	*	*	-	-	-
Mung bean/"Masho"	*	*	*	*	*	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**3,572**	*	*	*	*	*	*	*
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	*	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	2,526	*	*	*	*	*	*	*
Rapeseed	78	*	*	*	*	-	-	-
Vegetables.....	**11,608**	**7,610**	**20,438**	**319,641**	**4,857**	*	*	*
Lettuce.....	*	*	*	*	*	-	-	-
Head Cabbage....	*	*	*	12,337	*	*	*	*
Ethiopian Cabbage	9,289	5,700	7,627	291,375	4,452	*	*	*
Tomatoes.....	*	*	*	8,096	*	-	-	-
Green peppers...	924	651	1,633	23,935	211	-	-	-
Red peppers.....	*	*	*	*	*	-	-	-
Swiss chard.....	*	*	*	1,966	*	-	-	-
Root Crops.....	**82,101**	**67,388**	**296,693**	**247,299**	**7,600**	**13,855**	*	*
Beetroot.....	3,266	2,699	3,250	10,899	362	-	-	-
Carrot.....	1,188	998	2,271	3,660	*	*	*	*
Onion.....	3,578	2,805	43,333	35,523	261	*	*	*
Potatoes.....	57,809	48,684	223,361	171,869	5,630	*	*	*
Yam.....	*	*	-	*	*	-	-	-
Garlic.....	*	*	24,445	33,667	378	-	-	-
Taro/'Godere'...	759	*	*	4,154	*	-	-	-
Sweet potatoes..	*	*	*	4,137	*	-	-	-

Table 10.3 (Cont'd)

Oromia

	UREA			UREA + DAP			Indigenous seed		
Crop type	**Holder**	**Hectare**	**Quintal**	**Holder**	**Hectare**	**Quintal**	**Holder**	**Hectare**	**Quintal**
All	**76,152**	**20,069**	**32,089**	*****	*****	*****	**2,746,067**	**644,084**	**795,095**
Cereals	**45,941**	**13,719**	**21,539**	*****	*****	*****	**1,650,131**	**464,624**	**640,417**
Teff	*	*	*	-	-	-	244,821	77,317	54,547
Barley	*	*	*	-	-	-	277,469	74,326	196,375
Wheat	14,434	5,350	9,058	*	*	*	175,737	84,180	227,192
Maize	18,971	4,301	*	*	*	*	1,146,766	214,562	121,737
Sorghum	-	-	-	*	*	*	87,374	11,670	11,963
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	*	*	*	*	*	*	32,277	2,567	28,604
Rice	-	-	-	-	-	-	-	-	-
Pulse	**16,123**	*****	**3,262**	*****	*****	*****	**1,036,886**	**96,147**	**151,870**
Horse/Faba beans	*	*	*	-	-	-	26,436	1,686	*
Field peas	*	*	*	-	-	-	101,206	22,730	51,442
White Haricot beans	*	*	*	-	-	-	213,074	13,598	15,517
Red Haricot beans	*	*	*	*	*	*	693,532	50,230	70,414
Chick peas	-	-	-	-	-	-	*	*	*
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	*	*	*
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	*	-	-	-	16,601	639	2,183
Mung bean/"Masho"	-	-	-	-	-	-	*	*	*
Gibto	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	-	-	-	-	-	-	24,781	3,017	2,807
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	*	*	*
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	15,914	2,526	*
Rapeseed	**-**	**-**	**-**	**-**	**-**	**-**	*****	*****	*****
Vegetables.....	4,175	*	937	-	-	-	529,988	10,394	-
Lettuce.....	*	*	*	-	-	-	*	*	-
Head Cabbage....	281	15	18	-	-	-	18,436	452	-
Ethiopian Cabbage	*	*	*	-	-	-	481,355	8,940	-
Tomatoes.....	*	*	*	-	-	-	14,251	83	-
Green peppers...	*	*	*	-	-	-	40,574	896	-
Red peppers.....	*	*	*	-	-	-	7,777	*	-
Swiss chard.....	**827**	*****	**26**	**-**	**-**	**-**	**2,731**	*****	**-**
Root Crops.....	26,711	*	6,351	*	*	*	733,983	69,902	-
Beetroot.....	-	-	-	-	-	-	21,413	1,429	-
Carrot.....	156	5	8	-	-	-	11,390	608	-
Onion.....	*	*	*	-	-	-	93,309	2,250	-
Potatoes.....	11,641	421	1,564	*	*	*	558,165	49,545	-
Yam.....	-	-	-	-	-	-	*	*	-
Garlic.....	*	*	*	-	-	-	91,203	*	-
Taro/'Godere'...	-	-	-	-	-	-	6,722	759	-
Sweet potatoes..	*	*	*	-	-	-	7,152	*	-

Table 10.3 (Cont'd)

Oromiya

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**455,667**	**108,774**	**86,551**	**460,215**	**185,585**	**255,093**	**35,379**	**928,804**	**311,209**
Cereals	**310,061**	**87,939**	**81,693**	**320,481**	**156,926**	**136,984**	**24,269**	**594,231**	**244,501**
Teff	*	*	*	109,471	38,216	-	-	78,030	26,392
Barley	*	*	*	90,898	34,305	5,298	1,012	141,586	52,076
Wheat	85,845	33,914	59,165	141,178	68,130	36,194	9,588	185,049	90,141
Maize	208,340	46,848	15,167	38,723	14,269	98,242	13,670	289,688	71,479
Sorghum	*	*	*	*	*	-	-	14,943	2,633
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	11,882	970	-	-	21,733	1,780
Rice	-	-	-	-	-	-	-	-	-
Pulse	**30,659**	**6,925**	*****	**26,376**	**5,745**	**13,869**	**639**	**212,676**	**26,115**
Horse/Faba beans	*	*	-	*	*	*	*	11,796	673
Field peas	*	*	*	*	*	*	*	37,826	9,071
White Haricot beans	*	*	*	*	*	*	*	26,182	1,641
Red Haricot beans	25,726	*	*	7,223	1,738	*	249	124,455	11,857
Red Chickpeas	-	-	-	-	-	-	-	*	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	*	*	-	-	*	*
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	*	*	*	*	*	*
Mung bean/"Masho"	-	-	-	*	*	*	*	*	*
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	*****	*****	*****	*****	*****	*****	*****	*****	*****
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	*	*	*	-	-	-	-	*	*
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	*	*	-	-	*	*
Rapeseed	*	*	-	*	*	*	*	*	*
Vegetables.....	**29,045**	**1,214**	**-**	**9,897**	*****	**38,208**	**1,069**	**87,532**	**2,708**
Lettuce.....	-	-	-	*	*	*	*	*	*
Head Cabbage....	5,411	*	-	*	*	3,884	*	7,400	*
Ethiopian Cabbage	*	*	-	1,286	*	17,430	314	72,065	1,548
Tomatoes.....	*	*	-	*	*	10,613	*	6,409	*
Green peppers...	*	*	-	*	*	11,235	269	3,952	95
Red peppers.....	*	*	-	*	*	*	*	*	*
Swiss chard.....	1,793	*	-	-	-	2,452	*	*	*
Root Crops.....	**114,624**	**12,141**	**-**	**130,152**	**21,788**	**123,198**	**9,396**	**292,264**	**37,075**
Beetroot.....	7,338	1,836	-	1,822	716	7,012	1,664	11,003	2,645
Carrot.....	6,086	*	-	*	*	5,756	*	11,581	983
Onion.....	22,139	*	-	28,862	2,131	48,124	2,409	40,200	2,190
Potatoes.....	80,134	8,244	-	93,825	16,533	70,072	4,315	231,977	30,113
Yam.....	*	*	-	-	-	-	-	-	-
Garlic.....	1,478	124	-	7,797	*	6,750	452	12,870	813
Taro/'Godere'...	-	-	-	-	-	-	-	*	*
Sweet potatoes..	*	*	-	-	-	*	*	*	*

Table 10.3 (Cont'd)

Oromiya

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**672,584**	**184,621**	**344,206**	**305,661**	**76,885**	**299,483**
Cereals	**424,280**	**142,058**	**198,041**	**133,195**	**46,174**	**125,741**
Teff	53,840	13,810	15,065	*	*	*
Barley	143,592	45,537	68,933	13,736	*	*
Wheat	116,388	45,907	71,405	62,571	29,713	82,192
Maize	155,758	34,497	31,714	51,129	6,737	24,700
Sorghum	*	*	379	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	18,900	*	*	-	-	-
Rice	-	-	-	-	-	-
Pulse	**146,133**	**16,314**	**28,232**	**17,910**	*****	**7,776**
Horse/Faba beans	7,729	363	819	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	16,715	1,364	2,801	*	*	*
Red Haricot beans	114,017	10,911	20,805	13,362	*	4,227
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	*****	*****	*****	*****	*****	*****
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	*	*	*	-	-	-
Rapeseed	-	-	-	*	*	*
Vegetables	**46,883**	**1,115**	**5,523**	**25,695**	**1,314**	*****
Lettuce	-	-	-	*	*	*
Head Cabbage	1,839	*	*	*	*	*
Ethiopian Cabbage	42,260	935	4,748	13,254	255	2,483
Tomatoes	*	*	*	*	*	*
Green peppers	2,903	75	*	3,194	118	*
Red papers	*	*	*	-	-	-
Swiss chard	*	*	*	1,259	*	*
Root crops	**219,877**	**24,992**	**112,104**	**174,725**	**27,055**	**151,974**
Beet root	3,819	722	447	5,115	1,615	2,803
Carrot	*	*	*	3,693	226	1,092
Onion	14,997	*	*	23,757	1,551	36,196
Potatoes	186,094	18,682	98,476	139,786	19,692	97,946
Yam	-	-	-	-	-	-
Garlic	13,327	*	*	10,686	*	13,936
Taro 'Godere'	*	*	*	-	-	-
Sweet potatoes	*	-	-	-	-	-

Table 10.3 (Cont'd)

Oromiya

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**44,339**	**19,126**	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.4: (cont'd) Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2009 EC (2017/18 GC)
Somali

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	*	**340**	*	*	*	-	-	-
Cereals	*	*	*	-	-	-	-	-
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	**197**	*	*	-	-	-	-	-
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes.....	191	*	*	-	-	-	-	-
Green peppers...	*	*	*	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	*	**167**	*	*	*	-	-	-
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	*	162	*	*	*	-	-	-
Potatoes.....	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	*	*	*	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	*	-	-	-	-	-

Table 10.4 (Cont'd)

Somali

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*	*	*	*
Cereals	*	*	*	*	*	*	*	*	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	*	*	*	*	*	*	-
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	*	*	*	*	*	*	*	*	-
Green peppers...	-	-	-	-	-	-	*	*	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	*	*	*	-	-	-	*	*	-
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	*	*	*	-	-	-	*	*	-
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	*	*	-

Table 10.4 (Cont'd)
Somali

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**2,553**	**167**	*	*	*	**5,036**	*	*	*
Cereals	*	*	*	-	-	*	*	-	-
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	*	*	-	-
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-	-
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	-	*	*	**3,002**	**197**	*	*
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	*	*	-	*	*	3,002	191	*	*
Green peppers...	-	-	-	-	-	*	*	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	*	*	-	*	*	**3,002**	*	*	*
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	*	*	-	*	*	3,002	*	*	*
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	*	*	-	-	-	*	*	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	*	*	-	-

Table 10.4 (Cont'd)

Somali

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	-	-	-	*	*	*
Cereals	-	-	-	-	-	-
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	-	-	-	*	*	*
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-
Tomatoes	-	-	-	*	*	*
Green peppers	-	-	-	*	*	*
Red papers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root crops	-	-	-	*	*	*
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	*	*	*
Potatoes	-	-	-	-	-	-
Yam	-	-	-	-	-	-
Garlic	-	-	-	*	*	*
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	-	-	-	*	*	*

Table 10.4 (Cont'd)

Somali

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.5: (cont'd) Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 20013 EC (2020/21 GC)
Benishangul Gumuz

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**10,971**	**7,479**	**1,333**	**71,824**	**6,848**	*****	*****	*****
Cereals	**4,121**	**2,610**	**406**	**48,108**	**2,341**	*****	*****	*****
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	3,982	2,472	406	47,925	2,203	*	*	*
Sorghum	*	*	-	*	*	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**3,630**	**2,133**	**254**	**55,297**	**1,976**	*****	*****	*****
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	*	*	*	*	*	-	-	-
Red Haricot beans	3,511	2,043	219	54,277	1,929	*	*	*
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	*	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	**745**	**455**	*****	**19,957**	**302**	*****	*****	*****
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	*	-	-	*	*	*
Ethiopian Cabbage	571	307	*	19,119	272	-	-	-
Tomatoes.....	*	*	*	*	*	-	-	-
Green peppers...	*	*	*	*	*	*	*	*
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	*	*	-	*	*	-	-	-
Root Crops.....	**2,476**	**2,280**	*****	**18,279**	**2,229**	*****	*****	*****
Beetroot.....	*	*	*	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	*	*	-	*	*	-	-	-
Potatoes.....	2,419	2,226	*	17,102	2,178	*	*	*
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	*	*	*	*	*	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	-	*	*	-	-	-

Table 10.5 (Cont'd)

Benishangul Gumuz

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*	**120,504**	**9,936**	**2,342**
Cereals	*	*	*	*	*	*	**57,939**	**3,222**	**841**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	57,756	3,084	841
Sorghum	-	-	-	-	-	-	*	*	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	*	*	*	-	-	-	**93,512**	**3,512**	**1,501**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	2,113	*	*
Red Haricot beans	*	*	*	-	-	-	91,740	3,393	1,486
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	*	*	*
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	*	*	*	*	42,256	728	-
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	*	*	-
Ethiopian Cabbage	*	*	*	-	-	-	36,950	555	-
Tomatoes.....	-	-	-	*	*	*	*	*	-
Green peppers...	*	*	*	-	-	-	*	*	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	*	*	-
Root Crops.....	*	*	*	-	-	-	**23,897**	**2,474**	-
Beetroot.....	-	-	-	-	-	-	*	*	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	*	*	-
Potatoes.....	*	*	*	-	-	-	**22,301**	**2,419**	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	*	*	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	*	*	-

Table 10.5 (Cont'd)

Benishangul Gumuz

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	*	*	*	*	*	**11,819**	**537**	**28,596**	*
Cereals	*	**514**	*	*	*	**7,142**	**328**	*	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	514	*	*	*	7,142	328	*	*
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	*	*	-	*	*	*	*	*	*
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	*	*	-	*	*	*	*	*	*
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	-	*	*	**7,446**	*	**8,831**	*
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	*	*	*	*	*	*
Ethiopian Cabbage	*	*	-	-	-	*	*	*	46
Tomatoes.....	*	*	-	-	-	*	*	*	*
Green peppers...	-	-	-	*	*	*	*	*	*
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	*	*	-	-
Root Crops.....	*	*	-	*	*	*	*	*	*
Beetroot.....	*	*	-	*	*	*	*	*	*
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	*	*	*	*	*	*
Potatoes.....	-	-	-	-	-	-	-	*	*
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	*	*	-	-	*	*
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	-	-	-

Table 10.5 (Cont'd)

Benishangul Gumuz

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**9,040**	**433**	**827**	*****	*****	*****
Cereals	**4,117**	*****	*****	*****	*****	*****
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	4,117	*	*	*	*	*
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	**4,781**	*****	*****	*****	*****	*****
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	*	*	*	-	-	-
Red Haricot beans	4,079	*	*	*	*	*
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	**5,156**	*****	*****	**1,019**	*****	*****
Lettuce	-	-	-	-	-	-
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root crops	*****	*****	*****	*****	*****	*****
Beet root	*	*	*	*	*	*
Carrot	-	-	-	-	-	-
Onion	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-
Yam	-	-	-	-	-	-
Garlic	*	*	*	-	-	-
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-

Table 10.5 (Cont'd)
Benishangul Gumuz

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.6: (cont'd) Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2009 EC (2017/18 GC)
SNNP

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**969,943**	**497,492**	**518,180**	**2,648,546**	**198,822**	**17,119**	**3,182**	**3,588**
Cereals	**570,016**	**207,184**	**186,087**	**1,389,426**	**92,256**	**7,315**	**1,376**	**1,145**
Teff	28,560	19,126	*	*	*	*	*	*
Barley	18,219	11,416	5,429	85,605	7,385	-	-	-
Wheat	*	-	-	-	-	-	-	-
Maize	481,251	171,110	163,338	1,318,062	78,617	6,620	*	*
Sorghum	31,861	*	*	36,362	*	-	-	-
Finger millet	*	*	-	*	*	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	*	*	*	-	-	-	-	-
Pulse	**180,284**	**110,552**	**160,892**	**1,063,203**	**42,214**	**10,066**	*****	*****
Horse/Faba beans	4,412	980	1,167	37,081	*	-	-	-
Field peas	3,048	1,555	*	29,245	1,441	-	-	-
White Haricot beans	7,837	5,638	950	80,593	*	*	*	*
Red Haricot beans	159,260	101,876	158,126	969,426	34,430	*	*	*
Red Chick peas	*	-	-	-	-	-	-	-
White Chick peas	*	-	-	-	-	-	-	-
Lentiles	*	*	*	*	*	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	*	*	-	*	*	-	-	-
Fenugreek	*	*	*	*	*	-	-	-
Mung bean/"Masho"	*	*	*	*	*	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**6,792**	**871**	*****	**30,026**	**719**	**-**	**-**	**-**
Nueg	*	-	-	-	-	-	-	-
Linseed	*	*	-	*	*	-	-	-
Ground nuts	*	*	*	12,698	*	-	-	-
Safflower	*	*	*	*	*	-	-	-
Sesame	*	*	*	-	-	-	-	-
Rapeseed	*	*	*	*	*	-	-	-
Vegetables.....	**50,432**	**33,899**	**8,251**	**1,179,827**	**30,212**	*****	*****	*****
Lettuce.....	*	*	-	*	*	-	-	-
Head Cabbage....	3,288	*	*	11,791	379	-	-	-
Ethiopian Cabbage	45,999	31,454	7,171	1,159,434	29,463	*	*	*
Tomatoes.....	*	*	-	12,606	*	-	-	-
Green peppers...	169	*	*	16,767	48	-	-	-
Red peppers.....	*	*	-	*	*	-	-	-
Swiss chard.....	*	*	-	*	*	-	-	-
Root Crops.....	**162,420**	**144,985**	**161,827**	**813,554**	**33,421**	*****	*****	*****
Beetroot.....	337	225	*	19,389	191	-	-	-
Carrot.....	34	16	*	8,497	8	-	-	-
Onion.....	2,244	641	*	43,068	*	-	-	-
Potatoes.....	141,681	131,647	157,024	414,917	21,302	*	*	*
Yam.....	4,195	3,376	*	81,409	2,993	-	-	-
Garlic.....	1,773	1,400	55	93,625	1,365	-	-	-
Taro/'Godere'...	3,921	2,392	2,039	140,331	2,183	-	-	-
Sweet potatoes..	8,234	5,288	*	199,824	5,076	-	-	-

Table 10.6 (Cont'd)

SNNP

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**78,404**	**15,269**	**12,372**	**23,949**	*****	**11,713**	**4,965,061**	**826,702**	**378,573**
Cereals	**47,612**	**11,953**	**7,287**	**15,535**	*****	*****	**2,671,124**	**461,966**	**216,415**
Teff	*	*	*	*	*	*	118,649	27,922	14,931
Barley	*	*	*	*	*	*	208,609	18,094	19,686
Wheat	-	-	-	-	-	-	*	*	*
Maize	35,932	6,848	4,926	*	*	*	2,475,478	374,889	168,640
Sorghum	*	*	*	-	-	-	115,971	30,988	8,025
Finger millet	-	-	-	-	-	-	*	*	*
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	*	*	*
Pulse	**23,107**	**1,033**	**2,197**	*****	*****	*****	**2,552,621**	**165,141**	**155,527**
Horse/Faba beans	*	*	*	-	-	-	127,028	4,410	3,909
Field peas	-	-	-	-	-	-	59,614	2,966	2,058
White Haricot beans	-	-	-	*	*	*	124,600	7,569	4,765
Red Haricot beans	22,852	1,025	2,181	*	*	*	2,386,318	144,693	144,305
Chick peas	-	-	-	-	-	-	*	*	*
White Chick peas	-	-	-	-	-	-	*	*	-
Lentiles	-	-	-	-	-	-	*	*	*
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	*	*	*
Fenugreek	-	-	-	-	-	-	*	*	*
Mung bean/"Masho"	-	-	-	-	-	-	*	*	*
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	*	*	*	-	-	-	115,444	6,792	6,630
Nueg	-	-	-	-	-	-	*	*	-
Linseed	-	-	-	-	-	-	*	*	*
Ground nuts	-	-	-	-	-	-	50,127	*	*
Safflower	-	-	-	-	-	-	10,907	*	*
Sesame	-	-	-	-	-	-	*	*	*
Rapeseed	*****	*****	*****	**-**	**-**	**-**	**24,055**	*****	**16**
Vegetables.....	*	*	*	*	*	*	1,740,184	49,116	-
Lettuce.....	-	-	-	-	-	-	*	*	-
Head Cabbage....	-	-	-	-	-	-	30,787	2,827	-
Ethiopian Cabbage	*	*	*	*	*	*	1,692,234	45,228	-
Tomatoes.....	-	-	-	-	-	-	21,009	*	-
Green peppers...	-	-	-	-	-	-	42,890	167	-
Red peppers.....	-	-	-	-	-	-	*	*	-
Swiss chard.....	**-**	**-**	**-**	**-**	**-**	**-**	**4,943**	*****	**-**
Root Crops.....	24,830	2,103	2,475	*	*	*	1,716,239	143,689	-
Beetroot.....	-	-	-	-	-	-	22,929	205	-
Carrot.....	-	-	-	-	-	-	15,244	28	-
Onion.....	-	-	-	-	-	-	68,732	1,161	-
Potatoes.....	23,267	1,962	2,296	*	*	*	1,172,339	124,189	-
Yam.....	-	-	-	-	-	-	125,240	4,195	-
Garlic.....	-	-	-	-	-	-	130,678	1,755	-
Taro/'Godere'...	-	-	-	-	-	-	243,730	3,921	-
Sweet potatoes..	*	*	*	-	-	-	291,635	8,234	-

Table 10.6 (Cont'd)

SNNP

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**931,652**	**143,021**	**60,486**	**74,036**	**16,994**	**81,663**	*****	**1,711,881**	**325,163**
Cereals	**706,045**	**107,940**	**46,709**	**30,302**	*****	**62,660**	*****	**949,235**	**182,012**
Teff	*	*	*	*	*	*	*	46,750	*
Barley	*	*	-	*	*	-	-	37,036	2,467
Wheat	-	-	-	-	-	-	-	-	-
Maize	684,259	106,274	46,358	18,798	*	43,240	*	869,952	157,032
Sorghum	*	*	*	*	*	*	*	38,200	2,204
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	*	*	-	*	*	-	-	*	*
Pulse	**169,044**	**15,143**	**13,777**	*****	*****	*****	*****	**907,696**	**63,806**
Horse/Faba beans	*	*	*	*	*	-	-	15,552	337
Field peas	*	*	-	-	-	-	-	5,912	*
White Haricot beans	*	*	*	-	-	-	-	16,470	538
Red Haricot beans	161,290	14,567	13,742	*	*	*	*	888,383	62,464
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	*	*
Mung bean/"Masho"	*	*	-	*	*	-	-	*	*
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	*****	*****	**-**	**-**	**31,852**	*****
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	*	*
Safflower	-	-	-	-	-	-	-	*	*
Sesame	-	-	-	*	*	-	-	*	*
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*****	*****	**-**	*****	*****	**16,072**	*****	**132,888**	**4,199**
Lettuce.....	-	-	-	-	-	-	-	*	*
Head Cabbage....	*	*	-	-	-	*	*	10,492	*
Ethiopian Cabbage	*	*	-	*	*	*	*	118,573	2,808
Tomatoes.....	*	*	-	-	-	*	*	*	37
Green peppers...	*	*	-	-	-	-	-	*	*
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	*	*	-	-	-	-	-	-	-
Root Crops.....	**132,024**	**18,731**	**-**	**33,459**	**5,549**	**6,539**	*****	**567,845**	**71,214**
Beetroot.....	8,670	*	-	-	-	*	*	6,105	*
Carrot.....	8,269	6	-	-	-	*	*	8,589	13
Onion.....	13,617	*	-	-	-	*	*	10,278	*
Potatoes.....	106,298	17,492	-	32,530	5,537	*	*	482,957	68,286
Yam.....	-	-	-	-	-	-	-	30,311	898
Garlic.....	*	*	-	-	-	-	-	14,003	321
Taro/'Godere'...	-	-	-	*	*	-	-	35,676	556
Sweet potatoes..	-	-	-	-	-	-	-	24,662	799

Table 10.6 (Cont'd)

SNNP

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**1,179,472**	**168,750**	**262,403**	**560,411**	**98,635**	**212,564**
Cereals	**446,519**	**54,829**	**89,446**	**217,969**	**42,477**	**79,114**
Teff	13,751	*	*	*	*	*
Barley	33,270	2,542	2,534	*	1,227	2,509
Wheat	-	-	-	-	-	-
Maize	402,437	48,178	82,339	188,353	33,867	67,123
Sorghum	*	*	*	8,290	*	*
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	*	*	*	-	-	-
Pulse	**722,315**	**53,950**	**117,340**	**175,722**	**12,372**	**38,602**
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	-	-	-
White Haricotbeans	4,249	271	375	2,573	*	*
Red Haricot beans	714,878	53,433	116,156	169,988	12,026	37,190
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	*	*	*	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	-	-	-	-	-	-
Oile seeds	*****	*****	*****	*****	*****	*****
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	*	*	*
Safflower	*	*	*	-	-	-
Sesame	-	-	-	*	*	*
Rapeseed	*	*	*	-	-	-
Vegetables	**66,668**	**2,229**	**5,585**	**18,357**	*****	**1,787**
Lettuce	-	-	-	-	-	-
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	59,582	1,238	5,200	13,556	*	*
Tomatoes	-	-	-	-	-	-
Green peppers	*	*	*	-	-	-
Red papers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root crops	**410,905**	**57,613**	**49,301**	**335,972**	**42,794**	**92,947**
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	4,290	*	*	*	*	*
Potatoes	383,655	57,058	47,248	323,662	42,271	90,375
Yam	*	*	*	6,986	*	*
Garlic	4,454	31	46	*	*	*
Taro 'Godere'	12,894	105	*	5,207	*	*
Sweet potatoes	4,349	*	*	*	*	*

Table 10.6 (Cont'd)
SNNP

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**38,355**	**3,831**	**5,288**	**29,006**	*****	*****
Cereals	*****	*****	*****	*****	*****	*****
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	**6,333**	*****	*****	*****	*****	*****
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	6,333	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*****	*****	*****	*****	*****	*****
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*****	*****	*****	*****	*****	*****
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*****	*****	**3,212**	*****	*****	*****
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	3,212	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.7: (cont'd) Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2013 EC (2020/21 GC)
Sidama

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**47,729**	**43,905**	**200,828**	**587,166**	**11,829**	*	*	*
Cereals	**24,182**	**22,976**	**89,049**	**276,566**	**5,151**	*	*	*
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	24,182	22,976	89,049	276,566	5,151	*	*	*
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**11,427**	**10,398**	**63,926**	**172,835**	**2,003**	*	*	*
Horse/Faba beans	*	*	*	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	*	*	*	*	*	-	-	-
Red Haricot beans	11,094	10,085	61,898	162,409	1,878	*	*	*
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	*	*	*	*	*	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	*	*	*	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	*	*	*	*	*	-	-	-
Vegetables.....	**7,305**	**6,149**	**33,551**	**376,762**	**3,510**	*	*	*
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	-	*	*	-	-	-
Ethiopian Cabbage	7,190	6,052	33,530	372,716	3,420	*	*	*
Tomatoes.....	*	*	-	*	*	-	-	-
Green peppers...	*	*	*	*	*	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**4,615**	**4,212**	**14,249**	**61,381**	**1,006**	*	*	*
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	*	*	-	*	*	-	-	-
Potatoes.....	3,787	3,546	*	*	*	*	*	*
Yam.....	109	109	*	*	*	*	*	*
Garlic.....	*	*	-	*	*	-	-	-
Taro/'Godere'...	*	*	-	*	*	-	-	-
Sweet potatoes..	*	*	*	*	*	-	-	-

Table 10.7 (Cont'd)
Sidama

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*	**1,070,060**	**29,008**	**73,422**
Cereals	*	*	*	*	*	*	**316,526**	**6,932**	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	316,526	6,932	*
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	*	*	*	-	-	-	**496,650**	**10,301**	**38,099**
Horse/Faba beans	*	*	*	-	-	-	*	*	*
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	*	*	*	-	-	-	21,455	*	*
Red Haricot beans	*	*	*	-	-	-	488,702	10,010	37,238
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	*	*	*
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	*	*	*
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	*	*	*
Vegetables.....	*	*	*	-	-	-	663,505	7,167	-
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	*	*	-
Ethiopian Cabbage	*	*	*	-	-	-	659,115	7,053	-
Tomatoes.....	-	-	-	-	-	-	*	*	-
Green peppers...	-	-	-	-	-	-	6,750	*	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	-	-	-	*	*	*	191,778	4,406	-
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	*	*	-
Potatoes.....	-	-	-	*	*	*	134,691	3,621	-
Yam.....	-	-	-	-	-	-	8,277	109	-
Garlic.....	-	-	-	-	-	-	*	*	-
Taro/'Godere'...	-	-	-	-	-	-	*	*	-
Sweet potatoes..	-	-	-	-	-	-	*	*	-

Table 10.7 (Cont'd)
Sidama

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**478,510**	**18,591**	*	*	*	*	*	**315,679**	**16,918**
Cereals	**452,833**	**17,250**	*	*	*	*	*	**243,377**	**9,326**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	452,833	17,250	*	*	*	*	*	243,377	9,326
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**60,889**	**1,125**	**745**	*	*	*	*	**196,326**	**5,058**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	*	*	*	-	-	*	*	*	*
Red Haricot beans	53,935	1,084	654	*	*	*	*	196,326	5,041
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	-	*	*	*	*	**150,187**	**1,635**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	*	*	-	*	*	*	*	149,153	1,617
Tomatoes.....	-	-	-	-	-	-	-	-	-
Green peppers...	*	*	-	-	-	*	*	*	*
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	*	*	-	*	*	-	-	**34,018**	*
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	*	*
Potatoes.....	*	*	-	*	*	-	-	*	*
Yam.....	-	-	-	-	-	-	-	*	*
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	-	-	-	-	-	*	*

Table 10.7 (Cont'd)

Sidama

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**372,907**	**23,213**	**155,396**	**62,523**	*****	*****
Cereals	**295,074**	**13,258**	**70,399**	**50,369**	*****	**4,880**
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	295,074	13,258	70,399	50,369	*	4,880
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	**264,311**	**6,622**	**49,368**	*****	*****	*****
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	11,150	*	*	-	-	-
Red Haricot beans	260,468	6,451	47,452	*	*	*
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	*****	*****	*****	**-**	**-**	**-**
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	*	*	*	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	*	*	*	-	-	-
Vegetables	**162,519**	**1,763**	**24,323**	*****	*****	*****
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	161,830	1,757	24,302	*	*	*
Tomatoes	-	-	-	-	-	-
Green peppers	*	*	*	*	-	-
Red papers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root crops	*****	*****	*****	*****	*****	*****
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	-	-	-
Potatoes	*	*	*	-	-	-
Yam	*	*	*	*	*	*
Garlic	-	-	-	-	-	-
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	*	*	*	*	*	*

Table 10.7 (Cont'd)
Sidama

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.8: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2013 EC (2020/21 GC)
Gambela

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**4,702**	**104**	*****	**1,062**	**65**	*****	*****	*****
Cereals	**4,163**	**92**	*****	**1,062**	**65**	*****	*****	*****
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	4,082	92	*	1,062	65	*	*	*
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	*	-	-	-	-	-	-	-
Pulse	**174**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	*	-	-	-	-	-	-	-
Red Haricot beans	113	-	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**310**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	*	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	*	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	**53**	*****	*****	**-**	**-**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-
Ethiopian Cabbage	41	-	-	-	-	-	-	-
Tomatoes.....	*	*	*	-	-	-	-	-
Green peppers...	*	-	-	-	-	-	-	-
Red peppers.....	*	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	*****	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	-
Potatoes.....	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	*	-	-	-	-	-	-	-

Table 10.8 (Cont'd)

Gambela

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*	**22,257**	**4,279**	**2,313**
Cereals	*	*	*	*	*	*	**21,818**	**3,756**	**2,100**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	21,693	3,675	1,992
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	*	*	*
Pulse	-	-	-	-	-	-	**1,031**	**174**	*
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	579	*	*
Red Haricot beans	-	-	-	-	-	-	478	113	7
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	548	310	*
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	*	*	*
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	*	*	*
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	-	-	-	*	*	*	334	38	-
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	330	38	-
Tomatoes.....	-	-	-	*	*	*	-	-	-
Green peppers...	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	*	*	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	-	-	-	-	-	-	*	*	-
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	-	-
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	*	*	-

Table 10.8 (Cont'd)

Gambela

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**2,458**	**420**	**107**	*****	*****	*****	*****	**911**	**200**
Cereals	**2,435**	**407**	**107**	*****	*****	**-**	**-**	**873**	**177**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	2,435	407	107	*	*	-	-	873	177
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-	-
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	*****	*****
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	*	*
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*****	*****	**-**	**-**	**-**	*****	*****	*****	*****
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	*	*	-	-	-	*	*	*	*
Tomatoes.....	*	*	-	-	-	*	*	-	-
Green peppers...	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	-	-
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	-	-	-

Table 10.8 (Cont'd)

Gambela

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	-	-	-	-	-	-
Cereals	-	-	-	-	-	-
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-
Tomatoes	-	-	-	-	-	-
Green peppers	-	-	-	-	-	-
Red papers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root crops	-	-	-	-	-	-
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-
Yam	-	-	-	-	-	-
Garlic	-	-	-	-	-	-
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-

Table 10.8 (Cont'd)

Gambela

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.9: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2013 EC (2020/21 GC)

Hareri

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**575**	**553**	**1,264**	**8,609**	**183**	**-**	**-**	**-**
Cereals	*****	*****	*****	*****	*****	**-**	**-**	**-**
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	-	-	-
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	*****	*****	*****	**-**	**-**	**-**	**-**	**-**
Horse/Faba beans	*	*	*	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	*****	*****	**768**	**7,304**	*****	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	*	*	*	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes.....	*	*	*	*	66	-	-	-
Green peppers...	*	*	*	*	*	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	*	-	-	-	-	-	-	-
Root Crops.....	**64**	**58**	*****	**1,660**	**31**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	*	*	*	*	*	-	-	-
Potatoes.....	*	*	*	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	*	*	*	*	*	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	*	*	*	-	-	-

Table 10.9 (Cont'd)

Hareri

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	-	-	-	*	*	*
Cereals	*	*	*	-	-	-	*	*	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	-	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	*	-	-	-	*	*	-
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	*	-	-	-	*	*	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	*	*	*	-	-	-	*	*	-
Green peppers...	*	*	*	-	-	-	*	*	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	*	*	-
Root Crops.....	*	*	*	-	-	-	*	*	-
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	-	-
Potatoes.....	-	-	-	-	-	-	*	*	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	*	*	*	-	-	-	*	*	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	*	-	-	-	*	*	-

Table 10.9 (Cont'd)
Hareri

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**15,732**	**491**	*	*	*	**16,441**	**519**	**18,584**	**575**
Cereals	*	*	*	-	-	*	*	**3,432**	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	-	-	*	*	3,432	*
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	*	*	*	-	-	*	*	*	*
Horse/Faba beans	*	*	*	-	-	*	*	*	*
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-	-
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	**12,654**	*	-	*	*	**13,363**	*	**13,363**	*
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	-	*	*	*	*	*	*
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	9,351	*	-	*	*	9,351	*	9,705	*
Green peppers...	*	*	-	*	*	*	*	*	*
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	*	*	*	*
Root Crops.....	*	*	-	-	-	**2,462**	**48**	**3,748**	**64**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	*	*	-	-	-	*	*	*	*
Potatoes.....	-	-	-	-	-	*	*	*	*
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	*	*	*	*
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	*	*	*	*

Table 10.9 (Cont'd)
Hareri

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	**5,825**	**189**	*
Cereals	*	*	*	*	*	*
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	*	*	*	*	*	*
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	*	*	*	-	-	-
Horse/Faba beans	*	*	*	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	*	*	*	**4,053**	**113**	**575**
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-
Tomatoes	*	*	*	2,709	102	*
Green peppers	-	-	-	*	*	*
Red papers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root crops	*	*	*	*	*	*
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	*	*	*
Potatoes	*	*	*	-	-	-
Yam	-	-	-	-	-	-
Garlic	-	-	-	-	-	-
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	-	-	-	*	*	*

Table 10.9 (Cont'd)
Hareri

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 10.10: (cont'd) Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2013 EC (2020/21 GC)
Dire Dawa Astedadar

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**671**	**630**	*****	**10,151**	**243**	*****	*****	*****
Cereals	*****	*****	*****	**1,591**	*****	**-**	**-**	**-**
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	*	*	*	1,591	*	-	-	-
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	*****	*****	*****	**5,752**	**40**	*****	*****	*****
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	*	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes.....	49	44	*	5,569	25	*	*	*
Green peppers...	*	*	-	*	*	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**409**	**395**	*****	**3,968**	**150**	*****	*****	*****
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	*	*	278	*	*	*	*	*
Potatoes.....	*	*	*	*	*	*	*	*
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	*	*	*	856	76	-	-	-

Table 10.10 (Cont'd)

Dire Dawa

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*	**25,242**	**556**	*
Cereals	*	*	*	*	*	*	*	*	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	*	*	14	*	9,259	61	-
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	*	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	*	*	*	*	14	*	9,077	47	-
Green peppers...	-	-	-	-	-	-	*	*	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	*	*	*	*	*	*	*	352	-
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	*	*	*	*	*	*	5,896	*	-
Potatoes.....	-	-	-	*	*	*	*	*	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	*	*	*	1,342	*	-

Table 10.10 (Cont'd)
Dire Dawa

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	*	*	-	*	*	**25,831**	**634**	*	*
Cereals	-	-	-	-	-	*	*	*	*
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	*	*	*	*
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	-	-	-	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	-	-
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	*	*	-	*	*	**9,888**	*	**3,208**	*
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	*	*	-	*	*	*	*	*	*
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	*	*	-	*	*	9,496	49	2,998	16
Green peppers...	-	-	-	-	-	*	*	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	*	*	-	*	*	*	**400**	*	*
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	*	*	-	*	*	6,596	*	*	*
Potatoes.....	-	-	-	-	-	*	*	*	*
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	1,342	*	*	*

Table 10.10 (Cont'd)
Dire Dawa

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	-	-	-	-	-	-
Cereals	-	-	-	-	-	-
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	-	-	-	-	-	-
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-
Tomatoes	-	-	-	-	-	-
Green peppers	-	-	-	-	-	-
Red papers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root crops	-	-	-	-	-	-
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	-	-	-
Potatoes	-	-	-	-	-	-
Yam	-	-	-	-	-	-
Garlic	-	-	-	-	-	-
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-

Table 10.10 (Cont'd)
Dire Dawa

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	*	*	*	*	*	*
Cereals	*	*	*	*	*	*
Teff	*	*	*	*	*	*
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	*	*	*	*	*	*
Sorghum	*	*	*	*	*	*
Finger millet	*	*	*	*	*	*
Oats/ 'Aja'	*	*	*	*	*	*
Rice	*	*	*	*	*	*
Pulse	*	*	*	*	*	*
Horse/Faba beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	*	*	*
Red Chick - Peas	*	*	*	*	*	*
White Chick - Peas	*	*	*	*	*	*
Lentiles	*	*	*	*	*	*
Vetch/Grass peas	*	*	*	*	*	*
Soya beans	*	*	*	*	*	*
Fenugreek	*	*	*	*	*	*
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	*	*	*	*	*	*
Oile seeds	*	*	*	*	*	*
Nueg	*	*	*	*	*	*
Linseed	*	*	*	*	*	*
Ground nuts	*	*	*	*	*	*
Safflower	*	*	*	*	*	*
Sesame	*	*	*	*	*	*
Rapeseed	*	*	*	*	*	*
Vegetables	*	*	*	*	*	*
Lettuce	*	*	*	*	*	*
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	*	*	*	*	*	*
Green peppers	*	*	*	*	*	*
Red papers	*	*	*	*	*	*
Swiss chard	*	*	*	*	*	*
Root crops	*	*	*	*	*	*
Beet root	*	*	*	*	*	*
Carrot	*	*	*	*	*	*
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Yam	*	*	*	*	*	*
Garlic	*	*	*	*	*	*
Taro 'Godere'	*	*	*	*	*	*
Sweet potatoes	*	*	*	*	*	*

Table 21. Holders Applying Inputs by Age group
National

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	4,839	*	*	*	1,105
18 - 20	90,049	22,527	12,635	8,255	7,914
21 - 24	293,122	88,766	46,184	26,112	31,234
25 - 29	1,085,206	345,008	181,520	63,190	95,751
30 - 39	3,466,948	1,322,264	700,574	266,176	358,764
40 - 49	3,295,152	1,378,876	610,441	241,145	403,912
50 - 59	2,073,557	826,459	332,401	142,728	249,746
60 and above	1,858,562	716,797	275,206	123,542	230,217
Not stated	*	*	-	-	*
Total	**12,168,676**	**4,703,104**	**2,160,336**	**872,028**	**1,379,263**

Table 21.1 Holders Applying Inputs by Age group
Afar

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	*	*	-	*	*
18 - 20	*	-	*	-	*
21 - 24	72	*	*	*	72
25 - 29	329	36	116	*	293
30 - 39	1,060	186	423	218	1,040
40 - 49	463	*	209	*	445
50 - 59	360	*	136	*	360
60 and above	98	-	*	-	94
Not stated	-	-	-	-	-
Total	**2,411**	**348**	**991**	**345**	**2,333**

Table 21.2 Holders Applying Inputs by Age group
Amhara

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	*	*	-	-	*
18 - 20	5,643	2,960	*	*	3,187
21 - 24	37,058	17,962	*	*	16,783
25 - 29	139,616	63,824	16,411	10,823	53,816
30 - 39	554,494	294,819	70,214	74,558	221,676
40 - 49	700,451	350,921	85,638	77,476	293,842
50 - 59	534,199	252,796	40,142	44,376	187,329
60 and above	551,811	238,489	44,710	48,459	177,375
Not stated	*	*	-	-	*
Total	**2,524,899**	**1,223,205**	**260,756**	**262,301**	**955,014**

Table 21. 3 Holders Applying Inputs by Age group
Oromia

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	3,794	*	*	*	583
18 - 20	31,887	9,317	4,086	5,575	2,260
21 - 24	117,548	37,721	23,731	19,769	10,562
25 - 29	327,457	110,512	49,922	42,956	28,989
30 - 39	925,060	340,870	141,314	146,769	76,238
40 - 49	766,036	289,024	118,738	120,790	65,258
50 - 59	425,025	150,555	58,977	62,023	37,642
60 and above	396,116	138,706	57,027	60,254	33,562
Not stated	-	-	-	-	-
Total	**2,992,923**	**1,077,673**	**455,170**	**459,011**	**255,093**

Table 21.4 Holders Applying Inputs by Age group
Ethiopia Somali

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	-	-	-	-	-
18 - 20	-	-	-	-	-
21 - 24	-	-	-	-	-
25 - 29	898	*	*	*	898
30 - 39	1,750	*	*	*	1,750
40 - 49	709	*	*	*	709
50 - 59	*	*	*	*	*
60 and above	*	*	260	*	*
Not stated	-	-	-	-	-
Total	**5,202**	**2,458**	**2,553**	*****	**5,036**

Table 21.5 Holders Applying Inputs by Age group
Benishangul Gumuz

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	*	-	-	-	*
18 - 20	3,274	*	*	-	*
21 - 24	8,493	*	*	*	*
25 - 29	14,904	*	*	*	*
30 - 39	30,691	2,745	*	*	2,463
40 - 49	28,452	2,757	*	*	2,653
50 - 59	18,531	3,270	*	*	2,174
60 and above	21,457	3,246	1,298	*	2,923
Not stated	-	-	-	-	-
Total	**125,934**	**12,757**	*****	*****	**11,819**

Table 21.6 Holders Applying Inputs by Age group
SNNP

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	*	-	-	-	-
18 - 20	39,744	9,223	6,298	*	-
21 - 24	112,019	22,643	9,076	*	*
25 - 29	489,364	108,663	80,021	7,229	5,512
30 - 39	1,557,895	490,785	313,148	20,777	32,474
40 - 49	1,451,845	556,330	267,036	18,297	23,898
50 - 59	878,304	324,080	139,154	14,682	9,722
60 and above	753,703	277,033	116,920	10,752	9,924
Not stated	-	-	-	-	-
Total	**5,283,308**	**1,788,756**	**931,652**	**74,036**	**81,663**

Table 21.7 Holders Applying Inputs by Age group
Sidama

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	-	-	-	-	-
18 - 20	*	-	-	-	*
21 - 24	15,677	8,742	*	-	*
25 - 29	105,442	58,799	31,270	*	*
30 - 39	372,772	180,540	160,927	*	*
40 - 49	327,729	171,508	133,445	*	*
50 - 59	206,816	91,173	91,635	*	*
60 and above	127,816	57,060	53,873	*	*
Not stated	-	-	-	-	-
Total	**1,164,607**	**567,820**	**478,510**	*****	*****

Table 21.8 Holders Applying Inputs by Age group
Gambela

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	*	-	-	-	-
18 - 20	227	-	*	-	*
21 - 24	498	-	*	-	-
25 - 29	2,720	-	297	-	-
30 - 39	7,609	*	719	*	-
40 - 49	6,939	*	748	*	*
50 - 59	3,606	-	384	*	-
60 and above	2,832	-	229	*	-
Not stated	-	-	-	-	-
Total	**24,520**	*****	**2,458**	*****	*****

Table 21.9 Holders Applying Inputs by Age group
Hareri

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	-	-	-	-	-
18 - 20	*	*	*	-	*
21 - 24	*	*	*	-	*
25 - 29	2,522	*	2,093	-	2,093
30 - 39	7,118	5,038	7,118	*	6,690
40 - 49	3,526	2,388	2,743	*	*
50 - 59	1,204	1,204	*	*	1,204
60 and above	*	*	*	-	*
Not stated	-	-	-	-	-
Total	**18,584**	**12,476**	**15,732**	*****	**16,441**

Table 21.10 Holders Applying Inputs by Age group
Dire Dawa

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	-	-	-	-	-
18 - 20	-	-	-	-	-
21 - 24	*	*	-	-	*
25 - 29	*	*	-	-	*
30 - 39	8,501	*	-	*	8,341
40 - 49	9,002	5,540	*	*	8,704
50 - 59	*	*	*	*	*
60 and above	*	*	-	*	*
Not stated	-	-	-	-	-
Total	**26,289**	*****	*****	*****	**25,831**

Table 22. Holders Applying Inputs by Educational Status
National

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	6,037,684	2,186,199	917,654	366,155	753,815
Literate	928,969	467,640	133,811	97,053	248,767
Grades 1 - 3	1,574,983	577,394	340,363	112,877	115,935
Grades 4 - 6	2,167,609	881,973	480,916	191,115	152,100
Grades 7 - 8	963,956	386,346	192,063	70,605	75,399
Grades 9 - 11	443,020	178,297	86,524	31,564	29,584
Grade 12 complete	38,715	19,603	6,922	*	3,009
Above grade 12	13,741	5,652	*	*	*
Total	**12,168,676**	**4,703,104**	**2,160,336**	**872,028**	**1,379,263**

Table 22.1 Holders Applying Inputs by Educational Status
Afar

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	1,604	255	699	254	1,530
Literate	*	*	68	*	*
Grades 1 - 3	113	*	*	*	113
Grades 4 - 6	220	*	97	*	220
Grades 7 - 8	81	*	36	*	77
Grades 9 - 11	*	-	*	-	*
Grade 12 complete	-	-	-	-	-
Above grade 12	*	*	*	-	*
Total	**2,411**	**348**	**991**	**345**	**2,333**

Table 22. 2 Holders Applying Inputs by Educational Status
Amhara

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	1,476,968	694,504	141,556	169,753	540,729
Literate	510,748	284,068	47,812	44,307	214,215
Grades 1 - 3	167,805	76,946	25,161	11,279	52,053
Grades 4 - 6	229,591	107,099	36,201	25,185	87,380
Grades 7 - 8	100,108	43,662	5,278	8,161	40,255
Grades 9 - 11	36,459	15,342	*	3,616	18,860
Grade 12 complete	*	*	*	-	*
Above grade 12	*	-	-	-	-
Total	**2,524,899**	**1,223,205**	**260,756**	**262,301**	**955,014**

Table 22.3 Holders Applying Inputs by Educational Status
Oromiya

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	1,270,430	402,569	168,405	157,503	123,544
Literate	244,695	103,638	43,826	47,120	23,242
Grades 1 - 3	501,257	175,448	90,646	70,461	41,118
Grades 4 - 6	592,879	240,098	90,695	118,261	39,459
Grades 7 - 8	248,527	104,006	40,480	45,836	19,439
Grades 9 - 11	117,631	47,846	19,015	18,862	7,005
Grade 12 complete	12,194	2,958	*	*	*
Above grade 12	5,311	1,110	*	*	*
Total	**2,992,923**	**1,077,673**	**455,170**	**459,011**	**255,093**

Table 22.4 Holders Applying Inputs by Educational Status
Somali

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	3,310	*	1,820	*	3,144
Literate	*	-	-	-	*
Grades 1 - 3	*	*	*	*	*
Grades 4 - 6	1,040	709	544	*	1,040
Grades 7 - 8	260	-	*	-	260
Grades 9 - 11	-	-	-	-	-
Grade 12 complete	-	-	-	-	-
Above grade 12	-	-	-	-	-
Total	**5,202**	**2,458**	**2,553**	*****	**5,036**

Table 22. 5 Holders Applying Inputs by Educational Status
Benishangul Gumuz

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	61,548	6,494	4,930	*	4,753
Literate	10,491	*	*	-	*
Grades 1 - 3	17,211	1,485	*	*	1,706
Grades 4 - 6	24,489	1,315	*	*	1,847
Grades 7 - 8	7,560	*	*	*	1,105
Grades 9 - 11	4,636	*	*	-	454
Grade 12 complete	-	-	-	-	-
Above grade 12	-	-	-	-	-
Total	**125,934**	**12,757**	*****	*****	**11,819**

Table 22.6 Holders Applying Inputs by Educational Status
SNNP

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	2,721,889	848,059	435,914	23,967	53,828
Literate	142,789	66,656	31,258	*	*
Grades 1 - 3	706,045	240,582	126,196	12,207	6,257
Grades 4 - 6	980,125	347,472	187,587	20,287	9,795
Grades 7 - 8	458,770	168,296	88,782	*	6,663
Grades 9 - 11	242,777	98,761	55,638	5,064	*
Grade 12 complete	23,261	14,392	4,803	*	*
Above grade 12	7,650	4,539	*	-	-
Total	**5,283,308**	**1,788,756**	**931,652**	**74,036**	**81,663**

Table 22.7 Holders Applying Inputs by Educational Status

Sidama - - -

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	464,930	217,934	155,333	*	*
Literate	*	*	*	*	*
Grades 1 - 3	172,041	77,182	91,832	*	*
Grades 4 - 6	328,030	179,311	159,174	*	*
Grades 7 - 8	143,221	67,889	56,001	*	*
Grades 9 - 11	39,019	15,563	6,997	*	*
Grade 12 complete	*	*	-	-	-
Above grade 12	-	-	-	-	-
Total	**1,164,607**	**567,820**	**478,510**	*****	*****

Table 22.8 Holders Applying Inputs by Educational Status
Gambela

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	14,873	*	980	*	-
Literate	258	-	*	-	-
Grades 1 - 3	1,732	*	372	*	-
Grades 4 - 6	3,289	*	521	*	-
Grades 7 - 8	2,347	*	193	-	*
Grades 9 - 11	1,873	-	329	-	*
Grade 12 complete	108	-	-	-	-
Above grade 12	*	-	-	-	-
Total	**24,520**	*****	**2,458**	*****	*****

Table 22.9 Holders Applying Inputs by Educational Status
Hareri

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	*	*	*	*	*
Literate	*	*	*	*	*
Grades 1 - 3	5,179	3,479	4,322	-	3,893
Grades 4 - 6	2,541	*	2,541	*	2,541
Grades 7 - 8	-	-	-	-	-
Grades 9 - 11	-	-	-	-	-
Grade 12 complete	-	-	-	-	-
Above grade 12	-	-	-	-	-
Total	**18,584**	**12,476**	**15,732**	*****	**16,441**

Table 22.10 Holders Applying Inputs by Educational Status
Dire Dawa

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	12,969	*	*	*	12,510
Literate	*	*	-	-	*
Grades 1 - 3	3,506	*	*	*	3,506
Grades 4 - 6	5,405	*	-	*	5,405
Grades 7 - 8	*	*	-	-	*
Grades 9 - 11	*	*	-	-	*
Grade 12 complete	-	-	-	-	-
Above grade 12	-	-	-	-	-
Total	**26,289**	*****	*****	*****	**25,831**

Table 23. Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage
National

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	4,228,189	280,766	139,610	87,976	2,540
Crop disease	431,202	10,127	5,792	1,343	*
Frost or floods	151,656	7,331	4,094	1,650	*
Locust	*	*	-	*	-
Shortage of rain	2,363,579	203,102	100,866	68,751	1,162
Too much rain	535,854	23,000	12,012	6,684	*
Wild animals	152,046	2,857	1,122	642	*
Birds	29,417	781	*	325	*
Hailstone	67,410	*	*	*	-
Pests	540,715	18,196	9,813	3,047	*
Weeds	205,156	6,253	3,231	2,004	*
Others	256,280	7,033	2,005	2,772	*

Table 23.1Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage
Afar

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	1,584	579	-	*	-
Crop disease	334	95	-	*	-
Frost or floods	*	*	-	*	-
Locust	*	*	-	*	-
Shortage of rain	*	*	-	-	-
Too much rain	*	*	-	*	-
Wild animals	*	*	-	*	-
Birds	*	*	-	*	-
Hailstone	-	-	-	-	-
Pests	402	105	-	*	-
Weeds	180	52	-	*	-
Others	*	*	-	*	-

Table 23. 2Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage
Amhara

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	1,068,954	135,154	77,930	*	*
Crop disease	187,321	3,103	*	*	-
Frost or floods	35,616	*	*	*	-
Locust	-	-	-	-	-
Shortage of rain	623,141	122,695	70,237	*	*
Too much rain	119,897	3,911	2,810	*	-
Wild animals	26,157	138	*	*	-
Birds	9,386	120	*	*	-
Hailstone	9,847	*	*	-	-
Pests	109,717	2,404	1,410	139	-
Weeds	*	*	*	*	-
Others	58,473	927	*	*	-

Table 23. 3 Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage
Oromia

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	902,614	61,800	35,644	12,089	*
Crop disease	118,389	4,588	3,485	285	-
Frost or floods	58,067	5,106	2,954	*	-
Locust	*	*	-	-	-
Shortage of rain	434,323	35,589	19,795	8,091	*
Too much rain	46,542	*	*	227	-
Wild animals	34,332	853	*	121	*
Birds	13,726	468	*	*	*
Hailstone	*	*	*	*	-
Pests	143,966	5,336	3,084	1,028	-
Weeds	44,376	2,002	1,298	*	*
Others	53,453	1,641	*	353	-

Table 23.4 Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage
Somali

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	1,135	30	-	-	-
Crop disease	*	*	-	-	-
Frost or floods	-	-	-	-	-
Locust	-	-	-	-	-
Shortage of rain	-	-	-	-	-
Too much rain	-	-	-	-	-
Wild animals	*	*	-	-	-
Birds	-	-	-	-	-
Hailstone	-	-	-	-	-
Pests	804	21	-	-	-
Weeds	-	-	-	-	-
Others	-	-	-	-	-

Table 23. 5 Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage
Benishangul Gumuz

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	25,772	290	*	*	-
Crop disease	1,647	4	*	*	-
Frost or floods	*	*	-	*	-
Locust	-	-	-	-	-
Shortage of rain	*	*	*	*	-
Too much rain	*	*	-	*	-
Wild animals	*	*	*	*	-
Birds	-	-	-	-	-
Hailstone	*	*	-	*	-
Pests	6,786	*	*	*	-
Weeds	*	*	*	*	-
Others	*	*	-	*	-

Table 23.6 Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage SNNP

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	2,040,867	81,167	25,426	30,113	2,008
Crop disease	107,319	2,205	652	689	*
Frost or floods	54,830	1,112	356	571	*
Locust	-	-	-	-	-
Shortage of rain	1,182,611	43,837	10,701	16,982	693
Too much rain	348,126	13,725	5,222	5,751	*
Wild animals	88,291	1,789	627	427	*
Birds	5,931	187	*	*	-
Hailstone	37,571	*	*	*	-
Pests	267,814	9,984	5,117	1,843	*
Weeds	134,176	3,307	1,256	1,493	*
Others	134,990	4,336	1,017	2,087	*

Table 23. 7Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage

Sidama	-	-	-		

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	153,803	1,066	*	94	-
Crop disease	*	*	-	*	-
Frost or floods	*	*	-	-	-
Locust	-	-	-	-	-
Shortage of rain	115,543	807	*	*	-
Too much rain	*	*	*	*	-
Wild animals	*	*	-	-	-
Birds	-	-	-	-	-
Hailstone	*	*	*	-	-
Pests	*	*	-	*	-
Weeds	*	*	*	-	-
Others	*	*	*	-	-

Table 23. 8Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage - Gambella

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	9,283	480	304	44	-
Crop disease	344	17	*	*	-
Frost or floods	893	*	*	-	-
Locust	-	-	-	-	-
Shortage of rain	1,559	106	69	*	-
Too much rain	*	20	*	*	-
Wild animals	*	*	*	*	-
Birds	338	4	*	-	-
Hailstone	-	-	-	-	-
Pests	4,721	248	157	*	-
Weeds	918	55	*	*	-
Others	98	*	*	*	-

Table 23. 9 Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage

Hareri

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	8,227	45	*	-	-
Crop disease	*	*	*	-	-
Frost or floods	*	*	-	-	-
Locust	-	-	-	-	-
Shortage of rain	*	*	*	-	-
Too much rain	1,586	*	*	-	-
Wild animals	-	-	-	-	-
Birds	-	-	-	-	-
Hailstone	-	-	-	-	-
Pests	2,709	12	*	-	-
Weeds	-	-	-	-	-
Others	-	-	-	-	-

Table 23.10 Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage

Dire Dawa

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	15,950	155	*	-	-
Crop disease	12,421	*	*	-	-
Frost or floods	*	*	-	-	-
Locust	-	-	-	-	-
Shortage of rain	*	*	-	-	-
Too much rain	*	*	-	-	-
Wild animals	*	*	-	-	-
Birds	-	-	-	-	-
Hailstone	-	-	-	-	-
Pests	*	*	*	-	-
Weeds	-	-	-	-	-
Others	*	*	-	-	-

APPENDIX I

Estimation Procedures of Totals,

Ratios and Sampling Errors

APPENDIX I Estimation Procedures of Totals, Ratios and Sampling Errors

The following formulas were used to estimate total area of land under specific crop and production of specific crop in a stratum.

1. ForEstimating Total Area of Land under Specific Crop:

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

in which, $W_{hi} = \frac{M_h H_{hi}}{n_h m_{hi} h_{hi}}$ is the basic weight.

Where:

h represents the stratum

n_h is the total number of sample EAs successfully covered in the h[th] stratum.

M_h is the measure of size of the h[th] stratum as obtained from the sampling frame.

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

H_{hi} is the total number of agricultural households of the i[th] sample EA in the h[th] stratum.

h_{hi} is the number of sample agricultural households successfully covered in the i[th] sample EA in the h[th] stratum.

a_{hij} is the value of area for agricultural household j, in the i[th] EA in the h[th] strtatum under a specific crop.

a_{hi} is the sample total area under specific crop for EA i in stratum h

$\hat{A}_h$ estimate of total area under specific crop in stratum h

2. For Estimating Total Number of Holders :

$$Y_h = \sum_{i=1}^{n_h} W_{hi} H_{hi}$$

in which, $H_{hi} = a_{hi} * \overline{Y}_{hi}$

Where,

$\overline{Y}_{hi}$ is average yield per square meter of a specific crop in the i[th] EA in the h[th] stratum.

H_h is estimate of total quantity of production of a specific crop in the h[th] stratum.

H_{hi} is estimate of total quantity of production under specific crop for EA i in stratum h.

3. Sampling Variance of Estimates:

Sampling variance for the estimate of stratum total of area, production and yield for a specific crop are estimated by the following formulas.

$$Var(\hat{A}_h) = (1 - f_h) \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{A}_{hi} - \frac{\hat{A}_h}{n_h} \right)^2 + f_h \sum_{i=1}^{n_h} (1 - f_{hi}) \left(\frac{h_{hi}}{h_{hi} - 1} \right) \sum_{j=1}^{h_{hi}} \left(\hat{A}_{hij} - \frac{\hat{A}_{hi}}{h_{hi}} \right)^2$$

$$Var(\hat{P}_h) = (1 - f_h) \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{P}_{hi} - \frac{\hat{P}_h}{n_h} \right)^2 + f_h \sum_{i=1}^{n_h} (1 - f_{hi}) \left(\frac{h_{hi}}{h_{hi} - 1} \right) \sum_{j=1}^{h_{hi}} \left(\hat{P}_{hij} - \frac{\hat{P}_{hi}}{h_{hi}} \right)^2$$

Where,

f_h = average first stage probability of selection of EAs within stratum *h*.

$f_{hi} = \frac{h_{hi}}{H_{hi}}$ = average second stage probability of selection within the *i*[th] sample EA in stratum *h*.

$\hat{A}_{hi}, \hat{P}_{hi}$ are weighted total area and production, respectively, of a specific crop in the i[th] EA and h[th] Stratum.

$\hat{A}_{hij}, \hat{P}_{hij}$ are weighted values of area and production, respectively, from j[th] agricultural household in the

i^{th} EA and h^{th} stratum under a specific crop.

Since all strata are independent, the total variance at regional and country level is computed by aggregating the result obtained at Zone/Special Wereda level, i.e.

$$Var(\hat{A}) = \sum_{h}^{L} Var(\hat{A}_h), Var(\hat{\mathrm{P}}) = \sum_{h}^{L} Var(\hat{P}_h)$$

Where, L is the number of strata (Zone/Special Wereda).

In estimating the sampling variance by the above formula, selection of EAs within a stratum is assumed to be with replacement. By so doing the variance estimate may be slightly over estimated but it greatly simplifies the estimation procedure.

4. Coefficient of Variation (CV) of Estimates:

Coefficient of Variation (CV) in percentage of estimate of stratum total of area and production for a specific crop are given by:

$$CV(\hat{A}_h) = \frac{\sqrt{Var(\hat{A}_h)}}{\hat{A}_h} * 100, CV(\hat{\mathrm{P}}_h) = \frac{\sqrt{Var(\hat{\mathrm{P}}_h)}}{\hat{\mathrm{P}}_h} * 100,$$

5. Ninety-five Percent Confidence Interval (CI) of Stratum Total of Area:

$$\hat{A}_h \pm 1.96 * SE(\hat{A}_h) \quad ,$$

Where $SE(\hat{A}_h) = \sqrt{Var(\hat{A}_h)}$ is standard error of the estimate of the stratum total of area.

Estimates of standard error and confidence interval for the other estimates can also be calculated by adopting the above formulas.

APPENDIX II

Standard Errors and Coefficient of Variation for

Area and Production

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

National

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**8,620,142.00**	**190,652.20**	**2.21**	**1,748,457.62**	**96,818.91**	**5.54**	**14,754,984.98**	**709,126.63**	**4.81**
Cereals..... .	**6,990,865.00**	**196,458.60**	**2.81**	**1,335,905.95**	**72,405.48**	**5.42**	**12,129,875.99**	**623,655.94**	**5.14**
Teff..... .	480,336.00	54,890.61	11.43	133,997.77	19,503.22	14.55	1,190,613.23	206,408.56	17.34
Barley..... .	1,030,136.00	87,957.76	8.54	220,740.20	32,214.51	14.59	1,554,331.88	223,426.57	14.37
Wheat..... .	364,638.00	49,130.92	13.47	126,850.75	21,519.11	16.96	908,061.76	153,696.75	16.93
Maize..... .	5,625,753.00	188,823.58	3.36	798,174.54	54,272.22	6.80	8,102,248.68	507,518.33	6.26
Sorghum..... .	234,237.00	36,714.28	15.67	44,358.82	13,026.68	29.37	304,058.23	81,563.27	26.82
Finger millet..... .	10,351.00	6,429.55	62.12	109.75	59.25	53.99	794.40	428.75	53.97
Oats/'Aja'..... .	68,465.00	27,414.76	40.04	5,124.50	2,578.09	50.31	50,976.73	19,518.05	38.29
Rice..... .	7,507.00	5,555.77	74.01	6,549.60	4,881.49	74.53	18,791.10	13,958.77	74.28
Pulses..... .	**4,606,041.00**	**150,019.52**	**3.26**	**401,362.65**	**58,462.27**	**14.57**	**2,581,034.58**	**274,330.44**	**10.63**
Horse beans..... .	180,664.00	29,019.26	16.06	6,558.90	1,372.32	20.92	55,209.11	12,828.79	23.24
Field peas..... .	211,773.00	30,700.14	14.50	30,824.63	5,903.40	19.15	204,146.04	47,529.10	23.28
White Haricot beans .	391,669.00	42,663.09	10.89	24,571.08	5,644.35	22.97	178,111.36	43,570.76	24.46
Red Haricot beans.....	3,907,749.00	140,738.17	3.60	231,716.04	13,501.64	5.83	1,703,982.38	107,437.53	6.31
Red Chick-peas..... .	21,924.00	8,237.05	37.57	4,196.20	1,841.12	43.88	15,360.19	9,721.81	63.29
White Chick-peas..... .	1,269.00	1,266.06	99.75	3,950.73	3,941.95	99.78	-	-	-
Lentils.....	80,619.00	22,476.17	27.88	13,009.15	5,049.16	38.81	67,194.29	39,035.47	58.09
Vetch..... .	28,609.00	12,733.13	44.51	4,612.47	2,055.06	44.55	13,260.10	5,783.21	43.61
Soya beans..... .	1,207.00	1,152.44	95.46	122.43	113.88	93.02	-	-	-
Fenugreek.....	34,438.00	8,711.98	25.30	717.15	269.87	37.63	5,168.55	2,254.18	43.61
Mung bean/"Masho".....	37,555.00	12,597.33	33.54	81,083.89	53,422.51	65.89	338,602.58	237,210.57	70.06
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	174,008.00	37,952.33	21.81	11,189.03	3,443.18	30.77	44,074.41	21,185.66	48.07
Neug..... .	**802.00**	**801.55**	**99.95**	**67.04**	**67.00**	**99.95**	**-**	**-**	**-**
Linseed..... .	5,331.00	2,977.28	55.85	331.56	204.23	61.60	344.65	255.22	74.05
Groundnuts..... .	55,228.00	19,120.27	34.62	5,296.55	2,716.10	51.28	37,288.51	21,049.67	56.45
Sunflower..... .	10,907.00	5,119.48	46.94	63.14	38.10	60.34	949.76	632.24	66.57
Sesame..... .	47,669.00	23,555.30	49.41	4,749.30	2,116.42	44.56	5,423.03	2,366.96	43.65
Rapeseed..... .	57,201.00	22,892.45	40.02	681.45	315.92	46.36	68.47	61.07	89.20
Vegetables..... .	**3,275,231.00**	**147,208.25**	**4.49**	**72,992.76**	**5,974.35**	**8.18**	**6,022,756.15**	**555,278.95**	**9.22**
Lettuce..... .	9,216.00	4,190.44	45.47	34.27	19.56	57.06	1,815.14	1,803.40	99.35
Head Cabbage..... .	82,640.00	13,665.12	16.54	4,537.23	1,397.46	30.80	216,292.30	56,612.10	26.17
Ethiopian Cabbage..... .	3,011,477.00	141,359.74	4.69	63,374.38	5,567.69	8.79	5,698,113.85	540,215.04	9.48
Tomatoes..... .	112,805.00	19,883.75	17.63	2,946.51	868.32	29.47	43,422.76	18,989.26	43.73
Green peppers..... .	182,507.00	31,366.73	17.19	1,866.50	481.45	25.79	63,037.25	13,141.41	20.85
Red peppers..... .	23,622.00	5,959.78	25.23	217.91	93.39	42.86	74.85	48.36	64.60
Swiss chard..... .	15,132.00	4,809.77	31.79	15.96	8.64	54.11	-	-	-
Root Crops..... .	4,750,942.00	148,912.53	3.13	302,936.89	20,047.27	6.62	31,884,229.83	1,938,875.28	6.08
Beetroot..... .	**68,508.00**	**9,991.85**	**14.58**	**3,621.79**	**585.65**	**16.17**	**132,935.61**	**36,347.98**	**27.34**
Carrot..... .	44,342.00	8,938.00	20.16	1,280.44	458.56	35.81	27,159.12	11,404.02	41.99
Onion..... .	468,270.00	61,006.38	13.03	12,244.90	1,971.59	16.10	393,618.34	99,305.51	25.23
Potatoes..... .	3,687,963.00	144,763.08	3.93	249,302.45	18,462.10	7.41	29,098,461.10	1,893,586.92	6.51
Yam/'Boye'..... .	134,441.00	25,593.73	19.04	4,332.18	1,513.26	34.93	69,001.01	25,154.08	36.45
Garlic..... .	317,299.00	35,371.05	11.15	16,019.16	7,254.50	45.29	814,172.01	234,294.78	28.78
Taro/'Godere'..... .	253,438.00	34,584.54	13.65	4,714.93	863.13	18.31	175,840.54	43,761.25	24.89
Sweet potatoes..... .	324,208.00	32,433.61	10.00	11,421.04	2,008.77	17.59	1,173,042.11	149,660.07	12.76

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Afar

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**1,830.00**	**448.85**	**24.53**	**1,855.10**	**685.30**	**36.94**	**13,628.75**	**3,211.37**	**23.56**
Cereals..... .	**1,805.00**	**450.05**	**24.94**	**1,782.88**	**669.78**	**37.57**	**13,628.75**	**3,211.37**	**23.56**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	1,752.00	418.10	23.86	1,738.59	649.45	37.35	13,628.75	3,211.37	23.56
Sorghum..... .	105.00	97.00	92.14	44.30	40.88	92.29	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**96.00**	**67.75**	**70.70**	**68.42**	**45.77**	**66.89**	**-**	**-**	**-**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	-	-	-	-	-	-	-	-	-
Red Haricot beans..... .	71.00	64.74	91.34	21.90	20.10	91.79	-	-	-
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	25.00	19.95	80.01	46.53	41.12	88.38	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	26.00	26.70	101.44	3.79	3.85	101.44	-	-	-
Neug..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	26.00	26.70	101.44	3.79	3.85	101.44	-	-	-
Rapeseed..... .	-	-	-	-	-	-	-	-	-
Vegetables..... .	**278.00**	**152.13**	**54.74**	**223.26**	**123.97**	**55.53**	**-**	**-**	**-**
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	49.00	44.34	91.29	44.47	40.60	91.29	-	-	-
Ethiopian Cabbage..... .	9.00	8.34	88.73	1.47	1.30	88.73	-	-	-
Tomatoes..... .	171.00	90.47	53.05	130.76	62.67	47.93	-	-	-
Green peppers..... .	53.00	43.58	82.61	39.89	34.68	86.94	-	-	-
Red peppers..... .	29.00	18.93	65.07	6.68	4.38	65.64	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	347.00	115.21	33.17	453.60	173.81	38.32	-	-	-
Beetroot..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	343.00	117.41	34.27	451.27	174.93	38.76	-	-	-
Potatoes..... .	-	-	-	-	-	-	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	-	-	-	-	-	-	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	5.00	4.17	88.73	2.33	2.07	88.73	-	-	-

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Amhara

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**1,049,541.00**	**88,263.79**	**8.41**	**280,616.44**	**64,971.33**	**23.15**	**1,613,382.35**	**341,870.99**	**21.19**
Cereals..... .	**989,350.00**	**87,805.65**	**8.88**	**177,610.15**	**31,279.99**	**17.61**	**1,190,403.73**	**245,400.78**	**20.61**
Teff..... .	97,839.00	37,008.69	37.83	24,898.01	12,622.63	50.70	257,101.78	163,086.37	63.43
Barley..... .	532,001.00	71,048.19	13.35	124,299.96	28,659.50	23.06	671,625.64	172,507.52	25.69
Wheat..... .	102,468.00	33,255.52	32.45	5,211.26	2,017.98	38.72	33,288.60	15,357.11	46.13
Maize..... .	381,817.00	63,992.98	16.76	20,063.12	4,473.62	22.30	214,603.41	53,315.36	24.84
Sorghum..... .	11,049.00	7,851.80	71.06	580.22	439.95	75.82	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	36,188.00	25,580.29	70.69	2,557.59	2,394.42	93.62	13,784.30	13,065.69	94.79
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**202,147.00**	**38,238.17**	**18.92**	**102,695.87**	**55,863.90**	**54.40**	**422,737.25**	**239,386.99**	**56.63**
Horse beans..... .	22,582.00	12,697.47	56.23	437.51	252.21	57.65	6,408.34	4,442.57	69.32
Field peas..... .	48,584.00	16,560.54	34.09	4,647.65	2,033.49	43.75	12,584.53	6,800.49	54.04
White Haricot beans.... .	12,998.00	9,737.65	74.91	2,356.63	2,096.51	88.96	6,175.19	5,714.72	92.54
Red Haricot beans..... .	35,895.00	17,160.45	47.81	1,247.29	540.01	43.29	4,693.38	2,427.80	51.73
Red Chick-peas..... .	21,285.00	8,223.49	38.63	3,801.22	1,801.88	47.40	15,360.19	9,721.81	63.29
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	69,416.00	21,961.55	31.64	12,633.13	5,045.24	39.94	66,477.14	39,033.36	58.72
Vetch..... .	28,609.00	12,733.13	44.51	4,612.47	2,055.06	44.55	13,260.10	5,783.21	43.61
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	11,690.00	4,517.98	38.65	46.05	21.57	46.83	260.24	145.89	56.06
Mung bean/"Masho"..... .	12,426.00	7,798.97	62.76	72,913.92	53,254.86	73.04	297,518.14	235,906.01	79.29
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	6,597.00	3,400.09	51.54	310.42	201.73	64.99	241.36	241.00	99.85
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	4,075.00	2,862.29	70.24	288.32	200.99	69.71	241.36	241.00	99.85
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	2,521.00	1,835.19	72.79	22.09	17.26	78.12	-	-	-
Vegetables..... .	**198,182.00**	**48,881.69**	**24.67**	**1,940.86**	**955.84**	**49.25**	**40,213.13**	**13,950.68**	**34.69**
Lettuce..... .	4,931.00	3,641.93	73.85	7.92	4.58	57.78	-	-	-
Head Cabbage..... .	20,753.00	9,422.83	45.40	96.93	75.72	78.12	4,868.93	3,832.07	78.70
Ethiopian Cabbage..... .	79,833.00	30,453.60	38.15	282.27	131.05	46.43	16,371.89	8,549.03	52.22
Tomatoes..... .	44,856.00	17,565.04	39.16	1,071.06	695.16	64.90	10,787.06	6,148.64	57.00
Green peppers..... .	78,435.00	27,624.01	35.22	427.06	226.67	53.08	8,110.39	5,320.19	65.60
Red peppers..... .	12,554.00	4,773.75	38.03	55.21	22.78	41.26	74.85	48.36	64.60
Swiss chard..... .	4,379.00	3,565.33	81.42	0.42	0.27	65.54	-	-	-
Root Crops..... .	1,832,908.00	87,454.93	4.77	50,092.06	4,574.85	9.13	3,782,890.41	404,860.89	10.70
Beetroot..... .	**7,847.00**	**4,774.41**	**60.84**	**16.15**	**13.33**	**82.55**	-	-	-
Carrot..... .	3,353.00	2,139.30	63.81	58.66	39.59	67.48	18.95	18.90	99.72
Onion..... .	223,476.00	45,398.81	20.31	4,997.42	1,450.39	29.02	139,825.70	59,787.06	42.76
Potatoes..... .	1,599,822.00	94,930.75	5.93	43,557.90	4,675.42	10.73	3,620,170.32	401,213.20	11.08
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	87,739.00	21,242.63	24.21	667.73	229.18	34.32	22,875.44	10,866.59	47.50
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	9,816.00	8,999.68	91.69	794.20	782.95	98.58	-	-	-

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Oromia

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**2,349,539.00**	**77,119.66**	**3.28**	**660,163.31**	**42,523.58**	**6.44**	**5,884,381.83**	**363,387.29**	**6.18**
Cereals..... .	**1,927,040.00**	**73,807.49**	**3.83**	**553,518.72**	**38,019.13**	**6.87**	**5,046,225.15**	**323,711.06**	**6.41**
Teff..... .	260,281.00	33,115.08	12.72	80,539.29	12,350.90	15.34	762,474.46	117,019.36	15.35
Barley..... .	288,512.00	35,810.54	12.41	78,220.87	13,936.84	17.82	725,169.52	136,373.56	18.81
Wheat..... .	261,019.00	36,150.39	13.85	118,094.62	21,144.23	17.90	854,750.14	151,620.92	17.74
Maize..... .	1,362,249.00	71,619.45	5.26	262,362.27	28,515.00	10.87	2,555,704.78	227,036.15	8.88
Sorghum..... .	87,930.00	19,778.02	22.49	11,734.76	3,272.13	27.88	110,933.81	32,279.48	29.10
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	32,277.00	9,859.89	30.55	2,566.92	955.68	37.23	37,192.43	14,499.72	38.99
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**1,063,845.00**	**60,791.63**	**5.71**	**103,072.18**	**11,879.67**	**11.53**	**833,353.12**	**98,197.41**	**11.78**
Horse beans..... .	27,811.00	6,996.57	25.16	1,688.28	834.29	49.42	12,378.91	7,032.42	56.81
Field peas..... .	102,800.00	22,665.39	22.05	23,129.27	5,474.26	23.67	179,912.42	46,900.33	26.07
White Haricot beans.... .	215,038.00	28,177.35	13.10	13,883.67	4,424.43	31.87	108,760.78	35,839.76	32.95
Red Haricot beans..... .	716,337.00	49,581.98	6.92	56,467.77	7,515.32	13.31	488,372.04	63,932.60	13.09
Red Chick-peas..... .	517.00	456.73	88.30	381.89	377.83	98.94	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	7,807.00	4,336.25	55.54	263.30	175.78	66.76	551.19	370.43	67.21
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	16,601.00	6,307.47	38.00	638.62	267.77	41.93	4,839.62	2,248.79	46.47
Mung bean/"Masho"..... .	12,458.00	6,762.24	54.28	6,619.38	4,159.32	62.84	38,538.16	24,810.93	64.38
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	26,749.00	9,045.65	33.82	3,572.41	1,310.08	36.67	4,803.57	2,303.42	47.95
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	4,508.00	3,448.13	76.49	968.61	665.45	68.70	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	15,914.00	7,936.53	49.87	2,525.73	1,162.42	46.02	4,803.57	2,303.42	47.95
Rapeseed..... .	6,327.00	2,858.59	45.18	78.07	36.73	47.05	-	-	-
Vegetables..... .	**554,986.00**	**41,759.28**	**7.52**	**11,607.54**	**1,384.25**	**11.93**	**2,811,756.33**	**444,132.60**	**15.80**
Lettuce..... .	1,892.00	1,468.93	77.64	18.15	18.04	99.39	1,815.14	1,803.40	99.35
Head Cabbage..... .	23,847.00	4,557.13	19.11	982.93	571.40	58.13	70,770.82	19,502.03	27.56
Ethiopian Cabbage..... .	496,299.00	41,343.09	8.33	9,288.98	1,166.32	12.56	2,671,643.30	442,511.80	16.56
Tomatoes..... .	20,244.00	4,739.24	23.41	385.60	269.19	69.81	21,276.70	17,201.16	80.85
Green peppers..... .	41,380.00	6,781.42	16.39	923.60	396.44	42.92	46,250.37	11,646.33	25.18
Red peppers..... .	7,884.00	3,142.81	39.86	4.40	2.89	65.61	-	-	-
Swiss chard..... .	4,524.00	1,110.93	24.56	3.88	3.47	89.47	-	-	-
Root Crops..... .	839,837.00	56,659.27	6.75	82,101.14	10,921.59	13.30	6,538,904.19	628,755.71	9.62
Beetroot..... .	**28,751.00**	**5,877.71**	**20.44**	**3,265.69**	**577.29**	**17.68**	**117,368.53**	**35,962.68**	**30.64**
Carrot..... .	17,476.00	5,107.87	29.23	1,187.72	456.69	38.45	26,083.87	11,392.33	43.68
Onion..... .	115,120.00	21,584.61	18.75	3,577.69	920.73	25.74	92,058.55	30,526.48	33.16
Potatoes..... .	636,639.00	49,103.38	7.71	57,808.67	7,810.44	13.51	5,452,701.48	550,016.82	10.09
Yam/'Boye'..... .	924.00	739.02	79.95	28.06	23.14	82.46	-	-	-
Garlic..... .	92,477.00	19,918.91	21.54	13,538.83	7,235.32	53.44	709,965.89	233,047.18	32.83
Taro/'Godere'..... .	6,722.00	3,075.89	45.76	759.10	368.00	48.48	-	-	-
Sweet potatoes..... .	7,995.00	2,734.66	34.20	1,935.37	1,407.77	72.74	140,725.87	75,978.27	53.99

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Somali

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**1,490.00**	**1,476.97**	**99.13**	**241.07**	**239.03**	**99.15**	**1,164.39**	**1,154.51**	**99.15**
Cereals..... .	**1,490.00**	**1,476.97**	**99.13**	**241.07**	**239.03**	**99.15**	**1,164.39**	**1,154.51**	**99.15**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	1,490.00	1,476.97	99.13	241.07	239.03	99.15	1,164.39	1,154.51	99.15
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	-	-	-	-	-	-	-	-	-
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	-	-	-	-	-	-	-	-	-
Red Haricot beans..... .	-	-	-	-	-	-	-	-	-
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	-	-	-	-
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-	-	-	-
Vegetables..... .	**3,002.00**	**47.99**	**1.60**	**197.11**	**64.94**	**32.94**	**-**	**-**	**-**
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage..... .	-	-	-	-	-	-	-	-	-
Tomatoes..... .	3,002.00	47.99	1.60	191.48	70.49	36.81	-	-	-
Green peppers..... .	378.00	374.78	99.12	5.62	5.58	99.12	-	-	-
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	3,168.00	148.01	4.67	305.62	171.54	56.13	-	-	-
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	3,168.00	148.01	4.67	300.51	176.59	58.77	-	-	-
Potatoes..... .	-	-	-	-	-	-	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	95.00	93.80	99.22	3.07	3.05	99.22	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	95.00	93.80	99.22	2.04	2.03	99.22	-	-	-

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Benishangul Gumuz

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**106,463.00**	**16,213.90**	**15.23**	**7,750.22**	**2,255.30**	**29.10**	**65,436.95**	**19,722.74**	**30.14**
Cereals..... .	**87,432.00**	**15,812.23**	**18.09**	**4,120.64**	**1,269.29**	**30.80**	**23,858.43**	**7,747.37**	**32.47**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	87,249.00	15,831.50	18.15	3,982.44	1,271.82	31.94	23,858.43	7,747.37	32.47
Sorghum..... .	183.00	182.60	99.63	138.20	137.68	99.63	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**99,524.00**	**16,498.98**	**16.58**	**3,629.58**	**1,057.30**	**29.13**	**41,578.52**	**12,510.82**	**30.09**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	2,113.00	939.95	44.48	109.97	59.92	54.49	1,357.50	755.04	55.62
Red Haricot beans..... .	97,752.00	16,341.11	16.72	3,511.25	1,057.22	30.11	40,221.02	12,479.38	31.03
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	51.00	50.63	99.25	8.36	8.30	99.25	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	-	-	-	-
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-	-	-	-
Vegetables..... .	**44,226.00**	**7,828.94**	**17.70**	**744.94**	**183.64**	**24.65**	**35,710.23**	**9,268.47**	**25.95**
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	366.00	268.72	73.41	1.44	1.24	85.93	-	-	-
Ethiopian Cabbage..... .	38,921.00	7,880.46	20.25	570.98	170.20	29.81	31,693.49	9,348.29	29.50
Tomatoes..... .	1,688.00	1,026.02	60.80	54.23	42.98	79.25	2,096.68	1,652.13	78.80
Green peppers..... .	4,411.00	3,293.99	74.68	117.84	94.23	79.96	1,920.06	1,488.30	77.51
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	61.00	60.41	99.38	0.44	0.44	99.38	-	-	-
Root Crops..... .	24,001.00	8,053.41	33.55	2,475.57	905.55	36.58	314,794.49	110,056.48	34.96
Beetroot..... .	**311.00**	**308.71**	**99.39**	**2.64**	**2.63**	**99.39**	**-**	**-**	**-**
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	748.00	548.00	73.25	46.97	44.78	95.34	130.56	121.60	93.14
Potatoes..... .	22,301.00	7,710.67	34.58	2,418.97	903.63	37.36	314,649.41	110,055.22	34.98
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	2,142.00	2,128.13	99.36	1.69	1.68	99.40	6.22	6.18	99.40
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	213.00	212.18	99.70	5.29	5.28	99.70	8.30	8.27	99.70

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

SNNP

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**4,188,641.00**	**111,692.65**	**2.67**	**757,091.10**	**57,363.71**	**7.58**	**6,763,817.72**	**497,295.31**	**7.35**
Cereals..... .	**3,202,174.00**	**118,886.11**	**3.71**	**570,015.55**	**52,839.09**	**9.27**	**5,533,947.66**	**469,229.78**	**8.48**
Teff..... .	122,216.00	23,382.21	19.13	28,560.47	8,276.48	28.98	171,036.99	48,101.96	28.12
Barley..... .	209,623.00	37,501.03	17.89	18,219.37	4,708.76	25.84	157,536.71	39,532.75	25.09
Wheat..... .	1,151.00	1,032.79	89.74	3,544.87	3,452.69	97.40	20,023.02	19,948.57	99.63
Maize..... .	3,009,710.00	122,982.15	4.09	481,251.15	45,669.33	9.49	4,972,641.03	446,572.68	8.98
Sorghum..... .	134,970.00	29,917.80	22.17	31,861.35	12,600.53	39.55	193,124.42	74,903.96	38.79
Finger millet..... .	10,351.00	6,429.55	62.12	109.75	59.25	53.99	794.40	428.75	53.97
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	7,312.00	5,553.24	75.95	6,468.58	4,881.00	75.46	18,791.10	13,958.77	74.28
Pulses..... .	**2,690,006.00**	**96,378.19**	**3.58**	**180,284.01**	**12,122.02**	**6.72**	**1,190,963.64**	**87,142.93**	**7.32**
Horse beans..... .	127,809.00	25,052.38	19.60	4,411.55	1,059.89	24.03	36,328.15	9,766.15	26.88
Field peas..... .	60,388.00	12,430.91	20.58	3,047.70	864.61	28.37	11,649.09	3,623.22	31.10
White Haricot beans.... .	132,533.00	27,154.80	20.49	7,837.45	2,802.80	35.76	59,291.74	24,057.73	40.58
Red Haricot beans..... .	2,523,155.00	95,346.80	3.78	159,260.17	10,798.40	6.78	1,080,913.72	82,093.48	7.59
Red Chick-peas..... .	121.00	120.96	99.67	13.09	13.04	99.67	-	-	-
White Chick-peas..... .	1,269.00	1,266.06	99.75	3,950.73	3,941.95	99.78	-	-	-
Lentils..... .	3,395.00	2,016.30	59.39	112.72	93.42	82.88	165.96	164.34	99.02
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	1,156.00	1,151.33	99.58	114.06	113.58	99.58	-	-	-
Fenugreek..... .	6,147.00	3,962.60	64.46	32.48	25.84	79.56	68.69	54.55	79.42
Mung bean/"Masho"..... .	12,646.00	7,220.84	57.10	1,504.06	763.48	50.76	2,546.28	1,275.19	50.08
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	115,444.00	30,909.43	26.77	6,791.55	3,169.99	46.68	38,906.42	21,058.54	54.13
Neug..... .	**802.00**	**801.55**	**99.95**	**67.04**	**67.00**	**99.95**	-	-	-
Linseed..... .	1,256.00	819.46	65.24	43.23	36.28	83.92	103.29	83.99	81.31
Groundnuts..... .	50,127.00	18,802.44	37.51	4,243.36	2,632.42	62.04	37,233.91	21,049.60	56.53
Sunflower..... .	10,907.00	5,119.48	46.94	63.14	38.10	60.34	949.76	632.24	66.57
Sesame..... .	31,411.00	22,177.39	70.60	1,989.93	1,764.66	88.68	619.46	544.74	87.94
Rapeseed..... .	24,055.00	10,985.64	45.67	384.85	256.93	66.76	-	-	-
Vegetables..... .	**1,770,683.00**	**98,761.58**	**5.58**	**50,431.62**	**5,502.61**	**10.91**	**2,897,700.12**	**324,565.17**	**11.20**
Lettuce..... .	2,393.00	1,462.32	61.11	8.21	6.01	73.24	-	-	-
Head Cabbage..... .	34,156.00	8,560.64	25.06	3,287.53	1,270.31	38.64	138,148.12	52,949.63	38.33
Ethiopian Cabbage..... .	1,720,568.00	97,409.78	5.66	45,998.95	5,205.87	11.32	2,745,380.99	300,745.21	10.95
Tomatoes..... .	22,908.00	5,493.20	23.98	812.67	415.07	51.08	9,262.32	4,916.97	53.09
Green peppers..... .	43,409.00	11,646.85	26.83	168.85	75.93	44.97	4,908.69	2,005.61	40.86
Red peppers..... .	3,151.00	1,688.98	53.60	151.49	90.42	59.69	-	-	-
Swiss chard..... .	5,813.00	3,009.83	51.77	3.94	3.07	77.96	-	-	-
Root Crops..... .	1,818,455.00	90,538.44	4.98	162,420.11	16,079.28	9.90	20,805,899.41	1,777,698.97	8.54
Beetroot..... .	**31,599.00**	**6,511.47**	**20.61**	**337.30**	**97.66**	**28.95**	**15,567.07**	**5,278.41**	**33.91**
Carrot..... .	23,513.00	7,015.76	29.84	34.06	12.15	35.67	1,056.30	515.79	48.83
Onion..... .	82,349.00	21,296.42	25.86	2,244.42	880.19	39.22	161,603.53	73,179.31	45.28
Potatoes..... .	1,265,574.00	82,377.09	6.51	141,681.07	15,966.67	11.27	19,298,584.64	1,755,661.78	9.10
Yam/'Boye'..... .	125,240.00	25,316.29	20.21	4,195.06	1,512.37	36.05	67,257.92	25,124.76	37.36
Garlic..... .	131,540.00	19,867.32	15.10	1,773.18	474.13	26.74	80,599.90	21,555.06	26.74
Taro/'Godere'..... .	243,730.00	34,318.34	14.08	3,920.82	779.97	19.89	173,949.79	43,720.54	25.13
Sweet potatoes..... .	291,635.00	30,390.81	10.42	8,234.19	1,178.98	14.32	1,007,280.26	127,591.26	12.67

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Sidama

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**890,381.00**	**99,286.36**	**11.15**	**35,809.42**	**6,927.26**	**19.34**	**364,958.39**	**78,847.95**	**21.60**
Cereals..... .	**749,623.00**	**105,072.34**	**14.02**	**24,181.89**	**4,941.27**	**20.43**	**273,509.74**	**60,610.92**	**22.16**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	749,623.00	105,072.34	14.02	24,181.89	4,941.27	20.43	273,509.74	60,610.92	22.16
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**548,964.00**	**88,242.92**	**16.07**	**11,426.67**	**2,804.87**	**24.55**	**91,325.58**	**23,616.15**	**25.86**
Horse beans..... .	2,033.00	2,033.45	100.01	9.37	9.37	100.01	93.70	93.70	100.01
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	28,408.00	13,893.16	48.91	322.94	161.86	50.12	2,526.14	1,385.62	54.85
Red Haricot beans..... .	534,062.00	87,728.54	16.43	11,094.36	2,792.34	25.17	88,705.75	23,543.20	26.54
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	24,643.00	19,787.15	80.30	200.86	179.22	89.23	123.06	80.67	65.55
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	345.00	344.03	99.80	4.42	4.41	99.80	54.60	54.49	99.80
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	24,298.00	19,794.96	81.47	196.44	179.29	91.27	68.47	61.07	89.20
Vegetables..... .	**680,152.00**	**87,675.68**	**12.89**	**7,305.12**	**1,575.29**	**21.56**	**235,520.42**	**73,874.86**	**31.37**
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	2,196.00	1,627.10	74.09	48.14	42.86	89.02	2,504.43	2,500.63	99.85
Ethiopian Cabbage..... .	675,417.00	88,289.98	13.07	7,190.31	1,578.36	21.95	231,168.88	73,532.72	31.81
Tomatoes..... .	712.00	711.34	99.90	8.32	8.31	99.90	-	-	-
Green peppers..... .	7,095.00	3,229.15	45.51	58.34	38.87	66.62	1,847.11	1,586.71	85.90
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	209,022.00	54,092.09	25.88	4,614.65	1,493.60	32.37	441,741.33	166,328.57	37.65
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	35,436.00	27,028.68	76.27	343.05	281.13	81.95	-	-	-
Potatoes..... .	151,223.00	50,489.77	33.39	3,786.58	1,494.52	39.47	412,355.25	166,494.59	40.38
Yam/'Boye'..... .	8,277.00	3,684.87	44.52	109.05	46.52	42.66	1,743.09	1,214.31	69.66
Garlic..... .	2,598.00	1,830.15	70.45	24.04	19.64	81.68	724.57	591.86	81.68
Taro/'Godere'..... .	2,986.00	2,980.11	99.81	35.01	34.94	99.81	1,890.74	1,887.10	99.81
Sweet potatoes..... .	11,389.00	6,041.98	53.05	316.92	216.26	68.24	25,027.68	18,598.65	74.31

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Gambela

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**24,484.00**	**881.04**	**3.60**	**4,646.91**	**403.04**	**8.67**	**46,193.11**	**3,656.81**	**7.92**
Cereals..... .	**24,178.00**	**916.30**	**3.79**	**4,163.18**	**381.12**	**9.15**	**45,116.64**	**3,681.73**	**8.16**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	24,089.00	922.84	3.83	4,082.16	375.29	9.19	45,116.64	3,681.73	8.16
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	195.00	167.39	85.63	81.02	69.53	85.81	-	-	-
Pulses..... .	**1,031.00**	**321.56**	**31.20**	**173.73**	**65.71**	**37.82**	**1,076.47**	**443.02**	**41.16**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	579.00	259.10	44.72	60.42	47.65	78.87	-	-	-
Red Haricot beans..... .	478.00	183.59	38.45	113.31	44.39	39.18	1,076.47	443.02	41.16
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	548.00	265.34	48.38	310.00	132.45	42.72	-	-	-
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	249.00	212.43	85.39	80.15	68.63	85.62	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	317.00	162.64	51.23	229.85	118.20	51.43	-	-	-
Rapeseed..... .	-	-	-	-	-	-	-	-	-
Vegetables..... .	**471.00**	**133.09**	**28.26**	**53.27**	**21.36**	**40.11**	**1,855.92**	**612.36**	**32.99**
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage..... .	431.00	125.15	29.05	41.43	19.11	46.13	1,855.30	612.04	32.99
Tomatoes..... .	24.00	22.76	96.31	11.67	11.24	96.31	-	-	-
Green peppers..... .	13.00	12.42	96.63	0.03	0.03	96.63	0.62	0.60	96.63
Red peppers..... .	4.00	3.09	85.12	0.14	0.12	85.12	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	5.00	4.90	95.38	1.49	1.42	95.38	-	-	-
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	-	-	-	-	-	-	-	-	-
Potatoes..... .	-	-	-	-	-	-	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	-	-	-	-	-	-	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	5.00	4.90	95.38	1.49	1.42	95.38	-	-	-

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Hareri

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**3,432.00**	**1,649.41**	**48.06**	**140.88**	**88.12**	**62.55**	**784.18**	**556.80**	**71.00**
Cereals..... .	**3,432.00**	**1,649.41**	**48.06**	**128.69**	**86.50**	**67.21**	**784.18**	**556.80**	**71.00**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	3,432.00	1,649.41	48.06	128.69	86.50	67.21	784.18	556.80	71.00
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**429.00**	**428.06**	**99.89**	**12.19**	**12.18**	**99.89**	**-**	**-**	**-**
Horse beans..... .	429.00	428.06	99.89	12.19	12.18	99.89	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	-	-	-	-	-	-	-	-	-
Red Haricot beans..... .	-	-	-	-	-	-	-	-	-
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	-	-	-	-
Neug..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-	-	-	-
Vegetables..... .	**13,363.00**	**4,317.98**	**32.31**	**370.16**	**211.08**	**57.02**	**-**	**-**	**-**
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	1,064.00	1,062.46	99.89	20.18	20.15	99.89	-	-	-
Ethiopian Cabbage..... .	-	-	-	-	-	-	-	-	-
Tomatoes..... .	9,705.00	4,159.16	42.86	232.07	121.33	52.28	-	-	-
Green peppers..... .	6,943.00	4,202.80	60.54	110.64	75.44	68.19	-	-	-
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	355.00	354.15	99.89	7.28	7.27	99.89	-	-	-
Root Crops..... .	3,748.00	1,781.38	47.53	63.86	30.16	47.23	-	-	-
Beetroot..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	896.00	895.04	99.89	17.32	17.30	99.89	-	-	-
Potatoes..... .	429.00	428.06	99.89	5.62	5.61	99.89	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	709.00	708.31	99.89	10.61	10.60	99.89	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	1,714.00	1,712.25	99.89	30.31	30.28	99.89	-	-	-

Table 24 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2020/21GC (2013E.C.) Belg Season Agricultural Sample Survey

Dire Dawa

Crop	Holders			Area in Hectares			Production in Quintals		
	Estimate	S.E.	C.V.	Estimate	S.E.	C.V.	Estimate	S.E	C.V.
Grain Crops.....	**4,341.00**	**2,919.90**	**67.26**	**143.16**	**79.36**	**55.43**	**1,237.33**	**736.00**	**59.48**
Cereals..... .	**4,341.00**	**2,919.90**	**67.26**	**143.16**	**79.36**	**55.43**	**1,237.33**	**736.00**	**59.48**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	4,341.00	2,919.90	67.26	143.16	79.36	55.43	1,237.33	736.00	59.48
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	-	-	-	-	-	-	-	-	-
Red Haricot beans..... .	-	-	-	-	-	-	-	-	-
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	-	-	-	-
Neug..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-	-	-	-
Vegetables..... .	**9,888.00**	**4,019.59**	**40.65**	**118.88**	**66.83**	**56.21**	**-**	**-**	**-**
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	210.00	208.62	99.57	55.61	55.37	99.57	-	-	-
Ethiopian Cabbage..... .	-	-	-	-	-	-	-	-	-
Tomatoes..... .	9,496.00	3,915.18	41.23	48.64	17.82	36.63	-	-	-
Green peppers..... .	392.00	256.02	65.35	14.62	13.12	89.74	-	-	-
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	19,451.00	11,183.62	57.50	408.78	168.39	41.19	-	-	-
Beetroot..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	6,734.00	3,099.64	46.03	266.26	133.96	50.31	-	-	-
Potatoes..... .	11,976.00	11,769.55	98.27	43.63	43.19	98.98	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	-	-	-	-	-	-	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	1,342.00	611.44	45.55	98.89	51.23	51.80	-	-	-

APPENDIX III

STANDARDERRORS AND COEFFICIENTOF VARIETIONFOR THE FARM MANAGEMENT PRACTICE

Table 25: Number of Holders, Inputs Applied Area and Quantity of Inputs used, Standard Errors and Coeficient of Variation for vthe estimates, Belg Season AgriculturalSample Survey of Private Holders 2020/21G.C (2013EC)

National

Crop type	All cropLand Area			All Fertilizer						Natural					
	Area Hectare			Area Hectare			Quintal			Holder			Hectare		
	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV
All	**2,124,387.00**	**98,600.00**	**4.64**	**1,195,442.00**	**56,654.00**	**4.74**	**2,345,435.00**	**153,263.00**	**6.53**	**4,955,319.00**	**158,712.00**	**3.20**	**391,680.00**	**29,850.00**	**7.62**
Cereals	**1,335,906.00**	**72,405.00**	**5.42**	**697,710.00**	**49,273.00**	**7.06**	**955,031.00**	**99,722.00**	**10.44**	**2,512,208.00**	**124,270.00**	**4.95**	**221,599.00**	**23,522.00**	**10.61**
Teff	133,998.00	19,503.00	14.55	80,934.00	17,000.00	21.01	95,192.00	38,117.00	40.04	61,507.00	14,780.00	24.03	18,330.00	6,538.00	35.67
Barley	220,740.00	32,215.00	14.59	153,968.00	24,697.00	16.04	184,246.00	32,415.00	17.59	260,192.00	45,229.00	17.38	31,085.00	9,217.00	29.65
Wheat	126,851.00	21,519.00	16.96	107,916.00	20,487.00	18.98	228,409.00	46,658.00	20.43	32,203.00	15,624.00	48.52	2,668.00	1,039.00	38.94
Maize	798,175.00	54,272.00	6.80	339,595.00	28,862.00	8.50	412,146.00	48,422.00	11.75	2,216,758.00	115,753.00	5.22	161,237.00	16,979.00	10.53
Sorghum	44,359.00	13,027.00	29.37	10,921.00	3,925.00	35.94	3,934.00	1,530.00	38.88	73,714.00	22,811.00	30.94	8,231.00	3,775.00	45.86
Finger millet	110.00	59.00	53.99	19.00	18.00	99.68	-	-	-	5,167.00	5,149.00	99.65	19.00	18.00	99.68
Oats/ 'Aja'	5,125.00	2,578.00	50.31	4,306.00	2,533.00	58.84	31,003.00	19,223.00	62.00	1,986.00	1,186.00	59.71	30.00	18.00	59.14
Rice	6,550.00	4,881.00	74.53	51.00	50.00	99.69	99.00	99.00	99.69	-	-	-	-	-	-
Pulse	**401,363.00**	**58,462.00**	**14.57**	**178,873.00**	**12,243.00**	**6.84**	**272,432.00**	**33,182.00**	**12.18**	**1,778,886.00**	**93,349.00**	**5.25**	**76,028.00**	**8,115.00**	**10.67**
Horse/Faba beans	6,559.00	1,372.00	20.92	1,961.00	523.00	26.66	3,400.00	1,255.00	36.92	50,605.00	13,308.00	26.30	1,028.00	407.00	39.59
Field peas	30,825.00	5,903.00	19.15	6,506.00	1,730.00	26.59	4,385.00	2,014.00	45.94	44,439.00	10,031.00	22.57	3,419.00	1,073.00	31.38
White Haricot bean	24,571.00	5,644.00	22.97	11,535.00	2,972.00	25.76	9,227.00	2,233.00	24.20	209,061.00	31,413.00	15.03	8,433.00	2,785.00	33.03
Red Haricot beans	231,716.00	13,502.00	5.83	148,326.00	10,208.00	6.88	250,200.00	32,144.00	12.85	1,519,833.00	84,133.00	5.54	55,600.00	5,489.00	9.87
Red Chick peas	4,196.00	1,841.00	43.88	398.00	253.00	63.62	2,306.00	1,921.00	83.30	873.00	871.00	99.70	37.00	37.00	99.71
White chick peas	3,951.00	3,942.00	99.78	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	13,009.00	5,049.00	38.81	4,638.00	4,357.00	93.94	73.00	53.00	72.84	20,684.00	16,226.00	78.45	4,523.00	4,356.00	96.31
Vetch/Grass peas	4,612.00	2,055.00	44.55	394.00	sE	91.57	-	-	-	2,270.00	1,678.00	73.93	394.00	361.00	91.57
Soya beans	122.00	114.00	93.02	114.00	114.00	99.58	-	-	-	1,156.00	1,151.00	99.58	114.00	114.00	99.58
Fenugreek	717.00	270.00	37.63	123.00	65.00	52.84	789.00	497.00	63.03	7,158.00	3,352.00	46.83	55.00	32.00	58.80
Mung bean/"Masho	81,084.00	53,423.00	65.89	4,877.00	2,935.00	60.17	2,053.00	1,431.00	69.69	3,459.00	2,086.00	60.29	2,425.00	1,816.00	74.90
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**11,189.00**	**3,443.00**	**30.77**	**2,286.00**	**833.00**	**36.45**	**2,587.00**	**1,072.00**	**41.44**	**56,647.00**	**19,928.00**	**35.18**	**1,610.00**	**770.00**	**47.82**
Nueg	67.00	67.00	99.95	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	332.00	204.00	61.60	7.00	7.00	100.12	-	-	-	739.00	740.00	100.12	7.00	7.00	100.12
Ground nuts	5,297.00	2,716.00	51.28	462.00	286.00	61.93	40.00	33.00	84.35	12,698.00	5,881.00	46.32	460.00	286.00	62.11
Safflower	63.00	38.00	60.34	33.00	28.00	85.88	4.00	4.00	99.95	4,905.00	4,099.00	83.57	32.00	28.00	89.79
Sesame	4,749.00	2,116.00	44.56	1,179.00	723.00	61.34	1,384.00	831.00	60.01	801.00	798.00	99.65	684.00	683.00	99.81
Rapeseed	681.00	316.00	46.36	604.00	296.00	49.03	1,159.00	673.00	58.09	38,981.00	18,575.00	47.65	427.00	208.00	48.80
Vegetables	**72,993.00**	**5,974.00**	**8.18**	**49,675.00**	**4,911.00**	**9.89**	**84,986.00**	**16,246.00**	**19.12**	**1,990,665.00**	**114,231.00**	**5.74**	**39,343.00**	**4,572.00**	**11.62**
Lettuce	34.00	20.00	57.06	32.00	19.00	60.42	264.00	263.00	99.63	7,207.00	3,916.00	54.33	15.00	7.00	47.90
Head Cabbage	4,537.00	1,397.00	30.80	3,167.00	1,280.00	40.41	6,381.00	2,527.00	39.61	30,267.00	5,792.00	19.14	610.00	195.00	32.04
Ethiopian Cabbage	63,374.00	5,568.00	8.79	43,736.00	4,651.00	10.63	50,520.00	11,075.00	21.92	1,893,271.00	112,397.00	5.94	37,752.00	4,497.00	11.91
Tomatoes	2,947.00	868.00	29.47	1,345.00	364.00	27.05	13,405.00	8,023.00	59.85	39,203.00	6,863.00	17.51	457.00	157.00	34.30
Green peppers	1,867.00	481.00	25.79	1,285.00	327.00	25.48	13,391.00	7,372.00	55.05	77,038.00	18,968.00	24.62	436.00	93.00	21.44
Red peppers	218.00	93.00	42.86	102.00	42.00	41.10	855.00	532.00	62.24	7,661.00	2,591.00	33.82	68.00	37.00	54.82
Swiss chard	16.00	9.00	54.11	8.00	5.00	55.67	168.00	124.00	73.36	11,707.00	4,739.00	40.48	5.00	3.00	65.32
Root Crops	**302,937.00**	**20,047.00**	**6.62**	**266,898.00**	**18,731.00**	**7.02**	**1,030,398.00**	**84,460.00**	**8.20**	**1,508,528.00**	**93,304.00**	**6.19**	**53,100.00**	**5,894.00**	**11.10**
Beetroot	3,622.00	586.00	16.17	2,943.00	410.00	13.93	6,665.00	2,724.00	40.86	31,804.00	6,007.00	18.89	553.00	165.00	29.94
Carrot	1,280.00	459.00	35.81	1,043.00	423.00	40.55	3,098.00	1,110.00	35.84	12,543.00	3,283.00	26.18	73.00	42.00	57.25
Onion	12,245.00	1,972.00	16.10	9,423.00	1,666.00	17.68	189,957.00	46,267.00	24.36	113,580.00	32,527.00	28.64	1,079.00	347.00	32.13
Potatoes	249,302.00	18,462.00	7.41	227,285.00	17,463.00	7.68	737,815.00	66,250.00	8.98	973,323.00	78,841.00	8.10	37,981.00	5,492.00	14.46
Yam	4,332.00	1,513.00	34.93	3,488.00	1,361.00	39.02	2,223.00	995.00	44.75	87,331.00	19,998.00	22.90	3,074.00	1,195.00	38.89
Garlic	16,019.00	7,255.00	45.29	13,233.00	6,444.00	48.70	87,658.00	32,424.00	36.99	141,138.00	18,319.00	12.98	1,797.00	474.00	26.40
Taro/'Godere'	4,715.00	863.00	18.31	3,040.00	671.00	22.07	2,054.00	818.00	39.84	147,172.00	22,931.00	15.58	2,772.00	650.00	23.46
Sweet potatoes	11,421.00	2,009.00	17.59	6,444.00	970.00	15.06	926.00	494.00	53.34	215,845.00	24,901.00	11.54	5,771.00	875.00	15.16

Page 1

Table 25: Con't
National

Crop type	DAP									UREA								
	Holder			Hectare			Quintal			Holder			Hectare			Quintal		
	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV
All	**148,152.00**	**45,329.00**	**30.60**	**32,610.00**	**12,683.00**	**38.89**	**48,377.00**	**14,082.00**	**29.11**	**370,541.00**	**56,826.00**	**15.34**	**57,969.00**	**10,875.00**	**18.76**	**125,669.00**	**29,409.00**	**23.40**
Cereals	**107,414.00**	**43,619.00**	**40.61**	**26,863.00**	**11,700.00**	**43.55**	**34,696.00**	**11,586.00**	**33.39**	**250,704.00**	**51,719.00**	**20.63**	**45,047.00**	**9,531.00**	**21.16**	**71,436.00**	**18,020.00**	**25.23**
Teff	15,207.00	9,766.00	64.22	5,540.00	3,913.00	70.64	3,488.00	2,358.00	67.61	39,954.00	18,068.00	45.22	13,462.00	7,010.00	52.07	16,875.00	12,166.00	72.10
Barley	5,400.00	2,528.00	46.81	1,381.00	821.00	59.44	2,975.00	1,883.00	63.29	32,518.00	13,692.00	42.11	8,558.00	3,844.00	44.91	13,407.00	5,882.00	43.87
Wheat	14,671.00	7,354.00	50.12	10,394.00	7,863.00	75.65	14,041.00	7,962.00	56.71	14,434.00	5,707.00	39.54	5,350.00	2,325.00	43.47	9,058.00	3,739.00	41.28
Maize	81,406.00	42,131.00	51.75	8,597.00	4,110.00	47.81	12,837.00	5,689.00	44.31	174,521.00	46,696.00	26.76	17,270.00	3,698.00	21.41	31,442.00	8,717.00	27.72
Sorghum	5,125.00	4,167.00	81.31	951.00	753.00	79.13	1,129.00	837.00	74.14	635.00	634.00	99.91	284.00	284.00	99.91	51.00	51.00	99.91
Finger millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats/'Aja'	906.00	903.00	99.61	-	-	-	227.00	226.00	99.61	1,808.00	1,800.00	99.54	122.00	122.00	99.54	603.00	600.00	99.55
Rice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**37,199.00**	**16,648.00**	**44.75**	**2,482.00**	**1,187.00**	**47.84**	**4,977.00**	**2,033.00**	**40.84**	**80,723.00**	**30,089.00**	**37.27**	**4,579.00**	**1,774.00**	**38.75**	**12,707.00**	**5,336.00**	**41.99**
Horse/Faba beans	-	-	-	-	-	-	-	-	-	3,148.00	2,220.00	70.52	85.00	68.00	80.07	336.00	300.00	89.13
Field peas	1,345.00	1,125.00	83.69	167.00	142.00	84.83	62.00	55.00	88.90	2,860.00	1,739.00	60.81	651.00	415.00	63.67	892.00	517.00	57.92
White Haricot beans	4,176.00	2,900.00	69.44	114.00	108.00	94.36	795.00	648.00	81.53	3,517.00	2,213.00	62.94	606.00	593.00	97.80	693.00	598.00	86.20
Red Haricot beans	31,678.00	16,354.00	51.62	2,201.00	1,171.00	53.18	3,984.00	1,881.00	47.21	74,337.00	29,952.00	40.29	3,131.00	1,511.00	48.25	10,690.00	5,150.00	48.18
Red Chick peas	453.00	452.00	99.83	-	-	-	136.00	136.00	99.83	-	-	-	-	-	-	-	-	-
White chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-	567.00	566.00	99.85	94.00	94.00	99.85	45.00	45.00	99.85
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	895.00	612.00	68.35	12.00	8.00	72.13	50.00	34.00	68.49
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**3,469.00**	**3,452.00**	**99.50**	**195.00**	**194.00**	**99.51**	**752.00**	**748.00**	**99.50**	**780.00**	**779.00**	**99.94**	**2.00**	**2.00**	**99.94**	**39.00**	**39.00**	**99.94**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	3,469.00	3,452.00	99.50	195.00	194.00	99.51	752.00	748.00	99.50	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	780.00	779.00	99.94	2.00	2.00	99.94	39.00	39.00	99.94
Vegetables	**29,350.00**	**23,851.00**	**81.26**	**382.00**	**222.00**	**58.19**	**1,607.00**	**1,345.00**	**83.67**	**58,304.00**	**27,620.00**	**47.37**	**1,156.00**	**406.00**	**35.08**	**7,541.00**	**3,701.00**	**49.08**
Lettuce	-	-	-	-	-	-	-	-	-	240.00	240.00	99.88	2.00	2.00	99.88	14.00	14.00	99.88
Head Cabbage	362.00	265.00	73.29	2.00	2.00	89.63	10.00	7.00	70.77	1,279.00	578.00	45.20	122.00	69.00	56.42	182.00	117.00	64.52
Ethiopian Cabbage	28,029.00	23,843.00	85.07	365.00	222.00	60.72	1,568.00	1,344.00	85.75	49,104.00	27,406.00	55.81	615.00	282.00	45.91	6,286.00	3,673.00	58.44
Tomatoes	487.00	322.00	66.16	3.00	2.00	67.60	12.00	8.00	65.46	2,311.00	1,795.00	77.66	98.00	62.00	63.34	63.00	40.00	62.33
Green peppers	473.00	335.00	70.89	11.00	11.00	97.89	17.00	15.00	86.02	5,060.00	2,101.00	41.53	312.00	237.00	76.13	652.00	360.00	55.23
Red peppers	-	-	-	-	-	-	-	-	-	974.00	633.00	64.95	7.00	5.00	60.59	316.00	214.00	67.50
Swiss chard	-	-	-	-	-	-	-	-	-	827.00	138.00	16.66	-	-	40.09	26.00	1.00	3.69
Root Crops	**34,432.00**	**11,389.00**	**33.08**	**2,688.00**	**1,350.00**	**50.22**	**6,345.00**	**2,258.00**	**35.59**	**114,762.00**	**22,114.00**	**19.27**	**7,185.00**	**2,244.00**	**31.23**	**33,946.00**	**9,931.00**	**29.25**
Beetroot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carrot	121.00	120.00	99.50	21.00	21.00	99.50	60.00	60.00	99.50	156.00	-	-	5.00	-	-	8.00	-	-
Onion	3,247.00	1,386.00	42.69	64.00	26.00	40.66	342.00	180.00	52.56	42,955.00	17,433.00	40.58	1,152.00	352.00	30.60	20,052.00	8,831.00	44.04
Potatoes	30,693.00	11,300.00	36.82	2,592.00	1,348.00	52.00	5,856.00	2,232.00	38.11	57,414.00	13,301.00	23.17	3,201.00	887.00	27.70	10,191.00	4,225.00	41.45
Yam	345.00	344.00	99.80	7.00	7.00	99.80	34.00	34.00	99.80	-	-	-	-	-	-	-	-	-
Garlic	256.00	256.00	99.80	5.00	5.00	99.80	51.00	51.00	99.80	10,932.00	5,196.00	47.53	2,570.00	2,029.00	78.96	3,446.00	2,383.00	69.16
Taro/'Godere'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-	-	3,461.00	1,582.00	45.72	257.00	146.00	56.96	249.00	163.00	65.53

Page 1

Table 25: Con't

National

Crop type	UREA + DAP									Indigenous seed								
	Holder			Hectare			Quintal			Holder			Hectare			Quintal		
	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV
All	**89,590.00**	**33,098.00**	**36.94**	**7,580.00**	**2,639.00**	**34.82**	**20,134.00**	**6,066.00**	**30.13**	**11,364,261.00**	**183,203.00**	**1.61**	**1,836,673.00**	**92,887.00**	**5.06**	**1,594,160.00**	**111,332.00**	**6.98**
Cereals	**29,721.00**	**11,057.00**	**37.20**	**5,215.00**	**2,251.00**	**43.17**	**10,639.00**	**4,510.00**	**42.39**	**5,570,853.00**	**171,102.00**	**3.07**	**1,109,127.00**	**65,235.00**	**5.88**	**1,201,141.00**	**94,785.00**	**7.89**
Teff	1,391.00	1,388.00	99.79	1,458.00	1,455.00	99.81	800.00	798.00	99.80	459,220.00	53,507.00	11.65	129,134.00	19,019.00	14.73	80,101.00	11,597.00	14.48
Barley	1,660.00	1,323.00	79.67	201.00	145.00	72.11	271.00	212.00	78.32	995,588.00	85,131.00	8.55	216,223.00	32,005.00	14.80	452,463.00	62,408.00	13.79
Wheat	539.00	537.00	99.72	244.00	243.00	99.72	539.00	537.00	99.72	251,518.00	41,229.00	16.39	91,468.00	18,147.00	19.84	251,559.00	52,155.00	20.73
Maize	25,528.00	10,771.00	42.19	3,136.00	1,330.00	42.42	8,158.00	4,240.00	51.98	4,278,692.00	158,523.00	3.70	617,172.00	46,329.00	7.51	348,704.00	30,486.00	8.74
Sorghum	539.00	537.00	99.72	39.00	39.00	99.72	269.00	269.00	99.72	214,682.00	35,249.00	16.42	43,421.00	13,050.00	30.06	20,179.00	4,911.00	24.34
Finger millet	-	-	-	-	-	-	-	-	-	10,351.00	6,430.00	62.12	110.00	59.00	53.99	230.00	124.00	54.21
Oats/ 'Aja'	603.00	601.00	99.73	137.00	137.00	99.73	603.00	601.00	99.73	67,438.00	27,391.00	40.62	5,102.00	2,578.00	50.54	43,027.00	18,134.00	42.15
Rice	-	-	-	-	-	-	-	-	-	7,176.00	5,546.00	77.28	6,499.00	4,881.00	75.11	4,878.00	3,456.00	70.86
Pulse	**2,906.00**	**1,606.00**	**55.26**	**130.00**	**99.00**	**76.09**	**639.00**	**434.00**	**67.96**	**4,381,017.00**	**147,079.00**	**3.36**	**377,691.00**	**58,210.00**	**15.41**	**383,284.00**	**37,905.00**	**9.89**
Horse/Faba beans	-	-	-	-	-	-	-	-	-	178,080.00	28,952.00	16.26	6,542.00	1,372.00	20.98	14,921.00	4,723.00	31.65
Field peas	-	-	-	-	-	-	-	-	-	209,405.00	30,587.00	14.61	30,344.00	5,841.00	19.25	62,550.00	14,812.00	23.68
White Haricot beans	696.00	696.00	99.99	13.00	13.00	99.99	139.00	139.00	99.99	374,819.00	39,912.00	10.65	23,976.00	5,634.00	23.50	22,500.00	6,547.00	29.10
Red Haricot beans	2,906.00	1,606.00	55.26	117.00	86.00	73.73	500.00	303.00	60.63	3,696,735.00	138,375.00	3.74	209,709.00	12,431.00	5.93	255,273.00	30,927.00	12.12
Red Chick Peas	-	-	-	-	-	-	-	-	-	19,725.00	7,525.00	38.15	3,965.00	1,795.00	45.27	2,695.00	1,377.00	51.11
White Chick peas	-	-	-	-	-	-	-	-	-	1,269.00	1,266.00	99.75	3,951.00	3,942.00	99.78	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-	80,619.00	22,476.00	27.88	13,009.00	5,049.00	38.81	12,792.00	6,268.00	49.00
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	27,896.00	12,190.00	43.70	4,531.00	2,026.00	44.71	5,181.00	1,974.00	38.10
Soya beans	-	-	-	-	-	-	-	-	-	1,207.00	1,152.00	95.46	122.00	114.00	93.02	10.00	9.00	89.72
Fenugreek	-	-	-	-	-	-	-	-	-	33,725.00	8,460.00	25.09	715.00	270.00	37.73	2,495.00	887.00	35.53
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-	36,874.00	12,528.00	33.98	80,826.00	53,422.00	66.09	4,866.00	2,339.00	48.07
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**172,039.00**	**37,937.00**	**22.05**	**10,634.00**	**3,413.00**	**32.10**	**9,735.00**	**3,369.00**	**34.61**
Nueg	-	-	-	-	-	-	-	-	-	802.00	802.00	99.95	67.00	67.00	99.95	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	5,331.00	2,977.00	55.85	332.00	204.00	61.60	78.00	63.00	80.71
Ground nuts	-	-	-	-	-	-	-	-	-	54,510.00	19,107.00	35.05	4,762.00	2,663.00	55.93	3,675.00	1,736.00	47.25
Safflower	-	-	-	-	-	-	-	-	-	10,907.00	5,119.00	46.94	63.00	38.00	60.34	62.00	33.00	53.72
Sesame	-	-	-	-	-	-	-	-	-	47,669.00	23,555.00	49.41	4,749.00	2,116.00	44.56	5,834.00	2,885.00	49.45
Rapeseed	-	-	-	-	-	-	-	-	-	55,952.00	22,863.00	40.86	661.00	315.00	47.72	87.00	52.00	59.53
Vegetables	**3,008.00**	**1,236.00**	**41.09**	**130.00**	**90.00**	**69.43**	**521.00**	**247.00**	**47.35**	**3,175,649.00**	**146,049.00**	**4.60**	**69,583.00**	**5,868.00**	**8.43**	**-**	**-**	**-**
Lettuce	-	-	-	-	-	-	-	-	-	8,502.00	3,617.00	42.54	34.00	20.00	57.47	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-	-	68,225.00	11,121.00	16.30	3,434.00	1,055.00	30.73	-	-	-
Ethiopian Cabbage	639.00	465.00	72.78	90.00	89.00	98.76	209.00	181.00	86.49	2,949,826.00	141,200.00	4.79	62,098.00	5,550.00	8.94	-	-	-
Tomatoes	2,369.00	1,145.00	48.33	40.00	17.00	41.23	312.00	168.00	53.76	89,537.00	18,672.00	20.85	2,105.00	800.00	38.02	-	-	-
Green peppers	-	-	-	-	-	-	-	-	-	170,764.00	29,719.00	17.40	1,693.00	459.00	27.09	-	-	-
Red peppers	-	-	-	-	-	-	-	-	-	22,652.00	5,958.00	26.30	209.00	93.00	44.72	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-	11,040.00	3,268.00	29.60	11.00	8.00	68.56	-	-	-
Root Crops	**65,828.00**	**31,425.00**	**47.74**	**2,105.00**	**876.00**	**41.61**	**8,335.00**	**3,624.00**	**43.47**	**4,463,646.00**	**143,902.00**	**3.22**	**269,637.00**	**18,009.00**	**6.68**	**-**	**-**	**-**
Beetroot	-	-	-	-	-	-	-	-	-	50,528.00	8,841.00	17.50	1,649.00	510.00	30.94	-	-	-
Carrot	-	-	-	-	-	-	-	-	-	27,405.00	7,179.00	26.20	639.00	260.00	40.73	-	-	-
Onion	4,499.00	2,323.00	51.63	165.00	90.00	54.31	388.00	166.00	42.88	391,583.00	57,085.00	14.58	8,824.00	1,693.00	19.18	-	-	-
Potatoes	61,329.00	31,474.00	51.32	1,920.00	870.00	45.33	7,941.00	3,632.00	45.74	3,472,833.00	139,883.00	4.03	222,303.00	16,235.00	7.30	-	-	-
Yam	-	-	-	-	-	-	-	-	-	134,344.00	25,593.00	19.05	4,330.00	1,513.00	34.95	-	-	-
Garlic	-	-	-	-	-	-	-	-	-	312,702.00	35,280.00	11.28	15,865.00	7,254.00	45.72	-	-	-
Taro/'Godere'	-	-	-	-	-	-	-	-	-	253,438.00	34,585.00	13.65	4,715.00	863.00	18.31	-	-	-
Sweet potatoes	277.00	277.00	99.82	21.00	21.00	99.82	6.00	6.00	99.82	322,653.00	32,347.00	10.03	11,312.00	2,005.00	17.72	-	-	-

Page

Table 25: Con't

National

Crop type	Improved seed									Pesticide					
	Holder			Hectare			Quintal			Holder			Hectare		
	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV
All	**2,160,336.00**	**139,188.00**	**6.44**	**285,963.00**	**28,931.00**	**10.12**	**200,883.00**	**31,413.00**	**15.64**	**872,028.00**	**83,033.00**	**9.52**	**232,881.00**	**28,333.00**	**12.17**
Cereals	**1,663,862.00**	**130,261.00**	**7.83**	**225,329.00**	**26,848.00**	**11.92**	**181,498.00**	**30,108.00**	**16.59**	**513,890.00**	**64,222.00**	**12.50**	**186,498.00**	**26,813.00**	**14.38**
Teff	24,896.00	12,062.00	48.45	4,864.00	2,106.00	43.30	4,579.00	3,721.00	81.27	140,549.00	27,124.00	19.30	48,272.00	10,381.00	21.51
Barley	26,401.00	12,456.00	47.18	4,518.00	2,171.00	48.05	8,363.00	4,751.00	56.81	106,924.00	24,352.00	22.78	36,961.00	10,552.00	28.55
Wheat	114,891.00	21,528.00	18.74	35,383.00	9,092.00	25.70	67,490.00	15,959.00	23.65	150,229.00	27,749.00	18.47	68,780.00	14,898.00	21.66
Maize	1,496,053.00	127,167.00	8.50	179,579.00	24,981.00	13.91	100,719.00	24,498.00	24.32	164,782.00	42,045.00	25.52	25,351.00	6,067.00	23.93
Sorghum	18,278.00	12,721.00	69.60	913.00	599.00	65.67	347.00	222.00	64.12	7,812.00	3,625.00	46.41	1,334.00	639.00	47.92
Finger millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	1,026.00	1,026.00	99.97	23.00	23.00	99.97	-	-	-	37,254.00	25,892.00	69.50	3,246.00	2,317.00	71.40
Rice	331.00	330.00	99.69	51.00	50.00	99.69	-	-	-	4,815.00	4,052.00	84.15	2,555.00	2,162.00	84.61
Pulse	**270,290.00**	**41,900.00**	**15.50**	**23,671.00**	**5,562.00**	**23.50**	**17,949.00**	**6,719.00**	**37.44**	**60,954.00**	**14,225.00**	**23.34**	**10,639.00**	**2,720.00**	**25.57**
Horse/Faba beans	2,584.00	1,323.00	51.20	17.00	13.00	75.57	8.00	7.00	80.07	2,820.00	1,393.00	49.40	266.00	168.00	63.20
Field peas	2,368.00	1,206.00	50.91	480.00	277.00	57.75	514.00	512.00	99.71	10,077.00	5,621.00	55.78	2,639.00	1,514.00	57.37
White Haricot beans	16,850.00	8,755.00	51.96	595.00	276.00	46.33	398.00	276.00	69.42	2,486.00	1,848.00	74.33	332.00	297.00	89.52
Red Haricot beans	247,291.00	39,952.00	16.16	22,007.00	5,522.00	25.09	17,029.00	6,674.00	39.19	22,596.00	8,502.00	37.63	1,998.00	809.00	40.49
Red chick peas	2,199.00	1,929.00	87.73	231.00	227.00	97.89	-	-	-	4,697.00	3,845.00	81.87	734.00	518.00	70.61
White chick peas	-	-	-	-	-	-	-	-	-	4,521.00	2,948.00	65.21	1,177.00	810.00	68.84
Lentiles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	713.00	712.00	99.86	81.00	81.00	99.86	-	-	-	10,489.00	5,135.00	48.95	2,413.00	1,199.00	49.68
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	713.00	712.00	99.86	2.00	2.00	99.86	-	-	-	3,225.00	2,448.00	75.91	153.00	123.00	80.36
Mung bean/"Masho"	680.00	660.00	97.03	257.00	226.00	87.67	-	-	86.98	917.00	665.00	72.55	926.00	727.00	78.50
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**1,968.00**	**1,357.00**	**68.97**	**555.00**	**534.00**	**96.20**	**1,437.00**	**1,434.00**	**99.80**	**6,347.00**	**5,325.00**	**83.89**	**1,015.00**	**921.00**	**90.77**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground nuts	719.00	717.00	99.80	535.00	534.00	99.80	1,437.00	1,434.00	99.80	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	6,149.00	5,321.00	86.53	1,009.00	921.00	91.30
Rapeseed	1,250.00	1,153.00	92.23	20.00	16.00	80.47	-	-	-	198.00	197.00	99.52	6.00	6.00	99.52
Vegetables	**101,208.00**	**23,242.00**	**22.96**	**3,166.00**	**862.00**	**27.22**	-	-	-	**54,612.00**	**14,933.00**	**27.34**	**2,290.00**	**747.00**	**32.62**
Lettuce	714.00	713.00	99.87	-	-	99.87	-	-	-	720.00	718.00	99.66	5.00	5.00	99.73
Head Cabbage	14,414.00	4,814.00	33.40	1,103.00	590.00	53.51	-	-	-	5,605.00	2,671.00	47.65	727.00	563.00	77.49
Ethiopian Cabbage	52,171.00	21,478.00	41.17	1,033.00	520.00	50.28	-	-	-	17,466.00	7,477.00	42.81	560.00	291.00	51.84
Tomatoes	23,452.00	5,893.00	25.13	842.00	320.00	38.07	-	-	-	20,689.00	6,033.00	29.16	803.00	333.00	41.52
Green peppers	11,730.00	4,973.00	42.39	173.00	79.00	45.62	-	-	-	9,985.00	7,657.00	76.69	170.00	95.00	56.07
Red peppers	970.00	672.00	69.22	9.00	5.00	58.20	-	-	-	2,398.00	1,793.00	74.75	25.00	14.00	57.19
Swiss chard	4,092.00	1,850.00	45.20	5.00	4.00	73.94	-	-	-	-	-	-	-	-	-
Root Crops	**347,140.00**	**47,044.00**	**13.55**	**33,241.00**	**8,080.00**	**24.31**	-	-	-	**364,450.00**	**55,550.00**	**15.24**	**32,439.00**	**6,015.00**	**18.54**
Beetroot	17,980.00	4,247.00	23.62	1,973.00	257.00	13.05	-	-	-	2,029.00	776.00	38.24	718.00	88.00	12.21
Carrot	16,937.00	4,835.00	28.55	642.00	351.00	54.62	-	-	-	1,398.00	709.00	50.74	174.00	92.00	53.01
Onion	77,437.00	20,168.00	26.05	3,421.00	1,040.00	30.41	-	-	-	170,492.00	39,478.00	23.16	6,328.00	1,544.00	24.40
Potatoes	241,541.00	42,231.00	17.48	26,980.00	8,012.00	29.70	-	-	-	165,512.00	37,415.00	22.61	22,498.00	5,599.00	24.89
Yam	97.00	97.00	99.54	2.00	2.00	99.54	-	-	-	-	-	-	-	-	-
Garlic	4,566.00	1,606.00	35.17	154.00	33.00	21.43	-	-	-	43,621.00	14,586.00	33.44	2,709.00	1,590.00	58.70
Taro/'Godere'	-	-	-	-	-	-	-	-	-	929.00	929.00	99.95	12.00	12.00	99.95
Sweet potatoes	922.00	742.00	80.41	70.00	50.00	72.58	-	-	-	-	-	-	-	-	-

Page 1

Table 25: Con't

National

Crop type	NPS									NPA + UREA								
	Holder			Hectare			Quintal			Holder			Hectare			Quintal		
	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV
All	**2,776,776.00**	**136,293.00**	**4.91**	**412,608.00**	**31,720.00**	**7.69**	**903,748.00**	**90,230.00**	**9.98**	**1,565,871.00**	**108,009.00**	**6.90**	**215,534.00**	**23,887.00**	**11.08**	**1,000,771.00**	**104,249.00**	**10.42**
Cereals	**1,329,479.00**	**108,909.00**	**8.19**	**237,593.00**	**26,090.00**	**10.98**	**406,741.00**	**50,869.00**	**12.51**	**580,144.00**	**66,851.00**	**11.52**	**111,933.00**	**20,412.00**	**18.24**	**357,738.00**	**66,560.00**	**18.61**
Teff	79,172.00	16,013.00	20.23	19,385.00	4,349.00	22.44	20,378.00	5,329.00	26.15	68,146.00	23,877.00	35.04	19,363.00	8,377.00	43.26	49,161.00	26,096.00	53.08
Barley	242,141.00	39,973.00	16.51	70,206.00	17,451.00	24.86	99,925.00	24,222.00	24.24	57,061.00	15,055.00	26.38	11,034.00	4,016.00	36.39	28,050.00	9,812.00	34.98
Wheat	131,991.00	23,367.00	17.70	46,812.00	9,608.00	20.53	75,542.00	16,322.00	21.61	90,251.00	24,794.00	27.47	31,690.00	10,793.00	34.06	108,685.00	34,187.00	31.45
Maize	939,373.00	98,338.00	10.47	98,616.00	14,253.00	14.45	198,573.00	35,580.00	17.92	389,624.00	51,375.00	13.19	47,001.00	11,802.00	25.11	152,777.00	28,884.00	18.91
Sorghum	13,705.00	6,456.00	47.11	985.00	574.00	58.31	1,632.00	1,051.00	64.39	8,290.00	4,097.00	49.43	431.00	247.00	57.22	853.00	487.00	57.06
Finger millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	19,661.00	8,663.00	44.06	1,538.00	797.00	51.82	10,591.00	6,483.00	61.21	26,449.00	25,346.00	95.83	2,414.00	2,396.00	99.23	18,211.00	18,081.00	99.29
Rice	331.00	330.00	99.69	51.00	50.00	99.69	99.00	99.00	99.69	-	-	-	-	-	-	-	-	-
Pulse	**1,144,373.00**	**92,391.00**	**8.07**	**77,520.00**	**7,801.00**	**10.06**	**196,510.00**	**31,359.00**	**15.96**	**237,274.00**	**36,810.00**	**15.51**	**15,949.00**	**2,825.00**	**17.71**	**54,490.00**	**9,496.00**	**17.43**
Horse/Faba beans	17,454.00	5,452.00	31.24	551.00	195.00	35.32	1,789.00	577.00	32.25	4,219.00	1,699.00	40.26	290.00	157.00	54.00	1,274.00	655.00	51.40
Field peas	10,050.00	4,429.00	44.07	1,425.00	904.00	63.45	1,966.00	1,260.00	64.09	1,712.00	1,294.00	75.55	785.00	749.00	95.42	1,368.00	1,195.00	87.34
Haricot beans whi	35,438.00	7,373.00	20.81	2,108.00	610.00	28.92	5,688.00	1,615.00	28.40	4,074.00	1,726.00	42.36	243.00	163.00	67.11	1,801.00	1,301.00	72.24
Haricot beans red	1,094,532.00	91,738.00	8.38	70,941.00	7,349.00	10.36	184,882.00	30,560.00	16.53	223,316.00	36,279.00	16.25	14,236.00	2,621.00	18.41	47,242.00	8,869.00	18.77
Chick peas	855.00	854.00	99.94	102.00	102.00	99.94	113.00	113.00	99.94	2,107.00	1,917.00	91.00	258.00	229.00	88.48	2,057.00	1,913.00	92.98
White chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	906.00	906.00	100.08	21.00	21.00	100.08	27.00	27.00	100.08	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	772.00	621.00	80.50	39.00	35.00	88.88	401.00	374.00	93.38	2,431.00	1,219.00	50.13	18.00	12.00	65.49	338.00	276.00	81.50
Mung bean/"Masho"	2,979.00	2,183.00	73.29	2,333.00	2,315.00	99.24	1,644.00	1,371.00	83.40	3,275.00	3,266.00	99.71	120.00	120.00	99.83	409.00	408.00	99.83
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**11,766.00**	**5,633.00**	**47.87**	**299.00**	**183.00**	**61.21**	**1,120.00**	**695.00**	**62.07**	**1,926.00**	**1,648.00**	**85.56**	**12.00**	**9.00**	**70.01**	**195.00**	**139.00**	**71.04**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground nuts	345.00	344.00	99.80	1.00	1.00	99.80	7.00	7.00	99.80	818.00	817.00	99.94	1.00	1.00	99.94	33.00	33.00	99.94
Safflower	859.00	858.00	99.95	1.00	1.00	99.95	4.00	4.00	99.95	-	-	-	-	-	-	-	-	-
Sesame	817.00	814.00	99.61	142.00	142.00	99.61	306.00	305.00	99.63	818.00	817.00	99.94	6.00	6.00	99.94	82.00	82.00	99.94
Rapeseed	9,745.00	5,521.00	56.65	154.00	116.00	74.98	803.00	625.00	77.85	290.00	217.00	74.85	6.00	6.00	98.02	81.00	79.00	97.27
Vegetables	**300,819.00**	**60,056.00**	**19.96**	**5,279.00**	**1,198.00**	**22.68**	**37,795.00**	**10,452.00**	**27.65**	**111,918.00**	**18,890.00**	**16.88**	**3,267.00**	**961.00**	**29.40**	**36,556.00**	**12,052.00**	**32.97**
Lettuce	-	-	-	-	-	-	-	-	-	1,200.00	1,196.00	99.62	15.00	15.00	99.65	250.00	249.00	99.64
Head Cabbage	7,046.00	3,439.00	48.81	1,044.00	765.00	73.25	354.00	182.00	51.43	15,368.00	6,146.00	40.00	1,380.00	823.00	59.66	5,458.00	2,499.00	45.78
Ethiopian Cabbage	268,435.00	59,293.00	22.09	3,969.00	921.00	23.20	34,480.00	10,396.00	30.15	54,739.00	12,973.00	23.70	863.00	296.00	34.34	7,679.00	2,543.00	33.12
Tomatoes	6,344.00	2,257.00	35.58	61.00	22.00	36.75	720.00	325.00	45.19	18,645.00	5,067.00	27.18	658.00	306.00	46.56	12,008.00	8,008.00	66.68
Green peppers	20,115.00	7,499.00	37.28	196.00	77.00	39.47	1,975.00	829.00	42.00	24,346.00	10,804.00	44.38	330.00	165.00	49.86	10,747.00	7,304.00	67.97
Red papers	2,240.00	1,432.00	63.91	10.00	7.00	66.77	262.00	208.00	79.46	2,745.00	1,706.00	62.17	17.00	10.00	59.11	277.00	187.00	67.47
Swiss chard	96.00	96.00	99.29	-	-	99.29	5.00	5.00	99.29	1,259.00	629.00	49.97	4.00	3.00	98.09	138.00	123.00	89.64
Root crops	**1,126,810.00**	**86,145.00**	**7.65**	**91,917.00**	**13,253.00**	**14.42**	**261,582.00**	**37,928.00**	**14.50**	**1,015,908.00**	**86,562.00**	**8.52**	**84,372.00**	**9,799.00**	**11.61**	**551,792.00**	**65,455.00**	**11.86**
Beet root	5,207.00	1,555.00	29.86	727.00	343.00	47.12	472.00	208.00	44.08	9,788.00	2,998.00	30.63	1,650.00	81.00	4.93	3,550.00	627.00	17.66
Carrot	6,820.00	2,818.00	41.32	689.00	385.00	55.89	1,140.00	697.00	61.10	6,775.00	2,291.00	33.81	255.00	96.00	37.58	1,889.00	763.00	40.38
Onion	35,300.00	9,417.00	26.68	1,102.00	513.00	46.52	9,323.00	3,745.00	40.17	128,159.00	29,445.00	22.98	4,161.00	1,140.00	27.39	117,365.00	30,395.00	25.90
Potatoes	1,046,203.00	85,076.00	8.13	84,823.00	12,975.00	15.30	240,482.00	37,642.00	15.65	850,918.00	82,806.00	9.73	73,464.00	9,399.00	12.79	354,106.00	47,735.00	13.48
Yam	6,007.00	3,955.00	65.84	191.00	185.00	96.76	470.00	342.00	72.68	9,361.00	4,046.00	43.22	217.00	133.00	61.20	1,719.00	856.00	49.82
Garlic	23,920.00	7,434.00	31.08	4,130.00	2,392.00	57.92	8,202.00	3,805.00	46.39	55,043.00	15,169.00	27.56	4,487.00	2,564.00	57.15	72,325.00	30,810.00	42.60
Taro 'Godere'	13,674.00	4,888.00	35.75	164.00	73.00	44.31	1,320.00	713.00	54.01	5,207.00	2,574.00	49.43	103.00	60.00	57.73	735.00	388.00	52.85
Sweet potatoes	7,899.00	3,109.00	39.36	92.00	53.00	58.04	173.00	90.00	51.80	1,445.00	802.00	55.50	36.00	26.00	73.27	103.00	68.00	66.07

Page 1

Table 25: Con't
National

Crop type	MIXED						MIXED+UREA								
	Hectare			Quintal			Holder			Hectare			Quintal		
	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV
All	**34,332.00**	**9,382.00**	**27.33**	**91,060.00**	**23,756.00**	**26.09**	**299,188.00**	**50,879.00**	**17.01**	**43,129.00**	**13,063.00**	**30.29**	**155,676.00**	**43,997.00**	**28.26**
Cereals	**19,221.00**	**8,464.00**	**44.04**	**23,691.00**	**9,866.00**	**41.65**	**92,208.00**	**27,751.00**	**30.10**	**30,239.00**	**12,409.00**	**41.03**	**50,090.00**	**20,599.00**	**41.12**
Teff	2,326.00	1,392.00	59.83	1,822.00	981.00	53.81	4,830.00	4,162.00	86.18	1,070.00	858.00	80.21	2,669.00	2,377.00	89.08
Barley	9,869.00	4,988.00	50.54	12,249.00	5,460.00	44.57	62,803.00	25,566.00	40.71	21,633.00	9,671.00	44.70	27,370.00	10,922.00	39.90
Wheat	4,824.00	3,304.00	68.50	6,607.00	4,470.00	67.66	4,984.00	4,958.00	99.47	5,935.00	5,905.00	99.50	13,936.00	13,865.00	99.49
Maize	2,202.00	1,289.00	58.56	3,014.00	1,401.00	46.49	21,156.00	7,909.00	37.38	1,538.00	622.00	40.47	5,345.00	2,614.00	48.91
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	2,053.00	2,050.00	99.88	63.00	63.00	99.89	770.00	769.00	99.89
Rice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**1,340.00**	**949.00**	**70.78**	**1,697.00**	**971.00**	**57.20**	**5,896.00**	**3,016.00**	**51.15**	**845.00**	**749.00**	**88.66**	**1,412.00**	**961.00**	**68.10**
Horse/Faba beans	7.00	7.00	99.94	-	-	-	-	-	-	-	-	-	-	-	-
Field peas	59.00	59.00	100.02	96.00	96.00	100.02	-	-	-	-	-	-	-	-	-
White Haricot bean	8.00	8.00	99.97	23.00	23.00	99.97	288.00	212.00	73.58	10.00	9.00	86.76	88.00	84.00	95.34
Red Haricot beans	1,266.00	947.00	74.76	1,578.00	966.00	61.19	5,608.00	2,974.00	53.03	835.00	749.00	89.72	1,324.00	958.00	72.34
Red Chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**163.00**	**152.00**	**93.65**	**286.00**	**247.00**	**86.43**	**780.00**	**779.00**	**99.94**	**5.00**	**5.00**	**99.94**	**195.00**	**195.00**	**99.94**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	152.00	152.00	99.63	245.00	244.00	99.63	-	-	-	-	-	-	-	-	-
Rapeseed	10.00	10.00	99.64	41.00	41.00	99.64	780.00	779.00	99.94	5.00	5.00	99.94	195.00	195.00	99.94
Vegetables	**57.00**	**43.00**	**76.91**	**231.00**	**156.00**	**67.50**	**4,792.00**	**2,444.00**	**50.99**	**61.00**	**36.00**	**58.71**	**735.00**	**400.00**	**54.46**
Lettuce	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	2,144.00	1,820.00	84.88	8.00	7.00	89.45	378.00	275.00	72.70
Ethiopian Cabbage	55.00	43.00	78.53	220.00	156.00	70.85	1,616.00	1,310.00	81.07	26.00	24.00	92.36	78.00	56.00	71.00
Tomatoes	1.00	1.00	99.97	12.00	12.00	99.97	1,032.00	1,031.00	99.88	27.00	27.00	99.88	279.00	279.00	99.95
Green peppers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red papers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Root crops	**13,552.00**	**3,767.00**	**27.80**	**65,154.00**	**21,086.00**	**32.36**	**243,037.00**	**45,112.00**	**18.56**	**11,979.00**	**3,452.00**	**28.82**	**103,244.00**	**35,884.00**	**34.76**
Beet root	-	-	-	-	-	-	4,270.00	4,259.00	99.75	13.00	13.00	99.75	2,644.00	2,638.00	99.77
Carrot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Onion	119.00	101.00	84.96	421.00	281.00	66.58	43,636.00	22,988.00	52.68	1,581.00	1,013.00	64.04	42,065.00	31,761.00	75.50
Potatoes	13,145.00	3,627.00	27.59	64,056.00	20,607.00	32.17	197,966.00	41,878.00	21.15	10,160.00	3,364.00	33.11	55,183.00	16,877.00	30.58
Yam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Garlic	209.00	208.00	99.27	632.00	609.00	96.45	6,264.00	4,299.00	68.63	35.00	19.00	55.53	3,002.00	1,936.00	64.51
Taro 'Godere'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweet potatoes	78.00	78.00	100.01	45.00	45.00	100.01	898.00	898.00	100.01	190.00	190.00	100.01	350.00	350.00	100.01

Page 1

APPENDIX IV

QUESTIONNAIRE

Form AgSS 2013/8
CENTRAL STATISTICAL AUTHORITY
ETHIOPIAN AGRICULTURAL SAMPLE SURVEY 2020/21 (2013 E.C)

PART I – IDENTIFICATION PARTICULARS

1	2	3	4	5	6	7	8	9	10	11	12	13	14
REGION	ZONE	WEREDA	PA / REST. AR	EA LOCAL	HH ID	HH HEAD SEX 1=M 2=F	HOLDER ID	HOLDER'S NAME	HOLDER'S AGE	HOLDER'S SEX M=1 F=2	HIGHEST GRADE COMPLETED	HOLDER'S HH SIZE	**FARMING TYPE** CROP=1 LIVEST=2 BOTH=3

PART II – CROP FIELD / OTHER LAND USE

15	16	17		
		PARCEL NO.	FIELD NO.	
		IS THE FIELD PURE STAND =1 MIXED CROP =2 OTHER LAND USE=3		
		CROP/OTHER NAME	CROP NAME	CROP NAME
SER. NO.	QUESTIONS FOR THE HOLDER	CODE	CODE	CODE
1	Ownership Own = 1 Rented in =2 Other =3			
1.1	For how much did you rent this plot? If it is your own, how much would you pay if you rent it? (If it is share cropped in, estimate the share of the production that you will share to the owner of the plot in birr).			
2	Is field under Extension Program? Yes =1 No = 2			
3	Is Field Irrigated? Yes =1 No =2			
3.1	If Field Irrigated source of water. River =1 Lake =2 Pond =3 Harvested water =4 other =5			
3.2	**Type of irrigation:** Full/conventional irrigation = 1 Supplemental irrigation = 2			
4	**How many times was the field tilled in this production season?** Zero tillage (direct drill/seedling) = 1 Tilled once = 2 Tilled two times = 3 Tilled three or more times = 4 Not at all(not cultivated) = 5			
4.1	Slope of the field/plot: Plain = 1 partially slopy = 2 slopy = 3			
5	Did you use prevention methods against soil erosion on this field? Yes = 1 No = 2 → Q6			
5.1	**If the answer to Q5 is Yes, main soil erosion preventive method used:** Terracing = 1 Bund = 2 Planting trees = 3 Plough across the contour = 4 Rotational grazing = 5 avoiding grazing = 6 Creating grassed waterways = 7 Other (specify) = 8			
6	**Do you apply any method to maintain /improve soil organic matters on this field/plot?** Yes = 1 No = 2 → *Q7*			
6.1	**(If the response to Q6 is YES, what method do you mainly used?** Growing annual crops in rows between perennial crops = 1 maintaining continuous soil cover (residues) = 2 Maximizing the use of organic matter sources =3 Using appropriate placement of nitrogen fertilizers = 4 Avoiding grazing = 5 Increasing the complexity of the crop rotations = 6 intercropping the complexity crop rotations with leguminous crops = 7 other = 8			
7	**How was the seed planted/ sowed?** (For only Temporary crops) Broadcasting = 1 Row planting = 2			

8	If more than one crop grown or if crops were intercropped, give the percentage of land devoted to each crop (the total percentage should equals 100).						
9	**Type of seed/seedling sowed/planted:** Improved seed *= 1 local seed = 2* → **Q**16						
10	**10.1 If code 1 for Q9, the seed used was: (For only Temporary crops)** New improved seed for this production season = 1 Improved seed left over from last year production season = 2 Improved seed saved from previous harvest *= 3* (if Code 2 or 3 for Q13.1,→ Q16)						
	10.2 If code 1 for Q9, From whom/or institution did you obtain/purchase the seed? Code (a): (codes are available in enumerators manual).						
11	**(For Cereals, Pulses and Oil seeds only:)** If improved seeds are used, (If code 1 for Q10.1, quantity of seed used (in Kg)	Kilo	Gram	Kilo	Gram	Kilo	Gram
	(For Cereals, Pulses and Oil seeds only:) If improved seeds are used, (If code 1 for Q10.1, quantity of seed used (in Kg)						
12	***(For Cereals, Pulses and Oil seeds only):*** If improved seeds are used, (If code 1 in *Q10.1),* Total cost of seed (Birr)	Birr	Cents	Birr	Cents	Birr	Cents
	(For Cereals, Pulses and Oil seeds only): If improved seeds are used, (If code 1 in *Q10.1),* Total cost of seed (Birr)						
113	*For Cereals, Pulses & Oilseeds only* Quantity of indigenous seeds used	Kilo	Gram	Kilo	Gram	Kilo	Gram
13.1	**(for only cereals, pulses and oil seeds):** cost of local seed used (in Birr).	Birr	Cents	Birr	Cents	Birr	Cents
14	**Was there any crop damage on this field?? Yes = 1 No =2**						
15	**If yes in question number 10, Cause of damage** →						
	Code →						
16	Percent of damaged crop						
17	Prevention/precaution measure taken? Yes =1 No =2						
18	Type of measure if any? Chemical = 1 Non – chemical = 2 Both = 3						
19	Chemical type used if any. Pesticide =1 herbicide =2 Fungicide =3 1&2 = 4 1 & 3 = 5 2 & 3 = 6 All = 7						
19.1	Quantity of chemical used	Pesticid		herbicide		Fungicide	
		Quantity	UoM	Quantity	UoM	Quantity	UoM
19.2	Price of quantity of chemical used	Pesticid		herbicide		Fungicide	
		Birr	Cents	Birr	Cents	Birr	Cents
20	Is Fertilizer Used? Yes =1 No = 2						
21	Type of fertilizer used if any? Natural = 1 Chemical = 2 Both = 3						
	If chemical fertilizer used 22.1 Type UREA = 1 DAP = 2 Both = 3 NPS=4 NPS & DAP=5						
	22.2. **. Quantity of chemical fertilizer applied to the field** (by fertilizer type)	Urea		DAP		NPS	Blended
		Killo	Gram	Killo	Gram	Killo Gram	Killo Gram
	22.3Total Cost of chemical fertilizer applied, by fertilizer type, (in Birr)	Urea		DAP		NPS	Blended
		Birr	Cents	Birr	Cents	Birr Cents	Birr Cents

23	If natural fertilizer used, type Manure = 1 Compost = 2 Organic = 3 1 &2 = 4 1&3 = 5 2 & 3 = 6 All = 7 others = 8									
24	Quantity of crop produced in standard/local measurement	Name	Code	Quantity	Name	code	Quantity	Name	Code	Quantity
24.1	Howm much is . . .local unit is 1 quintal									
25	Number of oxen/other animals used during land clearing, land preparation and planting.									
25.1	**Total cost paid for animal services** (oxens/other animals) during land clearing, land preparation and planting (if own animals used, estimated cost)									
					M	**F**	**C**			
26	Number of days family members spent on this field during land clearing, land preparation and planting (in perso-days).									
26.1	Estimated cost for family members participated on this field during land clearing, land preparation and planting.(in Birr)									
27	Number of days hired persons spent during land clearing, land preparation and planting.(in person-days)									
27.1	Total cost for hired persons during land clearing, land preparation and planting.(in Birr)									
28	Labour sharing (debo, wenfel,....): number of days persons in the work party spent during land clearing, land preparation and planting.(in person-days)									
28.1	Total cost paid for persons participated in the work party, (including spent in the form of foods, drinks, ...) (in Birr)									
29	Total cost spent for mantionary service (if own mationary used, estimate in monetary value)									
30	Total cost spent for animal service for transport during land clearing, land preparation and planting.									

M = Male, F = Female , C = Children (under 15 years of age)

FORM 2A: SECTION 3: Area of field/plot measured by (GPS, Compass Rope, or Measurer) (Meher 2013 E.C)

1	2	3	4	5	6		7	8	9	10	11	12	13		14	
HH Id	Sex of HH head	Holder Id	Parcel No.	Plot No.	Crop name		Was area of the field measured using GPS, Compass-Rope or Measurer? GPS = 1 Compass Rope = 2 Measurer = 3 Not measured = 4	If field is measured using GPS or Measurer , accuracy	Closure error (for fields measured using compass and meter only)	Area of field/Plot (in sq.m.)	If field is not measured, reason: Difficult to measure with compass /measurer/GPS = 1 Other = 2	If field is measured using GPS or measurer software, field obstruction Not protected/bare = 1 Covered with trees/perennial crops =2 In compound = 3 Partially covered = 4 Other (specify) = 5	Date of measurement		How large is the plot in Local Units?	
					Name	Code				(Measured Clockwise)			Day	Month	Area in [Name]	
															Area	UoM

	Name	Signature	Date
Data collector's			
Field Supervisor's			