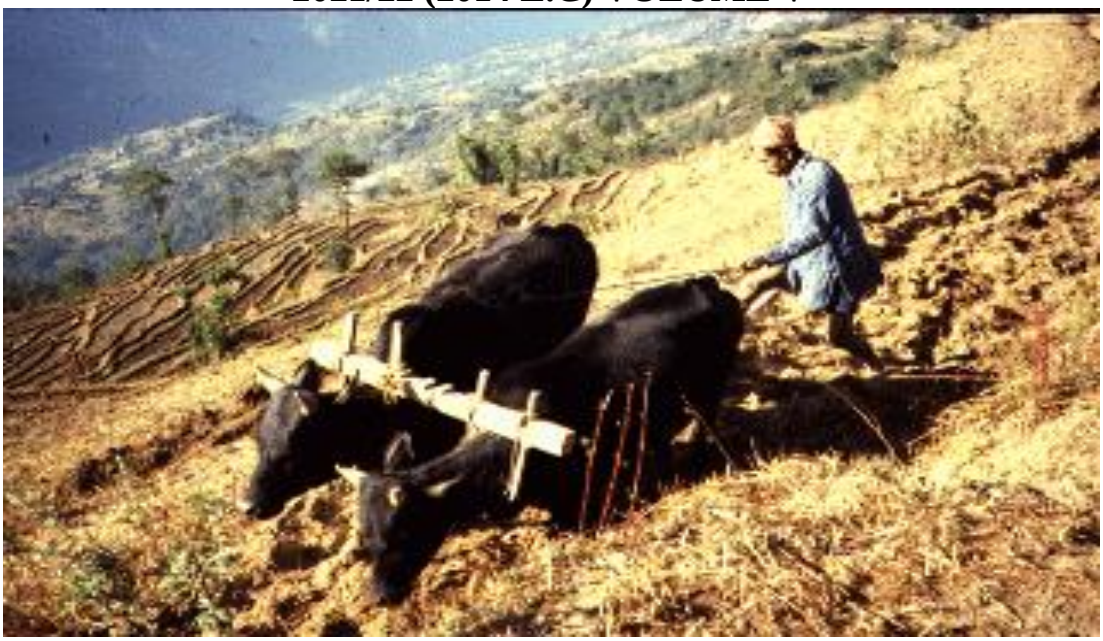
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

ETHIOPIAN STATISTICS SERVICE

AGRICULTURAL SAMPLE SURVERY
2021/22 (2014 E.C) VOLUME V



REPORT ON AREA, PRODUCTION AND FARM MANAGEMENT PRACTICEOFBELG SEASON CROPS FOR

PRIVATE PEASANT HOLDINGS

ADDIS ABABA
SEPTEMBER, 2022

---

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 4

2. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING 4
2.1 COVERAGE 4
2.2 SAMPLING FRAME 4
2.3 SAMPLE DESIGN AND SELECTION SCHEME 4
2.4 FIELD ORGANIZATION 5
2.5 TRAINING OF THE FIELD STAFF 5
2.6 METHODS OF DATA COLLECTION 6
2.7 DATA PROCESSING 7
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 2021/22 (2014 EC) TOTAL CROP LAND AREA AND PRODUCTION OF MAJOR CROPS, MEHER AND BELG SEASONS 13

CHAPTER IV 31

4 FARM MANAGEMENT PRACTISES OF THE 2021/22 (2014 EC) BELG SEASON ... 31
4.1 INTRODUCTION 31
4.2 SUMMARY OF THE FARM MANAGEMENT PRACTICES OF THE 2020/21 (2013 E.C.) BELG SEASON AGRICULTURAL SAMPLE SURVEY 32
4.3 FERTLIZER APPLIED AREA AND FERTLIZER TYPE USED 34
4.4 THE USE OF NATURAL FERTLIZER 35
4.5. THE USE OF COMMERCIAL FERTLIZERS 35
4.6. ALL CROPLAND AREA AND TRENDS OF THE USE OF COMMERCIAL 39
FERTLIZERS 39
4.7. THE USE OF IMPROVED SEEDS 40
4.8 NUMBER OF HOLDERS REPORTING CROP DAMAGE BY CAUSES OF DAMAGE .. 43

APPENDIX I 113

APPENDIX II 117

APPENDIX III 129

APPENDIX IV 137

List of Tables

Table 0.Number of EA's and Households Covered in Belg, 2021/22 (2014 EC) Survey…….……2

Summary Table 1: Cropland Area and Production of Major Belg Crops: Private PeasantHoldings, 2021/22 (2014 EC) …….……..……11

Summary Table 2: Summary of National Grain Cropland Area and Production of Meher season, Belg Season and Commercial Farms during 2021/22 (2014 EC) 11

Summary Table 3. Cropland Area under Major Crops for Private Peasant Holdings For 2021/22 (2014 EC)Both seasons ..……..……..12

Summary Table 4. Total Production of Major Crops Harvested by Private Peasant Holdings,2021/22 (2014 EC)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 2021/22 (2014 EC)…….19

Table 6. Total Cropland Area and Number of Holders Engaged in 2021/22 (2014 EC) 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, 2021/22 (2014 EC) Belg season, National…….33

Table 9. Summary of Fertilizer Applied Cropland Area for Private Holdings of 2021/22 (2014 EC) 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 2021/22 (2014 EC)……13***

Figure 2 ***Estimates of Total Production of Major Crops for Private Holdings in Ethiopia for Both Seasons of 2021/22 (2014 EC) ….……15***

Figure 3: ***Percentage of Area under Major Belg Season Crops in 2021/22 (2014 EC), 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 2021/22 (2014 EC)..…...36***

Figure 6. ***Percentage Distribution of Quantity of Chemical Fertilizers Applied by Fertilizer Type for Private Holding of 2021/22 (2014 EC) 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 2021/22 (2014 EC) …….40***

Figure 9. ***Number of Holders Using Different Inputs by Educational status, 2021/22 (2014 EC), Belg Season…..…….....41***

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

List of Acronyms

AgSS	***Agricultural Sample Survey***
ESS	***Ethiopian statistics service***
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 implements as 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.

Ethiopian Statistical Service, ESS, (Formerly known as 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 ESS, 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 used 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 2021/22 (2014 EC) 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 2021/22 (2014 EC) 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, 2014 EC (2021/22) Survey

A slight variation on the number of planned and covered EA's of Belg, 2014 EC (2021/22) 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, 2014 EC (2021/22) Survey

No.	REG	Number of EA'S Planned	Number of EA Covered	Number of Households Covered
1	Afar	22	12	193
2	Amhara	192	173	3185
3	Oromia	502	353	6711
4	Somale	20	5	79
5	Benishangul-Gumuz	31	10	172
6	SNNP	494	494	9506
7	Sidama	43	38	720
8	Gambela	75	64	1403
9	Harari	7	1	14
10	Diredewa	8	6	92
	Total covered	**1,394**	**1156**	**22075**

CHAPTER II

2. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

2.1 COVERAGE

The 2021/22 (2014 EC) 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 1n 1156 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 Ethiopian statistics service (ESS) 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 2021/22 (2014 EC), 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 equipments such 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 2021/22 (2014 EC) 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 2021/22 (2014 EC) Belg season agricultural sample survey was not also carried out in the teritery of Mekele ESS 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, together with dry season irrigation survey, which was carried out at Adama town for eight consecutive days. In the first stage training, the trainers and the trainees were ESS branch office

statisticians (senior supervisors) and staffs from the head office respectively. The first round trainnes who in turn trained the ESS 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 the objectives and uses of the Agricultural Sample Survey (AgSS), concepts and definitions of terms used, the method of area measurement, interviewing procedures, etc.

The 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 2021/22 (2014 EC) 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' 30/2014E.C. (March 8 to June 7, 2022GC). 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 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 or collection activities was carriedout. 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/variables are prepared for use on Tablet and CSPro software is used for the purpose of data consistency checking. The data entry task is carried out/accomplished at field level during data collection using Tablet (that have fully operational data entry system). After the data capturing/entry is accomplished, the data are checked for consistency and cleaned using the data cleaning specifications prepared for this purpose. Finally, tabulation is done on personal computers to produce results as indicated in the tabulation plan.

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 2021/22 (2014 EC) 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 2021/22 (2014 EC) Belg season agricultural sample survey estimate indicates a total cropland area estimates of about 2,080,790.44 hectare and production of 55,184,475.14 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 up to the year 2015GC (2006EC). In this report it is categorized as a pulse crop which is its proper category. With this background, the main findings of the 2021/22 (2014 EC) Belg season crop production sample survey are presented in this Chapter**.**

3.1.1 <u>Grain Crops</u>: 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. The 2021/22 (2014 EC) Belg season agricultural sample survey result indicates that a total land area of about 1,703,256.33 hectare was cultivated by the major Belg crops (grains) from which a total grain production of about 13,395,391.98 quintals was estimated at national level. As compared to the production (the most past recent Belg season production) year of the 2020/21 (2013 E.C.) grain cultivated area has decreased by 2.59% and the total production has also decreased by 9.21%. 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 1,265,120.75 hectares (74.28%) of the national Belg grain cropland area) and about 10,882,678 quintals (81.24%) of the total Belg grain production). Following cereals is pulse crops which accounted for about 417,717.6 hectares (24.52% of the total grain area) and about 2,450,846.12quintals production (which is 18.30% of the total grain production). Moreover, oilseeds are the other category of grain crops produced which accounted for an area of 20,417.98 hectares (1.20% of the total grain area) and

61,867.85 quintals of production (0.46% 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, *2021.22 (2014 E.C.), Country Level*

Crop	Total Cropland Area		Total Production	
Category	**in Hectare**	**%**	**In Quintals**	**%**
Cereal……	**1,265,120.75**	***74.28***	**10,882,678.00**	***81.24***
Pulses……	**417,717.60**	***24.52***	**2,450,846.12**	***18.30***
Oilseeds……...	**20,417.98**	***1.20***	**61,867.85**	***0.46***
Grain crops……	**1,703,256.33**	***100.00***	**13,395,391.97**	***100.00***

Inorder to illustrate the overall performance of the 2021/22 (2014 EC) 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 for commercial farms are presented in the Summary Table 2 below. By the year 2021/22 (2014 EC) the overall grain cultivated area estimate is about 14,549,881.18 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 2021.22 (2014 E.C.), Country Level

	Grain crops Area (Ha)	%	Grain Production(Qt)	%
Meher season private holdings	12,196,548.67	*83.83*	327,903,521.41	*92.40*
Belg season private holdings	1,703,256.33	*11.71*	13,395,391.97	*3.77*
Commercial Farms	650,076.18	*4.47*	13,579,881.18	*3.83*
Grand total	***14,549,881.18***	***100.00***	***354,878,794.56***	***100.00***

Out of the total grain area estimated, Belg season grain area accounted for about 1,703,256.33 hectares (11.71% of total grain area) where as Meher season grain area accounted for about 12,196,548.67 hectare (83.83% of the total grain area cultivated). Commercial farms grain cultivated area is about 650,076.18 hectares (4.47% of the total grain area cultivated).

The total grain crops produced during 2021/22 (2014 EC) amounts 354,878,794.56 quintals which is decreased by 5.51% from the 2020/21 (2013 E.C) total production considering Meher, Belg and commercial farms. Meher season, Belg season and commercial farms account for about 327,903,521.41 Quintals (92.40%), 13,395,391.97 Quintals (3.77%) and 13,579,881.18 Quintals (3.83%) of the total grain production, respectively for the year 2021/22 (2014 EC).

3.2 ESTIMATES OF THE 2021/22 (2014 EC) TOTAL CROP LAND AREA AND PRODUCTION OF MAJOR CROPS, MEHER AND BELG SEASONS

For the year 2021/22 (2014 EC), the total cropland area cultivated of major crops (grains) of the private peasant holdings during both seasons was estimated to be 13,899,804.99 hectares (commercial not included). Meher season accounts for 12,196,548.66 (87.75%) while Belg season accounts for 1,703,256.33 (12.25%) 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 2021/22 (2014 E.C), Both Seasons:Country Level

Crop Type	*Total Grain Cropland Area in Hectares during*					
	Meher Season		*Belg Season*		*Both seasons Total*	
	Area in Ha	*%*	*Area in Ha*	*%*	*Area in Ha*	*%*
Cereal	*9,997,511.08*	*81.97*	*1,265,120.75*	*74.28*	*11,262,631.83*	*81.03*
Pulses	*1,676,888.30*	*13.75*	*417,717.60*	*24.52*	*2,094,605.90*	*15.07*
Oilseeds	*522,149.28*	*4.28*	*20,417.98*	*1.20*	*542,567.26*	*3.90*
Total	***12,196,548.66***	***100.00***	***1,703,256.33***	***100.00***	***13,899,804.99***	***100.00***

As indicated in Summary Table 3, cereals accounted for about 11,262,631.83 hectares (81.03% of the total grain cultivated area) while Pulses and Oil crops accounted for about 2,094,605.90 hectare (15.07%) and 542,567.26 hectares (3.90%) 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 2021/22 (2014 EC), is indicated using Figure 1 as follows.

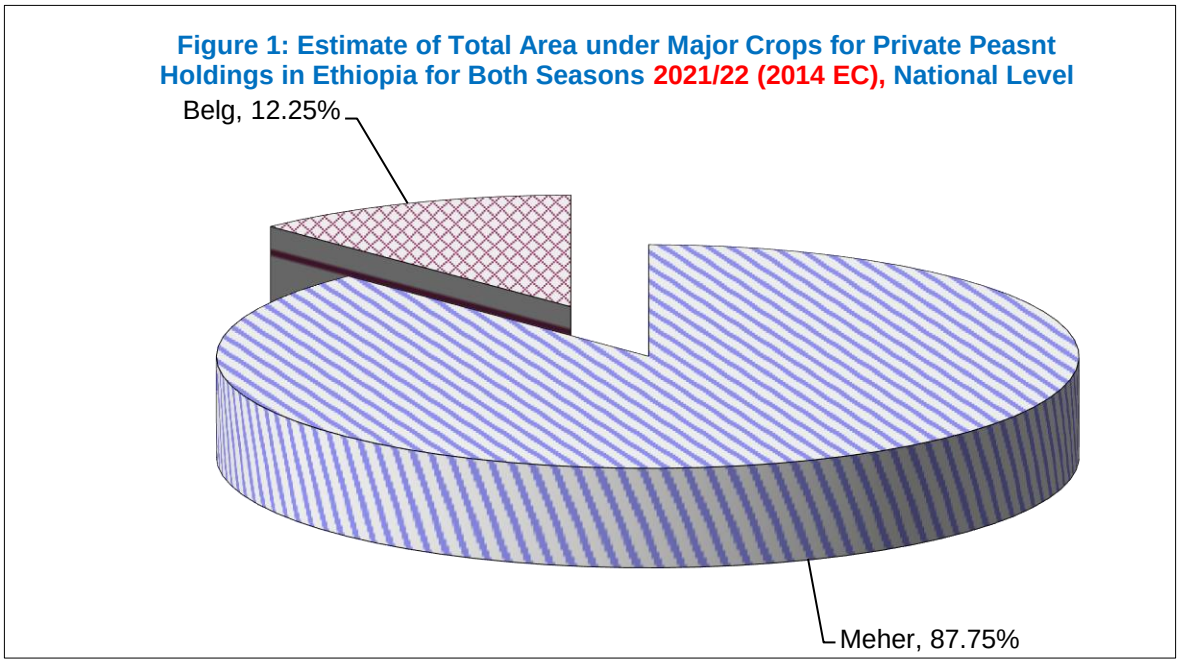


Figure 1 shows that out of the total major crops cultivated area by private peasant holdings during both seasons of 2021/22 (2014 EC), Belg and Meher seasons account for 12.25% and 87.75%, respectively. Likewise, the overall performance of the major grain crops production estimates for both seasons is illustrated in Summary Table 4.

Summary Table 4. Total Production of Major Crops Harvested by Private Peasant Holdings, 2021/22 (2014 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	***290,808,263.25***	***88.69***	***10,142,138.69***	***74.69***	***300,950,401.94***	***88.13***
Pulses	***31,680,193.33***	***9.66***	***1,251,778.79***	***9.22***	***32,931,972.12***	***9.64***
Oil crops	***5,415,064.82***	***1.65***	***2,185,963.70***	***16.10***	***7,601,028.52***	***2.23***
Total	***327,903,521.40***	***100.00***	***13,579,881.18***	***100.00***	***341,483,402.58***	***100.00***

The Summary Table 4 indicate that cereals production accounted for a bout ***300,950,401.94*** quintals (88.13% of the total grain crops) produced in both seasons. Pulses and Oil crops account for about ***32,931,972.12*** quintals (9.64%) and ***7,601,028.52*** (2.23%), 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 2021/22 (2014 EC),is indicated using Figure 2 bellow.

Figure 2: Estimates of Total Productionof Major Crops for Private Holdings in Ethiopia for Both Seasons of 2021/22 (2014 EC), National Level

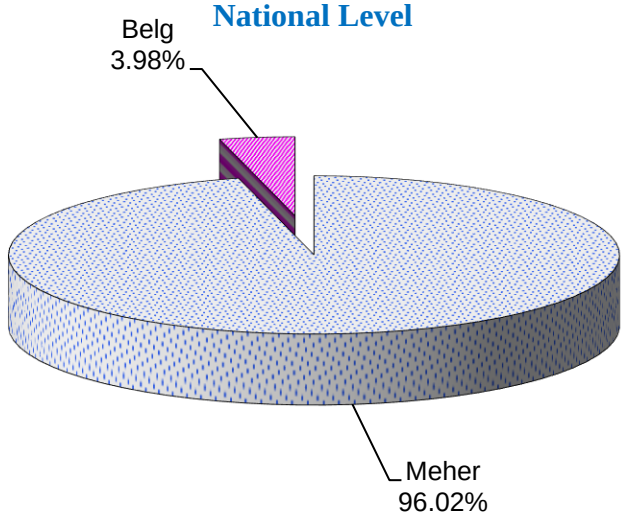
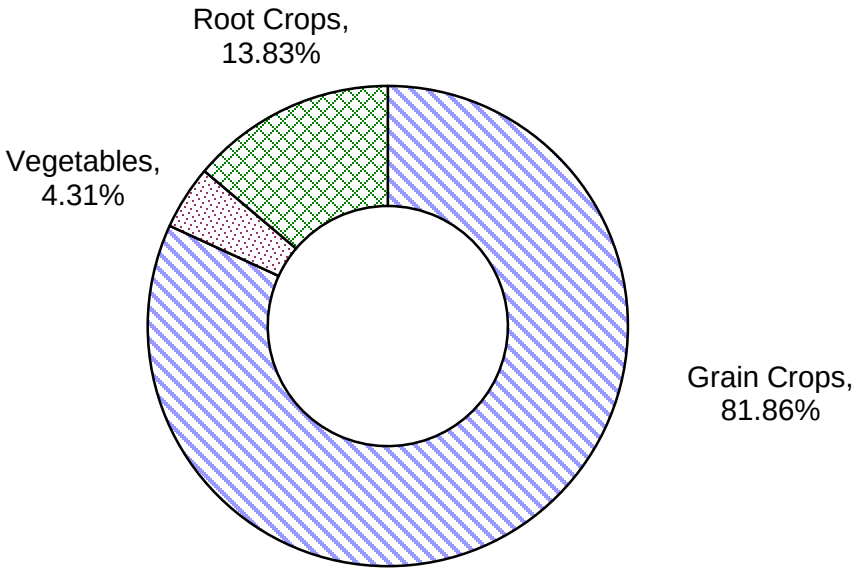


Figure 2 indicates that out of the total of major grain crops produced by private peasant holdings during both seasons of 2021/22 (2014 EC), Belg accounts for 3.98% (which is about **13,579,881.18** quintals) whereas Meher accounts for 96.02% (about **327,903,521.40** quintals).

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 4.31% of the area under all crops at national level during the Belg season. Out of the total area under vegetables,

84.49% and 5.65% are accounted for Ethiopian Cabbage and Tomatoes respectively (See Statistical Table 5.1).

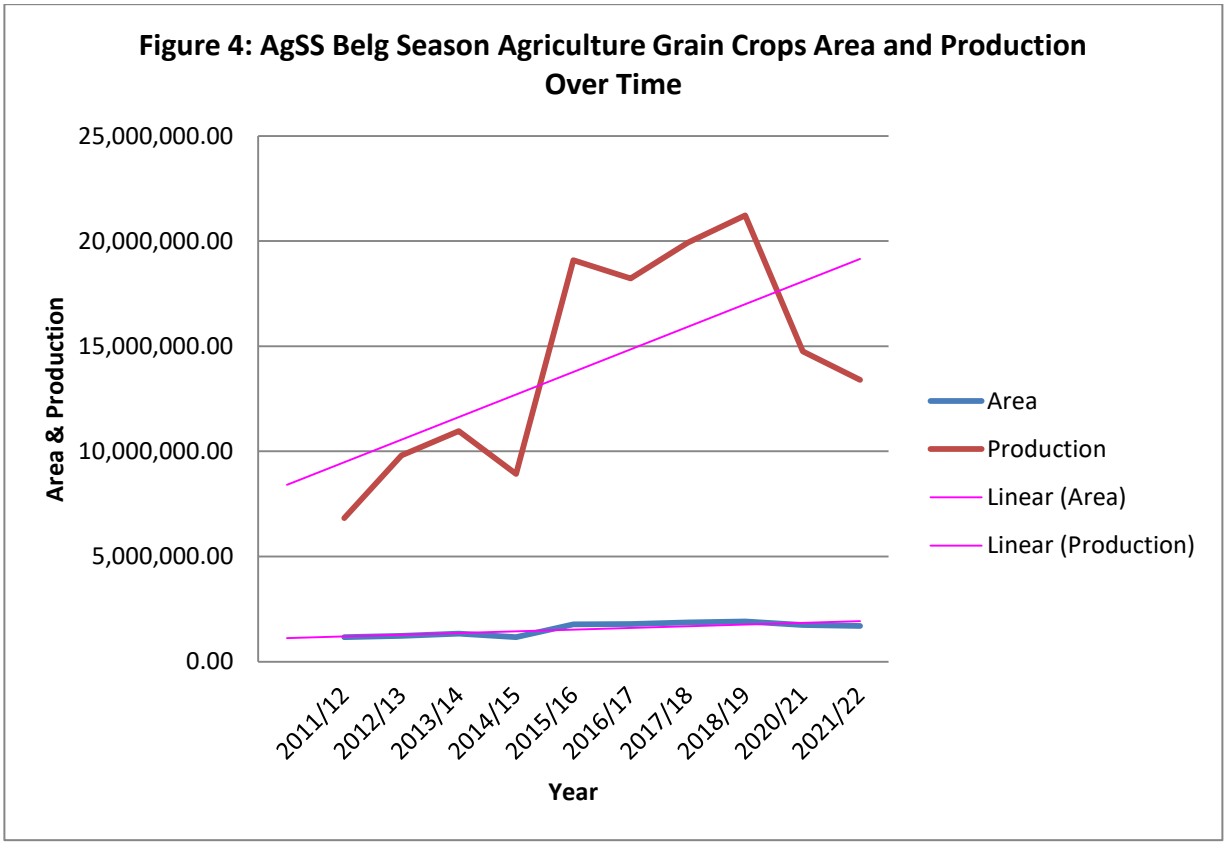
Figure 3: Percentage Distribution of Area under Major Belg Season Crops in 2021/22 (2014EC), National Level



3.1.4. Root Crops: - 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 13.83% of the area under all Belg crops in the country. Potatoes, onion and sweet potatoes accounted for 82.06%, 6.08% and 5.72% of the total root crop area cultivated respectively. Interms of production, potatoes, sweet potatoes and onion accounted for 87.04%, 8.72% and 1.95% 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 2021/22 (2004-2014EC) for the purpose of comparision and understanding the changes over time of the variables under discussion. Thus, the trend exhibits, annualy on average, increasing trend in area (by about 5.43%) and production (by about 13.59%) of Belg season agriculture over the past ten 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 Table5: Estimates of total Grain Cropland area and production for Meher (main), Belag (minor) Seasons of private Holdings and Commercial Farms (Large scale Farms (LSF) for 2021/22 (2014EC)

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.....	**1,703,256.33**	**12,196,548.67**	**650,076.18**	**14,549,881.18**	**13,395,391.98**	**327,903,521.41**	**13,579,881.18**	**354,878,794.57**
Cereals.....	**1,265,120.75**	**9,997,511.08**	**325,586.25**	**11,588,218.08**	**10,882,678.00**	**290,808,263.25**	**10,142,138.69**	**311,833,079.94**
Teff.....	152,356.92	2,932,670.03	8,974.79	3,094,001.74	1,080,172.63	56,143,388.01	125,030.05	57,348,590.69
Barley.....	177,342.95	799,127.84	6,657.52	983,128.31	959,010.34	20,718,071.07	159,038.50	21,836,119.91
Wheat.....	111,522.64	1,867,047.71	113,124.00	2,091,694.35	790,307.36	58,078,220.52	3,445,743.89	62,314,271.77
Maize.....	744,931.79	2,563,201.21	89,754.27	3,397,887.27	7,483,986.52	107,513,689.44	3,537,535.49	118,535,211.45
Sorghum.....	67,199.58	1,350,509.37	99,533.77	1,517,242.72	500,385.88	35,536,707.10	2,737,879.91	38,774,972.89
Finger millet.....	870.09	366,301.45	2,200.16	369,371.70	-	9,421,471.73	35,340.40	9,456,812.13
Oats/'Aja'.....	10,881.28	27,531.11	-	38,412.39	68,815.28	590,109.04	-	658,924.32
Rice.....	15.50	91,122.35	5,341.74	96,479.59	-	2,806,333.23	101,570.45	2,907,903.68
Pulses.....	**417,717.60**	**1,676,888.30**	**60,595.12**	**2,155,201.02**	**2,450,846.12**	**31,680,193.33**	**1,251,778.79**	**35,382,818.24**
Horse beans.....	4,757.91	520,551.70	532.18	525,841.79	32,102.81	10,916,093.35	14,361.94	10,962,558.10
Field peas.....	39,554.82	220,194.82	81.90	259,831.54	210,413.66	3,803,358.97	2,762.01	4,016,534.64
White Haricot beans.	22,217.66	98,508.53	9,050.75	129,776.94	135,244.15	1,715,653.14	248,205.22	2,099,102.51
Red Haricot beans...	238,440.96	240,841.81	5,295.75	484,578.52	1,390,616.31	4,125,926.43	17,943.67	5,534,486.41
Red Chick-peas.....	6,073.57	155,014.47	-	161,088.04	12,433.02	3,113,057.25	-	3,125,490.27
White Chick-peas....	671.67	46,259.67	8,954.76	55,886.10	-	899,327.88	144,543.16	1,043,871.04
Lentils.....	13,998.32	69,371.01	-	83,369.33	33,053.78	865,386.09	-	898,439.87
Vetch.....	4,670.11	152,917.35	-	157,587.46	12,626.13	3,244,495.52	-	3,257,121.65
Soya beans.....	505.67	75,938.88	14,360.47	90,805.02	-	1,855,222.32	376,779.70	2,232,002.02
Fenugreek.....	1,784.49	30,145.56	-	31,930.05	9,978.80	353,282.89	-	363,261.69
Mung bean/"Masho"...	84,721.44	56,015.65	22,319.31	163,056.40	614,377.45	571,587.88	447,183.09	1,633,148.42
Gibto.....	320.97	11,128.88	-	11,449.85	-	216,801.57	-	216,801.57
Oilseeds.....	**20,417.98**	**522,149.28**	**263,894.81**	**806,462.07**	**61,867.85**	**5,415,064.82**	**2,185,963.70**	**7,662,896.37**
Neug.....	-	179,827.91	537.42	180,365.33	-	2,024,315.77	5,719.72	2,030,035.49
Linseed.....	524.75	48,285.56	348.03	49,158.34	271.17	443,984.32	6,431.25	450,686.74
Groundnuts.....	9,318.44	77,283.21	1,014.66	87,616.31	37,681.14	1,392,784.61	14,788.44	1,445,254.19
Sunflower.....	1,584.68	2,982.33	182.95	4,749.96	19,582.77	28,941.15	2,981.09	51,505.01
Sesame.....	8,274.94	204,511.91	258,750.38	471,537.23	4,332.77	1,378,071.37	2,102,305.77	3,484,709.91
Rapeseed.....	**715.18**	**9,258.33**	**3,061.37**	**13,034.88**	**-**	**146,967.55**	**53,737.43**	**200,704.98**
Vegetables.....	89,778.23	236,772.95	13,046.56	339,597.74	8,745,654.14	8,663,270.46	1,798,272.46	19,207,197.06
Lettuce.....	11.55	1,340.29	911.28	2,263.12	161.09	4,669.54	452,482.00	457,312.63
Head Cabbage.....	2,179.95	6,546.41	293.41	9,019.77	142,261.57	397,671.97	82,320.95	622,254.49
Ethiopian Cabbag....	75,853.10	48,442.38	941.65	125,237.13	8,336,238.80	4,719,384.30	80,336.76	13,135,959.86
Tomatoes.....	5,075.92	7,710.16	2,140.77	14,926.85	131,969.05	336,558.42	554,800.96	1,023,328.43
Green peppers.....	5,038.68	13,360.97	2,558.16	20,957.81	134,562.81	661,465.88	542,295.02	1,338,323.71
Red peppers.....	1,549.29	157,650.07	6,160.19	165,359.55	460.81	2,492,889.70	84,361.38	2,577,711.89
Swiss chard.....	69.74	1,722.65	41.09	1,833.48	-	50,630.68	1,675.39	52,306.07
Root Crops.....	**287,755.88**	**240,903.35**	**2,750.18**	**531,409.41**	**33,043,429.03**	**41,369,575.64**	**456,710.58**	**74,869,715.25**
Beetroot.....	1,360.74	3,276.64	515.00	5,152.38	55,425.22	213,765.97	20,000.00	289,191.19
Carrot.....	1,031.81	6,759.92	44.95	7,836.68	19,912.88	316,716.09	9,875.00	346,503.97
Onion.....	17,508.86	25,237.55	1,415.30	44,161.71	644,604.79	2,076,626.72	381,009.32	3,102,240.83
Potatoes.....	236,123.70	78,478.72	50.01	314,652.43	28,760,743.24	13,095,668.04	8,140.03	41,864,551.31
Yam/'Boye'.....	1,514.77	3,888.44		5,403.21	42,996.91	320,837.19		363,834.10
Garlic.....	9,298.81	30,946.22	632.52	40,877.55	310,045.79	1,938,797.93	37,686.23	2,286,529.95
Taro/'Godere'.....	4,444.54	52,376.77	-	56,821.31	328,194.31	14,269,243.45	-	14,597,437.76
Sweet potatoes.....	**16,472.65**	**39,939.10**	**92.40**		**2,881,505.89**	**9,137,852.52**	**-**	**12,019,358.41**

Table 5.1. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Afar

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**2,101**	**1,833.24**	**100.00**	**16,841.30**	**100.00**	
Cereals.....	**2,090**	**1,822.80**	**99.43**	**16,841.30**	**100.00**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	1,890	1,730.30	94.38	16,841.30	100.00	9.73
Sorghum.....	208	92.50	5.05	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**11**	**10.44**	**0.57**	**-**	**-**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	-	-	-	-	-	-
Red Haricot beans...	-	-	-	-	-	-
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	11	10.44	0.57	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**189**	**172.66**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	-	-	-	-	-	-
Ethiopian Cabbag....	-	-	-	-	-	-
Tomatoes.....	65	59.23	34.30	-	-	-
Green peppers.....	65	92.50	53.57	-	-	-
Red peppers.....	58	20.93	12.12	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**416**	**310.03**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	416	310.03	100.00	-	-	-
Potatoes.....	-	-	-	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	-	-	-	-	-	-

Table 5.2. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Amhara

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**1,121,636**	**268,497.05**	**100.00**	**1,716,690.01**	**100.00**	
Cereals.....	**1,025,740**	**174,096.38**	**64.84**	**1,086,033.19**	**63.26**	
Teff.....	141,424	32,257.78	12.01	347,648.55	20.25	10.78
Barley.....	470,905	106,462.40	39.65	435,741.40	25.38	4.09
Wheat.....	172,540	9,346.79	3.48	58,260.03	3.39	6.23
Maize.....	361,444	22,824.13	8.50	231,104.93	13.46	10.13
Sorghum.....	1,667	187.65	0.07	-	-	-
Finger millet.....	1,142	28.77	0.01	-	-	-
Oats/'Aja'.....	67,993	2,988.86	1.11	13,278.27	0.77	4.44
Rice.....	-	-	-	-	-	-
Pulses.....	**200,695**	**93,662.39**	**34.88**	**626,625.11**	**36.50**	
Horse beans.....	27,061	1,896.57	0.71	16,353.64	0.95	8.62
Field peas.....	23,824	2,415.66	0.90	3,856.77	0.22	1.60
White Haricot beans.	1,028	214.78	0.08	-	-	-
Red Haricot beans...	14,799	1,736.39	0.65	3,700.13	0.22	2.13
Red Chick-peas.....	38,767	5,743.18	2.14	12,433.02	0.72	2.16
White Chick-peas....	3,975	642.78	0.24	-	-	-
Lentils.....	52,102	6,366.27	2.37	18,410.43	1.07	2.89
Vetch.....	22,107	4,488.03	1.67	12,626.13	0.74	2.81
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	4,745	303.40	0.11	1,103.40	0.06	3.64
Mung bean/"Masho"...	54,114	69,534.37	25.90	558,141.57	32.51	8.03
Gibto.....	1,429	320.97	0.12	-	-	-
Oilseeds.....	**5,534**	**738.27**	**0.27**	**4,031.72**	**0.23**	
Neug.....	-	-	-	-	-	-
Linseed.....	4,249	430.53	0.16	271.17	0.02	0.63
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	1,285	307.75	0.11	3,760.55	0.22	12.22
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**162,171**	**8,183.38**	**100.00**	**215,589.74**	**100.00**	**26.34**
Lettuce.....	701	6.00	0.07	-	-	-
Head Cabbage.....	16,035	1,183.11	14.46	92,484.80	42.90	78.17
Ethiopian Cabbag....	22,999	1,268.10	15.50	47,132.75	21.86	37.17
Tomatoes.....	30,148	2,000.44	24.45	26,738.88	12.40	13.37
Green peppers.....	76,023	2,737.99	33.46	48,772.50	22.62	17.81
Red peppers.....	35,504	977.85	11.95	460.81	0.21	0.47
Swiss chard.....	1,581	9.90	0.12	-	-	-
Root Crops.....	**1,485,574**	**64,940.19**	**100.00**	**3,782,794.25**	**100.00**	**58.25**
Beetroot.....	5,638	265.80	0.41	-	-	-
Carrot.....	7,541	161.10	0.25	82.32	-	0.51
Onion.....	154,541	11,167.37	17.20	337,339.63	8.92	30.21
Potatoes.....	1,280,498	48,170.97	74.18	3,364,619.32	88.95	69.85
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	69,853	4,627.94	7.13	80,752.98	2.13	17.45
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	17,546	547.01	0.84	-	-	-

Table 5.3. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Oromia

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**1,451,086**	**675,470.55**	**100.00**	**5,238,937.96**	**100.00**	**7.76**
Cereals.....	**1,142,167**	**552,919.82**	**81.86**	**4,564,741.35**	**87.13**	
Teff.....	275,107	95,073.29	14.08	610,146.21	11.65	6.42
Barley.....	197,234	55,720.65	8.25	398,669.12	7.61	7.15
Wheat.....	155,834	101,896.61	15.09	730,583.85	13.95	7.17
Maize.....	730,334	262,551.84	38.87	2,492,993.58	47.59	9.50
Sorghum.....	84,228	29,733.93	4.40	276,811.58	5.28	9.31
Finger millet.....	528	86.68	0.01	-	-	-
Oats/'Aja'.....	25,072	7,856.82	1.16	55,537.01	1.06	7.07
Rice.....	-	-	-	-	-	-
Pulses.....	**676,247**	**120,086.90**	**17.78**	**658,159.63**	**12.56**	
Horse beans.....	8,659	713.09	0.11	3,920.30	0.07	5.50
Field peas.....	98,420	32,340.71	4.79	193,855.87	3.70	5.99
White Haricot beans.	124,775	15,405.62	2.28	92,420.66	1.76	6.00
Red Haricot beans...	393,784	52,227.99	7.73	288,210.54	5.50	5.52
Red Chick-peas.....	1,019	330.39	0.05	-	-	-
White Chick-peas....	469	20.90	*	-	-	-
Lentils.....	18,403	7,601.48	1.13	14,643.34	0.28	1.93
Vetch.....	974	182.09	0.03	-	-	-
Soya beans.....	364	18.62	*	-	-	-
Fenugreek.....	24,288	1,475.67	0.22	8,873.03	0.17	6.01
Mung bean/"Masho"...	40,789	9,770.35	1.45	56,235.88	1.07	5.76
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**9,332**	**2,463.83**	**0.36**	**16,036.98**	**0.31**	
Neug.....	-	-	-	-	-	-
Linseed.....	225	14.48	*	-	-	-
Groundnuts.....	6,346	1,918.46	0.28	15,807.73	0.30	8.24
Sunflower.....	-	-	-	-	-	-
Sesame.....	868	381.47	0.06	229.24	*	0.60
Rapeseed.....	1,893	149.42	0.02	-	-	-
Vegetables.....	**332,627**	**22,024.04**	**100.00**	**5,884,825.83**	**100.00**	**267.20**
Lettuce.....	604	3.86	0.02	161.09	-	41.73
Head Cabbage.....	9,470	326.48	1.48	31,989.38	0.54	97.98
Ethiopian Cabbag....	297,554	18,729.48	85.04	5,736,874.00	97.49	306.30
Tomatoes.....	14,835	2,093.59	9.51	84,940.19	1.44	40.57
Green peppers.....	29,415	631.33	2.87	30,861.18	0.52	48.88
Red peppers.....	3,468	204.81	0.93	-	-	-
Swiss chard.....	1,139	34.48	0.16	-	-	-
Root Crops.....	**498,181**	**67,081.51**	**100.00**	**5,890,276.65**	**100.00**	**87.81**
Beetroot.....	14,186	793.39	1.18	41,479.58	0.70	52.28
Carrot.....	10,763	711.53	1.06	19,830.56	0.34	27.87
Onion.....	17,117	2,315.61	3.45	91,786.41	1.56	39.64
Potatoes.....	423,257	59,121.04	88.13	5,548,566.13	94.20	93.85
Yam/'Boye'.....	199	4.59	-	-	-	-
Garlic.....	58,765	3,942.48	5.88	178,353.45	3.03	45.24
Taro/'Godere'.....	2,637	65.59	0.10	-	-	-
Sweet potatoes.....	2,158	127.28	0.19	10,260.51	0.17	80.61

Table 5.4. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Somali

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**2,047**	**221.63**	**100.00**	**915.37**	**100.00**	**4.13**
Cereals.....	**1,806**	**215.55**	**97.26**	**915.37**	**100.00**	
Teff.....	221	13.90	6.27	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	138	0.05	0.02	-	-	-
Maize.....	1,382	164.27	74.12	915.37	100.00	5.57
Sorghum.....	84	37.33	16.84	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**240**	**6.09**	**2.75**	**-**	**-**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	-	-	-	-	-	-
Red Haricot beans...	240	6.09	2.75	-	-	-
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**297**	**13.41**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	44	0.26	1.94	-	-	-
Ethiopian Cabbag....	-	-	-	-	-	-
Tomatoes.....	253	13.15	98.06	-	-	-
Green peppers.....	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**299**	**19.77**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	255	17.83	90.19	-	-	-
Potatoes.....	-	-	-	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	44	1.94	9.81	-	-	-

Table 5.5. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Benishangul Gumuz

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**143,986**	**7,259.60**	**100.00**	**71,300.70**	**100.00**	**9.82**
Cereals.....	**18,921**	**612.61**	**8.44**	**4,015.76**	**5.63**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	18,921	612.61	8.44	4,015.76	5.63	6.56
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**133,818**	**6,646.99**	**91.56**	**67,284.93**	**94.37**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	13,092	901.40	12.42	9,491.48	13.31	10.53
Red Haricot beans...	120,727	5,745.59	79.14	57,793.45	81.06	10.06
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**60,463**	**2,863.26**	**100.00**	**135,397.90**	**100.00**	**47.29**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	2,507	156.10	5.45	-	-	-
Ethiopian Cabbag....	47,816	2,086.24	72.86	110,170.85	81.37	52.81
Tomatoes.....	2,507	307.02	10.72	16,262.41	12.01	52.97
Green peppers.....	7,633	301.03	10.51	8,964.64	6.62	29.78
Red peppers.....	671	12.88	0.45	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**10,200**	**165.95**	**100.00**	**10,702.21**	**100.00**	**64.49**
Beetroot.....	671	0.34	0.20	-	-	-
Carrot.....	1,341	77.87	46.92	-	-	-
Onion.....	1,183	1.35	0.81	4.54	0.04	3.36
Potatoes.....	5,668	80.67	48.61	10,694.12	99.92	132.57
Yam/'Boye'.....	666	3.53	2.13	-	-	-
Garlic.....	-	-	-	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	671	2.21	1.33	3.55	0.03	1.61

Table 5.6. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of

Belg, 2022 (2014 E.C)

SNNP

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**3,354,389**	**708,529.28**	**100.00**	**5,941,721.65**	**100.00**	
Cereals.....	**2,757,029**	**505,422.04**	**71.33**	**4,874,252.40**	**82.03**	
Teff.....	42,849	25,003.97	3.53	122,377.86	2.06	4.89
Barley.....	179,203	15,159.91	2.14	124,599.82	2.10	8.22
Wheat.....	2,723	279.19	0.04	1,463.48	0.02	5.24
Maize.....	2,616,516	427,025.07	60.27	4,402,236.95	74.09	10.31
Sorghum.....	131,873	37,148.17	5.24	223,574.30	3.76	6.02
Finger millet.....	5,825	754.64	0.11	-	-	-
Oats/'Aja'.....	1,008	35.60	0.01	-	-	-
Rice.....	204	15.50	*	-	-	-
Pulses.....	**2,214,607**	**186,065.10**	**26.26**	**1,025,670.09**	**17.26**	
Horse beans.....	42,880	2,148.25	0.30	11,828.87	0.20	5.51
Field peas.....	53,834	4,798.45	0.68	12,701.01	0.21	2.65
White Haricot beans.	92,765	4,937.78	0.70	29,473.26	0.50	5.97
Red Haricot beans...	2,098,509	168,243.30	23.75	971,664.59	16.35	5.78
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	639	7.99	*	-	-	-
Lentils.....	876	30.57	*	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	2,758	487.05	0.07	-	-	-
Fenugreek.....	1,570	5.42	*	2.37	*	0.44
Mung bean/"Masho"...	21,649	5,406.29	0.76	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**79,474**	**17,042.13**	**2.41**	**41,799.15**	**0.70**	
Neug.....	-	-	-	-	-	-
Linseed.....	2,703	79.74	0.01	-	-	-
Groundnuts.....	36,653	7,380.37	1.04	21,873.41	0.37	2.96
Sunflower.....	10,749	1,276.93	0.18	15,822.21	0.27	12.39
Sesame.....	20,564	7,739.33	1.09	4,103.52	0.07	0.53
Rapeseed.....	12,002	565.76	0.08	-	-	-
Vegetables.....	**1,659,701**	**47,937.16**	**100.00**	**2,233,489.15**	**100.00**	**46.59**
Lettuce.....	770	1.69	-	-	-	-
Head Cabbage.....	23,651	352.69	0.74	8,677.94	0.39	24.61
Ethiopian Cabbag....	1,608,790	46,015.95	95.99	2,183,212.35	97.75	47.44
Tomatoes.....	15,799	327.01	0.68	4,027.57	0.18	12.32
Green peppers.....	70,515	898.31	1.87	37,571.29	1.68	41.82
Red peppers.....	10,945	316.15	0.66	-	-	-
Swiss chard.....	3,033	25.36	0.05	-	-	-
Root Crops.....	**1,579,659**	**150,794.78**	**100.00**	**23,046,631.36**	**100.00**	**152.83**
Beetroot.....	25,426	301.21	0.20	13,945.64	0.06	46.30
Carrot.....	9,572	81.31	0.05	-	-	-
Onion.....	56,713	2,764.69	1.83	215,474.22	0.93	77.94
Potatoes.....	1,139,037	125,585.56	83.28	19,535,622.53	84.77	155.56
Yam/'Boye'.....	44,060	1,345.65	0.89	41,255.92	0.18	30.66
Garlic.....	100,675	657.70	0.44	50,939.36	0.22	77.45
Taro/'Godere'.....	134,569	4,366.43	2.90	328,194.31	1.42	75.16
Sweet potatoes.....	317,409	15,692.23	10.41	2,861,199.38	12.41	182.33

Table 5.8. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private

Holders of Belg, 2022 (2014 E.C)

Sidama

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**229,070**	**37,067.95**	**100.00**	**362,115.27**	**100.00**	
Cereals.....	**188,272**	**25,997.34**	**70.13**	**290,292.05**	**80.17**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	188,272	25,997.34	70.13	290,292.05	80.17	11.17
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**158,084**	**11,070.61**	**29.87**	**71,823.22**	**19.83**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	6,710	731.28	1.97	3,858.75	1.07	5.28
Red Haricot beans...	152,746	10,339.33	27.89	67,964.47	18.77	6.57
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**-**	**-**	**-**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	-	-	-	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	-	-	-	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**137,169**	**8,131.23**	**100.00**	**275,136.80**	**100.00**	**33.84**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	1,828	161.30	1.98	9,109.45	3.31	56.48
Ethiopian Cabbag....	131,983	7,728.87	95.05	257,634.15	93.64	33.33
Tomatoes.....	-	-	-	-	-	-
Green peppers.....	3,358	241.06	2.96	8,393.21	3.05	34.82
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**56,148**	**3,236.56**	**100.00**	**313,024.56**	**100.00**	**96.72**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-
Potatoes.....	43,435	2,908.89	89.88	301,241.14	96.24	103.56
Yam/'Boye'.....	10,148	161.00	4.97	1,740.99	0.56	10.81
Garlic.....	1,556	53.37	1.65	-	-	-
Taro/'Godere'.....	488	12.39	0.38	-	-	-
Sweet potatoes.....	5,800	100.92	3.12	10,042.44	3.21	99.51

Table 5.8. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Gambela

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**12,978**	**4,250.10**	**100.00**	**45,877.47**	**100.00**	
Cereals.....	**12,681**	**3,907.27**	**91.93**	**44,594.33**	**97.20**	
Teff.....	28	7.97	0.19	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	12,672	3,899.30	91.75	44,594.33	97.20	11.44
Sorghum.....	-	-	-	-	-	-
Finger millet.....	-	-	-	-	-	-
Oats/'Aja'.....	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-
Pulses.....	**1,061**	**169.08**	**3.98**	**1,283.14**	**2.80**	
Horse beans.....	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-
White Haricot beans.	152	26.80	0.63	-	-	-
Red Haricot beans...	919	142.27	3.35	1,283.14	2.80	9.02
Red Chick-peas.....	-	-	-	-	-	-
White Chick-peas....	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-
Soya beans.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Mung bean/"Masho"...	-	-	-	-	-	-
Gibto.....	-	-	-	-	-	-
Oilseeds.....	**331**	**173.75**	**4.09**	**-**	**-**	
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Groundnuts.....	79	19.60	0.46	-	-	-
Sunflower.....	-	-	-	-	-	-
Sesame.....	280	154.15	3.63	-	-	-
Rapeseed.....	-	-	-	-	-	-
Vegetables.....	**957**	**34.86**	**100.00**	**1,214.72**	**100.00**	**34.85**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	-	-	-	-	-	-
Ethiopian Cabbag....	921	24.47	70.20	1,214.72	100.00	49.64
Tomatoes.....	56	6.88	19.74	-	-	-
Green peppers.....	31	2.38	6.83	-	-	-
Red peppers.....	8	1.13	3.24	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**137**	**2.22**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	9	0.49	22.07	-	-	-
Potatoes.....	26	0.18	8.11	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	28	0.36	16.22	-	-	-
Taro/'Godere'.....	11	0.13	5.86	-	-	-
Sweet potatoes.....	63	1.06	47.75	-	-	-

Table 5.9. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Hareri

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**1,246**	**117.01**	**100.00**	**929.80**	**100.00**	
Cereals.....	**1,246**	**117.01**	**100.00**	**929.80**	**100.00**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	1,246	117.01	100.00	929.80	100.00	7.95
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.....	**3,124**	**207.91**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	-	-	-	-	-	-
Ethiopian Cabbag....	-	-	-	-	-	-
Tomatoes.....	191	58.28	28.03	-	-	-
Green peppers.....	2,934	134.07	64.48	-	-	-
Red peppers.....	482	15.55	7.48	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**241**	**10.97**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	241	10.97	100.00	-	-	-
Potatoes.....	-	-	-	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	-	-	-	-	-	-

Table 5.10. Estimates of Holders, Area, Production and Yield of Temporary Crops for Private Holders of Belg, 2022 (2014 E.C)

Dire Dawa

Crop	Holders	Cropland area in		Production in		Yield (QTS/Ha)
	Number	Hectare	%	Quintals	%	
Grain Crops.....	**879**	**9.91**	**100.00**	**62.44**	**100.00**	
Cereals.....	**879**	**9.91**	**100.00**	**62.44**	**100.00**	
Teff.....	-	-	-	-	-	-
Barley.....	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-
Maize.....	879	9.91	100.00	62.44	100.00	6.30
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.....	**3,627**	**210.32**	**100.00**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-
Head Cabbage.....	-	-	-	-	-	-
Ethiopian Cabbag....	-	-	-	-	-	-
Tomatoes.....	3,627	210.32	100.00	-	-	-
Green peppers.....	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-
Root Crops.....	**19,307**	**1,193.90**	**100.00**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-
Onion.....	15,462	920.53	77.10	-	-	-
Potatoes.....	4,394	256.39	21.48	-	-	-
Yam/'Boye'.....	-	-	-	-	-	-
Garlic.....	275	16.97	1.42	-	-	-
Taro/'Godere'.....	-	-	-	-	-	-
Sweet potatoes.....	-	-	-	-	-	-

CHAPTER IV

4 FARM MANAGEMENT PRACTISES OF THE 2021/22 (2014 EC) 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 2021/22 (2014 EC) Belg season farm management practice of the country indicates that the total quantity of chemical fertlizers applied during the season has slightly decreased by 40.23% (from 2,345,435 quintals in 2013 E.C to 1,401,981 quintals in the 2014 E.C), at national level. Similarly, the total improved seed applied area has also decreased by about 35.847% (from 285,963 hectares in 2013 E.C to about 183,481 hectares in 2014 E.C). Interms of quantity as well, the total improved seeds applied has decreased by 66.93% which is a change from 196,666 quintals in 2013 E.C to **65,039** quintals in 2014 E.C).

Given this background, in Chapter four, the quantitative information about the use of modern agricultural inputs for Belg season crops of 2021/22 (2014 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 Ethiopian Statistical Service in May 2022.

4.2 SUMMARY OF THE FARM MANAGEMENT PRACTICES OF THE 2021/22 (2014 E.C.) BELG SEASON AGRICULTURAL SAMPLE SURVEY

According to the 2021/22 (2014 EC) Belg Season Crop Production Sample Survey, total cropland area estimated is about 2,080,790 hectares of land while the estimated number of holders engaged in crop production activity is about 9,133,846 at national level. For more illustration see summary Table 6 bellow.

Table 6.Total Cropland Area and Number of Holders Engaged in 2021/22 (2014 E.C.) Belg Season Crop Production

Background Characteristics	Statistical Figures
Total Belg Cropland Area in Hectare	2,080,790
Number of Belg Crop Producing Holders	9,133,846
Improved Farm Management practiced Area (in Hectare)	1,746,157
Quantity of Commercial Fertilizer Applied (Quintals)	1,401,981

As indicated Table 6, during 2021/22 (2014 EC), out of the total area under Belg season crops, 1,746,157 hectares (83.92 % 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 1,401,981 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 2021/22 (2014 EC), National Level

Farm Management Practice Category	Cropland Area Under Different Farm Management Practices (Hectare)	Percentage from Total Cropland Area
Fertilizer	**647,357.00**	**31.11**
Improved Seeds	**183,481.00**	**8.82**
Pesticides	**189,425.00**	**9.10**
Irrigation	**152,728.00**	**7.34**
Extension	**573,166.00**	**27.55**
Total Belg Cropland Area	**2,080,790.00**	**100.00**

As shown in Table 7 above, the total crop land area estimated is **647,357** hectare for fertilizer, **183,481** hectare for improved seed, **189,425** hectare for pesticide, **152,728** hectare for irrigation and **573,166** hectare for extension. Out of the total Belg cropland area, the percentage distribution is **31.11** % for fertilizer, **8.82** % for improved seed, **9.10** % for pesticides **7.34** % for irrigation and **27.55**% 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, 20221/22 (2014 E.C.) Belg season, National

Crop Category	Cropland Area			
	Total Area		Area under Improved Farm Management Practice	
	Hectare	%	Hectare	%
Cereals	1,265,121.00	60.80	1,053,609.00	50.64
Pulses	417,718.00	20.07	201,629.00	9.69
Oil crops	20,418.00	0.98	9,203.00	0.44
Vegetables	89,778.00	4.31	58,994.00	2.84
Root Crops	287,756.00	13.83	422,721.00	20.32
Total	2,080,791.00	100.00	1,746,156.00	83.92

As indicated in summary Table 8 above, estimates of total cropland area under different farm management practices shows that cereals accounted 1,265,121.00 hectares (60.80 % of the total all cropland areal), followed by pulses with 417,718.00 hectares (20.07 % from the total all cropland area). Root corps, vegetables and oil crops accounted for 287,756.00 hectare (13.83 %), 89,778.00 hectares (4.31 %) and 20,418.00 hectare (0.98 %), respectively. Out of the total cereal cultivated cropland area, 1,746,156.00 hectare (83.92 % of the total cropland area) is cultivated with improved farm management practices (includes all fertilizer, improved seed, pesticides and irrigation). The respective numbers are 1,053,609.00 hectare (50.64 %) for cereals, 201,629.00 hectares (9.69 %) for pulses, 422,721.00 hectare (20.32 %) for root crops, 9,203.00 hectare (0.44 %) for oil crops. The corresponding figure for vegetables can be refered as 58,994.00 hectare (2.84 %).

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 1,131,478 hectares, covering 54.38% 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 2021/22 (2014 E.C.) Belg season, National

Fertilizer Type	Fertilizer Applied Area		Percentage from Total Belg Cropland Area
	Hectare	Percentage of Fertilizer Applied Area	
Natural Fertilizer	**484,122.00**	**42.79**	**23.27**
Commercial Fertilizers	**647,357.00**	**57.21**	**31.11**
DAP	4,529.00	0.40	0.22
Urea	35,599.00	3.15	1.71
Urea + DAP	1,297.00	0.11	0.06
NPS	284,628.00	25.16	13.68
NPS + Urea	143,096.00	12.65	6.88
Mixed (Blended)	108,246.00	9.57	5.20
Mixed (Blended)+Urea	69,962.00	6.18	3.36
Total Fertilizer Area	**1,131,478.00**	**100.00**	**54.38**
Total Cropland Area	**2,080,790.00**		**100.00**

As indicated in Summary Table 9, nearly 484,122.00 hectares (42.79 % of the total fertilizer applied cropland area) is applied with natural fertilizer. This accounts 23.27 % of the total Belg cropland area. The coverage of chemical fertilizers is estimated to be **647,357.00** hectares (**57.21** % from the total fertilizer applied area and 31.11 % 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 0.40 %, 3.15 %, 0.11 %, 25.16 %, 12.65 %, 9.57 %, and 6.18 % 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: 0.22, 1.71, 0.06, 13.68, 6.88, 5.20, and 3.36 respectively.

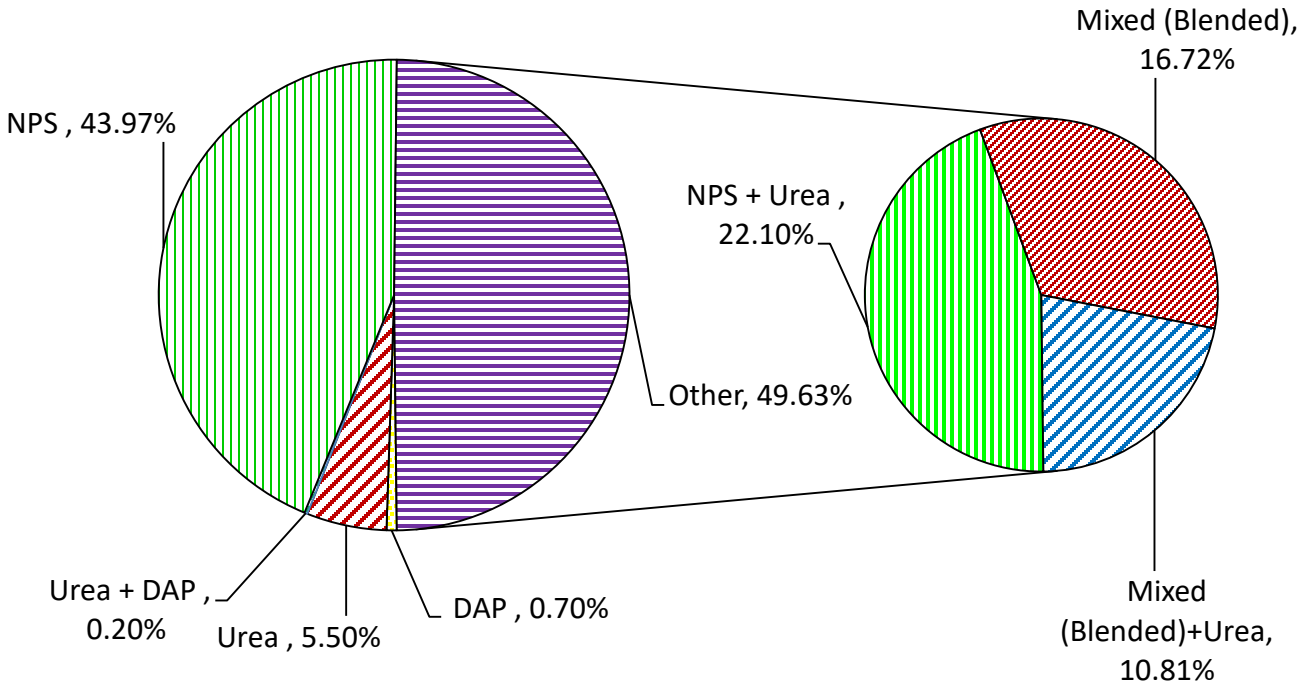
4.4 THE USE OF NATURAL FERTLIZER

In general, the application of natural fertilizers for Belg season crops in 2021/221 (2014 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 205,596 hectares (42.47%). The fertilized area (natural fertilizer) under red haricot beans stood second with 83316 hectare (17.21%) while Potatoes stands third accounting for 45462 hectare (9.39%) 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 647, 357 hectare (57.21% of total fertilizer applied cropland area), in 2021/22 (2014 E.C.) Belg season. Out of this, NPS is the most used fertilizer which accounted for about 284,628 hectare (25.16% of the commercial fertilizer applied area). The second most applied commercial fertilizer is the mixture of NPS and Urea (NPS + UREA) covering 143,096 hectare (accounting for 12.65%) while the use of Mixed (Blended) stands in the third position applied on 108,246 hectare (9.57) 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 2021/22 (2014 E.C)



The commercial fertilizers applied area vary between crops. The highest area is reported for potatoes accounting for 176,173.00 hectares (27.21 %) followed by maize which is 148,560.00 hectares (22.95 % 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 2021/22 (2014 E.C.) Belg season, National

Crop type	Chemical fertilizer Applied Area		Rank
	Hectare	Percentage	
Potatoes	176,173.00	27.21	1st
Maize	148,560.00	22.95	2nd
Barley	86,816.00	13.41	3rd

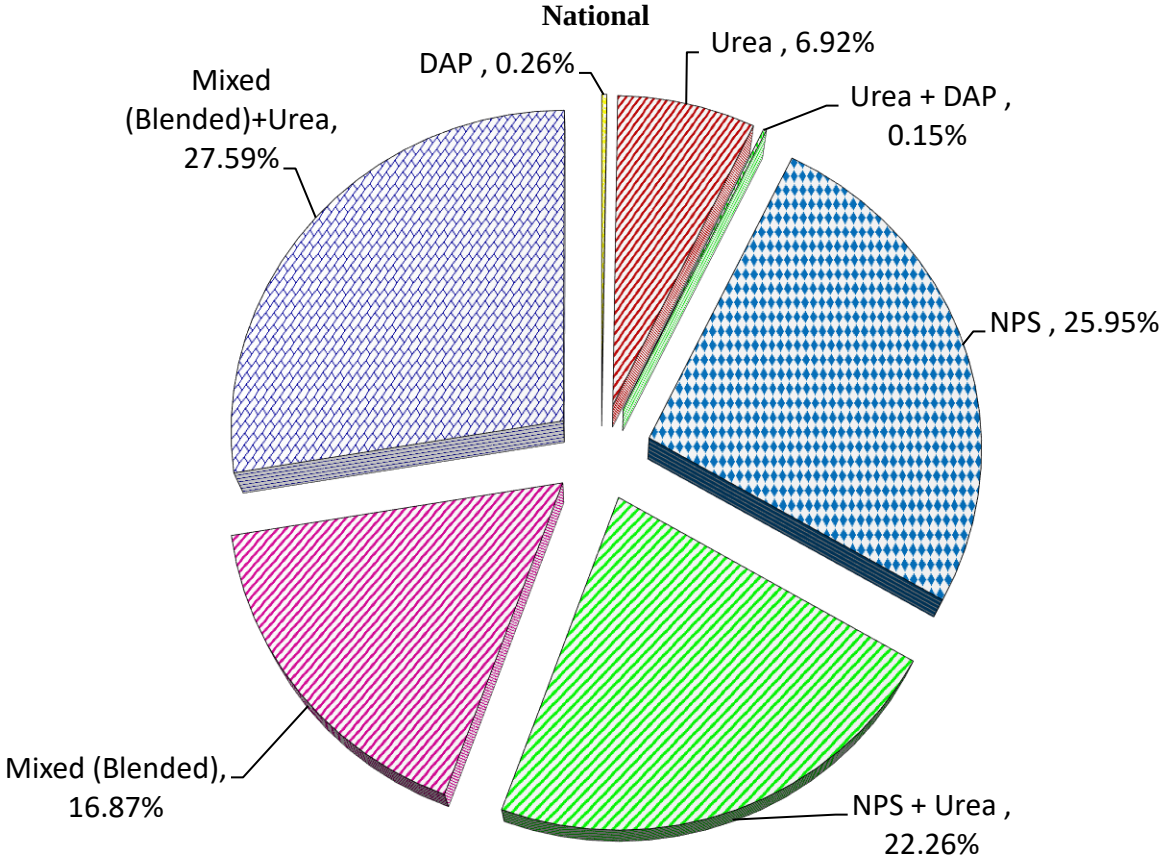
Region-wise, the distribution of both natural and commercial fertilizers applied varies from region to region. For instance, of the total area under both (Natural + Commercial) fertilizers, the highest was reported for S.N.N.P region accounting for nearly 534,481 hectare (47.24 % of total fertilized area). Oromia region accounted for 363,260 hectares (32.10 %) of the total country level of both natural and commercial fertilizers applied cropland area) while Amhara region accounted nearly 183,056.00 hectare (16.18 %).

Table 11. Summary of Chemical Fertilizer Applied Cropland Area Rank By Region for Private Holdings of 2021/22 (2014 E.C.) Belg season, National

Region	Crop type	All Fertilizer			
		Area			Quintal
		Estimate (Ha)	%	Rank	Estimate
National	All	**1,131,478.00**	**100.00**		**1,401,981.00**
SNNP	All	534,481.00	47.24	1ST	309,341.00
Oromia	All	363,260.00	32.10	2nd	395,071.00
Amhara	All	183,056.00	16.18	3rd	660,093.00
Sidama	All	43,317.00	3.83	4th	32,149.00
Benishangul Gumuz	All	3,861.00	0.34	5th	1,536.00
Dire Dawa	All	1,133.00	0.10	6th	1,850.00
Hareri	All	1,072.00	0.09	7th	30.00
Afar	All	938.00	0.08	8th	1,748.00
Somali	All	267.00	0.02	9th	125.00
Gambela	All	93.00	0.01	10th	37.00

In terms of quantity, the total commercial fertilizer applied is 1,401,981quintals. Out of this,the mixture of Mixed and Urea is the most applied commercial fertilizer accounting for 386, 821 quintals (27.59%). 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 2021/22 (2014 E.C) Belg Season, National

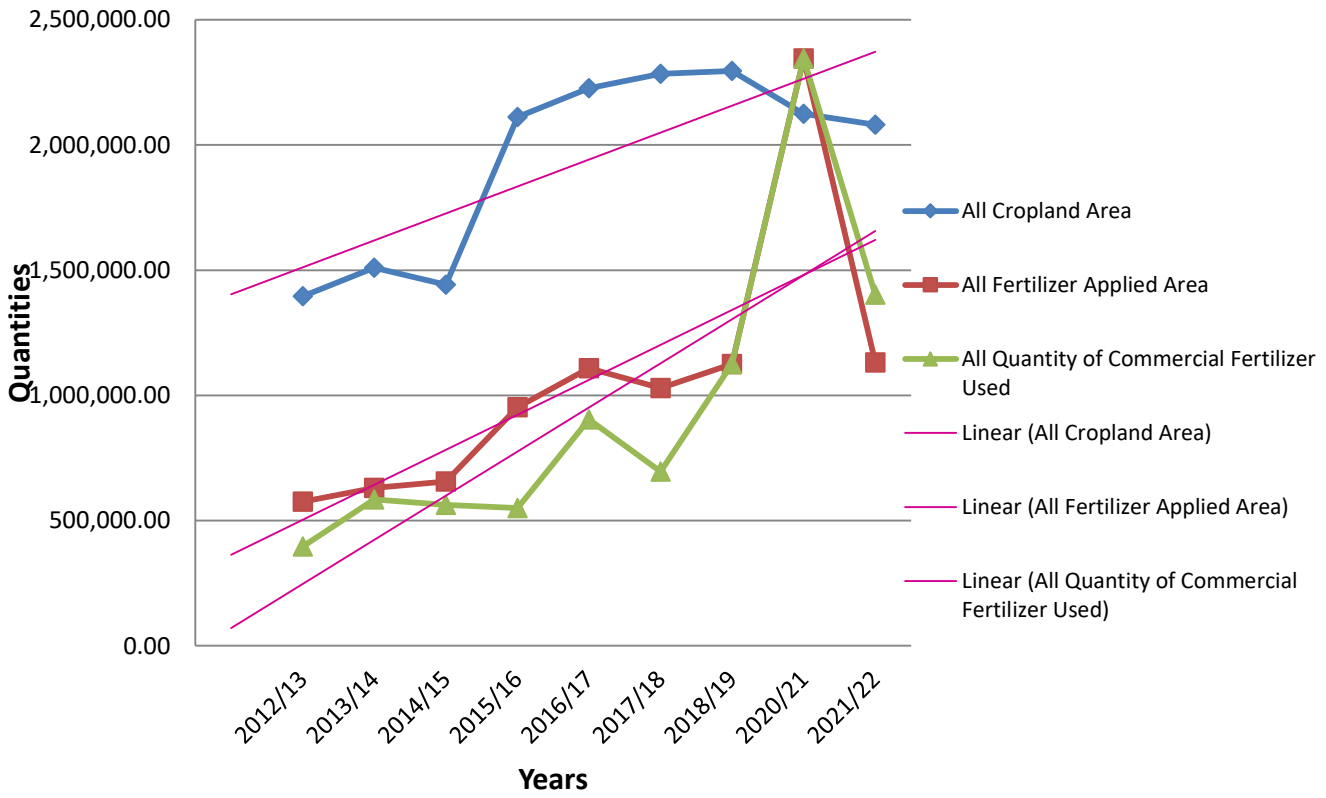


As indicated in Figure 6, the mixture of Mixed and Urea is (Mixed + Urea) is the first most applied chemical fertilizer (386,821 qt, 27.59%), applicaton of NPS is the second most applied fertilizer type which is about 363,837 quintals (25.95%) while Urea+DAP is the leas type of chemical fertilizer applied accounting about 2,145 quintals (0.15%).

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

Figure 7 shows the trends of (the summary results of the previous nine 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 2021/22. The examination of the consequetive belg season agricultural sample survey results display an increasing trend of all crop land area (about by 6.13%), fertilizer applied area (nearly by 26.58%) and amount of chemical fertilizer (by 26.58%) 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

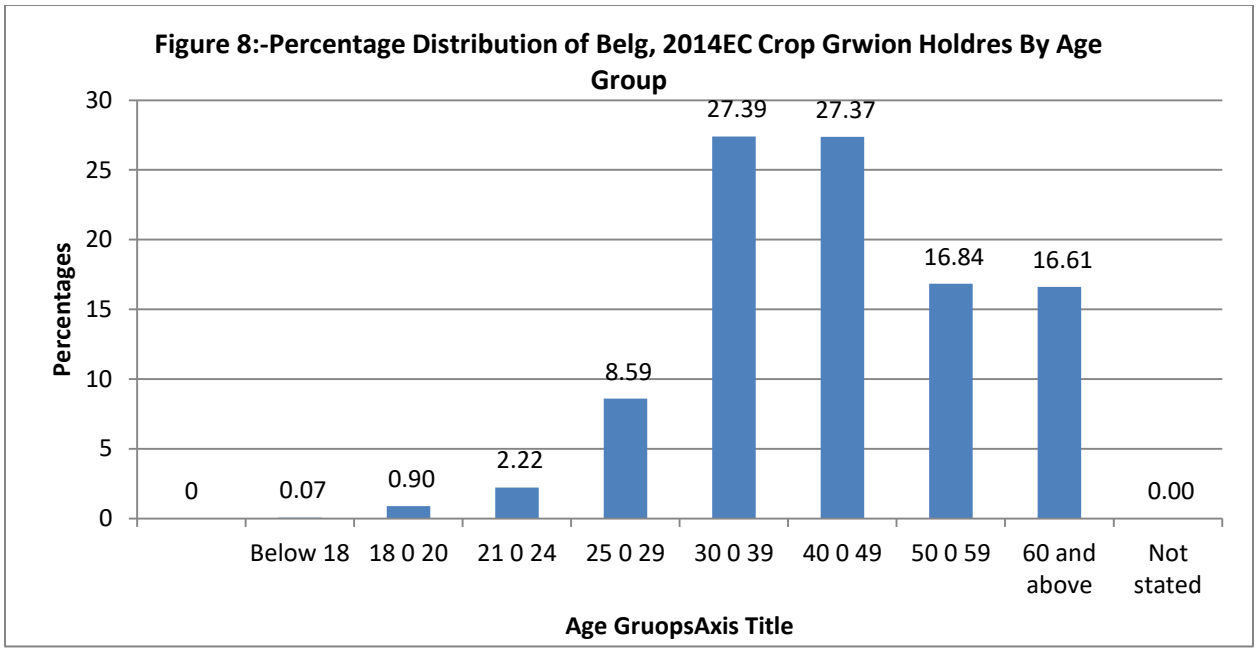


4.7. THE USE OF IMPROVED SEEDS

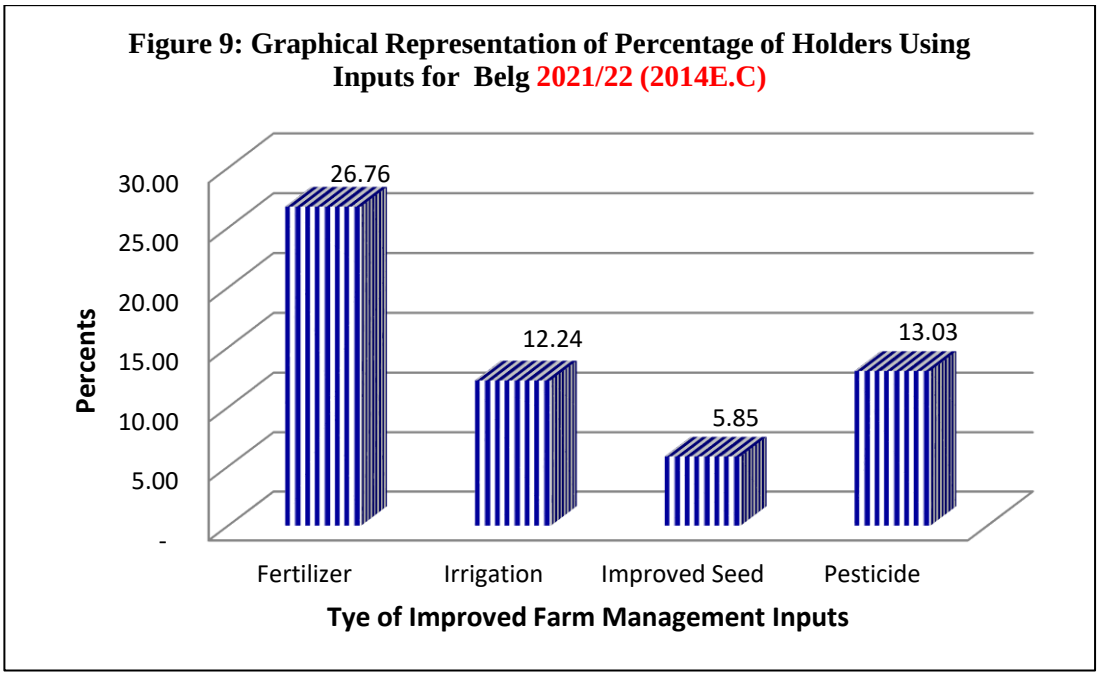
Better application of improved variety seeds helps to harvest higher yield compared to the use of traditional variety seeds. The survey findings indicate that the total crop area applied with improved seed is nearly 183,481 hectare while total quantity used is 65,039 quintals, at country level. The area applied with improved seed is about 8.82% of the total Belg 2014E.C cropland area. The total quantity of improved seeds used is nearly 4.55% 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 9,133,206 holders were engaged in the overall Belg season agricultural activities in 2021/22 (2014 E.C.). Accordingly, the category with the largest number of holders is in the age group 30-39, with 2,501,498 holders (which is 27.39% of the total holders). The age group of 40 to 49 stands second with 2,499,360 holders (27.37% 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.

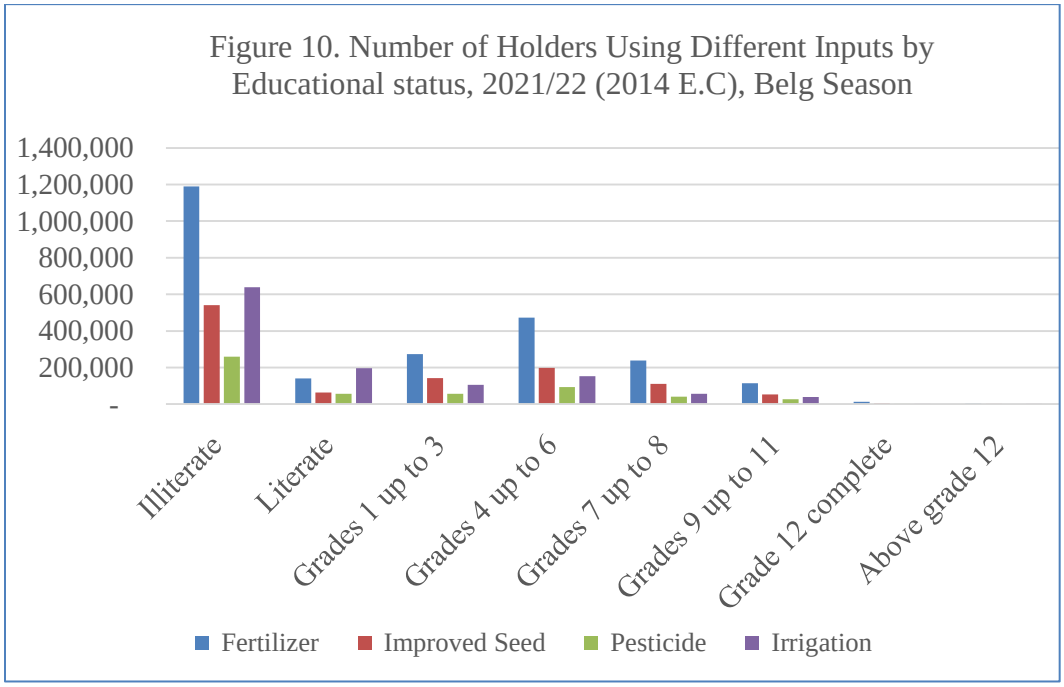


Moreover, 2,444,016 holders (26.76 % of total holders) used fertilizer and 1,117,638 holders (12.24 %) used improved seeds. Likewise, 533,985 holders (5.85%) applied pesticides and 1,189,645 holders (13.30 %) used irrigation at national level for 2021/22 (2014 E.C.). Belg season, in order to obtain higher 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 2021/22 (2014 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 2021/22 (2014 EC) Belg season crop production sample survey, out of the total number of holders (9,133,206), the largest category of the holders number is under the illiterate category in which the number of all crop holders is 4,769,990 (which accounts for 52.23 % of total holders) (See Figure 10).

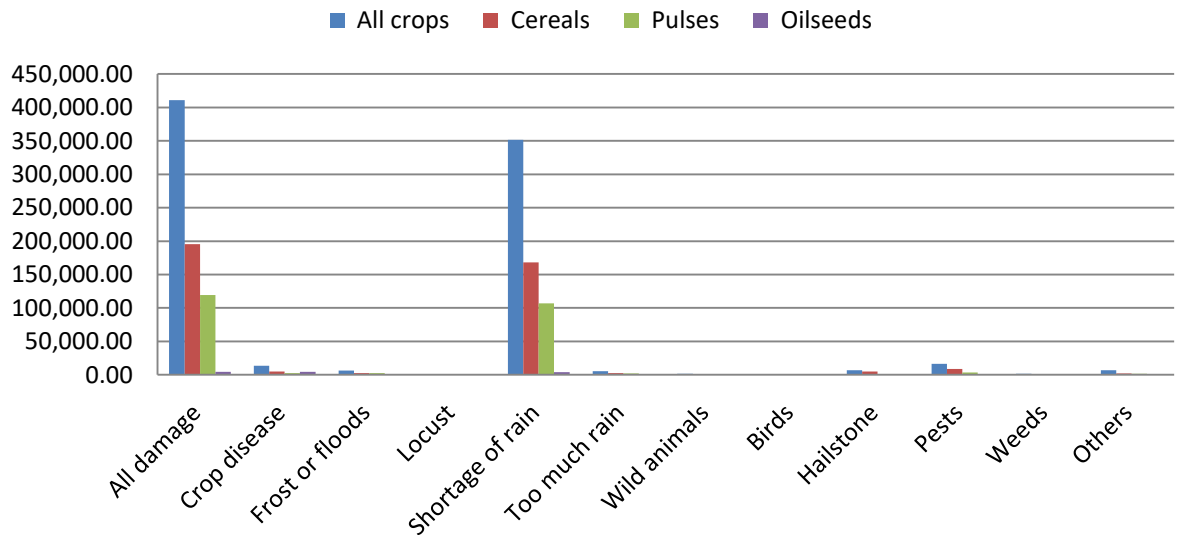
Under this category, 1,189,111 holder are reported for using fertilizer, 540,356 holders using improved seeds, 258,743 using pesticides and 638,552 using irrigation.

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 1,568,675. The respective number of holders is 472,487 for fertilizer, 197,931 for improved seeds, 191,115 for pesticides and 153,264 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 2021/22 (2014 EC), Belg season are estimated to be about 4,289,067 and the damaged cropland area was estimated to be 410,834 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.

Figure 11. Damaged Cropland Area by Causes of Damage and Crop Category 2021/22 (2014 E.C), Belg Season



As indicated in Figure 11, the highest cropland area damaged was reported for cereals which is 195,349 hectares, followed by pulses with about 119,352 hectares and oil crops with 4,382 hectares. With regard to the causes of crop damage, it is reported that 351,407 hectares (85.54%) was damaged due to shortage of rain. The second highest cause of crop damage pest with estimated crop damaged area of 16,488 hectares (4.01%), while Crop disease stands third position in damaging 13,668 hectare (3.33%) cropland area (For further details, see Figure 11and Table 23).

National and Regional Statistical Tables of Farm Management Practices

Table 10: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
National

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**2080790**	**1131478**	**1401981**	**3926299**	**484122**	**19240**	**4529**	**3607**
Cereals	**1265121**	**636612**	**577277**	**2128999**	**279998**	**5826**	**2698**	**617**
Teff	152357	67474	76026	75566	18290	-	-	-
Barley	177343	107529	102897	284134	41082	-	-	-
Wheat	111523	89635	174227	33516	2819	-	-	-
Maize	744932	354156	203725	1786387	205596	5826	2698	617
Sorghum	67200	12387	386	55393	11824	-	-	-
Finger millet	870	172	171	1166	143	-	-	-
Oats/ 'Aja'	10881	5260	19845	5432	244	-	-	-
Rice	16	-	-	-	-	-	-	-
Pulse	**417718**	**169607**	**87392**	**1499278**	**100864**	**12007**	**1233**	**850**
Horse/Faba beans	4758	1815	291	29842	1576	-	-	-
Field peas	39555	5105	1714	36636	3206	-	-	-
White Haricot beans	22218	9588	3343	106098	6657	-	-	-
Red Haricot beans	238441	144127	77910	1340476	83316	12007	1233	850
Red Chick peas	6074	1655	1034	6896	725	-	-	-
White Chick peas	672	-	-	-	-	-	-	-
Lentiles	13998	1823	576	11148	1602	-	-	-
Vetch/Grass peas	4670	63	-	1694	63	-	-	-
Soya beans	506	-	-	-	-	-	-	-
Fenugreek	1784	104	42	2532	97	-	-	-
Mung bean/"Masho"	84721	5327	2482	13982	3622	-	-	-
Gibto	321	-	-	-	-	-	-	-
Oile seeds	**20418**	**4239**	**2102**	**21723**	**2097**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	525	257	79	1506	59	-	-	-
Ground nuts	9318	2542	1440	7298	1413	-	-	-
Safflower	1585	888	524	4156	198	-	-	-
Sesame	8275	-	-	-	-	-	-	-
Rapeseed	715	552	60	8763	426	-	-	-
Vegetables.....	**89778**	**62122**	**71228**	**1523803**	**40890**	**6432**	**31**	**511**
Lettuce.....	12	12	61	1668	5	-	-	-
Head Cabbage....	2180	1675	9313	16256	305	-	-	-
Ethiopian Cabbage	75853	51283	21301	1427486	38478	5913	20	439
Tomatoes.....	5076	4406	27180	21827	636	-	-	-
Green peppers...	5039	4157	11249	97940	1268	519	11	72
Red peppers.....	1549	547	2021	14207	171	-	-	-
Swiss chard.....	70	43	103	4336	28	-	-	-
Root Crops.....	**287756**	**258896**	**663982**	**1257465**	**60272**	**3578**	**566**	**1629**
Beetroot.....	1361	1005	4662	24072	337	-	-	-
Carrot.....	1032	523	551	11972	231	-	-	-
Onion.....	17509	15196	93540	47464	1139	532	*	10
Potatoes.....	236124	221635	538706	871012	45462	3046	566	1619
Yam.....	1515	1030	784	36623	696	-	-	-
Garlic.....	9299	7331	23967	108200	786	-	-	-
Taro/'Godere'...	4445	2578	735	75080	2249	-	-	-
Sweet potatoes..	16473	9599	1038	233376	9371	-	-	-

Table 10 (Cont'd)
National

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**295145**	**35599**	**97076**	**2804**	**1297**	**2145**	**8694117**	**1897310**	**1363627**
Cereals	**171082**	**25200**	**56926**	**2763**	**909**	**1163**	**4554324**	**1119736**	**1064703**
Teff	30628	11411	18081	-	-	-	427066	141611	79984
Barley	7232	1288	1163	-	-	-	825761	174645	396677
Wheat	8258	1753	2300	-	-	-	281720	95554	266590
Maize	89848	8596	23176	2763	909	1163	3373317	629282	244960
Sorghum	137	15	24	-	-	-	217573	66996	15649
Finger millet	-	-	-	-	-	-	6851	767	212
Oats/ 'Aja'	45326	2136	12182	-	-	-	92751	10865	60627
Rice	-	-	-	-	-	-	204	16	4
Pulse	**28672**	**2487**	**1981**	**1404**	**233**	**715**	**3289538**	**407010**	**291768**
Horse/Faba beans	422	51	13	-	-	-	78485	4747	4582
Field peas	1586	79	53	-	-	-	174818	39042	43986
White Haricot beans	1058	200	175	-	-	-	230719	21759	23528
Red Haricot beans	25919	1788	1608	1404	233	715	2692191	230078	172248
Chick peas	1325	369	133	-	-	-	38661	5754	5006
White Chick peas	-	-	-	-	-	-	5084	672	-
Lentiles	-	-	-	-	-	-	71017	13407	11041
Vetch/Grass peas	-	-	-	-	-	-	23044	4669	4457
Soya beans	-	-	-	-	-	-	2493	501	43
Fenugreek	-	-	-	-	-	-	30406	1782	3315
Mung bean/"Masho"	-	-	-	-	-	-	115409	84279	23275
Gibto	-	-	-	-	-	-	1429	321	286
Oile seeds	**643**	**181**	**32**	**-**	**-**	**-**	**94203**	**20363**	**7156**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	7176	525	214
Ground nuts	-	-	-	-	-	-	43077	9318	4714
Safflower	643	181	32	-	-	-	12034	1585	123
Sesame	-	-	-	-	-	-	21459	8234	2074
Rapeseed	-	-	-	-	-	-	13680	702	30
Vegetables.....	**29065**	**1191**	**1877**	**168**	**25**	**38**	**2314833**	**87279**	**-**
Lettuce.....	224	6	56	-	-	-	1851	6	-
Head Cabbage....	3882	73	145	-	-	-	39295	1616	-
Ethiopian Cabbage	10223	613	458	128	24	32	2094840	75140	-
Tomatoes.....	4846	167	682	40	1	6	59106	4448	-
Green peppers...	8569	272	320	-	-	-	176344	4522	-
Red peppers.....	3524	53	160	-	-	-	50241	1491	-
Swiss chard.....	224	8	56	-	-	-	5267	55	-
Root Crops.....	**111001**	**6541**	**36260**	**638**	**130**	**230**	**3409773**	**262922**	**-**
Beetroot.....	1349	67	151	-	-	-	36742	1193	-
Carrot.....	226	1	11	-	-	-	22099	763	-
Onion.....	44099	2408	25105	-	-	-	193887	11682	-
Potatoes.....	59792	3649	9914	-	-	-	2703945	218178	-
Yam.....	699	54	19	638	65	115	55073	1515	-
Garlic.....	6955	326	988	-	-	-	225609	8720	-
Taro/'Godere'...	573	9	34	638	65	115	137705	4445	-
Sweet potatoes..	750	27	38	-	-	-	341876	16426	-

Table 10 (Cont'd)
National

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**1117638**	**183481**	**65039**	**533985**	**189425**	**1189645**	**152728**	**3017150**	**573166**
Cereals	**800112**	**145385**	**62150**	**299576**	**133440**	**614881**	**95685**	**1417805**	**322485**
Teff	35646	10746	4685	87912	31025	97701	28356	99317	26281
Barley	22859	2698	790	49920	15971	66276	9705	250563	60301
Wheat	50511	15969	19157	91420	60389	111467	10113	155056	41122
Maize	701958	115650	37334	103641	21785	359373	43552	997394	186948
Sorghum	487	203	-	1061	548	8504	1532	15004	4194
Finger millet	643	103	-	-	-	1142	29	2473	152
Oats/ 'Aja'	1322	16	185	40961	3722	58718	2399	38155	3487
Rice	-	-	-	-	-	-	-	-	-
Pulse	**109458**	**10708**	**2877**	**64766**	**22210**	**53659**	**10443**	**683692**	**89525**
Horse/Faba beans	115	11	-	1466	42	6268	364	8606	569
Field peas	1260	512	44	9630	5677	4342	1097	26101	8475
White Haricot beans	7802	458	306	1483	252	1341	242	28051	2863
Red Haricot beans	98463	8363	2105	8518	1298	22109	2592	581809	59110
Red Chickpeas	1125	320	281	11156	2264	9258	1403	11796	2151
White Chick peas	-	-	-	4081	662	106	19	2650	422
Lentiles	364	591	-	1151	711	7494	1305	2329	349
Vetch/Grass peas	38	1	-	19091	4242	2826	540	20631	4371
Soya beans	629	5	4	-	-	-	-	-	-
Fenugreek	197	3	-	332	17	1210	86	528	29
Mung bean/"Masho"	1319	442	137	11423	7046	5093	2795	9434	11187
Gibto	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	**468**	**55**	**12**	**643**	**181**	**1285**	**308**	**29034**	**6516**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	1212	198
Ground nuts	-	-	-	-	-	-	-	20469	5105
Safflower	-	-	-	643	181	1285	308	5720	928
Sesame	253	41	10	-	-	-	-	472	126
Rapeseed	215	14	1	-	-	-	-	1632	159
Vegetables.....	**51715**	**2500**	**-**	**48004**	**5942**	**177451**	**10744**	**307132**	**18576**
Lettuce.....	224	6	-	-	-	701	6	327	7
Head Cabbage....	14241	564	-	9441	1104	20373	1525	25080	1428
Ethiopian Cabbage	15327	713	-	8888	178	22499	780	194656	10279
Tomatoes.....	8377	628	-	18659	3537	38393	4186	22271	3392
Green peppers...	13631	516	-	7325	917	86072	3427	66894	3030
Red peppers.....	895	58	-	8919	206	29195	800	17395	410
Swiss chard.....	**487**	**14**	**-**	**-**	**-**	**2244**	**20**	**1679**	**30**
Root Crops.....	**277264**	**24834**	**-**	**210386**	**27652**	**627700**	**35548**	**1516946**	**136064**
Beetroot.....	9178	168	-	2186	205	9644	832	9777	419
Carrot.....	7119	269	-	193	18	8923	309	8602	548
Onion.....	52098	5827	-	94387	8886	179283	14228	92800	9553
Potatoes.....	208022	17945	-	87646	15021	400054	14701	1355858	118579
Yam.....	-	-	-	-	-	-	-	7360	450
Garlic.....	5631	578	-	34798	3523	74040	4957	56628	4378
Taro/'Godere'...	-	-	-	-	-	303	4	10771	602
Sweet potatoes..	1815	46	-	-	-	7123	517	38894	1535

Table 10 (Cont'd)
National

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**1449770**	**284628**	**363837**	**747421**	**143096**	**312050**
Cereals	**643305**	**159102**	**148584**	**328939**	**60142**	**118605**
Teff	36858	11520	8312	26000	7955	11284
Barley	116821	30823	39164	46213	5150	10220
Wheat	64401	33567	40207	26557	7037	18652
Maize	458260	81609	59571	245372	39527	75793
Sorghum	543	49	2	759	28	40
Finger millet	-	-	-	1142	29	171
Oats/ 'Aja'	4403	1534	1328	4012	417	2444
Rice	-	-	-	-	-	-
Pulse	**543004**	**46166**	**50807**	**136369**	**14849**	**28333**
Horse/Faba beans	2484	74	111	1333	70	87
Field peas	2544	1355	1099	497	6	10
White Haricotbeans	19472	2021	2163	4911	528	648
Red Haricot beans	516741	41271	45151	129082	14168	27293
Red Chick peas	1649	486	616	1142	75	285
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	197	3	10
Mung bean/"Masho"	2008	959	1667	-	-	-
Gibto	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	**7330**	**1286**	**1609**	**2110**	**478**	**382**
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	4480	1045	1396	524	83	44
Safflower	737	114	153	1585	395	338
Sesame	-	-	-	-	-	-
Rapeseed	**2114**	**126**	**60**	**-**	**-**	**-**
Vegetables	**113920**	**8138**	**11441**	**57827**	**6063**	**30769**
Lettuce	-	-	-	183	1	5
Head Cabbage	2955	53	63	6399	266	1454
Ethiopian Cabbage	104117	7498	10388	36878	3049	6275
Tomatoes	3734	392	377	6011	2134	20330
Green peppers	2514	96	190	9557	580	2590
Red papers	1793	99	423	718	32	111
Swiss chard	**-**	**-**	**-**	**183**	**1**	**4**
Root crops	**601255**	**69936**	**151396**	**429966**	**61562**	**133962**
Beet root	2345	64	208	3412	418	3675
Carrot	3367	126	135	900	43	94
Onion	10418	1201	4935	21921	2862	13648
Potatoes	574094	66126	142219	396646	57351	113591
Yam	549	9	22	3424	206	628
Garlic	13134	2264	3637	6820	405	1795
Taro 'Godere'	1428	43	89	1918	199	432
Sweet potatoes	**4495**	**104**	**150**	**2397**	**77**	**99**

Table 10 (Cont'd)
National

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**732838**	**108246**	**236445**	**524165**	**69962**	**386821**
Cereals	**178095**	**74246**	**98948**	**171221**	**34317**	**152434**
Teff	13115	5801	4374	*	*	*
Barley	79969	23735	34986	30198	5450	17363
Wheat	56911	*	*	47001	9281	62558
Maize	45220	8318	7975	78729	6903	35430
Sorghum	*	*	*	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	*	*	784	*	*	*
Rice	-	-	-	-	-	-
Pulse	**21841**	**2924**	**3923**	**11483**	**851**	**783**
Horse/Faba beans	*	*	*	*	*	*
Field peas	1528	460	552	-	-	-
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	15627	1556	1676	9837	563	616
Red Chick - Peas	-	-	-	-	-	-
White Chick - Peas	-	-	-	-	-	-
Lentiles	1153	221	576	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	*	*	*	-	-	-
Mung bean/"Masho"	*	*	*	*	*	*
Gibto	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	*****	*****	*****	**-**	**-**	**-**
Nueg	-	-	-	-	-	-
Linseed	*	*	*	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables	**20443**	**1456**	**4433**	**36787**	*****	*****
Lettuce	-	-	-	-	-	-
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	8752	*	*	4377	*	*
Tomatoes	-	-	-	*	*	*
Green peppers	8005	*	*	20221	1333	*
Red papers	3285	59	443	5021	133	884
Swiss chard	*****	*****	*****	**43**	**6**	**43**
Root crops	**575252**	**29422**	**129062**	**387032**	**30466**	**211445**
Beet root	*	6	*	2313	114	*
Carrot	510	120	304	267	1	6
Onion	23002	1280	6240	56337	6305	43603
Potatoes	542337	26764	116667	321724	21717	154696
Yam	-	-	-	-	-	-
Garlic	16841	1241	5149	23187	2309	12399
Taro 'Godere'	*	*	*	-	-	-
Sweet potatoes	*****	**-**	*****	**1005**	**20**	**141**

Table 10.1: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
Afar

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**2316**	**938**	**1748**	**13**	**16**	**-**	**-**	**-**
Cereals	**1823**	**456**	**321**	**13**	**16**	**-**	**-**	**-**
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	1730	454	310	13	16	-	-	-
Sorghum	93	1	11	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**10**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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"	10	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	**173**	**173**	**158**	**-**	**-**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes.....	59	59	57	-	-	-	-	-
Green peppers...	93	93	79	-	-	-	-	-
Red peppers.....	21	21	22	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**310**	**310**	**1269**	**-**	**-**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	310	310	1269	-	-	-	-	-
Potatoes.....	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	-	-

Table 10.1 (Cont'd)
Afar

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**491**	**440**	**321**	**-**	**-**	**-**	**2419**	**1993**	**722**
Cereals	**491**	**440**	**321**	**-**	**-**	**-**	**1941**	**1662**	**719**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	480	438	310	-	-	-	1742	1569	621
Sorghum	11	1	11	-	-	-	208	93	98
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**-**	**-**	**-**	**-**	**-**	**-**	**11**	**10**	**3**
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"	-	-	-	-	-	-	11	10	3
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	**-**	**-**	**-**	**-**	**-**	**-**	**69**	**30**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	-	-	-	-	-	-	11	9	-
Green peppers...	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	58	21	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**-**	**-**	**-**	**-**	**-**	**-**	**397**	**291**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	397	291	-
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	**288**	**323**	**21**	**631**	**552**	**1747**	**1490**	**873**	**868**
Cereals	**149**	**161**	**21**	**95**	**114**	**1185**	**1071**	**873**	**868**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	149	161	21	84	113	1185	1064	851	866
Sorghum	-	-	-	11	1	9	6	22	2
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.....	**120**	**143**	**-**	**178**	**162**	**178**	**162**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	55	50	-	55	49	55	49	-	-
Green peppers...	65	93	-	65	93	65	93	-	-
Red peppers.....	-	-	-	58	21	58	21	-	-
Swiss chard.....	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Root Crops.....	**19**	**19**	**-**	**358**	**276**	**383**	**257**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	19	19	-	358	276	383	257	-	-
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	**380**	**207**	**672**	**225**	**276**	**755**
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	**58**	**21**	**22**	**131**	**152**	**136**
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-
Tomatoes	-	-	-	65	59	57
Green peppers	-	-	-	65	93	79
Red papers	58	21	22	-	-	-
Swiss chard	**-**	**-**	**-**	**-**	**-**	**-**
Root crops	**321**	**186**	**650**	**95**	**124**	**619**
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	321	186	650	95	124	619
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: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
Amhara

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**341621**	**183056**	**660093**	**600063**	**52266**	-	-	-
Cereals	**174096**	**109349**	**253102**	**257981**	**37825**	-	-	-
Teff	32258	29515	59360	30980	4448	-	-	-
Barley	106462	55696	49823	154283	29661	-	-	-
Wheat	9347	7683	63369	27986	1073	-	-	-
Maize	22824	13943	62698	73120	2608	-	-	-
Sorghum	188	-	-	-	-	-	-	-
Finger millet	29	29	171	-	-	-	-	-
Oats/ 'Aja'	2989	2483	17681	4049	37	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**93662**	**6543**	**2528**	**31511**	**4620**	-	-	-
Horse/Faba beans	1897	219	76	3320	175	-	-	-
Field peas	2416	472	288	4371	334	-	-	-
White Haricot beans	215	182	161	-	-	-	-	-
Red Haricot beans	1736	566	342	2750	182	-	-	-
Red Chick peas	5743	1449	1011	6896	725	-	-	-
White Chick peas	643	-	-	-	-	-	-	-
Lentiles	6366	1651	576	10288	1430	-	-	-
Vetch/Grass peas	4488	63	-	1694	63	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	303	81	10	1211	78	-	-	-
Mung bean/"Masho"	69534	1861	64	3610	1633	-	-	-
Gibto	321	-	-	-	-	-	-	-
Oile seeds	**738**	**379**	**111**	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	431	198	79	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Safflower	308	181	32	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	**8183**	**6766**	**28245**	**48014**	**592**	-	-	-
Lettuce.....	6	6	56	478	*	-	-	-
Head Cabbage....	1183	1015	7600	901	14	-	-	-
Ethiopian Cabbage	1268	1137	2859	9693	177	-	-	-
Tomatoes.....	2000	1719	7963	2688	36	-	-	-
Green peppers...	2738	2516	8156	26785	265	-	-	-
Red peppers.....	978	363	1555	6563	98	-	-	-
Swiss chard.....	10	10	56	1358	2	-	-	-
Root Crops.....	**64940**	**60020**	**376107**	**313600**	**9229**	-	-	-
Beetroot.....	266	168	782	1659	83	-	-	-
Carrot.....	161	47	45	2320	36	-	-	-
Onion.....	11167	10641	75548	9134	269	-	-	-
Potatoes.....	48171	44245	278164	280674	8315	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	4628	4410	20816	6268	35	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	547	509	752	13787	489	-	-	-

Table 10.2 (Cont'd)
Amhara

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**184773**	**19750**	**76511**	**-**	**-**	**-**	**2276506**	**319984**	**404294**
Cereals	**110836**	**15114**	**42567**	**-**	**-**	**-**	**921373**	**159087**	**373334**
Teff	27738	9883	17539	-	-	-	122058	26678	14023
Barley	848	121	130	-	-	-	468955	106274	249303
Wheat	4052	228	707	-	-	-	145409	7288	46345
Maize	42553	2745	12009	-	-	-	270680	15658	18612
Sorghum	-	-	-	-	-	-	1667	188	88
Finger millet	-	-	-	-	-	-	1142	29	51
Oats/ 'Aja'	45326	2136	12182	-	-	-	66670	2972	44912
Rice	-	-	-	-	-	-	-	-	-
Pulse	**2655**	**934**	**635**	**-**	**-**	**-**	**199373**	**93340**	**30746**
Horse/Faba beans	-	-	-	-	-	-	27061	1897	2848
Field peas	-	-	-	-	-	-	23824	2416	5232
White Haricot beans	643	182	161	-	-	-	1028	215	77
Red Haricot beans	1330	384	342	-	-	-	14799	1736	949
Chick peas	1325	369	133	-	-	-	37642	5424	4777
White Chick peas	-	-	-	-	-	-	3975	643	-
Lentiles	-	-	-	-	-	-	52102	6366	7696
Vetch/Grass peas	-	-	-	-	-	-	22107	4488	4183
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	4547	301	133
Mung bean/"Masho"	-	-	-	-	-	-	54114	69534	4564
Gibto	-	-	-	-	-	-	1429	321	286
Oile seeds	**643**	**181**	**32**	**-**	**-**	**-**	**5534**	**738**	**215**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	4249	431	182
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	643	181	32	-	-	-	1285	308	32
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	**13572**	**414**	**1188**	**-**	**-**	**-**	**146935**	**7827**	**-**
Lettuce.....	224	6	56	-	-	-	478	*	-
Head Cabbage....	980	17	20	-	-	-	11257	1051	-
Ethiopian Cabbage	-	-	-	-	-	-	22999	1268	-
Tomatoes.....	3722	92	636	-	-	-	27532	1935	-
Green peppers...	5919	239	260	-	-	-	66936	2593	-
Red peppers.....	3524	53	160	-	-	-	35504	978	-
Swiss chard.....	224	8	56	-	-	-	1358	2	-
Root Crops.....	**71863**	**3106**	**32089**	**-**	**-**	**-**	**1390937**	**58992**	**-**
Beetroot.....	226	10	56	-	-	-	4296	187	-
Carrot.....	226	1	11	-	-	-	6672	140	-
Onion.....	36737	2052	24769	-	-	-	124665	8012	-
Potatoes.....	30887	810	6523	-	-	-	1210069	45593	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	5542	232	730	-	-	-	67464	4512	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	16324	547	-

Table 10.2 (Cont'd)
Amhara

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**252011**	**21637**	**16240**	**268044**	**51823**	**976258**	**104631**	**1293864**	**121846**
Cereals	**137214**	**15010**	**15958**	**141196**	**25078**	**489143**	**62092**	**444666**	**53546**
Teff	22450	5580	1255	45676	14681	97250	27849	52367	6919
Barley	1951	188	-	8327	1106	64466	9439	122316	27091
Wheat	27131	2059	9003	27850	2294	96674	5990	92897	6279
Maize	93564	7167	5515	53585	4751	256952	16388	216818	12295
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	1142	29	1142	29
Oats/ 'Aja'	1322	16	185	36886	2245	58643	2396	30365	933
Rice	-	-	-	-	-	-	-	-	-
Pulse	**1323**	**322**	**281**	**37859**	**12620**	**32768**	**7855**	**50612**	**18393**
Horse/Faba beans	-	-	-	1466	42	6234	358	3583	360
Field peas	-	-	-	-	-	3411	853	1065	155
White Haricot beans	-	-	-	643	182	1028	215	-	-
Red Haricot beans	-	-	-	643	381	4767	627	4125	245
Red Chickpeas	1125	320	281	11012	2244	9008	1356	11796	2151
White Chick peas	-	-	-	3975	643	-	-	2650	422
Lentiles	-	-	-	-	-	7494	1305	1928	215
Vetch/Grass peas	-	-	-	18947	4189	1852	358	19800	4242
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	197	3	-	226	13	892	81	197	3
Mung bean/"Masho"	-	-	-	4043	4925	4092	2703	7544	10601
Gibto	**-**	**-**	**-**	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**643**	**181**	**1285**	**308**	**1212**	**198**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	1212	198
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	643	181	1285	308	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	**15726**	**356**	**-**	**31060**	**3423**	**138579**	**6682**	**91632**	**5995**
Lettuce.....	224	6	-	-	-	701	6	224	6
Head Cabbage....	4778	132	-	8078	985	15855	1182	11546	1096
Ethiopian Cabbage	-	-	-	-	-	9439	61	12166	806
Tomatoes.....	2616	66	-	14348	1560	28426	1981	16267	1447
Green peppers...	9088	145	-	5001	693	72818	2684	49078	2266
Red peppers.....	-	-	-	8861	185	28096	758	15807	366
Swiss chard.....	**224**	**8**	**-**	**-**	**-**	**1581**	**10**	**224**	**8**
Root Crops.....	**107617**	**5948**	**-**	**122496**	**10521**	**552381**	**27695**	**902656**	**43714**
Beetroot.....	1342	78	-	-	-	4426	207	5037	249
Carrot.....	868	21	-	-	-	7343	160	1292	30
Onion.....	29877	3155	-	84160	6686	150208	11006	76044	7381
Potatoes.....	74598	2578	-	12257	475	367592	11850	798050	32435
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	2389	115	-	33201	3360	66711	4453	35326	3071
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	1222	-	-	-	-	1005	20	17546	547

Table 10.2 (Cont'd)
Amhara

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**167076**	**14115**	**40597**	**146439**	**11476**	**61291**
Cereals	**44772**	**9322**	**15572**	**81384**	**7694**	**34848**
Teff	2109	132	127	16471	2604	7316
Barley	27287	8148	11965	20234	2249	6031
Wheat	10259	656	2773	18368	1093	5957
Maize	11045	386	707	35458	1612	13243
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	1142	29	171
Oats/ 'Aja'	-	-	-	3161	108	2131
Rice	-	-	-	-	-	-
Pulse	**1186**	**280**	**593**	**1339**	**78**	**295**
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-
Red Chick peas	1186	280	593	1142	75	285
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	197	3	10
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables	**2223**	**332**	**418**	**6199**	**383**	**1973**
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	490	12	10
Ethiopian Cabbage	-	-	-	664	9	36
Tomatoes	1433	271	287	2069	243	1255
Green peppers	790	61	131	2749	99	604
Red papers	-	-	-	227	20	68
Swiss chard	**-**	**-**	**-**	**-**	**-**	**-**
Root crops	**124875**	**4181**	**24015**	**77330**	**3321**	**24174**
Beet root	-	-	-	1142	41	251
Carrot	-	-	-	395	10	34
Onion	4654	389	1403	9417	916	4647
Potatoes	115757	3264	20757	64787	1962	17461
Yam	-	-	-	-	-	-
Garlic	5194	528	1855	5824	392	1781
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	**-**	**-**	**-**	**-**	**-**	**-**

Table 10.2 (Cont'd)
Amhara

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**547383**	**34403**	**135840**	**453483**	**51046**	**345854**
Cereals	**103613**	**14445**	**27543**	**146519**	**24949**	**132572**
Teff	1593	282	512	*	*	*
Barley	47850	10271	14802	28726	5246	16895
Wheat	30836	1766	7319	37582	2867	*
Maize	25776	2109	4649	65208	4484	32091
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	1043	18	261	*	*	*
Rice	-	-	-	-	-	-
Pulse	**2941**	**372**	**889**	*****	*****	*****
Horse/Faba beans	*	*	*	*	*	*
Field peas	576	138	288	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-
Red Chick - Peas	-	-	-	-	-	-
White Chick - Peas	-	-	-	-	-	-
Lentiles	1153	221	576	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	*	*	*
Gibto	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	*****	*****	*****	**-**	**-**	**-**
Nueg	-	-	-	-	-	-
Linseed	*	*	*	-	-	-
Ground nuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables	**14119**	**1013**	*****	**33357**	*****	*****
Lettuce	-	-	-	-	-	-
Head Cabbage	*	*	*	*	*	*
Ethiopian Cabbage	*	*	*	*	*	*
Tomatoes	-	-	-	*	*	*
Green peppers	7435	*	*	19872	1282	*
Red papers	3285	59	443	5021	133	884
Swiss chard	**-**	**-**	**-**	**-**	**-**	**-**
Root crops	**467490**	**18375**	**103567**	**336630**	**21808**	**192263**
Beet root	*	*	*	*	*	*
Carrot	-	-	-	-	-	-
Onion	22567	1218	5866	53518	5795	*
Potatoes	437643	16146	92197	274335	13748	141227
Yam	-	-	-	-	-	-
Garlic	15278	1009	4878	22796	2214	11571
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	*****	**-**	*****	**1005**	**20**	**141**

Table 10.3: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
Oromia

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**764576**	**363260**	**395071**	**655166**	**123533**	**8701**	**491**	**2194**
Cereals	**552920**	**249108**	**201172**	**357205**	**79401**	**294**	**69**	**15**
Teff	95073	28437	14052	40825	12109	-	-	-
Barley	55721	41794	48141	41810	5657	-	-	-
Wheat	101897	81785	110616	4227	1719	-	-	-
Maize	262552	88949	25849	268979	54838	294	69	15
Sorghum	29734	5279	347	21888	4783	-	-	-
Finger millet	87	87	-	528	87	-	-	-
Oats/ 'Aja'	7857	2777	2165	1383	208	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**120087**	**37124**	**12902**	**280189**	**26160**	**6752**	**33**	**554**
Horse/Faba beans	713	173	117	1558	75	-	-	-
Field peas	32341	3664	1404	11850	1930	-	-	-
White Haricot beans	15406	5074	1659	56656	3934	-	-	-
Red Haricot beans	52228	26193	7250	210915	19887	6752	33	554
Red Chick peas	330	206	23	-	-	-	-	-
White Chick peas	21	-	-	-	-	-	-	-
Lentiles	7601	172	-	860	172	-	-	-
Vetch/Grass peas	182	-	-	-	-	-	-	-
Soya beans	19	-	-	-	-	-	-	-
Fenugreek	1476	19	32	497	16	-	-	-
Mung bean/"Masho"	9770	1623	2418	988	145	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**2464**	**1038**	**1407**	**821**	**40**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	14	-	-	-	-	-	-	-
Ground nuts	1918	918	1358	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	381	-	-	-	-	-	-	-
Rapeseed	149	120	49	821	40	-	-	-
Vegetables.....	**22024**	**14641**	**25168**	**193800**	**10058**	**5401**	**20**	**419**
Lettuce.....	4	4	-	604	4	-	-	-
Head Cabbage....	326	296	490	5458	173	-	-	-
Ethiopian Cabbage	18729	11879	3829	177167	9478	5401	20	419
Tomatoes.....	2094	1869	18839	6035	75	-	-	-
Green peppers...	631	527	1615	18376	325	-	-	-
Red peppers.....	205	57	352	321	2	-	-	-
Swiss chard.....	34	8	43	306	2	-	-	-
Root Crops.....	**67082**	**61349**	**154422**	**145614**	**7874**	**1949**	**369**	**1207**
Beetroot.....	793	632	3782	4647	67	-	-	-
Carrot.....	712	349	471	3618	139	-	-	-
Onion.....	2316	1994	14498	4831	43	-	-	-
Potatoes.....	59121	55870	132534	110171	7250	1949	369	1207
Yam.....	5	4	-	132	4	-	-	-
Garlic.....	3942	2452	3073	30557	333	-	-	-
Taro/'Godere'...	66	47	65	1822	35	-	-	-
Sweet potatoes..	127	2	-	737	2	-	-	-

Table 10.3 (Cont'd)
Oromia

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**24512**	**6302**	**5511**	**-**	**-**	**-**	**1771688**	**714594**	**626169**
Cereals	**14725**	**4911**	**3625**	**-**	**-**	**-**	**1059281**	**515332**	**521235**
Teff	2666	1378	508	-	-	-	263428	91181	61598
Barley	3387	980	967	-	-	-	194405	54638	133030
Wheat	4207	1525	1593	-	-	-	134896	88239	220056
Maize	5007	1015	544	-	-	-	664589	243596	81040
Sorghum	125	14	13	-	-	-	84228	29734	9777
Finger millet	-	-	-	-	-	-	528	87	41
Oats/ 'Aja'	-	-	-	-	-	-	25072	7857	15694
Rice	-	-	-	-	-	-	-	-	-
Pulse	**1392**	**120**	**57**	**-**	**-**	**-**	**669052**	**117091**	**102626**
Horse/Faba beans	-	-	-	-	-	-	8659	713	661
Field peas	1013	57	41	-	-	-	98044	31991	36565
White Haricot beans	-	-	-	-	-	-	124504	15366	5971
Red Haricot beans	379	64	17	-	-	-	387599	50214	35996
Chick peas	-	-	-	-	-	-	1019	330	229
White Chick peas	-	-	-	-	-	-	469	21	-
Lentiles	-	-	-	-	-	-	18039	7010	3319
Vetch/Grass peas	-	-	-	-	-	-	937	181	274
Soya beans	-	-	-	-	-	-	364	19	11
Fenugreek	-	-	-	-	-	-	24288	1476	3181
Mung bean/"Masho"	-	-	-	-	-	-	40789	9770	16420
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**9117**	**2450**	**2307**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	225	14	11
Ground nuts	-	-	-	-	-	-	6346	1918	2146
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	868	381	139
Rapeseed	-	-	-	-	-	-	1678	136	10
Vegetables.....	**2028**	**176**	**266**	**-**	**-**	**-**	**326509**	**20898**	**-**
Lettuce.....	-	-	-	-	-	-	604	4	-
Head Cabbage....	90	41	90	-	-	-	8594	259	-
Ethiopian Cabbage	1939	136	176	-	-	-	293535	18143	-
Tomatoes.....	-	-	-	-	-	-	14103	1719	-
Green peppers...	-	-	-	-	-	-	29204	594	-
Red peppers.....	-	-	-	-	-	-	3116	150	-
Swiss chard.....	-	-	-	-	-	-	1054	29	-
Root Crops.....	**9487**	**1094**	**1562**	**-**	**-**	**-**	**446515**	**58824**	**-**
Beetroot.....	566	54	72	-	-	-	12760	737	-
Carrot.....	-	-	-	-	-	-	8494	471	-
Onion.....	-	-	-	-	-	-	13356	1271	-
Potatoes.....	8254	948	1240	-	-	-	377822	52656	-
Yam.....	-	-	-	-	-	-	199	5	-
Garlic.....	667	92	250	-	-	-	56881	3492	-
Taro/'Godere'...	-	-	-	-	-	-	2637	66	-
Sweet potatoes..	-	-	-	-	-	-	2158	127	-

Table 10.3 (Cont'd)
Oromia

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**166694**	**49982**	**17889**	**205882**	**129516**	**120833**	**29470**	**436585**	**166633**
Cereals	**104342**	**37588**	**17213**	**131223**	**105783**	**78314**	**19923**	**249767**	**117410**
Teff	11678	3892	3430	41476	16212	-	-	39882	16315
Barley	3305	1083	42	41125	14830	1476	233	77962	29180
Wheat	21933	13658	10154	63570	58095	14793	4123	60685	34591
Maize	70572	18956	3588	24138	14623	57195	14721	109073	34159
Sorghum	-	-	-	1050	547	6613	844	2170	597
Finger millet	-	-	-	-	-	-	-	229	15
Oats/ 'Aja'	-	-	-	4075	1477	74	2	7791	2553
Rice	-	-	-	-	-	-	-	-	-
Pulse	**7346**	**2996**	**674**	**20519**	**9053**	**7391**	**951**	**85010**	**17759**
Horse/Faba beans	-	-	-	-	-	34	6	2815	129
Field peas	376	350	-	9057	5625	596	219	22778	8216
White Haricot beans	271	39	108	841	69	313	27	16511	1736
Red Haricot beans	6298	2014	566	5568	799	4176	354	43701	7337
Red Chickpeas	-	-	-	143	20	249	46	-	-
White Chick peas	-	-	-	106	19	106	19	-	-
Lentiles	364	591	-	1151	711	-	-	401	133
Vetch/Grass peas	38	1	-	143	53	974	182	831	129
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	106	3	319	6	331	26
Mung bean/"Masho"	-	-	-	3873	1754	1001	92	532	54
Gibto	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	**215**	**14**	**1**	**-**	**-**	**-**	**-**	**1075**	**123**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-
Rapeseed	215	14	1	-	-	-	-	1075	123
Vegetables.....	**6293**	**1126**	**-**	**8417**	**2041**	**17276**	**2775**	**44353**	**5100**
Lettuce.....	-	-	-	-	-	-	-	103	1
Head Cabbage....	876	68	-	316	75	1146	160	2338	115
Ethiopian Cabbage	4122	586	-	4095	116	8689	591	34109	2936
Tomatoes.....	733	374	-	3282	1737	5030	1778	3653	1778
Green peppers...	211	37	-	723	112	3077	232	4671	265
Red peppers.....	352	55	-	-	-	87	4	-	-
Swiss chard.....	**85**	**6**	**-**	**-**	**-**	**663**	**10**	**85**	**6**
Root Crops.....	**54370**	**8257**	**-**	**63005**	**12638**	**42713**	**5821**	**165193**	**26242**
Beetroot.....	1426	56	-	1541	203	4660	623	1962	166
Carrot.....	2269	241	-	193	18	1580	150	5031	490
Onion.....	3808	1045	-	6501	1567	8999	1905	4740	1389
Potatoes.....	46602	6466	-	55379	10736	26135	2575	148558	22945
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	1972	450	-	448	115	4183	469	9472	1229
Taro/'Godere'...	-	-	-	-	-	-	-	775	23
Sweet potatoes..	-	-	-	-	-	954	100	249	1

Table 10.3 (Cont'd)
Oromia

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**360222**	**124612**	**182182**	**61940**	**27354**	**77314**
Cereals	**164881**	**82642**	**82006**	**31054**	**15076**	**25795**
Teff	29960	9256	7855	4518	1135	2035
Barley	64935	20056	24290	2930	1503	2316
Wheat	53660	32828	37313	7947	5888	12575
Maize	41118	18968	11220	20051	6231	8540
Sorghum	-	-	-	125	11	15
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	4403	1534	1328	852	309	313
Rice	-	-	-	-	-	-
Pulse	**34422**	**7017**	**7728**	**6575**	**1628**	**1606**
Horse/Faba beans	1845	42	84	1037	56	28
Field peas	2544	1355	1099	-	-	-
White Haricotbeans	6159	744	1192	1372	215	109
Red Haricot beans	21819	3712	3663	4663	1358	1469
Red Chick peas	463	206	23	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	2008	959	1667	-	-	-
Gibto	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	**3207**	**998**	**1407**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	2562	918	1358	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	**645**	**80**	**49**	**-**	**-**	**-**
Vegetables	**14336**	**1297**	**1927**	**7184**	**2491**	**20725**
Lettuce	-	-	-	-	-	-
Head Cabbage	346	2	3	444	75	316
Ethiopian Cabbage	12674	1182	1500	2089	555	943
Tomatoes	784	58	71	3282	1737	18768
Green peppers	181	*	2	1514	125	698
Red papers	352	55	352	-	-	-
Swiss chard	**-**	**-**	**-**	**-**	**-**	**-**
Root crops	**178555**	**32657**	**89112**	**27421**	**8158**	**29188**
Beet root	543	48	136	2097	376	3422
Carrot	1590	55	100	505	34	61
Onion	1907	408	2441	3265	972	6943
Potatoes	173462	30447	84718	21619	6776	18754
Yam	-	-	-	-	-	-
Garlic	4597	1699	1718	79	*	8
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	**-**	**-**	**-**	**-**	**-**	**-**

Table 10.3 (Cont'd)
Oromia

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**133393**	**69276**	**95991**	**27015**	**11693**	**31878**
Cereals	**66877**	*****	*****	**15471**	**9035**	**19264**
Teff	10467	*	*	*	*	*
Barley	32119	13464	20184	515	135	384
Wheat	*	*	*	9419	*	15945
Maize	12893	*	*	5248	*	*
Sorghum	*	*	*	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	*	*	*	-	-	-
Rice	-	-	-	-	-	-
Pulse	**7607**	**1831**	*****	**1982**	*****	*****
Horse/Faba beans	*	*	*	-	-	-
Field peas	*	*	*	-	-	-
White Haricotbeans	*	*	*	*	*	*
Red Haricot beans	*	*	*	1711	*	*
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	**4978**	*****	*****	**2772**	**185**	*****
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	*	*	*
Ethiopian Cabbage	*	*	*	2341	122	202
Tomatoes	-	-	-	-	-	-
Green peppers	*	*	*	*	*	*
Red papers	-	-	-	-	-	-
Swiss chard	**-**	**-**	**-**	**43**	**6**	**43**
Root crops	**68759**	**9059**	**22298**	**14011**	**2138**	**11054**
Beet root	124	3	12	1493	83	139
Carrot	510	120	304	267	1	6
Onion	435	61	373	2819	510	4741
Potatoes	66046	8630	21274	10997	1450	5341
Yam	-	-	-	-	-	-
Garlic	1385	232	270	391	95	828
Taro 'Godere'	*	*	*	-	-	-
Sweet potatoes	**-**	**-**	**-**	**-**	**-**	**-**

Table 10.4: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
Somali

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**255**	**93**	**37**	**843**	**69**	**20**	*	**5**
Cereals	**216**	**76**	**7**	**677**	**66**	-	-	-
Teff	14	14	-	55	14	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	*	*	-	28	*	-	-	-
Maize	164	63	7	567	52	-	-	-
Sorghum	37	*	-	28	*	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**6**	**3**	**-**	**166**	**3**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-
Red Haricot beans	6	3	-	166	3	-	-	-
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.....	**13**	**9**	**17**	**-**	**-**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	*	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes.....	13	9	17	-	-	-	-	-
Green peppers...	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**20**	**5**	**13**	**-**	**-**	**20**	*	**5**
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	18	5	13	-	-	20	*	5
Potatoes.....	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	2	-	-	-	-	-	-	-

Table 10.4 (Cont'd)
Somali

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**300**	**23**	**27**	**40**	**1**	**6**	**2326**	**238**	**530**
Cereals	**132**	**10**	**7**	**-**	**-**	**-**	**1681**	**208**	**500**
Teff	-	-	-	-	-	-	221	14	148
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	138	*	159
Maize	132	10	7	-	-	-	1257	157	174
Sorghum	-	-	-	-	-	-	84	37	19
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**-**	**-**	**-**	**-**	**-**	**-**	**240**	**6**	**30**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	240	6	30
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.....	**104**	**8**	**11**	**40**	**1**	**6**	**297**	**13**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	44	*	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	104	8	11	40	1	6	253	13	-
Green peppers...	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**64**	**5**	**8**	**-**	**-**	**-**	**192**	**11**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	64	5	8	-	-	-	148	9	-
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	44	2	-

Table 10.4 (Cont'd)
Somali

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**232**	**17**	**8**	**165**	**9**	**1265**	**185**	**129**	**15**
Cereals	**125**	**8**	**8**	**-**	**-**	**773**	**158**	**129**	**15**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	28	*
Maize	125	8	8	-	-	735	121	102	15
Sorghum	-	-	-	-	-	57	37	-	-
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.....	**-**	**-**	**-**	**101**	**5**	**297**	**13**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	44	*	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	-	-	-	101	5	253	13	-	-
Green peppers...	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Root Crops.....	**107**	**9**	**-**	**84**	**5**	**280**	**13**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	107	9	-	84	5	236	11	-	-
Potatoes.....	-	-	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	44	2	-	-

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: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
Benishangul Gumuz

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**10289**	**3861**	**1536**	**56703**	**2711**	**1025**	**9**	**56**
Cereals	**613**	**19**	**-**	**7335**	**19**	**-**	**-**	**-**
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	613	19	-	7335	19	-	-	-
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**6647**	**2093**	**452**	**35866**	**1643**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	901	66	42	1520	59	-	-	-
Red Haricot beans	5746	2026	410	34347	1584	-	-	-
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.....	**2863**	**1622**	**1059**	**17834**	**969**	**512**	**9**	**51**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	156	116	34	671	81	-	-	-
Ethiopian Cabbage	2086	965	806	14017	465	-	-	-
Tomatoes.....	307	307	13	1836	245	-	-	-
Green peppers...	301	221	172	1980	178	512	9	51
Red peppers.....	13	13	34	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**166**	**127**	**25**	**4089**	**79**	**512**	*****	**5**
Beetroot.....	*	*	-	671	*	-	-	-
Carrot.....	78	48	20	-	-	-	-	-
Onion.....	1	1	5	671	1	512	*	5
Potatoes.....	81	74	-	2082	74	-	-	-
Yam.....	4	4	-	666	4	-	-	-
Garlic.....	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	2	-	-	-	-	-	-	-

Table 10.5 (Cont'd)
Benishangul Gumuz

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**5978**	**277**	**113**	**-**	**-**	**-**	**191929**	**9820**	**38045**
Cereals	**-**	**-**	**-**	**-**	**-**	**-**	**14331**	**297**	**128**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	14331	297	128
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**943**	**12**	**38**	**-**	**-**	**-**	**129603**	**6521**	**37917**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	12038	894	15364
Red Haricot beans	943	12	38	-	-	-	117566	5627	22554
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.....	**5035**	**265**	**75**	**-**	**-**	**-**	**58356**	**2836**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	2507	156	-
Ethiopian Cabbage	3981	259	70	-	-	-	47816	2086	-
Tomatoes.....	-	-	-	-	-	-	2507	307	-
Green peppers...	1054	6	5	-	-	-	5526	274	-
Red peppers.....	-	-	-	-	-	-	671	13	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**-**	**-**	**-**	**-**	**-**	**-**	**9688**	**166**	**-**
Beetroot.....	-	-	-	-	-	-	671	*	-
Carrot.....	-	-	-	-	-	-	1341	78	-
Onion.....	-	-	-	-	-	-	671	1	-
Potatoes.....	-	-	-	-	-	-	5668	81	-
Yam.....	-	-	-	-	-	-	666	4	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	671	2	-

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	**11424**	**469**	**114**	**1724**	**41**	**5046**	**54**	**13994**	**379**
Cereals	**4590**	**315**	**114**	**-**	**-**	**-**	**-**	**666**	**2**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	4590	315	114	-	-	-	-	666	2
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**4215**	**126**	**-**	**-**	**-**	**1885**	**20**	**7006**	**283**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	1054	7	-	-	-	-	-	1054	7
Red Haricot beans	3161	119	-	-	-	1885	20	5952	275
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.....	**2107**	**28**	**-**	**1724**	**41**	**3161**	**34**	**6322**	**93**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	671	35	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	4215	66
Tomatoes.....	-	-	-	-	-	-	-	-	-
Green peppers...	2107	28	-	1054	6	3161	34	2107	28
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Root Crops.....	**512**	*****	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	512	*	-	-	-	-	-	-	-
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	**15940**	**620**	**1128**	**5402**	**244**	**239**
Cereals	**-**	**-**	**-**	**-**	**-**	**-**
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	**6993**	**246**	**322**	**2241**	**190**	**92**
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	1054	7	42	-	-	-
Red Haricot beans	5939	239	280	2241	190	92
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	**8276**	**326**	**785**	**3161**	**54**	**148**
Lettuce	-	-	-	-	-	-
Head Cabbage	671	35	34	-	-	-
Ethiopian Cabbage	6264	216	705	1054	26	32
Tomatoes	671	62	13	-	-	-
Green peppers	-	-	-	2107	28	116
Red papers	671	13	34	-	-	-
Swiss chard	**-**	**-**	**-**	**-**	**-**	**-**
Root crops	**671**	**48**	**20**	**-**	**-**	**-**
Beet root	-	-	-	-	-	-
Carrot	671	48	20	-	-	-
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: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
SNNP

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**907261**	**534481**	**309341**	**2484395**	**290328**	**8976**	**4024**	**1290**
Cereals	**505422**	**252386**	**110069**	**1427464**	**154021**	**5022**	**2627**	**582**
Teff	25004	9508	2613	3705	1719	-	-	-
Barley	15160	10038	4932	88041	5765	-	-	-
Wheat	279	166	241	1276	27	-	-	-
Maize	427025	225510	102255	1358049	139413	5022	2627	582
Sorghum	37148	7107	28	33477	7041	-	-	-
Finger millet	755	57	-	638	57	-	-	-
Oats/ 'Aja'	36	-	-	-	-	-	-	-
Rice	16	-	-	-	-	-	-	-
Pulse	**186065**	**113974**	**63494**	**1100829**	**66065**	**5256**	**1200**	**297**
Horse/Faba beans	2148	1423	99	24964	1326	-	-	-
Field peas	4798	969	23	20415	942	-	-	-
White Haricot beans	4938	3536	1291	44448	2264	-	-	-
Red Haricot beans	168243	106198	62082	1044519	59687	5256	1200	297
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	8	-	-	-	-	-	-	-
Lentiles	31	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	487	-	-	-	-	-	-	-
Fenugreek	5	4	-	825	4	-	-	-
Mung bean/"Masho"	5406	1844	-	9384	1844	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**17042**	**2822**	**584**	**20903**	**2057**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	80	59	-	1506	59	-	-	-
Ground nuts	7380	1624	82	7298	1413	-	-	-
Safflower	1277	707	492	4156	198	-	-	-
Sesame	7739	-	-	-	-	-	-	-
Rapeseed	566	432	10	7942	386	-	-	-
Vegetables.....	**47937**	**32247**	**8697**	**1192555**	**26666**	**-**	**-**	**-**
Lettuce.....	2	2	5	587	1	-	-	-
Head Cabbage....	353	86	181	8850	36	-	-	-
Ethiopian Cabbage	46016	31317	8164	1158373	25917	-	-	-
Tomatoes.....	327	256	259	8851	160	-	-	-
Green peppers...	898	477	38	50226	455	-	-	-
Red peppers.....	316	84	45	7323	72	-	-	-
Swiss chard.....	25	25	4	2673	25	-	-	-
Root Crops.....	**150795**	**133052**	**126499**	**761703**	**41519**	**1097**	**196**	**411**
Beetroot.....	301	206	98	17096	187	-	-	-
Carrot.....	81	79	15	6034	56	-	-	-
Onion.....	2765	1430	1406	26144	323	-	-	-
Potatoes.....	125586	118528	123350	462344	28971	1097	196	411
Yam.....	1346	881	752	27366	570	-	-	-
Garlic.....	658	422	50	70240	388	-	-	-
Taro/'Godere'...	4366	2518	588	73259	2214	-	-	-
Sweet potatoes..	15692	8988	239	214990	8811	-	-	-

Table 10.6 (Cont'd)
SNNP

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**67777**	**7806**	**13446**	**2763**	**1296**	**2139**	**4156416**	**812551**	**281012**
Cereals	**41654**	**4387**	**10217**	**2763**	**909**	**1163**	**2425849**	**426633**	**161134**
Teff	225	149	34	-	-	-	41331	23730	4213
Barley	2997	187	66	-	-	-	162402	13733	14344
Wheat	-	-	-	-	-	-	1276	27	30
Maize	38432	4050	10117	2763	909	1163	2290861	351495	136734
Sorghum	-	-	-	-	-	-	131386	36945	5668
Finger millet	-	-	-	-	-	-	5182	652	120
Oats/ 'Aja'	-	-	-	-	-	-	1008	36	21
Rice	-	-	-	-	-	-	204	16	4
Pulse	**20629**	**1285**	**1102**	**1404**	**233**	**715**	**2155592**	**180883**	**115285**
Horse/Faba beans	422	51	13	-	-	-	42765	2137	1073
Field peas	573	22	13	-	-	-	52950	4636	2189
White Haricot beans	416	18	14	-	-	-	87631	4694	1744
Red Haricot beans	20213	1194	1063	1404	233	715	2040793	163926	107931
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	639	8	-
Lentiles	-	-	-	-	-	-	876	31	26
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	2129	482	32
Fenugreek	-	-	-	-	-	-	1570	5	1
Mung bean/"Masho"	-	-	-	-	-	-	20495	4964	2289
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**79221**	**17001**	**4594**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	2703	80	21
Ground nuts	-	-	-	-	-	-	36653	7380	2548
Safflower	-	-	-	-	-	-	10749	1277	91
Sesame	-	-	-	-	-	-	20310	7698	1914
Rapeseed	-	-	-	-	-	-	12002	566	20
Vegetables.....	**4678**	**136**	**111**	**128**	**24**	**32**	**1643208**	**47496**	**-**
Lettuce.....	-	-	-	-	-	-	770	2	-
Head Cabbage....	2812	15	35	-	-	-	16892	149	-
Ethiopian Cabbage	1218	114	42	128	24	32	1598554	45902	-
Tomatoes.....	648	-	6	-	-	-	11289	207	-
Green peppers...	1406	7	28	-	-	-	70515	898	-
Red peppers.....	-	-	-	-	-	-	10401	313	-
Swiss chard.....	-	-	-	-	-	-	2855	25	-
Root Crops.....	**21890**	**1998**	**2016**	**638**	**130**	**230**	**1493005**	**140539**	**-**
Beetroot.....	558	2	23	-	-	-	19016	268	-
Carrot.....	-	-	-	-	-	-	5591	74	-
Onion.....	1342	92	62	-	-	-	44596	1436	-
Potatoes.....	18921	1812	1833	-	-	-	1063667	116758	-
Yam.....	699	54	19	638	65	115	44060	1346	-
Garlic.....	736	1	8	-	-	-	99405	645	-
Taro/'Godere'...	573	9	34	638	65	115	134569	4366	-
Sweet potatoes..	750	27	38	-	-	-	316816	15646	-

Table 10.6 (Cont'd)
SNNP

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**592927**	**94710**	**25896**	**50003**	**6550**	**53159**	**14758**	**1191744**	**268295**
Cereals	**474763**	**78789**	**24438**	**24892**	**1990**	**40454**	**12087**	**667021**	**141471**
Teff	1518	1274	-	760	132	452	507	7067	3047
Barley	17603	1427	748	468	35	334	33	50285	4031
Wheat	1447	252	-	-	-	-	-	1447	252
Maize	454030	75530	23690	23664	1823	38293	10904	615201	130439
Sorghum	487	203	-	-	-	1826	644	12812	3595
Finger millet	643	103	-	-	-	-	-	1102	109
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**72521**	**5183**	**1448**	**5816**	**481**	**11615**	**1618**	**505704**	**50215**
Horse/Faba beans	115	11	-	-	-	-	-	2208	80
Field peas	884	162	44	573	52	334	26	2259	105
White Haricot beans	5133	244	168	-	-	-	-	10486	1120
Red Haricot beans	65959	4317	1095	1736	61	11281	1592	492671	48377
Red Chickpeas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	629	5	4	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	1319	442	137	3508	367	-	-	1358	533
Gibto	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	**253**	**41**	**10**	**-**	**-**	**-**	**-**	**26747**	**6196**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	20469	5105
Safflower	-	-	-	-	-	-	-	5720	928
Sesame	253	41	10	-	-	-	-	472	126
Rapeseed	-	-	-	-	-	-	-	558	36
Vegetables.....	**22048**	**441**	**-**	**4916**	**156**	**6776**	**242**	**121075**	**4845**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	6759	204	-	-	-	1877	21	9368	56
Ethiopian Cabbage	10236	114	-	4793	62	4012	107	107265	4504
Tomatoes.....	4510	120	-	123	94	1066	94	2153	106
Green peppers...	-	-	-	-	-	1140	20	6216	135
Red peppers.....	544	3	-	-	-	471	1	1107	28
Swiss chard.....	**178**	*****	**-**	**-**	**-**	**-**	**-**	**1370**	**16**
Root Crops.....	**107844**	**10256**	**-**	**20129**	**3924**	**13586**	**811**	**439731**	**65567**
Beetroot.....	6410	33	-	646	1	558	2	2778	4
Carrot.....	3981	7	-	-	-	-	-	2279	28
Onion.....	12117	1329	-	1569	275	4670	346	11506	762
Potatoes.....	85685	8828	-	17411	3599	2207	45	401510	62693
Yam.....	-	-	-	-	-	-	-	6811	442
Garlic.....	1270	13	-	1148	49	2873	19	11262	71
Taro/'Godere'...	-	-	-	-	-	303	4	9997	579
Sweet potatoes..	593	46	-	-	-	5120	395	21098	988

Table 1(Cont'd)
SNNP

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**770643**	**118147**	**111844**	**513809**	**101090**	**166920**
Cereals	**350188**	**52273**	**40214**	**201953**	**36007**	**56357**
Teff	4790	2132	330	5011	4216	1932
Barley	24598	2619	2909	23049	1399	1874
Wheat	482	83	121	241	56	121
Maize	322632	47390	36852	175314	30319	52405
Sorghum	543	49	2	633	17	25
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	**416592**	**31733**	**34865**	**116708**	**12479**	**25770**
Horse/Faba beans	639	32	27	295	13	59
Field peas	-	-	-	497	6	10
White Haricotbeans	9293	951	751	3001	303	525
Red Haricot beans	407801	30749	34087	113210	12157	25176
Red Chick peas	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-
Gibto	**-**	**-**	**-**	**-**	**-**	**-**
Oile seeds	**4123**	**288**	**202**	**2110**	**478**	**382**
Nueg	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	1918	128	38	524	83	44
Safflower	737	114	153	1585	395	338
Sesame	-	-	-	-	-	-
Rapeseed	**1469**	**46**	**10**	**-**	**-**	**-**
Vegetables	**50851**	**3018**	**3109**	**29205**	**2261**	**5348**
Lettuce	-	-	-	183	1	5
Head Cabbage	1563	6	22	4389	29	124
Ethiopian Cabbage	47980	2996	3072	25323	2125	4923
Tomatoes	837	1	4	594	94	249
Green peppers	943	15	10	-	-	-
Red papers	471	1	2	491	12	43
Swiss chard	**-**	**-**	**-**	**183**	**1**	**4**
Root crops	**268586**	**30835**	**33454**	**322268**	**49865**	**79063**
Beet root	1802	15	73	173	1	2
Carrot	1107	24	15	-	-	-
Onion	2986	192	235	8595	823	1109
Potatoes	258945	30458	32892	309146	48583	76890
Yam	-	-	-	2926	191	618
Garlic	3068	20	37	916	13	6
Taro 'Godere'	1428	43	89	1430	187	349
Sweet potatoes	**2938**	**83**	**113**	**1899**	**67**	**89**

Table 10.6 (Cont'd)
SNNP

Crop type	MIXED			MIXED + UREA		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**52063**	**4567**	**4614**	**43667**	*****	**9088**
Cereals	**7606**	**1828**	**938**	**9230**	**333**	*****
Teff	1055	1292	317	-	-	-
Barley	-	-	-	*	*	*
Wheat	-	-	-	-	-	-
Maize	6551	*	*	8273	*	*
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	*****	**721**	**448**	*****	**258**	**297**
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	-	-	-	-	-	-
Red Haricot beans	*	721	448	*	258	297
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	**39004**	**1988**	**3197**	**36392**	*****	*****
Beet root	*	*	*	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	-	-	-
Potatoes	38648	1988	3196	36392	*	*
Yam	-	-	-	-	-	-
Garlic	*	*	*	-	-	-
Taro 'Godere'	-	-	-	-	-	-
Sweet potatoes	**-**	**-**	**-**	**-**	**-**	**-**

Table 10.7: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
Sidama

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**48436**	**43317**	**32149**	**118399**	**13415**	**511**	**2**	**41**
Cereals	**25997**	**24034**	**12574**	**76527**	**7532**	**511**	**1**	**20**
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	25997	24034	12574	76527	7532	511	1	20
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**11071**	**9871**	**8017**	**50717**	**2373**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	731	730	191	3475	400	-	-	-
Red Haricot beans	10339	9141	7826	47779	1973	-	-	-
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.....	**8131**	**6385**	**7764**	**68611**	**2440**	**511**	**1**	**20**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	161	161	1008	376	*	-	-	-
Ethiopian Cabbage	7729	5984	5642	68235	2440	511	1	20
Tomatoes.....	-	-	-	-	-	-	-	-
Green peppers...	241	240	1114	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**3237**	**3027**	**3794**	**25775**	**1069**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	-
Potatoes.....	2909	2744	3632	15740	852	-	-	-
Yam.....	161	142	32	8459	118	-	-	-
Garlic.....	53	30	-	1136	30	-	-	-
Taro/'Godere'...	12	12	83	-	-	-	-	-
Sweet potatoes..	101	100	47	3861	69	-	-	-

Table 10.7 (Cont'd)
Sidama

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**4785**	**598**	**801**	**-**	**-**	**-**	**259926**	**32606**	**11410**
Cereals	**3054**	**279**	**163**	**-**	**-**	**-**	**115924**	**12707**	**6383**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	3054	279	163	-	-	-	115924	12707	6383
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**3054**	**135**	**149**	**-**	**-**	**-**	**134605**	**8990**	**5027**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	5365	564	292
Red Haricot beans	3054	135	149	-	-	-	130275	8426	4735
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.....	**3085**	**105**	**170**	**-**	**-**	**-**	**132222**	**7745**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	3085	105	170	-	-	-	131016	7716	-
Tomatoes.....	-	-	-	-	-	-	-	-	-
Green peppers...	-	-	-	-	-	-	1205	29	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**1732**	**79**	**318**	**-**	**-**	**-**	**55012**	**3163**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	-	-
Potatoes.....	1732	79	318	-	-	-	42299	2835	-
Yam.....	-	-	-	-	-	-	10148	161	-
Garlic.....	-	-	-	-	-	-	1556	53	-
Taro/'Godere'...	-	-	-	-	-	-	488	12	-
Sweet potatoes..	-	-	-	-	-	-	5800	101	-

Table 1(Cont'd)
Sidama

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**87271**	**15830**	**4827**	**4333**	**600**	**6475**	**640**	**76478**	**14693**
Cereals	**78000**	**13290**	**4354**	**1735**	**322**	**2887**	**227**	**53357**	**8953**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	78000	13290	4354	1735	322	2887	227	53357	8953
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**24053**	**2080**	**474**	**572**	**56**	**-**	**-**	**35310**	**2866**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	1345	167	30	-	-	-	-	-	-
Red Haricot beans	23045	1913	444	572	56	-	-	35310	2866
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.....	**4947**	**386**	**-**	**376**	**10**	**4681**	**413**	**41216**	**2353**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	1828	161	-	376	10	1452	161	1828	161
Ethiopian Cabbage	967	13	-	-	-	359	22	36877	1963
Tomatoes.....	-	-	-	-	-	-	-	-	-
Green peppers...	2152	212	-	-	-	2870	230	2511	228
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Root Crops.....	**1136**	**74**	**-**	**2598**	**211**	**-**	**-**	**8856**	**522**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	-	-	-
Potatoes.....	1136	74	-	2598	211	-	-	7740	506
Yam.....	-	-	-	-	-	-	-	549	9
Garlic.....	-	-	-	-	-	-	-	568	7
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	-	-	-

Table 10.7 (Cont'd)
Sidama

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**131681**	**26711**	**26586**	**18300**	**2591**	**4722**
Cereals	**83455**	**14856**	**10785**	**14548**	**1365**	**1606**
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	83455	14856	10785	14548	1365	1606
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulse	**83811**	**6889**	**7299**	**9507**	**474**	**569**
Horse/Faba beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
White Haricotbeans	2966	319	177	538	11	13
Red Haricot beans	81182	6570	7121	8969	463	556
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	**37926**	**3130**	**5157**	**11466**	**709**	**2417**
Lettuce	-	-	-	-	-	-
Head Cabbage	376	10	4	1076	152	1004
Ethiopian Cabbage	37191	3104	5110	7749	334	341
Tomatoes	-	-	-	-	-	-
Green peppers	359	16	43	2640	223	1071
Red papers	-	-	-	-	-	-
Swiss chard	**-**	**-**	**-**	**-**	**-**	**-**
Root crops	**24678**	**1836**	**3346**	**2029**	**43**	**130**
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	-	-	-
Potatoes	22908	1807	3287	546	6	27
Yam	549	9	22	498	15	10
Garlic	-	-	-	-	-	-
Taro 'Godere'	-	-	-	488	12	83
Sweet potatoes	**1557**	**20**	**37**	**498**	**10**	**10**

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 2014 EC (2021/22GC)
Gambela

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**4287**	**1072**	**30**	**103**	**1059**	**7**	**2**	**21**
Cereals	**3907**	**1068**	**6**	**103**	**1059**	**-**	**-**	**-**
Teff	8	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	3899	1068	6	103	1059	-	-	-
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulse	**169**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Horse/Faba beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
White Haricot beans	27	-	-	-	-	-	-	-
Red Haricot beans	142	-	-	-	-	-	-	-
Red Chick peas	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oile seeds	**174**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	20	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-
Sesame	154	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Vegetables.....	**35**	**4**	**24**	**-**	**-**	**7**	**2**	**21**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-
Ethiopian Cabbage	24	1	1	-	-	-	-	-
Tomatoes.....	7	1	2	-	-	-	-	-
Green peppers...	2	2	21	-	-	7	2	21
Red peppers.....	1	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**2**	*****	*****	**-**	**-**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	*	-	-	-	-	-	-	-
Potatoes.....	*	-	-	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	*	*	*	-	-	-	-	-
Taro/'Godere'...	*	-	-	-	-	-	-	-
Sweet potatoes..	1	-	-	-	-	-	-	-

Table 10.8 (Cont'd)
Gambela

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**9**	*****	*****	**-**	**-**	**-**	**12532**	**4055**	**1427**
Cereals	**-**	**-**	**-**	**-**	**-**	**-**	**11818**	**3684**	**1252**
Teff	-	-	-	-	-	-	28	8	3
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	11808	3676	1250
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**-**	**-**	**-**	**-**	**-**	**-**	**1061**	**169**	**134**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	152	27	81
Red Haricot beans	-	-	-	-	-	-	919	142	53
Chick peas	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oile seeds	**-**	**-**	**-**	**-**	**-**	**-**	**331**	**174**	**41**
Nueg	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	79	20	20
Safflower	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	280	154	20
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables.....	**-**	**-**	**-**	**-**	**-**	**-**	**934**	**27**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	919	24	-
Tomatoes.....	-	-	-	-	-	-	42	1	-
Green peppers...	-	-	-	-	-	-	24	*	-
Red peppers.....	-	-	-	-	-	-	8	1	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**9**	*****	*****	**-**	**-**	**-**	**137**	**2**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	-	9	*	-
Potatoes.....	-	-	-	-	-	-	26	*	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	9	*	*	-	-	-	28	*	-
Taro/'Godere'...	-	-	-	-	-	-	11	*	-
Sweet potatoes..	-	-	-	-	-	-	63	1	-

Table 10.8 (Cont'd)
Gambela

Crop type	Improved seed			Pesticide		Irrigation		Extension package	
	Holder	Hectare	Quintal	Holder	Hectare	Holder	Hectare	Holder	Hectare
All	**952**	**232**	**45**	**451**	**156**	**21**	**8**	**713**	**142**
Cereals	**929**	**224**	**45**	**436**	**153**	**-**	**-**	**704**	**126**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	929	224	45	436	153	-	-	704	126
Sorghum	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulse	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**51**	**9**
Horse/Faba beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
White Haricot beans	-	-	-	-	-	-	-	-	-
Red Haricot beans	-	-	-	-	-	-	-	51	9
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.....	**23**	**8**	**-**	**16**	**3**	**21**	**8**	**31**	**7**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	2	*	-	-	-	-	-	24	3
Tomatoes.....	14	6	-	16	3	14	6	7	4
Green peppers...	7	2	-	-	-	7	2	-	-
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	**18**	**10**	**9**	**-**	**-**	**-**
Cereals	**9**	**8**	**6**	**-**	**-**	**-**
Teff	-	-	-	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	9	8	6	-	-	-
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	**9**	**2**	**3**	**-**	**-**	**-**
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	9	1	1	-	-	-
Tomatoes	9	1	2	-	-	-
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 2014 EC (2021/22GC)
Hareri

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**336**	**267**	**125**	**814**	**93**	**-**	**-**	**-**
Cereals	**117**	**106**	**25**	**814**	**48**	**-**	**-**	**-**
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	117	106	25	814	48	-	-	-
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.....	**208**	**150**	**93**	**572**	**45**	**-**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes.....	58	58	25	-	-	-	-	-
Green peppers...	134	82	53	572	45	-	-	-
Red peppers.....	16	10	14	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**11**	**11**	**7**	**-**	**-**	**-**	**-**	**-**
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	11	11	7	-	-	-	-	-
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	**623**	**147**	**84**	**-**	**-**	**-**	**3124**	**336**	**12**
Cereals	**191**	**58**	**25**	**-**	**-**	**-**	**1246**	**117**	**12**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	191	58	25	-	-	-	1246	117	12
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.....	**382**	**78**	**52**	**-**	**-**	**-**	**3124**	**208**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	191	58	25	-	-	-	191	58	-
Green peppers...	191	20	27	-	-	-	2934	134	-
Red peppers.....	-	-	-	-	-	-	482	16	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**241**	**11**	**7**	**-**	**-**	**-**	**241**	**11**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	241	11	7	-	-	-	241	11	-
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	-	-	-	**673**	**71**	**3124**	**336**	**2502**	**287**
Cereals	-	-	-	-	-	**1246**	**117**	**623**	**94**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	1246	117	623	94
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.....	-	-	-	**673**	**71**	**3124**	**208**	**2502**	**182**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	-	-	-	191	58	191	58	191	58
Green peppers...	-	-	-	482	13	2934	134	2311	108
Red peppers.....	-	-	-	-	-	482	16	482	16
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	-	-	-	-	-	**241**	**11**	**241**	**11**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	-	-	-	-	-	241	11	241	11
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	**241**	**13**	**19**	**482**	**13**	**22**
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	**241**	**13**	**19**	**482**	**13**	**22**
Lettuce	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-
Tomatoes	-	-	-	-	-	-
Green peppers	241	4	5	482	13	22
Red papers	241	10	14	-	-	-
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: Number of Holders,Inputs Applied Area and Quantity of Inputs used in Belg 2014 EC (2021/22GC)
Dire Dawa

Crop type	All cropland Area	All Fertilizer		Natural		DAP		
		Hectare	Quintal	Holder	Hectare	Holder	Hectare	Quintal
All	**1414**	**1133**	**1850**	**9799**	**632**	-	-	-
Cereals	**10**	**10**	-	**879**	**10**	-	-	-
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	10	10	-	879	10	-	-	-
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.....	**210**	**128**	**4**	**2417**	**120**	-	-	-
Lettuce.....	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-
Tomatoes.....	210	128	4	2417	120	-	-	-
Green peppers...	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-
Root Crops.....	**1194**	**995**	**1846**	**6684**	**503**	-	-	-
Beetroot.....	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-
Onion.....	921	804	794	6684	503	-	-	-
Potatoes.....	256	175	1024	-	-	-	-	-
Yam.....	-	-	-	-	-	-	-	-
Garlic.....	17	17	27	-	-	-	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	-	-

Table 10.10 (Cont'd)
Dire Dawa

Crop type	UREA			UREA + DAP			Indigenous seed		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**5896**	**256**	**262**	**-**	**-**	**-**	**17250**	**1133**	**6**
Cereals	**-**	**-**	**-**	**-**	**-**	**-**	**879**	**10**	**6**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	879	10	6
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.....	**181**	**8**	**4**	**-**	**-**	**-**	**3178**	**198**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	181	8	4	-	-	-	3178	198	-
Green peppers...	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Root Crops.....	**5715**	**248**	**259**	**-**	**-**	**-**	**13649**	**924**	**-**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	5715	248	259	-	-	-	9804	651	-
Potatoes.....	-	-	-	-	-	-	4394	256	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	275	17	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	-	-	-

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	**5839**	**281**	**-**	**2079**	**107**	**21717**	**1157**	**268**	**9**
Cereals	**-**	**-**	**-**	**-**	**-**	**879**	**10**	**-**	**-**
Teff	-	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	879	10	-	-
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.....	**450**	**12**	**-**	**544**	**31**	**3359**	**207**	**-**	**-**
Lettuce.....	-	-	-	-	-	-	-	-	-
Head Cabbage....	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage	-	-	-	-	-	-	-	-	-
Tomatoes.....	450	12	-	544	31	3359	207	-	-
Green peppers...	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Root Crops.....	**5658**	**269**	**-**	**1716**	**76**	**18116**	**940**	**268**	**9**
Beetroot.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onion.....	5658	269	-	1716	76	14546	692	268	9
Potatoes.....	-	-	-	-	-	4119	231	-	-
Yam.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	275	17	-	-
Taro/'Godere'...	-	-	-	-	-	-	-	-	-
Sweet potatoes..	-	-	-	-	-	-	-	-	-

Table 1(Cont'd)
Dire Dawa

Crop type	NPS			NPS + Urea		
	Holder	Hectare	Quintal	Holder	Hectare	Quintal
All	**3570**	**193**	**799**	**824**	**52**	**788**
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	**3570**	**193**	**799**	**824**	**52**	**788**
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	549	26	206	549	27	330
Potatoes	3021	150	566	549	25	459
Yam	-	-	-	-	-	-
Garlic	275	17	27	-	-	-
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	6,665	*	*	-	*
18 - 20	82,542	15,503	7,473	6,142	6,434
21 - 24	203,186	34,506	22,309	14,274	23,422
25 - 29	784,820	157,667	80,892	55,676	85,565
30 - 39	2,501,498	680,124	320,989	161,972	302,197
40 - 49	2,499,360	693,882	309,517	137,072	346,188
50 - 59	1,538,005	434,397	203,597	85,287	235,064
60 and above	1,517,120	426,388	171,808	73,562	189,147
Not stated	*	-	-	-	*
Total	**9,133,206**	**2,444,016**	**1,117,638**	**533,985**	**1,189,645**

Table 21. Holders Applying Inputs by Age group
Afar

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	-	-	-	-	-
18 - 20	*	-	-	-	*
21 - 24	*	*	-	*	*
25 - 29	211	*	*	*	180
30 - 39	709	*	96	*	497
40 - 49	1,308	*	93	*	624
50 - 59	274	*	71	*	263
60 and above	98	*	*	*	84
Not stated	*	-	-	-	*
Total	**2,706**	*****	**288**	*****	**1,747**

Table 21.2 Holders Applying Inputs by Age group
Amhara

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	226	-	-	-	-
18 - 20	12,015	4,659	490	3,401	5,686
21 - 24	41,210	7,372	4,533	7,026	17,652
25 - 29	155,083	34,830	16,985	29,400	64,476
30 - 39	546,296	133,960	56,504	79,205	235,140
40 - 49	679,751	124,695	76,061	69,475	293,842
50 - 59	486,251	93,163	54,726	45,069	201,378
60 and above	499,506	86,483	42,712	34,469	158,084
Not stated	-	-	-	-	-
Total	**2,420,338**	**485,163**	**252,011**	**268,044**	**976,258**

Table 21.3 Holders Applying Inputs by Age group
Oromia

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	2,986	*	-	-	563
18 - 20	23,918	*	750	2,359	681
21 - 24	57,933	11,534	4,094	6,530	4,246
25 - 29	230,883	40,213	13,982	23,936	14,500
30 - 39	526,634	135,538	47,220	60,719	35,778
40 - 49	452,512	112,524	43,458	50,532	28,034
50 - 59	283,640	74,940	29,715	30,124	18,036
60 and above	276,708	68,485	27,475	31,683	18,994
Not stated	-	-	-	-	-
Total	**1,855,214**	**444,866**	**166,694**	**205,882**	**120,833**

Table 21.4 Holders Applying Inputs by Age group
Somali

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	-	-	-	-	-
18 - 20	*	-	-	-	*
21 - 24	-	-	-	-	-
25 - 29	*	-	-	-	*
30 - 39	577	148	*	*	337
40 - 49	761	64	-	64	*
50 - 59	732	84	*	*	*
60 and above	312	*	-	-	*
Not stated	-	-	-	-	-
Total	**2,539**	**341**	*****	**165**	*****

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	*	-	-	-	-
21 - 24	*	-	-	-	-
25 - 29	15,699	*	*	-	-
30 - 39	50,134	8,677	*	-	*
40 - 49	44,273	*	2,145	-	*
50 - 59	34,270	*	*	*	*
60 and above	50,583	*	*	*	-
Not stated	-	-	-	-	-
Total	**201,750**	*****	*****	*****	*****

Table 21.6 Holders Applying Inputs by Age group
SNNP

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	2,381	*	-	-	-
18 - 20	40,938	8,326	5,430	*	-
21 - 24	95,867	11,480	11,680	*	*
25 - 29	351,224	66,684	40,784	*	3,238
30 - 39	1,272,019	341,669	179,850	18,016	16,099
40 - 49	1,234,253	411,544	165,622	15,117	12,305
50 - 59	688,027	238,666	104,459	8,209	10,235
60 and above	646,079	239,333	85,101	6,303	10,523
Not stated	-	-	-	-	-
Total	**4,330,788**	**1,317,824**	**592,927**	**50,003**	**53,159**

Table 21.7 Holders Applying Inputs by Age group
Sidama

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	-	-	-	-	-
18 - 20	1,866	1,261	804	-	-
21 - 24	4,641	3,546	1,968	-	-
25 - 29	27,075	13,390	5,304	228	-
30 - 39	91,018	54,917	31,322	2,928	2,887
40 - 49	74,522	39,205	20,114	605	2,152
50 - 59	40,094	19,641	12,455	284	1,076
60 and above	41,337	22,753	15,304	289	359
Not stated	-	-	-	-	-
Total	**280,553**	**154,713**	**87,271**	**4,333**	**6,475**

Table 21.8 Holders Applying Inputs by Age group
Gambela

Age group	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Below 18	*	-	-	-	-
18 - 20	166	-	-	-	-
21 - 24	522	-	*	-	-
25 - 29	1,448	-	151	*	-
30 - 39	4,169	-	235	91	-
40 - 49	3,678	*	232	186	*
50 - 59	1,735	-	162	51	-
60 and above	1,548	*	140	100	*
Not stated	-	-	-	-	-
Total	**13,284**	*****	**952**	**451**	*****

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	432	*	-	*	432
25 - 29	*	-	-	-	*
30 - 39	1,105	*	-	432	1,105
40 - 49	*	-	-	-	*
50 - 59	*	-	-	-	*
60 and above	432	*	-	-	432
Not stated	-	-	-	-	-
Total	**3,124**	**1,346**	**-**	**673**	**3,124**

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	2,428	*	*	*	2,428
30 - 39	8,836	4,100	*	*	8,469
40 - 49	8,111	*	*	*	7,562
50 - 59	2,740	*	*	*	2,466
60 and above	*	-	-	-	*
Not stated	-	-	-	-	-
Total	**22,908**	**10,290**	*****	*****	**21,717**

Table 22. Holders Applying Inputs by Educational Status
National

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	4,769,990	1,189,111	540,356	258,743	638,552
Literate	669,491	139,494	64,196	56,363	195,446
Grades 1 - 3	1,007,185	273,255	141,645	56,559	104,473
Grades 4 - 6	1,568,675	472,487	197,931	92,367	153,264
Grades 7 - 8	729,898	238,866	110,994	39,937	56,026
Grades 9 - 11	342,620	114,195	53,578	27,240	38,303
Grade 12 complete	34,741	12,515	6,047	*	*
Above grade 12	10,607	4,093	2,890	-	1,199
Total	**9,133,206**	**2,444,016**	**1,117,638**	**533,985**	**1,189,645**

Table 22.1 Holders Applying Inputs by Educational Status
Afar

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	2,129	*	162	*	1,303
Literate	*	*	*	*	*
Grades 1 - 3	161	*	*	*	*
Grades 4 - 6	189	*	*	*	*
Grades 7 - 8	*	*	-	*	*
Grades 9 - 11	*	*	*	*	*
Grade 12 complete	*	*	-	*	*
Above grade 12	-	-	-	-	-
Total	**2,706**	*****	**288**	*****	**1,747**

Table 22. 2 Holders Applying Inputs by Educational Status
Amhara

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	1,386,382	294,608	150,035	157,067	543,237
Literate	458,348	69,651	42,391	43,669	185,907
Grades 1 - 3	140,596	28,578	24,651	16,277	75,717
Grades 4 - 6	281,153	56,988	23,295	33,917	110,736
Grades 7 - 8	99,076	21,814	8,374	6,726	31,741
Grades 9 - 11	51,232	12,200	3,265	*	27,147
Grade 12 complete	3,102	*	-	*	*
Above grade 12	449	-	-	-	223
Total	**2,420,338**	**485,163**	**252,011**	**268,044**	**976,258**

Table 22.3 Holders Applying Inputs by Educational Status
Oromia

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	879,857	179,261	73,708	82,081	53,507
Literate	100,167	25,211	9,525	10,751	6,928
Grades 1 - 3	274,547	64,849	22,574	30,331	19,355
Grades 4 - 6	355,150	95,594	31,335	44,223	21,193
Grades 7 - 8	165,251	49,772	18,528	24,766	11,521
Grades 9 - 11	68,710	24,801	8,675	12,839	6,659
Grade 12 complete	7,660	4,399	1,533	*	*
Above grade 12	3,871	*	*	-	*
Total	**1,855,214**	**444,866**	**166,694**	**205,882**	**120,833**

Table 22.4 Holders Applying Inputs by Educational Status
Somali

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	1,493	148	*	*	514
Literate	-	-	-	-	-
Grades 1 - 3	*	-	-	-	*
Grades 4 - 6	*	104	*	*	*
Grades 7 - 8	265	-	*	-	*
Grades 9 - 11	*	*	*	-	*
Grade 12 complete	*	-	-	*	*
Above grade 12	*	*	-	-	*
Total	**2,539**	**341**	*****	**165**	*****

Table 22.5 Holders Applying Inputs by Educational Status
Benishangul Gumuz

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	115,847	*	*	*	*
Literate	*	*	-	-	-
Grades 1 - 3	22,564	*	-	-	-
Grades 4 - 6	31,572	*	-	*	*
Grades 7 - 8	19,911	*	2,145	-	*
Grades 9 - 11	4,946	*	*	-	*
Grade 12 complete	-	-	-	-	-
Above grade 12	-	-	-	-	-
Total	**201,750**	*****	*****	*****	*****

Table 22.6 Holders Applying Inputs by Educational Status
SNNP

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	2,263,964	641,449	273,780	14,781	23,200
Literate	99,084	41,401	11,037	*	*
Grades 1 - 3	513,209	152,260	79,882	8,502	5,663
Grades 4 - 6	817,768	263,407	121,738	11,750	12,616
Grades 7 - 8	404,962	141,749	65,980	7,748	8,009
Grades 9 - 11	204,095	69,080	35,599	*	*
Grade 12 complete	21,805	5,407	3,137	*	-
Above grade 12	5,900	3,070	*	-	-
Total	**4,330,788**	**1,317,824**	**592,927**	**50,003**	**53,159**

Table 22.7 Holders Applying Inputs by Educational Status
Sidama

\- - - -

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	99,114	56,386	30,689	2,170	2,511
Literate	2,756	564	878	-	-
Grades 1 - 3	52,791	23,901	13,893	1,209	1,094
Grades 4 - 6	75,386	44,491	20,770	457	1,794
Grades 7 - 8	36,506	22,321	15,597	498	1,076
Grades 9 - 11	11,786	5,673	3,780	-	-
Grade 12 complete	1,926	1,378	1,378	-	-
Above grade 12	287	-	287	-	-
Total	**280,553**	**154,713**	**87,271**	**4,333**	**6,475**

Table 22.8 Holders Applying Inputs by Educational Status
Gambela

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	7,891	-	434	275	-
Literate	124	-	*	-	-
Grades 1 - 3	749	*	77	*	-
Grades 4 - 6	1,680	*	190	68	*
Grades 7 - 8	1,367	-	106	*	-
Grades 9 - 11	1,264	*	101	51	*
Grade 12 complete	153	-	-	-	-
Above grade 12	56	-	*	-	-
Total	**13,284**	*****	**952**	**451**	*****

Table 22.9 Holders Applying Inputs by Educational Status
Hareri

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	*	432	-	*	*
Literate	*	*	-	*	*
Grades 1 - 3	*	*	-	*	*
Grades 4 - 6	623	*	-	-	623
Grades 7 - 8	-	-	-	-	-
Grades 9 - 11	-	-	-	-	-
Grade 12 complete	-	-	-	-	-
Above grade 12	-	-	-	-	-
Total	**3,124**	**1,346**	**-**	**673**	**3,124**

Table 22.10 Holders Applying Inputs by Educational Status
Dire Dawa

Educational Status of Holders	All Crop Holders	Fertilizer	Improved Seed	Pesticide	Irrigation
Illiterate	11,915	*	*	*	10,999
Literate	*	*	*	*	*
Grades 1 - 3	2,115	1,105	*	-	2,115
Grades 4 - 6	4,692	*	*	*	4,692
Grades 7 - 8	*	*	*	*	*
Grades 9 - 11	*	*	-	-	*
Grade 12 complete	-	-	-	-	-
Above grade 12	-	-	-	-	-
Total	**22,908**	**10,290**	*****	*****	**21,717**

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	4,289,067.00	410,834.00	195,349.00	119,352.00	4,382.00
Crop disease	356,571.00	13,668.00	4,836.00	2,531.00	*
Frost or floods	88,076.00	6,466.00	2,789.00	*	-
Locust	*	*	*	-	-
Shortage of rain	3,197,412.00	351,407.00	168,345.00	106,957.00	4,065.00
Too much rain	103,354.00	5,453.00	2,389.00	2,091.00	58.00
Wild animals	96,469.00	1,815.00	564.00	*	-
Birds	11,701.00	*	*	*	-
Hailstone	184,737.00	6,859.00	4,914.00	512.00	-
Pests	339,461.00	16,488.00	8,705.00	3,552.00	110.00
Weeds	61,875.00	1,705.00	470.00	618.00	*
Others	171,002.00	6,648.00	2,169.00	1,630.00	*

Table 23.1 Number 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	1,141.00	253.00	*	-	-
Crop disease	*	*	*	-	-
Frost or floods	*	*	*	-	-
Locust	-	-	-	-	-
Shortage of rain	*	*	*	-	-
Too much rain	-	-	-	-	-
Wild animals	*	*	*	-	-
Birds	-	-	-	-	-
Hailstone	-	-	-	-	-
Pests	576.00	82.00	*	-	-
Weeds	*	*	*	-	-
Others	*	*	*	-	-

Table 23.2 Number 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	1,325,223.00	126,841.00	49,301.00	53,407.00	151.00
Crop disease	234,015.00	9,704.00	3,325.00	1,440.00	*
Frost or floods	24,043.00	1,677.00	1,482.00	95.00	-
Locust	-	-	-	-	-
Shortage of rain	818,487.00	102,282.00	37,130.00	49,241.00	77.00
Too much rain	33,812.00	3,482.00	1,866.00	1,512.00	-
Wild animals	5,530.00	25.00	*	3.00	-
Birds	1,807.00	5.00	-	-	-
Hailstone	178,421.00	6,342.00	4,694.00	483.00	-
Pests	90,657.00	1,952.00	246.00	530.00	-
Weeds	*	*	*	-	*
Others	69,128.00	1,203.00	*	*	-

Table 23.4 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	853,880.00	156,124.00	99,497.00	32,577.00	900.00
Crop disease	42,507.00	1,490.00	672.00	249.00	13.00
Frost or floods	4,694.00	206.00	*	*	-
Locust	-	-	-	-	-
Shortage of rain	657,558.00	139,438.00	89,850.00	29,728.00	719.00
Too much rain	10,612.00	743.00	332.00	165.00	58.00
Wild animals	14,798.00	721.00	*	*	-
Birds	*	*	*	*	-
Hailstone	*	*	*	*	-
Pests	102,892.00	9,607.00	6,580.00	1,029.00	110.00
Weeds	9,311.00	592.00	*	*	-
Others	28,912.00	*	*	*	-

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	*	35.00	*	-	-
Crop disease	*	*	*	-	-
Frost or floods	-	-	-	-	-
Locust	-	-	-	-	-
Shortage of rain	*	*	*	-	-
Too much rain	-	-	-	-	-
Wild animals	*	*	-	-	-
Birds	-	-	-	-	-
Hailstone	-	-	-	-	-
Pests	359.00	16.00	*	-	-
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	29,369.00	*	-	*	-
Crop disease	*	*	-	-	-
Frost or floods	*	*	-	-	-
Locust	-	-	-	-	-
Shortage of rain	20,182.00	*	-	*	-
Too much rain	*	*	-	-	-
Wild animals	-	-	-	-	-
Birds	-	-	-	-	-
Hailstone	-	-	-	-	-
Pests	*	*	-	-	-
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	1,940,000.00	118,444.00	44,450.00	32,700.00	*
Crop disease	60,855.00	*	*	*	*
Frost or floods	58,213.00	4,579.00	*	*	-
Locust	*	*	*	-	-
Shortage of rain	1,590,108.00	101,453.00	39,680.00	27,378.00	*
Too much rain	54,361.00	1,181.00	*	406.00	-
Wild animals	75,307.00	1,034.00	*	*	-
Birds	*	*	-	*	-
Hailstone	2,385.00	*	*	*	-
Pests	139,637.00	4,577.00	*	1,984.00	-
Weeds	48,508.00	901.00	170.00	*	-
Others	67,618.00	2,703.00	447.00	687.00	-

Table 23.7 Number 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	113,237.00	7,999.00	1,749.00	604.00	-
Crop disease	3,007.00	32.00	13.00	-	-
Frost or floods	-	-	-	-	-
Locust	-	-	-	-	-
Shortage of rain	104,019.00	7,791.00	1,639.00	598.00	-
Too much rain	1,017.00	6.00	-	-	-
Wild animals	511.00	7.00	-	-	-
Birds	-	-	-	-	-
Hailstone	-	-	-	-	-
Pests	984.00	100.00	97.00	-	-
Weeds	757.00	3.00	-	-	-
Others	4,634.00	60.00	-	5.00	-

Table 23.8 Number of Holders and Damaged Crop Area in Hectare by Category of Crops and Cause of Damage Gambela

Cause of damage	Crop category				
	All holders	All crops	Cereals	Pulses	Oilseeds
All damage	4,791.00	252.00	115.00	53.00	*
Crop disease	*	10.00	-	10.00	-
Frost or floods	*	*	*	*	-
Locust	*	*	*	-	-
Shortage of rain	316.00	*	*	*	-
Too much rain	413.00	21.00	12.00	8.00	-
Wild animals	267.00	*	*	*	-
Birds	*	*	*	*	-
Hailstone	382.00	37.00	14.00	*	-
Pests	2,282.00	89.00	44.00	*	*
Weeds	517.00	22.00	9.00	*	-
Others	156.00	6.00	*	*	*

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	*	*	*	-	-
Crop disease	-	-	-	-	-
Frost or floods	-	-	-	-	-
Locust	-	-	-	-	-
Shortage of rain	*	*	-	-	-
Too much rain	-	-	-	-	-
Wild animals	-	-	-	-	-
Birds	*	*	*	-	-
Hailstone	-	-	-	-	-
Pests	673.00	*	*	-	-
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	18,663.00	660.00	*	-	-
Crop disease	11,772.00	326.00	-	-	-
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 hth stratum.

M_h is the measure of size of the hth stratum as obtained from the sampling frame.

m_{hi} is the measure of size of the ith sample EA in the hth stratum obtained from the sampling frame.

H_{hi} is the total number of agricultural households of the ith sample EA in the hth stratum.

h_{hi} is the number of sample agricultural households successfully covered in the ith sample EA in the hth stratum.

a_{hij} is the value of area for agricultural household j, in the ith EA in the hth 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, $H_{hi} = a_{hi} * \bar{Y}_{hi}$

Where,

$\bar{Y}_{hi}$ is average yield per square meter of a specific crop in the ith EA in the hth stratum.

H_h is estimate of total quantity of production of a specific crop in the hth 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 ith 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 ith 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.

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

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:

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

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 2021/229GC (2014E.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	**6,319,418.00**	**134,171.96**	**2.12**	**1,703,256.33**	**77,358.69**	**4.54**	**13,395,391.98**	**670,812.21**	**5.01**
Cereals..... .	**5,150,832.00**	**121,097.99**	**2.35**	**1,265,120.75**	**66,493.84**	**5.26**	**10,882,678.00**	**631,218.91**	**5.80**
Teff..... .	459,628.00	49,936.47	10.86	152,356.92	20,321.32	13.34	1,080,172.63	185,565.58	17.18
Barley..... .	847,343.00	58,341.23	6.89	177,342.95	13,339.27	7.52	959,010.34	100,453.94	10.47
Wheat..... .	331,235.00	39,464.75	11.91	111,522.64	33,208.53	29.78	790,307.36	253,388.15	32.06
Maize..... .	3,933,556.00	108,583.70	2.76	744,931.79	42,934.59	5.76	7,483,986.52	471,413.75	6.30
Sorghum..... .	218,060.00	31,188.70	14.30	67,199.58	13,088.59	19.48	500,385.88	117,566.37	23.50
Finger millet..... .	7,494.00	2,448.53	32.67	870.09	354.84	40.78	-	-	-
Oats/"Aja"..... .	94,073.00	33,378.18	35.48	10,881.28	3,237.19	29.75	68,815.28	22,913.55	33.30
Rice..... .	204.00	203.52	99.93	15.50	15.49	99.93	-	-	-
Pulses..... .	**3,384,764.00**	**105,161.80**	**3.11**	**417,717.60**	**17,435.33**	**4.17**	**2,450,846.12**	**107,058.63**	**4.37**
Horse beans..... .	78,600.00	8,218.15	10.46	4,757.91	594.93	12.50	32,102.81	5,321.23	16.58
Field peas..... .	176,078.00	18,563.84	10.54	39,554.82	6,576.11	16.63	210,413.66	53,681.82	25.51
White Haricot beans.... .	238,521.00	28,871.43	12.10	22,217.66	4,657.18	20.96	135,244.15	27,773.13	20.54
Red Haricot beans..... .	2,781,724.00	96,741.11	3.48	238,440.96	12,755.80	5.35	1,390,616.31	81,154.90	5.84
Red Chick-peas..... .	39,786.00	6,337.33	15.93	6,073.57	1,083.26	17.84	12,433.02	3,810.62	30.65
White Chick-peas..... .	5,084.00	4,038.95	79.45	671.67	642.32	95.63	-	-	-
Lentils..... .	71,381.00	12,674.14	17.76	13,998.32	5,063.81	36.17	33,053.78	10,099.67	30.56
Vetch..... .	23,082.00	9,368.09	40.59	4,670.11	1,698.74	36.37	12,626.13	5,067.09	40.13
Soya beans..... .	3,122.00	1,766.69	56.59	505.67	476.34	94.20	-	-	-
Fenugreek..... .	30,603.00	7,679.34	25.09	1,784.49	471.28	26.41	9,978.80	3,355.95	33.63
Mung bean/"Masho"..... .	116,564.00	19,860.21	17.04	84,721.44	5,017.59	5.92	614,377.45	28,820.77	4.69
Gibto..... .	1,429.00	1,426.79	99.84	320.97	320.46	99.84	-	-	-
Oilseeds..... .	**94,671.00**	**17,904.16**	**18.91**	**20,417.98**	**6,444.72**	**31.56**	**61,867.85**	**16,064.53**	**25.97**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	7,176.00	2,935.46	40.91	524.75	396.62	75.58	271.17	246.92	91.06
Groundnuts..... .	43,077.00	11,770.59	27.32	9,318.44	4,081.96	43.81	37,681.14	14,209.77	37.71
Sunflower..... .	12,034.00	4,177.70	34.72	1,584.68	628.85	39.68	19,582.77	7,766.25	39.66
Sesame..... .	21,712.00	11,539.40	53.15	8,274.94	4,845.25	58.55	4,332.77	2,569.48	59.30
Rapeseed..... .	**13,895.00**	**4,922.84**	**35.43**	**715.18**	**301.90**	**42.21**	**-**	**-**	**-**
Vegetables..... .	2,360,326.00	85,236.37	3.61	89,778.23	5,359.75	5.97	8,745,654.14	1,044,008.16	11.94
Lettuce..... .	2,075.00	447.26	21.56	11.55	6.26	54.22	161.09	161.01	99.95
Head Cabbage..... .	53,536.00	10,340.22	19.31	2,179.95	985.26	45.20	142,261.57	86,242.17	60.62
Ethiopian Cabbage..... .	2,110,063.00	81,072.64	3.84	75,853.10	4,542.01	5.99	8,336,238.80	1,036,004.32	12.43
Tomatoes..... .	67,483.00	10,986.47	16.28	5,075.92	1,629.11	32.09	131,969.05	64,156.38	48.61
Green peppers..... .	189,975.00	24,220.44	12.75	5,038.68	825.19	16.38	134,562.81	22,933.25	17.04
Red peppers..... .	51,136.00	8,210.68	16.06	1,549.29	285.68	18.44	460.81	31.76	6.89
Swiss chard..... .	5,753.00	1,568.19	27.26	69.74	26.59	38.13	-	-	-
Root Crops..... .	**3,650,163.00**	**119,796.89**	**3.28**	**287,755.88**	**15,629.90**	**5.43**	**33,043,429.03**	**2,366,355.60**	**7.16**
Beetroot..... .	45,920.00	9,380.99	20.43	1,360.74	223.68	16.44	55,425.22	9,849.69	17.77
Carrot..... .	29,217.00	5,120.01	17.52	1,031.81	285.01	27.62	19,912.88	8,631.32	43.35
Onion..... .	245,938.00	24,791.98	10.08	17,508.86	3,212.39	18.35	644,604.79	159,522.05	24.75
Potatoes..... .	2,896,315.00	117,555.99	4.06	236,123.70	14,973.13	6.34	28,760,743.24	2,282,060.69	7.93
Yam/"Boye"..... .	55,073.00	10,329.49	18.76	1,514.77	397.41	26.24	42,996.91	25,763.95	59.92
Garlic..... .	231,152.00	23,664.52	10.24	9,298.81	2,105.93	22.65	310,045.79	106,190.15	34.25
Taro/"Godere"..... .	137,705.00	17,790.78	12.92	4,444.54	798.17	17.96	328,194.31	155,198.16	47.29
Sweet potatoes..... .	343,691.00	37,505.58	10.91	16,472.65	2,679.28	16.27	2,881,505.89	613,608.38	21.29

Table 24.1 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**2,101.00**	**374.33**	**17.82**	**1,833.24**	**351.05**	**19.15**	**16,841.30**	**4,325.44**	**25.68**
Cereals..... .	**2,090.00**	**379.16**	**18.14**	**1,822.80**	**359.01**	**19.70**	**16,841.30**	**4,325.44**	**25.68**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	1,890.00	494.42	26.15	1,730.30	426.38	24.64	16,841.30	4,325.44	25.68
Sorghum..... .	208.00	183.03	87.94	92.50	79.35	85.79	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**11.00**	**10.48**	**94.49**	**10.44**	**9.86**	**94.49**	**-**	**-**	**-**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	-	-	-	-	-	-	-	-	-
Red Haricot beans..... .	-	-	-	-	-	-	-	-	-
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	11.00	10.48	94.49	10.44	9.86	94.49	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables..... .	189.00	125.62	66.38	172.66	139.62	80.87	-	-	-
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage..... .	-	-	-	-	-	-	-	-	-
Tomatoes..... .	65.00	61.04	93.33	59.23	55.28	93.33	-	-	-
Green peppers..... .	65.00	61.04	93.33	92.50	86.34	93.34	-	-	-
Red peppers..... .	58.00	55.88	95.63	20.93	20.07	95.89	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	**416.00**	**300.71**	**72.27**	**310.03**	**173.70**	**56.03**	**-**	**-**	**-**
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	416.00	300.71	72.27	310.03	173.70	56.03	-	-	-
Potatoes..... .	-	-	-	-	-	-	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	-	-	-	-	-	-	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	-	-	-	-	-	-	-	-	-

Table 24.2 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**1,121,636.00**	**65,208.28**	**5.81**	**268,497.05**	**17,458.40**	**6.50**	**1,716,690.01**	**172,609.24**	**10.05**
Cereals..... .	**1,025,740.00**	**64,686.49**	**6.31**	**174,096.38**	**16,673.93**	**9.58**	**1,086,033.19**	**171,363.06**	**15.78**
Teff..... .	141,424.00	34,158.43	24.15	32,257.78	13,531.87	41.95	347,648.55	148,562.97	42.73
Barley..... .	470,905.00	42,523.44	9.03	106,462.40	9,815.83	9.22	435,741.40	68,196.83	15.65
Wheat..... .	172,540.00	29,376.90	17.03	9,346.79	1,779.54	19.04	58,260.03	10,910.65	18.73
Maize..... .	361,444.00	40,332.30	11.16	22,824.13	2,997.69	13.13	231,104.93	33,783.15	14.62
Sorghum..... .	1,667.00	1,053.50	63.21	187.65	140.33	74.78	-	-	-
Finger millet..... .	1,142.00	1,140.17	99.88	28.77	28.73	99.88	-	-	-
Oats/'Aja'..... .	67,993.00	32,593.01	47.94	2,988.86	2,006.72	67.14	13,278.27	8,883.13	66.90
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**200,695.00**	**15,315.70**	**7.63**	**93,662.39**	**2,930.02**	**3.13**	**626,625.11**	**8,521.35**	**1.36**
Horse beans..... .	27,061.00	2,507.32	9.27	1,896.57	82.34	4.34	16,353.64	-	-
Field peas..... .	23,824.00	2,714.93	11.40	2,415.66	174.56	7.23	3,856.77	-	-
White Haricot beans.... .	1,028.00	735.58	71.54	214.78	183.62	85.49	-	-	-
Red Haricot beans..... .	14,799.00	4,164.28	28.14	1,736.39	452.92	26.08	3,700.13	3,250.08	87.84
Red Chick-peas..... .	38,767.00	6,309.50	16.28	5,743.18	1,059.94	18.46	12,433.02	3,810.62	30.65
White Chick-peas..... .	3,975.00	3,970.21	99.88	642.78	641.99	99.88	-	-	-
Lentils..... .	52,102.00	2,244.65	4.31	6,366.27	328.17	5.15	18,410.43	-	-
Vetch..... .	22,107.00	9,367.50	42.37	4,488.03	1,697.96	37.83	12,626.13	5,067.09	40.13
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	4,745.00	-	-	303.40	-	-	1,103.40	-	-
Mung bean/"Masho"..... .	54,114.00	1,015.28	1.88	69,534.37	331.71	0.48	558,141.57	542.58	0.10
Gibto..... .	1,429.00	1,426.79	99.84	320.97	320.46	99.84	-	-	-
Oilseeds..... .	**5,534.00**	**2,694.36**	**48.69**	**738.27**	**487.93**	**66.09**	**4,031.72**	**3,753.86**	**93.11**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	4,249.00	2,420.83	56.98	430.53	391.45	90.92	271.17	246.92	91.06
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	1,285.00	1,283.50	99.87	307.75	307.34	99.87	3,760.55	3,755.60	99.87
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables..... .	162,171.00	22,747.67	14.03	8,183.38	2,413.65	29.49	215,589.74	111,663.87	51.79
Lettuce..... .	701.00	223.14	31.82	6.00	5.85	97.39	-	-	-
Head Cabbage..... .	16,035.00	7,629.91	47.58	1,183.11	947.24	80.06	92,484.80	84,524.80	91.39
Ethiopian Cabbage..... .	22,999.00	5,383.46	23.41	1,268.10	692.09	54.58	47,132.75	38,913.13	82.56
Tomatoes..... .	30,148.00	8,336.19	27.65	2,000.44	856.05	42.79	26,738.88	10,017.50	37.46
Green peppers..... .	76,023.00	17,309.41	22.77	2,737.99	679.15	24.80	48,772.50	12,944.05	26.54
Red peppers..... .	35,504.00	6,955.85	19.59	977.85	118.85	12.15	460.81	31.76	6.89
Swiss chard..... .	1,581.00	223.14	14.11	9.90	8.10	81.85	-	-	-
Root Crops..... .	**1,485,574.00**	**88,346.69**	**5.95**	**64,940.19**	**4,996.66**	**7.69**	**3,782,794.25**	**293,279.80**	**7.75**
Beetroot..... .	5,638.00	3,151.64	55.90	265.80	165.00	62.08	-	-	-
Carrot..... .	7,541.00	2,516.42	33.37	161.10	56.09	34.81	82.32	56.72	68.90
Onion..... .	154,541.00	22,462.36	14.53	11,167.37	3,108.74	27.84	337,339.63	88,800.36	26.32
Potatoes..... .	1,280,498.00	91,498.37	7.15	48,170.97	4,017.08	8.34	3,364,619.32	285,275.64	8.48
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	69,853.00	13,736.20	19.66	4,627.94	1,418.35	30.65	80,752.98	31,004.60	38.39
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	17,546.00	15,327.50	87.35	547.01	525.53	96.07	-	-	-

Table 24.3 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**1,451,086.00**	**53,674.56**	**3.70**	**675,470.55**	**59,944.40**	**8.87**	**5,238,937.96**	**490,899.72**	**9.37**
Cereals..... .	**1,142,167.00**	**52,348.30**	**4.58**	**552,919.82**	**51,765.47**	**9.36**	**4,564,741.35**	**455,684.32**	**9.98**
Teff..... .	275,107.00	35,375.81	12.86	95,073.29	13,988.97	14.71	610,146.21	105,905.49	17.36
Barley..... .	197,234.00	25,591.72	12.98	55,720.65	8,616.51	15.46	398,669.12	69,669.27	17.48
Wheat..... .	155,834.00	26,297.45	16.88	101,896.61	33,159.86	32.54	730,583.85	253,149.55	34.65
Maize..... .	730,334.00	46,836.46	6.41	262,551.84	29,645.45	11.29	2,492,993.58	319,567.43	12.82
Sorghum..... .	84,228.00	17,942.80	21.30	29,733.93	6,718.97	22.60	276,811.58	70,169.85	25.35
Finger millet..... .	528.00	378.29	71.70	86.68	73.56	84.86	-	-	-
Oats/'Aja'..... .	25,072.00	7,151.85	28.53	7,856.82	2,540.02	32.33	55,537.01	21,121.57	38.03
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**676,247.00**	**42,980.21**	**6.36**	**120,086.90**	**13,267.33**	**11.05**	**658,159.63**	**81,959.99**	**12.45**
Horse beans..... .	8,659.00	1,768.08	20.42	713.09	246.66	34.59	3,920.30	1,593.85	40.66
Field peas..... .	98,420.00	14,653.84	14.89	32,340.71	6,335.56	19.59	193,855.87	53,388.84	27.54
White Haricot beans.... .	124,775.00	21,418.79	17.17	15,405.62	4,346.45	28.21	92,420.66	21,982.62	23.79
Red Haricot beans..... .	393,784.00	30,267.94	7.69	52,227.99	7,659.41	14.67	288,210.54	48,080.39	16.68
Red Chick-peas..... .	1,019.00	593.23	58.22	330.39	223.57	67.67	-	-	-
White Chick-peas..... .	469.00	378.31	80.59	20.90	18.99	90.86	-	-	-
Lentils..... .	18,403.00	12,443.02	67.61	7,601.48	5,053.07	66.47	14,643.34	10,099.67	68.97
Vetch..... .	974.00	104.93	10.77	182.09	51.48	28.27	-	-	-
Soya beans..... .	364.00	363.47	99.94	18.62	18.61	99.94	-	-	-
Fenugreek..... .	24,288.00	7,620.90	31.38	1,475.67	471.27	31.94	8,873.03	3,355.95	37.82
Mung bean/"Masho"..... .	40,789.00	17,333.26	42.49	9,770.35	4,332.43	44.34	56,235.88	28,815.66	51.24
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	**9,332.00**	**2,635.53**	**28.24**	**2,463.83**	**731.71**	**29.70**	**16,036.98**	**5,535.88**	**34.52**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	225.00	223.72	99.63	14.48	14.43	99.63	-	-	-
Groundnuts..... .	6,346.00	2,282.03	35.96	1,918.46	672.26	35.04	15,807.73	5,539.18	35.04
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	868.00	604.18	69.59	381.47	284.74	74.64	229.24	171.08	74.63
Rapeseed..... .	**1,893.00**	**1,234.48**	**65.21**	**149.42**	**134.63**	**90.11**	**-**	**-**	**-**
Vegetables..... .	332,627.00	29,879.77	8.98	22,024.04	3,231.23	14.67	5,884,825.83	1,024,974.17	17.42
Lettuce..... .	604.00	387.63	64.21	3.86	2.25	58.17	161.09	161.01	99.95
Head Cabbage..... .	9,470.00	2,256.48	23.83	326.48	123.81	37.92	31,989.38	16,728.64	52.29
Ethiopian Cabbage..... .	297,554.00	28,089.31	9.44	18,729.48	2,885.14	15.40	5,736,874.00	1,022,291.01	17.82
Tomatoes..... .	14,835.00	4,947.97	33.35	2,093.59	1,340.81	64.04	84,940.19	61,316.17	72.19
Green peppers..... .	29,415.00	7,810.88	26.55	631.33	239.09	37.87	30,861.18	10,853.14	35.17
Red peppers..... .	3,468.00	2,545.22	73.40	204.81	149.34	72.92	-	-	-
Swiss chard..... .	1,139.00	578.08	50.76	34.48	24.18	70.11	-	-	-
Root Crops..... .	**498,181.00**	**34,600.87**	**6.95**	**67,081.51**	**9,413.05**	**14.03**	**5,890,276.65**	**998,175.74**	**16.95**
Beetroot..... .	14,186.00	2,822.50	19.90	793.39	82.97	10.46	41,479.58	2,906.92	7.01
Carrot..... .	10,763.00	2,479.15	23.03	711.53	264.27	37.14	19,830.56	8,631.13	43.52
Onion..... .	17,117.00	2,301.79	13.45	2,315.61	473.58	20.45	91,786.41	20,741.04	22.60
Potatoes..... .	423,257.00	33,261.33	7.86	59,121.04	9,218.28	15.59	5,548,566.13	993,125.68	17.90
Yam/'Boye'..... .	199.00	197.92	99.64	4.59	4.58	99.72	-	-	-
Garlic..... .	58,765.00	10,229.95	17.41	3,942.48	1,547.47	39.25	178,353.45	100,685.96	56.45
Taro/'Godere'..... .	2,637.00	1,266.52	48.02	65.59	31.43	47.92	-	-	-
Sweet potatoes..... .	2,158.00	835.11	38.71	127.28	93.57	73.51	10,260.51	9,669.71	94.24

Table 24.4 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**2,047.00**	**672.35**	**32.85**	**221.63**	**92.46**	**41.72**	**915.37**	**435.37**	**47.56**
Cereals..... .	**1,806.00**	**589.65**	**32.64**	**215.55**	**93.21**	**43.24**	**915.37**	**435.37**	**47.56**
Teff..... .	221.00	215.10	97.38	13.90	13.64	98.14	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	138.00	134.53	97.45	0.05	0.05	97.50	-	-	-
Maize..... .	1,382.00	648.34	46.91	164.27	75.24	45.80	915.37	435.37	47.56
Sorghum..... .	84.00	47.84	56.81	37.33	36.32	97.29	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**240.00**	**160.38**	**66.76**	**6.09**	**5.91**	**97.13**	**-**	**-**	**-**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	-	-	-	-	-	-	-	-	-
Red Haricot beans..... .	240.00	160.38	66.76	6.09	5.91	97.13	-	-	-
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables..... .	297.00	56.18	18.94	13.41	3.68	27.45	-	-	-
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	44.00	43.50	98.86	0.26	0.26	98.86	-	-	-
Ethiopian Cabbage..... .	-	-	-	-	-	-	-	-	-
Tomatoes..... .	253.00	18.90	7.48	13.15	3.44	26.16	-	-	-
Green peppers..... .	-	-	-	-	-	-	-	-	-
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	**299.00**	**156.36**	**52.27**	**19.77**	**9.50**	**48.05**	**-**	**-**	**-**
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	255.00	114.49	44.87	17.83	8.23	46.16	-	-	-
Potatoes..... .	-	-	-	-	-	-	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	-	-	-	-	-	-	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	44.00	43.50	98.86	1.94	1.92	98.86	-	-	-

Table 24 .5 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**143,986.00**	**55,591.72**	**38.61**	**7,259.60**	**3,243.44**	**44.68**	**71,300.70**	**29,424.02**	**41.27**
Cereals..... .	**18,921.00**	**11,244.58**	**59.43**	**612.61**	**563.44**	**91.97**	**4,015.76**	**3,720.99**	**92.66**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	18,921.00	11,244.58	59.43	612.61	563.44	91.97	4,015.76	3,720.99	92.66
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**133,818.00**	**53,318.99**	**39.84**	**6,646.99**	**2,811.40**	**42.30**	**67,284.93**	**26,825.22**	**39.87**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	13,092.00	6,771.11	51.72	901.40	790.24	87.67	9,491.48	8,343.00	87.90
Red Haricot beans..... .	120,727.00	48,717.04	40.35	5,745.59	2,316.96	40.33	57,793.45	22,353.52	38.68
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables..... .	60,463.00	17,228.72	28.49	2,863.26	876.86	30.62	135,397.90	46,660.69	34.46
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	2,507.00	2,009.68	80.16	156.10	150.24	96.25	-	-	-
Ethiopian Cabbage..... .	47,816.00	18,178.82	38.02	2,086.24	948.95	45.49	110,170.85	50,618.24	45.95
Tomatoes..... .	2,507.00	2,009.68	80.16	307.02	301.89	98.33	16,262.41	15,934.52	97.98
Green peppers..... .	7,633.00	4,676.09	61.26	301.03	254.92	84.68	8,964.64	7,355.72	82.05
Red peppers..... .	671.00	670.33	99.95	12.88	12.87	99.95	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	**10,200.00**	**5,176.45**	**50.75**	**165.95**	**99.97**	**60.24**	**10,702.21**	**9,493.91**	**88.71**
Beetroot..... .	671.00	670.33	99.95	0.34	0.34	99.95	-	-	-
Carrot..... .	1,341.00	1,340.49	99.94	77.87	77.82	99.94	-	-	-
Onion..... .	1,183.00	790.97	66.86	1.35	1.13	84.18	4.54	3.99	87.97
Potatoes..... .	5,668.00	4,198.58	74.07	80.67	71.62	88.79	10,694.12	9,494.98	88.79
Yam/'Boye'..... .	666.00	665.49	99.92	3.53	3.53	99.92	-	-	-
Garlic..... .	-	-	-	-	-	-	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	671.00	670.33	99.95	2.21	2.21	99.95	3.55	3.55	99.95

Table 24.6 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**3,354,389.00**	**88,186.96**	**2.63**	**708,529.28**	**45,547.11**	**6.43**	**5,941,721.65**	**422,135.39**	**7.10**
Cereals..... .	**2,757,029.00**	**87,246.97**	**3.16**	**505,422.04**	**38,239.34**	**7.57**	**4,874,252.40**	**401,574.07**	**8.24**
Teff..... .	42,849.00	8,680.88	20.26	25,003.97	5,844.08	23.37	122,377.86	33,877.06	27.68
Barley..... .	179,203.00	30,667.90	17.11	15,159.91	2,709.51	17.87	124,599.82	24,215.27	19.43
Wheat..... .	2,723.00	1,700.15	62.44	279.19	251.99	90.26	1,463.48	1,347.63	92.08
Maize..... .	2,616,516.00	88,554.47	3.38	427,025.07	30,886.73	7.23	4,402,236.95	344,679.84	7.83
Sorghum..... .	131,873.00	25,488.14	19.33	37,148.17	11,231.17	30.23	223,574.30	94,329.45	42.19
Finger millet..... .	5,825.00	2,133.58	36.63	754.64	345.95	45.84	-	-	-
Oats/'Aja'..... .	1,008.00	805.74	79.91	35.60	28.39	79.73	-	-	-
Rice..... .	204.00	203.52	99.93	15.50	15.49	99.93	-	-	-
Pulses..... .	**2,214,607.00**	**78,320.74**	**3.54**	**186,065.10**	**10,558.25**	**5.67**	**1,025,670.09**	**62,862.84**	**6.13**
Horse beans..... .	42,880.00	7,623.99	17.78	2,148.25	535.09	24.91	11,828.87	5,076.92	42.92
Field peas..... .	53,834.00	11,068.44	20.56	4,798.45	1,753.71	36.55	12,701.01	5,600.80	44.10
White Haricot beans.... .	92,765.00	18,121.86	19.54	4,937.78	1,462.62	29.62	29,473.26	14,781.94	50.15
Red Haricot beans.....	2,098,509.00	77,794.15	3.71	168,243.30	9,923.12	5.90	971,664.59	61,351.33	6.31
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas.....	639.00	638.30	99.87	7.99	7.98	99.87	-	-	-
Lentils..... .	876.00	875.57	99.94	30.57	30.56	99.94	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	2,758.00	1,728.90	62.68	487.05	475.98	97.73	-	-	-
Fenugreek..... .	1,570.00	945.64	60.22	5.42	3.13	57.82	2.37	2.37	99.92
Mung bean/"Masho"..... .	21,649.00	9,641.31	44.53	5,406.29	2,509.22	46.41	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	**79,474.00**	**17,502.39**	**22.02**	**17,042.13**	**6,384.01**	**37.46**	**41,799.15**	**14,605.88**	**34.94**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	2,703.00	1,645.13	60.87	79.74	62.18	77.98	-	-	-
Groundnuts..... .	36,653.00	11,547.13	31.50	7,380.37	4,026.19	54.55	21,873.41	13,085.68	59.82
Sunflower..... .	10,749.00	3,975.65	36.99	1,276.93	548.62	42.96	15,822.21	6,797.80	42.96
Sesame..... .	20,564.00	11,522.90	56.04	7,739.33	4,836.40	62.49	4,103.52	2,563.77	62.48
Rapeseed..... .	**12,002.00**	**4,765.54**	**39.71**	**565.76**	**270.22**	**47.76**	**-**	**-**	**-**
Vegetables..... .	1,659,701.00	74,510.50	4.49	47,937.16	3,414.41	7.12	2,233,489.15	157,272.93	7.04
Lettuce..... .	770.00	-	-	1.69	-	-	-	-	-
Head Cabbage..... .	23,651.00	6,290.64	26.60	352.69	188.56	53.46	8,677.94	3,663.70	42.22
Ethiopian Cabbage.....	1,608,790.00	73,649.70	4.58	46,015.95	3,305.49	7.18	2,183,212.35	155,400.84	7.12
Tomatoes..... .	15,799.00	4,223.31	26.73	327.01	117.08	35.80	4,027.57	1,452.39	36.06
Green peppers..... .	70,515.00	14,218.41	20.16	898.31	300.12	33.41	37,571.29	13,656.07	36.35
Red peppers..... .	10,945.00	3,445.16	31.48	316.15	210.65	66.63	-	-	-
Swiss chard..... .	3,033.00	1,440.58	47.49	25.36	7.56	29.82	-	-	-
Root Crops..... .	**1,579,659.00**	**72,738.07**	**4.60**	**150,794.78**	**11,428.67**	**7.58**	**23,046,631.36**	**2,125,366.05**	**9.22**
Beetroot..... .	25,426.00	8,345.91	32.82	301.21	126.20	41.90	13,945.64	9,410.96	67.48
Carrot..... .	9,572.00	3,455.29	36.10	81.31	46.83	57.60	-	-	-
Onion..... .	56,713.00	8,889.87	15.68	2,764.69	593.57	21.47	215,474.22	130,887.70	60.74
Potatoes..... .	1,139,037.00	65,607.32	5.76	125,585.56	11,091.01	8.83	19,535,622.53	2,034,706.38	10.42
Yam/'Boye'..... .	44,060.00	10,306.13	23.39	1,345.65	397.37	29.53	41,255.92	25,763.95	62.45
Garlic..... .	100,675.00	16,327.86	16.22	657.70	168.14	25.56	50,939.36	13,319.16	26.15
Taro/'Godere'..... .	134,569.00	17,745.63	13.19	4,366.43	797.56	18.27	328,194.31	155,198.16	47.29
Sweet potatoes..... .	317,409.00	34,213.82	10.78	15,692.23	2,625.56	16.73	2,861,199.38	613,532.19	21.44

Table 24.7 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**229,070.00**	-	-	**37,067.95**	-	-	**362,115.27**	-	-
Cereals..... .	**188,272.00**	-	-	**25,997.34**	-	-	**290,292.05**	-	-
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	188,272.00	-	-	25,997.34	-	-	290,292.05	-	-
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**158,084.00**	-	-	**11,070.61**	-	-	**71,823.22**	-	-
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	6,710.00	-	-	731.28	-	-	3,858.75	-	-
Red Haricot beans..... .	152,746.00	-	-	10,339.33	-	-	67,964.47	-	-
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	-	-	-	-	-	-	-	-	-
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	-	-	-	-	-	-	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	-	-	-	-	-	-	-	-	-
Rapeseed..... .	-	-	-	-	-	-	-	-	-
Vegetables..... .	137,169.00	-	-	8,131.23	-	-	275,136.80	-	-
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	1,828.00	-	-	161.30	-	-	9,109.45	-	-
Ethiopian Cabbage..... .	131,983.00	-	-	7,728.87	-	-	257,634.15	-	-
Tomatoes..... .	-	-	-	-	-	-	-	-	-
Green peppers..... .	3,358.00	-	-	241.06	-	-	8,393.21	-	-
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	**56,148.00**	-	-	**3,236.56**	-	-	**313,024.56**	-	-
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	-	-	-	-	-	-	-	-	-
Potatoes..... .	43,435.00	-	-	2,908.89	-	-	301,241.14	-	-
Yam/'Boye'..... .	10,148.00	-	-	161.00	-	-	1,740.99	-	-
Garlic..... .	1,556.00	-	-	53.37	-	-	-	-	-
Taro/'Godere'..... .	488.00	-	-	12.39	-	-	-	-	-
Sweet potatoes..... .	5,800.00	-	-	100.92	-	-	10,042.44	-	-

Table 24.8 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**12,978.00**	**467.40**	**3.60**	**4,250.10**	**1,020.43**	**24.01**	**45,877.47**	**11,356.62**	**24.75**
Cereals..... .	**12,681.00**	**471.80**	**3.72**	**3,907.27**	**1,018.11**	**26.06**	**44,594.33**	**11,345.71**	**25.44**
Teff..... .	28.00	24.09	86.81	7.97	6.94	87.09	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	12,672.00	472.19	3.73	3,899.30	1,018.19	26.11	44,594.33	11,345.71	25.44
Sorghum..... .	-	-	-	-	-	-	-	-	-
Finger millet..... .	-	-	-	-	-	-	-	-	-
Oats/'Aja'..... .	-	-	-	-	-	-	-	-	-
Rice..... .	-	-	-	-	-	-	-	-	-
Pulses..... .	**1,061.00**	**236.64**	**22.31**	**169.08**	**54.80**	**32.41**	**1,283.14**	**407.52**	**31.76**
Horse beans..... .	-	-	-	-	-	-	-	-	-
Field peas..... .	-	-	-	-	-	-	-	-	-
White Haricot beans.... .	152.00	63.63	41.95	26.80	15.72	58.65	-	-	-
Red Haricot beans..... .	919.00	216.01	23.50	142.27	43.88	30.84	1,283.14	407.52	31.76
Red Chick-peas..... .	-	-	-	-	-	-	-	-	-
White Chick-peas..... .	-	-	-	-	-	-	-	-	-
Lentils..... .	-	-	-	-	-	-	-	-	-
Vetch..... .	-	-	-	-	-	-	-	-	-
Soya beans..... .	-	-	-	-	-	-	-	-	-
Fenugreek..... .	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"..... .	-	-	-	-	-	-	-	-	-
Gibto..... .	-	-	-	-	-	-	-	-	-
Oilseeds..... .	**331.00**	**139.98**	**42.24**	**173.75**	**73.66**	**42.39**	**-**	**-**	**-**
Neug..... .	-	-	-	-	-	-	-	-	-
Linseed..... .	-	-	-	-	-	-	-	-	-
Groundnuts..... .	79.00	54.30	69.06	19.60	15.97	81.47	-	-	-
Sunflower..... .	-	-	-	-	-	-	-	-	-
Sesame..... .	280.00	124.98	44.56	154.15	68.10	44.18	-	-	-
Rapeseed..... .	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vegetables..... .	957.00	185.78	19.42	34.86	11.89	34.10	1,214.72	433.67	35.70
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage..... .	921.00	185.04	20.10	24.47	8.80	35.97	1,214.72	433.67	35.70
Tomatoes..... .	56.00	27.39	48.62	6.88	5.34	77.57	-	-	-
Green peppers..... .	31.00	16.69	53.57	2.38	2.02	84.72	-	-	-
Red peppers..... .	8.00	7.32	95.32	1.13	1.08	95.32	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	**137.00**	**52.08**	**38.00**	**2.22**	**1.02**	**46.13**	**-**	**-**	**-**
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	9.00	9.18	99.24	0.49	0.49	99.24	-	-	-
Potatoes..... .	26.00	22.32	85.70	0.18	0.16	89.01	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	28.00	18.52	66.12	0.36	0.31	86.47	-	-	-
Taro/'Godere'..... .	11.00	10.07	92.01	0.13	0.12	92.01	-	-	-
Sweet potatoes..... .	63.00	41.41	65.92	1.06	0.75	70.73	-	-	-

Table 24.9 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**1,246.00**	**280.46**	**22.52**	**117.01**	**89.62**	**76.59**	**929.80**	**781.08**	**84.01**
Cereals..... .	**1,246.00**	**280.46**	**22.52**	**117.01**	**89.62**	**76.59**	**929.80**	**781.08**	**84.01**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	1,246.00	280.46	22.52	117.01	89.62	76.59	929.80	781.08	84.01
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..... .	3,124.00	1,213.59	38.84	207.91	38.64	18.59	-	-	-
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage..... .	-	-	-	-	-	-	-	-	-
Tomatoes..... .	191.00	190.43	99.79	58.28	58.16	99.79	-	-	-
Green peppers..... .	2,934.00	1,404.02	47.86	134.07	4.00	2.98	-	-	-
Red peppers..... .	482.00	481.28	99.79	15.55	15.52	99.79	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	**241.00**	**240.64**	**99.79**	**10.97**	**10.95**	**99.79**	**-**	**-**	**-**
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	241.00	240.64	99.79	10.97	10.95	99.79	-	-	-
Potatoes..... .	-	-	-	-	-	-	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	-	-	-	-	-	-	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	-	-	-	-	-	-	-	-	-

Table 24.10 Estimates, Standar Errors and Coefficients of Variation for the Estimates of Holdres, Area and Production of Privat Peasant Holders for 2021/229GC (2014E.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	**879.00**	**877.23**	**99.75**	**9.91**	**9.88**	**99.75**	**62.44**	**62.28**	**99.75**
Cereals..... .	**879.00**	**877.23**	**99.75**	**9.91**	**9.88**	**99.75**	**62.44**	**62.28**	**99.75**
Teff..... .	-	-	-	-	-	-	-	-	-
Barley..... .	-	-	-	-	-	-	-	-	-
Wheat..... .	-	-	-	-	-	-	-	-	-
Maize..... .	879.00	877.23	99.75	9.91	9.88	99.75	62.44	62.28	99.75
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..... .	3,627.00	2,193.60	60.47	210.32	109.84	52.23	-	-	-
Lettuce..... .	-	-	-	-	-	-	-	-	-
Head Cabbage..... .	-	-	-	-	-	-	-	-	-
Ethiopian Cabbage..... .	-	-	-	-	-	-	-	-	-
Tomatoes..... .	3,627.00	2,193.60	60.47	210.32	109.84	52.23	-	-	-
Green peppers..... .	-	-	-	-	-	-	-	-	-
Red peppers..... .	-	-	-	-	-	-	-	-	-
Swiss chard..... .	-	-	-	-	-	-	-	-	-
Root Crops..... .	**19,307.00**	**5,580.27**	**28.90**	**1,193.90**	**258.98**	**21.69**	**-**	**-**	**-**
Beetroot..... .	-	-	-	-	-	-	-	-	-
Carrot..... .	-	-	-	-	-	-	-	-	-
Onion..... .	15,462.00	4,996.92	32.32	920.53	219.67	23.86	-	-	-
Potatoes..... .	4,394.00	4,381.03	99.70	256.39	255.65	99.71	-	-	-
Yam/'Boye'..... .	-	-	-	-	-	-	-	-	-
Garlic..... .	275.00	274.14	99.82	16.97	16.94	99.82	-	-	-
Taro/'Godere'..... .	-	-	-	-	-	-	-	-	-
Sweet potatoes..... .	-	-	-	-	-	-	-	-	-

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 Coefficient of variations for the Estimates of Belg Season Agricultural Sample Survey of Private Holders 2021/2

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	**2,080,790.00**	**79,179.00**	**3.81**	**1,131,478.00**	**55,589.00**	**4.91**	**1,401,981.00**	**97,533.00**	**6.96**	**3,926,299.00**	**116,528.00**	**2.97**	**484,122.00**	**33,010.00**	**6.82**
Cereals	**1,265,121.00**	**66,494.00**	**5.26**	**636,612.00**	**49,567.00**	**7.79**	**577,277.00**	**72,778.00**	**12.61**	**2,128,999.00**	**90,625.00**	**4.26**	**279,998.00**	**26,784.00**	**9.57**
Teff	152,357.00	20,321.00	13.34	67,474.00	15,025.00	22.27	76,026.00	33,945.00	44.65	75,566.00	19,908.00	26.35	18,290.00	5,184.00	28.35
Barley	177,343.00	13,339.00	7.52	107,529.00	10,954.00	10.19	102,897.00	11,750.00	11.42	284,134.00	37,310.00	13.13	41,082.00	6,896.00	16.79
Wheat	111,523.00	33,209.00	29.78	89,635.00	31,623.00	35.28	174,227.00	48,294.00	27.72	33,516.00	4,002.00	11.94	2,819.00	1,189.00	42.17
Maize	744,932.00	42,935.00	5.76	354,156.00	26,578.00	7.50	203,725.00	19,558.00	9.60	1,786,387.00	83,628.00	4.68	205,596.00	23,182.00	11.28
Sorghum	67,200.00	13,089.00	19.48	12,387.00	5,877.00	47.44	386.00	235.00	61.00	55,393.00	16,732.00	30.21	11,824.00	5,860.00	49.56
Finger millet	870.00	355.00	40.78	172.00	97.00	56.48	171.00	171.00	99.88	1,166.00	742.00	63.65	143.00	93.00	64.79
Oats/ 'Aja'	10,881.00	3,237.00	29.75	5,260.00	1,883.00	35.79	19,845.00	8,388.00	42.27	5,432.00	2,921.00	53.78	244.00	155.00	63.46
Rice	16.00	15.00	99.93	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**417,718.00**	**17,435.00**	**4.17**	**169,607.00**	**9,102.00**	**5.37**	**87,392.00**	**6,556.00**	**7.50**	**1,499,278.00**	**72,735.00**	**4.85**	**100,864.00**	**7,352.00**	**7.29**
Horse/Faba beans	4,758.00	595.00	12.50	1,815.00	465.00	25.60	291.00	101.00	34.57	29,842.00	5,967.00	20.00	1,576.00	450.00	28.56
Field peas	39,555.00	6,576.00	16.63	5,105.00	1,203.00	23.56	1,714.00	863.00	50.31	36,636.00	6,672.00	18.21	3,206.00	467.00	14.56
White Haricot beans	22,218.00	4,657.00	20.96	9,588.00	1,753.00	18.28	3,343.00	948.00	28.36	106,098.00	15,810.00	14.90	6,657.00	1,488.00	22.36
Red Haricot beans	238,441.00	12,756.00	5.35	144,127.00	8,473.00	5.88	77,910.00	6,189.00	7.94	1,340,476.00	70,726.00	5.28	83,316.00	6,762.00	8.12
Red Chick peas	6,074.00	1,083.00	17.84	1,655.00	448.00	27.08	1,034.00	315.00	30.49	6,896.00	1,668.00	24.18	725.00	83.00	11.47
White chick peas	672.00	642.00	95.63	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	13,998.00	5,064.00	36.17	1,823.00	119.00	6.54	576.00	-	-	11,148.00	603.00	5.41	1,602.00	119.00	7.44
Vetch/Grass peas	4,670.00	1,699.00	36.37	63.00	40.00	62.50	-	-	-	1,694.00	1,217.00	71.82	63.00	40.00	62.50
Soya beans	506.00	476.00	94.20	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	1,784.00	471.00	26.41	104.00	16.00	15.64	42.00	31.00	75.67	2,532.00	766.00	30.26	97.00	16.00	16.29
Mung bean/"Masho"	84,721.00	5,018.00	5.92	5,327.00	1,750.00	32.84	2,482.00	1,470.00	59.22	13,982.00	6,718.00	48.04	3,622.00	1,467.00	40.50
Gibto	321.00	320.00	99.84	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**20,418.00**	**6,445.00**	**31.56**	**4,239.00**	**1,142.00**	**26.95**	**2,102.00**	**372.00**	**17.68**	**21,723.00**	**6,055.00**	**27.88**	**2,097.00**	**984.00**	**46.91**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	525.00	397.00	75.58	257.00	207.00	80.24	79.00	79.00	99.96	1,506.00	1,075.00	71.35	59.00	59.00	99.25
Ground nuts	9,318.00	4,082.00	43.81	2,542.00	1,017.00	40.01	1,440.00	52.00	3.61	7,298.00	4,105.00	56.25	1,413.00	941.00	66.54
Safflower	1,585.00	629.00	39.68	888.00	431.00	48.55	524.00	356.00	67.98	4,156.00	1,995.00	47.99	198.00	147.00	74.43
Sesame	8,275.00	4,845.00	58.55	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	715.00	302.00	42.21	552.00	284.00	51.47	60.00	50.00	84.19	8,763.00	3,973.00	45.34	426.00	258.00	60.52
Vegetables	**89,778.00**	**5,360.00**	**5.97**	**62,122.00**	**4,002.00**	**6.44**	**71,228.00**	**22,831.00**	**32.05**	**1,523,803.00**	**71,945.00**	**4.72**	**40,890.00**	**2,559.00**	**6.26**
Lettuce	12.00	6.00	54.22	12.00	6.00	54.22	61.00	56.00	90.88	1,668.00	388.00	23.23	5.00	2.00	45.43
Head Cabbage	2,180.00	985.00	45.20	1,675.00	955.00	57.02	9,313.00	7,394.00	79.39	16,256.00	3,622.00	22.28	305.00	124.00	40.64
Ethiopian Cabbage	75,853.00	4,542.00	5.99	51,283.00	2,975.00	5.80	21,301.00	2,554.00	11.99	1,427,486.00	69,467.00	4.87	38,478.00	2,506.00	6.51
Tomatoes	5,076.00	1,629.00	32.09	4,406.00	1,597.00	36.24	27,180.00	16,551.00	60.89	21,827.00	5,211.00	23.88	636.00	281.00	44.16
Green peppers	5,039.00	825.00	16.38	4,157.00	711.00	17.10	11,249.00	4,352.00	38.69	97,940.00	19,953.00	20.37	1,268.00	352.00	27.80
Red peppers	1,549.00	286.00	18.44	547.00	89.00	16.29	2,021.00	538.00	26.62	14,207.00	4,164.00	29.31	171.00	55.00	32.05
Swiss chard	70.00	27.00	38.13	43.00	11.00	26.16	103.00	56.00	54.42	4,336.00	1,448.00	33.38	28.00	8.00	27.66
Root Crops	**287,756.00**	**15,630.00**	**5.43**	**258,896.00**	**15,327.00**	**5.92**	**663,982.00**	**46,986.00**	**7.08**	**1,257,465.00**	**80,437.00**	**6.40**	**60,272.00**	**5,322.00**	**8.83**
Beetroot	1,361.00	224.00	16.44	1,005.00	155.00	15.41	4,662.00	615.00	13.19	24,072.00	8,172.00	33.95	337.00	123.00	36.34
Carrot	1,032.00	285.00	27.62	523.00	97.00	18.52	551.00	59.00	10.68	11,972.00	2,736.00	22.85	231.00	76.00	33.04
Onion	17,509.00	3,212.00	18.35	15,196.00	3,129.00	20.59	93,540.00	27,703.00	29.62	47,464.00	7,083.00	14.92	1,139.00	240.00	21.10
Potatoes	236,124.00	14,973.00	6.34	221,635.00	14,861.00	6.71	538,706.00	38,863.00	7.21	871,012.00	72,330.00	8.30	45,462.00	4,625.00	10.17
Yam	1,515.00	397.00	26.24	1,030.00	281.00	27.26	784.00	532.00	67.91	36,623.00	7,592.00	20.73	696.00	199.00	28.61
Garlic	9,299.00	2,106.00	22.65	7,331.00	1,746.00	23.82	23,967.00	7,117.00	29.70	108,200.00	13,962.00	12.90	786.00	151.00	19.22
Taro/'Godere'	4,445.00	798.00	17.96	2,578.00	551.00	21.40	735.00	306.00	41.57	75,080.00	12,961.00	17.26	2,249.00	536.00	23.82
Sweet potatoes	16,473.00	2,679.00	16.27	9,599.00	1,779.00	18.54	1,038.00	621.00	59.81	233,376.00	32,660.00	13.99	9,371.00	1,781.00	19.01

Tab 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	**19,240.00**	**8,672.00**	**45.07**	**4,529.00**	**3,134.00**	**69.21**	**3,607.00**	**1,360.00**	**37.70**	**295,145.00**	**41,449.00**	**14.04**	**35,599.00**	**8,593.00**	**24.14**	**97,076.00**	**28,566.00**	**29.43**
Cereals	**5,826.00**	**2,291.00**	**39.32**	**2,698.00**	**2,063.00**	**76.48**	**617.00**	**86.00**	**14.02**	**171,082.00**	**38,679.00**	**22.61**	**25,200.00**	**8,139.00**	**32.30**	**56,926.00**	**18,129.00**	**31.85**
Teff	-	-	-	-	-	-	-	-	-	30,628.00	15,708.00	51.29	11,411.00	7,464.00	65.41	18,081.00	14,527.00	80.35
Barley	-	-	-	-	-	-	-	-	-	7,232.00	2,403.00	33.23	1,288.00	454.00	35.21	1,163.00	529.00	45.49
Wheat	-	-	-	-	-	-	-	-	-	8,258.00	2,269.00	27.48	1,753.00	712.00	40.59	2,300.00	1,052.00	45.74
Maize	5,826.00	2,291.00	39.32	2,698.00	2,063.00	76.48	617.00	86.00	14.02	89,848.00	22,569.00	25.12	8,596.00	1,962.00	22.83	23,176.00	7,361.00	31.76
Sorghum	-	-	-	-	-	-	-	-	-	137.00	125.00	91.83	15.00	14.00	92.05	24.00	16.00	69.00
Finger millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-	45,326.00	28,533.00	62.95	2,136.00	1,571.00	73.55	12,182.00	7,672.00	62.98
Rice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**12,007.00**	**8,107.00**	**67.52**	**1,233.00**	**1,054.00**	**85.46**	**850.00**	**565.00**	**66.41**	**28,672.00**	**6,213.00**	**21.67**	**2,487.00**	**752.00**	**30.24**	**1,981.00**	**579.00**	**29.23**
Horse/Faba beans	-	-	-	-	-	-	-	-	-	422.00	423.00	100.16	51.00	51.00	100.16	13.00	13.00	100.16
Field peas	-	-	-	-	-	-	-	-	-	1,586.00	1,160.00	73.17	79.00	61.00	76.96	53.00	42.00	79.65
White Haricot beans	-	-	-	-	-	-	-	-	-	1,058.00	706.00	66.75	200.00	183.00	91.09	175.00	161.00	92.19
Red Haricot beans	12,007.00	8,107.00	67.52	1,233.00	1,054.00	85.46	850.00	565.00	66.41	25,919.00	5,945.00	22.94	1,788.00	512.00	28.61	1,608.00	436.00	27.10
Red Chick peas	-	-	-	-	-	-	-	-	-	1,325.00	1,326.00	100.05	369.00	369.00	100.05	133.00	133.00	100.05
White chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	-	-	-	-	-	-	-	-	-	**643.00**	**642.00**	**99.94**	**181.00**	**181.00**	**99.94**	**32.00**	**32.00**	**99.94**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	643.00	642.00	99.94	181.00	181.00	99.94	32.00	32.00	99.94
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetables	**6,432.00**	**5,398.00**	**83.92**	**31.00**	**22.00**	**68.61**	**511.00**	**420.00**	**82.19**	**29,065.00**	**5,292.00**	**18.21**	**1,191.00**	**282.00**	**23.67**	**1,877.00**	**224.00**	**11.94**
Lettuce	-	-	-	-	-	-	-	-	-	224.00	223.00	99.78	6.00	6.00	99.78	56.00	56.00	99.78
Head Cabbage	-	-	-	-	-	-	-	-	-	3,882.00	2,810.00	72.40	73.00	43.00	59.13	145.00	96.00	66.30
Ethiopian Cabbage	5,913.00	5,373.00	90.88	20.00	20.00	95.53	439.00	416.00	94.86	10,223.00	4,054.00	39.66	613.00	265.00	43.19	458.00	141.00	30.67
Tomatoes	-	-	-	-	-	-	-	-	-	4,846.00	737.00	15.22	167.00	62.00	37.14	682.00	35.00	5.18
Green peppers	519.00	512.00	98.60	11.00	9.00	82.94	72.00	55.00	76.27	8,569.00	1,957.00	22.84	272.00	26.00	9.57	320.00	60.00	18.65
Red peppers	-	-	-	-	-	-	-	-	-	3,524.00	1,062.00	30.12	53.00	23.00	43.37	160.00	19.00	11.76
Swiss chard	-	-	-	-	-	-	-	-	-	224.00	223.00	99.78	8.00	8.00	99.78	56.00	56.00	99.78
Root Crops	**3,578.00**	**1,792.00**	**50.08**	**566.00**	**333.00**	**58.91**	**1,629.00**	**930.00**	**57.11**	**111,001.00**	**14,604.00**	**13.16**	**6,541.00**	**1,047.00**	**16.01**	**36,260.00**	**12,370.00**	**34.12**
Beetroot	-	-	-	-	-	-	-	-	-	1,349.00	737.00	54.64	67.00	43.00	64.89	151.00	71.00	46.75
Carrot	-	-	-	-	-	-	-	-	-	226.00	-	-	1.00	-	-	11.00	-	-
Onion	532.00	512.00	96.22	-	-	69.83	10.00	7.00	69.49	44,099.00	5,434.00	12.32	2,408.00	287.00	11.92	25,105.00	11,566.00	46.07
Potatoes	3,046.00	1,717.00	56.38	566.00	333.00	58.96	1,619.00	930.00	57.46	59,792.00	13,534.00	22.63	3,649.00	989.00	27.09	9,914.00	3,613.00	36.45
Yam	-	-	-	-	-	-	-	-	-	699.00	697.00	99.64	54.00	54.00	99.72	19.00	19.00	99.76
Garlic	-	-	-	-	-	-	-	-	-	6,955.00	1,417.00	20.37	326.00	114.00	35.16	988.00	431.00	43.64
Taro/'Godere'	-	-	-	-	-	-	-	-	-	573.00	573.00	99.91	9.00	9.00	99.91	34.00	34.00	99.91
Sweet potatoes	-	-	-	-	-	-	-	-	-	750.00	750.00	99.90	27.00	27.00	99.90	38.00	37.00	99.90

Tab 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	**2,804.00**	**574.00**	**20.46**	**1,297.00**	**428.00**	**33.01**	**2,145.00**	**101.00**	**4.72**	**8,694,117.00**	**140,532.00**	**1.62**	**1,897,310.00**	**75,897.00**	**4.00**	**1,363,627.00**	**123,266.00**	**9.04**
Cereals	**2,763.00**	**572.00**	**20.71**	**909.00**	**424.00**	**46.60**	**1,163.00**	**46.00**	**3.97**	**4,554,324.00**	**115,179.00**	**2.53**	**1,119,736.00**	**64,004.00**	**5.72**	**1,064,703.00**	**113,579.00**	**10.67**
Teff	-	-	-	-	-	-	-	-	-	427,066.00	47,222.00	11.06	141,611.00	19,691.00	13.91	79,984.00	13,762.00	17.21
Barley	-	-	-	-	-	-	-	-	-	825,761.00	56,947.00	6.90	174,645.00	13,210.00	7.56	396,677.00	35,758.00	9.01
Wheat	-	-	-	-	-	-	-	-	-	281,720.00	36,799.00	13.06	95,554.00	32,629.00	34.15	266,590.00	85,984.00	32.25
Maize	2,763.00	572.00	20.71	909.00	424.00	46.60	1,163.00	46.00	3.97	3,373,317.00	100,545.00	2.98	629,282.00	39,945.00	6.35	244,960.00	16,177.00	6.60
Sorghum	-	-	-	-	-	-	-	-	-	217,573.00	31,203.00	14.34	66,996.00	13,095.00	19.55	15,649.00	2,938.00	18.78
Finger millet	-	-	-	-	-	-	-	-	-	6,851.00	2,236.00	32.63	767.00	292.00	38.04	212.00	79.00	37.31
Oats/ 'Aja'	-	-	-	-	-	-	-	-	-	92,751.00	32,676.00	35.23	10,865.00	3,235.00	29.77	60,627.00	35,971.00	59.33
Rice	-	-	-	-	-	-	-	-	-	204.00	204.00	99.93	16.00	15.00	99.93	4.00	4.00	99.93
Pulse	**1,404.00**	**127.00**	**9.06**	**233.00**	**19.00**	**7.95**	**715.00**	**32.00**	**4.45**	**3,289,538.00**	**105,503.00**	**3.21**	**407,010.00**	**17,202.00**	**4.23**	**291,768.00**	**33,869.00**	**11.61**
Horse/Faba beans	-	-	-	-	-	-	-	-	-	78,485.00	8,222.00	10.48	4,747.00	595.00	12.54	4,582.00	417.00	9.09
Field peas	-	-	-	-	-	-	-	-	-	174,818.00	18,170.00	10.39	39,042.00	6,396.00	16.38	43,986.00	7,015.00	15.95
White Haricot beans	-	-	-	-	-	-	-	-	-	230,719.00	28,455.00	12.33	21,759.00	4,644.00	21.34	23,528.00	12,551.00	53.34
Red Haricot beans	1,404.00	127.00	9.06	233.00	19.00	7.95	715.00	32.00	4.45	2,692,191.00	96,930.00	3.60	230,078.00	12,658.00	5.50	172,248.00	21,952.00	12.74
Red Chick Peas	-	-	-	-	-	-	-	-	-	38,661.00	5,938.00	15.36	5,754.00	978.00	17.00	5,006.00	818.00	16.33
White Chick Peas	-	-	-	-	-	-	-	-	-	5,084.00	4,039.00	79.45	672.00	642.00	95.63	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-	71,017.00	12,602.00	17.75	13,407.00	4,867.00	36.30	11,041.00	2,451.00	22.20
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	23,044.00	9,368.00	40.65	4,669.00	1,699.00	36.39	4,457.00	1,179.00	26.45
Soya beans	-	-	-	-	-	-	-	-	-	2,493.00	1,650.00	66.22	501.00	476.00	95.13	43.00	34.00	78.56
Fenugreek	-	-	-	-	-	-	-	-	-	30,406.00	7,679.00	25.26	1,782.00	471.00	26.45	3,315.00	1,139.00	34.34
Mung bean/"Masho"	-	-	-	-	-	-	-	-	-	115,409.00	19,813.00	17.17	84,279.00	4,988.00	5.92	23,275.00	7,409.00	31.83
Gibto	-	-	-	-	-	-	-	-	-	1,429.00	1,427.00	99.84	321.00	320.00	99.84	286.00	285.00	99.84
Oile seeds	-	-	-	-	-	-	-	-	-	**94,203.00**	**17,884.00**	**18.98**	**20,363.00**	**6,445.00**	**31.65**	**7,156.00**	**1,850.00**	**25.86**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	7,176.00	2,935.00	40.91	525.00	397.00	75.58	214.00	134.00	62.60
Ground nuts	-	-	-	-	-	-	-	-	-	43,077.00	11,771.00	27.32	9,318.00	4,082.00	43.81	4,714.00	1,338.00	28.39
Safflower	-	-	-	-	-	-	-	-	-	12,034.00	4,178.00	34.72	1,585.00	629.00	39.68	123.00	54.00	43.70
Sesame	-	-	-	-	-	-	-	-	-	21,459.00	11,517.00	53.67	8,234.00	4,844.00	58.84	2,074.00	1,263.00	60.92
Rapeseed	-	-	-	-	-	-	-	-	-	13,680.00	4,876.00	35.65	702.00	296.00	42.21	30.00	12.00	40.35
Vegetables	**168.00**	**133.00**	**79.17**	**25.00**	**24.00**	**96.91**	**38.00**	**32.00**	**85.86**	**2,314,833.00**	**84,864.00**	**3.67**	**87,279.00**	**5,144.00**	**5.89**	-	-	-
Lettuce	-	-	-	-	-	-	-	-	-	1,851.00	388.00	20.94	6.00	2.00	39.46	-	-	-
Head Cabbage	-	-	-	-	-	-	-	-	-	39,295.00	9,526.00	24.24	1,616.00	965.00	59.71	-	-	-
Ethiopian Cabbage	128.00	127.00	99.54	24.00	24.00	99.54	32.00	32.00	99.54	2,094,840.00	81,091.00	3.87	75,140.00	4,307.00	5.73	-	-	-
Tomatoes	40.00	39.00	96.53	1.00	1.00	96.53	6.00	5.00	96.53	59,106.00	10,608.00	17.95	4,448.00	1,646.00	37.02	-	-	-
Green peppers	-	-	-	-	-	-	-	-	-	176,344.00	24,085.00	13.66	4,522.00	821.00	18.15	-	-	-
Red peppers	-	-	-	-	-	-	-	-	-	50,241.00	8,154.00	16.23	1,491.00	280.00	18.80	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-	5,267.00	1,529.00	29.03	55.00	25.00	45.65	-	-	-
Root Crops	**638.00**	-	-	**130.00**	-	-	**230.00**	-	-	**3,409,773.00**	**115,855.00**	**3.40**	**262,922.00**	**14,893.00**	**5.66**	-	-	-
Beetroot	-	-	-	-	-	-	-	-	-	36,742.00	7,448.00	20.27	1,193.00	169.00	14.19	-	-	-
Carrot	-	-	-	-	-	-	-	-	-	22,099.00	4,194.00	18.98	763.00	284.00	37.19	-	-	-
Onion	-	-	-	-	-	-	-	-	-	193,887.00	22,287.00	11.49	11,682.00	2,888.00	24.72	-	-	-
Potatoes	-	-	-	-	-	-	-	-	-	2,703,945.00	112,574.00	4.16	218,178.00	14,237.00	6.53	-	-	-
Yam	638.00	-	-	65.00	-	-	115.00	-	-	55,073.00	10,329.00	18.76	1,515.00	397.00	26.24	-	-	-
Garlic	-	-	-	-	-	-	-	-	-	225,609.00	23,130.00	10.25	8,720.00	2,080.00	23.86	-	-	-
Taro/'Godere'	638.00	-	-	65.00	-	-	115.00	-	-	137,705.00	17,791.00	12.92	4,445.00	798.00	17.96	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-	-	341,876.00	37,481.00	10.96	16,426.00	2,679.00	16.31	-	-	-

Tab 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	**1,117,638.00**	**66,448.00**	**5.95**	**183,481.00**	**14,884.00**	**8.11**	**65,039.00**	**6,204.00**	**9.54**	**533,985.00**	**57,822.00**	**10.83**	**189,425.00**	**39,319.00**	**20.76**
Cereals	**800,112.00**	**53,340.00**	**6.67**	**145,385.00**	**13,781.00**	**9.48**	**62,150.00**	**6,172.00**	**9.93**	**299,576.00**	**48,638.00**	**16.24**	**133,440.00**	**37,113.00**	**27.81**
Teff	35,646.00	12,530.00	35.15	10,746.00	3,776.00	35.14	4,685.00	2,015.00	43.01	87,912.00	23,282.00	26.48	31,025.00	8,468.00	27.29
Barley	22,859.00	10,858.00	47.50	2,698.00	1,081.00	40.07	790.00	476.00	60.26	49,920.00	14,590.00	29.23	15,971.00	5,516.00	34.53
Wheat	50,511.00	11,712.00	23.19	15,969.00	6,586.00	41.24	19,157.00	4,298.00	22.44	91,420.00	22,517.00	24.63	60,389.00	28,781.00	47.66
Maize	701,958.00	49,100.00	6.99	115,650.00	11,107.00	9.60	37,334.00	3,738.00	10.01	103,641.00	27,445.00	26.48	21,785.00	5,852.00	26.86
Sorghum	487.00	485.00	99.62	203.00	203.00	99.62	-	-	-	1,061.00	852.00	80.34	548.00	445.00	81.10
Finger millet	643.00	643.00	100.04	103.00	103.00	100.04	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	1,322.00	1,323.00	100.07	16.00	16.00	100.07	185.00	185.00	100.07	40,961.00	26,709.00	65.20	3,722.00	1,982.00	53.25
Rice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**109,458.00**	**17,628.00**	**16.10**	**10,708.00**	**2,072.00**	**19.35**	**2,877.00**	**666.00**	**23.16**	**64,766.00**	**15,527.00**	**23.97**	**22,210.00**	**4,654.00**	**20.95**
Horse/Faba beans	115.00	115.00	99.51	11.00	11.00	99.51	-	-	-	1,466.00	1,464.00	99.85	42.00	42.00	99.87
Field peas	1,260.00	958.00	76.04	512.00	385.00	75.05	44.00	44.00	99.80	9,630.00	5,570.00	57.84	5,677.00	3,555.00	62.63
White Haricot beans	7,802.00	3,687.00	47.25	458.00	221.00	48.25	306.00	167.00	54.44	1,483.00	813.00	54.84	252.00	190.00	75.72
Red Haricot beans	98,463.00	16,716.00	16.98	8,363.00	1,860.00	22.23	2,105.00	563.00	26.75	8,518.00	3,922.00	46.04	1,298.00	692.00	53.34
Red Chick Peas	1,125.00	1,123.00	99.83	320.00	319.00	99.83	281.00	281.00	99.83	11,156.00	5,230.00	46.88	2,264.00	1,024.00	45.23
White Check Peas	-	-	-	-	-	-	-	-	-	4,081.00	3,972.00	97.32	662.00	642.00	97.04
Lentiles	364.00	363.00	99.96	591.00	591.00	99.96	-	-	-	1,151.00	824.00	71.59	711.00	605.00	85.12
Vetch/Grass peas	38.00	-	-	1.00	-	-	-	-	-	19,091.00	8,796.00	46.08	4,242.00	1,654.00	38.98
Soya beans	629.00	630.00	100.15	5.00	5.00	100.15	4.00	4.00	100.15	-	-	-	-	-	-
Fenugreek	197.00	-	-	3.00	-	-	-	-	-	332.00	105.00	31.64	17.00	3.00	20.36
Mung bean/"Masho"	1,319.00	1,313.00	99.54	442.00	440.00	99.55	137.00	136.00	99.55	11,423.00	3,012.00	26.37	7,046.00	1,034.00	14.68
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**468.00**	**332.00**	**71.04**	**55.00**	**44.00**	**79.70**	**12.00**	**10.00**	**88.90**	**643.00**	**642.00**	**99.94**	**181.00**	**181.00**	**99.94**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	643.00	642.00	99.94	181.00	181.00	99.94
Sesame	253.00	255.00	100.63	41.00	42.00	100.63	10.00	10.00	100.63	-	-	-	-	-	-
Rapeseed	215.00	214.00	99.43	14.00	13.00	99.44	1.00	1.00	99.45	-	-	-	-	-	-
Vegetables	**51,715.00**	**9,581.00**	**18.53**	**2,500.00**	**684.00**	**27.36**	-	-	-	**48,004.00**	**13,090.00**	**27.27**	**5,942.00**	**2,434.00**	**40.97**
Lettuce	224.00	223.00	99.78	6.00	6.00	99.78	-	-	-	-	-	-	-	-	-
Head Cabbage	14,241.00	3,214.00	22.57	564.00	193.00	34.26	-	-	-	9,441.00	6,431.00	68.12	1,104.00	943.00	85.34
Ethiopian Cabbage	15,327.00	7,303.00	47.65	713.00	548.00	76.93	-	-	-	8,888.00	5,278.00	59.38	178.00	86.00	48.30
Tomatoes	8,377.00	2,929.00	34.96	628.00	331.00	52.62	-	-	-	18,659.00	8,422.00	45.14	3,537.00	1,582.00	44.73
Green peppers	13,631.00	2,118.00	15.54	516.00	98.00	18.94	-	-	-	7,325.00	2,915.00	39.79	917.00	398.00	43.45
Red peppers	895.00	646.00	72.17	58.00	55.00	95.12	-	-	-	8,919.00	799.00	8.96	206.00	29.00	14.14
Swiss chard	487.00	285.00	58.54	14.00	8.00	56.85	-	-	-	-	-	-	-	-	-
Root Crops	**277,264.00**	**42,132.00**	**15.20**	**24,834.00**	**4,101.00**	**16.51**	-	-	-	**210,386.00**	**29,221.00**	**13.89**	**27,652.00**	**5,601.00**	**20.25**
Beetroot	9,178.00	3,176.00	34.60	168.00	89.00	52.90	-	-	-	2,186.00	681.00	31.14	205.00	28.00	13.87
Carrot	7,119.00	2,482.00	34.87	269.00	35.00	13.08	-	-	-	193.00	125.00	64.69	18.00	10.00	55.47
Onion	52,098.00	8,139.00	15.62	5,827.00	915.00	15.71	-	-	-	94,387.00	18,954.00	20.08	8,886.00	2,649.00	29.81
Potatoes	208,022.00	41,146.00	19.78	17,945.00	3,973.00	22.14	-	-	-	87,646.00	18,043.00	20.59	15,021.00	4,640.00	30.89
Yam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Garlic	5,631.00	1,853.00	32.91	578.00	368.00	63.64	-	-	-	34,798.00	10,876.00	31.25	3,523.00	1,318.00	37.41
Taro/'Godere'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweet potatoes	1,815.00	1,357.00	74.78	46.00	46.00	99.78	-	-	-	-	-	-	-	-	-

Tab 25 Con't
National

Crop type	Irrigation						Extension package					
	Holder			Hectare			Holder			Hectare		
	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV	Estimate	SE	CV
All	**1,189,645.00**	**81,169.00**	**6.82**	**152,728.00**	**20,193.00**	**13.22**	**3,017,150.00**	**112,667.00**	**3.73**	**573,166.00**	**32,608.00**	**5.69**
Cereals	**614,881.00**	**70,882.00**	**11.53**	**95,685.00**	**16,485.00**	**17.23**	**1,417,805.00**	**81,772.00**	**5.77**	**322,485.00**	**25,285.00**	**7.84**
Teff	97,701.00	31,352.00	32.09	28,356.00	13,389.00	47.22	99,317.00	21,812.00	21.96	26,281.00	6,665.00	25.36
Barley	66,276.00	30,158.00	45.50	9,705.00	3,100.00	31.94	250,563.00	24,490.00	9.77	60,301.00	6,688.00	11.09
Wheat	111,467.00	24,991.00	22.42	10,113.00	1,883.00	18.62	155,056.00	25,711.00	16.58	41,122.00	8,694.00	21.14
Maize	359,373.00	43,654.00	12.15	43,552.00	6,867.00	15.77	997,394.00	69,582.00	6.98	186,948.00	18,567.00	9.93
Sorghum	8,504.00	6,594.00	77.54	1,532.00	1,038.00	67.79	15,004.00	4,359.00	29.05	4,194.00	1,769.00	42.18
Finger millet	1,142.00	1,140.00	99.88	29.00	29.00	99.88	2,473.00	1,396.00	56.46	152.00	82.00	53.80
Oats/ 'Aja'	58,718.00	31,458.00	53.57	2,399.00	1,528.00	63.69	38,155.00	15,448.00	40.49	3,487.00	1,121.00	32.15
Rice	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**53,659.00**	**8,047.00**	**15.00**	**10,443.00**	**1,504.00**	**14.41**	**683,692.00**	**48,759.00**	**7.13**	**89,525.00**	**7,345.00**	**8.20**
Horse/Faba beans	6,268.00	2,195.00	35.02	364.00	81.00	22.33	8,606.00	1,599.00	18.58	569.00	60.00	10.48
Field peas	4,342.00	743.00	17.12	1,097.00	209.00	19.01	26,101.00	9,333.00	35.76	8,475.00	3,602.00	42.50
White Haricot bean	1,341.00	757.00	56.48	242.00	184.00	76.27	28,051.00	6,241.00	22.25	2,863.00	756.00	26.40
Red Haricot beans	22,109.00	6,592.00	29.82	2,592.00	756.00	29.15	581,809.00	45,465.00	7.81	59,110.00	5,861.00	9.91
Red Chick Peas	9,258.00	3,530.00	38.13	1,403.00	604.00	43.04	11,796.00	3,429.00	29.07	2,151.00	653.00	30.36
White Check Peas	106.00	105.00	99.23	19.00	19.00	99.23	2,650.00	2,648.00	99.92	422.00	422.00	99.92
Lentiles	7,494.00	-	-	1,305.00	-	-	2,329.00	400.00	17.18	349.00	133.00	38.17
Vetch/Grass peas	2,826.00	1,153.00	40.80	540.00	322.00	59.54	20,631.00	9,259.00	44.88	4,371.00	1,690.00	38.66
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	1,210.00	105.00	8.67	86.00	3.00	4.00	528.00	191.00	36.27	29.00	24.00	82.16
Mung bean/"Masho	5,093.00	1,423.00	27.94	2,795.00	344.00	12.32	9,434.00	1,592.00	16.87	11,187.00	561.00	5.02
Gibto	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**1,285.00**	**1,284.00**	**99.87**	**308.00**	**307.00**	**99.87**	**29,034.00**	**8,998.00**	**30.99**	**6,516.00**	**3,200.00**	**49.10**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	1,212.00	1,211.00	99.96	198.00	198.00	99.96
Ground nuts	-	-	-	-	-	-	20,469.00	8,617.00	42.10	5,105.00	3,135.00	61.40
Safflower	1,285.00	1,284.00	99.87	308.00	307.00	99.87	5,720.00	2,822.00	49.33	928.00	516.00	55.57
Sesame	-	-	-	-	-	-	472.00	473.00	100.15	126.00	126.00	100.15
Rapeseed	-	-	-	-	-	-	1,632.00	1,204.00	73.77	159.00	127.00	79.96
Vegetables	**177,451.00**	**23,221.00**	**13.09**	**10,744.00**	**2,702.00**	**25.15**	**307,132.00**	**28,483.00**	**9.27**	**18,576.00**	**2,983.00**	**16.06**
Lettuce	701.00	223.00	31.82	6.00	6.00	97.39	327.00	246.00	75.15	7.00	6.00	84.45
Head Cabbage	20,373.00	7,745.00	38.02	1,525.00	951.00	62.37	25,080.00	9,084.00	36.22	1,428.00	950.00	66.52
Ethiopian Cabbage	22,499.00	3,607.00	16.03	780.00	133.00	17.00	194,656.00	19,853.00	10.20	10,279.00	1,348.00	13.12
Tomatoes	38,393.00	9,267.00	24.14	4,186.00	1,593.00	38.06	22,271.00	8,456.00	37.97	3,392.00	1,552.00	45.74
Green peppers	86,072.00	17,453.00	20.28	3,427.00	666.00	19.42	66,894.00	11,673.00	17.45	3,030.00	702.00	23.16
Red peppers	29,195.00	6,498.00	22.26	800.00	119.00	14.83	17,395.00	6,972.00	40.08	410.00	121.00	29.46
Swiss chard	2,244.00	397.00	17.71	20.00	9.00	42.14	1,679.00	697.00	41.50	30.00	8.00	27.92
Root Crops	**627,700.00**	**47,926.00**	**7.64**	**35,548.00**	**4,158.00**	**11.70**	**1,516,946.00**	**88,460.00**	**5.83**	**136,064.00**	**11,736.00**	**8.63**
Beetroot	9,644.00	2,995.00	31.05	832.00	160.00	19.28	9,777.00	3,462.00	35.41	419.00	174.00	41.51
Carrot	8,923.00	2,536.00	28.43	309.00	59.00	19.11	8,602.00	2,603.00	30.26	548.00	263.00	47.98
Onion	179,283.00	22,919.00	12.78	14,228.00	3,153.00	22.16	92,800.00	19,698.00	21.23	9,553.00	2,694.00	28.20
Potatoes	400,054.00	40,780.00	10.19	14,701.00	1,478.00	10.05	1,355,858.00	87,704.00	6.47	118,579.00	11,259.00	9.49
Yam	-	-	-	-	-	-	7,360.00	2,454.00	33.34	450.00	181.00	40.09
Garlic	74,040.00	13,711.00	18.52	4,957.00	1,408.00	28.40	56,628.00	11,055.00	19.52	4,378.00	1,172.00	26.76
Taro/'Godere'	303.00	303.00	99.83	4.00	4.00	99.83	10,771.00	2,433.00	22.59	602.00	163.00	27.11
Sweet potatoes	7,123.00	3,459.00	48.56	517.00	277.00	53.48	38,894.00	17,743.00	45.62	1,535.00	764.00	49.77

Tab 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	**1,449,770.00**	**72,140.00**	**4.98**	**284,628.00**	**20,699.00**	**7.27**	**363,837.00**	**26,829.00**	**7.37**	**747,421.00**	**60,573.00**	**8.10**	**143,096.00**	**13,388.00**	**9.36**	**312,050.00**	**33,221.00**	**10.65**
Cereals	**643,305.00**	**39,374.00**	**6.12**	**159,102.00**	**17,658.00**	**11.10**	**148,584.00**	**15,987.00**	**10.76**	**328,939.00**	**41,890.00**	**12.73**	**60,142.00**	**7,329.00**	**12.19**	**118,605.00**	**17,052.00**	**14.38**
Teff	36,858.00	9,110.00	24.72	11,520.00	2,836.00	24.62	8,312.00	2,474.00	29.76	26,000.00	8,174.00	31.44	7,955.00	3,044.00	38.26	11,284.00	3,972.00	35.20
Barley	116,821.00	16,742.00	14.33	30,823.00	5,647.00	18.32	39,164.00	6,246.00	15.95	46,213.00	23,096.00	49.98	5,150.00	2,372.00	46.06	10,220.00	6,164.00	60.31
Wheat	64,401.00	12,528.00	19.45	33,567.00	10,940.00	32.59	40,207.00	9,894.00	24.61	26,557.00	12,789.00	48.16	7,037.00	2,314.00	32.88	18,652.00	5,808.00	31.14
Maize	458,260.00	32,724.00	7.14	81,609.00	9,804.00	12.01	59,571.00	6,902.00	11.59	245,372.00	30,155.00	12.29	39,527.00	5,086.00	12.87	75,793.00	10,479.00	13.83
Sorghum	543.00	543.00	99.92	49.00	49.00	99.92	2.00	2.00	99.92	759.00	645.00	85.00	28.00	20.00	72.21	40.00	29.00	72.84
Finger millet	-	-	-	-	-	-	-	-	-	1,142.00	1,140.00	99.88	29.00	29.00	99.88	171.00	171.00	99.88
Oats/ 'Aja'	4,403.00	1,990.00	45.19	1,534.00	714.00	46.52	1,328.00	544.00	40.97	4,012.00	2,555.00	63.67	417.00	238.00	57.19	2,444.00	1,655.00	67.74
Rice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**543,004.00**	**33,813.00**	**6.23**	**46,166.00**	**3,740.00**	**8.10**	**50,807.00**	**4,871.00**	**9.59**	**136,369.00**	**16,221.00**	**11.90**	**14,849.00**	**2,307.00**	**15.54**	**28,333.00**	**4,137.00**	**14.60**
Horse/Faba beans	2,484.00	911.00	36.68	74.00	35.00	47.46	111.00	57.00	51.10	1,333.00	296.00	22.21	70.00	13.00	19.27	87.00	59.00	68.24
Field peas	2,544.00	1,720.00	67.62	1,355.00	840.00	61.99	1,099.00	705.00	64.11	497.00	498.00	100.09	6.00	6.00	100.09	10.00	10.00	100.09
Haricot beans white	19,472.00	5,381.00	27.63	2,021.00	684.00	33.84	2,163.00	886.00	40.98	4,911.00	1,170.00	23.82	528.00	212.00	40.23	648.00	107.00	16.57
Haricot beans red	516,741.00	32,982.00	6.38	41,271.00	3,483.00	8.44	45,151.00	4,541.00	10.06	129,082.00	16,042.00	12.43	14,168.00	2,275.00	16.05	27,293.00	4,102.00	15.03
Red chick Peas	1,649.00	462.00	28.04	486.00	206.00	42.31	616.00	23.00	3.75	1,142.00	1,140.00	99.88	75.00	75.00	99.88	285.00	285.00	99.88
White Chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-	197.00	-	-	3.00	-	-	10.00	-	-
Mung bean/"Masho"	2,008.00	1,082.00	53.90	959.00	764.00	79.69	1,667.00	1,271.00	76.26	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**7,330.00**	**2,267.00**	**30.92**	**1,286.00**	**174.00**	**13.57**	**1,609.00**	**163.00**	**10.16**	**2,110.00**	**1,288.00**	**61.07**	**478.00**	**315.00**	**65.81**	**382.00**	**330.00**	**86.54**
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground nuts	4,480.00	1,429.00	31.90	1,045.00	95.00	9.07	1,396.00	28.00	2.03	524.00	525.00	100.16	83.00	83.00	100.16	44.00	44.00	100.16
Safflower	737.00	734.00	99.71	114.00	114.00	99.71	153.00	153.00	99.72	1,585.00	1,176.00	74.21	395.00	303.00	76.83	338.00	328.00	96.82
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	2,114.00	1,599.00	75.64	126.00	92.00	72.90	60.00	50.00	84.19	-	-	-	-	-	-	-	-	-
Vegetables	**113,920.00**	**11,074.00**	**9.72**	**8,138.00**	**899.00**	**11.04**	**11,441.00**	**1,230.00**	**10.75**	**57,827.00**	**6,877.00**	**11.89**	**6,063.00**	**1,468.00**	**24.21**	**30,769.00**	**16,239.00**	**52.78**
Lettuce	-	-	-	-	-	-	-	-	-	183.00	-	-	1.00	-	-	5.00	-	-
Head Cabbage	2,955.00	1,306.00	44.19	53.00	36.00	66.96	63.00	38.00	60.39	6,399.00	2,682.00	41.91	266.00	50.00	18.83	1,454.00	206.00	14.18
Ethiopian Cabbage	104,117.00	10,776.00	10.35	7,498.00	891.00	11.89	10,388.00	1,180.00	11.36	36,878.00	3,879.00	10.52	3,049.00	431.00	14.14	6,275.00	765.00	12.18
Tomatoes	3,734.00	1,093.00	29.27	392.00	74.00	18.87	377.00	52.00	13.89	6,011.00	3,059.00	50.89	2,134.00	1,338.00	62.69	20,330.00	15,937.00	78.39
Green peppers	2,514.00	1,051.00	41.82	96.00	15.00	15.83	190.00	12.00	6.04	9,557.00	3,273.00	34.25	580.00	150.00	25.85	2,590.00	724.00	27.96
Red papers	1,793.00	925.00	51.58	99.00	61.00	61.44	423.00	355.00	83.87	718.00	430.00	59.84	32.00	21.00	63.98	111.00	68.00	61.37
Swiss chard	-	-	-	-	-	-	-	-	-	183.00	-	-	1.00	-	-	4.00	-	-
Root crops	**601,255.00**	**58,233.00**	**9.69**	**69,936.00**	**7,793.00**	**11.14**	**151,396.00**	**19,571.00**	**12.93**	**429,966.00**	**45,163.00**	**10.50**	**61,562.00**	**9,595.00**	**15.59**	**133,962.00**	**19,257.00**	**14.38**
Beet root	2,345.00	1,543.00	65.81	64.00	38.00	59.04	208.00	130.00	62.36	3,412.00	1,218.00	35.69	418.00	54.00	12.93	3,675.00	351.00	9.54
Carrot	3,367.00	1,078.00	32.02	126.00	54.00	42.45	135.00	40.00	29.30	900.00	400.00	44.45	43.00	28.00	65.21	94.00	44.00	46.92
Onion	10,418.00	3,568.00	34.24	1,201.00	354.00	29.46	4,935.00	1,975.00	40.02	21,921.00	3,236.00	14.76	2,862.00	563.00	19.68	13,648.00	3,675.00	26.92
Potatoes	574,094.00	57,304.00	9.98	66,126.00	7,684.00	11.62	142,219.00	19,198.00	13.50	396,646.00	45,040.00	11.36	57,351.00	9,570.00	16.69	113,591.00	18,721.00	16.48
Yam	549.00	-	-	9.00	-	-	22.00	-	-	3,424.00	1,920.00	56.07	206.00	143.00	69.35	628.00	532.00	84.66
Garlic	13,134.00	5,591.00	42.57	2,264.00	1,118.00	49.39	3,637.00	2,051.00	56.39	6,820.00	4,189.00	61.43	405.00	228.00	56.19	1,795.00	961.00	53.56
Taro 'Godere'	1,428.00	874.00	61.18	43.00	25.00	59.81	89.00	65.00	73.11	1,918.00	953.00	49.68	199.00	132.00	66.42	432.00	290.00	67.10
Sweet potatoes	4,495.00	2,030.00	45.16	104.00	57.00	55.34	150.00	79.00	52.38	2,397.00	1,413.00	58.96	77.00	50.00	65.06	99.00	72.00	73.09

Tab 25 Con't

National

Crop type	MIXED									MIXED + 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	**732,838.00**	**61,403.00**	**8.38**	**108,246.00**	**31,608.00**	**29.20**	**236,445.00**	**42,934.00**	**18.16**	**524,165.00**	**48,976.00**	**9.34**	**69,962.00**	**11,706.00**	**16.73**	**386,821.00**	**59,636.00**	**15.42**
Cereals	**178,095.00**	**24,026.00**	**13.49**	**74,246.00**	**31,210.00**	**42.04**	**98,948.00**	**36,630.00**	**37.02**	**171,221.00**	**26,984.00**	**15.76**	**34,317.00**	**8,703.00**	**25.36**	**152,434.00**	**45,502.00**	**29.85**
Teff	13,115.00	5,141.00	39.20	5,801.00	2,154.00	37.13	4,374.00	1,885.00	43.08	33,999.00	17,298.00	50.88	12,498.00	6,819.00	54.56	33,975.00	20,441.00	60.16
Barley	79,969.00	14,371.00	17.97	23,735.00	4,824.00	20.32	34,986.00	4,877.00	13.94	30,198.00	6,791.00	22.49	5,450.00	949.00	17.41	17,363.00	5,788.00	33.33
Wheat	56,911.00	20,116.00	35.35	35,178.00	25,530.00	72.57	50,508.00	32,032.00	63.42	47,001.00	16,358.00	34.80	9,281.00	4,205.00	45.31	62,558.00	28,138.00	44.98
Maize	45,220.00	9,332.00	20.64	8,318.00	3,208.00	38.57	7,975.00	2,666.00	33.43	78,729.00	9,396.00	11.93	6,903.00	1,660.00	24.05	35,430.00	7,381.00	20.83
Sorghum	1,022.00	587.00	57.42	471.00	349.00	74.00	319.00	232.00	72.63	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oats/ 'Aja'	4,085.00	2,198.00	53.79	744.00	598.00	80.39	784.00	345.00	43.94	6,463.00	5,248.00	81.19	185.00	169.00	91.03	3,107.00	2,412.00	77.62
Rice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulse	**21,841.00**	**6,865.00**	**31.43**	**2,924.00**	**901.00**	**30.82**	**3,923.00**	**1,312.00**	**33.45**	**11,483.00**	**4,679.00**	**40.75**	**851.00**	**327.00**	**38.43**	**783.00**	**265.00**	**33.92**
Horse/Faba beans	1,470.00	1,238.00	84.24	14.00	13.00	95.16	29.00	25.00	84.24	733.00	732.00	99.93	30.00	30.00	99.93	51.00	51.00	99.93
Field peas	1,528.00	567.00	37.08	460.00	222.00	48.17	552.00	190.00	34.45	-	-	-	-	-	-	-	-	-
White Haricot bean	972.00	687.00	70.64	151.00	129.00	85.19	307.00	284.00	92.49	271.00	204.00	75.54	30.00	22.00	71.70	51.00	37.00	73.60
Red Haricot beans	15,627.00	6,461.00	41.35	1,556.00	631.00	40.55	1,676.00	827.00	49.33	9,837.00	4,572.00	46.48	563.00	232.00	41.16	616.00	250.00	40.52
Red Chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White Chick peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentiles	1,153.00	-	-	221.00	-	-	576.00	-	-	-	-	-	-	-	-	-	-	-
Vetch/Grass peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenugreek	106.00	105.00	99.23	3.00	3.00	99.23	32.00	31.00	99.23	-	-	-	-	-	-	-	-	-
Mung bean/"Masho"	1,501.00	1,494.00	99.54	518.00	516.00	99.63	751.00	747.00	99.54	643.00	642.00	99.94	228.00	228.00	99.94	64.00	64.00	99.94
Gibto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oile seeds	**1,212.00**	**1,211.00**	**99.96**	**198.00**	**198.00**	**99.96**	**79.00**	**79.00**	**99.96**	-	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	1,212.00	1,211.00	99.96	198.00	198.00	99.96	79.00	79.00	99.96	-	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetables	**20,443.00**	**4,986.00**	**24.39**	**1,456.00**	**547.00**	**37.55**	**4,433.00**	**2,017.00**	**45.50**	**36,787.00**	**11,196.00**	**30.43**	**4,328.00**	**2,271.00**	**52.47**	**22,160.00**	**15,877.00**	**71.65**
Lettuce	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Head Cabbage	402.00	285.00	70.97	4.00	4.00	96.66	34.00	33.00	98.86	7,259.00	6,380.00	87.89	974.00	940.00	96.52	7,618.00	7,388.00	96.98
Ethiopian Cabbage	8,752.00	4,035.00	46.10	794.00	431.00	54.31	2,207.00	1,621.00	73.47	4,377.00	1,396.00	31.89	806.00	577.00	71.57	1,504.00	1,223.00	81.36
Tomatoes	-	-	-	-	-	-	-	-	-	10,367.00	7,273.00	70.16	1,076.00	796.00	73.98	5,785.00	4,458.00	77.06
Green peppers	8,005.00	2,055.00	25.68	598.00	336.00	56.23	1,750.00	1,208.00	69.00	20,221.00	8,124.00	40.18	1,333.00	509.00	38.22	6,326.00	4,183.00	66.13
Red papers	3,285.00	1,250.00	38.06	59.00	1.00	0.85	443.00	25.00	5.65	5,021.00	797.00	15.87	133.00	21.00	15.87	884.00	398.00	45.08
Swiss chard	178.00	177.00	99.62	-	-	99.62	-	-	99.62	43.00	-	-	6.00	-	-	43.00	-	-
Root crops	**575,252.00**	**57,095.00**	**9.93**	**29,422.00**	**3,951.00**	**13.43**	**129,062.00**	**21,459.00**	**16.63**	**387,032.00**	**43,072.00**	**11.13**	**30,466.00**	**5,206.00**	**17.09**	**211,445.00**	**27,434.00**	**12.97**
Beet root	526.00	285.00	54.21	6.00	2.00	39.00	26.00	13.00	51.23	2,313.00	686.00	29.68	114.00	30.00	26.38	601.00	457.00	76.14
Carrot	510.00	-	-	120.00	-	-	304.00	-	-	267.00	-	-	1.00	-	-	6.00	-	-
Onion	23,002.00	8,129.00	35.34	1,280.00	443.00	34.61	6,240.00	2,844.00	45.57	56,337.00	15,773.00	28.00	6,305.00	2,683.00	42.54	43,603.00	20,154.00	46.22
Potatoes	542,337.00	56,734.00	10.46	26,764.00	3,909.00	14.61	116,667.00	21,103.00	18.09	321,724.00	41,109.00	12.78	21,717.00	4,216.00	19.41	154,696.00	19,218.00	12.42
Yam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Garlic	16,841.00	5,798.00	34.43	1,241.00	439.00	35.37	5,149.00	1,948.00	37.84	23,187.00	8,331.00	35.93	2,309.00	1,073.00	46.49	12,399.00	5,636.00	45.46
Taro 'Godere'	258.00	257.00	99.64	12.00	12.00	99.64	65.00	64.00	99.64	-	-	-	-	-	-	-	-	-
Sweet potatoes	1,222.00	1,221.00	99.96	-	-	-	611.00	611.00	99.96	1,005.00	-	-	20.00	-	-	141.00	-	-

APPENDIX IV

QUESTIONNAIRE

Form AgSS 2013/8
CENTRAL STATISTICAL AUTHORITY
ETHIOPIAN AGRICULTURAL SAMPLE SURVEY 2021/22 (2014 EC)

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		
SER. NO.	QUESTIONS FOR THE HOLDER	PARCEL NO.	FIELD NO.	
		IS THE FIELD PURE STAND =1 MIXED CROP =2 OTHER LAND USE=3		
		CROP/OTHER NAME	CROP NAME	CROP NAME
		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* → Q16						
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) (Belg 2014 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			