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ETHIOPIA**

CENTRAL STATISTICAL AGENCY

**AGRICULTURAL SAMPLE SURVEY
2009/2010 (2002 E.C.)**

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REPORT ON

LAND UTILIZATION

(PRIVATE PEASANT HOLDINGS, MEHER SEASON)

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PART I

INTRODUCTION AND OBJECTIVES OF THE SURVEY

1.1 Introduction

The relentless exploitation of agriculture and growth of population in Ethiopia have made land an extremely expensive natural resource. This problem is even more pronounced in rural parts of the country within the private peasant holdings where the quest for agricultural land is grave. Land scarcity is in the spotlight and a persistent concern to the government at the height of the march on food security.

By virtue of being an indispensable part of life, land is changing invariably in configuration resulting in minuscule holding size per household and becoming a scant supply to farmers in Ethiopia. Information on the mode of land use that prevails within the farming population certainly assists the government to spell out land use policy so as to cope with the pressure on agricultural land.

In view of this, to gauge the shifting make – up of land use and help decision makers articulate the fitting policies, the Central Statistical Agency (C.S.A) has been providing statistical information by collecting, processing and summarizing data on the country's agricultural land use by employing standard procedures of data collection. The 2009/10 (2002 E.C) Agricultural Sample Survey was conducted to furnish data on land utilization within the private peasant holdings for Meher season of the same year.

The survey results are presented in this bulletin and on electronic media for data users. This report comprises three parts. Part I contains the objectives of the annual survey. Part II deals with coverage of the survey, sample design, field organization and method of data collection and Part III includes summary of the results. Estimation procedures and formulation of estimates of totals and variance are presented in Appendix I. Estimates of the standard errors with the corresponding coefficients of variations for land use area are presented in Appendix II.

1.2 Objectives of the Survey

The general objective of CSA's Agricultural Sample Survey (AgSS) is to collect basic quantitative information on the country's agricultural land that is essential for planning, policy formulation, food security, etc. The AgSS is composed of four components: Crop Production Forecast Survey, Meher Season Survey of which land use is a part, Livestock Survey and Belg Season Survey.

The specific objectives of Meher Season Survey (Land Utilization) are to estimate the total cultivated area and other forms of land use. Companion reports are also published separately with estimates of crop area, volume of production and quantity of agricultural inputs during Meher Season agriculture. The Land Utilization report is based on private peasant holdings in sedentary rural areas of the country. The data is summarized at regional levels.

PART II

SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

2.1. SCOP AND COVERAGE OF THE SURVEY

The range of data items that the 2009/10 (2002 E.C) Agricultural Main Season Survey dealt with included land use area (crop area, fallow land, grazing land, wood land and other land use). Holders engaged in growing crops / raising animals were enumerated and data on land use area was recorded.

The 2009/10 (2002 E.C) Annual Agricultural Sample Survey (Meher season) covered the entire rural parts of the country except the non-sedentary population of three zones of Afar & six zones of Somali regions.

To be covered by the survey, a total of 1660 enumeration areas (EAs) were selected. However, due to various reasons that are beyond control, in 25 EAs the survey could not be successful and hence interrupted. Thus, all in all the survey succeeded to cover 1635 EAs (98.5%) throughout the regions. The Annual Agricultural Sample survey (Meher season) was conducted on the basis of 20 agricultural households selected from each EA. Regarding the ultimate sampling units, it was intended to cover a total of 33,200 agricultural households, however 32,630 (98.3 %) were actually covered by the survey.

2.2 SAMPLING FRAME

The list containing EAs of all regions and their respective agricultural households obtained from the 2006/07 (1999 E.C) cartographic census frame was used as the sampling frame in order to select the primary sampling units (EAs). Consequently, all sample EAs were selected from this frame based on the design proposed for the survey. The second stage sampling units, households, were selected from a fresh list of households that were prepared for each EA at the beginning of the survey.

2.3 SAMPLE DESIGN

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

The sample size for the 2009/10 (2002 E.C) agricultural sample survey was determined by taking into account both the required level of precision for the most important estimates within each domain and the amount of resources allocated to the survey. In order to reduce non-sampling errors, manageability of the survey in terms of quality and operational control was also considered.

All regions were taken to be the domain of estimation for which major findings of the survey are reported.

2.4 SELECTION SCHEME

Enumeration areas from each stratum were selected systematically using probability proportional to size sampling technique; size being number of agricultural households. The sizes for EAs were obtained from the 2006/07 (1999 E.C) cartographic census frame. From the fresh list of households prepared at the beginning of the survey 20 agricultural households within each sample EA were selected systematically.

Estimation procedure of totals, ratios, sampling error and the measurement of precision of estimates (CV) are given in Appendix I and II respectively. Distribution of sampling units (sampled and covered EAs) by stratum is also presented in Appendix III.

2.5. ORGANIZATION OF FIELD WORK

The conduct of a survey cannot be executed without the arrangement of fieldwork. In recognition of this, the organization of fieldwork has been entrusted to the Department of Regional Offices and Field Operations that liaises between the Head Office and the 25 Branch Statistical Offices spread across the regions. All Branch Offices took part in the survey execution especially in recruiting the enumerators, organizing the 2nd stage training, assigning the field staff to their sites of enumeration, supervising the data collection and retrieving completed questionnaires and submitting them to the Head Office for data processing.

The Branch Offices were also responsible for administering the financial and logistic aspects of the survey within their areas of operation. A total of 1,817 enumerators, 558 field supervisors, 44 coordinators and 65 statisticians were involved in the data collection where on the average one supervisor was assigned to five enumeration areas for supervision of data collection. All the enumerators were supplied with the necessary survey equipment after the completion of the training to ensure the smooth operation of the survey. To facilitate the data collection activities, a total of 164 four-wheel drive vehicles were used.

2.6 TRAINING OF FIELD STAFF

The execution of a survey and quality of data acquired from the survey highly depend on the type of training given to the enumerators and supervisors and the consequent understanding of the tasks to be performed and the standard procedures to be followed by the enumerators and supervisors in the survey undertaking. The quality and completeness of data are ensured when the training meets its objective of producing responsible and fervent enumerators and supervisors.

In light of this point, the training was given to the field staff in two stages. The first stage training, which took place at the Head Quarters of CSA and lasted 7 days targeted staff from the Head Office, statisticians and senior field supervisors from Branch Statistical Offices. The staff that took part in the first stage training was then assigned to conduct similar training for the enumerators and other supervisors for 12 days in all the twenty- five Branch Statistical Offices distributed across the country.

In the training the field staffs was given detailed classroom instruction on how to collect data, method of area measurement, interviewing procedures, etc. The training also included field practice to reinforce the understanding of concepts, definitions and theories discussed in the classroom with regard to field measurement, crop cutting GPS reading and interviewing methods.

2.7 METHOD OF DATA COLLECTION

The agricultural data for the year 2009/10 (2002 E.C) was collected from sedentary rural peasant households by interviewing the selected agricultural holders and

physically measuring their crop and other fields. The data obtained were recorded in various forms designed for this purpose.

The data obtained were recorded in various forms designed for this purpose. Instruments like measuring tape; compass, kitchen balance, scientific calculators, GPS (Oromiya region only) and others were used during data collection for a timely and smooth acquisition of accurate data. The procedures for measuring area under crop and area of non - crop fields operated by the holders were performed for the 30 selected households from each sampled E.A. using measuring tapes and compasses.

2.8. DATA PROCESSING

a) Editing, Coding and Verification

Statistical data editing plays an important role in ensuring the quality of the collected survey data. It minimizes the effects of errors introduced while collecting data in the field, hence the need for data editing, coding and verification. Although coding and editing are done by the enumerators and supervisors in the field, respectively, verification of this task is done at the Head Office. An editing, coding and verification instruction manual was prepared and reproduced for this purpose. Then 66 editors-coders and verifiers were trained for two days in editing, coding and verification using the aforementioned manual as a reference and teaching aid. The completed questionnaires were edited, coded and later verified on a 100 % basis before the questionnaires were passed over to the data entry unit. The editing, coding and verification exercise of all questionnaires took 18 days.

b) Data Entry, Cleaning and Tabulation

Before data entry, the Natural Resources and Agricultural Statistics Department of the CSA prepared edit specification for the survey for use on personal computers for data consistency checking purposes. The data on the edited and coded questionnaires were then entered into personal computers. The data were then checked and cleaned using the edit specifications prepared earlier for this purpose. The data entry operation involved about 70 data encoders, 10 data encoder supervisors, 12 data cleaning operators and 55 personal computers. The data entered into the computers using the entry module of the CSPRO (Census and Survey Processing System) software, which is a software package developed by the United States Bureau of the Census. Following

the data entry operations, the data was further reviewed for data inconsistencies, missing data ... etc. by the regular professional staff from Natural Resources and Agricultural Statistics Department. The final stage of the data processing was to summarizing the cleaned data and produce statistical tables that present the results of the survey using the tabulation component of the PC based CSPRO software produced by professional staff from Data processing Department.

2.9 CONCEPTS AND DEFINITIONS

Data items of agriculture have to be distinctly defined and identified so that the information about the items becomes useful. The correct way of stating data items and related terms is a prerequisite for making standards and definitions for the collection and compilation of agricultural data .The purpose of using standard concepts and definitions is not only to provide quality data but also to ensure that the right items are enumerated and measured accurately to reflect the agricultural situation.

Standard concepts and definitions used in the survey help to maintain consistent enumeration and measurement of variables of interest. To achieve this, CSA communicates concepts and definitions to the field staff through training and instruction manuals. The concepts and definitions used in the survey included the following.

Enumeration Area (E.A): an enumeration area in the rural parts of the country is a locality that is in most of the cases less than and only in some cases equal to a farmers' association in geographical area and usually consists of 150-200 households

Household: - a household may be either:

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

Agriculture: - The growing of crops and/or raising of animals for own consumption and /or sale.

Agricultural Household: - a household is considered an agricultural household when at least one member of the household is engaged in growing crops and/or raising livestock in private or in combination 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 legal entity by one person alone, or with others without regard to management, organization, size or location.

Size of Holding: - is the total land in different uses that a holder exercises management control over. The land can be under any crops, fallow, grazing, woodland and other land.

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

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

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

Crop: includes cereals, pulses, oilseeds, vegetables, root crops, fruits coffee, Enset, Chat, hops, sugarcane, cotton, tobacco, etc produced for food, making drinks, stimulation and making fabrics or clothing.

Temporary/Annual Crops: - are crops, which are grown in less than a year's time, sometimes only a few months with an objective to sow or replant again for additional

production following the current harvest. Continuously grown crops planted in rotation are also considered as temporary crops since each is harvested and destroyed by ploughing in preparation for each successive crop.

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

Meher (Main) Season Crop: - any temporary crop harvested between Meskerm (September) and Yekatit (February) is considered as Meher season crop.

Belg Season Crop: - any temporary crop harvested between the months of Megabit (March) and Pagume (August) is considered to be Belg Season Crop.

Grazing land:- land used for growing herbaceous forage crops either through cultivation or naturally, is considered to be grazing land.

Fallow land: - land which has been or is intended to be kept at rest for at least one agricultural year (season) and a maximum idleness of less than five years is considered fallow land.

Woodland: – all tracts of timber, natural or planted and part of the holding, which has value as wood, timber, other wood products and /or used for production. Forestland used for recreational purposes is not included as woodland.

Other land use: - includes land occupied by the holders' houses and /or buildings, gardens, barns, wells, ponds, etc.

Note:-

1. If in some tables figures do not add up to total it is due to rounding
2. Those land use designated by “*” in all tables could not be reported because of high coefficient of variation (i.e. they are less reliable). However, they are consolidated in the total in the estimate.
3. In all tables “-” indicates not reported.

PART III

SUMMARY OF SURVEY RESULTS

Land use area

Food security embraces a wide range of crops such as cereals, pulses, oilseeds, etc. The fact that most of the land within the private peasant holding is under these food crops comes as no surprise when the struggle for self-sufficiency in food is being intensified. This is nowhere more illustrated than in the land use survey results for 2009/10 (2002 E.C).

The total land area reported for the private peasant holdings was estimated at about 16 million hectares and operated by more than 12.9 million agricultural households and about 13.3 million holders.

The statistical tables in this report show that most of the agricultural land (more than 75%) was under temporary crops and about 12.3 million and 6.9 million households were reported growing temporary and permanent crops, respectively, in 2009/10 (2002 E.C). The numbers of households growing both types of crops are not mutually exclusive.

The average holding sizes per household and holder were recorded to be 1.23 and 1.2 hectares, respectively. On the other hand the average cropland area was found out to be 1.03 hectares per household and 1.01 hectare per holder. For details refer to Statistical Table 1.

Distributions of households by holding size and holders, by age, sex, educational status, holding type and cropland area, by crop type and total land area by tenure system are presented in Statistical Tables 2 to 8.10

Fig.1 Land Use Area by Type

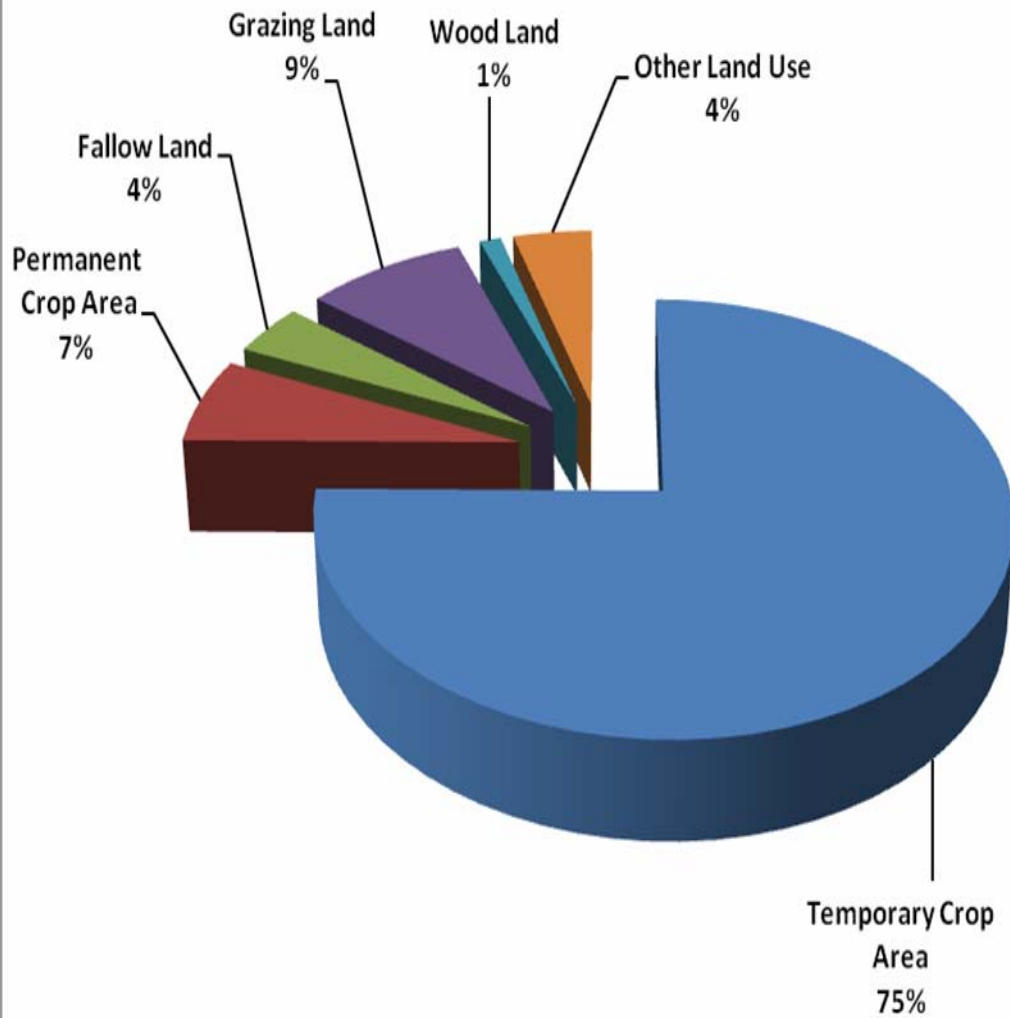


Table 2 Distribution of Agricultural Households by Holding size and Household size

Ethiopia

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	8,262,937	1,256,310	1,073,601	1,683,236	625,867	12,901,952
Under 0.10	683,326	50,740	37,923	76,024	38,695	886,707
0.10 – 0.50	2,064,327	226,197	237,595	387,736	124,204	3,040,058
0.51 – 1.00	2,031,597	293,787	257,569	407,303	134,676	3,124,932
1.01 – 2.00	2,146,107	405,114	318,126	453,439	167,274	3,490,060
2.01 – 5.00	1,230,324	258,136	199,461	324,743	139,866	2,152,529
5.01 – 10.00	102,268	20,838	20,037	30,123	19,861	193,127
Over 10	4,989	*	2,890	3,870	*	14,537

Table 2.1 Distribution of Agricultural Households by Holding size and Household size

Tigray Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	624,466	155,999	79,461	94,185	27,340	981,451
Under 0.10	63,069	4,722	6,195	6,631	1,648	82,264
0.10 – 0.50	188,932	41,475	22,063	24,993	7,982	285,444
0.51 – 1.00	166,316	40,215	25,011	23,508	9,178	264,228
1.01 – 2.00	147,139	44,594	16,636	24,000	5,477	237,847
2.01 – 5.00	56,820	23,805	8,894	13,998	2,877	106,395
5.01 – 10.00	2,189	*	*	894	-	4,933
Over 10	-	-	-	*	*	*

Table 2.2 Distribution of Agricultural Households by Holding size and Household size

Afar Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	42,935	2,856	1,575	2,157	962	50,485
Under 0.10	22,911	2,012	1,141	1,278	706	28,047
0.10 – 0.50	6,133	357	*	*	*	6,857
0.51 – 1.00	6,842	*	*	*	-	7,353
1.01 – 2.00	4,599	351	*	*	*	5,522
2.01 – 5.00	2,213	-	*	-	*	2,387
5.01 – 10.00	*	-	-	*	*	319
Over 10	-	-	-	-	-	-

Table 2.3 Distribution of Agricultural Households by Holding size and Household size

Amhara Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	2,596,573	548,142	144,247	248,847	78,951	3,616,759
Under 0.10	236,719	18,062	4,698	11,020	7,696	278,195
0.10 – 0.50	500,458	73,072	13,986	31,642	9,834	628,992
0.51 – 1.00	591,788	122,429	31,209	54,057	12,766	812,250
1.01 – 2.00	809,567	210,987	57,670	79,206	30,059	1,187,488
2.01 – 5.00	432,890	117,180	34,169	70,319	17,520	672,077
5.01 – 10.00	23,477	5,481	*	2,603	*	34,498
Over 10	*	*	*	-	-	*

Table 2.4 Distribution of Agricultural Households by Holding size and Household size

Oromia Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	2,970,023	390,409	540,101	755,757	301,375	4,957,665
Under 0.10	200,503	15,604	13,312	32,784	10,911	273,114
0.10 – 0.50	576,221	58,453	78,668	106,675	32,665	852,682
0.51 – 1.00	674,314	83,688	117,066	158,555	44,677	1,078,299
1.01 – 2.00	825,683	116,910	176,301	230,519	89,543	1,438,956
2.01 – 5.00	620,659	101,712	135,283	200,908	104,416	1,162,978
5.01 – 10.00	69,583	13,474	17,342	22,641	18,052	141,092
Over 10	3,060	*	2,130	3,675	*	10,544

Table 2.5 Distribution of Agricultural Households by Holding size and Household size

Somalie Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	114,722	16,808	2,860	5,857	1,729	141,976
Under 0.10	32,024	4,253	946	1,731	*	39,059
0.10 – 0.50	25,170	5,605	1,033	1,355	1,002	34,166
0.51 – 1.00	24,561	2,101	*	883	*	28,089
1.01 – 2.00	23,256	2,130	*	1,463	*	27,631
2.01 – 5.00	8,789	2,221	*	*	*	11,463
5.01 – 10.00	922	*	-	*	-	1,570
Over 10	-	-	-	-	-	-

Table 2.6 Distribution of Agricultural Households by Holding size and Household size

Benishangul – Gumuz Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	85,941	15,161	15,077	22,399	6,864	145,443
Under 0.10	6,330	*	353	906	910	8,932
0.10 – 0.50	20,996	2,347	3,398	3,141	1,044	30,925
0.51 – 1.00	17,654	2,587	3,503	5,195	1,700	30,640
1.01 – 2.00	22,114	5,350	4,740	6,518	1,528	40,250
2.01 – 5.00	17,716	4,283	2,840	5,898	1,491	32,228
5.01 – 10.00	876	*	*	708	190	2,073
Over 10	*	-	*	*	-	396

Table 2.7 Distribution of Agricultural Households by Holding size and Household size

S.N.N.P. Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	1,777,442	123,270	284,272	542,215	203,984	2,931,183
Under 0.10	115,217	5,397	10,708	20,495	16,082	167,899
0.10 – 0.50	726,113	43,879	115,922	214,841	69,314	1,170,070
0.51 – 1.00	534,949	41,319	78,634	161,259	64,973	881,134
1.01 – 2.00	306,263	23,996	61,057	109,641	39,968	540,925
2.01 – 5.00	89,916	8,680	17,951	32,889	13,180	162,615
5.01 – 10.00	4,984	-	-	*	*	8,541
Over 10	-	-	-	-	-	-

Table 2.8 Distribution of Agricultural Households by Holding size and Household size

Gambela Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	19,820	1,813	3,379	6,846	3,854	35,712
Under 0.10	3,467	160	340	965	523	5,455
0.10 – 0.50	10,505	635	1,451	2,829	1,945	17,365
0.51 – 1.00	4,053	551	910	1,881	842	8,236
1.01 – 2.00	1,334	364	481	888	319	3,385
2.01 – 5.00	460	69	162	284	193	1,168
5.01 – 10.00	-	*	*	-	*	*
Over 10	-	-	-	-	-	-

Table 2.9 Distribution of Agricultural Households by Holding size and Household size

Harari Region

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	13,091	1,259	1,619	2,232	461	18,662
Under 0.10	687	*	183	-	-	925
0.10 – 0.50	3,811	187	577	886	207	5,668
0.51 – 1.00	4,818	528	485	750	*	6,703
1.01 – 2.00	3,233	*	375	477	*	4,550
2.01 – 5.00	542	*	-	*	-	816
5.01 – 10.00	-	-	-	-	-	-
Over 10	-	-	-	-	-	-

Table 2.10 Distribution of Agricultural Households by Holding size and Household size

Dire Dawa

Holding size (HA)	Household size					
	One Member	2 - 3 Members	4 - 5 Members	6 - 9 Members	10 and more Members	All Households
All	17,925	592	1,010	2,742	347	22,616
Under 0.10	2,398	*	*	213	*	2,816
0.10 – 0.50	5,987	*	455	1,125	*	7,889
0.51 – 1.00	6,302	*	422	1,002	*	8,001
1.01 – 2.00	2,919	*	*	348	*	3,506
2.01 – 5.00	319	*	-	*	-	403
5.01 – 10.00	-	-	-	-	-	-
Over 10	-	-	-	-	-	-

Table 3 Distribution of Holders by Age, Holding type and Sex

Ethiopia

Holder's age	Holding type					
	Crop			Livestock		
	Male	Female	Both	Male	Female	Both
Under 18	43,582	3,216	46,798	40,434	28,654	69,088
18 – 20	80,650	8,683	89,333	38,691	19,259	57,950
21 – 24	96,560	17,990	114,549	30,805	11,677	42,483
25 – 29	175,770	26,681	202,451	40,195	14,637	54,832
30 – 39	231,141	55,197	286,338	43,341	34,233	77,574
40 – 49	96,879	61,333	158,213	25,108	27,470	52,578
50 – 59	71,621	68,132	139,753	12,953	26,032	38,985
>=60	116,725	157,540	274,265	25,081	48,480	73,561
All	912,929	398,771	1,311,700	256,607	210,443	467,050

Table 3. Continued.....

Holder's age	Holding type					
	Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both
Under 18	48,901	9,607	58,508	132,917	41,477	174,394
18 – 20	198,586	27,290	225,876	317,927	55,233	373,159
21 – 24	477,935	57,724	535,658	605,300	87,390	692,690
25 – 29	1,339,925	144,574	1,484,499	1,555,890	185,892	1,741,782
30 – 39	2,793,618	404,124	3,197,742	3,068,099	493,555	3,561,654
40 – 49	1,986,843	437,490	2,424,333	2,108,830	526,294	2,635,124
50 – 59	1,311,902	436,695	1,748,597	1,396,476	530,858	1,927,335
>=60	1,512,904	472,305	1,985,209	1,654,710	678,325	2,333,035
All	9,670,614	1,989,809	11,660,424	10,840,150	2,599,024	13,439,174

Ethiopia

Table 3.1 Distribution of Holders by Age, Holding type and Sex

Tigray Region

Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under	-	-	-	-	*	*	-	*	*	-	*	*
18 – 20	*	-	*	*	*	*	1,534	1,657	3,191	2,415	2,317	4,732
21 – 24	1,289	1,695	2,984	2,024	2,142	4,165	13,781	1,483	15,264	17,094	5,320	22,414
25 – 29	6,756	2,813	9,569	4,006	1,780	5,786	57,645	8,934	66,579	68,407	13,527	81,934
30 – 39	12,671	6,342	19,013	4,611	6,016	10,628	183,958	30,322	214,280	201,240	42,681	243,920
40 – 49	4,035	8,585	12,620	*	3,954	5,130	175,687	32,398	208,085	180,898	44,936	225,834
50 – 59	4,265	9,053	13,318	*	5,387	6,079	113,064	37,411	150,476	118,022	51,851	169,873
>=60	9,974	22,901	32,875	2,916	8,635	11,551	152,403	47,749	200,153	165,293	79,286	244,579
All	39,286	51,390	90,676	16,010	28,837	44,847	698,072	160,392	858,464	753,368	240,618	993,987

Table 3.2 Distribution of Holders by Age, Holding type and Sex

Afar Region

Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	*	-	*	-	*	*	*	-	*	*	*	*
18 – 20	*	-	*	736	364	1,100	*	*	*	1,015	375	1,389
21 – 24	*	-	*	952	195	1,147	290	*	341	1,280	246	1,526
25 – 29	*	-	*	4,043	630	4,673	1,085	-	1,085	5,393	630	6,024
30 – 39	*	*	*	10,948	1,577	12,525	2,808	*	2,937	13,870	1,764	15,634
40 – 49	*	-	*	10,213	960	11,173	2,573	361	2,934	12,838	1,321	14,159
50 – 59	-	-	-	4,767	804	5,571	728	187	915	5,496	991	6,486
>=60	-	*	*	3,223	755	3,978	1,143	*	1,351	4,366	1,001	5,366
All	565	*	659	34,880	5,343	40,223	8,978	946	9,924	44,423	6,384	50,807

Table 3.3 Distribution of Holders by Age, Holding type and Sex

Amhara Region

Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	3,376	*	4,455	4,101	6,028	10,130	6,024	*	6,885	13,502	7,969	21,470
18 – 20	12,125	*	13,790	14,002	7,144	21,146	32,896	6,581	39,477	59,023	15,390	74,413
21 – 24	19,908	4,883	24,791	16,323	2,505	18,827	106,719	7,769	114,488	142,950	15,156	158,106
25 – 29	53,839	10,642	64,481	15,652	*	18,032	328,961	23,822	352,783	398,452	36,843	435,296
30 – 39	72,442	25,086	97,528	5,785	13,853	19,638	739,766	74,654	814,420	817,993	113,593	931,586
40 – 49	30,736	25,271	56,007	*	7,387	8,661	596,411	101,053	697,465	628,422	133,710	762,133
50 – 59	25,158	29,883	55,042	-	8,308	8,308	404,894	126,616	531,510	430,053	164,807	594,860
>=60	43,371	55,745	99,116	5,326	15,812	21,137	483,557	134,995	618,552	532,254	206,551	738,805
All	260,956	154,254	415,210	62,464	63,416	125,880	2,699,228	476,351	3,175,579	3,022,648	694,021	3,716,669

Table 3.4 Distribution of Holders by Age, Holding type and Sex

Oromia Region												
Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	33,833	2,097	35,929	25,261	16,616	41,877	29,205	5,772	34,977	88,298	24,485	112,783
18 – 20	48,475	3,355	51,831	15,698	8,027	23,724	114,193	12,758	126,950	178,366	24,140	202,505
21 – 24	54,875	4,448	59,324	7,985	4,792	12,777	250,021	31,178	281,198	312,881	40,418	353,299
25 – 29	71,266	6,935	78,201	6,912	6,970	13,882	629,612	50,750	680,362	707,789	64,656	772,445
30 – 39	87,288	15,062	102,350	8,945	7,519	16,463	1,136,490	151,741	1,288,230	1,232,722	174,322	1,407,044
40 – 49	36,430	16,241	52,671	4,560	9,551	14,111	713,751	152,666	866,418	754,741	178,459	933,200
50 – 59	27,833	15,361	43,194	*	7,132	8,638	474,951	154,279	629,230	504,291	176,772	681,063
>=60	42,266	50,129	92,395	9,094	17,393	26,487	522,420	180,029	702,449	573,780	247,551	821,331
All	402,266	113,630	515,896	79,960	77,999	157,959	3,870,642	739,173	4,609,815	4,352,869	930,802	5,283,670

Table 3.5 Distribution of Holders by Age, Holding type and Sex

Somali Region												
Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	-	-	-	-	*	*	*	-	*	*	*	*
18 – 20	-	-	-	*	*	731	697	721	1,419	754	1,395	2,149
21 – 24	*	-	*	*	437	1,228	3,226	*	3,471	4,245	682	4,927
25 – 29	*	*	*	*	1,168	3,676	7,990	1,363	9,353	10,840	2,593	13,433
30 – 39	1,756	*	2,009	6,537	1,877	8,413	26,608	2,551	29,159	34,901	4,680	39,582
40 – 49	1,441	*	1,696	5,622	2,669	8,291	23,912	3,361	27,273	30,975	6,284	37,259
50 – 59	*	*	872	3,935	2,167	6,102	11,414	3,351	14,765	15,794	5,946	21,739
>=60	*	*	*	3,339	2,968	6,307	12,117	3,142	15,259	15,781	6,805	22,587
All	4,538	1,693	6,230	22,788	12,119	34,907	86,105	14,734	100,839	113,430	28,546	141,976

Table 3.6 Distribution of Holders by Age, Holding type and Sex

Benishangul – Gumuz Region												
Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	469	-	469	*	-	*	630	*	738	1,349	*	1,457
18 – 20	1,889	*	2,268	*	*	*	3,033	841	3,874	4,971	1,278	6,249
21 – 24	938	699	1,637	*	-	*	6,532	882	7,414	7,691	1,581	9,272
25 – 29	2,783	846	3,629	*	*	*	17,585	2,417	20,003	20,501	3,437	23,939
30 – 39	3,482	1,236	4,717	-	*	*	27,954	5,207	33,161	31,436	6,552	37,988
40 – 49	2,705	1,184	3,889	-	-	-	19,830	4,713	24,543	22,535	5,897	28,432
50 – 59	934	1,504	2,439	-	*	*	12,302	3,329	15,631	13,236	5,042	18,278
>=60	2,803	2,056	4,859	*	*	*	15,036	3,045	18,082	18,048	5,201	23,249
All	16,002	7,905	23,907	862	649	1,511	102,903	20,543	123,446	119,767	29,097	148,865

Table 3.7 Distribution of Holders by Age, Holding type and Sex

S.N.N.P. Region												
Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	5,744	-	5,744	10,481	5,497	15,979	12,783	2,373	15,156	29,008	7,870	36,878
18 – 20	17,498	3,181	20,679	7,509	*	9,843	44,783	4,493	49,276	69,789	10,008	79,797
21 – 24	18,551	6,015	24,566	2,412	1,555	3,967	94,095	15,960	110,054	115,058	23,529	138,587
25 – 29	39,061	5,108	44,169	6,471	1,479	7,951	288,671	56,612	345,283	334,203	63,200	397,403
30 – 39	51,795	6,616	58,411	6,329	*	9,384	657,603	137,472	795,075	715,727	147,143	862,870
40 – 49	20,491	9,060	29,551	*	2,397	4,301	442,454	140,424	582,879	464,850	151,881	616,731
50 – 59	12,686	11,425	24,111	*	1,842	3,648	288,163	109,783	397,946	302,656	123,050	425,705
>=60	17,442	25,411	42,853	*	2,320	3,074	318,624	101,970	420,594	336,819	129,702	466,521
All	183,267	66,816	250,083	37,668	20,479	58,146	2,147,176	569,087	2,716,263	2,368,111	656,382	3,024,492

Table 3.8 Distribution of Holders by Age, Holding type and Sex

Gambela Region

Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	104	*	144	*	*	*	*	*	*	237	128	365
18 – 20	251	*	352	*	-	*	510	152	662	770	253	1,024
21 – 24	650	163	813	*	*	119	1,479	*	1,559	2,196	295	2,492
25 – 29	1,238	275	1,513	*	*	*	3,279	513	3,792	4,587	843	5,430
30 – 39	1,443	452	1,894	*	26	*	7,362	1,198	8,560	8,844	1,675	10,519
40 – 49	869	737	1,606	*	*	*	4,510	1,356	5,866	5,411	2,099	7,509
50 – 59	269	387	657	*	-	*	2,724	848	3,572	3,000	1,235	4,235
>=60	356	283	639	*	*	*	*	467	4,477	4,500	783	5,283
All	5,181	2,437	7,618	481	203	684	23,883	4,670	28,553	29,544	7,311	36,855

Table 3.9 Distribution of Holders by Age, Holding type and Sex

Harari Region

Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	-	-	-	-	-	-	-	-	-	-	-	-
18 – 20	*	-	*	-	-	-	435	-	435	514	-	514
21 – 24	*	*	*	-	-	-	924	*	1,000	1,007	162	1,169
25 – 29	149	-	149	-	-	-	2,750	*	2,866	2,899	*	3,015
30 – 39	151	*	194	*	*	*	5,156	414	5,569	5,348	502	5,849
40 – 49	*	-	*	-	*	*	3,025	559	3,584	3,100	595	3,695
50 – 59	*	*	*	-	-	-	1,909	466	2,375	1,938	510	2,448
>=60	*	188	330	-	-	-	1,291	400	1,691	1,433	589	2,021
All	707	362	1,069	*	*	*	15,490	2,031	17,521	16,238	2,474	18,712

Table 3.10 Distribution of Holders by Age, Holding type and Sex

Dire Dawa

Holder's age	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Under 18	-	-	-	*	-	*	-	-	-	*	-	*
18 – 20	-	-	-	*	-	*	264	*	341	310	*	387
21 – 24	-	-	-	*	-	*	868	-	868	899	-	899
25 – 29	*	-	*	*	-	*	2,348	*	2,394	2,818	*	2,864
30 – 39	-	*	*	*	*	262	5,913	437	6,350	6,019	643	6,662
40 – 49	*	-	*	326	512	838	4,689	599	5,288	5,060	1,111	6,172
50 – 59	-	*	*	240	*	423	1,752	425	2,177	1,992	655	2,647
>=60	*	*	*	*	464	551	2,302	300	2,602	2,435	858	3,292
All	*	189	350	1,453	1,317	2,770	18,137	1,884	20,021	19,752	3,389	23,141

Table 4 Distribution of Holders by Educational level, Holding Type and Sex

Ethiopia

Educational level	Holding type					
	Crop			Livestock		
	Male	Female	Both	Male	Female	Both
Illiterate	479,462	365,565	845,027	136,100	163,311	299,411
Literate (Informal Ed.)	67,288	8,804	76,092	16,686	4,373	21,059
Grades 1 – 3	114,115	5,418	119,533	26,694	12,446	39,140
Grades 4 – 6	136,466	9,803	146,269	39,372	15,698	55,070
Grades 7 – 8	60,745	5,454	66,199	21,272	11,318	32,590
Grades 9 – 11	42,682	2,941	45,623	12,846	3,297	16,142
Grade 12 complete	6,276	*	7,062	*	-	*
Above grade 12	5,896	-	5,896	1,610	-	1,610
All	912,929	398,771	1,311,700	256,607	210,443	467,050

Table 4. Continued.....

Ethiopia

Educational level	Holding type					
	Crop & Livestock			All		
	Male	Female	Male	Female	Male	Female
Illiterate	5,620,535	1,817,147	5,620,535	1,817,147	5,620,535	1,817,147
Literate (Informal)	908,088	36,182	908,088	36,182	908,088	36,182
Grades 1 – 3	1,180,255	54,794	1,180,255	54,794	1,180,255	54,794
Grades 4 – 6	1,209,757	51,425	1,209,757	51,425	1,209,757	51,425
Grades 7 – 8	442,991	19,845	442,991	19,845	442,991	19,845
Grades 9 – 11	227,573	7,202	227,573	7,202	227,573	7,202
Grade 12 complete	52,742	*	52,742	*	52,742	*
Above grade 12	28,673	*	28,673	*	28,673	*
All	9,670,614	1,989,809	9,670,614	1,989,809	9,670,614	1,989,809

Table 4.1 Distribution of Holders by Educational level, Holding Type and Sex

Tigray Region

Educational level	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Illiterate	18,194	48,811	67,006	5,423	26,684	32,107	385,989	149,565	535,553	409,606	225,060	634,666
Literate (Informal Ed.)	8,633	-	8,633	2,054	-	2,054	119,623	1,580	121,203	130,310	1,580	131,890
Grades 1 – 3	*	*	2,500	3,110	*	3,703	94,592	4,310	98,902	98,904	6,200	105,105
Grades 4 – 6	7,661	-	7,661	*	*	2,682	71,869	2,931	74,799	81,306	3,836	85,143
Grades 7 – 8	*	*	1,933	*	*	1,740	15,314	1,659	16,972	17,679	2,966	20,645
Grades 9 – 11	2,092	*	2,397	*	*	2,040	9,639	*	9,987	13,447	*	14,423
Grade 12	*	-	*	*	-	*	*	-	*	1,566	-	1,566
Above grade 12	-	-	-	-	-	-	*	-	*	*	-	*
All	39,286	51,390	90,676	16,010	28,837	44,847	698,072	160,392	858,464	753,368	240,618	993,987

Table 4.2 Distribution of Holders by Educational level, Holding Type and Sex

Afar Region

Educational level	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Illiterate	323	*	417	29,390	4,650	34,040	7,796	946	8,742	37,509	5,691	43,199
Literate (Informal Ed.)	*	-	*	1,895	*	2,305	217	-	217	2,146	*	2,555
Grades 1 – 3	-	-	-	1,424	*	1,522	410	-	410	1,834	*	1,932
Grades 4 – 6	*	-	*	1,155	*	1,243	427	-	427	1,639	*	1,727
Grades 7 – 8	*	-	*	436	*	478	*	-	*	529	*	572
Grades 9 – 11	*	-	*	374	*	428	*	-	*	508	*	562
Grade 12 complete	-	-	-	*	-	*	-	-	-	*	-	*
Above grade 12	*	-	*	-	-	-	-	-	-	*	-	*
All	565	*	659	34,880	5,343	40,223	8,978	946	9,924	44,423	6,384	50,807

Table 4.3 Distribution of Holders by Educational level, Holding Type and Sex

Amhara Region

Educational level	Holding type					
	Crop			Livestock		
	Male	Female	Both	Male	Female	Both
Illiterate	170,402	141,901	312,303	32,429	52,152	84,581
Literate (Informal Ed.)	35,575	*	41,294	7,021	*	9,633
Grades 1 – 3	20,741	*	22,428	6,454	2,959	9,414
Grades 4 – 6	20,356	2,344	22,700	6,870	3,919	10,790
Grades 7 – 8	7,219	1,197	8,416	7,380	*	8,431
Grades 9 – 11	5,889	*	7,296	*	*	*
Grade 12 complete	*	-	*	-	-	-
Above grade 12	*	-	*	-	-	-
All	260,956	154,254	415,210	62,464	63,416	125,880

Table 4.3 Continued.....

Amhara Region

Educational level	Holding type					
	Crop & Livestock			All		
	Male	Female	Male	Female	Male	Female
Illiterate	1,817,653	447,254	2,264,907	2,020,485	641,306	2,661,791
Literate (Informal)	457,559	12,039	469,597	500,155	20,370	520,525
Grades 1 – 3	158,638	4,704	163,342	185,833	9,351	195,184
Grades 4 – 6	182,377	5,219	187,596	209,603	11,483	221,086
Grades 7 – 8	53,135	3,913	57,048	67,735	6,160	73,895
Grades 9 – 11	25,362	*	27,669	33,559	4,437	37,996
Grade 12 complete	4,505	*	4,965	4,955	*	5,414
Above grade 12	-	*	*	*	*	*
All	2,699,228	476,351	3,175,579	3,022,648	694,021	3,716,669

Table 4.4 Distribution of Holders by Educational level, Holding Type and Sex

Oromia Region

Educational level	Holding type					
	Crop			Livestock		
	Male	Female	Both	Male	Female	Both
Illiterate	183,366	103,144	286,510	37,623	54,962	92,585
Literate (Informal Ed.)	14,535	*	17,503	2,897	*	3,792
Grades 1 – 3	66,864	*	68,156	9,385	8,218	17,603
Grades 4 – 6	69,873	3,514	73,387	18,178	6,040	24,218
Grades 7 – 8	38,308	1,925	40,233	4,489	6,300	10,789
Grades 9 – 11	24,053	-	24,053	5,238	1,584	6,822
Grade 12 complete	2,574	*	3,360	*	-	*
Above grade 12	*	-	*	*	-	*
All	402,266	113,630	515,896	79,960	77,999	157,959

Table 4.4 Continued.....

Oromia Region

Educational level	Holding type					
	Crop & Livestock			All		
	Male	Female	Male	Female	Male	Female
Illiterate	2,102,502	670,908	2,773,409	2,323,491	829,013	3,152,504
Literate (Informal)	259,774	16,245	276,019	277,205	20,109	297,314
Grades 1 – 3	590,499	23,536	614,035	666,748	33,046	699,795
Grades 4 – 6	553,356	17,432	570,788	641,407	26,986	668,393
Grades 7 – 8	209,198	7,113	216,312	251,995	15,338	267,333
Grades 9 – 11	116,549	3,156	119,705	145,839	4,740	150,579
Grade 12 complete	23,014	*	23,796	26,468	1,569	28,037
Above grade 12	15,751	-	15,751	19,715	-	19,715
All	3,870,642	739,173	4,609,815	4,352,869	930,802	5,283,670

Table 4.5 Distribution of Holders by Educational level, Holding Type and Sex

Somali Region

Educational level	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Illiterate	3,37	1,62	5,001	18,1	11,2	29,46	67,1	13,09	80,25	88,71	26,00	114,7
Literate (Informal Ed.)	600	*	669	2,737	*	3,192	10,975	*	12,455	14,312	*	16,317
Grades 1 – 3	-	-	-	438	*	*	2,599	*	2,754	3,037	*	3,351
Grades 4 – 6	*	-	*	1,178	*	1,288	3,521	-	3,521	4,999	*	5,108
Grades 7 – 8	*	-	*	*	*	*	1,313	-	1,313	1,688	*	1,798
Grades 9 – 11	-	-	-	-	-	-	*	-	*	*	-	*
Grade 12	*	-	*	*	-	*	*	-	*	*	-	*
Above grade 12	-	-	-	-	-	-	*	-	*	*	-	*
All	4,538	1,693	6,230	22,788	12,119	34,907	86,105	14,734	100,839	113,430	28,546	141,976

Table 4.6 Distribution of Holders by Educational level, Holding Type and Sex
Benishangul – Gumuz Region

Educational level	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Illiterate	8,546	7,278	15,824	*	*	*	52,849	18,492	71,341	61,603	26,362	87,965
Literate (Informal Ed.)	1,562	-	1,562	-	-	-	8,855	*	8,988	10,418	*	10,550
Grades 1 – 3	2,482	*	2,819	445	-	445	16,342	776	17,118	19,269	1,113	20,382
Grades 4 – 6	1,970	*	2,159	-	*	*	16,427	976	17,403	18,397	1,222	19,619
Grades 7 – 8	929	*	1,030	-	-	-	4,566	*	4,732	5,495	*	5,763
Grades 9 – 11	480	-	480	*	-	*	3,315	-	3,315	4,004	-	4,004
Grade 12	-	-	-	-	-	-	*	-	*	*	-	*
Above grade 12	*	-	*	-	-	-	*	-	*	*	-	*
All	16,002	7,905	23,907	862	649	1,511	102,903	20,543	123,446	119,767	29,097	148,865

Table 4.7 Distribution of Holders by Educational level, Holding Type and Sex
S.N.N.P. Region

Educational level	Holding type					
	Crop			Livestock		
	Male	Female	Both	Male	Female	Both
Illiterate	92,719	60,372	153,090	11,471	11,542	23,013
Literate (Informal Ed.)	6,166	-	6,166	-	-	-
Grades 1 – 3	22,204	*	22,812	5,277	*	5,696
Grades 4 – 6	35,175	3,517	38,693	10,131	4,461	14,592
Grades 7 – 8	12,232	*	13,332	7,207	3,475	10,682
Grades 9 – 11	9,519	*	10,739	2,955	*	3,537
Grade 12 complete	*	-	*	*	-	*
Above grade 12	*	-	*	*	-	*
All	183,267	66,816	250,083	37,668	20,479	58,146

Table 4.7 Continued.....

S.N.N.P. Region

Educational level	Holding type					
	Crop & Livestock			All		
	Male	Female	Male	Female	Male	Female
Illiterate	1,150,012	509,206	1,659,218	1,254,201	581,121	1,835,321
Literate (Informal Ed.)	48,735	4,636	53,371	54,901	4,636	59,537
Grades 1 – 3	311,269	21,173	332,442	338,750	22,199	360,949
Grades 4 – 6	373,544	24,351	397,895	418,851	32,329	451,180
Grades 7 – 8	156,827	6,889	163,715	176,266	11,463	187,729
Grades 9 – 11	70,909	1,315	72,224	83,382	3,117	86,499
Grade 12 complete	24,116	*	25,184	26,982	*	28,050
Above grade 12	11,765	*	12,215	14,777	*	15,227
All	2,147,176	569,087	2,716,263	2,368,111	656,382	3,024,492

Table 4.8 Distribution of Holders by Educational level, Holding Type and Sex

Gambela Region

Educational level	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Illiterate	1,921	1,926	3,847	254	*	342	12,334	3,888	16,222	14,509	5,901	20,411
Literate (Informal Ed.)	183	*	230	*	-	*	999	*	1,068	1,221	*	1,338
Grades 1 – 3	582	*	692	*	-	*	2,993	140	3,132	3,689	250	3,939
Grades 4 – 6	979	189	1,168	*	*	*	3,971	392	4,363	4,985	657	5,642
Grades 7 – 8	828	156	984	*	*	*	2,139	105	2,244	3,005	270	3,275
Grades 9 – 11	516	*	526	-	*	*	1,166	*	1,242	1,682	116	1,798
Grade 12	*	-	*	-	-	-	161	-	161	213	-	213
Above grade 12	120	-	120	-	-	-	121	-	121	241	-	241
All	5,181	2,437	7,618	481	203	684	23,883	4,670	28,553	29,544	7,311	36,855

Table 4.9 Distribution of Holders by Educational level, Holding Type and Sex

Harari Region

Educational level	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Illiterate	498	276	774	*	*	*	10,242	1,953	12,195	10,782	2,309	13,091
Literate (Informal Ed.)	-	-	-	-	-	-	942	-	942	942	-	942
Grades 1 – 3	*	*	*	-	-	-	1,811	-	1,811	1,850	*	1,936
Grades 4 – 6	*	-	*	-	-	-	1,973	*	2,051	2,022	*	2,101
Grades 7 – 8	*	-	*	-	-	-	277	-	277	306	-	306
Grades 9 – 11	*	-	*	-	-	-	170	-	170	261	-	261
Grade 12	-	-	-	-	-	-	*	-	*	*	-	*
Above grade 12	-	-	-	-	-	-	-	-	-	-	-	-
All	707	362	1,069	*	*	*	15,490	2,031	17,521	16,238	2,474	18,712

Table 4.10 Distribution of Holders by Educational level, Holding Type and Sex

Dire Dawa

Educational level	Holding type											
	Crop			Livestock			Crop & Livestock			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
Illiterate	*	*	255	1,078	1,275	2,353	14,004	1,838	15,842	15,198	3,253	18,450
Literate (Informal Ed.)	-	-	-	*	-	*	409	-	409	453	-	453
Grades 1 – 3	-	-	-	*	-	*	1,103	-	1,103	1,149	-	1,149
Grades 4 – 6	*	*	*	*	*	*	2,293	*	2,339	2,386	*	2,523
Grades 7 – 8	-	-	-	*	-	*	*	-	*	309	-	309
Grades 9 – 11	-	-	-	*	-	*	*	-	*	*	-	*
Grade 12	-	-	-	*	-	*	-	-	-	*	-	*
Above grade 12	-	-	-	-	-	-	*	-	*	*	-	*
All	*	189	350	1,453	1,317	2,770	18,137	1,884	20,021	19,752	3,389	23,141

Table 5 Estimate of Area by Crop and Holding size

Ethiopia

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	11,857,35	9,233,025	4,476,026	300,007	820,979	1,785,743	1,661,920	153,557	*
Teff	5,630,440	2,588,661	1,183,569	62,166	214,208	544,588	538,153	43,010	*
Barley	4,365,199	1,129,112	543,740	45,791	121,362	219,485	186,257	12,014	*
Wheat	4,666,194	1,683,565	859,054	54,753	164,028	323,130	256,721	19,186	*
Maize	7,148,501	1,772,253	1,004,882	76,481	149,110	276,905	234,238	24,627	*
Sorghum	4,072,328	1,618,677	755,898	51,006	137,283	302,030	309,317	45,280	*
Finger millet	1,346,755	368,999	105,713	7,186	29,456	96,342	120,422	9,083	*
Oats / 'Aja'	253,886	24,018	14,151	463	2,419	4,522	2,229	*	-
Rice	126,432	47,739	*	*	*	18,742	14,584	*	-
Pulses	6,659,923	1,489,308	561,100	58,986	163,750	356,764	324,828	20,007	*
Horse beans	3,689,452	512,067	206,081	24,558	65,921	115,353	92,406	6,054	*
Field peas	1,493,441	226,533	77,478	8,286	27,475	60,847	49,913	2,534	-
Haricot beans	2,153,146	244,013	115,183	16,431	29,555	46,674	31,948	*	*
Chickpeas	941,999	213,187	79,489	3,623	14,023	56,376	54,826	3,690	*
Lentils	727,002	105,956	34,343	3,358	14,809	26,817	25,113	1,516	-
Grass peas/vetch	670,593	135,658	40,677	1,829	8,188	38,822	44,261	1,880	-
Soya beans	62,508	5,679	1,740	38	290	994	*	*	-
Fenugreek	402,227	21,183	6,072	483	2,103	6,066	5,926	*	-
Gibto	105,717	25,033	*	380	1,386	4,815	17,890	*	-
Oilseeds	2,737,359	780,916	322,656	9,552	34,925	122,042	213,156	68,512	*
Neug	878,875	256,794	163,808	1,201	7,436	30,406	49,569	4,224	*
Linseed	891,217	140,801	92,678	2,255	7,271	18,964	18,241	1,390	*
Groundnuts	211,694	41,579	26,657	911	2,276	4,559	7,021	*	*
Safflower	89,998	4,653	*	193	537	1,950	1,296	*	-
Sesame	581,914	315,843	34,181	3,797	15,333	60,648	129,877	62,122	*
Rapeseed	494,999	21,247	4,843	1,195	2,072	5,514	7,152	*	-
Vegetables	5,060,004	138,393	51,842	11,276	18,055	28,471	25,452	2,583	*
Lettuce	37,591	*	*	14	23	7	3	-	-
Head cabbage	274,662	2,562	1,670	193	150	329	218	*	-
Ethiopian cabbage	2,799,879	32,782	11,857	6,483	7,267	5,416	1,710	51	-
Tomatoes	194,704	4,953	1,491	224	739	705	*	*	-
Green peppers	812,431	7,850	3,525	841	675	1,245	1,297	*	-
Red peppers	1,776,393	89,862	33,086	3,469	9,176	20,745	20,414	*	*
Swiss chard	97,809	227	104	*	25	24	23	*	-
Root crops	5,038,428	212,208	91,953	22,977	33,992	37,455	23,436	*	*
Beetroot	257,382	1,096	676	*	85	102	80	*	-
Carrot	157,032	2,713	2,379	74	*	54	69	*	-
Onion	556,342	17,588	10,006	843	1,581	1,961	2,789	*	-
Potatoes	1,371,759	69,784	32,334	5,323	9,720	13,368	8,638	*	-
Garlic	2,079,195	15,361	6,247	1,087	2,286	2,679	2,691	*	*
Taro / Godere	956,894	52,201	8,694	8,147	12,762	13,685	7,789	*	-
Sweet potatoes	1,296,460	53,465	31,616	7,351	7,422	5,605	1,380	*	*
Other `temporary	2,634,727	63,228	23,928	8,915	9,903	11,462	7,441	*	*
Permanent crops	6,941,246	1,036,558	520,348	139,279	172,306	142,840	58,593	3,186	*
Coffee	2,959,093	395,003	279,517	32,400	36,247	31,262	14,594	984	-
Chat	1,723,263	138,811	97,126	10,948	13,420	12,296	4,782	*	-
Fruit crops	2,625,123	53,086	16,822	8,432	10,658	11,175	5,463	*	*
Gesho	1,615,533	23,998	6,106	1,726	3,750	7,009	5,015	389	*
Sugar cane	762,720	18,908	10,820	2,415	2,806	1,899	955	12	-
Other permanent	4,021,6	406,750	109,95	83,357	105,424	79,199	27,783	1,028	-

Table 5.1 Estimate of Area by Crop and Holding size

Tigray									
Crop	No.of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	934,864	693,967	1,415	65,774	146,976	252,201	208,932	17,282	*
Teff	530,566	187,859	160	17,185	39,160	72,984	56,375	*	-
Barley	447,284	106,788	297	12,876	26,375	38,402	26,877	*	-
Wheat	402,819	113,596	237	16,180	32,181	36,394	25,719	*	-
Maize	527,007	64,649	556	8,016	14,976	25,513	14,093	*	-
Sorghum	326,645	155,421	84	7,080	21,842	53,969	62,852	8,360	*
Finger millet	252,901	64,612	*	4,313	12,399	24,628	22,453	*	*
Oats / 'Aja'	*	*	-	-	*	*	-	-	-
Rice	*	*	-	*	*	*	*	-	-
Pulses	430,727	63,798	164	8,479	16,565	23,509	13,463	*	-
Horse beans	249,109	19,727	75	4,350	7,422	6,435	1,446	-	-
Field peas	80,323	8,331	*	912	2,652	3,400	1,360	-	-
Haricot beans	30,364	4,076	*	352	*	1,465	*	-	-
Chickpeas	72,929	13,549	*	1,050	2,008	5,503	4,359	*	-
Lentils	75,407	7,910	*	1,091	2,733	2,269	1,137	*	-
Grass peas/vetch	47,044	9,459	-	*	971	4,165	3,390	*	-
Soya beans	*	*	-	-	-	*	*	*	-
Fenugreek	21,358	691	*	111	*	270	*	*	-
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	250,459	98,566	*	1,929	9,079	30,484	43,071	*	*
Neug	50,360	6,744	*	296	1,511	2,789	2,142	-	-
Linseed	100,192	13,148	-	922	2,409	5,261	4,475	*	-
Groundnuts	*	*	-	-	*	*	*	*	-
Safflower	*	*	-	-	-	*	*	-	-
Sesame	125,725	78,053	-	711	4,956	22,128	36,346	*	*
Rapeseed	*	*	*	-	*	*	*	-	-
Vegetables	220,049	3,682	35	351	706	1,311	1,261	*	-
Lettuce	2,453	3	*	-	*	*	*	-	-
Head cabbage	1,947	*	-	*	*	*	*	-	-
Ethiopian cabbage	*	*	-	-	*	-	-	-	-
Tomatoes	25,034	448	*	*	74	*	199	-	-
Green peppers	63,101	633	*	96	199	162	170	-	-
Red peppers	143,687	2,560	29	184	424	1,026	878	*	-
Swiss chard	5,823	17	*	*	3	*	*	-	-
Root crops	108,765	1,823	*	412	597	556	*	-	-
Beetroot	*	*	-	-	*	*	-	-	-
Carrot	*	*	-	*	-	-	-	-	-
Onion	21,041	341	*	*	57	35	27	-	-
Potatoes	36,320	907	*	56	276	*	*	-	-
Garlic	74,768	552	*	118	264	95	74	-	-
Taro / Godere	-	-	-	-	-	-	-	-	-
Sweet potatoes	*	*	-	-	*	-	*	-	-
Other temporary	36,623	426	*	17	60	227	115	*	-
Permanent crops	217,927	8,886	158	2,316	1,942	3,063	1,316	*	-
Coffee	10,614	*	*	*	*	*	*	-	-
Chat	16,030	*	*	*	*	*	*	*	-
Fruit crops	45,897	1,002	*	44	*	430	372	*	-
Gesho	120,720	1,133	*	215	353	341	139	*	-
Sugar cane	*	*	-	*	*	-	-	-	-
Other permanent	104,683	5,146	95	1,625	1,404	1,396	614	*	-

Table 5.2 Estimate of Area by Crop and Holding size

Afar Region		Holding size in hectare							
		No. of Holders	Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00
Cereals	7,308	5,697	*	488	1,032	2,154	1,968	*	-
Teff	2,316	1,619	-	93	119	596	*	*	-
Barley	*	*	-	-	-	-	*	-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	6,507	3,499	*	351	841	1,225	1,057	*	-
Sorghum	1,825	578	-	*	72	*	*	*	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats / 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulses	870	167	-	*	*	135	*	*	-
Horse beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
Haricot beans	704	122	-	*	*	100	*	-	-
Chickpeas	*	45	-	-	*	*	-	*	-
Lentils	*	*	-	-	*	-	-	-	-
Grass peas/vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	1,335	192	-	*	*	87	*	*	-
Neug	*	*	-	-	-	-	*	-	-
Linseed	*	*	-	*	-	*	-	-	-
Groundnuts	*	*	-	-	*	-	-	-	-
Safflower	260	*	-	-	*	*	*	-	-
Sesame	981	*	-	-	-	78	*	*	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables	606	*	-	*	*	*	-	-	-
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-	-	-
Ethiopian cabbage	*	*	-	-	-	*	-	-	-
Tomatoes	*	*	-	*	-	*	-	-	-
Green peppers	*	*	-	*	-	-	-	-	-
Red peppers	450	*	-	*	*	*	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
Root crops	264	*	-	*	*	*	*	-	-
Beetroot	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	*	*	-	*	*	*	*	-	-
Potatoes	-	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-	-
Taro / Godere	-	-	-	-	-	-	-	-	-
Sweet potatoes	*	*	-	*	-	-	-	-	-
Other temporary	385	*	-	*	*	*	*	-	-
Permanent crops	4,630	142	*	*	23	44	*	*	-
Coffee	-	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-	-
Fruit crops	1,148	*	*	*	*	*	*	*	-
Gesho	-	-	-	-	-	-	-	-	-
Sugar cane	*	*	-	-	-	*	*	-	-
Other permanent	3,615	83	*	*	21	24	*	*	-

Table 5.3 Estimate of Area by Crop and Holding size

Amhara Region		Holding size in hectare							
Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	3,491,338	2,986,622	5,665	123,595	405,845	1,141,167	1,173,279	107,613	*
Teff	2,168,938	1,001,028	447	30,283	126,853	387,576	417,679	35,326	*
Barley	1,533,878	387,862	667	18,862	63,267	152,529	142,673	*	*
Wheat	1,668,522	548,315	981	23,224	87,267	219,004	195,685	15,460	*
Maize	1,983,295	355,508	3,209	24,488	45,224	127,578	138,765	12,534	*
Sorghum	903,114	486,468	266	21,984	64,172	172,080	184,616	*	*
Finger millet	492,212	164,321	*	2,461	13,920	61,758	79,227	6,937	-
Oats / 'Aja'	104,043	8,743	*	285	2,230	3,910	2,079	*	-
Rice	64,092	34,376	*	*	*	16,731	12,556	*	-
Pulses	2,248,657	694,672	517	25,598	98,279	271,235	278,416	16,758	*
Horse beans	1,434,186	232,535	306	13,804	41,468	89,899	79,916	5,448	*
Field peas	685,494	108,469	*	4,453	17,149	43,870	40,875	2,077	-
Haricot beans	296,227	51,247	43	1,239	7,355	19,977	18,921	*	*
Chickpeas	499,592	113,337	*	1,988	10,092	47,953	49,002	3,081	*
Lentils	408,922	62,827	*	2,189	11,728	24,270	23,711	*	-
Grass peas/vetch	397,492	85,262	-	1,216	7,189	34,425	40,871	1,560	-
Soya beans	*	*	-	-	*	*	*	-	-
Fenugreek	188,773	14,236	*	347	1,885	5,714	5,787	*	-
Gibto	102,638	24,891	-	363	1,386	4,791	17,830	*	-
Oilseeds	1,204,242	316,456	327	5,850	20,550	78,698	150,355	*	*
Neug	355,889	75,304	*	673	5,006	24,864	41,249	3,501	-
Linseed	315,263	31,961	*	1,120	4,300	12,635	12,845	1,057	-
Groundnuts	19,522	*	-	*	*	361	*	*	-
Safflower	72,388	4,014	*	186	529	1,847	1,256	*	-
Sesame	266,250	185,782	*	2,560	8,588	33,505	85,672	*	*
Rapeseed	381,231	16,415	304	1,161	2,028	5,486	6,975	*	-
Vegetables	1,303,575	37,117	465	2,496	4,470	11,929	15,222	*	*
Lettuce	6,072	20	*	9	4	*	*	-	-
Head cabbage	82,160	346	*	67	41	133	99	-	-
Ethiopian cabbage	255,927	1,599	27	232	535	438	*	*	-
Tomatoes	51,534	392	*	17	*	220	*	*	-
Green peppers	167,472	2,141	*	*	179	607	922	*	-
Red peppers	862,043	32,562	362	1,774	3,657	10,512	13,734	*	*
Swiss chard	27,752	*	*	*	2	15	11	*	-
Root crops	1,457,515	36,341	361	3,702	7,839	13,048	10,221	*	-
Beetroot	41,115	*	2	*	16	28	19	-	-
Carrot	30,616	136	*	*	*	28	*	*	-
Onion	165,629	3,649	17	379	847	1,132	866	*	-
Potatoes	499,939	24,130	180	2,322	5,103	9,455	6,672	*	-
Garlic	1,108,883	8,073	154	868	1,793	2,356	2,539	*	-
Taro / Godere	*	*	-	-	*	-	-	-	-
Sweet potatoes	21,802	196	5	*	*	*	77	*	-
Other temporary	527,294	6,233	116	630	739	1,476	1,864	*	*
Permanent crops	1,140,044	31,696	673	4,739	7,105	10,467	7,994	*	*
Coffee	226,781	5,424	214	1,287	1,378	1,231	1,309	*	-
Chat	176,869	6,437	92	1,839	2,126	1,723	652	*	-
Fruit crops	215,260	2,847	78	230	710	618	852	*	*
Gesho	891,803	15,189	220	1,208	2,669	6,172	4,584	*	*
Sugar cane	62,058	1,066	*	*	184	474	316	*	-
Other permanent	156,116	734	14	142	37	249	282	*	-

Table 5.4 Estimate of Area by Crop and Holding size

Oromia Region

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	4,756,109	4,466,528	4,466,528	-	-	-	-	-	-
Teff	2,140,224	1,182,811	1,182,811	-	-	-	-	-	-
Barley	1,602,528	542,476	542,476	-	-	-	-	-	-
Wheat	1,844,019	857,603	857,603	-	-	-	-	-	-
Maize	2,978,603	1,000,056	1,000,056	-	-	-	-	-	-
Sorghum	1,883,150	754,878	754,878	-	-	-	-	-	-
Finger millet	471,490	105,611	105,611	-	-	-	-	-	-
Oats / 'Aja'	126,800	14,147	14,147	-	-	-	-	-	-
Rice	42,075	*	*	-	-	-	-	-	-
Pulses	2,309,385	559,780	559,780	-	-	-	-	-	-
Horse beans	1,271,328	205,520	205,520	-	-	-	-	-	-
Field peas	387,474	77,397	77,397	-	-	-	-	-	-
Haricot beans	828,328	114,707	114,707	-	-	-	-	-	-
Chickpeas	299,918	79,405	79,405	-	-	-	-	-	-
Lentils	215,931	34,248	34,248	-	-	-	-	-	-
Grass peas/vetch	223,267	40,673	40,673	-	-	-	-	-	-
Soya beans	30,825	1,739	1,739	-	-	-	-	-	-
Fenugreek	168,067	6,054	6,054	-	-	-	-	-	-
Gibto	*	*	*	-	-	-	-	-	-
Oilseeds	1,070,622	322,285	322,285	-	-	-	-	-	-
Neug	438,649	163,785	163,785	-	-	-	-	-	-
Linseed	406,637	92,675	92,675	-	-	-	-	-	-
Groundnuts	126,814	26,655	26,655	-	-	-	-	-	-
Safflower	10,945	*	*	-	-	-	-	-	-
Sesame	123,332	34,154	34,154	-	-	-	-	-	-
Rapeseed	96,989	4,535	4,535	-	-	-	-	-	-
Vegetables	1,820,872	50,843	50,843	-	-	-	-	-	-
Lettuce	17,723	*	*	-	-	-	-	-	-
Head cabbage	106,459	1,658	1,658	-	-	-	-	-	-
Ethiopian cabbage	1,044,828	11,467	11,467	-	-	-	-	-	-
Tomatoes	33,982	1,474	1,474	-	-	-	-	-	-
Green peppers	389,278	3,446	3,446	-	-	-	-	-	-
Red peppers	540,284	32,590	32,590	-	-	-	-	-	-
Swiss chard	24,031	101	101	-	-	-	-	-	-
Root crops	1,990,656	91,021	91,021	-	-	-	-	-	-
Beetroot	109,837	669	669	-	-	-	-	-	-
Carrot	71,589	2,373	2,373	-	-	-	-	-	-
Onion	227,530	9,968	9,968	-	-	-	-	-	-
Potatoes	451,078	32,032	32,032	-	-	-	-	-	-
Garlic	740,017	6,078	6,078	-	-	-	-	-	-
Taro / Godere	236,883	8,452	8,452	-	-	-	-	-	-
Sweet potatoes	695,217	31,448	31,448	-	-	-	-	-	-
Other temporary	828,554	23,485	23,485	-	-	-	-	-	-
Permanent crops	2,734,782	514,742	514,742	-	-	-	-	-	-
Coffee	1,139,554	278,161	278,161	-	-	-	-	-	-
Chat	904,912	96,660	96,660	-	-	-	-	-	-
Fruit crops	942,354	16,471	16,471	-	-	-	-	-	-
Gesho	375,362	5,820	5,820	-	-	-	-	-	-
Sugar cane	246,877	10,739	10,739	-	-	-	-	-	-
Other permanent	1,238,990	106,890	106,890	-	-	-	-	-	-

Table 5.5 Estimate of Area by Crop and Holding size

Somali Region

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	87,139	67,095	110	5,179	12,420	24,808	19,274	5,305	-
Teff	-	-	-	-	-	-	-	-	-
Barley	7,158	3,016	-	*	*	693	1,584	*	-
Wheat	11,051	4,364	-	*	551	1,972	*	*	-
Maize	69,275	26,999	63	2,731	5,481	11,156	6,490	1,077	-
Sorghum	60,217	32,705	47	2,204	6,051	10,987	9,555	*	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats / 'Aja'	*	*	-	-	*	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulses	6,231	576	*	*	212	130	*	-	-
Horse beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
Haricot beans	4,675	432	*	*	*	*	*	-	-
Chickpeas	*	*	-	-	*	*	-	-	-
Lentils	*	*	-	-	*	-	*	-	-
Grass peas/vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	-	-	*	-	*	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	6,511	2,119	-	169	619	*	*	-	-
Neug	-	-	-	-	-	-	-	-	-
Linseed	*	*	-	-	*	*	-	-	-
Groundnuts	5,475	1,878	-	143	587	*	*	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	*	*	-	*	*	*	*	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables	6,177	*	*	*	*	102	*	-	-
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-	-	-
Tomatoes	*	*	*	*	*	*	*	-	-
Green peppers	*	*	-	*	*	*	-	-	-
Red peppers	1,036	*	-	*	*	9	*	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
Root crops	4,088	*	*	*	*	*	*	-	-
Beetroot	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	*	*	*	*	*	*	*	-	-
Potatoes	*	*	-	-	-	*	-	-	-
Garlic	*	*	-	-	-	*	-	-	-
Taro / Godere	-	-	-	-	-	-	-	-	-
Sweet potatoes	*	*	-	*	*	*	*	-	-
Other temporary	808	*	-	*	-	*	-	-	-
Permanent crops	19,205	4,898	*	438	970	2,318	984	*	-
Coffee	*	*	-	*	-	-	*	-	-
Chat	17,135	4,279	*	*	794	2,081	881	*	-
Fruit crops	4,083	584	-	85	*	228	*	-	-
Gesho	-	-	-	-	-	-	-	-	-
Sugar cane	*	*	-	*	-	-	*	-	-
Other permanent	1,102	26	-	*	*	*	*	-	-

Table 5.6 Estimate of Area by Crop and Holding size
Benishangul – Gumuz Region

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	145,952	148,213	311	6,697	17,136	42,854	67,814	9,451	3,948
Teff	35,022	18,632	-	247	1,472	5,653	9,978	*	*
Barley	5,312	874	*	47	38	*	*	*	-
Wheat	6,368	3,725	-	*	*	1,015	*	*	-
Maize	130,843	35,953	239	2,540	4,362	9,520	13,416	3,580	*
Sorghum	102,885	59,963	72	3,635	9,407	18,834	24,214	2,897	904
Finger millet	52,340	28,392	-	182	1,653	7,297	17,078	*	*
Oats / 'Aja'	1,000	88	-	*	*	39	*	-	-
Rice	3,583	585	-	*	19	196	327	*	-
Pulses	53,369	7,288	11	188	657	2,218	4,011	197	*
Horse beans	6,415	625	*	15	45	212	335	*	-
Field peas	4,320	660	-	*	*	*	176	*	-
Haricot beans	35,123	4,303	6	140	328	1,033	2,684	*	*
Chickpeas	3,315	237	-	*	*	*	134	-	-
Lentils	975	47	-	*	-	*	*	-	-
Grass peas/vetch	-	-	-	-	-	-	-	-	-
Soya beans	10,069	1,321	*	*	159	517	586	*	-
Fenugreek	774	7	-	*	-	*	*	-	-
Gibto	*	*	-	-	-	*	*	*	-
Oilseeds	89,703	32,891	*	1,023	2,961	9,031	16,114	2,684	1,054
Neug	31,588	10,724	*	233	856	2,598	6,159	*	*
Linseed	7,557	*	-	24	14	99	*	*	*
Groundnuts	29,786	6,753	*	283	465	2,011	3,854	*	*
Safflower	1,535	47	*	*	*	*	*	-	-
Sesame	53,232	14,741	*	482	1,617	4,305	5,827	1,628	865
Rapeseed	*	*	*	*	*	*	*	-	-
Vegetables	51,471	1,709	2	51	165	453	580	*	*
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	2,537	11	-	*	*	*	4	*	-
Ethiopian cabbage	3,982	62	*	*	7	25	9	*	-
Tomatoes	6,280	27	-	*	4	9	12	-	-
Green peppers	8,512	80	-	*	*	19	*	*	-
Red peppers	38,939	1,529	2	40	136	397	523	*	*
Swiss chard	693	1	-	*	*	*	*	*	-
Root crops	42,104	879	*	130	134	303	254	*	*
Beetroot	2,616	4	-	*	*	*	*	*	-
Carrot	801	*	-	*	*	*	*	-	-
Onion	7,383	67	*	2	23	8	33	*	-
Potatoes	5,698	*	*	*	*	*	*	*	-
Garlic	9,651	51	*	*	*	14	13	*	*
Taro / Godere	3,698	46	*	*	8	*	*	*	-
Sweet potatoes	27,428	387	*	69	82	123	84	*	*
Other temporary	53,816	1,652	12	154	286	544	609	*	*
Permanent crops	68,756	2,711	17	323	507	977	861	*	*
Coffee	21,634	754	2	70	145	240	284	*	-
Chat	12,394	317	*	20	67	67	161	*	-
Fruit crops	59,334	1,444	11	215	265	588	355	*	*
Gesho	12,861	78	*	*	15	29	17	*	-
Sugar cane	3,201	77	-	*	*	27	35	-	-
Other permanent	5,123	*	*	*	4	*	9	*	-

Table 5.7 Estimate of Area by Crop and Holding size
S.N.N.P. Region

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	2,365,420	837,850	1,782	93,099	228,055	314,090	187,295	13,530	-
Teff	753,261	196,702	151	14,359	46,601	77,770	53,317	4,503	-
Barley	767,845	88,038	299	13,868	31,342	27,530	14,646	353	-
Wheat	729,460	155,661	227	15,162	43,729	64,651	31,350	*	-
Maize	1,412,815	278,928	620	36,535	76,038	100,503	59,484	5,748	-
Sorghum	741,225	108,744	*	12,759	28,593	38,920	25,626	*	-
Finger millet	77,592	6,020	*	230	1,482	2,650	1,633	*	-
Oats / 'Aja'	20,551	769	*	177	*	350	109	-	-
Rice	11,923	*	-	*	135	*	*	-	-
Pulses	1,600,229	162,695	617	24,504	47,866	59,448	28,830	1,430	-
Horse beans	727,928	53,628	177	6,388	16,976	18,794	10,699	*	-
Field peas	335,744	31,672	*	2,914	7,564	13,228	7,502	*	-
Haricot beans	947,881	68,837	411	14,487	20,944	23,955	8,642	*	-
Chickpeas	65,025	6,488	-	574	1,835	2,748	1,331	-	-
Lentils	25,183	912	*	68	337	274	230	*	-
Grass peas/vetch	*	*	-	-	*	*	-	-	-
Soya beans	14,159	*	-	*	*	*	*	-	-
Fenugreek	22,903	186	*	24	78	79	*	-	-
Gibto	*	*	-	*	*	*	-	-	-
Oilseeds	102,156	6,181	*	392	979	1,884	2,742	*	-
Neug	*	*	-	-	*	*	*	-	-
Linseed	61,040	2,385	*	187	541	958	678	*	-
Groundnuts	14,923	607	*	159	*	222	*	-	-
Safflower	3,882	*	-	*	*	*	*	-	-
Sesame	9,371	2,696	*	*	*	458	*	*	-
Rapeseed	12,231	182	*	33	34	*	*	*	-
Vegetables	1,646,145	43,510	491	8,304	12,454	14,593	7,384	*	-
Lettuce	11,310	26	-	*	18	*	*	-	-
Head cabbage	81,028	525	*	115	104	190	110	-	-
Ethiopian cabbage	1,489,078	19,622	361	6,241	6,708	4,948	1,336	*	-
Tomatoes	69,496	1,271	2	104	400	249	*	*	-
Green peppers	180,095	1,493	19	353	268	429	*	*	-
Red peppers	188,553	20,521	*	1,466	4,936	8,766	5,250	-	-
Swiss chard	39,509	52	*	21	20	6	*	-	-
Root crops	1,413,726	80,678	527	18,538	25,093	23,269	12,077	*	-
Beetroot	103,098	261	6	60	68	68	60	-	-
Carrot	53,477	*	*	31	*	25	*	-	-
Onion	130,214	2,868	*	235	619	*	1,308	-	-
Potatoes	377,151	12,364	109	2,900	4,326	3,331	1,699	-	-
Garlic	145,102	578	*	96	221	*	41	*	-
Taro / Godere	708,466	43,496	236	8,068	12,669	13,633	7,770	*	-
Sweet potatoes	537,062	20,925	151	7,148	7,085	5,312	1,177	*	-
Other temporary	1,173,454	30,819	307	7,999	8,668	9,076	4,711	*	-
Permanent crops	2,704,057	463,308	4,653	129,753	158,204	122,414	46,396	1,888	-
Coffee	1,544,837	107,288	1,105	30,630	33,588	28,711	12,573	*	-
Chat	565,345	25,050	*	7,622	8,704	5,810	2,535	*	-
Fruit crops	1,322,585	29,631	240	7,585	9,074	8,927	3,671	134	-
Gesho	212,139	1,760	24	286	707	461	274	*	-
Sugar cane	438,669	6,658	24	2,285	2,504	1,270	568	*	-
Other permanent	2,494,938	292,920	2,933	81,344	103,627	77,235	26,774	1,008	-

Table 5.8 Estimate of Area by Crop and Holding size

Gambela Region

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	30,929	9,601	154	2,442	2,908	2,142	1,619	*	-
Teff	114	10	*	-	*	9	-	-	-
Barley	209	*	-	-	1	*	*	-	-
Wheat	139	6	-	-	1	6	-	-	-
Maize	22,806	4,793	116	1,443	1,562	747	742	*	-
Sorghum	16,213	4,682	37	998	1,305	1,354	835	*	-
Finger millet	176	42	-	-	*	10	31	-	-
Oats / 'Aja'	*	*	-	-	*	-	-	-	-
Rice	602	58	*	2	36	12	*	-	-
Pulses	5,497	89	*	28	22	*	*	-	-
Horse beans	*	*	-	*	*	*	*	-	-
Field peas	*	*	-	-	-	*	-	-	-
Haricot beans	5,082	50	*	26	13	*	*	-	-
Chickpeas	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-
Grass peas/vetch	*	*	-	*	-	*	-	-	-
Soya beans	161	*	-	*	*	*	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	1,898	25	2	8	8	4	*	-	-
Neug	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Groundnuts	1,089	18	*	4	7	*	*	-	-
Safflower	359	*	*	*	*	*	-	-	-
Sesame	*	*	*	*	*	*	-	-	-
Rapeseed	*	*	-	-	*	-	-	-	-
Vegetables	8,223	133	3	19	44	59	8	-	-
Lettuce	*	*	-	-	-	*	-	-	-
Head cabbage	*	*	-	*	*	*	*	-	-
Ethiopian cabbage	4,981	27	2	8	12	4	*	-	-
Tomatoes	1,304	*	*	*	*	*	-	-	-
Green peppers	2,146	32	*	5	8	*	*	-	-
Red peppers	1,330	58	*	*	20	31	*	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
Root crops	11,309	398	12	115	147	83	28	*	-
Beetroot	181	*	*	*	-	*	-	-	-
Carrot	*	*	-	-	*	*	-	-	-
Onion	777	7	*	*	*	*	*	-	-
Potatoes	323	2	-	*	*	*	*	-	-
Garlic	543	1	-	-	*	1	*	-	-
Taro / Godere	7,472	196	6	65	77	38	*	-	-
Sweet potatoes	4,417	191	6	47	68	38	18	*	-
Other temporary	12,324	521	6	73	147	124	112	*	-
Permanent crops	20,887	4,591	58	755	1,544	1,425	520	*	-
Coffee	10,352	3,092	19	312	1,057	1,016	402	*	-
Chat	2,719	103	*	9	34	53	*	*	-
Fruit crops	18,373	525	16	212	139	135	22	*	-
Gesho	2,607	17	*	3	6	6	1	*	-
Sugar cane	7,633	119	3	42	28	33	*	*	-
Other permanent	9,933	735	20	178	280	183	*	*	-

Table 5.9 Estimate of Area by Crop and Holding size

Harari Region

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	18,297	7,835	23	927	2,490	3,283	1,111	-	-
Teff	-	-	-	-	-	-	-	-	-
Barley	621	*	-	*	*	*	-	-	-
Wheat	3,165	247	*	40	110	76	*	-	-
Maize	12,549	1,425	7	237	452	602	128	-	-
Sorghum	17,274	6,123	11	646	1,915	2,581	969	-	-
Finger millet	*	*	-	-	*	-	-	-	-
Oats / 'Aja'	*	*	-	-	*	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulses	*	*	-	*	-	-	-	-	-
Horse beans	*	*	-	*	-	-	-	-	-
Field peas	*	*	-	*	-	-	-	-	-
Haricot beans	-	-	-	-	-	-	-	-	-
Chickpeas	*	*	-	*	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-
Grass peas/vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	8,249	2,018	*	141	644	848	385	-	-
Neug	-	-	-	-	-	-	-	-	-
Linseed	*	*	-	-	-	-	*	-	-
Groundnuts	8,199	2,011	*	140	642	848	381	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	*	*	-	*	*	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables	486	*	-	*	*	*	*	-	-
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	*	*	-	-	*	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-	-	-
Tomatoes	*	*	-	*	*	*	-	-	-
Green peppers	*	*	-	*	*	*	-	-	-
Red peppers	*	*	-	-	*	-	*	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
Root crops	4,022	160	*	26	61	57	*	-	-
Beetroot	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	*	*	-	-	*	-	*	-	-
Potatoes	551	12	*	*	*	*	-	-	-
Garlic	*	*	-	-	-	-	*	-	-
Taro / Godere	-	-	-	-	-	-	-	-	-
Sweet potatoes	3,477	140	*	21	59	52	*	-	-
Other temporary	1,373	11	*	3	3	*	-	-	-
Permanent crops	17,459	4,055	23	576	1,361	1,674	421	-	-
Coffee	1,548	*	-	*	23	*	*	-	-
Chat	15,695	3,299	20	519	1,125	1,324	311	-	-
Fruit crops	10,338	444	*	31	129	210	*	-	-
Gesho	*	*	-	-	-	*	-	-	-
Sugar cane	1,956	197	-	*	75	89	*	-	-
Other permanent	4,332	46	*	*	9	*	*	-	-

Table 5.10 Estimate of Area by Crop and Holding size

Dire Dawa

Crop	No. of Holders	Holding size in hectare							
		Total	Under 0.10	0.10 – 0.50	0.51 – 1.00	1.01 – 2.00	2.01 – 5.00	5.01 – 10.00	Over 10
Cereals	19,996	9,619	24	1,806	4,117	3,043	629	-	-
Teff	-	-	-	-	-	-	-	-	-
Barley	*	*	-	*	*	-	-	-	-
Wheat	*	*	-	*	*	*	*	-	-
Maize	4,800	444	*	141	175	*	*	-	-
Sorghum	19,781	9,115	21	1,655	3,926	2,970	543	-	-
Finger millet	-	-	-	-	-	-	-	-	-
Oats / 'Aja'	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulses	4,865	243	*	35	138	63	*	-	-
Horse beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
Haricot beans	4,762	238	*	35	138	63	*	-	-
Chickpeas	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-
Grass peas/vetch	*	*	*	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	*	*	-	*	-	*	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	2,184	*	-	*	*	*	-	-	-
Neug	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Groundnuts	*	*	-	*	*	*	-	-	-
Safflower	-	-	-	-	-	-	-	-	-
Sesame	677	17	-	*	*	*	-	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables	2,399	70	*	15	*	*	*	-	-
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-	-	-
Ethiopian cabbage	*	*	-	-	*	-	*	-	-
Tomatoes	1,975	*	*	13	*	*	*	-	-
Green peppers	669	7	-	2	*	*	-	-	-
Red peppers	-	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
Root crops	5,979	194	*	37	79	36	*	-	-
Beetroot	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	673	11	-	*	8	*	*	-	-
Potatoes	526	7	-	2	*	*	-	-	-
Garlic	*	*	-	-	-	-	*	-	-
Taro / Godere	*	*	-	-	*	*	-	-	-
Sweet potatoes	5,373	144	*	34	62	30	*	-	-
Other temporary	*	*	-	*	-	*	-	-	-
Permanent crops	13,498	1,529	11	362	649	458	50	-	-
Coffee	3,496	105	*	32	49	22	-	-	-
Chat	12,164	1,200	*	264	516	362	*	-	-
Fruit crops	5,751	94	*	24	44	25	*	-	-
Gesho	-	-	-	-	-	-	-	-	-
Sugar cane	*	*	-	*	-	-	-	-	-
Other permanent	2,831	*	-	*	*	*	-	-	-

Table 6 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Ethiopia		Holding type							
		Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
		Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10									
All tenure	250,321	12,185	246,663	5,214	473,482	25,456	970,466	42,855	
Land owned	235,472	11,045	218,690	4,809	452,020	23,631	906,182	39,485	
Land rented	18,852	386	14,159	130	26,486	558	59,497	1,074	
Other tenure	30,387	755	20,442	275	48,419	1,267	99,248	2,296	
0.10 – 0.50									
All tenure	538,379	144,711	28,015	6,368	2,640,700	812,483	3,207,094	963,562	
Land owned	511,959	124,347	28,015	6,080	2,616,243	759,923	3,156,217	890,350	
Land rented	80,629	12,218	*	*	247,462	31,506	329,082	43,746	
Other tenure	67,676	8,146	*	*	215,835	21,053	285,114	29,466	
0.51 – 1.00									
All tenure	267,660	190,379	10,829	7,983	2,931,270	2,152,663	3,209,759	2,351,025	
Land owned	258,851	155,328	10,829	7,614	2,917,017	1,939,095	3,186,697	2,102,037	
Land rented	64,201	19,905	*	294	515,292	137,554	580,169	157,754	
Other tenure	55,622	15,146	*	*	366,392	76,013	422,808	91,234	
1.01 – 2.00									
All tenure	184,965	253,040	4,921	6,723	3,351,029	4,798,269	3,540,914	5,058,033	
Land owned	176,877	183,061	4,921	5,123	3,328,274	4,090,101	3,510,073	4,278,286	
Land rented	73,781	43,812	*	*	962,099	465,317	1,036,694	509,840	
Other tenure	47,599	26,167	*	*	623,005	242,851	671,288	269,906	
2.01 – 5.00									
All tenure	60,021	163,170	1,341	3,821	2,067,686	5,949,641	2,129,048	6,116,632	
Land owned	56,609	114,829	1,341	3,071	2,053,210	4,911,946	2,111,160	5,029,845	
Land rented	24,625	34,051	-	-	767,570	708,784	792,195	742,835	
Other tenure	14,447	14,291	*	*	503,694	328,911	518,402	343,952	
5.01 – 10.00									
All tenure	*	*	*	*	174,598	1,096,523	180,820	1,138,424	
Land owned	*	*	*	*	173,622	923,964	178,879	949,274	
Land rented	*	*	-	-	70,839	109,604	74,426	123,977	
Other tenure	*	*	*	*	63,572	62,954	65,141	65,173	
Over 10									
All tenure	*	*	-	-	13,573	175,051	14,537	185,374	
Land owned	*	*	-	-	13,573	132,865	14,537	136,005	
Land rented	*	*	-	-	6,203	29,702	7,167	36,662	
Other tenure	*	*	-	-	4,789	12,484	4,823	12,707	
All holding									
All tenure	1,308,389	814,767	291,912	31,052	11,652,337	15,010,085	13,252,639	15,855,904	
Land owned	1,245,847	616,451	263,939	27,305	11,553,959	12,781,526	13,063,745	13,425,281	
Land rented	266,640	131,705	16,640	*	2,595,951	1,483,026	2,879,230	1,615,888	
Other tenure	217,286	66,612	23,832	2,590	1,825,706	745,533	2,066,824	814,735	

Table 6.1 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Tigray

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	16,842	765	36,118	786	31,029	1,658	83,989	3,209
Land owned	16,271	732	31,657	722	28,661	1,551	76,589	3,004
Land rented	*	*	2,713	32	3,496	*	8,385	109
Other tenure	*	*	*	*	*	*	4,188	96
0.10 – 0.50								
All tenure	46,723	12,166	3,028	575	241,836	77,378	291,586	90,119
Land owned	45,816	11,149	3,028	539	239,655	71,692	288,498	83,379
Land rented	6,883	826	*	*	31,238	4,559	38,643	5,405
Other tenure	*	*	*	*	11,113	1,127	13,889	1,335
0.51 – 1.00								
All tenure	16,243	11,495	*	*	247,688	181,824	265,320	194,378
Land owned	16,097	10,337	*	*	244,977	158,498	262,463	169,769
Land rented	4,596	802	*	*	74,057	22,189	78,992	23,115
Other tenure	1,251	*	-	-	9,346	1,137	10,597	1,494
1.01 – 2.00								
All tenure	9,754	13,624	-	-	227,979	324,505	237,733	338,129
Land owned	8,791	9,609	-	-	225,214	263,348	234,005	272,957
Land rented	4,284	3,983	-	-	104,995	59,762	109,279	63,745
Other tenure	*	*	-	-	7,296	*	7,946	1,427
2.01 – 5.00								
All tenure	*	*	-	-	104,660	284,769	105,774	288,133
Land owned	*	*	-	-	103,008	210,320	104,123	212,912
Land rented	*	*	-	-	66,072	71,376	66,544	72,147
Other tenure	-	-	-	-	5,434	3,073	5,434	3,073
5.01 – 10.00								
All tenure	-	-	-	-	4,933	33,011	4,933	33,011
Land owned	-	-	-	-	4,933	20,289	4,933	20,289
Land rented	-	-	-	-	3,742	12,693	3,742	12,693
Other tenure	-	-	-	-	*	*	*	*
Over 10								
All tenure	-	-	-	-	*	*	*	*
Land owned	-	-	-	-	*	*	*	*
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	90,676	41,415	40,535	2,419	858,464	906,800	989,675	950,634
Land owned	88,088	34,418	36,074	2,195	846,788	727,706	970,950	764,319
Land rented	18,411	6,402	3,574	*	283,761	172,283	305,746	178,861
Other tenure	5,027	595	2,229	*	35,092	6,811	42,348	7,454

Table 6.2 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Afar Region

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	*	*	27,270	720	767	31	28,170	753
Land owned	*	*	24,758	689	767	29	25,606	719
Land rented	-	-	*	*	-	-	*	*
Other tenure	*	*	2,450	30	*	*	2,817	33
0.10 – 0.50								
All tenure	*	*	4,183	1,022	2,617	740	6,952	1,808
Land owned	*	*	4,183	1,021	2,617	719	6,952	1,787
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	*	*	-	-	*	*
0.51 – 1.00								
All tenure	*	*	4,311	3,293	2,861	2,187	7,353	5,617
Land owned	*	*	4,311	3,253	2,861	2,173	7,353	5,564
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	*	*	-	-	*	*
1.01 – 2.00								
All tenure	108	*	2,952	4,001	2,462	3,626	5,522	7,765
Land owned	*	*	2,952	3,069	2,462	3,348	5,466	6,417
Land rented	108	*	*	*	397	278	542	460
Other tenure	-	-	*	*	-	-	*	*
2.01 – 5.00								
All tenure	*	*	1,309	3,704	1,135	3,230	2,482	7,033
Land owned	*	*	1,309	2,954	1,135	2,997	2,482	6,050
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	*	*	*	*	*	*
5.01 – 10.00								
All tenure	*	*	*	*	*	*	271	*
Land owned	*	*	*	*	*	*	271	*
Land rented	-	-	-	-	-	-	-	-
Other tenure	*	*	*	*	-	-	*	*
Over 10								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	659	667	40,167	13,682	9,924	10,362	50,750	24,712
Land owned	550	*	37,655	11,594	9,924	9,815	48,129	21,702
Land rented	108	*	*	*	662	528	990	711
Other tenure	*	*	3,528	*	*	*	3,953	*

Table 6.3 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	89,096	4,238	70,965	868	132,567	6,480	292,628	11,587
Land owned	83,862	3,951	60,537	801	124,766	5,846	269,165	10,598
Land rented	5,086	*	*	24	4,578	117	14,388	256
Other tenure	5,838	173	5,911	43	11,899	517	23,648	733
0.10 – 0.50								
All tenure	138,088	37,329	2,971	741	505,530	157,330	646,589	195,400
Land owned	130,268	30,442	2,971	741	498,837	142,832	632,076	174,016
Land rented	26,251	4,295	-	-	63,386	10,209	89,637	14,504
Other tenure	16,790	2,592	-	-	29,132	4,288	45,922	6,880
0.51 – 1.00								
All tenure	84,795	62,239	-	-	739,224	556,301	824,019	618,539
Land owned	82,936	50,048	-	-	735,151	476,992	818,086	527,040
Land rented	23,309	8,287	-	-	171,777	53,644	195,086	61,931
Other tenure	10,905	3,904	-	-	100,492	25,664	111,397	29,568
1.01 – 2.00								
All tenure	74,371	100,574	*	*	1,119,748	1,608,310	1,195,204	1,710,441
Land owned	71,377	70,019	*	*	1,110,878	1,270,486	1,183,341	1,341,502
Land rented	33,679	22,373	*	*	446,445	248,150	480,642	271,083
Other tenure	12,407	8,182	-	-	181,010	89,674	193,417	97,856
2.01 – 5.00								
All tenure	23,946	66,814	-	-	645,409	1,783,303	669,356	1,850,118
Land owned	22,085	36,896	-	-	642,697	1,351,355	664,782	1,388,251
Land rented	15,255	24,517	-	-	348,738	360,185	363,993	384,702
Other tenure	4,809	5,401	-	-	101,140	71,763	105,949	77,165
5.01 – 10.00								
All tenure	*	*	-	-	29,298	174,905	33,021	200,397
Land owned	*	*	-	-	29,298	129,929	32,090	142,062
Land rented	*	*	-	-	19,103	38,612	21,895	51,970
Other tenure	-	-	-	-	3,261	*	3,261	*
Over 10								
All tenure	*	*	-	-	*	*	*	*
Land owned	*	*	-	-	*	*	*	*
Land rented	*	*	-	-	*	*	*	*
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	414,950	306,648	75,021	3,166	3,174,103	4,322,451	3,664,074	4,632,265
Land owned	394,251	206,565	64,593	2,540	3,143,955	3,404,927	3,602,798	3,614,032
Land rented	107,302	79,829	*	*	1,054,958	719,253	1,167,503	799,666
Other tenure	50,750	20,253	5,911	43	426,933	198,271	483,594	218,567

Table 6.4 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Oromia Region

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	85,067	3,783	62,628	1,494	170,322	8,320	318,016	13,596
Land owned	77,594	3,121	55,084	1,305	162,401	7,557	295,079	11,982
Land rented	8,894	162	3,975	42	12,303	250	25,172	453
Other tenure	19,512	501	8,384	147	30,150	513	58,046	1,161
0.10 – 0.50								
All tenure	188,209	54,156	10,480	2,459	763,937	235,885	962,626	292,500
Land owned	177,442	45,816	10,480	2,207	756,315	218,105	944,237	266,128
Land rented	27,897	3,701	*	*	64,763	5,960	93,129	9,663
Other tenure	39,436	4,639	*	*	136,042	11,820	176,563	16,709
0.51 – 1.00								
All tenure	128,257	90,610	2,405	1,633	1,014,587	746,304	1,145,248	838,547
Land owned	122,366	72,361	2,405	1,455	1,008,476	670,648	1,133,246	744,464
Land rented	29,933	8,034	335	170	161,221	32,922	191,489	41,127
Other tenure	41,113	10,215	335	8	225,101	42,733	266,549	52,956
1.01 – 2.00								
All tenure	83,258	115,044	-	-	1,396,003	2,024,535	1,479,260	2,139,579
Land owned	81,814	87,435	-	-	1,386,015	1,769,580	1,467,829	1,857,015
Land rented	31,112	12,736	-	-	308,736	111,296	339,848	124,032
Other tenure	32,173	14,874	-	-	413,643	143,659	445,816	158,532
2.01 – 5.00								
All tenure	27,206	72,663	-	-	1,120,388	3,334,639	1,147,594	3,407,302
Land owned	26,505	59,766	-	-	1,111,444	2,856,137	1,137,949	2,915,903
Land rented	7,254	5,820	-	-	310,588	234,023	317,842	239,843
Other tenure	8,705	7,076	-	-	383,741	244,479	392,447	251,555
5.01 – 10.00								
All tenure	*	*	-	-	128,927	816,813	130,407	825,521
Land owned	*	*	-	-	128,164	707,863	129,644	715,148
Land rented	*	*	-	-	46,763	53,660	47,374	53,707
Other tenure	*	*	-	-	59,048	55,290	59,916	56,666
Over 10								
All tenure	-	-	-	-	10,544	130,745	10,544	130,745
Land owned	-	-	-	-	10,544	100,439	10,544	100,439
Land rented	-	-	-	-	4,828	17,822	4,828	17,822
Other tenure	-	-	-	-	4,789	12,484	4,789	12,484
All holding								
All tenure	513,477	344,965	75,513	5,585	4,604,706	7,297,240	5,193,696	7,647,789
Land owned	487,200	275,783	67,969	4,966	4,563,359	6,330,329	5,118,528	6,611,079
Land rented	105,702	30,501	4,780	213	909,200	455,933	1,019,681	486,648
Other tenure	141,808	38,680	9,805	405	1,252,514	510,977	1,404,127	550,063

Table 6.5 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Somali Region

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	*	*	31,396	776	7,358	423	39,059	1,221
Land owned	*	*	31,134	752	7,358	415	38,796	1,189
Land rented	-	-	*	*	*	*	497	13
Other tenure	-	-	1,296	20	-	-	1,296	20
0.10 – 0.50								
All tenure	1,652	481	1,656	369	30,858	8,710	34,166	9,561
Land owned	1,652	450	1,656	369	30,858	8,487	34,166	9,307
Land rented	*	*	-	-	*	*	*	*
Other tenure	*	*	-	-	492	67	537	72
0.51 – 1.00								
All tenure	2,035	1,434	1,196	852	24,858	17,971	28,089	20,258
Land owned	2,035	1,331	1,196	852	24,858	17,877	28,089	20,061
Land rented	*	*	-	-	*	*	*	*
Other tenure	-	-	-	-	178	*	178	*
1.01 – 2.00								
All tenure	1,051	1,356	*	*	25,954	37,326	27,631	39,552
Land owned	1,051	1,197	*	*	25,954	37,045	27,631	39,112
Land rented	*	*	-	-	*	*	*	*
Other tenure	-	-	-	-	*	*	*	*
2.01 – 5.00								
All tenure	1,039	3,189	*	*	10,391	28,855	11,463	32,162
Land owned	1,039	3,189	*	*	10,391	28,707	11,463	32,013
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	-	-	*	*	*	*
5.01 – 10.00								
All tenure	*	*	-	-	1,420	10,649	1,570	11,584
Land owned	*	*	-	-	1,420	10,649	1,570	11,584
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
Over 10								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	6,230	7,417	34,907	2,986	100,839	103,935	141,976	114,338
Land owned	6,230	7,123	34,645	2,961	100,839	103,180	141,714	113,265
Land rented	*	289	*	*	2,071	395	3,005	688
Other tenure	*	*	1,296	20	1,177	*	2,519	*

Table 6.6 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Benishangul – Gumuz Region

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	3,055	152	890	7	5,489	332	9,434	491
Land owned	2,815	126	*	*	5,064	313	8,503	444
Land rented	*	*	*	*	*	*	928	*
Other tenure	*	*	*	*	*	*	*	*
0.10 – 0.50								
All tenure	9,287	2,389	-	-	22,981	7,025	32,267	9,413
Land owned	9,059	2,238	-	-	22,736	6,625	31,795	8,863
Land rented	450	*	-	-	1,385	249	1,836	323
Other tenure	366	*	-	-	682	152	1,048	228
0.51 – 1.00								
All tenure	5,220	3,737	-	-	26,514	19,630	31,733	23,367
Land owned	5,220	3,498	-	-	26,475	18,428	31,695	21,926
Land rented	289	140	-	-	2,045	750	2,334	890
Other tenure	278	98	-	-	1,522	452	1,800	550
1.01 – 2.00								
All tenure	4,051	5,425	-	-	36,872	53,425	40,923	58,850
Land owned	3,951	4,286	-	-	36,798	45,737	40,749	50,023
Land rented	1,077	885	-	-	7,057	6,601	8,133	7,486
Other tenure	316	255	-	-	2,976	1,087	3,292	1,342
2.01 – 5.00								
All tenure	2,078	5,877	-	-	29,339	87,755	31,416	93,632
Land owned	1,968	4,310	-	-	28,467	64,995	30,435	69,305
Land rented	796	1,128	-	-	10,097	19,482	10,893	20,610
Other tenure	*	*	-	-	4,830	3,278	5,137	3,716
5.01 – 10.00								
All tenure	*	*	-	-	1,889	11,808	2,073	13,017
Land owned	*	*	-	-	1,676	6,800	1,826	6,807
Land rented	*	*	-	-	*	*	821	4,787
Other tenure	*	*	-	-	535	*	644	*
Over 10								
All tenure	*	*	-	-	362	*	396	5,190
Land owned	*	*	-	-	362	*	396	*
Land rented	*	*	-	-	284	*	317	*
Other tenure	*	*	-	-	-	-	*	*
All holding								
All tenure	23,907	19,150	890	7	123,446	184,803	148,243	203,959
Land owned	23,197	14,529	*	*	121,577	145,828	145,398	160,362
Land rented	3,196	3,283	*	*	21,892	32,815	25,262	36,099
Other tenure	1,603	1,338	*	*	10,582	6,159	12,276	7,497

Table 6.7 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

S.N.N.P. Region

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	53,510	3,094	14,866	522	120,919	7,915	189,295	11,532
Land owned	52,602	2,980	12,562	496	118,756	7,668	183,920	11,145
Land rented	*	*	2,129	25	5,298	105	9,682	205
Other tenure	3,412	*	*	*	3,544	143	7,351	183
0.10 – 0.50								
All tenure	149,479	37,017	*	*	1,046,694	317,487	1,201,521	355,613
Land owned	143,213	33,208	*	*	1,040,461	304,144	1,189,022	338,461
Land rented	18,633	3,274	-	-	84,553	10,196	103,186	13,470
Other tenure	8,109	535	-	-	35,885	3,147	43,994	3,681
0.51 – 1.00								
All tenure	29,512	19,743	*	*	853,993	612,903	884,963	633,753
Land owned	28,710	16,856	*	*	852,775	579,696	882,944	597,632
Land rented	5,403	2,400	-	-	104,312	27,527	109,716	29,927
Other tenure	1,869	*	*	*	28,860	5,680	31,140	6,194
1.01 – 2.00								
All tenure	12,041	16,496	*	*	531,011	731,828	543,311	748,618
Land owned	9,512	10,148	*	*	529,990	686,544	539,761	696,879
Land rented	3,335	3,523	*	*	93,524	38,678	97,118	42,309
Other tenure	*	*	-	-	17,169	6,606	19,221	9,430
2.01 – 5.00								
All tenure	4,415	10,704	-	-	154,196	421,624	158,611	432,328
Land owned	3,675	7,516	-	-	153,899	392,026	157,574	399,542
Land rented	*	*	-	-	31,729	23,455	32,577	25,268
Other tenure	*	*	-	-	8,069	6,144	8,693	7,518
5.01 – 10.00								
All tenure	*	*	-	-	7,948	48,056	8,444	52,429
Land owned	*	*	-	-	7,948	47,154	8,444	51,490
Land rented	-	-	-	-	*	*	*	*
Other tenure	*	*	-	-	*	*	*	*
Over 10								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	249,452	91,426	21,931	3,034	2,714,761	2,139,814	2,986,144	2,234,274
Land owned	238,208	75,044	19,627	2,873	2,703,830	2,017,232	2,961,664	2,095,149
Land rented	30,474	11,086	2,388	*	320,011	100,781	352,873	111,999
Other tenure	16,563	*	*	*	93,962	21,801	111,331	27,125

Table 6.8 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Ganbela Region

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	1,885	98	266	3	3,850	218	6,002	319
Land owned	1,515	82	188	*	3,067	178	4,769	263
Land rented	*	*	-	-	*	*	185	4
Other tenure	550	16	*	*	833	37	1,462	53
0.10 – 0.50								
All tenure	4,287	1,012	*	*	13,310	3,710	17,736	4,749
Land owned	3,854	883	*	*	11,827	3,229	15,821	4,140
Land rented	282	*	-	-	944	110	1,225	131
Other tenure	634	108	-	-	1,835	371	2,469	479
0.51 – 1.00								
All tenure	1,117	777	-	-	7,211	5,202	8,329	5,979
Land owned	1,007	570	-	-	7,109	4,739	8,116	5,309
Land rented	*	*	-	-	815	313	1,121	453
Other tenure	177	67	-	-	430	150	607	217
1.01 – 2.00								
All tenure	174	193	-	-	3,100	4,199	3,274	4,392
Land owned	174	179	-	-	3,063	3,786	3,236	3,965
Land rented	*	*	-	-	589	363	620	378
Other tenure	-	-	-	-	180	*	180	*
2.01 – 5.00								
All tenure	155	369	-	-	979	2,603	1,134	2,972
Land owned	155	369	-	-	979	2,594	1,134	2,963
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	-	-	*	*	*	*
5.01 – 10.00								
All tenure	-	-	-	-	*	*	*	*
Land owned	-	-	-	-	*	*	*	*
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
Over 10								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	7,618	2,449	406	*	28,553	16,663	36,577	19,142
Land owned	6,704	2,083	327	*	26,147	15,257	33,178	17,370
Land rented	692	175	-	-	2,493	790	3,186	965
Other tenure	1,361	191	*	*	3,305	616	4,745	807

Table 6.9 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Harari Region

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	311	24	*	*	491	34	925	59
Land owned	311	24	*	*	491	34	925	59
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
0.10 – 0.50								
All tenure	317	69	-	-	5,401	1,744	5,718	1,812
Land owned	317	68	-	-	5,401	1,720	5,718	1,788
Land rented	*	*	-	-	*	*	*	*
Other tenure	-	-	-	-	*	*	*	*
0.51 – 1.00								
All tenure	300	208	-	-	6,403	4,665	6,703	4,873
Land owned	300	189	-	-	6,403	4,516	6,703	4,705
Land rented	-	-	-	-	373	93	373	93
Other tenure	*	*	-	-	*	*	*	*
1.01 – 2.00								
All tenure	*	*	-	-	4,440	6,100	4,550	6,226
Land owned	*	*	-	-	4,440	5,998	4,550	6,125
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	-	-	191	*	191	*
2.01 – 5.00								
All tenure	*	*	-	-	785	1,924	816	2,014
Land owned	*	*	-	-	785	1,877	816	1,967
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	-	-	*	*	*	*
5.01 – 10.00								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
Over 10								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	1,069	517	*	*	17,521	14,466	18,712	14,984
Land owned	1,069	498	*	*	17,521	14,146	18,712	14,644
Land rented	*	*	-	-	634	183	684	184
Other tenure	*	*	-	-	556	138	585	156

Table 6.10 Distribution of Holders and Area by Holding size, Tenure system and Holding Type

Dire Dawa

Holding size (HA)	Holding type							
	Crop holding		Livestock holding		Crop & Livestock holding.		All holding	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Under 0.10								
All tenure	*	*	2,142	37	690	44	2,949	88
Land owned	*	*	2,024	35	690	41	2,830	83
Land rented	-	-	*	*	*	*	*	*
Other tenure	-	-	*	*	*	*	*	*
0.10 – 0.50								
All tenure	*	*	*	*	7,536	2,474	7,933	2,585
Land owned	*	*	*	*	7,536	2,370	7,933	2,482
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	-	-	517	65	517	65
0.51 – 1.00								
All tenure	-	-	*	*	7,931	5,676	8,001	5,715
Land owned	-	-	*	*	7,931	5,528	8,001	5,566
Land rented	-	-	-	-	*	*	*	*
Other tenure	-	-	-	-	311	*	311	*
1.01 – 2.00								
All tenure	*	*	-	-	3,460	4,417	3,506	4,480
Land owned	*	*	-	-	3,460	4,228	3,506	4,291
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	348	*	348	*
2.01 – 5.00								
All tenure	-	-	-	-	403	939	403	939
Land owned	-	-	-	-	403	938	403	938
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	*	*	*	*
5.01 – 10.00								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
Over 10								
All tenure	-	-	-	-	-	-	-	-
Land owned	-	-	-	-	-	-	-	-
Land rented	-	-	-	-	-	-	-	-
Other tenure	-	-	-	-	-	-	-	-
All holding								
All tenure	350	*	2,421	*	20,021	13,551	22,792	13,807
Land owned	350	*	2,302	*	20,021	13,105	22,674	13,359
Land rented	-	-	*	*	269	*	300	*
Other tenure	-	-	*	*	1,260	380	1,348	382

Table 7 Distribution of Households, Holders, Land area and Parcels by Tenure system

Ethiopia				
Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	12,773,043	2,841,830	2,028,127	12,901,952
Number of Male head households	10,302,368	2,577,590	1,717,408	10,399,726
Number of female head households	2,470,675	264,240	310,719	2,502,226
Number of holders	13,063,745	2,879,230	2,066,824	13,252,639
Land area in hectare	13,425,281	1,615,888	814,735	15,855,904
Number of Male holders	10,567,125	2,624,917	1,752,486	10,720,665
Land area in Hectare	11,730,988	1,542,280	728,401	14,001,669
Average area / male holder	1.11	0.59	0.42	1.31
Number of Female holders	2,496,620	254,314	314,339	2,531,973
Land area in hectare	1,694,294	73,608	86,334	1,854,235
Average area / female holder	0.68	0.29	0.27	0.73
Number of Parcels	43,218,038	2,366,696	1,636,405	50,040,723
Average area / parcel	0.31	0.68	0.5	0.32
Number of parcels / holder	3.31	0.82	0.79	3.78

Table 7.1 Distribution of Households, Holders, Land area and Parcels by Tenure system

Tigray Region				
Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	965,185	305,360	42,348	981,451
Number of Male head households	739,657	274,547	34,793	749,885
Number of female head households	225,528	30,813	7,555	231,566
Number of holders	970,950	305,746	42,348	989,675
Land area in hectare	764,319	178,861	7,454	950,634
Number of Male holders	739,667	274,254	34,432	752,064
Land area in Hectare	655,794	169,013	6,504	831,310
Average area / male holder	0.89	0.62	0.19	1.11
Number of Female holders	231,282	31,493	7,916	237,610
Land area in hectare	108,525	9,848	950	119,324
Average area / female holder	0.47	0.31	0.12	0.5
Number of Parcels	2,845,931	251,884	32,394	3,388,774
Average area / parcel	0.27	0.71	0.23	0.28
Number of parcels / holder	2.93	0.82	0.76	3.42

Table 7.2 Distribution of Households, Holders, Land area and Parcels by Tenure system

Afar Region				
Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	47,922	934	3,953	50,485
Number of Male head households	41,967	792	3,702	44,296
Number of female head households	5,955	*	251	6,189
Number of holders	48,129	990	3,953	50,750
Land area in hectare	21,702	711	*	24,712
Number of Male holders	42,037	849	3,702	44,423
Land area in Hectare	19,975	691	*	22,885
Average area / male holder	0.48	0.81	*	0.52
Number of Female holders	6,092	*	251	6,327
Land area in hectare	1,727	*	*	1,827
Average area / female holder	0.28	*	*	0.29
Number of Parcels	80,292	651	803	85,503
Average area / parcel	0.27	1.09	*	0.29
Number of parcels / holder	1.67	0.66	0.2	1.68

Table 7.3 Distribution of Households, Holders, Land area and Parcels by Tenure system

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	3,574,998	1,160,341	481,226	3,616,759
Number of Male head households	2,915,249	1,091,301	428,924	2,943,644
Number of female head households	659,749	69,040	52,301	673,116
Number of holders	3,602,798	1,167,503	483,594	3,664,074
Land area in hectare	3,614,032	799,666	218,567	4,632,265
Number of Male holders	2,942,369	1,103,324	430,744	2,987,827
Land area in Hectare	3,241,188	771,834	203,043	4,216,065
Average area / male holder	1.1	0.7	0.47	1.41
Number of Female holders	660,429	64,179	52,850	676,247
Land area in hectare	372,844	27,832	15,524	416,199
Average area / female holder	0.56	0.43	0.29	0.62
Number of Parcels	15,952,970	1,071,191	430,913	19,212,610
Average area / parcel	0.23	0.75	0.51	0.24
Number of parcels / holder	4.43	0.92	0.89	5.24

Table 7.4 Distribution of Households, Holders, Land area and Parcels by Tenure system

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	4,908,810	997,079	1,368,294	4,957,665
Number of Male head households	4,037,822	881,725	1,141,153	4,077,297
Number of female head households	870,988	115,354	227,141	880,368
Number of holders	5,118,528	1,019,681	1,404,127	5,193,696
Land area in hectare	6,611,079	486,648	550,063	7,647,789
Number of Male holders	4,231,336	908,248	1,173,789	4,295,974
Land area in Hectare	5,768,275	463,415	484,198	6,715,889
Average area / male holder	1.36	0.51	0.41	1.56
Number of Female holders	887,192	111,434	230,337	897,722
Land area in hectare	842,803	23,232	65,864	931,900
Average area / female holder	0.95	0.21	0.29	1.04
Number of Parcels	17,291,624	811,330	1,086,814	19,755,635
Average area / parcel	0.38	0.6	0.51	0.39
Number of parcels / holder	3.38	0.8	0.77	3.8

Table 7.5 Distribution of Households, Holders, Land area and Parcels by Tenure system

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	141,714	3,005	2,519	141,976
Number of Male head households	113,501	2,901	2,086	113,660
Number of female head households	28,213	*	432	28,317
Number of holders	141,714	3,005	2,519	141,976
Land area in hectare	113,265	688	*	114,338
Number of Male holders	113,271	2,901	2,086	113,430
Land area in Hectare	101,603	686	257	102,547
Average area / male holder	0.9	0.24	0.12	0.9
Number of Female holders	28,442	*	432	28,546
Land area in hectare	11,662	*	*	11,791
Average area / female holder	0.41	*	*	0.41
Number of Parcels	279,738	*	1,395	282,554
Average area / parcel	0.4	*	*	0.4
Number of parcels / holder	1.97	*	0.55	1.99

Table 7.6 Distribution of Households, Holders, Land area and Parcels by Tenure system
Benishangul – Gumuz Region

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	142,995	25,184	12,123	145,443
Number of Male head households	115,496	23,012	10,965	117,425
Number of female head households	27,499	2,172	1,158	28,018
Number of holders	145,398	25,262	12,276	148,243
Land area in hectare	160,362	36,099	7,497	203,959
Number of Male holders	117,227	23,090	11,074	119,516
Land area in Hectare	144,388	33,696	7,259	185,343
Average area / male holder	1.23	1.46	0.66	1.55
Number of Female holders	28,171	2,172	1,202	28,727
Land area in hectare	15,974	2,404	239	18,617
Average area / female holder	0.57	1.11	0.2	0.65
Number of Parcels	476,066	20,641	11,284	546,647
Average area / parcel	0.34	1.75	0.66	0.37
Number of parcels / holder	3.27	0.82	0.92	3.69

Table 7.7 Distribution of Households, Holders, Land area and Parcels by Tenure system

S.N.N.P. Region

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	2,917,758	345,759	111,027	2,931,183
Number of Male head households	2,278,174	299,483	89,836	2,289,937
Number of female head households	639,584	46,277	21,191	641,245
Number of holders	2,961,664	352,873	111,331	2,986,144
Land area in hectare	2,095,149	111,999	27,125	2,234,274
Number of Male holders	2,319,409	308,422	90,709	2,342,395
Land area in Hectare	1,758,915	101,783	23,642	1,884,340
Average area / male holder	0.76	0.33	0.26	0.8
Number of Female holders	642,256	44,451	20,622	643,749
Land area in hectare	336,234	10,216	*	349,934
Average area / female holder	0.52	0.23	*	0.54
Number of Parcels	6,081,016	205,429	68,321	6,542,123
Average area / parcel	0.34	0.55	0.4	0.34
Number of parcels / holder	2.05	0.58	0.61	2.19

Table 7.8 Distribution of Households, Holders, Land area and Parcels by Tenure system

Gambela Region

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	32,456	3,186	4,705	35,712
Number of Male head households	25,693	2,985	4,210	28,742
Number of female head households	6,763	*	495	6,970
Number of holders	33,178	3,186	4,745	36,577
Land area in hectare	17,370	965	807	19,142
Number of Male holders	26,200	2,985	4,210	29,352
Land area in Hectare	15,303	955	760	17,018
Average area / male holder	0.58	0.32	0.18	0.58
Number of Female holders	6,978	*	535	7,225
Land area in hectare	2,067	*	*	2,124
Average area / female holder	0.3	*	*	0.29
Number of Parcels	76,003	2,322	3,129	89,201
Average area / parcel	0.23	0.42	0.26	0.21
Number of parcels / holder	2.29	0.73	0.66	2.44

Table 7.9 Distribution of Households, Holders, Land area and Parcels by Tenure system

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	18,662	684	585	18,662
Number of Male head households	15,986	544	510	15,986
Number of female head households	2,676	*	*	2,676
Number of holders	18,712	684	585	18,712
Land area in hectare	14,644	184	156	14,984
Number of Male holders	16,238	544	510	16,238
Land area in Hectare	13,170	140	140	13,450
Average area / male holder	0.81	0.26	0.27	0.83
Number of Female holders	2,474	*	*	2,474
Land area in hectare	1,475	*	*	1,534
Average area / female holder	0.6	*	*	0.62
Number of Parcels	67,556	496	497	68,850
Average area / parcel	0.22	0.37	0.31	0.22
Number of parcels / holder	3.61	0.73	0.85	3.68

Table 7.10 Distribution of Households, Holders, Land area and Parcels by Tenure system

Items	Tenure system			
	Land owned	Land rented	Other tenure	All
Number of households	22,543	300	1,348	22,616
Number of Male head households	18,822	300	1,229	18,853
Number of female head households	3,721	-	*	3,762
Number of holders	22,674	300	1,348	22,792
Land area in hectare	13,359	*	382	13,807
Number of Male holders	19,369	300	1,229	19,446
Land area in Hectare	12,377	*	379	12,823
Average area / male holder	0.64	*	0.31	0.66
Number of Female holders	3,304	-	*	3,346
Land area in hectare	982	-	*	984
Average area / female holder	0.3	-	*	0.29
Number of Parcels	66,841	*	856	68,824
Average area / parcel	0.2	*	0.45	0.2
Number of parcels / holder	2.95	*	0.64	3.02

Table 8 Distribution of Holders and Area by Holding size and Sex of Holder

Ethiopia

Holding size (HA)	Sex of holder					
	Male		Female		Both	
	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	511,689	23,159	458,777	19,696	970,466	42,855
0.10 – 0.50	2,276,549	704,064	930,545	259,497	3,207,094	963,562
0.51 – 1.00	2,649,492	1,946,131	560,267	404,894	3,209,759	2,351,025
1.01 – 2.00	3,158,038	4,521,223	382,876	536,809	3,540,914	5,058,033
2.01 – 5.00	1,945,067	5,588,011	183,981	528,621	2,129,048	6,116,632
5.01 – 10.00	166,319	1,044,883	14,501	93,541	180,820	1,138,424
Over 10	13,511	174,197	*	*	14,537	185,374
All	10,720,665	14,001,669	2,531,973	1,854,235	13,252,639	15,855,904

Table 8.1 Distribution of Holders and Area by Holding size and Sex of Holder

Tigray Region

Holding size (HA)	Sex of holder					
	Male		Female		Both	
	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	27,485	1,169	56,503	2,040	83,989	3,209
0.10 – 0.50	189,556	61,850	102,031	28,269	291,586	90,119
0.51 – 1.00	218,634	160,842	46,687	33,536	265,320	194,378
1.01 – 2.00	213,477	305,393	24,256	32,736	237,733	338,129
2.01 – 5.00	97,994	267,402	7,780	20,731	105,774	288,133
5.01 – 10.00	4,580	30,998	*	*	4,933	33,011
Over 10	*	*	-	-	*	*
All	752,064	831,310	237,610	119,324	989,675	950,634

Table 8.2 Distribution of Holders and Area by Holding size and Sex of Holder

Afar Region

Distribution of Holding size (HA)	Sex of holder					
	Male		Female		Both	
	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	23,864	637	4,306	116	28,170	753
0.10 – 0.50	6,029	1,561	922	247	6,952	1,808
0.51 – 1.00	6,856	5,245	497	372	7,353	5,617
1.01 – 2.00	5,086	7,130	437	635	5,522	7,765
2.01 – 5.00	2,317	6,577	165	457	2,482	7,033
5.01 – 10.00	271	*	-	-	271	*
Over 10	-	-	-	-	-	-
All	44,423	22,885	6,327	1,827	50,750	24,712

Table 8.3 Distribution of Holders and Area by Holding size and Sex of Holder

Amhara Region

Distribution of Holding size (HA)	Sex of holder					
	Male		Female		Both	
	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	112,921	4,424	179,707	7,163	292,628	11,587
0.10 – 0.50	406,288	130,806	240,301	64,595	646,589	195,400
0.51 – 1.00	708,651	533,598	115,368	84,941	824,019	618,539
1.01 – 2.00	1,095,831	1,569,687	99,373	140,754	1,195,204	1,710,441
2.01 – 5.00	629,393	1,739,868	39,963	110,250	669,356	1,850,118
5.01 – 10.00	31,485	191,900	*	*	33,021	200,397
Over 10	*	*	-	-	*	*
All	2,987,827	4,216,065	676,247	416,199	3,664,074	4,632,265

Table 8.4 Distribution of Holders and Area by Holding size and Sex of Holder

Oromia Region

Distribution of	Sex of holder					
	Male		Female		Both	
Holding size (HA)	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	185,789	7,928	132,227	5,668	318,016	13,596
0.10 – 0.50	726,473	225,112	236,153	67,388	962,626	292,500
0.51 – 1.00	936,518	686,179	208,730	152,368	1,145,248	838,547
1.01 – 2.00	1,291,210	1,871,588	188,050	267,991	1,479,260	2,139,579
2.01 – 5.00	1,027,450	3,054,691	120,144	352,611	1,147,594	3,407,302
5.01 – 10.00	119,015	750,821	11,391	74,700	130,407	825,521
Over 10	9,518	119,568	*	*	10,544	130,745
All	4,295,974	6,715,889	897,722	931,900	5,193,696	7,647,789

Table 8.5 Distribution of Holders and Area by Holding size and Sex of Holder

Somali Region

Distribution of	Sex of holder					
	Male		Female		Both	
Holding size (HA)	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	25,340	847	13,718	375	39,059	1,221
0.10 – 0.50	27,352	7,545	6,814	2,016	34,166	9,561
0.51 – 1.00	23,898	17,137	4,191	3,121	28,089	20,258
1.01 – 2.00	24,671	35,540	2,960	4,013	27,631	39,552
2.01 – 5.00	10,600	29,895	863	2,267	11,463	32,162
5.01 – 10.00	1,570	11,584	-	-	1,570	11,584
Over 10	-	-	-	-	-	-
All	113,430	102,547	28,546	11,791	141,976	114,338

Table 8.6 Distribution of Holders and Area by Holding size and Sex of Holder

Benishangul – Gumuz Region

Distribution of	Sex of holder					
	Male		Female		Both	
Holding size (HA)	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	4,695	231	4,740	260	9,434	491
0.10 – 0.50	19,759	6,160	12,509	3,253	32,267	9,413
0.51 – 1.00	25,574	19,089	6,159	4,278	31,733	23,367
1.01 – 2.00	37,465	54,046	3,458	4,805	40,923	58,850
2.01 – 5.00	29,729	88,501	1,687	5,131	31,416	93,632
5.01 – 10.00	1,898	12,126	*	*	2,073	13,017
Over 10	396	5,190	-	-	396	5,190
All	119,516	185,343	28,727	18,617	148,243	203,959

Table 8.7 Distribution of Holders and Area by Holding size and Sex of Holder

S.N.N.P. Region

Distribution of	Sex of holder					
	Male		Female		Both	
Holding size (HA)	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	125,359	7,608	63,937	3,924	189,295	11,532
0.10 – 0.50	876,171	263,560	325,350	92,053	1,201,521	355,613
0.51 – 1.00	708,410	508,935	176,553	124,818	884,963	633,753
1.01 – 2.00	479,624	663,620	63,686	84,998	543,311	748,618
2.01 – 5.00	145,434	395,629	13,177	36,699	158,611	432,328
5.01 – 10.00	7,397	44,988	*	*	8,444	52,429
Over 10	-	-	-	-	-	-
All	2,342,395	1,884,340	643,749	349,934	2,986,144	2,234,274

Table 8.8 Distribution of Holders and Area by Holding size and Sex of Holder

Gambela

Distribution of Holding size (HA)	Sex of holder					
	Male		Female		Both	
	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	4,260	223	1,742	96	6,002	319
0.10 – 0.50	13,501	3,737	4,235	1,012	17,736	4,749
0.51 – 1.00	7,280	5,267	1,049	712	8,329	5,979
1.01 – 2.00	3,106	4,155	168	237	3,274	4,392
2.01 – 5.00	1,102	2,906	*	*	1,134	2,972
5.01 – 10.00	*	*	-	-	*	*
Over 10	-	-	-	-	-	-
All	29,352	17,018	7,225	2,124	36,577	19,142

Table 8.9 Distribution of Holders and Area by Holding size and Sex of Holder

Harari Region

Distribution of Holding size (HA)	Sex of holder					
	Male		Female		Both	
	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	470	30	455	29	925	59
0.10 – 0.50	4,727	1,509	992	303	5,718	1,812
0.51 – 1.00	6,162	4,459	541	413	6,703	4,873
1.01 – 2.00	4,181	5,732	369	494	4,550	6,226
2.01 – 5.00	698	1,719	*	*	816	2,014
5.01 – 10.00	-	-	-	-	-	-
Over 10	-	-	-	-	-	-
All	16,238	13,450	2,474	1,534	18,712	14,984

Table 8.10 Distribution of Holders and Area by Holding size and Sex of Holder

Dire Dawa

Distribution of Holding size (HA)	Sex of holder					
	Male		Female		Both	
	Number	Area (HA)	Number	Area (HA)	Number	Area (HA)
Under 0.10	1,505	62	1,443	26	2,949	88
0.10 – 0.50	6,694	2,224	1,239	361	7,933	2,585
0.51 – 1.00	7,510	5,380	492	335	8,001	5,715
1.01 – 2.00	3,388	4,333	*	*	3,506	4,480
2.01 – 5.00	350	823	*	*	403	939
5.01 – 10.00	-	-	-	-	-	-
Over 10	-	-	-	-	-	-
All	19,446	12,823	3,346	984	22,792	13,807

Table 9. Number of holders, Area of Land under Double cropping and Newly Cultivated Land by Region

Region	Number of holder and Area of land under double cropping		Number of holder and Area of newly cultivated land	
	Number of Holders	Area of land under double cropping (ha)	Number of Holders	Area of newly cultivated land
TIGRAY	58,868	8,304	971,033	52,480
AFAR	224	*	48,497	5,729
AMHARA	286,273	97,012	3,548,660	392,785
OROMIA	352,420	57,105	4,745,821	1,768,436
SOMALI	*	*	141,564	23,936
BENISHANGUL-GUMUZ	2,188	*	141,805	17,003
S.N.N.P.R.	13,122	2,627	2,898,658	456,928
GAMBELA	119	*	35,276	1,255
HARARI	*	*	18,514	769
DIRE DAWA	611	*	22,657	2,105
National	714,804	165,605	12,572,484	2,721,425

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, production and yield of specific crop in a stratum.

1. For estimating Total Area of Land under Specific Crop:

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

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

Where:

h represents the stratum

n_h is the total number of sample EAs successfully covered in the h^{th} stratum.

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

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

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

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

a_{hij} is the value of area for agricultural household j , in the i^{th} EA in the h^{th} stratum 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 Production under Specific Crop:

$$\hat{P}_h = \sum_{i=1}^{n_h} W_{hi} P_{hi}$$

in which, $P_{hi} = a_{hi} * \bar{Y}_{hi}$

Where, $\bar{Y}_{hi} = \frac{Y_{hi}}{16C_{hi}}$ is average yield per square meter of a specific crop in the i^{th} EA in the h^{th} stratum.

\hat{P}_h is estimate of total quantity of production of a specific crop in the h^{th} stratum.

Y_{hi} is sample total quantity of production of a specific crop from defined area of land for crop cutting of a crop in the i^{th} EA in the h^{th} stratum.

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

C_{hi} is the number of crop cutting of a specific crop in the i^{th} EA in the h^{th} stratum.

3. For estimating yield of a specific crop in stratum h:

$$\hat{Y}_h = \frac{\hat{P}_h}{\hat{A}_h}$$

4. 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.

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

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

$$Var(\hat{Y}_h) = \frac{1}{\hat{A}_h^2} \left[Var(\hat{P}_h) + \hat{Y}_h^2 Var(\hat{A}_h) - 2\hat{Y}_h Cov(\hat{P}_h, \hat{A}_h) \right]$$

Where,

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

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

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

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

$\hat{A}_{hij}, \hat{P}_{hij}$ are weighted values of area and production, respectively, from j^{th} agricultural household in the i^{th} EA and h^{th} stratum under a specific crop.

Since all strata are independent, the total variance is computed by aggregating the result obtained for each stratum, i.e.

$$Var(\hat{A}) = \sum_h^L Var(\hat{A}_h), Var(\hat{P}) = \sum_h^L Var(\hat{P}_h) \text{ and } Var(\hat{Y}) = \sum_h^L Var(\hat{Y}_h)$$

Where, L is the number of strata.

5. Coefficient of Variation (CV) of Estimates:

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

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

6. Ninety-five percent confidence interval (CI) of stratum total of area:

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

Where $SE(\hat{A}_h) = \sqrt{\text{Var}(\hat{A}_h)}$ 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
ESTIMATES OF STANDARD ERRORS AND
COEFFICIENTS OF VARIATIONS

Table 1: Standard Errors and Coefficients of Variations for Estimates of Holders and Area by Land Use Type

Type of Land Use	Holding Size					
	Under 0.10			0.10 - 0.50		
	Estimate	S.E.	C.V.(%)	Estimate	S.E.	C.V.(%)
Temporary Crop	20,087.06	966.95	4.81	613,833.87	12,633.83	2.06
Number of holders	609,960.26	26,443.64	4.34	3,040,419.48	54,168.58	1.78
Permanent Crop	8,030.97	567.31	7.06	184,763.13	5,827.59	3.15
Number of holders	309,705.15	17,534.87	5.66	1,871,954.93	44,955.96	2.4
Fallow Land	840.59	132.25	15.73	24,368.36	1,620.81	6.65
Grazing Land	1,418.18	156.1	11.01	57,693.31	2,302.80	3.99
Wood Land	587.63	89.31	15.2	12,224.51	713.29	5.83
Other Land	11,890.85	553.74	4.66	70,678.53	2,640.39	3.74
All Land	42,855.28	1,607.03	3.75	963,561.72	16,383.46	1.7
Number of holders	970,465.81	35,266.05	3.63	3,207,094.02	55,014.34	1.72

Table 1 cont'd

Type of Land Use	Holding Size					
	0.51 - 1.00			1.01 - 2.00		
	Estimate	S.E.	C.V.(%)	Estimate	S.E.	C.V.(%)
Temporary Crop	1,701,848.40	31,966.69	1.88	3,928,708.72	65,942.67	1.68
Number of holders	3,166,745.29	54,730.40	1.73	3,516,654.32	58,725.82	1.67
Permanent Crop	268,665.78	11,753.52	4.37	317,407.29	14,827.86	4.67
Number of holders	1,800,422.39	43,031.77	2.39	1,819,175.62	47,584.03	2.62
Fallow Land	69,318.41	3,915.75	5.65	175,406.77	9,564.61	5.45
Grazing Land	158,161.08	5,548.46	3.51	369,091.69	14,436.26	3.91
Wood Land	32,140.13	1,836.00	5.71	60,421.76	5,057.35	8.37
Other Land	120,890.88	4,652.85	3.85	206,996.29	9,325.86	4.51
All Land	2,351,024.68	40,448.65	1.72	5,058,032.52	83,758.16	1.66
Number of holders	3,209,759.23	55,432.60	1.73	3,540,914.35	58,547.93	1.65

Table 1 cont'd

Type of Land Use	Holding Size					
	2.01 - 5.00			5.01 - 10.00		
	Estimate	S.E.	C.V.(%)	Estimate	S.E.	C.V.(%)
Temporary Crop	4,713,906.55	124,994.18	2.65	810,554.25	72,945.09	9
Number of holders	2,120,427.75	50,682.47	2.39	179,098.85	13,594.09	7.59
Permanent Crop	219,904.03	15,019.69	6.83	30,233.13	5,461.64	18.07
Number of holders	1,037,716.51	35,935.62	3.46	96,522.21	8,495.08	8.8
Fallow Land	277,907.32	18,331.48	6.6	74,906.35	11,372.11	15.18
Grazing Land	609,587.93	29,756.55	4.88	167,993.76	18,220.15	10.85
Wood Land	61,941.03	4,651.82	7.51	17,658.79	4,643.15	26.29
Other Land	233,384.96	17,002.30	7.29	37,078.09	11,287.92	30.44
All Land	6,116,631.83	156,449.23	2.56	1,138,424.38	88,847.48	7.8
Number of holders	2,129,048.24	50,710.72	2.38	180,819.57	13,833.36	7.65

Table 1 cont'd

Type of Land Use	Holding Size					
	Over 10.00			Total		
	Estimate	S.E.	C.V.(%)	Estimate	S.E.	C.V.(%)
Temporary Crop	128,139.00	32,979.10	25.74	11,917,077.87	177,938.22	1.49
Number of holders	14,537.44	3,171.05	21.81	12,647,843.39	73,311.55	0.58
Permanent Crop	7,553.36	4,012.94	53.13	1,036,557.70	33,359.92	3.22
Number of holders	5,748.84	1,619.04	28.16	6,941,245.65	83,668.83	1.21
Fallow Land	12,464.35	4,001.52	32.1	635,212.15	31,042.35	4.89
Grazing Land	32,101.69	8,420.67	26.23	1,396,047.64	48,879.62	3.5
Wood Land	1,268.89	569.72	44.9	186,242.74	9,833.81	5.28
Other Land	3,846.45	2,004.12	52.1	684,766.05	31,708.11	4.63
All Land	185,373.74	41,264.29	22.26	15,855,904.15	217,807.01	1.37
Number of holders	14,537.44	3,171.05	21.81	13,252,638.66	70,336.35	0.53

Table -2: Standard Errors and Coefficients of variations for Estimates of Households by Household and Holding Size

Ethiopia

Ssize of Holding In Hectares	Household Size						
	All Households			Households with One Member			
	Estimate	S.E.	CV In %	Estimate	S.E.	CV In %	
All sizes	12,901,952	67,390.60	0.52	8,262,937	73,478.34	0.89	
Under 0.10 Hectare	886,707	33,523.04	3.78	683,326	25,818.65	3.78	
0.10 - 0.50 Hectare	3,040,058	54,671.21	1.8	2,064,327	43,058.14	2.09	
0.51 - 1.00 Hectare	3,124,932	54,948.53	1.76	2,031,597	42,799.38	2.11	
1.01 - 2.00 Hectare	3,490,060	58,030.66	1.66	2,146,107	45,467.63	2.12	
2.01 - 5.00 Hectare	2,152,529	50,232.89	2.33	1,230,324	36,248.55	2.95	
5.01 - 10.00 Hectare	193,127	14,405.92	7.46	102,268	9,515.44	9.3	
Over 10 Hectare	14,537	3,171.05	21.81	4,989	1,643.66	32.94	

Table -2: cont'd

Ethiopia

Ssize of Holding In Hectares	Household Size						
	Households with 2 – 3 Members			Households with 4 – 5 Members			
	Estimate	S.E.	CV In %	Estimate	S.E.	CV In %	
All sizes	1,256,310	37,548.55	2.99	1,073,601	25,060.38	2.33	
Under 0.10 Hectare	50,740	5,853.65	11.54	37,923	4,711.08	12.42	
0.10 - 0.50 Hectare	226,197	13,998.10	6.19	237,595	12,241.16	5.15	
0.51 - 1.00 Hectare	293,787	14,641.92	4.98	257,569	12,120.72	4.71	
1.01 - 2.00 Hectare	405,114	17,324.79	4.28	318,126	13,341.20	4.19	
2.01 - 5.00 Hectare	258,136	14,110.14	5.47	199,461	11,009.84	5.52	
5.01 - 10.00 Hectare	20,838	3,685.68	17.69	20,037	3,813.75	19.03	
Over 10 Hectare	1,498	1,089.68	72.74	2,890	1,231.62	42.62	

Table -2: cont'd

Ethiopia

Ssize of Holding In Hectares	Household Size						
	Households with 6 – 9 Members			Households with 10 or more Members			
	Estimate	S.E.	CV In %	Estimate	S.E.	CV In %	
All sizes	1,683,236	33,694.32	2	625,867	23,564.39	3.77	
Under 0.10 Hectare	76,024	7,373.27	9.7	38,695	5,695.75	14.72	
0.10 - 0.50 Hectare	387,736	16,942.76	4.37	124,204	8,338.46	6.71	
0.51 - 1.00 Hectare	407,303	16,483.76	4.05	134,676	8,829.39	6.56	
1.01 - 2.00 Hectare	453,439	15,975.40	3.52	167,274	11,098.38	6.63	
2.01 - 5.00 Hectare	324,743	14,906.27	4.59	139,866	9,877.13	7.06	
5.01 - 10.00 Hectare	30,123	3,684.97	12.23	19,861	3,345.57	16.84	
Over 10 Hectare	3,870	1,187.01	30.68	1,291	870.62	67.46	

Table 3. Standard Errors and Coefficients of Variations for the Estimates of Holders and Area by Crop Type

Crop	Number of Holders			Holding Area in Hectare			
	Estimate	S.E.	C.V %	Estimate	S.E.	C.V %	
Cereals	11,857,351.99	76,443.86	0.64	9,233,025.14	134,254.38	1.45	
Teff	5,630,440.46	92,408.29	1.64	2,588,661.14	68,134.53	2.63	
Barley	4,365,198.79	89,574.26	2.05	1,129,112.36	51,035.56	4.52	
Wheat	4,666,194.00	88,990.38	1.91	1,683,565.26	63,347.23	3.76	
Maize	7,148,501.47	99,513.64	1.39	1,772,253.11	50,152.02	2.83	
Sorghum	4,072,327.54	89,782.79	2.2	1,618,677.24	67,097.52	4.15	
Finger Millet	1,346,755.21	46,217.35	3.43	368,999.15	17,729.78	4.8	
Oats/'Aja'	253,886.44	17,994.65	7.09	24,017.99	2,875.79	11.97	
Rice	126,431.80	24,531.65	19.4	47,738.88	14,298.65	29.95	
Pulses	6,659,922.67	87,570.11	1.31	1,489,308.45	39,804.25	2.67	
Horse beans	3,689,451.70	79,189.68	2.15	512,067.20	18,967.33	3.7	
Field Peas	1,493,440.60	50,371.13	3.37	226,532.57	12,685.62	5.6	
Haricot beans	2,153,145.76	67,591.84	3.14	244,012.88	17,983.61	7.37	
Chick Peas	941,999.05	46,007.50	4.88	213,187.14	14,953.02	7.01	
Lentils	727,001.72	34,037.51	4.68	105,956.04	8,445.89	7.97	
Vetch	670,592.71	38,135.50	5.69	135,657.67	11,419.43	8.42	
Soya beans	62,508.24	8,896.46	14.23	5,678.69	1,772.71	31.22	
Fenugreek	402,226.82	24,421.34	6.07	21,183.02	3,860.30	18.22	
Gibto	105,717.01	15,434.73	14.6	25,033.25	4,732.19	18.9	
Oilseeds	2,737,358.50	62,193.24	2.27	780,915.89	57,761.57	7.4	
Neug	878,874.63	42,254.96	4.81	256,794.20	16,232.47	6.32	
Linseed	891,216.91	34,504.99	3.87	140,800.92	9,827.37	6.98	
Groundnuts	211,693.81	25,231.69	11.92	41,578.79	6,242.75	15.01	
Sunflower	89,998.28	12,811.65	14.24	4,652.53	922.58	19.83	
Sesame	581,914.33	31,382.07	5.39	315,842.80	54,300.24	17.19	
Rape seed	494,998.94	34,847.62	7.04	21,246.65	2,037.21	9.59	
Vegetables	5,060,003.91	87,282.93	1.72	138,392.53	10,824.57	7.82	
Lettuce	37,591.05	7,604.46	20.23	156.18	88.09	56.4	
Head Cabbage	274,662.31	18,512.65	6.74	2,561.71	785.66	30.67	
Ethiopian Cabbage	2,799,878.97	72,675.84	2.6	32,782.45	2,129.73	6.5	
Tomatoes	194,703.73	15,005.99	7.71	4,952.90	1,257.49	25.39	
Green peppers	812,430.65	40,803.73	5.02	7,849.75	1,066.16	13.58	
Red peppers	1,776,392.52	66,470.26	3.74	89,862.11	10,469.00	11.65	
Swiss chard	97,809.46	12,185.55	12.46	227.43	56.24	24.73	
Root Crops	5,038,428.08	85,519.74	1.7	212,208.33	11,350.00	5.35	
Beet root	257,382.21	14,515.99	5.64	1,096.31	200.68	18.31	
Carrot	157,031.90	14,631.91	9.32	2,712.70	602	22.19	
Onion	556,342.24	31,028.30	5.58	17,588.41	3,495.77	19.88	
Potatoes	1,371,758.55	63,279.42	4.61	69,783.60	8,448.52	12.11	
Garlic	2,079,194.76	57,840.27	2.78	15,361.25	1,561.79	10.17	
Taro/'Godere'	956,894.44	31,713.84	3.31	52,200.84	3,899.40	7.47	
Sweet Potatoes	1,296,459.83	51,920.66	4	53,465.22	3,938.24	7.37	
Other Temporary	2,634,726.56	64,334.68	2.44	63,227.53	5,171.93	8.18	
Permanent crop	6,941,245.65	83,668.83	1.21	1,036,557.70	33,359.92	3.22	
Coffee	2,959,092.71	77,465.21	2.62	395,003.48	23,930.09	6.06	
Chat	1,723,262.64	66,559.99	3.86	138,811.38	17,633.08	12.7	
Fruit Crops	2,625,123.27	65,950.11	2.51	53,086.49	3,960.08	7.46	
Gesho	1,615,532.87	49,655.53	3.07	23,997.98	2,128.07	8.87	
Sugar Cane	762,719.65	30,493.84	4	18,908.42	1,350.15	7.14	
Other Permanent	4,021,663.51	52,744.71	1.31	406,749.94	13,416.07	3.3	

Table 4. Standard Errors and Coefficients of Variations for the Estimates of Holder and Area by Holding Size & type and Tenure System

Ethiopia Size of Holding By Tenure	Crop Holding Number of Holders			Holding Area in Hectare		
	Estimate	S.E.	CV %	Estimate	S.E.	CV %
Holdings Under 0.10 Hectare						
All Tenure	250,320.89	14,724.40	5.88	12,185.30	789.13	6.48
Land Owned	235,471.97	14,232.44	6.04	11,044.73	733.42	6.64
Land Rented	18,851.75	3,774.50	20.02	386.07	106.74	27.65
Other Tenure	30,387.20	4,020.00	13.23	754.5	143.17	18.98
Holdings 0.10 - 0.50 Hectares						
All Tenure	538,379.14	20,332.64	3.78	144,711.15	5,632.74	3.89
Land Owned	511,958.67	19,394.41	3.79	124,346.72	4,896.72	3.94
Land Rented	80,629.10	7,523.76	9.33	12,218.09	1,651.94	13.52
Other Tenure	67,676.24	6,742.23	9.96	8,146.35	1,079.28	13.25
Holdings 0.51 - 1.00 Hectares						
All Tenure	267,659.55	14,030.87	5.24	190,379.05	10,172.77	5.34
Land Owned	258,850.66	13,888.71	5.37	155,327.80	8,698.05	5.6
Land Rented	64,201.31	6,971.17	10.86	19,905.39	2,938.58	14.76
Other Tenure	55,622.10	5,729.23	10.3	15,145.86	1,944.16	12.84
Holdings 1.01 - 2.00 Hectares						
All Tenure	184,964.55	11,483.57	6.21	253,040.33	16,043.39	6.34
Land Owned	176,877.23	11,310.72	6.39	183,061.48	12,715.40	6.95
Land Rented	73,781.20	6,675.35	9.05	43,811.57	5,088.57	11.61
Other Tenure	47,598.89	5,315.31	11.17	26,167.28	4,340.60	16.59
Holdings 2.01 - 5.00 Hectares						
All Tenure	60,021.20	8,005.81	13.34	163,169.97	24,268.20	14.87
Land Owned	56,608.88	6,848.90	12.1	114,828.67	14,896.40	12.97
Land Rented	24,625.17	6,005.48	24.39	34,050.69	11,065.78	32.5
Other Tenure	14,446.78	2,747.33	19.02	14,290.60	3,673.67	25.71
Holdings 5.01 - 10.00 Hectares						
All Tenure	6,079.62	3,831.03	63.01	40,958.61	26,209.01	63.99
Land Owned	5,115.35	2,953.13	57.73	24,701.78	13,663.56	55.31
Land Rented	3,586.95	2,840.23	79.18	14,373.05	13,283.84	92.42
Other Tenure	1,521.01	800.4	52.62	1,883.78	1,177.11	62.49
Holdings Over 10.00 Hectares						
All Tenure	964.27	930.82	96.53	10,322.99	9,963.75	96.52
Land Owned	964.27	930.82	96.53	3,139.65	3,076.22	97.98
Land Rented	964.27	930.82	96.53	6,959.77	6,881.97	98.88
Other Tenure	33.65	33.8	100.46	223.58	224.61	100.46
Holdings of All Size						
All Tenure	1,308,389.22	37,903.09	2.9	814,767.39	56,860.89	6.98
Land Owned	1,245,847.03	36,743.50	2.95	616,450.83	32,227.62	5.23
Land Rented	266,639.75	14,936.88	5.6	131,704.62	28,822.34	21.88
Other Tenure	217,285.87	14,180.73	6.53	66,611.94	7,953.37	11.94

Table 4. cont'd

Ethiopia		Livestock Holding				
Size of Holding By Tenure	Number of Holders			Holding Area in Hectare		
	Estimate	S.E.	CV %	Estimate	S.E.	CV %
Holdings Under 0.10 Hectare						
All Tenure	246,662.98	15,719.92	6.37	5,214.28	423.92	8.13
Land Owned	218,689.52	14,243.80	6.51	4,808.93	404.7	8.42
Land Rented	14,159.08	3,487.36	24.63	130.14	29.34	22.54
Other Tenure	20,441.88	3,817.34	18.67	275.22	52.89	19.22
Holdings 0.10 - 0.50 Hectares						
All Tenure	28,015.31	5,395.48	19.26	6,368.04	1,193.21	18.74
Land Owned	28,015.31	5,395.48	19.26	6,079.69	1,164.30	19.15
Land Rented	991.17	700.39	70.66	21.63	20.08	92.85
Other Tenure	1,602.35	850.17	53.06	266.73	230.49	86.41
Holdings 0.51 - 1.00 Hectares						
All Tenure	10,829.42	2,070.46	19.12	7,983.01	1,577.67	19.76
Land Owned	10,829.42	2,070.46	19.12	7,613.72	1,536.93	20.19
Land Rented	674.78	338.85	50.22	294.35	124.12	42.17
Other Tenure	794.67	413.67	52.06	74.93	48.75	65.06
Holdings 1.01 - 2.00 Hectares						
All Tenure	4,921.26	1,361.96	27.67	6,722.88	1,885.09	28.04
Land Owned	4,921.26	1,361.96	27.67	5,123.49	1,211.20	23.64
Land Rented	814.53	579.85	71.19	711.51	571.08	80.26
Other Tenure	683.84	542.99	79.4	887.88	702.04	79.07
Holdings 2.01 - 5.00 Hectares						
All Tenure	1,341.23	377.51	28.15	3,820.68	1,153.59	30.19
Land Owned	1,341.23	377.51	28.15	3,070.61	970.54	31.61
Land Rented	-	-	-	-	-	-
Other Tenure	261.49	166.44	63.65	750.07	485.34	64.71
Holdings 5.01 - 10.00 Hectares						
All Tenure	142.11	79.74	56.11	943.24	528.23	56
Land Owned	142.11	79.74	56.11	608.14	426.77	70.18
Land Rented	-	-	-	-	-	-
Other Tenure	47.97	48.86	101.86	335.11	341.34	101.86
Holdings Over 10.00 Hectares						
All Tenure	-	-	-	-	-	-
Land Owned	-	-	-	-	-	-
Land Rented	-	-	-	-	-	-
Other Tenure	-	-	-	-	-	-
Holdings of All Size						
All Tenure	291,912.31	16,496.19	5.65	31,052.13	3,499.21	11.27
Land Owned	263,938.85	15,224.32	5.77	27,304.58	2,985.11	10.93
Land Rented	16,639.56	3,619.61	21.75	1,157.62	585.49	50.58
Other Tenure	23,832.20	3,836.97	16.1	2,589.93	1,265.17	48.85

Table 4 cont'd

Ethiopia		Crop & Livestock Holding				
Size of Holding By Tenure	Number of Holders			Holding Area in Hectare		
	Estimate	S.E.	CV %	Estimate	S.E.	CV %
Holdings Under 0.10 Hectare						
All Tenure	473,481.94	23,840.49	5.04	25,455.70	1,289.99	5.07
Land Owned	452,020.30	23,150.31	5.12	23,631.10	1,245.86	5.27
Land Rented	26,485.86	3,839.34	14.5	558.04	104.63	18.75
Other Tenure	48,419.06	5,904.82	12.2	1,266.56	182.41	14.4
Holdings 0.10 - 0.50 Hectares						
All Tenure	2,640,699.57	49,975.28	1.89	812,482.53	15,536.18	1.91
Land Owned	2,616,243.47	49,879.53	1.91	759,923.24	14,821.74	1.95
Land Rented	247,461.73	14,197.50	5.74	31,505.95	2,149.72	6.82
Other Tenure	215,835.06	13,926.75	6.45	21,053.33	1,725.24	8.19
Holdings 0.51 - 1.00 Hectares						
All Tenure	2,931,270.26	53,524.61	1.83	2,152,662.62	39,085.56	1.82
Land Owned	2,917,016.60	53,559.07	1.84	1,939,095.49	37,268.47	1.92
Land Rented	515,292.41	19,522.30	3.79	137,553.86	6,094.55	4.43
Other Tenure	366,391.61	16,421.06	4.48	76,013.27	4,531.68	5.96
Holdings 1.01 - 2.00 Hectares						
All Tenure	3,351,028.54	58,243.60	1.74	4,798,269.31	83,314.11	1.74
Land Owned	3,328,274.39	58,164.62	1.75	4,090,101.16	78,295.96	1.91
Land Rented	962,098.64	29,558.22	3.07	465,317.25	17,800.56	3.83
Other Tenure	623,005.37	24,212.25	3.89	242,850.90	12,910.70	5.32
Holdings 2.01 - 5.00 Hectares						
All Tenure	2,067,685.81	50,023.73	2.42	5,949,641.18	154,147.10	2.59
Land Owned	2,053,209.64	49,307.95	2.4	4,911,945.50	127,016.65	2.59
Land Rented	767,569.80	29,904.97	3.9	708,784.37	36,345.33	5.13
Other Tenure	503,694.00	26,241.99	5.21	328,911.31	23,244.33	7.07
Holdings 5.01 - 10.00 Hectares						
All Tenure	174,597.84	12,493.95	7.16	1,096,522.53	79,614.88	7.26
Land Owned	173,621.69	12,423.75	7.16	923,964.12	68,887.37	7.46
Land Rented	70,839.32	6,865.56	9.69	109,604.39	15,096.75	13.77
Other Tenure	63,572.11	6,960.60	10.95	62,954.02	10,029.08	15.93
Holdings Over 10.00 Hectares						
All Tenure	13,573.17	2,737.91	20.17	175,050.75	36,864.61	21.06
Land Owned	13,573.17	2,737.91	20.17	132,865.34	30,244.96	22.76
Land Rented	6,203.15	1,990.00	32.08	29,701.80	11,882.32	40.01
Other Tenure	4,789.19	1,370.22	28.61	12,483.61	2,908.42	23.3
Holdings of All Size						
All Tenure	11,652,337.13	71,617.13	0.61	15,010,084.63	206,477.35	1.38
Land Owned	11,553,959.26	72,041.18	0.62	12,781,525.95	174,562.76	1.37
Land Rented	2,595,950.91	57,368.25	2.21	1,483,025.67	54,110.60	3.65
Other Tenure	1,825,706.40	49,813.56	2.73	745,533.01	35,788.53	4.8

Table 4 cont'd

Ethiopia		All Holding				
Size of Holding By Tenure	Number of Holders			Holding Area in Hectare		
	Estimate	S.E.	CV %	Estimate	S.E.	CV %
Holdings Under 0.10 Hectare						
All Tenure	970,465.81	35,266.05	3.63	42,855.28	1,607.03	3.75
Land Owned	906,181.79	33,207.21	3.66	39,484.76	1,524.34	3.86
Land Rented	59,496.69	7,726.99	12.99	1,074.24	155.77	14.5
Other Tenure	99,248.14	8,848.44	8.92	2,296.28	252.68	11
Holdings 0.10 - 0.50 Hectares						
All Tenure	3,207,094.02	55,014.34	1.72	963,561.72	16,383.46	1.7
Land Owned	3,156,217.45	54,733.51	1.73	890,349.64	15,600.59	1.75
Land Rented	329,082.00	16,901.30	5.14	43,745.67	2,834.16	6.48
Other Tenure	285,113.65	15,608.81	5.47	29,466.41	1,889.40	6.41
Holdings 0.51 - 1.00 Hectares						
All Tenure	3,209,759.23	55,432.60	1.73	2,351,024.68	40,448.65	1.72
Land Owned	3,186,696.68	55,332.29	1.74	2,102,037.02	38,389.59	1.83
Land Rented	580,168.50	21,377.95	3.68	157,753.60	6,943.35	4.4
Other Tenure	422,808.38	17,133.64	4.05	91,234.06	5,053.77	5.54
Holdings 1.01 - 2.00 Hectares						
All Tenure	3,540,914.35	58,547.93	1.65	5,058,032.52	83,758.16	1.66
Land Owned	3,510,072.88	58,573.66	1.67	4,278,286.13	78,808.53	1.84
Land Rented	1,036,694.37	30,401.05	2.93	509,840.34	18,925.20	3.71
Other Tenure	671,288.10	25,045.43	3.73	269,906.05	14,115.06	5.23
Holdings 2.01 - 5.00 Hectares						
All Tenure	2,129,048.24	50,710.72	2.38	6,116,631.83	156,449.23	2.56
Land Owned	2,111,159.75	49,646.66	2.35	5,029,844.79	127,355.47	2.53
Land Rented	792,194.97	30,660.05	3.87	742,835.06	38,562.80	5.19
Other Tenure	518,402.27	26,613.05	5.13	343,951.98	23,926.56	6.96
Holdings 5.01 - 10.00 Hectares						
All Tenure	180,819.57	13,833.36	7.65	1,138,424.38	88,847.48	7.8
Land Owned	178,879.15	13,363.05	7.47	949,274.03	72,887.99	7.68
Land Rented	74,426.27	7,764.75	10.43	123,977.44	21,812.03	17.59
Other Tenure	65,141.09	6,941.09	10.66	65,172.91	10,114.86	15.52
Holdings Over 10.00 Hectares						
All Tenure	14,537.44	3,171.05	21.81	185,373.74	41,264.29	22.26
Land Owned	14,537.44	3,171.05	21.81	136,004.99	30,815.19	22.66
Land Rented	7,167.42	2,553.50	35.63	36,661.56	17,346.28	47.31
Other Tenure	4,822.84	1,370.63	28.42	12,707.19	2,917.08	22.96
Holdings of All Size						
All Tenure	13,252,638.66	70,336.35	0.53	15,855,904.15	217,807.01	1.37
Land Owned	13,063,745.14	69,416.29	0.53	13,425,281.35	176,884.56	1.32
Land Rented	2,879,230.22	60,239.88	2.09	1,615,887.92	66,311.07	4.1
Other Tenure	2,066,824.47	54,769.11	2.65	814,734.88	38,164.96	4.68

Table -5 Standard Errors and Coefficients of Variations for Estimates of Household Heads by Sex, and Area by Tenure System

Ethiopia

ITEMS	Tenure System					
	Land Owned			Land Rented		
	Estimate	S.E.	CV %	Estimate	S.E.	CV %
Number of Households	12,773,042.77	67,175.17	0.53	2,841,830.21	59,179.94	2.08
Male Headed Households	10,302,367.60	65,577.60	0.64	2,577,590.02	54,133.17	2.1
Female Headed households	2,470,675.17	38,156.42	1.54	264,240.19	13,247.87	5.01
Number of Holders	13,063,745.14	69,416.29	0.53	2,879,230.22	60,239.88	2.09
Land Area in hectare	13,425,281.35	176,884.56	1.32	1,615,887.92	66,311.07	4.1
Number of Male Holders	10,567,124.78	67,166.48	0.64	2,624,916.61	55,635.97	2.12
Land Area in Hectare	11,730,987.68	163,863.25	1.4	1,542,280.11	62,782.01	4.07
Number of Female Holders	1.11	2.44	2.19	0.59	1.13	1.92
Land Area in Hectare	2,496,620.36	37,919.63	1.52	254,313.61	13,076.70	5.14
Number of Parcels	1,694,293.67	44,771.84	2.64	73,607.80	7,313.69	9.94

Table -5: cont'd

Ethiopia

ITEMS	Tenure System					
	Other Tenure			All Tenure		
	Estimate	S.E.	CV %	Estimate	S.E.	CV %
Number of Households	2,028,127.04	52,934.29	2.61	12,901,951.53	67,390.60	0.52
Male Headed Households	1,717,408.42	47,084.96	2.74	10,399,725.52	64,695.40	0.62
Female Headed households	310,718.62	14,428.38	4.64	2,502,226.01	38,859.98	1.55
Number of Holders	2,066,824.47	54,769.11	2.65	13,252,638.66	70,336.35	0.53
Land Area in hectare	814,734.88	38,164.96	4.68	15,855,904.15	217,807.01	1.37
Number of Male Holders	1,752,485.88	48,814.87	2.79	10,720,665.31	66,674.77	0.62
Land Area in Hectare	728,401.37	35,010.11	4.81	14,001,669.17	202,412.68	1.45
Number of Female Holders	0.42	0.72	1.72	1.31	3.04	2.34
Land Area in Hectare	314,338.59	14,439.13	4.59	2,531,973.35	38,561.57	1.52
Number of Parcels	86,333.51	7,929.96	9.19	1,854,234.98	49,122.65	2.65

Table 6 standard Errors and Coefficient of Variations for the Estimates of Holder and Area by Holding Size & Sex of Holder

Size of Holding By Sex	Number of Holders			Holding Area in Hectare		
	Estimate	S.E.	CV %	Estimate	S.E.	CV %
Holdings 0.10 Hectares						
Male	511,689.10	24,854.02	4.86	23,159.32	1,212.91	5.24
Female	458,776.71	18,594.63	4.05	19,695.97	895.19	4.55
Both	970,465.81	35,266.05	3.63	42,855.28	1,607.03	3.75
Holdings 0.10 - 0.50 Hectares						
Male	2,276,549.17	47,477.17	2.09	704,064.41	14,631.07	2.08
Female	930,544.85	22,117.36	2.38	259,497.30	6,421.14	2.47
Both	3,207,094.02	55,014.34	1.72	963,561.72	16,383.46	1.7
Holdings 0.51 - 1.00 Hectares						
Male	2,649,492.23	50,168.82	1.89	1,946,131.03	36,713.55	1.89
Female	560,267.00	18,316.05	3.27	404,893.64	13,472.43	3.33
Both	3,209,759.23	55,432.60	1.73	2,351,024.68	40,448.65	1.72
Holdings 1.01 - 2.00 Hectares						
Male	3,158,038.26	53,689.04	1.7	4,521,223.20	77,472.98	1.71
Female	382,876.09	14,282.87	3.73	536,809.32	20,241.86	3.77
Both	3,540,914.35	58,547.93	1.65	5,058,032.52	83,758.16	1.66
Holdings 2.01 - 5.00 Hectares						
Male	1,945,066.80	46,844.43	2.41	5,588,010.83	144,270.39	2.58
Female	183,981.44	11,833.73	6.43	528,621.00	34,737.20	6.57
Both	2,129,048.24	50,710.72	2.38	6,116,631.83	156,449.23	2.56
Holdings 5.01 - 10.00 Hectares						
Male	166,318.62	13,001.55	7.82	1,044,882.96	83,484.11	7.99
Female	14,500.95	2,688.10	18.54	93,541.42	18,662.57	19.95
Both	180,819.57	13,833.36	7.65	1,138,424.38	88,847.48	7.8
Holdings Over 10.00 Hectares						
Male	13,511.13	3,044.60	22.53	174,197.42	40,046.21	22.99
Female	1,026.31	810.99	79.02	11,176.33	8,940.62	80
Both	14,537.44	3,171.05	21.81	185,373.74	41,264.29	22.26
Holdings of All Size						
Male	10,720,665.31	66,674.77	0.62	14,001,669.17	202,412.68	1.45
Female	2,531,973.35	38,561.57	1.52	1,854,234.98	49,122.65	2.65
Both	13,252,638.66	70,336.35	0.53	15,855,904.15	217,807.01	1.37

APPENDIX III

NUMBER OF EAs SAMPLED AND COVERED
NUMBER OF HOUSEHOLDS SAMPLED AND COVERED
NUMBER OF PARCELS AND FIELDS MEASURED

**Appendix III . Number of Planned and Actually Covered Sampling Units
(EAs & Households) of the 2009/10 (2002 E.C.) Annual
Agricultural Sample Survey (Meher Season).**

Region	Enumeration Areas		Households	
	Planned	Covered	Planned	Covered
Tigray	152	152	3040	3040
Afar	49	48	980	937
Amhara	336	336	6720	6720
Oromiya	452	452	9040	9040
Somalie	72	70	1440	1353
Benishangul Gumuz	90	90	1800	1800
SNNP	380	380	7600	7600
Gambela	81	59	1620	1180
Hareri	24	24	480	480
Diredawa	24	24	480	480
Country Total	1660	1635	33200	32630

APPENDIX IV

QUESTIONNAIRE

PART III – RESULTS OF AREA MEASUREMENTS

18	19	20	21	22	23	24	25	26
Is the field measured?		Yes = 1		No = 2		Code		→
Side	1 - 2	2 - 3	3 -	4 -	5 -	6 -	7 -	8 -
Bearing (0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Side	9 -	10 -	11 -	12 -	13 -	14 -	15 -	16 -
Bearing(0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Side	17 -	18 -	19 -	20 -	21 -	22 -	23 -	24 -
Bearing (0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Side	25 -	26 -	27 -	28 -	29 -	30 -	31 -	32 -
Bearing (0)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Field Measurement	date	month	Closure error		Area in square meters			
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
For fields selected		Selected corner number		Shortest side length		Random number		
For crop cutting		Shortest side Bearing		Longest side length		Random number		

CENTRAL STATISTICAL AUTHORITY
ETHIOPIAN AGRICULTURAL SAMPLE SURVEY 2009/10 (2002 E.C)

PART I – IDENTIFICATION PARTICULARS

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

PART II – MISCELLANEOUS QUESTIONS FOR THE HOLDER

15	16	17
SER.NO.	QUESTIONS	CODE
1	Do you exercise crop rotation on your land holding? Yes = 1 No = 2	
2	Reason for not using chemical fertilizers on any one of your crop fields Ignorance = 1 High price = 2 Lack of Money = 3 Non – availability of supply = 4 lack of credit service =5 Skeptical of the outcome = 6 Others (specify) = 7	
3	Reason for not participating in Extension Program Ignorance = 1 Lack of Money = 2 Skeptical of the outcome = 3 Non – availability of the program = 4 Lack of adequate crop fields = 5 Others (specify) = 6	
4	Do you get credit services? Yes = 1 No = 2	
5	If no in # 4 Why? Non availability of the service = 1 Unable to pay the loan = 2 Inadequate services provided = 3 Ignorance = 4 Does not yield any results = 5 Others = 6	
6	Do you get advisory services? Yes = 1 No = 2	
7	If no in # 6 Why? Non availability of the service = 1 Inadequate services provided = 2 Inadequate services provided = 2 Ignorance = 3 Does not yield any results = 4 Others = 5	
8	Your major supplier of fertilizer is Government organizations = 1 Private organizations = 2 Merchants = 3 Others (Specify) = 4 Never used fertilizer = 5	
9	How many oxen do you have in this Meher season?	
10	If you have one or no ox how do you plough? By renting ox = 1 By pairing mine with someone's ox = 2 By pairing mine with cow/ horse =3 Using horses or cows = 4 Hand digging = 5 Using borrowed oxen = 6 others = 7	
11	Total number of fields recorded for the holder	
12	Total number of crop fields recorded for the holder	
13	Has the holder ploughed additional fields over that of the previous year? Yes =1 No = 2	
14	If yes in question # 13, what was the previous state of the additional fields? Holder's virgin land = 1 Public/ Community virgin land = 2 Borrowed fallow land = 3 Other = 4	