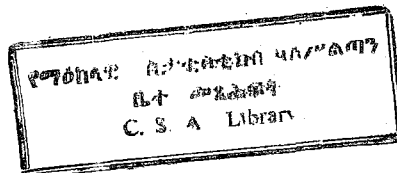


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Federal Democratic Republic Of Ethiopia
CENTRAL STATISTICAL AUTHORITY



AGRICULTURAL SAMPLE SURVEY
2003/04 (1996 E.C)

(September 2003-February 2004)

VOLUME IV
REPORT ON

LAND UTILIZATION

(PRIVATE PEASANT HOLDINGS, MEHER SEASON)

ADDIS ABABA
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Part I

1. Introduction

Land is a key asset in agriculture that is fast becoming a scarce natural resource. Economic and population dynamics sweeping across agriculture are significantly affecting land use patterns and holding sizes. In an agrarian country like Ethiopia where the vast majority of the people are engaged in agriculture and the increasing farming population is not matched by adequate land, the structure of agriculture is typified by small and fragmented land holdings. This situation poses a challenge and makes land use a constant concern to the government.

Economic and political factors propel the government into shaping its land use policy with statistical information as inputs. The use of data as policy inputs places increased emphasis on agricultural land statistics. In view of this, to monitor the trends in the changing patterns in land use and evaluate policies, the Central Statistical Authority (C.S.A) has been generating statistical information by collecting, processing and summarizing reliable, comprehensive and timely data on the country's agricultural land use. The 2003/04 (1996 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 other electronic media for public and private use. The report comprises three parts. Part I contains the objectives of this annual survey, Part II deals with coverage of the survey, sample design, field organization and method of data collection and Part III includes survey findings. 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.

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 are to estimate the total cultivated area and other forms of land use. Companion reports are published separately with estimates of crop area, volume of production and quantity of agricultural in puts during Meher Season agriculture. All reports are based on the private peasant holdings in sedentary rural areas of the country further subdivided by regions and zones.

PART II

Survey Design

1. Scope & Coverage of the Survey

The range of data items that the 2003/04 (1996 E.C) agricultural Main Season survey dealt with included land under crops and non-cropland. Holders engaged in growing crops and/or raising livestock were enumerated for this purpose and data on all forms of land use within the private peasant holdings were also recorded.

The survey also covered the entire rural parts of the country except three zones of Afar regional state and six zones of Somali regional state where their inhabitants are predominantly pastoralists. Accordingly the survey took into account all parts of Harari, Addis Ababa and Dire Dawa, and 63 additional Zones / Special weredas (that are treated as zones) of other regions.

A total of 2,072 enumeration areas were initially selected to be covered by the survey, however, due to various reasons that are beyond the control of the CSA 16 EA's were not covered and the survey was successfully carried out in 2056 (99.23 %) EA's. As regards the ultimate sampling unit, it was planned to conduct the survey on 51,800 agricultural households and 51,300 (99.03 %) households were actually covered by the Meher Season Agricultural Sample Survey. Distribution of the number of sampling units (planned and covered) by domain of estimation is tabulated in Appendix I.

2. SAMPLE DESIGN

A stratified two-stage cluster sample design was used to select the sample. Enumeration Areas (EA's) were taken to be the primary sampling units (PSU's) and the secondary sampling units (SSU's) were agricultural households. Sample enumeration areas from each stratum were sub-samples of the 2001/2 (1994 E.C) Ethiopian Agricultural Sample Enumeration. They were selected using probability proportional to size systematic sampling; size being number of agricultural households

obtained from the 1994 Population & Housing Census and adjusted for the sub-sampling effect. Within each sample EA a fresh list of households was prepared and 25 agricultural households from each sample EA were systematically selected at the second stage. The survey questionnaire was finally administered for those 25 agricultural households selected at the second stage. Information on farm management practices for Meher season was obtained from the 25 households that were ultimately selected.

The sample size for the 2003/4 agricultural sample survey was determined by taking into account of both the required level of precision for the most important estimates within each domain and the amount of resources allocated to the survey. In order to reduce non-sampling errors manageability of the survey in terms of quality and operational control was also considered.

Except Harari, Addis Ababa and Dire Dawa, where the region as a whole was taken to be the domain of estimation, each zone of a region / special wereda that is considered to be a zone by itself was adopted as a stratum for which major findings of the survey are reported. Estimation procedure for totals & ratios and their sampling errors are given in Appendix II. Estimates of standard errors and Coefficient of Variations for selected estimates are also presented in Appendix III.

3. 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 Field Operations that liaises between the Head Office and the 25 Branch Statistical offices spread across the regions. All Branch Statistical Offices took part in the survey execution especially in recruiting the enumerators, organizing the second 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 in administering the financial and logistic aspects of the survey within their areas of operation. A total of 2154 enumerators, 442 field supervisors and 21 coordinators 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 195 four-wheel drive vehicles were used.

4. Training of Field Staff

The execution of a survey and quality of data 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 is ensured when the training meets its objective of producing responsible and enthusiastic 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 in the Head Office and lasted 10 days targeted staff from the Head Office, 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 fifteen days in all the twenty-five Branch Statistical Offices located across the country.

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

5. Method of Data Collection

The agricultural land use data for the year 2003/04 (1996 E.C) was collected from sedentary rural peasant households by interviewing the selected agricultural holders and physically measuring all their fields. The data obtained were recorded in various forms designed for this purpose. Instruments like measuring tape; compass, scientific

calculators and others were used during data collection for a speedy and smooth acquisition of accurate data. The procedures for measuring areas of all fields used by the holders were performed for the twenty-five selected households from each sampled E.A. using measuring tapes and compasses.

6.Data Processing

6.1 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. An editing, coding and verification instruction manual was prepared and reproduced. Then 65 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 questioners were passed over to the data entry unit. The editing, coding and verification exercise of all questionnaires took 40 days.

6.2 Data Entry, Cleaning and Tabulation

Before data entry, the Agricultural Statistics Department 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 computer edit specification prepared earlier for this purpose. The data entry operation involved about 64 data encoders and it took 50 days to finish the job. Finally, tabulation was done on personal computers to produce statistical tables as per the tabulation plan.

7. 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 with out 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 with out 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 Nehase(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 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.



PART III

Summary of the Major Findings of the Survey

Land use area

Food security embraces a wide range of crops such as cereals pulses and 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 2003/04 (1996 E.C).

The total land area reported for the private peasant holdings was estimated at 12 million hectares and operated by 10.4 million and 10.9 million agricultural households and holders, in that order.

The statistical tables in this report show that most of the agricultural land (74%) was under temporary crops followed by fallow land that covered about nine percent of the total land area. Moreover, about 9.9 million and 596.7 thousands of households were growing temporary crops and permanent crops, respectively.

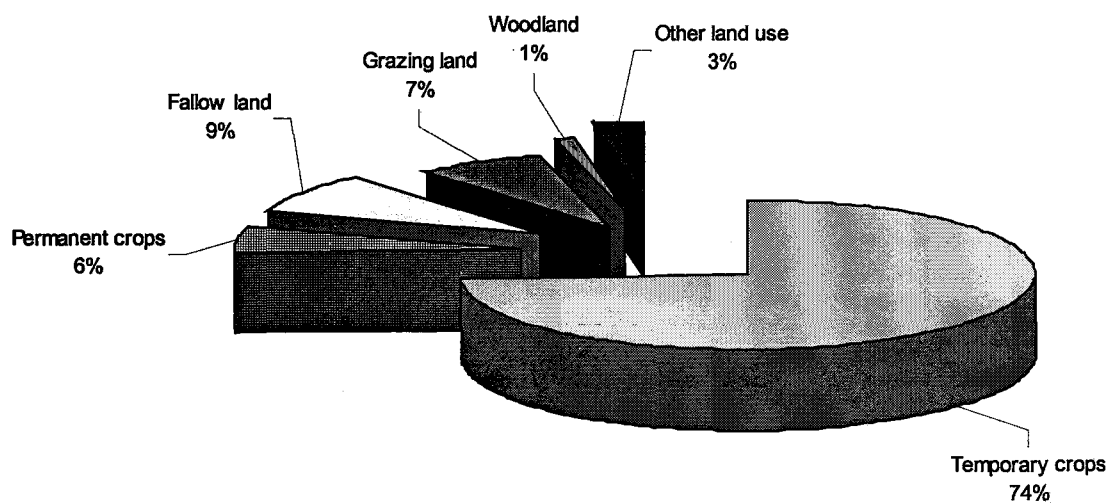
The average holding sizes per household and holder were reported to be 1.16 hectares and 1.12 hectares, respectively. On the other hand the average cropland area was found out to be about 0.96 hectare per household and 0.92 hectare per holder. For details refer to Statistical Tables 1 to 1.11, and Figure 1.

Distributions of households by holding size and holders by age, sex, educational level, holding type and cropland area by crop type and total land area by tenure systems are presented in Statistical Tables 2 to 8.11

Table A. Area ,Number of Households and Holders
by type of land use in Ethiopia

Items	Number
Temporary crop area in hectare	8,975,069
Number of households	9,939,435
Average area/household in hectare	0.9
Number of holders	10,276,320
Average area/holder in hectare	0.87
Permanent crop area in hectare	679,091
Number of households	5,967,224
Average area/household in hectare	0.11
Number of holders	6,031,223
Average area/holder in hectare	0.11
All crop area	9,654,159
Number of households	10,090,610
Average area/household in hectare	0.96
Number of holders	10,439,338
Average area/holder in hectare	0.92
Fallow land (ha)	1,075,742
Grazing land (ha)	877,428
Wood land (ha)	109,049
Other land use (ha)	344,410
All land use (ha)	12,060,789
Number of households	10,405,986
Average holding /HH (ha)	1.16
Number of holders	10,783,616
Average holding/holder (ha)	1.12
Members of households	53,605,695
Average household size	5.15

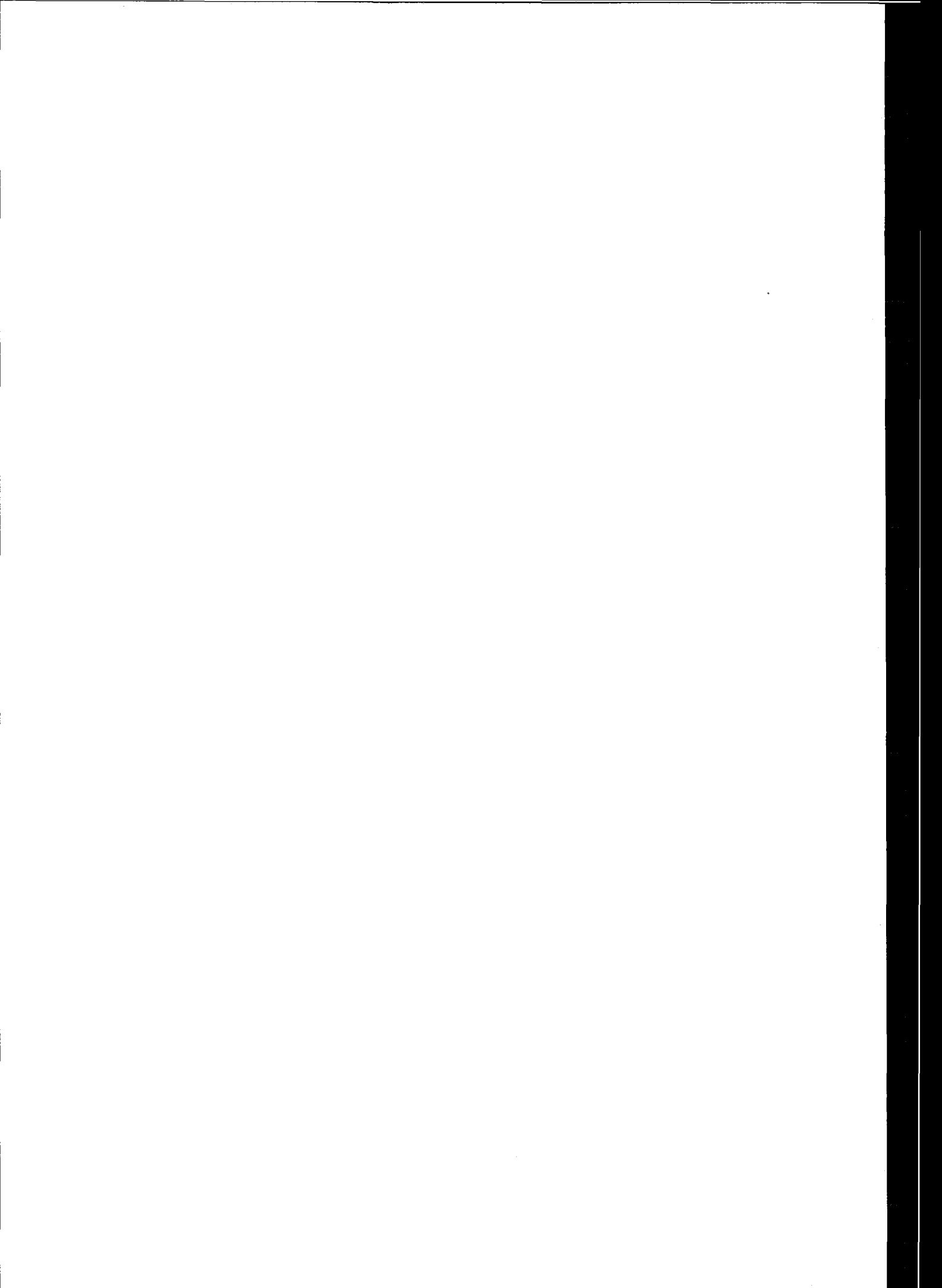
Figure 1. Percentage distribution of total land area by type of land use,
For private peasant holdings in Ethiopia





**STATISTICAL TABLES PRESENTING
RESULTS AT COUNTRY, REGIONAL AND
ZONAL LEVELS**

Tables 1 –8.11



Ethiopia Table 1 Land Use Area (in hectare), Number of Households and Holders by Size of Holding

Items	Holding Size							Total
	Under 0.10	0.10 - 0.50	0.51 - 1.0	1.01 - 2.0	2.01 - 5.00	5.01 - 10.00	Over 10	
Temporary crop area	16,768	520,166	1,435,179	3,162,358	3,403,687	402,026	34,886	8,975,069
Number of households	-	-	-	-	-	-	-	9,939,435
Average area/household	-	-	-	-	-	-	-	0.9
Number of holders	504,984	2,629,159	2,633,549	2,851,363	1,550,202	101,545	5,519	10,276,320
Average area/holder	0.03	0.2	0.54	1.11	2.2	3.96	6.32	0.87
Permanent crop area	7,521	144,544	190,159	210,823	115,173	9,448	*	679,091
Number of households	-	-	-	-	-	-	-	5,967,224
Average area/household	-	-	-	-	-	-	-	0.11
Number of holders	294,896	1,757,185	1,571,483	1,567,713	795,712	41,898	2,337	6,031,223
Average area/holder	0.03	0.08	0.12	0.13	0.14	0.23	*	0.11
All crop area	24,289	664,710	1,625,337	3,373,182	3,518,860	411,473	36,309	9,654,159
Number of households	-	-	-	-	-	-	-	10,090,610
Average area/household	-	-	-	-	-	-	-	0.96
Number of holders	556,662	2,710,534	2,654,469	2,859,283	1,551,265	101,605	5,519	10,439,338
Average area/holder	0.04	0.25	0.61	1.18	2.27	4.05	6.58	0.92
Fallow land	1,263	48,355	122,873	295,871	459,532	129,341	18,507	1,075,742
Grazing land	1,014	50,440	134,211	286,690	336,086	63,056	5,930	877,428
Wood land	456	8,095	19,417	35,268	35,410	9,070	1,333	109,049
Other land use	9,000	46,218	67,180	105,902	98,704	16,496	909	344,410
All land use	36,023	817,819	1,969,019	4,096,913	4,448,592	629,437	62,987	12,060,789
Number of households	-	-	-	-	-	-	-	10,405,986
Average holding /HH (ha)	-	-	-	-	-	-	-	1.16
Number of holders	776,564	2,767,209	2,688,020	2,883,156	1,561,217	101,876	5,573	10,783,616
Aver. holding/holder (ha)	0.05	0.3	0.73	1.42	2.85	6.18	11.3	1.12
Members of households	-	-	-	-	-	-	-	53,605,695
Average household size	-	-	-	-	-	-	-	5.15

Tigray Region Table 1.1 Land Use Area, Number of Households and Holders by Size of Holding

Items	Holding Size							Total
	Under 0.10	0.10 - 0.50	0.51 - 1.0	1.01 - 2.0	2.01 - 5.00	5.01 - 10.00	Over 10	
Temporary crop area	781	45,703	130,272	223,387	177,076	15,848	*	595,903
Number of households	-	-	-	-	-	-	-	628,828
Average area/household	-	-	-	-	-	-	-	0.95
Number of holders	20,225	168,868	200,869	175,812	71,878	2,711	*	640,612
Average area/holder	0.04	0.27	0.65	1.27	2.46	5.85	*	0.93
Permanent crop area	113	1,544	2,022	1,759	570	*	-	6,056
Number of households	-	-	-	-	-	-	-	185,235
Average area/household	-	-	-	-	-	-	-	0.03
Number of holders	6,765	54,470	62,297	46,538	15,497	*	-	185,973
Average area/holder	0.02	0.03	0.03	0.04	0.04	*	-	0.03
All crop area	894	47,247	132,294	225,146	177,646	15,895	*	601,959
Number of households	-	-	-	-	-	-	-	631,723
Average area/household	-	-	-	-	-	-	-	0.95
Number of holders	22,378	169,856	201,051	175,812	71,878	2,711	*	643,935
Average area/holder	0.04	0.28	0.66	1.28	2.47	5.86	*	0.93
Fallow land	87	1,206	2,097	2,577	1,367	*	-	7,422
Grazing land	*	2,157	6,743	13,870	11,797	650	-	35,232
Wood land	21	323	571	731	499	*	-	2,153
Other land use	526	3,989	5,716	6,269	4,014	493	*	21,018
All land use	1,543	54,922	147,422	248,594	195,324	17,134	*	667,785
Number of households	-	-	-	-	-	-	-	650,180
Average holding /HH (ha)	-	-	-	-	-	-	-	1.03
Number of holders	39,483	172,747	201,560	175,986	71,878	2,711	*	664,615
Aver. holding/holder (ha)	0.04	0.32	0.73	1.41	2.72	6.32	*	1
Members of households	-	-	-	-	-	-	-	3,249,340
Average household size	-	-	-	-	-	-	-	5

West Tigray zone Table 1.1.1 Land Use Area, Number of Households and Holders by Size of Holding

Items	Holding Size							Total
	Under 0.10	0.10 – 0.50	0.51 – 1.0	1.01 – 2.0	2.01 – 5.00	5.01- 10.00	Over 10	
Temporary crop area	82	6,050	24,900	55,514	41,530	*	*	136,248
Number of households	-	-	-	-	-	-	-	117,539
Average area/household	-	-	-	-	-	-	-	1.16
Number of holders	1,573	20,704	35,759	42,873	17,327	*	*	119,438
Average area/holder	0.05	0.29	0.7	1.29	2.4	*	*	1.14
Permanent crop area	-	*	*	43	*	*	-	151
Number of households	-	-	-	-	-	-	-	11,788
Average area/household	-	-	-	-	-	-	-	0.01
Number of holders	-	2,440	3,844	3,741	1,589	*	-	11,788
Average area/holder	-	*	*	0.01	*	*	-	0.01
All crop area	82	6,092	24,952	55,558	41,542	*	*	136,399
Number of households	-	-	-	-	-	-	-	117,539
Average area/household	-	-	-	-	-	-	-	1.16
Number of holders	1,573	20,704	35,759	42,873	17,327	*	*	119,438
Average area/holder	0.05	0.29	0.7	1.3	2.4	*	*	1.14
Fallow land	-	*	67	369	*	*	-	758
Grazing land	*	297	1,014	4,550	5,064	*	-	11,236
Wood land	-	*	*	*	*	-	-	*
Other land use	27	339	750	1,144	674	*	*	3,110
All land use	108	6,740	26,802	61,635	47,591	*	*	151,600
Number of households	-	-	-	-	-	-	-	118,661
Average holding /HH (ha)	-	-	-	-	-	-	-	1.28
Number of holders	3,027	20,704	35,933	43,047	17,327	*	*	121,241
Aver. holding/holder (ha)	0.04	0.33	0.75	1.43	2.75	*	*	1.25
Members of households	-	-	-	-	-	-	-	604,088
Average household size	-	-	-	-	-	-	-	5.09

Central Tigray zone Table 1.1.2 Land Use Area, Number of Households and Holders by Size of Holding

Items	Holding Size							Total
	Under 0.10	0.10 – 0.50	0.51 – 1.0	1.01 – 2.0	2.01 – 5.00	5.01- 10.00	Over 10	
Temporary crop area	214	17,014	42,465	65,968	38,025	*	-	165,704
Number of households	-	-	-	-	-	-	-	197,428
Average area/household	-	-	-	-	-	-	-	0.84
Number of holders	5,785	58,357	67,301	53,812	16,333	*	-	201,849
Average area/holder	0.04	0.29	0.63	1.23	2.33	*	-	0.82
Permanent crop area	*	*	*	164	*	-	-	807
Number of households	-	-	-	-	-	-	-	40,864
Average area/household	-	-	-	-	-	-	-	0.02
Number of holders	*	13,430	13,890	10,658	2,444	-	-	41,381
Average area/holder	*	*	*	0.02	*	-	-	0.02
All crop area	229	17,235	42,829	66,132	38,067	*	-	166,511
Number of households	-	-	-	-	-	-	-	197,428
Average area/household	-	-	-	-	-	-	-	0.84
Number of holders	5,785	58,357	67,301	53,812	16,333	*	-	201,849
Average area/holder	0.04	0.3	0.64	1.23	2.33	*	-	0.82
Fallow land	-	157	975	942	*	-	-	2,397
Grazing land	-	481	2,682	4,621	2,688	-	-	10,473
Wood land	*	38	90	*	*	-	-	*
Other land use	93	1,409	1,984	2,137	828	*	-	6,463
All land use	323	19,320	48,560	74,235	42,139	*	-	186,607
Number of households	-	-	-	-	-	-	-	199,874
Average holding /HH (ha)	-	-	-	-	-	-	-	0.93
Number of holders	7,773	58,708	67,562	53,812	16,333	*	-	204,450
Aver. holding/holder (ha)	0.04	0.33	0.72	1.38	2.58	*	-	0.91
Members of households	-	-	-	-	-	-	-	1,017,461
Average household size	-	-	-	-	-	-	-	5.09

East Tigray zone Table 1.1.3 Land Use Area, Number of Households and Holders by Size of Holding

Items	Holding Size							Total
	Under 0.10	0.10 – 0.50	0.51 – 1.0	1.01 – 2.0	2.01 – 5.00	5.01- 10.00	Over 10	
Temporary crop area	44	10,629	21,115	16,932	*	-	-	54,915
Number of households	-	-	-	-	-	-	-	102,273
Average area/household	-	-	-	-	-	-	-	0.54
Number of holders	1,451	46,765	36,606	16,311	*	-	-	103,855
Average area/holder	0.03	0.23	0.58	1.04	*	-	-	0.53
Permanent crop area	36	1,109	1,259	928	*	-	-	3,423
Number of households	-	-	-	-	-	-	-	65,295
Average area/household	-	-	-	-	-	-	-	0.05
Number of holders	1,571	27,129	24,419	10,525	1,798	-	-	65,442
Average area/holder	0.02	0.04	0.05	0.09	*	-	-	0.05
All crop area	81	11,738	22,374	17,860	*	-	-	58,338
Number of households	-	-	-	-	-	-	-	103,901
Average area/household	-	-	-	-	-	-	-	0.56
Number of holders	2,371	47,505	36,788	16,311	*	-	-	105,696
Average area/holder	0.03	0.25	0.61	1.09	*	-	-	0.55
Fallow land	21	880	890	929	*	-	-	3,023
Grazing land	*	765	1,491	1,479	221	-	-	3,965
Wood land	*	207	249	236	*	-	-	777
Other land use	92	1,289	1,350	793	*	-	-	3,710
All land use	217	14,879	26,354	21,297	*	-	-	69,812
Number of households	-	-	-	-	-	-	-	107,732
Average holding /HH (ha)	-	-	-	-	-	-	-	0.65
Number of holders	5,931	48,571	36,788	16,311	*	-	-	110,321
Aver. holding/holder (ha)	0.04	0.31	0.72	1.31	*	-	-	0.63
Members of households	-	-	-	-	-	-	-	554,623
Average household size	-	-	-	-	-	-	-	5.15

South Tigray zone Table 1.1.4 Land Use Area, Number of Households and Holders by Size of Holding

Items	Holding Size							Total
	Under 0.10	0.10 – 0.50	0.51 – 1.0	1.01 – 2.0	2.01 – 5.00	5.01- 10.00	Over 10	
Temporary crop area	425	10,421	33,203	62,230	71,872	*	-	181,753
Number of households	-	-	-	-	-	-	-	165,738
Average area/household	-	-	-	-	-	-	-	1.1
Number of holders	10,859	36,525	48,096	45,203	27,569	*	-	168,919
Average area/holder	0.04	0.29	0.69	1.38	2.61	*	-	1.08
Permanent crop area	62	122	233	502	223	*	-	1,188
Number of households	-	-	-	-	-	-	-	53,901
Average area/household	-	-	-	-	-	-	-	0.02
Number of holders	4,062	9,086	16,184	16,769	7,571	*	-	53,901
Average area/holder	0.02	0.01	0.01	0.03	0.03	*	-	0.02
All crop area	487	10,543	33,436	62,732	72,096	*	-	182,941
Number of households	-	-	-	-	-	-	-	166,941
Average area/household	-	-	-	-	-	-	-	1.1
Number of holders	12,092	36,709	48,096	45,203	27,569	*	-	170,337
Average area/holder	0.04	0.29	0.7	1.39	2.62	*	-	1.07
Fallow land	*	*	90	*	*	-	-	*
Grazing land	*	237	777	1,334	2,552	*	-	5,031
Wood land	*	64	203	63	127	*	-	470
Other land use	265	777	1,263	1,657	1,823	*	-	5,843
All land use	821	11,734	35,769	65,951	76,879	*	-	194,994
Number of households	-	-	-	-	-	-	-	175,127
Average holding /HH (ha)	-	-	-	-	-	-	-	1.11
Number of holders	19,946	37,438	48,096	45,203	27,569	*	-	178,920
Aver. holding/holder (ha)	0.04	0.31	0.74	1.46	2.79	*	-	1.09
Members of households	-	-	-	-	-	-	-	823,727
Average household size	-	-	-	-	-	-	-	4.7