

**FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
CENTRAL STATISTICAL AUTHORITY**

**AGRICULTURAL SAMPLE SURVEY
2003/2004[1996 E.C.]**

VOLUME II

**REPORT ON
LIVESTOCK AND LIVESTOCK CHARACTERISTICS
(PRIVATE PEASANT HOLDINGS)**

302

STATISTICAL BULLETIN

302

*ADDIS ABABA
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CHAPTER I

INTRODUCTION AND OBJECTIVES OF THE SURVEY

1.1 INTRODUCTION

Ethiopia is believed to have the largest livestock population in Africa. This livestock sector has been contributing considerable portion to the economy of the country, and still promising to rally round the economic development of the country. It is eminent that livestock products and by-products in the form of meat, milk, honey, eggs, cheese, and butter supply the needed animal protein that contribute to the improvement of the nutritional status of the people. Livestock also plays an important role in providing export commodities, such as live animals, hides, and skins to earn foreign exchanges to the country. On the other hand, draught animals provide power for the cultivation of the smallholdings and for crop threshing virtually all over the country and are also essential modes of transport to take holders and their families long-distances, to convey their agricultural products to the market places and bring back their domestic necessities. Livestock as well confer a certain degree of security in times of crop failure, as they are a “near-cash” capital stock. Furthermore, livestock provides farmyard manure that is commonly applied to improve soil fertility and also used as a source of energy.

Due to the very important role that the livestock sector plays in the economy of the country, formulation of development plan regarding the sector is indispensable. It is therefore imperative that livestock development plans should be formulated on the basis of reliable statistical data, and hence, timely and accurate livestock data are required for the formulation, implementation, monitoring, and evaluation of development plan and program in the sector. These livestock data can be generated usually using surveys and censuses. The Central Statistical Authority (CSA) has been generating livestock data through sample surveys since 1981 (1973 E.C.) on annual basis. CSA has also undertaken the first ever agricultural census in the year 2001/02. However, the annual survey was not conducted in 2003 due to the huge data to be processed from the 2001/02 Ethiopian Agricultural Sample Enumeration. And this

survey recommenced in 2004 as part of the agricultural sample survey by maintaining almost all data items that were included in the census.

In this report: estimates of livestock that include cattle, sheep, goats, draught animals (horses, mules, asses and camels), poultry and beehives were made based on the information obtained from the holders within the sampled agricultural households in rural sedentary areas of the country as to the reference date (February 9, 2004) and reference period (February 9, 2003 to February 9, 2004). The results obtained from the livestock survey for the rural sedentary areas of the country as well as brief discussions made on the results are presented in this report. In addition, the survey results at regional and zonal levels are presented in Statistical Tables 3.1 – 3.26, and the standard errors (SE), and coefficients of variation (CV) are given in Annex Tables 1 - 10 for some variables.

1.2 OBJECTIVES OF THE SURVEY

The general objective of the livestock survey is to produce data that could be used for development planning and policy formulation regarding the sector, and the specific objectives are to purvey quantitative information on the size and characteristics of livestock in rural sedentary areas at zonal level. In order to meet these objectives, data on: livestock number by type, age, sex, purpose and breed; livestock products particularly milk, egg, and honey; livestock diseases and vaccination; and animal feed were collected from sampled agricultural households in rural sedentary areas.

CHAPTER II

SURVEY METHODOLOGY AND OPERATIONS

2.1 SCOPE AND COVERAGE

The 2004 (1996 E.C.) livestock survey, which is part of the annual agricultural sample survey, covered the entire rural parts of the country except three zones of Afar regional state, six zones of Somali regional state where its inhabitants are predominantly pastoralists, and the whole of Gambella Region. Accordingly the survey took into account of all parts of Harari, Addis Ababa and Dire Dawa, and 61 additional Zones / Special weredas (that are treated as zones) of other regions.

To be covered by the survey, a total of 2,072 enumeration areas were selected initially, however, due to various reasons that are beyond the control of the CSA 60 EA's were not covered and the survey was successfully carried out in 2,012 (97.1%) EA's. As regards the ultimate sampling unit, it was planned to conduct the survey on 51,800 agricultural households and 50,201 (96.91%) households were actually covered by the sample survey. Distribution of the number of sampling units (planned and covered) by domain of estimation is tabulated in Appendix I.

2.2 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.

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 in addition considered.

Except Harari, Addis Ababa and Dire Dawa, where the regions 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 the Annex Tables.

2.3 BASIC CONCEPTS AND DEFINITIONS

It is thought essential that the definitions used for some key terms in the survey should be laid open and these are given as follows.

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

Households: A household may be either;

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

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

Holder: A holder is a person who exercises management control over the operations of the agricultural holding and takes the major decision regarding the utilization of the available resources. He also has technical and economic responsibility for the holding. He may operate the holding directly as an owner or as a manager.

Under conditions of traditional agricultural holding the holder may be regarded as the person, who with or without help of others, operates land or raises livestock in his own right, i.e. the person who decides on what, when, where and how to grow crops or raise livestock and has right to determine the utilization of the products.

Holding: A holding is all the land and/or livestock kept which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone, or with others, without regard to title, legal form, size or location.

Draught Animal: For this survey, it refers to animals that are engaged in activities such as ploughing, threshing... etc.

Dairy Cow: Refers to any type of cow used to give milk previously and/or provide milk currently or have never given milk before and pregnant now. Heifers are not included in this category.

Milking Cow: Refers to cows actually milked during the year, Feb. 9, 2003 to Feb. 9, 2004.

Meat Purpose: Cattle, Sheep, and Goats reared only for meat purpose either for home consumption and/or for sale, are defined as animals used for meat purpose.

Laying Hens: Refer to all hens and pullets of all types, which have laid eggs during the year Feb. 9, 2003 to Feb. 9, 2004.

Other Purposes: Cattle which participate in activities such as transporting and the like other than animals kept for draught, milk and beef purposes are categorized as cattle for other purposes. Moreover, Sheep and Goats that are kept for other purposes other than breeding, wool, meat, and milk production are included in this category.

2.4 FIELD ORGANIZATION

The entire 25 branch statistical offices of the CSA participated in the survey undertaking, especially in organizing the second stage training, in deploying the field staff to their respective sites of assignment, and retrieving completed questionnaires and submitting them to the head office for data processing. They were also responsible in administering the financial and logistic aspect of the survey within the areas of their assignment. In the data collection of the survey, a total of 2,154 enumerators and 442 field supervisors were involved with an average supervisor-enumerator ratio of 1-to-5. To accomplish the data collection operation, all the enumerators were supplied with the necessary survey equipment at the completion of the training. To assist the data collection activities in deployment, supervision, and retrieval of completed questionnaires, reasonably adequate four-wheel vehicles were used.

2.5 TRAINING OF FIELD STAFF

The field staff-training program was carried out in two stages. The first-stage consisted of trainees from the head office, Branch Statistical Office heads, and some of the field supervisors. The training was given for one week at CSA's headquarters in Addis Ababa. Many of these personnel trained in the first-stage conducted similar training for field supervisors and enumerators for about two weeks in branch offices, which are distributed around the country. During this second-stage training, the field

staff were given detailed classroom instruction on the objectives and uses of the survey, concepts and definitions of terms used, interviewing procedures, how to fill questionnaires, ...etc. The enumerators' training also includes a field practice to reinforce the concepts discussed in the classroom.

2.6 METHOD OF DATA COLLECTION

In each selected EAs, a fresh list of households was prepared and then agricultural households were identified from the list of households. From these identified agricultural households, 25 agricultural households were selected using systematic sampling techniques. Thus all agricultural holders belonging to each selected agricultural households were interviewed and the appropriate data were collected. The reference date for enumerating livestock, poultry, & beehives was February 9, 2004 (Yekatit 1/1996 E.C.).

2.7 DATA PROCESSING

2.7.1 Editing, Coding, and Verification

The editing and coding instruction manuals were prepared, and intensive training was given to the editor-coders. Those trained editors-coders were accomplished the editing and coding tasks. In due course, professional staff members were assigned to facilitate the editing and coding activities and the edited and coded questionnaires were verified by statistical technicians as well as by professionals.

2.7.2 Data Entry, Cleaning, and Processing

The data was entered by data encoders in personal computers using IMPS (Integrated Microcomputer Processing System) software. Then the data was checked and cleaned by regular staff members. Finally, the data processing activity was also done by personal computers (PCs) to produce results that were indicated in the tabulation plan.

CHAPTER III

SUMMARY OF THE SURVEY RESULTS

3.1 LIVESTOCK NUMBER BY BREED, AGE, SEX, AND PURPOSE

The livestock survey that was carried-out has covered the rural sedentary areas of the country on sample basis. The total number of each type of livestock as well as the numbers disaggregated by breed, age, sex, and purpose possessed by holders on the reference date (February 9, 2004), irrespective of ownership, were recorded by interviewing each holder in the sampled agricultural households in the sampled enumeration areas of the country. The numbers also include the livestock belonging to the holding but temporarily away or in transit at the time of the enumeration.

3.1.1 Cattle Population

The estimates of cattle for the rural sedentary areas at country level are presented in Summary Table III.1. As shown on the table, the total cattle population for the country is estimated to be 38,102,682. Out of this total cattle population, the female cattle constitute about 55.75 percent and the remaining 44.25 percent are male cattle.

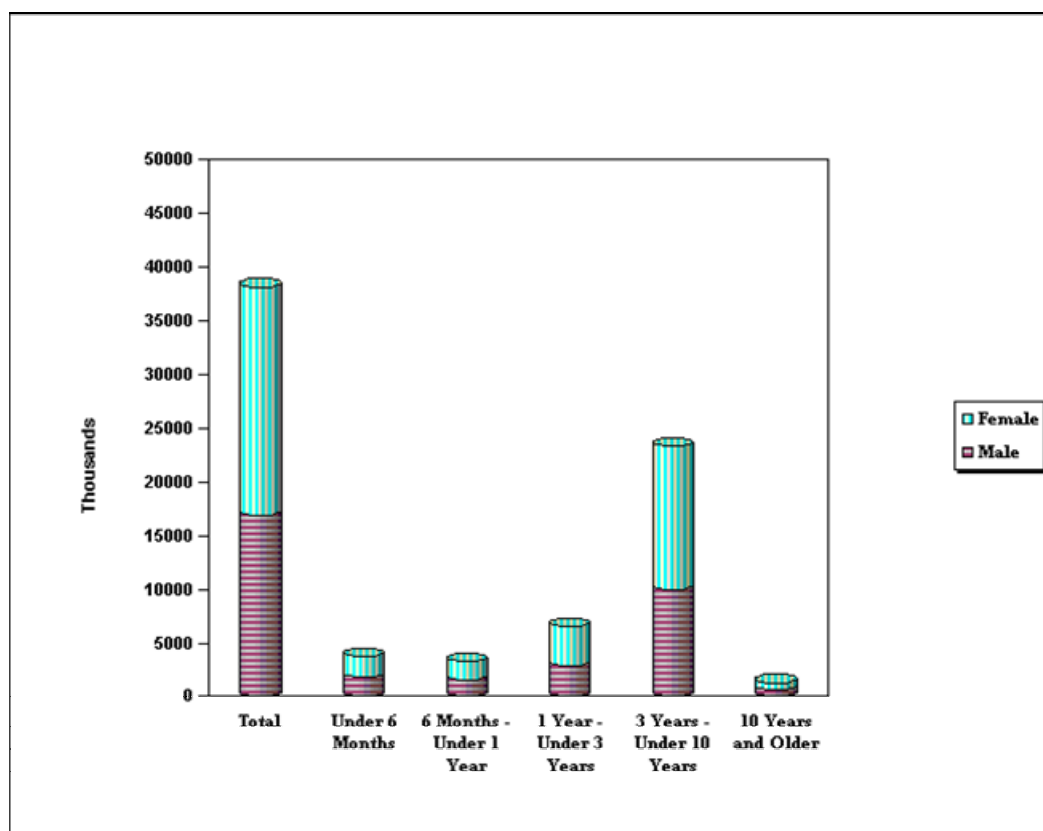
Regarding age groups, the majority of the cattle population (that is about 61.13 percent) is in the 3 years and less than 10 years age category, with about 34.91 percent female and about 26.21 percent male. Moreover, about 35.44 percent are less than three years and those with age category 10 years and over took small portion i.e. 3.43 percent of the total estimated number of cattle population (also see Fig III.1).

On the other hand, the results obtained indicated that 99.28 percent of the total cattle in the country are local breeds. The remaining are hybrid and exotic breeds that accounted for about 0.67 percent and 0.04 percent, respectively. Moreover, distribution of cattle by purpose is indicated in the same table. Among cattle aged 3 years and less than 10 years, those used for draught purposes accounted for 40.17 percent and the percentage share of beef cattle is the lowest that is about 0.81 percent.

**SUMMARY TABLE III.1: Estimated Number of Cattle by Sex, Age,
Breed, and Purpose for The Country**

Age, Breed, and Purpose	Total		Male		Female	
	Number	%	Number	%	Number	%
Total	38,102,682	100	16,860,266	44.25	21,242,416	55.75
Under 6 months	3,727,138	9.78	1,786,233	4.69	1,940,906	5.09
6 months - under 1 year	3,260,103	8.56	1,568,324	4.12	1,691,778	4.44
1 year – under 3 years	6,517,138	17.1	2,898,690	7.61	3,618,448	9.5
3 years – under 10 years.....	23,291,658	61.13	9,988,239	26.21	13,303,419	34.91
10 years and older	1,306,644	3.43	618,780	1.62	687,865	1.81
Cattle by Breed						
Total	38,102,682	100	16,860,266	44.25	21,242,416	55.75
Indigenous	37,830,127	99.28	16,756,692	43.98	21,073,435	55.31
Hybrid.....	256,918	0.67	98,329	0.26	158,589	0.42
Exotic.....	15,636	0.04	5,245	0.01	10,391	0.03
Aged 3 – 10 Years by Purpose						
Total	23,291,658	100	9,988,239	42.88	13,303,419	57.12
Used for Milk	7,086,577	30.43			7,086,577	30.43
Used for Draught.....	9,357,009	40.17	9,237,674	39.66	119,334	0.51
Used for Beef	189,654	0.81	144,761	0.62	44,893	0.19
Used for Breeding	5,443,788	23.37	281,455	1.21	5,162,332	22.16
Used for Other.....	1,214,630	5.21	324,348	1.39	890,282	3.82
Dairy Animals						
Dairy Cows.....	7,086,577	18.6			7,086,577	18.6
Milking Cows.....	8,712,548	22.87			8,712,548	22.87

FIGURE III.1 DISTRIBUTION OF CATTLE BY AGE AND SEX



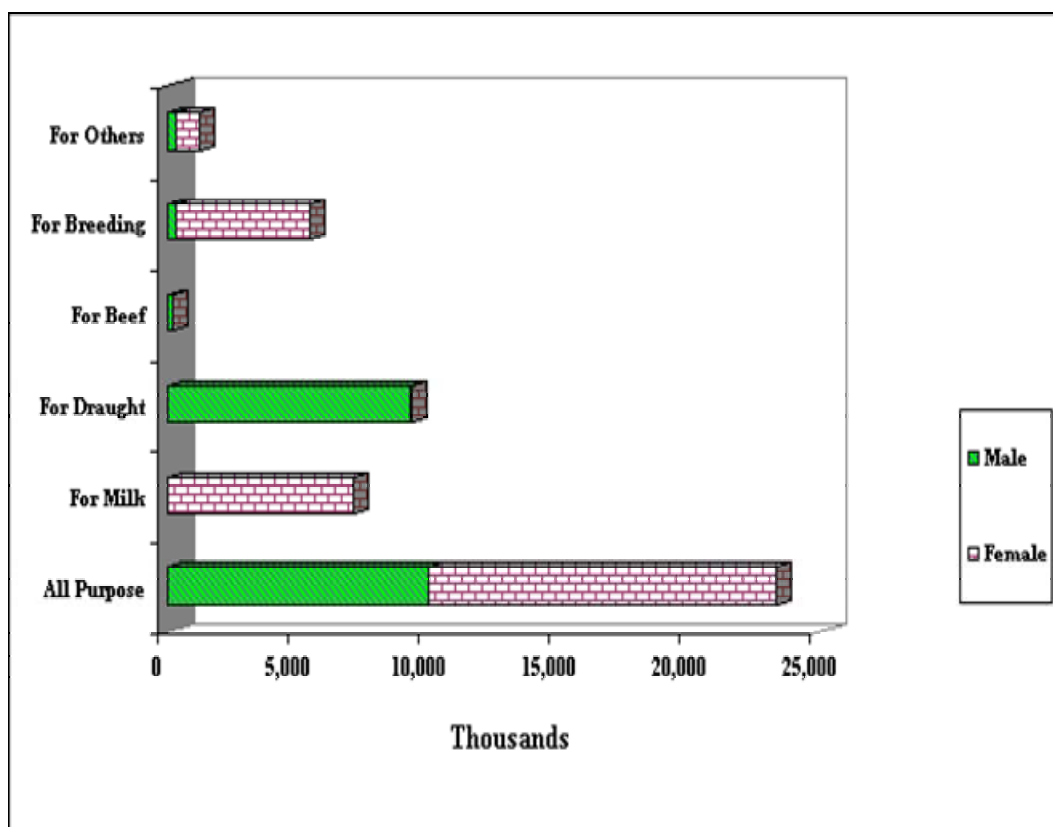
Beef cattle here refer to all cattle reared exclusively for meat that is used either for home consumption or for sale. Further, dairy-cows¹ are estimated to be 7.1 million and milking-cows² are 8.7 million heads.

As to regional level cattle distribution, Oromia Region took the major part that is 44.11 percent; Amhara and S.N.N.P. also contributed significant portions, 25.17 percent, and 20.69 percent, in that order (See Figure III.9). The rest lies between 0.09 percent and 6.68 percent. Moreover, cattle population by sex, age, breed, and purpose are estimated for each region and presented in the Statistical Tables given at the end of this chapter.

¹A Dairy Cow refers to a cow that is primarily kept for milk and has been milked previously or was being milked at the time of enumeration or has never been milked before but expected to be milked in the future or pregnant at the time of enumeration.

²A Milking Cow refers to any type of cow that actually milked during the reference period (Feb. 9, 2003 to Feb. 9, 2004).

FIGURE III.2 DISTRIBUTION OF CATTLE AGED 3 AND UNDER 10 YEARS BY PURPOSE, AND SEX



3.1.2 Sheep And Goat Populations

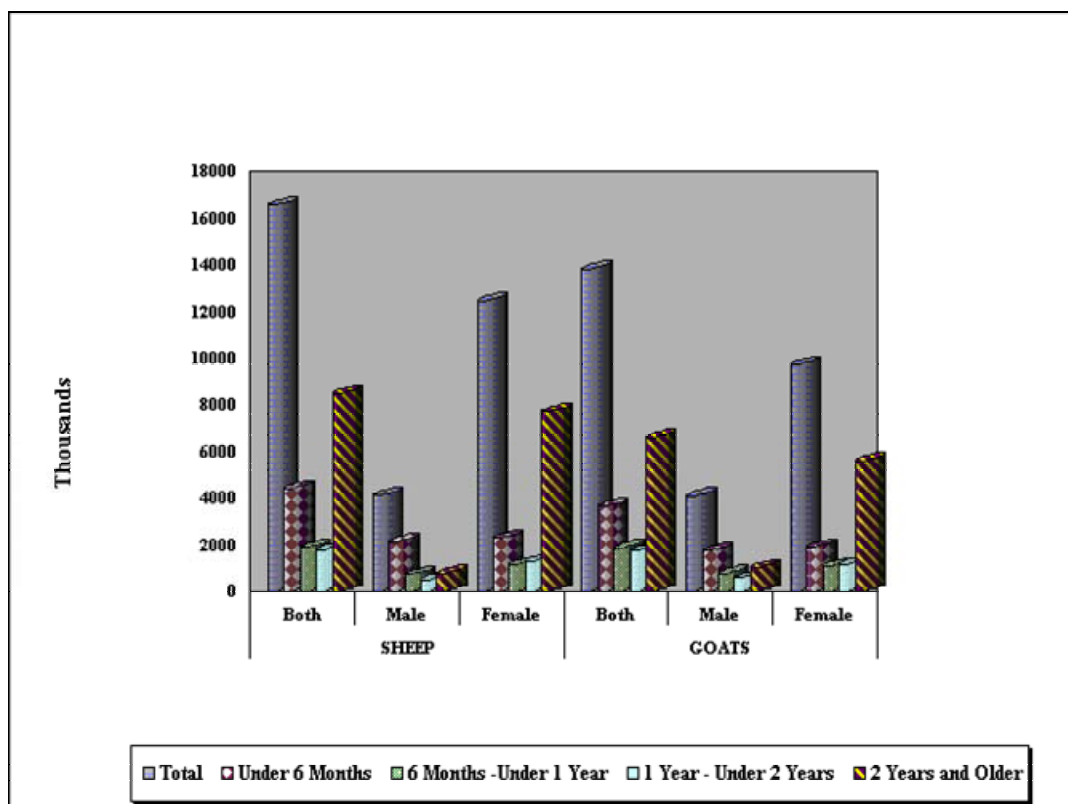
The estimated numbers and percentage distributions of sheep and goats in the sedentary areas of the country are given in Summary Table III.2. As pointed out in this table, about 16,575,493 sheep are estimated to be found in the country, out of which about 75.17 percent are females, and about 24.83 percent are males. Moreover, according to the survey result, the number of goats reported in the country is estimated to be about 13,834,703. Out of these total goats, 70.35 percent are females and 29.65 percent are males (See Summary Table III.2 and Fig. III.3).

**SUMMARY TABLE III.2: Estimated Number of Sheep and Goats by Sex, Age, Breed,
and Purpose for The Country**

Age, Breed, and Purpose	Total		Male		Female	
	Number	%	Number	%	Number	%
Total Sheep	16,575,493	100	4,116,478	24.83	12,459,015	75.17
Under 6 months	4,420,303	26.67	2,138,852	12.9	2,281,451	13.76
6 months - under 1 year	1,873,701	11.3	726,512	4.38	1,147,189	6.92
1 year - under 2 years	1,789,320	10.79	495,247	2.99	1,294,073	7.81
2 years and older	8,492,169	51.23	755,868	4.56	7,736,302	46.67
Sheep by Breed						
Total	16,575,493	100	4,116,478	24.83	12,459,015	75.17
Indigenous	16,554,898	99.88	4,111,273	24.8	12,443,625	75.07
Hybrid	1,787	0.01	342	*	1,444	0.01
Exotic	18,809	0.11	4,863	0.03	13,946	0.08
Sheep Aged 2 Years and Older by Purpose						
Total	8,492,169	100	755,868	8.9	7,736,302	91.1
Used for Mutton	330,184	3.89	296,030	3.49	34,154	0.4
Used for Wool	92,032	1.08	6,221	0.07	85,811	1.01
Used for Breeding	8,019,160	94.43	422,780	4.98	7,596,380	89.45
Used for Other	50,793	0.6	30,837	0.36	19,956	0.23
Total Goats	13,834,703	100	4,102,149	29.65	9,732,553	70.35
Under 6 months	3,642,644	26.33	1,746,658	12.63	1,895,985	13.7
6 months - under 1 year	1,840,569	13.3	766,329	5.54	1,074,240	7.76
1 year - under 2 years	1,741,719	12.59	578,899	4.18	1,162,820	8.41
2 years and older	6,609,771	47.78	1,010,264	7.3	5,599,507	40.47
Goats by Breed						
Total	13,834,703	100	4,102,149	29.65	9,732,553	70.35
Indigenous	13,820,684	99.9	4,099,309	29.63	9,721,375	70.27
Hybrid	13,808	0.1	2,840	0.02	10,968	0.08
Exotic	210	*	-	-	210	*
Goats Aged 2 Years and Older by Purpose						
Total	6,609,771	100	1,010,264	15.28	5,599,507	84.72
Used for Milk	514,435	7.78			514,435	7.78
Used for Meat	445,072	6.73	408,432	6.18	36,640	0.55
Used for Breeding	5,588,374	84.55	562,186	8.51	5,026,188	76.04
Used for Other	61,891	0.94	39,646	0.6	22,245	0.34

Pertaining to the age distribution of both the sheep and the goats, the largest portions are in the age group of two years and older (51.23 percent and about 47.78 percent, in that order). These are followed by the young stock under six months for both sheep and goats i.e. about 26.67 percent and 26.33 percent, respectively (See Figure III.3).

FIGURE III.3 DISTRIBUTION OF SHEEP AND GOATS BY AGE AND SEX



With respect to breed, almost all of the sheep and the goats are indigenous (99.88 percent and nearly 100 percent, in that order).

Summary Table III.2 also discloses the numbers and percentages of sheep and goats raised for different purposes in the country. The percentages of both sheep and goats kept for mutton and meat are significantly higher for males. Moreover, the data reveals that female sheep and female goats are primarily kept for breeding purposes. Among the sheep flock two years and older, 94.43 percent are kept for breeding; about four percent for mutton and only one percent of the sheep were kept for wool production. Likewise, amid the goat population aged two years and older, goats kept for breeding accounted for about 84.55 percent while goats kept for meat accounted for about 6.73 percent. The number of goats kept for milk at country level is estimated to be 514,435, which is 7.78 percent of the total goats aged two years and older (See Figures III.4 and III.5).

FIGURE III.4 DISTRIBUTION OF SHEEP AGED 2 YEARS AND OLDER BY SEX, AND PURPOSE

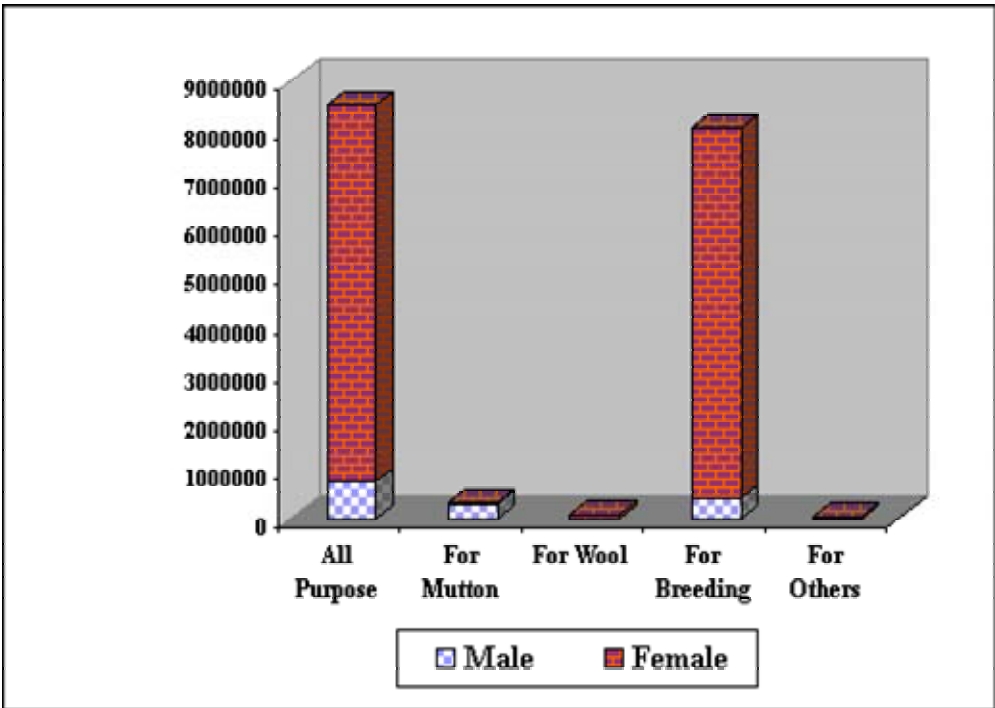
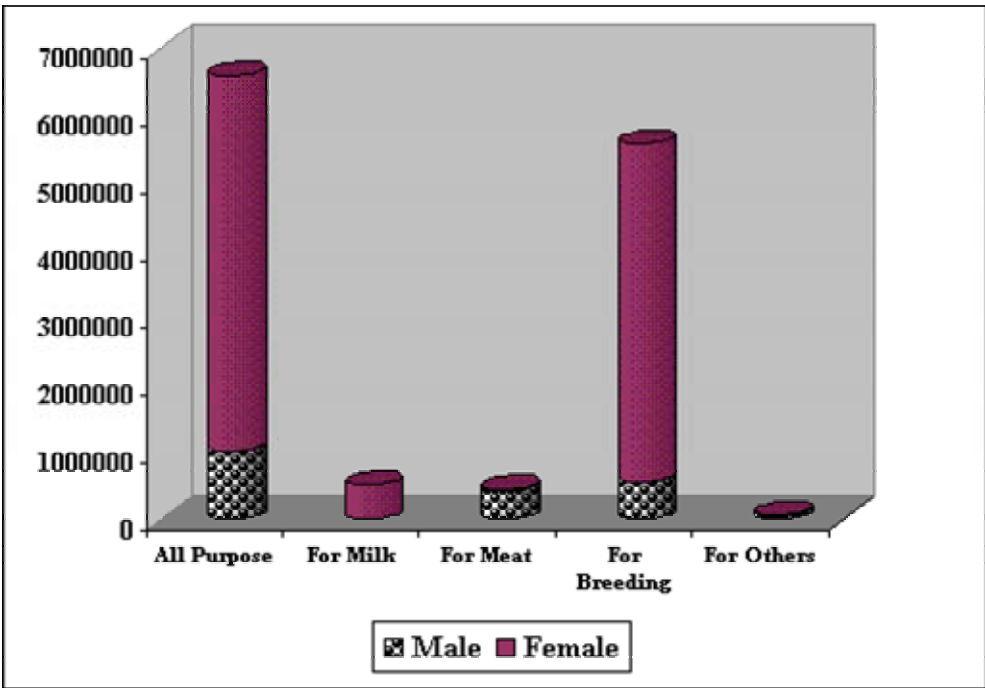


FIGURE III.5 DISTRIBUTION OF GOATS AGED 2 YEARS AND OLDER BY SEX, AND PURPOSE



The numbers and percentage distributions of sheep and goats at regional level are given in the Statistical Tables. Accordingly, Amhara, Oromia, and S.N.N.P. Regions reported considerable portions of the sheep population, which are 36.91 percent, 36.01 percent, and 18.15 percent, respectively. Regarding goat population, Oromia and Amhara Regions are the major contributors to the 2004 goat population of the country, about 29.5 percent and 28.69 percent, in that order. S.N.N.P. and Tigray Regions also reported substantial number of goats (See Figure III.9).

3.1.3 Horse, Ass, Mule And Camel Populations

Summary Table III.3 shows the estimates of horses, asses, mules, and camels for the rural sedentary areas of the country for private holdings. According to the survey result, there are about 1.45 million horses, 3.77 million asses, 321,339 mules, and 471,145 camels in the sedentary areas of the country.

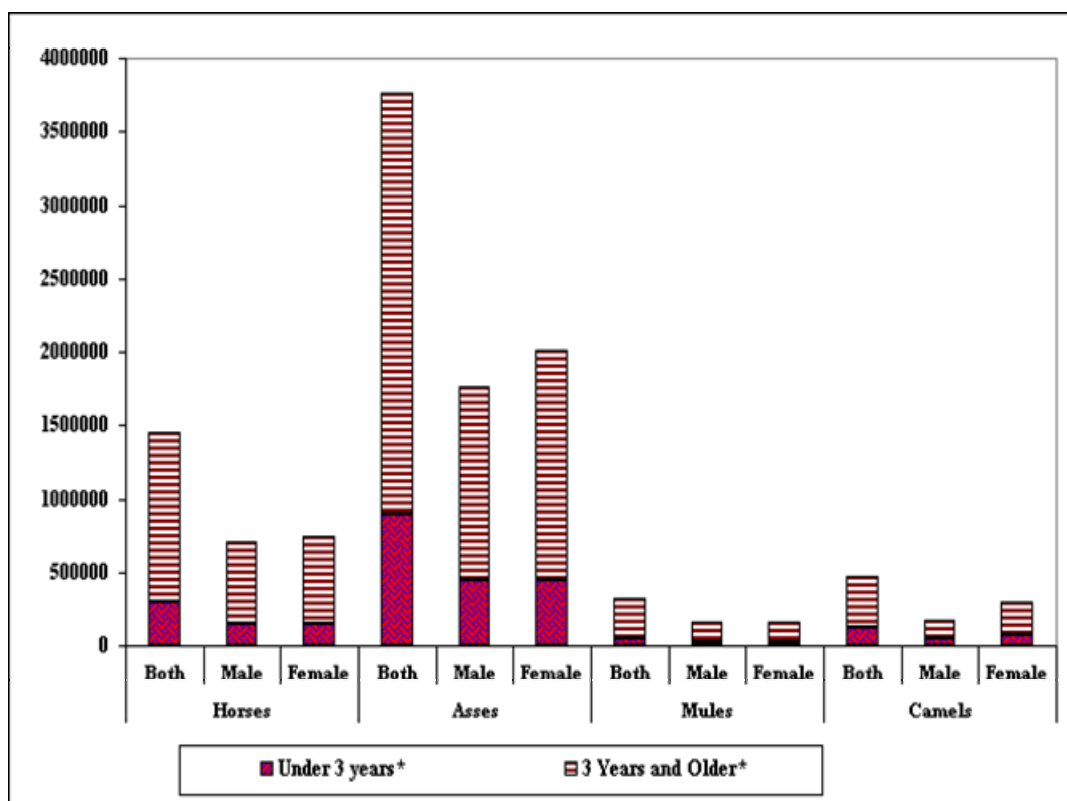
As indicated in the same table, asses are the overwhelming majority in the country compared with the other draught animals. Out of the total ass population in the country, 53.27 percent are females and the remaining 46.73 percent are males. With respect to age distribution, the majorities of the horses, asses and mules are of the age group 3 years and older. Furthermore, 72.43 percent of the camels are of the age group 4 years and older.

The estimates of these animals by sex and purpose are also given in Summary Table III.3. As indicated in this table, among the horses aged 3 years and older, 973,297 (84.74 percent) were for transportation, 161,132 (14.03 percent) were for draught, and the remaining 14,187 (1.24 percent) were for other purposes. With regard to asses, about 68.26 percent were for transportation whereas about 25.73 percent of them were for draught purposes and only six percent of them were for other purposes.

SUMMARY TABLE III.3: Estimated Number of Horses, Asses, Mules, and Camels by Sex, Age, and Purpose for The Country

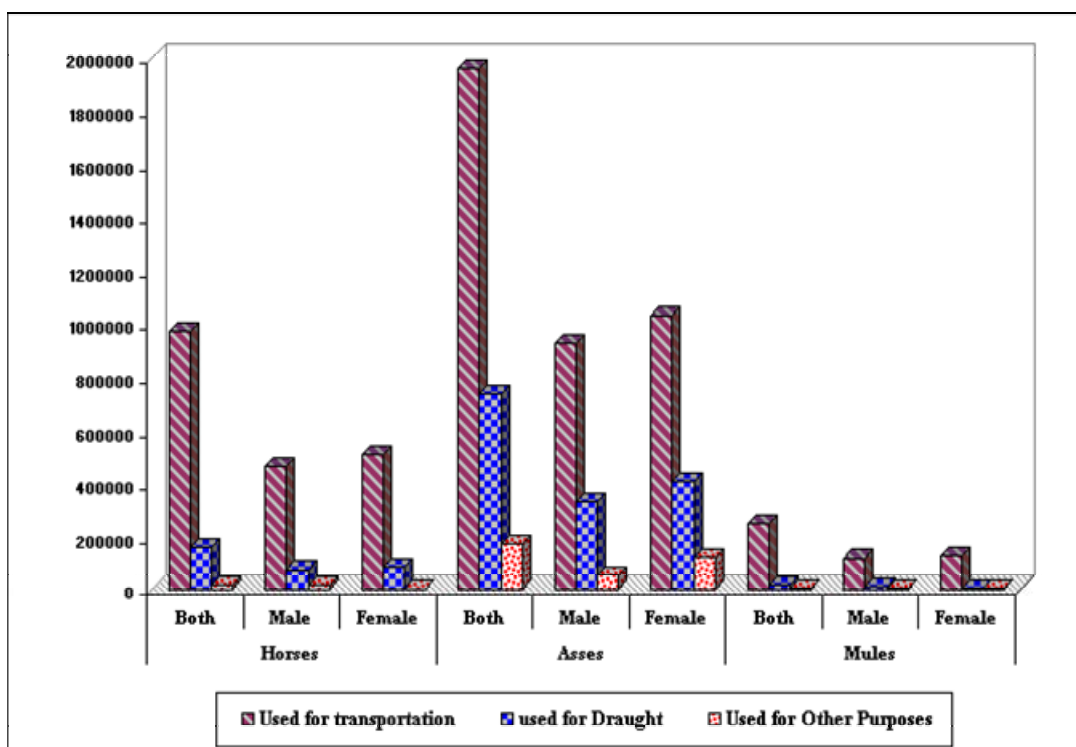
Age, Breed, and Purpose	Total		Male		Female	
	Number	%	Number	%	Number	%
Total Horses	1,447,274	100	702,743	48.56	744,531	51.44
Under 3 Years	298,658	20.64	148,870	10.29	149,788	10.35
3 years and older	1,148,616	79.36	553,873	38.27	594,743	41.09
Horses Aged 3 Years and Older by Purpose						
All Uses	1,148,616	100	553,873	48.22	594,743	51.78
Transportation	973,297	84.74	463,621	40.36	509,675	44.37
Draught	161,132	14.03	76,064	6.62	85,068	7.41
Other Uses	14,187	1.24	14,187	1.24	-	-
Total Asses	3,769,871	100	1,761,793	46.73	2,008,079	53.27
Under 3 Years	899,334	23.86	450,726	11.96	448,608	11.9
3 years and older	2,870,537	76.14	1,311,066	34.78	1,559,471	41.37
Asses Aged 3 Years and Older by Purpose						
All Uses	2,870,537	100	1,311,066	45.67	1,559,471	54.33
Transportation	1,959,429	68.26	927,786	32.32	1,031,643	35.94
Draught	738,508	25.73	331,844	11.56	406,664	14.17
Other Uses	172,600	6.01	51,436	1.79	121,164	4.22
Total Mules	321,339	100	156,582	48.73	164,757	51.27
Under 3 Years	49,879	15.52	22,289	6.94	27,589	8.59
3 years and older	271,461	84.48	134,293	41.79	137,168	42.69
Mules Aged 3 Years and Older by Purpose						
All Uses	271,461	100	134,293	49.47	137,168	50.53
Transportation	249,754	92	120,804	44.5	128,950	47.5
Draught	16,055	5.91	10,552	3.89	5,503	2.03
Other Uses	5,653	2.08	2,937	1.08	2,716	1
Total Camels	471,145	100	176,919	37.55	294,226	62.45
Under 4 Years	129,881	27.57	53,855	11.43	76,026	16.14
4 years and older	341,263	72.43	123,064	26.12	218,200	46.31
Camels Aged 4 Years and Older by Purpose						
All Uses	341,263	100	123,064	36.06	218,200	63.94
Meat	6,604	1.94	4,050	1.19	2,554	0.75
Milk	158,213	46.36			158,213	46.36
Transportation	111,957	32.81	94,902	27.81	17,055	5
Draught	4,926	1.44	3,336	0.98	1,590	0.47
Other Uses	59,563	17.45	20,776	6.09	38,788	11.37

FIGURE III.6 DISTRIBUTION OF HORSES, ASSES, MULES, AND CAMELS BY AGE AND SEX



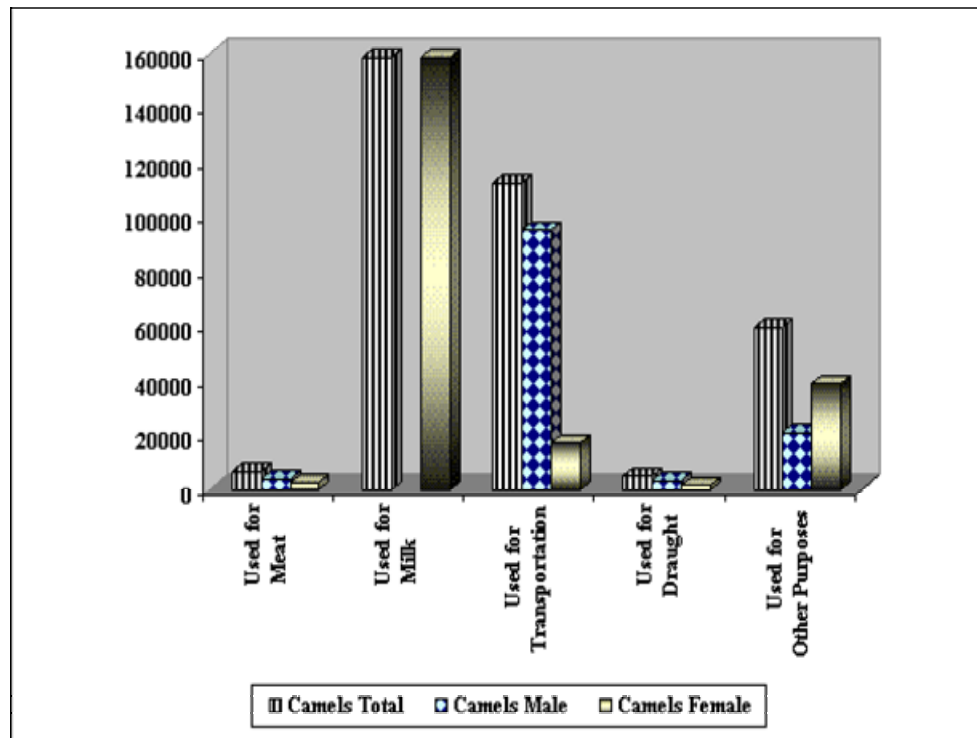
* Note that for camels the age Categories are under 4 years and 4 years & older

FIGURE III.7 DISTRIBUTION OF HORSES, ASSES, AND MULES BY PURPOSE AND SEX



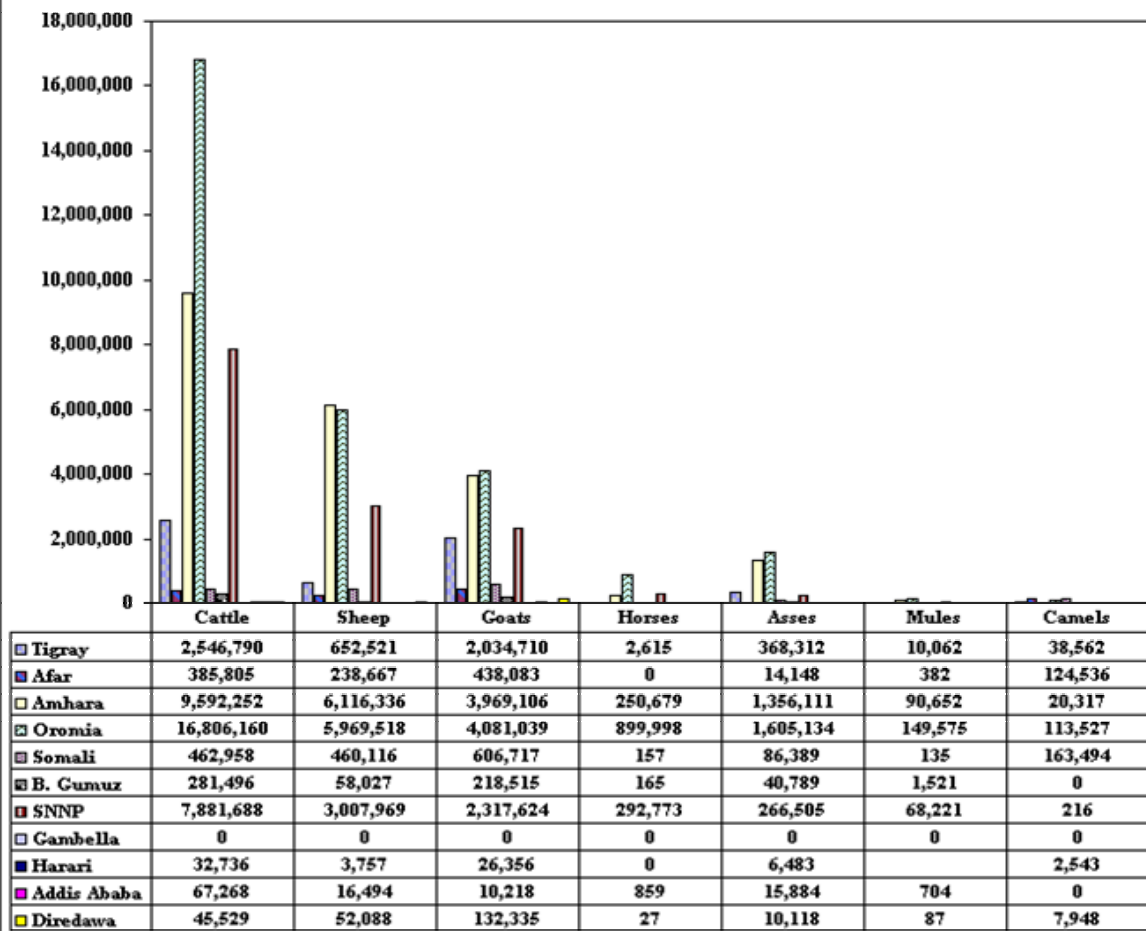
Considering the purpose of the mules, the data shows that 92 percent of them were used for transportation and the others 5.91 percent and 2.08 percent were for draught and other purposes, respectively. The survey result also indicates that 46.36 percent of the camels reported were kept for milk, 32.81 percent were for transportation, and only 1.44 were for draught purposes. On the other hand, the camels kept for meat are about 6,604 heads (See also Figures III.6 to III.8).

FIGURE III.8 DISTRIBUTION OF CAMELS BY PURPOSE AND SEX



Regarding the regional distribution of these draught animals, Oromia and Amhara Regions together make up about 78.55 percent of the total ass population in the country, and the remaining 21.45 percent are found in the other regions. On the other hand, more than half of the horse population and about 47 percent of the mules are found in Oromia Region. SNNP and Amhara Regions also contributed about 20.2 percent and 28.2 percent to the horse and mule populations of the country, respectively. With reference to camel population, Somali and Afar Regions jointly took the greater share that is more than 60 percent of the total camels in the sedentary areas of the country (See Figure III.9).

FIGURE III.9 DISTRIBUTION OF LIVESTOCK BY REGION



Remark: Gambella Region was not covered due to security reasons.

3.1.4 Poultry Population

Data on poultry population are collected as part of the livestock survey, and the total poultry population at country level is estimated to be about 36 million. In this report, poultry includes cocks, cockerels, pullets, laying hens, non-laying hens and chicks. Consequently, as shown in Summary Table III.4 and Figure III.10, most of the poultry are chicks (15,959,783), followed by laying hens (9,605,331). Pullets are estimated to be

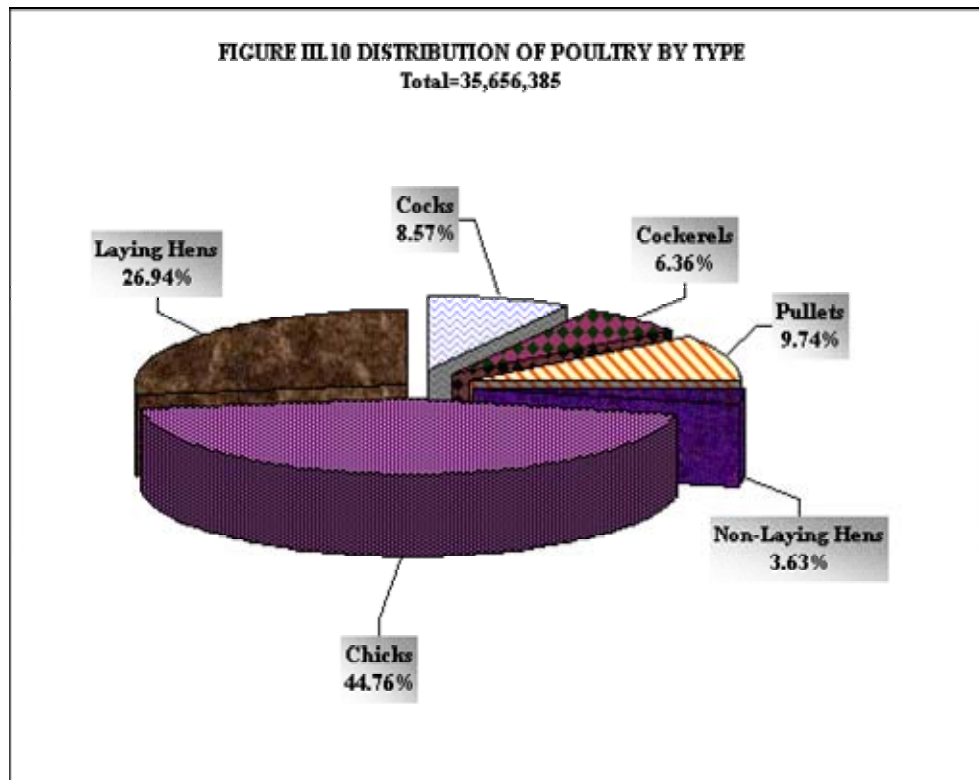
3,473,259 in the country. Cocks and cockerels are also estimated separately, and are 3,054,730 and 2,268,705, respectively. The others are non-laying hens that make up about 3.63 percent (1,294,577) of the total poultry population in the country.

Moreover, average egg-laying period per hen and average number of eggs laid per hen during this period are estimated based on the data collected. Consequently, the average number egg laying periods per hen per annum is about *five*. The average length of a single egg-laying period per hen is estimated to be about 20 days while average number of eggs laid per hen per egg- laying period is about 12 eggs in the country.

Pertaining to regional distribution, Oromia and Amhara Regions together reported about two-thirds of the total poultry (67.3 percent). S.N.N.P. and Tigray Regions also contributed about 29.46 percent jointly to the country's poultry population while the others reported between 0.09 percent and 0.49 percent (See Table 3-1).

SUMMARY TABLE III.4: Estimated Number of Poultry by Type for
The Countrys

Type of Poultry	Number	%
All Poultry	35,656,385	100
Cocks	3,054,730	8.57
Cockerels	2,268,705	6.36
Pullets	3,473,259	9.74
Non-Laying Hens	1,294,577	3.63
Chicks	15,959,783	44.76
Laying Hens.....	9,605,331	26.94



3.1.5 Beehive Population

Information on beehives was also collected during the livestock survey. As stated by the Ministry of Agriculture, there are three types of beehives, and these are traditional, intermediate, and modern.

Traditional [Fixed comb] Hive is a hollow structure made of cheap materials like clay, straw, bamboo, false banana leaves, logs, barks of tree, and animal dung. The bees fill all the available space with honeycombs from the top to down wards. The honeycombs cannot be removed since they are attached to the top and the sides of the hive. The honey can be removed only by removing one wall of the hive and breaking or cutting out the honeycomb (Reihard Fichtl and Admasu, 1994; Gezahegn Taddesse, 1993 E.C.).

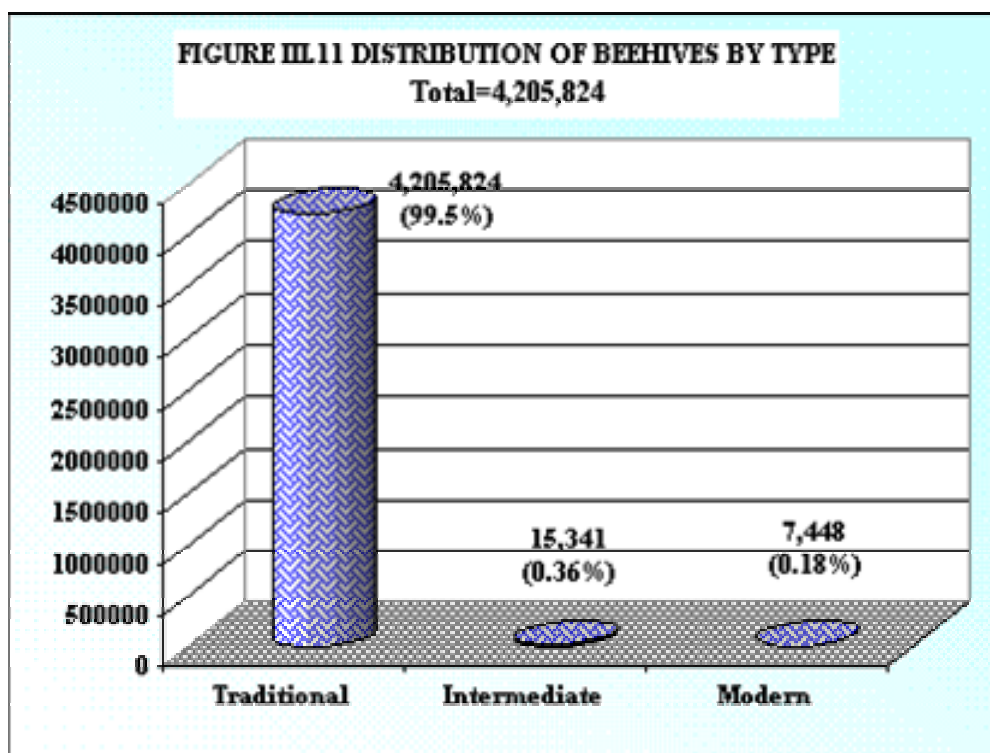
Intermediate [Transitional] Hive is a long trough-shaped box with sloping sidewalls covered with bars of a fixed width. The hive consists of a bottom board, two sidewalls and front and back walls. One opening is made in the front wall to serve as flight entrance. The cover of the hive can be made from any material, which gives adequate protection against light, sun, and rain (Gezahegn Tadesse, 1993 E.C.; P.Seegeren et al, 1996).

Modern Hive [Hive with Frames] is a brood (offspring) chamber (box) with a fixed bottom board and flight board. In the bottom board there is a ventilation hole of size (15cmx30cm), which can be covered with fine wire mesh or other suitable material. The brood chamber holds ten frames, which are kept separately at the right distance by means of side bar, or nails. Queen excluder (not necessary) placed horizontally on top of the brood chamber (Gezahegn Tadesse, 1993 E.C.; P.Seegeren et al, 1996).

Any type of the above beehives was enumerated if it produced honey at least once during the reference period (February 9, 2003 to February 9, 2004). Accordingly, the result of the survey revealed that a total of about 4.23 million hives is estimated to be found in the rural sedentary areas of the country. From this total hives, 99.46 percent are traditional, 15,341 (0.36 percent) are intermediate, and the remaining 7,448 (0.18 percent) are modern hives.

SUMMARY TABLE III.5: Estimated Number of Beehives by Type
for The Country

Type of Beehive	Number	%
All Beehives.....	4,228,612	100
Traditional Beehives	4,205,824	99.46
Intermediate Beehives	15,341	0.36
Modern Beehives	7,448	0.18



With regard to regional distribution of hives, Oromia Region reported more than half of the total hives. S.N.N.P. and Amhara Regions also contributed significant portions to the hive population of the country that is about 38 percent on aggregate. Tigray Region as well reported about 4.11 percent of the total hives in the country (See Table 3-1).

3.2 LIVESTOCK PRODUCTS

This section summarizes results on livestock products at country level. The various animal products include milk and milk products, eggs, wool, meat, hides and skins. Although data on such livestock products are not easily obtainable in the Ethiopian traditional agricultural sector, an endeavor was made to collect data on milk and honey productions. The data were collected subjectively from the holders in the sampled households and the results obtained are briefly discussed below.

3.2.1 Milk Production

Estimation of milk production entails three components, namely number of milking cows, number of months milking cows actually milked within the reference period and average milk production per cow per day. Hence, data on these components have been collected and the total milk production in the sedentary areas of the country is estimated by multiplying these three components. However, two basic concepts about milk production should be mentioned here. “Gross production”, which includes whole fresh milk actually milked and milk sucked by young animals and also milk fed to other animals. “Net production” consists of whole milk actually milked and milk fed to other animals but excludes milk sucked by young animals. Therefore, in the case of this survey, milk production is estimated based on the concept of “net production”, and as indicated in Summary Table III.6, the estimate of total cow milk production for the rural areas at country level during the reference period, is about 2.4 billion liters. On the other hand, the estimate of camel milk for the sedentary areas of the country is about 217 million liters.

Data on lactation period and average milk yield per cow per day were also collected. As a result, the average lactation period per cow at country level is estimated to be about seven months, and average milk yield per cow per day is about 1.324 liters. With regard to camel, the average lactation period is about 10 months whereas the average daily milk yield is about 4.182 liters in the sedentary areas of the country.

3.2.2 Honey Production

To estimate honey production, number of hives, frequency of honey production and honey production per harvest are required. Therefore, these data were collected from the holders within sampled households both in the rural areas of the country. As a result, the estimate of total honey production is about 25 million kilograms of which the greater portion (99.57 percent) is harvested from traditional hives (See Summary Table III.6).

As can be seen from the survey data, honey was harvested only once from traditional and intermediate hives during the 12 months period (i.e. the reference period) while twice from a modern hive in rural sedentary areas of the country.

3.2.3 Egg Production

To estimate egg production, the average number egg laying periods per hen per annum, length of a single egg-laying period per hen, and average number of eggs laid per hen per egg-laying period are required. Therefore, these data were collected from the livestock holders within sampled livestock owned households. As a result, the estimate of total number of eggs produced during the year is about 63.5 million.

SUMMARY TABLE III.6: Milk, Honey, And Egg Production for The Country

Item	Quantity Produced and Frequency
Milk Production	
Cow Milk	
Average Daily Milk Production (Liters/Cow).....	1.324
Average Lactation Period (Months)	7
Total Milk Production (Liters).....	2,431,148,647
Camel Milk	
Average Daily Milk Production (Liters/Camel)...	4.182
Average Lactation Period (Months)	10
Total Milk Production (Liters).....	217,494,663
Honey Production	
All Types of Beehives	
Production (Kilograms)	25,186,378
Average Frequency (Harvests/Year)	1
Traditional Beehives	
Production (Kilograms)	25,078,551
Average Frequency (Harvests/Year)	1
Intermediate Beehives	
Production (Kilograms)	*
Average Frequency (Harvests/Year)	1
Modern Beehives	
Production (Kilograms)	107,827
Average Frequency (Harvests/Year)	2
Egg Production	
Average Number of Clutches/Annum	5
Average Number Days/Clutch	20
Average Number of Eggs/Hen/Clutch	12
Total Egg Production (Number)	63,523,379

3.3 LIVESTOCK VACCINATION, DISEASE, TREATMENT, AND DEATH

Diseases have numerous negative impacts on productivity of herds i.e. death of animals, loss of weights, slow down growth, poor fertility performance, decrease in physical power and the likes. There have been many ways of fighting against diseases and among these, vaccinations (preventive measures) and treatments (curative measures) are the major ones. However, no efficient fight against disease or disease prevention is possible if descriptive data on prevalence of diseases, deaths, vaccinations, and treatments are not available. The availability of these data is also very important to set-up strategies that can assist in preventing and controlling diseases, by and large in improving veterinary services of the country. Hence, it was considered desirable to collect information on vaccinations, treatments, diseases, and deaths of animals during the survey.

SUMMARY TABLE III.8: Estimated Number of Livestock Vaccinated, Afflicted, Treated, and Died in The Country

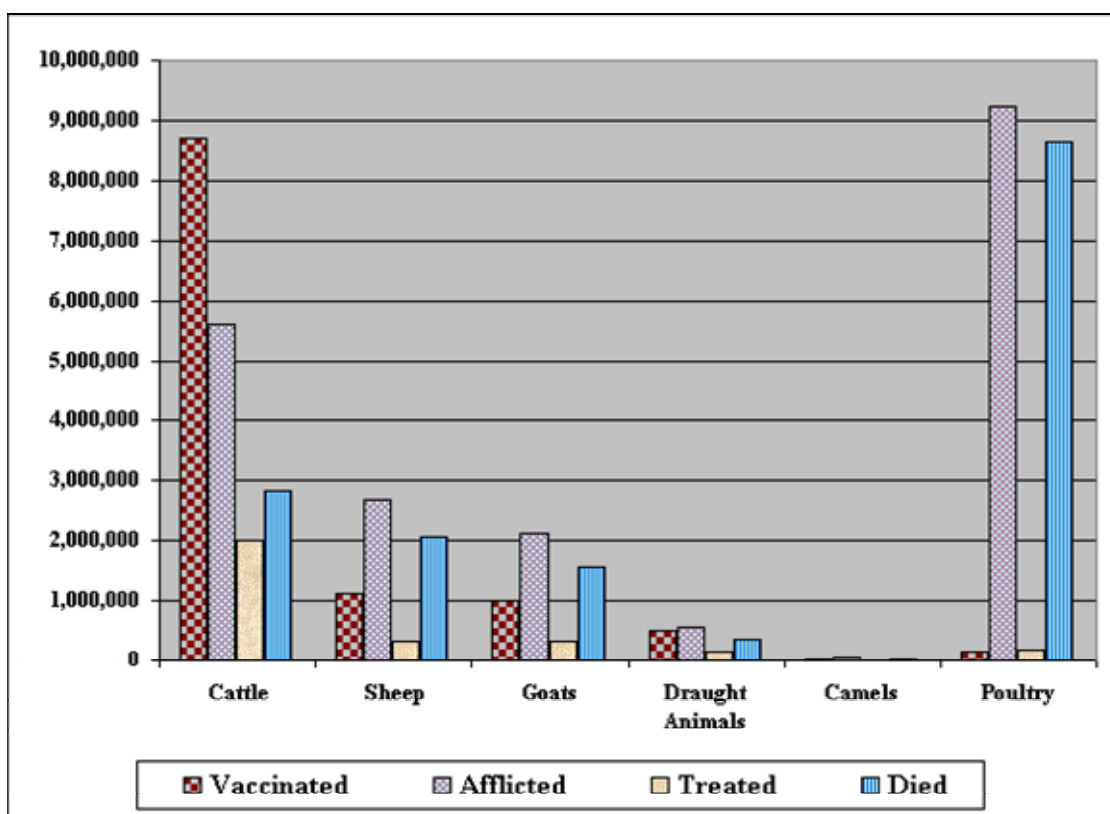
Item	Number	%
Total Vaccinated.....	11,489,798	100
Cattle.....	8,694,197	75.67
Sheep	1,133,056	9.86
Goats.....	989,759	8.61
Horses, Asses, and Mules.....	493,498	4.3
Camels	38,005	0.33
Poultry	141,284	1.23
Total Afflicted	20,234,130	100
Cattle.....	5,592,656	27.64
Sheep	2,671,938	13.21
Goats.....	2,117,792	10.47
Horses, Asses, and Mules.....	558,748	2.76
Camels	53,877	0.27
Poultry	9,239,119	45.66
Total Treated.....	2,999,413	100
Cattle.....	2,014,274	67.16
Sheep	322,280	10.74
Goats.....	328,991	10.97
Horses, Asses, and Mules.....	146,688	4.89
Camels	8,061	0.27
Poultry	179,118	5.97
Total Died.....	15,477,879	100
Cattle.....	2,840,323	18.35
Sheep	2,058,296	13.3
Goats.....	1,552,485	10.03
Horses, Asses, and Mules.....	345,953	2.24
Camels	35,119	0.23
Poultry	8,645,703	55.86

Data on these parameters specifically on number of vaccinated, afflicted, treated and dead animals were therefore collected and the results are shown in Summary Table III.8. The

estimated number of vaccinated animals within the reference period in the rural areas of the country is about 11 million. Out of these animals, about 75.67 percent were cattle followed by sheep, which took about 9.86 percent share. Goats, and draught animals (horses, asses, and mules) also accounted for about 8.61 percent, and 4.3 percent of the total vaccinated animals, respectively. The estimated number of vaccinated camels in the country is about 38,005, which is only 0.33 percent of the total vaccinated animals.

In the same table, it is indicated that about 20 million animals were diseased/afflicted by different types of diseases during the reference period and only 2.99 million of them were treated. The cattle constituted about 67.16 percent of the total treated animals in the country and substantial numbers of goats and sheep were treated as well (328,991 and 322,280 heads, respectively).

FIGURE III.12 DISTRIBUTION OF ANIMALS VACCINATED, AFFLICTED, TREATED AND DIED BY TYPE



According to the survey data, greater number of animals died during the reference period in the country due to various diseases of which the majority (55.86 percent) was poultry. In addition, the estimated numbers of cattle, sheep, and goats died in the country were about 2.84 million; 2.05 million; and 1.55 heads, respectively. The number of draught animals estimated dead was also considerable that is about 345,953 heads (See Summary Table III.8).

If we take a look at the regional results to see the distributions in the country, nearly two-thirds of the total vaccinated-animals are reported in Oromia and Amhara Regions, and the other regions reported the remaining one-third. Regarding diseased animals, the majorities are accounted for Oromia Region followed by Amhara Region (44.04 percent and 25.02 percent, in that order). Similar distribution patterns are observed for dead animals and treated animals as well (See Statistical Tables 3.21-3.24).

3.4 ANIMAL FEED

Data on animal feed practices of holders in the rural sedentary areas of the country were gathered to assess the feed utilization experience. For the purpose of this report, animal feeds are classified as green fodder (grazing), crop residue, improved feed, hay, industrial by-products, and other feeds. *Green fodder* is simply pasture grasses; *crop residue* includes harvested by-products (straw and chaff of cereals and pulses, etc.); *improved feed* is like alfalfa; *hay* includes any type of grass, clover etc. cut and dried as fodder; and finally industrial *by-products* are like oil cake (rapeseed cake, nueg cake, sunflower cake, etc.), bran, and brewery residue.

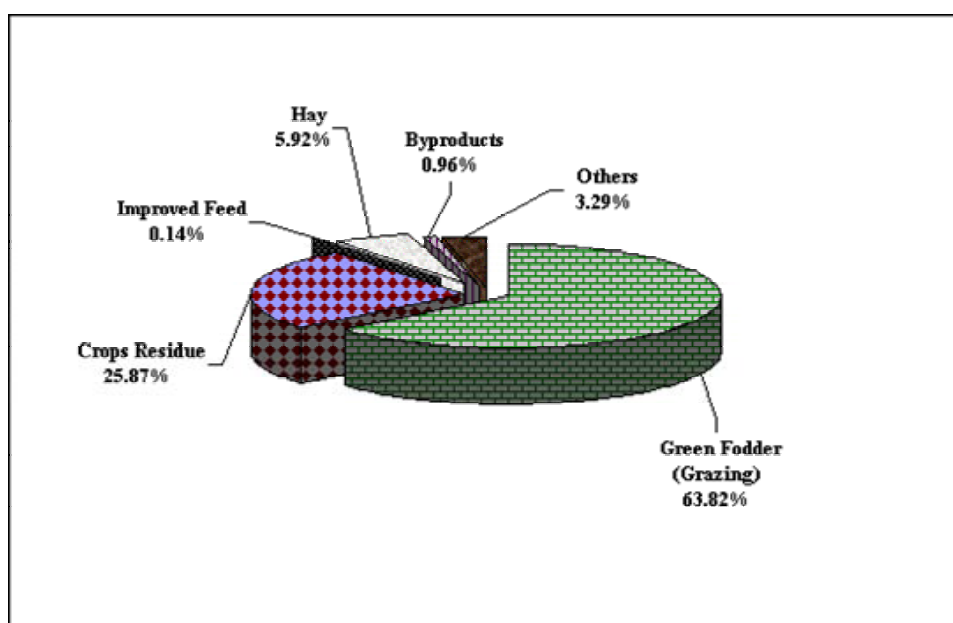
According to the information collected on feed usage experience of holders in the rural areas of the country, green fodder (grazing) is the major type of feed (about 63.83 percent) followed by crops residue that is 25.87 percent. Hay and by-products were also used as animal feed in the country that comprise about 5.92 and 0.96 percent of the total feed, respectively. Moreover, as shown in Summary Table III.9 and Figure III.13, very small

amount of improved feed (only 0.14 percent) was used as animal feed and other types of feed that accounted for about 3.29 percent were also used in the country.

SUMMARY TABLE III.9: Animal Feed Practices for The Country

Item	Number Reporting	Percentage That Use:
Total		100
Green Fodder/Grazing.....	9,523,678	63.83
Crops Residue.....	7,842,032	25.87
Improved Feed.....	63,491	0.14
Hay.....	2,646,808	5.92
By-products	876,525	0.96
Others	2,516,827	3.29

FIGURE III.13 ANIMAL FEED PRACTICES OF HOLDERS



Summary Table III.9 also highlights the number of holders reported each type of feed. According to the data, about 9.5 million holders have used green fodder to feed their animals. Significant number of holders (about 7.8 million) in the rural areas of the country also reported that they used to feed crops residue for their animals. Moreover, about 2.6 million, and 0.88 million holders have reported to use hay and by-products, respectively. Quite a number of holders (about 2.5 million) as well reported using other types of feeds while only 63,491 (0.14 percent) holders reported to use the improved feed.

**STATISTICAL TABLES PRESENTING
RESULTS AT
ZONE AND REGIONAL LEVEL**

TABLES 3.1–3.26

TABLE 3-1: NUMBER OF LIVESTOCK BY TYPE OF ANIMAL, ZONE, AND REGION

Geographic Area	ALL LIVESTOCK								
	CATTLE	SHEEP	GOATS	HORSES	ASSES	MULES	CAMELS	POULTRY	BEEHIVES
Ethiopia	38,102,682	16,575,493	13,834,703	1,447,274	3,769,871	321,339	471,145	35,656,385	4,228,612
Tigray	2,546,790	652,521	2,034,710	2,615	368,312	10,062	38,562	3,725,111	173,948
North West Tigray	691,608	47,869	682,642	-	67,522	1,218	3,328	951,892	31,729
Central Tigray	614,861	137,969	786,190	-	96,418	2,311	6,676	1,170,285	45,608
Eastern Tigray	284,386	309,223	144,445	*	63,977	2,035	-	411,602	40,271
Southern Tigray	574,215	128,557	251,078	1,788	110,224	3,625	26,143	656,997	39,607
Western Tigray	381,721	28,903	170,356	*	30,171	872	1,929	534,335	16,733
Afar	385,805	238,667	438,083	-	14,148	382	124,536	49,285	674
Zone 1	126,374	67,581	115,851	-	2,418	-	15,587	1,343	-
Zone 3	259,431	171,086	322,232	-	11,730	382	108,949	47,942	674
Amhara	9,592,252	6,116,336	3,969,106	250,679	1,356,111	90,652	20,317	11,243,773	766,383
North Gondar	1,547,651	487,561	791,826	39,016	179,158	10,956	-	2,497,880	109,015
South Gondar	1,118,652	496,970	421,895	22,278	148,431	14,929	-	1,257,047	107,000
North Wolo	822,188	638,067	550,433	16,724	142,177	10,868	-	1,102,246	61,997
South Wolo	1,426,158	1,661,367	799,454	27,783	267,280	21,761	-	1,835,430	109,366
North Shewa	972,172	1,155,696	537,105	29,674	224,749	10,580	-	1,241,219	47,845
East Gojam	1,150,217	854,352	163,133	56,529	152,471	6,338	-	680,805	60,279
West Gojam	1,406,586	453,949	189,759	7,956	142,636	9,741	-	1,554,778	149,011
Waghamera	234,682	51,587	271,727	*	36,688	2,371	-	210,172	39,535
Agewawie	607,051	292,642	104,976	50,520	33,577	3,015	-	580,755	70,788
Oromia	306,895	24,143	138,798	-	28,944	*	9,205	283,441	11,548
Oromia	16,806,160	5,969,518	4,081,039	899,998	1,605,134	149,575	113,527	12,761,341	2,289,877
West Wellega	993,996	207,081	74,458	*	84,685	8,121	-	1,355,853	593,766
East Welega	1,279,640	308,188	153,038	35,968	93,948	10,593	-	991,945	190,373
Illubabor	736,599	287,655	83,951	33,285	9,718	5,440	-	823,774	551,474
Jimma	1,805,856	678,820	232,125	109,307	46,559	34,069	-	1,545,644	360,914
West Shewa	1,492,408	664,207	153,087	128,009	90,378	5,430	-	962,426	61,765
North Shewa	1,146,266	829,306	104,112	70,944	140,168	5,692	-	622,974	34,852
East Shewa	1,187,320	250,456	445,803	14,609	247,430	5,898	-	1,239,484	32,029
Arsi	2,205,631	1,239,594	288,098	221,516	253,606	26,520	-	1,308,172	77,046
West Harerghe	756,426	122,142	502,589	*	140,150	3,549	24,282	929,057	42,244
East Harerghe	927,849	210,549	647,955	*	149,545	*	-	1,001,395	47,467
Bale	1,765,230	631,007	472,863	158,830	165,237	15,804	-	532,256	109,414
Borena	987,814	161,880	584,729	4,532	44,151	4,386	37,805	412,825	36,245
South West Shewa	661,697	133,509	121,776	17,982	92,321	8,515	-	514,731	28,277
Guji	859,428	245,124	216,453	99,404	47,238	14,872	-	520,804	124,010

TABLE 3-1 CONT'D

Geographic Area	ALL LIVESTOCK								
	CATTLE	SHEEP	GOATS	HORSES	ASSES	MULES	CAMELS	POULTRY	BEEHIVES
Somale	462,958	460,116	606,717	*	86,389	*	163,494	173,187	9,186
Shinele	17,146	42,463	84,949	-	3,565	-	6,767	6,625	29
Jijiga	289,939	282,051	274,491	-	61,222	-	30,676	117,387	9,157
Liben	155,873	135,602	247,277	*	21,601	*	126,051	49,176	-
Benshangul-Gumuz	281,496	58,027	218,515	*	40,789	1,521	-	785,357	156,409
Metekel	181,039	32,384	89,579	*	18,356	1,304	-	310,417	95,353
Asosa	66,100	12,697	94,199	-	18,486	*	-	347,656	50,432
Kemeshi	34,357	12,946	34,737	-	3,948	147	-	127,284	10,624
S.N.N.P.R	7,881,688	3,007,969	2,317,624	292,773	266,505	68,221	-	6,779,900	829,795
Gurage	893,060	241,086	115,767	53,550	39,814	6,796	-	529,856	28,161
Hadiya	670,527	202,869	133,425	24,108	40,029	13,031	-	940,491	39,810
Kembata Tembaro	290,637	95,010	36,042	8,309	20,862	2,259	-	305,863	18,514
Sidama	1,411,920	315,089	175,321	61,832	41,332	*	-	1,012,428	35,164
Gedio	92,202	105,712	9,157	20,965	*	3,355	-	208,479	30,937
Wolayita	695,489	122,653	119,539	*	25,785	3,136	-	653,380	27,844
South Omo	681,454	486,963	900,132	9,800	6,988	2,922	-	303,706	89,403
Shaka	75,324	41,033	8,087	2,702	942	*	-	133,058	84,141
Kaffa	560,122	319,369	87,847	44,747	*	8,349	-	591,667	267,360
Gamo Gofa	910,216	473,939	224,314	24,166	10,831	7,887	-	446,640	70,106
Bench-Maji	364,466	148,821	48,407	11,903	*	2,156	-	465,486	26,667
Yem Sp. Wereda	48,701	18,240	17,340	551	2,138	161	-	30,521	5,281
Amaro Sp. Wereda	83,371	50,091	39,738	3,100	396	1,058	-	58,137	4,046
Burji Sp. Wereda	33,434	1,975	21,507	*	2,998	92	-	19,790	1,938
Konso Sp. Wereda	84,142	68,468	116,310	-	2,102	-	-	87,141	15,293
Dirashe Sp. Wereda	67,797	10,190	52,133	*	7,219	*	-	73,305	6,842
Dawro	296,086	76,207	39,033	5,974	3,062	4,273	-	138,172	46,351
Basketo Sp. Wereda	21,854	9,241	3,270	354	*	399	-	27,274	2,176
Konta Sp. Wereda	55,516	13,576	7,144	1,138	-	778	-	54,263	9,317
Konta Special	437,503	182,228	122,610	17,624	44,282	6,382	-	578,657	17,206
Alaba Special	107,868	25,211	40,501	1,273	15,523	701	-	121,585	3,239
Harari	32,736	3,757	26,356	-	6,483	-	-	31,590	977
Hundene	32,736	3,757	26,356	-	6,483	-	-	31,590	977
Addis Ababa	67,268	16,494	10,218	859	15,884	704	-	62,364	692
Zone 3	47,673	11,172	7,588	685	10,416	297	-	40,031	354
Zone 6	19,595	5,322	*	174	5,468	407	-	22,333	338
Dire Dawa	45,529	52,088	132,335	*	10,118	*	7,948	44,479	670

TABLE 3-2: NUMBER OF CATTLE BY AGE AND SEX OF ANIMAL, ZONE, ZONE, AND REGION

Geographic Area	CATTLE										
	ALL CATTLE	MALE					FEMALE				
		< 6 Months	6 Mo < 1yr	1yr - <3 yrs	3 - <10 yrs	10 yrs & Over	< 6 Months	6 Mo < 1yr	1yr - <3 yrs	3 - <10 yrs	10 yrs & Over
Ethiopia	38,102,682	1,786,233	1,568,324	2,898,690	9,988,239	618,780	1,940,906	1,691,778	3,618,448	13,303,419	687,865
Tigray	2,546,790	94,349	108,990	185,406	786,292	61,093	111,304	120,953	211,616	819,246	47,541
North West Tigray	691,608	27,870	39,310	51,522	170,333	20,681	30,933	42,337	61,891	228,829	17,902
Central Tigray	614,861	12,305	19,272	48,440	241,431	13,168	17,052	19,406	41,751	191,660	10,377
Eastern Tigray	284,386	9,552	12,436	22,489	95,221	3,179	11,453	11,279	26,887	89,606	2,283
Southern Tigray	574,215	25,465	14,310	38,379	198,703	16,466	30,848	19,501	42,101	180,171	8,270
Western Tigray	381,721	19,157	23,661	24,575	80,605	7,599	21,017	28,431	38,986	128,980	8,710
Afar	385,805	23,915	10,968	15,617	26,152	793	46,440	28,301	52,105	173,386	8,130
Zone 1	126,374	7,655	2,690	4,623	7,448	*	15,960	8,197	16,548	61,720	1,342
Zone 3	259,431	16,259	8,278	10,994	18,704	*	30,480	20,103	35,557	111,666	6,788
Amhara	9,592,252	403,140	325,904	697,799	3,177,522	298,353	424,514	340,643	774,999	2,931,923	217,453
North Gondar	1,547,651	59,390	65,405	121,285	444,940	55,620	62,013	58,312	122,905	512,426	45,353
South Gondar	1,118,652	48,113	33,718	93,600	361,510	45,536	48,074	34,680	93,347	335,235	24,838
North Wolo	822,188	36,125	30,736	68,841	273,830	2,882	43,121	35,897	63,281	262,933	4,542
South Wolo	1,426,158	61,232	50,891	103,027	479,580	21,488	73,471	53,593	133,704	421,295	27,878
North Shewa	972,172	35,570	27,771	70,719	392,901	29,336	35,124	30,692	80,796	253,971	15,293
East Gojam	1,150,217	44,813	41,318	79,444	396,587	73,913	44,845	32,724	80,877	315,818	39,878
West Gojam	1,406,586	60,356	37,833	80,708	518,267	43,593	54,360	55,064	99,501	428,549	28,355
Waghamera	234,682	8,572	11,051	16,388	66,692	7,458	9,279	11,850	17,607	78,086	7,700
Agewawie	607,051	29,751	18,524	42,224	163,238	15,481	34,605	17,487	54,928	213,088	17,725
Oromia	306,895	19,218	8,657	21,564	79,977	3,048	19,622	10,344	28,053	110,521	5,890
Oromia	16,806,160	821,520	689,355	1,349,018	4,363,079	219,888	907,740	734,367	1,635,033	5,813,910	272,250
West Wellega	993,996	56,911	43,365	83,424	277,849	*	54,353	42,897	91,231	323,742	10,805
East Welega	1,279,640	68,723	43,971	92,399	376,207	24,373	77,257	50,078	110,602	414,859	21,173
Illubabor	736,599	43,086	28,891	66,041	195,194	6,107	46,178	29,019	68,065	247,710	6,308
Jimma	1,805,856	77,022	72,323	163,677	511,823	4,066	87,057	78,497	177,038	618,493	15,859
West Shewa	1,492,408	67,043	48,650	139,976	429,901	20,534	80,045	52,967	147,655	473,249	32,389
North Shewa	1,146,266	53,438	39,271	87,328	347,523	23,268	58,610	36,378	106,562	370,679	23,210
East Shewa	1,187,320	53,810	46,799	80,482	344,204	32,210	57,863	52,474	99,961	404,904	14,613
Arsi	2,205,631	89,922	74,145	163,040	663,514	40,784	98,700	86,347	215,283	740,435	33,462
West Harerghe	756,426	35,825	40,417	57,594	189,878	6,298	44,329	37,702	89,017	240,509	14,857
East Harerghe	927,849	46,048	49,347	98,584	147,135	*	51,860	47,395	107,116	358,663	20,443
Bale	1,765,230	75,548	79,657	134,127	382,822	9,870	87,076	85,806	177,751	695,522	37,052
Borena	987,814	69,629	53,013	67,859	148,222	*	79,094	67,393	100,673	368,344	*
South West Shewa	661,697	23,283	22,277	59,313	211,164	29,113	23,716	22,648	64,685	194,581	10,919
Guji	859,428	61,234	47,230	55,175	137,643	1,720	61,604	44,767	79,393	362,221	8,442

TABLE 3-2 CONT'D

Geographic Area	CATTLE										
	ALL CATTLE	MALE					FEMALE				
		< 6 Months	6 Mo < 1 yr	1 yr - <3 yrs	3 - <10 yrs	10 yrs & Over	< 6 Months	6 Mo < 1 yr	1 yr - <3 yrs	3 - <10 yrs	10 yrs & Over
Somale	462,958	25,505	22,209	28,303	77,233	*	32,491	26,952	42,116	204,488	2,385
Shinele	17,146	814	710	1,435	2,109	*	959	1,029	1,921	7,966	195
Jijiga	289,939	13,401	13,484	18,643	62,318	*	17,446	17,012	27,587	119,766	*
Liben	155,873	11,289	8,015	8,225	12,806	*	14,086	8,912	12,609	76,756	*
Benshangul-Gumuz	281,496	12,217	12,773	21,348	75,525	2,609	14,061	15,608	23,956	100,922	2,476
Metekel	181,039	7,298	8,628	13,705	49,330	1,979	8,761	10,283	14,250	64,951	1,854
Asosa	66,100	3,078	2,115	5,102	18,705	*	3,215	3,610	5,919	23,740	*
Kemeshi	34,357	1,841	2,030	2,541	7,490	435	2,085	1,715	3,787	12,232	*
S.N.N.P.R	7,881,688	398,985	392,636	588,802	1,446,209	30,985	398,090	419,039	862,750	3,208,159	136,035
Gurage	893,060	32,342	49,907	57,912	113,836	2,523	35,596	43,692	100,994	432,233	24,026
Hadiya	670,527	26,372	28,997	54,452	167,358	3,286	26,355	33,849	58,570	262,560	8728
Kembata Tembaro	290,637	10,672	12,543	22,453	59,066	2,642	12,785	15,229	30,837	114,077	10,333
Sidama	1,411,920	91,034	86,349	85,221	100,775	*	84,265	77,398	171,057	676,467	37,964
Gedio	92,202	6,918	3,863	9,874	15,959	-	3,607	3,491	8,923	38,485	1083
Wolayita	695,489	28,905	32,122	69,422	142,744	1,956	27,218	33,722	75,148	273,611	10642
South Omo	681,454	33,880	33,912	59,666	118,219	8,489	36,498	44,608	85,957	244,457	*
Shaka	75,324	5,992	3,968	5,893	12,448	-	5,689	4,385	7,165	29,068	717
Kaffa	560,122	31,370	26,072	40,127	142,891	1,675	34,762	34,817	55,938	189,246	3224
Gamo Gofa	910,216	48,930	45,166	72,558	185,782	*	49,022	47,366	109,853	341,241	8919
Bench-Maji	364,466	23,495	19,136	22,350	71,169	*	20,046	25,217	36,214	146,191	*
Yem Sp. Wereda	48,701	1,963	1,506	3,355	15,609	613	2,179	1,778	2,717	18,320	661
Amaro Sp. Wereda	83,371	4,419	3,402	5,973	18,278	363	4,389	3,427	9,577	32,233	1,310
Burji Sp. Wereda	33,434	997	1,092	2,070	14,175	186	1,197	1,283	2,545	9,718	170
Konso Sp. Wereda	84,142	3,988	3,439	6,321	26,443	*	3,511	3,579	7,209	26,657	1,729
Dirashe Sp. Wereda	67,797	2,771	2,316	3,765	26,224	*	3,141	2,615	5,188	21,542	*
Dawro	296,086	17,723	13,167	23,416	52,024	545	17,179	15,793	32,645	121,353	2,241
Basketo Sp. Wereda	21,854	1,433	1,245	2,112	4,773	*	1,273	1,018	1,931	7,760	233
Konta Sp. Wereda	55,516	3,729	3,006	3,477	13,393	*	3,423	2,709	6,195	19,554	*
Konta Special	437,503	15,599	16,317	32,591	114,845	3,540	19,352	18,385	47,825	162,052	6,997
Alaba Special	107,868	6,451	5,110	5,796	30,199	717	6,602	4,679	6,262	41,335	716
Harari	32,736	2,473	1,685	2,702	5,063	-	2,175	1,797	4,033	12,561	249
Hundene	32,736	2,473	1,685	2,702	5,063	-	2,175	1,797	4,033	12,561	249
Addis Ababa	67,268	1,370	1,598	5,426	25,490	3,783	1,985	2,205	5,467	19,011	933
Zone 3	47,673	809	1,347	3,987	16,800	2,308	1,458	1,770	4,157	14,384	651
Zone 6	19,595	561	250	1,439	8,690	1,475	527	435	1,310	4,628	281
Dire Dawa	45,529	2,759	2,207	4,269	5,675	-	2,107	1,914	6,372	19,813	413

TABLE 3-3: NUMBER OF SHEEP BY AGE AND SEX OF ANIMAL, ZONE, AND REGION

Geographic Area	SHEEP								
	ALL SHEEP	MALE				FEMALE			
		< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over	< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over
Ethiopia	16,575,493	2,138,852	726,512	495,247	755,868	2,281,451	1,147,189	1,294,073	7,736,302
Tigray	652,521	81,451	24,771	21,345	29,377	85,100	40,011	62,702	307,764
North West Tigray	47,869	7,581	1,467	1,413	2,690	6,313	1,595	4,258	22,552
Central Tigray	137,969	20,133	3,649	5,897	3,303	18,123	5,512	13,877	67,476
Eastern Tigray	309,223	36,154	11,283	6,367	14,214	35,644	22,195	25,892	157,475
Southern Tigray	128,557	13,593	6,435	6,781	7,246	20,693	9,333	15,651	48,824
Western Tigray	28,903	*	*	*	*	4,327	1,377	3,024	11,437
Afar	238,667	19,160	11,344	7,160	16,296	33,761	24,883	28,822	97,240
Zone 1	67,581	6,082	2,396	1,883	3,404	9,477	6,794	8,830	28,715
Zone 3	171,086	13,078	8,948	5,277	12,892	24,284	18,090	19,992	68,525
Amhara	6,116,336	739,396	221,823	178,720	328,139	811,015	384,856	410,925	3,041,463
North Gondar	487,561	69,896	14,114	9,878	15,436	65,428	40,251	25,876	246,683
South Gondar	496,970	67,747	17,766	12,591	7,748	66,968	32,886	22,188	269,076
North Wolo	638,067	69,399	16,977	18,717	43,052	86,321	39,318	43,915	320,367
South Wolo	1,661,367	187,080	61,355	58,889	125,810	205,039	82,458	110,328	830,409
North Shewa	1,155,696	142,365	53,040	36,419	88,396	159,193	73,150	59,218	543,916
East Gojam	854,352	99,924	21,666	16,531	19,248	119,618	64,835	89,868	422,661
West Gojam	453,949	53,046	25,130	17,269	16,800	54,083	31,423	29,938	226,260
Waghamera	51,587	5,764	991	1,629	4,209	6,831	2,040	3,135	26,988
Agewawie	292,642	40,214	8,118	4,999	5,199	44,444	17,874	25,773	146,022
Oromia	24,143	3,960	2,666	1,798	2,240	3,089	621	687	9,081
Oromia	5,969,518	900,158	294,096	137,474	182,913	915,248	403,348	434,905	2,701,375
West Wellega	207,081	36,497	10,170	5,064	6,174	33,865	17,651	16,968	80,692
East Welega	308,188	47,526	14,804	7,967	9,948	47,515	22,026	32,432	125,972
Illubabor	287,655	43,595	12,766	4,511	3,945	47,308	19,749	18,628	137,154
Jimma	678,820	87,359	33,053	18,565	16,436	98,857	46,964	45,352	332,234
West Shewa	664,207	100,388	29,788	9,687	19,937	103,508	46,140	39,072	315,687
North Shewa	829,306	113,795	57,654	*	27,308	134,125	42,831	39,646	393,226
East Shewa	250,456	34,970	14,830	8,434	9,031	36,015	18,569	19,656	108,949
Arsi	1,239,594	228,677	48,979	21,731	25,807	202,091	76,129	95,380	540,800
West Harerghe	122,142	16,376	2,743	3,352	5,621	16,109	10,289	13,099	54,553
East Harerghe	210,549	28,242	10,435	9,064	12,742	24,455	12,047	18,415	95,150
Bale	631,007	96,444	25,000	*	17,166	104,934	50,757	55,771	272,404
Borena	161,880	17,029	6,528	7,989	12,041	21,358	12,040	11,679	73,217
South West Shewa	133,509	11,555	13,968	2,239	5,835	12,637	12,925	9,350	65,000
Guji	245,124	37,705	13,378	9,619	10,924	32,471	15,231	19,457	106,338

TABLE 3-3 CONT'D

Geographic Area	SHEEP								
	ALL SHEEP	MALE				FEMALE			
		< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over	< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over
Somale	460,116	36,702	23,718	24,951	36,378	47,532	48,583	49,482	192,770
Shinele	42,463	4,416	1,684	1,675	3,288	4,899	3,213	4,846	18,441
Jijiga	282,051	21,407	14,760	13,454	17,186	30,226	33,310	31,226	120,482
Liben	135,602	10,879	*	*	*	12,406	*	*	53,847
Benshangul-Gumuz	58,027	6,754	3,787	2,197	3,540	9,041	3,214	5,423	24,071
Metekel	32,384	3,768	1,907	1,132	2,350	5,274	1,356	3,305	13,291
Asosa	12,697	1,624	1,197	*	*	2,055	912	954	5,338
Kemeshi	12,946	1,361	683	807	830	1,712	946	1,164	5,443
S.N.N.P.R	3,007,969	346,556	143,148	119,616	154,639	370,819	236,521	294,268	1,342,402
Gurage	241,086	31,379	7,660	4,950	4,685	36,082	14,387	21,015	120,927
Hadiya	202,869	21,999	12,031	5,956	7,137	22,704	21,841	18,862	92,339
Kembata Tembaro	95,010	8,905	7,320	6,401	5,912	10,623	10,425	7,775	37,648
Sidama	315,089	42,889	9,064	7,590	9,297	52,206	21,437	28,863	143,743
Gedio	105,712	12,164	4,529	4,928	5,406	15,474	7,871	10,470	44,870
Wolayita	122,653	16,077	11,705	6,957	6,309	11,853	13,132	14,816	41,803
South Omo	486,963	37,036	32,577	43,591	56,515	42,626	48,525	60,474	165,618
Shaka	41,033	6,423	1,897	774	699	7,015	3,097	3,472	17,656
Kaffa	319,369	52,700	7,824	4,310	4,152	52,726	16,007	21,436	160,215
Gamo Gofa	473,939	41,455	18,315	15,894	23,781	39,300	36,164	57,164	241,865
Bench-Maji	148,821	23,380	3,136	1,691	3,701	24,258	8,520	10,696	73,439
Yem Sp. Wereda	18,240	1,545	1,101	377	370	1,852	1,540	1,343	10,111
Amaro Sp. Wereda	50,091	5,117	2,349	1,690	3,054	6,278	3,814	2,879	24,909
Burji Sp. Wereda	1,975	288	123	94	196	156	110	122	886
Konso Sp. Wereda	68,468	3,559	4,008	3,716	15,662	5,758	4,300	4,846	26,619
Dirashe Sp. Wereda	10,190	648	584	527	1,294	678	604	820	5,035
Dawro	76,207	10,301	7,407	2,560	1,694	9,694	6,191	8,276	30,085
Basketo Sp. Wereda	9,241	1,001	312	72	260	1,366	775	882	4,572
Konta Sp. Wereda	13,576	1,932	703	1,051	675	1,884	1,115	1,428	4,788
Konta Special	182,228	23,831	9,133	5,564	3,432	24,667	14,906	16,642	84,054
Alaba Special	25,211	3,928	1,371	921	408	3,619	1,759	1,987	11,218
Harari	3,757	370	*	149	197	473	199	425	1,793
Hundene	3,757	370	*	149	197	473	199	425	1,793
Addis Ababa	16,494	1,944	882	1,098	1,212	1,991	1,044	1,180	7,143
Zone 3	11,172	1,104	676	811	1,111	1,284	825	739	4,622
Zone 6	5,322	840	*	286	*	*	219	442	2,521
Dire Dawa	52,088	6,359	2,790	2,538	*	6,471	4,530	5,941	20,281

TABLE 3-4: NUMBER OF GOATS BY AGE AND SEX OF ANIMAL, ZONE, AND REGION

Geographic Area	GOATS								
	ALL GOATS	MALE				FEMALE			
		< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over	< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over
Ethiopia	13,834,703	1,746,658	766,329	578,899	1,010,264	1,895,985	1,074,240	1,162,820	5,599,507
Tigray	2,034,710	255,488	92,793	93,602	158,396	278,406	146,727	178,117	831,181
North West Tigray	682,642	87,509	36,398	26,941	46,520	95,052	56,895	64,725	268,602
Central Tigray	786,190	100,951	27,572	43,464	64,220	102,513	45,105	66,238	336,128
Eastern Tigray	144,445	14,451	7,037	4,330	13,804	15,788	9,581	12,258	67,196
Southern Tigray	251,078	32,522	10,287	9,149	17,620	41,189	20,742	21,534	98,034
Western Tigray	170,356	20,056	11,499	9,718	16,232	23,864	14,404	13,362	61,221
Afar	438,083	33,346	18,523	15,195	25,496	62,947	49,150	54,233	179,194
Zone 1	115,851	8,589	3,227	3,192	5,426	16,430	13,274	15,875	49,836
Zone 3	322,232	24,757	15,295	12,003	20,070	46,516	35,876	38,358	129,357
Amhara	3,969,106	554,229	211,167	156,196	316,942	578,746	269,179	259,623	1,623,024
North Gondar	791,826	116,186	39,780	23,263	44,646	116,539	68,913	53,571	328,926
South Gondar	421,895	73,169	11,727	20,204	19,916	66,532	29,334	23,798	177,215
North Wolo	550,433	62,958	27,864	17,795	47,866	81,517	39,564	31,783	241,087
South Wolo	799,454	102,386	44,458	37,181	85,435	102,474	43,751	62,613	321,156
North Shewa	537,105	65,890	41,391	28,699	74,340	69,051	33,503	29,214	195,017
East Gojam	163,133	23,229	8,446	5,421	9,246	27,657	10,944	11,903	66,288
West Gojam	189,759	33,382	13,437	7,571	7,277	28,498	10,973	11,630	76,991
Waghamera	271,727	35,043	10,421	8,894	15,079	43,965	16,365	14,279	127,679
Agewawie	104,976	17,921	6,346	4,215	5,030	17,672	7,368	10,313	36,112
Oromia	138,798	24,064	7,297	2,954	8,108	24,839	8,465	10,519	52,553
Oromia	4,081,039	571,339	238,608	141,083	222,776	597,648	312,233	333,281	1,664,071
West Wellega	74,458	15,100	6,109	1,962	*	11,008	5,764	9,307	22,067
East Welega	153,038	28,381	6,901	5,112	8,699	21,795	11,620	11,395	59,135
Illubabor	83,951	14,245	5,863	2,786	1,900	10,774	10,117	*	34,058
Jimma	232,125	30,164	20,612	4,188	*	24,257	21,566	14,374	102,809
West Shewa	153,087	25,268	9,691	3,337	7,533	26,847	11,888	9,660	58,863
North Shewa	104,112	14,203	4,975	5,367	5,850	18,520	5,602	7,052	42,544
East Shewa	445,803	59,056	23,833	12,599	21,660	61,737	36,933	34,208	195,778
Arsi	288,098	41,998	17,220	6,650	16,266	51,189	19,896	13,282	121,597
West Harerghe	502,589	70,269	27,708	21,773	25,840	88,669	36,675	45,741	185,915
East Harerghe	647,955	95,247	34,906	28,152	37,795	81,932	39,074	63,546	267,301
Bale	472,863	73,480	20,293	19,204	14,420	77,244	29,878	32,888	205,456
Borena	584,729	69,298	37,420	17,074	40,484	77,426	56,656	53,894	232,478
South West Shewa	121,776	13,609	7,432	5,178	8,618	20,389	12,078	10,749	43,722
Guji	216,453	21,020	15,644	7,700	16,415	25,861	14,486	22,978	92,349

TABLE 3-4 CONT'D

Geographic Area	GOATS								
	ALL GOATS	MALE				FEMALE			
		< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over	< 6 Months	6 Mo < 1yr	1yr - <2 yrs	2 yrs & Over
Somale	606,717	52,576	30,134	30,991	46,184	75,748	54,184	63,408	253,492
Shinele	84,949	8,703	3,382	3,653	5,156	13,361	6,005	9,544	35,146
Jijiga	274,491	26,753	15,777	14,155	20,851	32,262	26,295	29,844	108,555
Liben	247,277	17,120	10,976	*	20,177	30,125	21,884	24,021	109,792
Benshangul-Gumuz	218,515	27,009	14,234	8,125	15,132	29,106	22,660	17,155	85,095
Metekel	89,579	11,047	5,910	3,769	7,077	12,931	7,975	5,073	35,797
Asosa	94,199	11,575	6,471	3,379	6,158	10,522	11,036	8,884	36,173
Kemeshi	34,737	4,387	1,852	977	1,897	5,652	3,649	3,198	13,125
S.N.N.P.R	2,317,624	232,139	151,357	126,054	216,918	250,459	207,187	239,933	893,577
Gurage	115,767	11,463	5,755	2,572	5,633	16,065	11,770	6,789	55,721
Hadiya	133,425	14,383	12,419	4,499	5,757	14,968	13,096	10,875	57,428
Kembata Tembaro	36,042	4,880	3,358	1,275	*	3,972	3,855	2,685	15,236
Sidama	175,321	21,144	13,524	6,481	8,761	21,241	13,417	14,326	76,426
Gedio	9,157	*	*	*	*	*	1,044	878	4,061
Wolayita	119,539	15,640	8,071	4,735	5,486	15,392	12,940	13,273	44,003
South Omo	900,132	59,914	64,272	73,367	123,026	72,291	91,796	119,134	296,332
Shaka	8,087	1,663	323	*	*	1,311	743	654	3,036
Kaffa	87,847	15,508	2,805	2,123	3,129	17,116	4,664	4,414	38,089
Gamo Gofa	224,314	27,692	11,344	10,671	*	28,988	15,713	24,892	89,478
Bench-Maji	48,407	7,227	1,238	*	*	8,561	3,696	2,624	22,183
Yem Sp. Wereda	17,340	1,946	994	360	390	2,499	1,153	1,556	8,441
Amaro Sp. Wereda	39,738	4,776	2,630	1,562	2,940	3,942	2,465	3,584	17,840
Burji Sp. Wereda	21,507	2,507	1,230	1,038	2,088	2,375	1,146	1,510	9,614
Konso Sp. Wereda	116,310	12,035	7,372	6,305	18,802	9,738	6,412	9,773	45,874
Dirashe Sp. Wereda	52,133	4,346	2,583	3,367	6,946	5,655	3,701	4,184	21,352
Dawro	39,033	5,263	2,896	1,513	1,375	5,779	5,077	3,815	13,316
Basketo Sp. Wereda	3,270	440	155	97	184	283	273	167	1,672
Konta Sp. Wereda	7,144	1,210	341	263	310	1,342	565	683	2,429
Konta Special	122,610	14,570	7,201	3,649	*	13,304	10,251	11,019	51,570
Alaba Special	40,501	4,960	2,351	980	1,529	4,698	3,411	3,099	19,474
Harari	26,356	3,924	1,810	819	1,016	3,800	2,170	1,402	11,415
Hundene	26,356	3,924	1,810	819	1,016	3,800	2,170	1,402	11,415
Addis Ababa	10,218	1,112	689	848	641	1,469	652	445	4,361
Zone 3	7,588	764	547	463	570	1,048	480	398	3,315
Zone 6	*	*	*	*	*	421	*	*	1,046
Dire Dawa	132,335	15,497	7,012	5,985	6,763	17,658	10,099	15,223	54,097

TABLE 3-5: NUMBER OF HORSES AND ASSES BY AGE AND SEX OF ANIMAL, ZONE, AND REGION

Geographic Area	HORSES AND ASSES									
	ALL HORSES	HORSES				ALL ASSES	ASSES			
		MALE		FEMALE			MALE		FEMALE	
		< 3 Years	3 Yrs & more	< 3 Years	3 Yrs & more		< 3 Years	3 Yrs & more	< 3 Years	3 Yrs & more
Ethiopia	1,447,274	148,870	553,873	149,788	594,743	3,769,871	450,726	1,311,066	448,608	1,559,471
Tigray	2,615	-	1,540	*	*	368,312	38,546	171,190	31,815	126,761
North West Tigray	-	-	-	-	-	67,522	8,577	25,262	5,096	28,586
Central Tigray	-	-	-	-	-	96,418	12,752	36,490	8,890	38,286
Eastern Tigray	*	-	*	-	-	63,977	5,385	27,758	6,337	24,497
Southern Tigray	1,788	-	*	*	*	110,224	10,482	57,300	10,299	32,143
Western Tigray	*	-	*	*	*	30,171	1,351	24,379	1,193	3,249
Afar	-	-	-	-	-	14,148	1,920	3,454	1,943	6,830
Zone 1	-	-	-	-	-	2,418	226	580	294	1,317
Zone 3	-	-	-	-	-	11,730	1,694	2,874	1,648	5,513
Amhara	250,679	20,848	95,763	23,121	110,947	1,356,111	185,485	364,607	199,734	606,283
North Gondar	39,016	*	17,009	4,125	15,340	179,158	25,141	59,876	24,378	69,763
South Gondar	22,278	1,684	4,312	*	14,303	148,431	23,418	21,337	22,012	81,664
North Wolo	16,724	*	6,597	*	7,624	142,177	21,342	30,571	23,945	66,318
South Wolo	27,783	*	9,233	2,436	15,388	267,280	30,367	83,508	40,294	113,111
North Shewa	29,674	2,303	5,992	3,504	17,875	224,749	31,880	68,982	32,272	91,616
East Gojam	56,529	7,398	23,322	6,720	19,089	152,471	22,206	40,126	18,915	71,224
West Gojam	7,956	*	*	-	3,153	142,636	19,044	33,044	22,742	67,806
Waghamera	*	-	*	-	*	36,688	4,461	12,791	4,093	15,343
Agewawie	50,520	2,948	26,108	3,388	18,076	33,577	3,022	8,923	6,918	14,714
Oromia	-	-	-	-	-	28,944	4,602	5,451	4,166	14,724
Oromia	899,998	99,936	341,732	97,836	360,494	1,605,134	180,142	587,761	179,630	657,600
West Wellega	*	-	*	-	*	84,685	8,077	27,334	10,025	39,248
East Welega	35,968	3,065	13,263	*	17,516	93,948	11,026	36,556	10,482	35,884
Illubabor	33,285	4,621	8,437	5,421	14,805	9,718	*	2,824	*	5,135
Jimma	109,307	10,582	37,170	11,163	50,392	46,559	5,516	19,206	4,022	17,815
West Shewa	128,009	13,839	49,815	15,511	48,845	90,378	10,488	28,913	11,493	39,484
North Shewa	70,944	8,964	17,426	11,000	33,553	140,168	20,103	40,957	20,752	58,356
East Shewa	14,609	-	10,351	*	*	247,430	23,503	82,532	32,246	109,149
Arsi	221,516	26,297	82,155	22,865	90,199	253,606	28,759	78,824	32,245	113,778
West Harerghe	*	-	-	-	*	140,150	12,962	62,429	13,666	51,093
East Harerghe	*	-	-	*	*	149,545	15,865	76,126	13,814	43,740
Bale	158,830	19,269	68,017	17,210	54,334	165,237	21,626	59,973	13,692	69,946
Borena	4,532	*	2,850	-	*	44,151	3,664	15,404	3,722	21,361
South West Shewa	17,982	1,992	10,631	861	4,498	92,321	10,580	37,527	9,315	34,900
Guji	99,404	10,665	39,410	9,934	39,396	47,238	6,871	19,155	3,500	17,711

TABLE 3-5 CONT'D

Geographic Area	HORSES AND ASSES									
	ALL HORSES	HORSES				ALL ASSES	ASSES			
		MALE		FEMALE			MALE		FEMALE	
		< 3 Years	3 Yrs & more	< 3 Years	3 Yrs & more		< 3 Years	3 Yrs & more	< 3 Years	3 Yrs & more
Somale	*	-	*	*	*	86,389	11,510	38,120	6,288	30,471
Shinele	-	-	-	-	-	3,565	445	1,324	339	1,456
Jijiga	-	-	-	-	-	61,222	8,302	28,680	3,914	20,327
Liben	*	-	*	*	*	21,601	2,762	8,116	2,035	8,688
Benshangul-Gumuz	*	-	-	-	*	40,789	4,046	23,555	3,813	9,375
Metekel	*	-	-	-	*	18,356	1,426	13,346	642	2,942
Asosa	-	-	-	-	-	18,486	2,306	7,308	2,952	5,919
Kemeshi	-	-	-	-	-	3,948	313	2,900	220	514
S.N.N.P.R	292,773	28,087	113,956	28,273	122,458	266,505	26,591	103,581	22,714	113,619
Gurage	53,550	5,975	11,984	6,906	28,685	39,814	4,774	18,699	2,035	14,306
Hadiya	24,108	2,768	8,277	3,106	9,957	40,029	3,423	8,541	6,501	21,564
Kembata Tembaro	8,309	*	2,951	*	4,293	20,862	1,068	15,306	796	3,692
Sidama	61,832	5,289	25,432	*	27,930	41,332	5,876	16,184	*	16,676
Gedio	20,965	*	12,373	2,011	6,015	*	-	*	-	*
Wolayita	*	-	*	-	-	25,785	2,304	14,367	*	*
South Omo	9,800	933	4,012	*	4,387	6,988	966	1,854	*	3,597
Shaka	2,702	*	2,058	*	*	942	*	905	-	*
Kaffa	44,747	3,814	22,839	4,275	13,819	*	-	*	-	*
Gamo Gofa	24,166	*	9,009	*	9,878	10,831	*	5,657	*	*
Bench-Maji	11,903	1,571	4,565	1,258	4,508	*	-	*	-	*
Yem Sp. Wereda	551	114	94	*	320	2,138	239	804	147	948
Amaro Sp. Wereda	3,100	306	1,225	*	1,283	396	*	*	-	*
Burji Sp. Wereda	*	-	*	-	*	2,998	258	1,316	360	1,064
Konso Sp. Wereda	-	-	-	-	-	2,102	*	895	251	784
Dirashe Sp. Wereda	*	-	*	*	-	7,219	497	4,475	315	1,931
Dawro	5,974	455	1,868	*	3,368	3,062	*	2,436	-	540
Basketo Sp. Wereda	354	54	229	*	*	*	*	*	-	*
Konta Sp. Wereda	1,138	*	595	*	294	-	-	-	-	*
Konta Special	17,624	2,717	5,218	2,801	6,888	44,282	4,240	8,405	5,213	26,423
Alaba Special	1,273	*	604	*	416	15,523	1,916	1,279	2,199	10,128
Harari	-	-	-	-	-	6,483	609	3,129	640	2,105
Hundene	-	-	-	-	-	6,483	609	3,129	640	2,105
Addis Ababa	859	-	829	-	*	15,884	701	12,482	575	2,126
Zone 3	685	-	654	-	*	10,416	212	9,515	*	509
Zone 6	174	-	174	-	-	5,468	489	2,967	395	1,617
Dire Dawa	*	-	-	*	-	10,118	1,177	3,187	1,455	4,299

TABLE 3-6: NUMBER OF MULES AND CAMELS BY AGE AND SEX OF ANIMAL, ZONE, AND REGION

Geographic Area	MULES					CAMELS				
	All Mules	MALE		FEMALE		All Camels	MALE		FEMALE	
		< 3 Years	3 Years and Older	< 3 Years	3 Years and Older		< 4 Years	4 Years and Older	< 4 Years	4 Years and Older
Ethiopia	321,339	22,289	134,293	27,589	137,168	471,145	53,855	123,064	76,026	218,200
Tigray	10,062	*	2,973	-	6,816	38,562	*	35,390	*	*
North West Tigray	1,218	-	*	-	1,049	3,328	-	2,708	*	*
Central Tigray	2,311	*	*	-	*	6,676	*	5,983	-	*
Eastern Tigray	2,035	-	*	-	1,261	-	*	*	-	*
Southern Tigray	3,625	-	771	-	*	26,143	*	24,434	-	*
Western Tigray	872	-	469	-	403	1,929	-	1,779	*	*
Afar	382	-	235	-	147	124,536	9,304	14,203	28,808	72,221
Zone 1	-	-	-	-	-	15,587	1,169	5,113	2,473	6,833
Zone 3	382	-	235	-	147	108,949	8,136	9,089	26,335	65,389
Amhara	90,652	6,581	28,818	13,133	42,120	20,317	1,960	16,699	-	*
North Gondar	10,956	*	3,873	*	5,346	-	*	*	-	*
South Gondar	14,929	1,569	*	2,037	6,069	-	-	-	-	*
North Wolo	10,868	*	*	*	6,354	-	*	*	-	*
South Wolo	21,761	*	5,105	3,546	11,931	-	*	*	-	*
North Shewa	10,580	*	4,420	1,847	3,117	-	-	-	-	*
East Gojam	6,338	-	*	*	3,503	-	*	-	-	*
West Gojam	9,741	*	4,429	1,346	3,599	-	-	-	-	*
Waghamera	2,371	*	926	-	1,343	-	-	-	-	*
Agewawie	3,015	750	1,052	*	859	-	-	-	-	*
Oromia	*	-	*	-	-	9,205	1,667	7,239	-	*
Oromia	149,575	10,728	67,229	11,977	59,641	113,527	20,636	16,320	21,142	55,430
West Wellega	8,121	-	5,145	-	2,976	-	-	-	-	*
East Welega	10,593	*	4,697	*	4,688	-	-	-	-	*
Illubabor	5,440	*	1,684	*	3,125	-	-	-	-	*
Jimma	34,069	*	8,847	4,469	19,482	-	-	-	-	*
West Shewa	5,430	*	*	*	2,332	-	-	-	-	*
North Shewa	5,692	*	1,367	*	1,768	-	-	-	-	*
East Shewa	5,898	*	4,909	-	*	-	*	*	*	*
Arsi	26,520	2,998	14,301	1,625	7,596	-	*	-	-	*
West Harerghe	3,549	*	*	*	*	24,282	*	*	3,924	13,103
East Harerghe	*	-	*	-	-	-	*	*	*	*
Bale	15,804	*	9,747	*	4,848	-	*	*	*	*
Borena	4,386	-	3,091	-	1,295	37,805	8,935	4,477	6,996	17,396
South West Shewa	8,515	761	3,186	932	3,636	-	-	-	-	*
Guji	14,872	974	7,452	1,166	5,280	-	*	*	*	*

TABLE 3-6 CONT'D

Geographic Area	MULES					CAMELS				
	All Mules	MALE		FEMALE		All Camels	MALE		FEMALE	
		< 3 Years	3 Years and Older	< 3 Years	3 Years and Older		< 4 Years	4 Years and Older	< 4 Years	4 Years and Older
Somale	*	*	-	-	*	163,494	18,876	37,381	23,759	83,479
Shinele	-	-	-	-	-	6,767	914	1,918	892	3,043
Jijiga	-	-	-	-	-	30,676	4,771	12,962	3,072	9,870
Liben	*	*	-	-	*	126,051	13,191	22,500	*	70,566
Benshangul-Gumuz	1,521	-	777	-	744	-	-	-	-	*
Metekel	1,304	-	722	-	581	-	-	-	-	*
Asosa	*	-	-	-	*	-	-	-	-	*
Kemeshi	147	-	*	-	*	-	-	-	-	*
S.N.N.P.R	68,221	4,539	33,621	2,453	27,610	-	*	*	-	*
Gurage	6,796	-	2,882	1,108	2,805	-	-	-	-	*
Hadiya	13,031	*	6,103	*	5,982	-	-	-	-	*
Kembata Tembaro	2,259	*	1,203	*	784	-	-	-	-	*
Sidama	*	-	*	-	*	-	-	-	-	*
Gedio	3,355	*	1,954	-	1,306	-	-	-	-	*
Wolayita	3,136	*	1,990	-	*	-	-	-	-	*
South Omo	2,922	*	1,199	*	1,457	-	*	*	-	*
Shaka	*	-	*	-	*	-	-	-	-	*
Kaffa	8,349	*	6,029	-	2,106	-	-	-	-	*
Gamo Gofa	7,887	*	3,003	*	4,006	-	-	-	-	*
Bench-Maji	2,156	-	*	-	1,769	-	-	-	-	*
Yem Sp. Wereda	161	-	*	*	115	-	-	-	-	*
Amaro Sp. Wereda	1,058	161	422	*	394	-	-	-	-	*
Burji Sp. Wereda	92	-	*	-	71	-	-	-	-	*
Konso Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Dirashe Sp. Wereda	*	-	*	-	-	-	-	-	-	*
Dawro	4,273	*	2,591	*	1,400	-	-	-	-	*
Basketo Sp. Wereda	399	*	196	*	173	-	-	-	-	*
Konta Sp. Wereda	778	*	485	-	267	-	-	-	-	*
Konta Special	6,382	2,116	2,402	*	1,668	-	-	-	-	*
Alaba Special	701	-	409	-	292	-	-	-	-	*
Harari	-	-	-	-	-	-	*	*	*	*
Hundene	-	-	-	-	-	-	*	*	*	*
Addis Ababa	704	101	579	-	*	-	-	-	-	*
Zone 3	297	*	*	-	-	-	-	-	-	*
Zone 6	407	*	307	-	*	-	-	-	-	*
Dire Dawa	*	-	*	*	-	7,948	1,176	2,762	1,030	2,980

TABLE 3-7: CATTLE AGED 3 – 10 YEARS BY SEX, PURPOSE, ZONE, AND REGION

Geographic Area	CATTLE AGED 3 – 10 YEARS									
	Total	MALE				FEMALE				
		Draught	Beef	Breeding	Other	Milk	Draught	Beef	Breeding	Other
Ethiopia	23,291,658	9,237,674	144,761	281,455	324,348	7,086,577	119,334	44,893	5,162,332	890,282
Tigray	1,605,538	757,398	6,291	15,573	7,030	138,935	5,882	2,464	657,991	13,973
North West Tigray	399,162	160,483	*	6,004	*	29,120	936	*	197,144	*
Central Tigray	433,090	233,953	1,368	1,662	4,448	37,852	1,262	*	144,578	6,988
Eastern Tigray	184,827	91,425	*	3,147	*	26,172	2,201	*	59,960	*
Southern Tigray	378,874	194,769	*	1,787	*	*	*	*	135,763	*
Western Tigray	209,585	76,769	*	2,972	*	*	*	*	120,546	*
Afar	199,537	12,293	1,196	12,196	467	115,597	638	349	53,800	3,002
Zone 1	69,167	4,949	*	2,319	*	40,885	249	-	18,221	2,364
Zone 3	130,370	7,344	1,144	9,876	340	74,712	*	349	35,579	638
Amhara	6,109,445	3,070,417	17,072	28,825	61,208	654,102	61,173	11,451	2,046,880	158,318
North Gonder	957,367	421,567	*	8,773	10,748	180,935	*	2,575	308,603	15,701
South Gonder	696,745	352,654	*	*	8,085	70,967	9,082	*	225,292	27,575
North Wolo	536,763	271,666	*	1,239	-	64,572	3,937	*	190,158	*
South Wolo	900,874	466,575	*	8,494	*	101,799	15,772	*	299,311	*
North Shewa	646,872	378,460	*	*	7,231	29,722	*	*	201,105	21,030
East Gojam	712,404	385,002	*	5,860	4,980	53,382	6,802	*	238,292	16,985
West Gojam	946,817	498,860	3,115	*	15,310	84,760	8,135	*	284,476	49,061
Waghamera	144,778	65,708	*	*	*	28,390	1,779	-	45,758	2,158
Agewawie	376,327	153,445	*	896	8,543	9,575	10,080	*	179,253	13,996
Oromia	190,499	76,479	*	*	2,730	29,998	*	-	74,631	5,510
Oromia	10,176,989	3,984,173	89,321	133,657	155,928	3,583,905	42,586	19,783	1,817,346	350,289
West Wellega	601,591	258,480	*	*	14,348	257,504	*	*	38,988	23,271
East Welega	791,065	343,540	*	6,847	24,469	165,101	*	*	214,449	28,548
Illubabor	442,904	190,823	*	2,200	1,266	118,197	*	-	123,263	5,337
Jimma	1,130,316	495,372	*	3,666	8,776	379,359	3,466	*	203,023	31,404
West Shewa	903,150	401,674	6,266	12,282	9,680	367,863	*	*	89,206	14,342
North Shewa	718,202	313,417	8,231	12,794	13,081	234,825	*	*	110,274	18,160
East Shewa	749,108	324,747	5,370	*	3,585	225,802	*	*	156,319	20,007
Arsi	1,403,949	618,706	9,222	7,977	27,609	449,682	10,826	2,520	214,098	63,309
West Harerghe	430,386	174,584	6,879	8,051	*	119,994	1,300	*	108,307	10,545
East Harerghe	505,798	128,184	9,739	3,501	*	233,939	2,399	3,280	103,537	15,508
Bale	1,078,344	327,420	13,845	11,293	30,265	496,474	*	*	113,833	81,494
Borena	516,566	108,797	12,653	21,180	*	183,463	*	*	167,102	15,048
South West Shewa	405,745	197,899	2,779	2,084	8,402	136,680	2,373	*	38,895	16,085
Guji	499,865	100,530	6,553	27,781	2,779	215,021	*	*	136,052	7,232

TABLE 3-7 CONT'D

Geographic Area	CATTLE AGED 3 – 10 YEARS									
	Total	MALE				FEMALE				
		Draught	Beef	Breeding	Other	Milk	Draught	Beef	Breeding	Other
Somale	281,720	63,398	*	10,455	835	81,721	958	*	117,911	3,299
Shinele	10,075	1,348	419	285	56	6,816	-	-	335	815
Jijiga	182,084	57,017	*	3,814	*	30,900	607	*	87,323	*
Liben	89,562	5,033	*	6,356	643	44,004	*	*	30,253	2,112
Benshangul-Gumuz	176,448	67,999	1,328	2,577	3,622	26,175	1,470	316	67,865	5,096
Metekel	114,280	43,562	1,199	1,750	2,819	3,947	*	*	57,866	2,763
Asosa	42,445	17,685	*	*	*	17,358	*	*	3,692	1,483
Kemeshi	19,722	6,752	*	364	*	4,870	*	-	6,307	*
S.N.N.P.R	4,654,367	1,249,586	25,153	77,134	94,335	2,446,775	6,304	9,545	393,582	351,953
Gurage	546,069	97,734	1,124	3,360	11,618	314,398	1,847	*	29,823	85,398
Hadiya	429,919	148,493	-	1,709	17,157	186,590	*	-	24,599	51,124
Kembata Tembaro	173,143	54,834	-	*	3,975	89,388	*	*	1,973	21,839
Sidama	777,242	70,609	4,122	7,541	*	578,277	-	*	28,709	66,752
Gedio	54,444	2,653	10,650	1,162	*	25,529	*	3,107	6,030	3,646
Wolayita	416,355	126,444	*	*	11,032	218,672	*	1,219	14,661	38,111
South Omo	362,676	71,999	*	41,012	*	153,799	*	-	85,603	4,267
Shaka	41,516	11,909	*	*	*	22,138	*	*	5,440	1,217
Kaffa	332,137	139,116	*	*	*	157,060	*	*	30,647	*
Gamo Gofa	527,022	170,334	*	9,087	6,088	241,924	-	-	70,900	28,417
Bench-Maji	217,360	70,012	*	*	*	122,621	*	*	18,478	*
Yem Sp. Wereda	33,929	14,358	*	*	996	10,817	*	*	5,396	1,987
Amaro Sp. Wereda	50,511	16,436	254	837	751	18,192	*	*	12,594	1,343
Burji Sp. Wereda	23,893	12,903	*	247	1,010	7,381	-	-	1,435	903
Konso Sp. Wereda	53,100	21,955	3,090	1,091	*	16,757	-	*	9,096	692
Dirashe Sp. Wereda	47,766	23,858	430	1,220	*	13,393	-	-	7,249	899
Dawro	173,377	44,740	*	*	5,792	104,888	*	501	5,790	9,988
Basketo Sp. Wereda	12,533	4,537	*	104	*	6,446	-	*	746	514
Konta Sp. Wereda	32,947	12,916	*	283	135	17,267	-	*	1,934	292
Konta Special	276,897	106,985	-	1,676	6,183	113,293	*	-	26,865	21,337
Alaba Special	71,534	26,762	*	*	2,671	27,946	-	-	*	7,775
Harari	17,624	4,527	383	*	*	8,177	*	*	3,430	748
Hundene	17,624	4,527	383	*	*	8,177	*	*	3,430	748
Addis Ababa	44,501	22,769	1,401	561	759	13,851	270	*	3,018	1,744
Zone 3	31,184	14,815	1,140	*	429	10,795	246	*	2,015	1,225
Zone 6	13,318	7,954	261	*	331	3,055	*	*	1,003	520
Dire Dawa	25,488	5,114	*	*	*	17,340	*	*	509	1,859

TABLE 3-8: SHEEP AGED 2 YEARS AND OLDER BY SEX, PURPOSE, ZONE, AND REGION

Geographic Area	SHEEP AGED 2 YEARS AND OLDER								
	Total	MALE				FEMALE			
		Mutton/Meat	Wool	Breeding	Other	Mutton/Meat	Wool	Breeding	Other
Ethiopia	8,492,169	296,030	6,221	422,780	30,837	34,154	85,811	7,596,380	19,956
Tigray	337,141	4,842	*	24,318	*	2,263	3,531	300,421	1,549
North West Tigray	25,242	*	-	2,385	-	-	-	22,552	*
Central Tigray	70,779	*	-	2,847	-	-	2,174	63,942	1,360
Eastern Tigray	171,690	*	-	13,046	*	1,271	832	155,184	189
Southern Tigray	56,070	*	-	4,331	-	992	375	47,456	*
Western Tigray	13,360	*	*	*	-	-	150	11,287	*
Afar	113,536	2,007	219	13,470	600	2,572	3,113	90,598	958
Zone 1	32,119	460	*	2,492	*	391	634	27,547	144
Zone 3	81,417	1,547	*	10,979	*	2,181	2,479	63,051	814
Amhara	3,369,602	140,679	*	169,377	16,382	12,825	34,161	2,987,571	6,907
North Gonder	262,119	*	*	12,140	-	1,236	5,908	239,538	*
South Gonder	276,825	3,793	-	3,598	*	1,870	431	266,775	*
North Wolo	363,419	16,471	-	25,676	*	1,210	3,963	314,591	603
South Wolo	956,219	46,386	*	73,113	5,902	-	5,195	824,849	364
North Shewa	632,311	41,235	*	39,775	7,059	2,302	9,888	528,451	3,275
East Gojam	441,910	13,491	-	4,547	*	3,398	6,795	411,162	1,307
West Gojam	243,060	12,787	-	4,013	-	2,039	1,454	221,757	1,011
Waghamera	31,197	*	-	3,353	*	-	-	26,799	189
Agewawie	151,221	2,416	-	2,783	-	770	527	144,566	159
Oromia	11,321	1,406	-	*	*	-	-	9,081	*
Oromia	2,884,288	79,391	2,116	94,649	6,757	12,451	32,006	2,654,077	2,841
West Wellega	86,865	*	*	4,157	-	298	1,075	79,319	*
East Welega	135,920	2,006	*	6,132	*	290	3,772	121,910	*
Illubabor	141,098	2,031	-	1,913	-	413	1,052	135,689	*
Jimma	348,670	6,977	-	*	*	-	4,690	327,544	*
West Shewa	335,623	9,934	-	7,444	*	2,615	7,161	305,911	*
North Shewa	420,534	14,512	-	11,997	*	301	566	390,484	1,875
East Shewa	117,980	2,378	-	6,368	*	-	2,542	106,407	*
Arsi	566,606	11,299	-	14,508	-	5,446	2,705	532,238	410
West Harerghe	60,174	*	-	*	*	1,074	705	52,774	*
East Harerghe	107,892	8,637	*	3,519	-	366	1,174	93,610	*
Bale	289,570	*	*	8,089	-	-	4,871	267,533	*
Borena	85,258	3,913	-	7,932	*	904	684	71,629	*
South West Shewa	70,835	3,610	-	*	*	745	175	63,689	391
Guji	117,262	960	-	9,812	*	-	834	105,340	165

TABLE 3-8 CONT'D

Geographic Area	SHEEP AGED 2 YEARS AND OLDER								
	Total	MALE				FEMALE			
		Mutton/Meat	Wool	Breeding	Other	Mutton/Meat	Wool	Breeding	Other
Somale	229,148	9,939	65	26,356	18	789	1,580	189,581	821
Shinele	21,729	1,521	59	1,690	18	75	284	18,082	*
Jijiga	137,668	*	-	12,948	-	86	912	119,296	188
Liben	69,751	*	*	*	-	627	383	52,203	633
Benshangul-Gumuz	27,611	880	*	2,401	*	-	1,103	22,858	109
Metekel	15,641	647	-	1,511	*	-	844	12,365	82
Asosa	5,698	*	-	*	-	-	72	5,266	*
Kemeshi	6,272	*	*	711	*	-	187	5,228	28
S.N.N.P.R	1,497,040	56,422	*	89,517	6,716	3,156	9,813	1,322,691	6,742
Gurage	125,612	2,477	-	2,208	-	260	-	119,865	802
Hadiya	99,477	2,566	-	1,800	*	503	-	91,170	666
Kembata Tembaro	43,560	4,415	*	*	*	-	-	37,518	131
Sidama	153,040	3,546	-	5,326	*	-	4,033	138,678	1,031
Gedio	50,275	1,904	-	3,501	-	330	195	44,251	94
Wolayita	48,112	3,122	-	3,187	-	-	-	41,501	302
South Omo	222,133	11,363	*	43,902	-	430	1,149	163,961	78
Shaka	18,355	*	*	*	*	139	559	16,867	91
Kaffa	164,366	*	-	1,452	1,340	533	423	156,973	2,287
Gamo Gofa	265,646	6,661	-	16,280	*	-	1,141	240,424	300
Bench-Maji	77,140	*	*	767	*	-	1,319	72,120	*
Yem Sp. Wereda	10,481	234	-	136	-	48	21	10,042	*
Amaro Sp. Wereda	27,964	669	-	2,336	*	96	50	24,764	*
Burji Sp. Wereda	1,082	82	-	100	*	13	-	873	*
Konso Sp. Wereda	42,281	11,482	-	4,179	-	138	-	26,481	*
Dirashe Sp. Wereda	6,329	498	*	767	-	33	215	4,787	*
Dawro	31,779	1,172	-	*	-	196	-	29,888	*
Basketo Sp. Wereda	4,832	141	-	105	*	17	99	4,439	17
Konta Sp. Wereda	5,464	*	-	502	-	-	26	4,763	*
Konta Special	87,486	1,805	-	*	*	368	584	82,209	893
Alaba Special	11,626	*	-	*	*	53	-	11,115	50
Harari	1,990	150	*	*	-	-	-	1,793	*
Hundene	1,990	150	*	*	-	-	-	1,793	*
Addis Ababa	8,354	692	-	520	-	51	71	7,021	*
Zone 3	5,733	665	-	446	-	25	-	4,597	*
Zone 6	2,622	*	-	*	-	26	71	2,424	*
Dire Dawa	23,459	1,029	-	*	-	47	433	19,770	30

TABLE 3-9: GOATS AGED 2 YEARS AND OLDER BY SEX, PURPOSE, ZONE, AND REGION

Geographic Area	GOATS AGED 2 YEARS AND OLDER							
	Total	MALE			FEMALE			
		Meat	Breeding	Other	Meat	Milk	Breeding	Other
Ethiopia	6,609,771	408,432	562,186	39,646	514,435	36,640	5,026,188	22,245
Tigray	989,577	42,139	109,757	6,500	22,155	5,783	799,806	3,438
North West Tigray	315,122	8,137	36,666	*	*	2,982	259,072	*
Central Tigray	400,348	24,665	38,705	*	6,712	*	327,638	1,324
Eastern Tigray	81,001	1,832	11,034	*	*	*	62,694	*
Southern Tigray	115,653	*	10,393	*	*	*	89,489	*
Western Tigray	77,453	3,020	12,959	*	-	*	60,914	*
Afar	204,690	4,705	20,287	505	98,176	1,645	79,060	*
Zone 1	55,263	*	4,827	*	23,452	*	26,221	*
Zone 3	149,427	4,152	15,460	*	74,724	1,570	52,839	*
Amhara	1,939,966	185,046	115,184	16,712	11,018	12,378	1,594,541	5,086
North Gonder	373,573	22,837	21,371	*	*	*	320,137	*
South Gonder	197,131	14,449	*	-	-	*	172,258	*
North Wolo	288,953	19,009	28,568	*	*	*	238,640	*
South Wolo	406,590	48,476	31,817	*	*	*	319,257	*
North Shewa	269,357	57,976	10,889	*	-	-	195,017	*
East Gojam	75,534	8,143	*	*	-	*	64,185	*
West Gojam	84,268	4,920	*	*	*	*	74,576	*
Waghamera	142,758	2,567	10,420	*	*	*	123,229	*
Agewawie	41,142	3,114	*	-	-	*	35,229	*
Oromia	60,661	3,555	3,708	*	*	*	52,014	*
Oromia	1,886,847	91,228	125,891	5,656	240,082	11,188	1,406,440	6,362
West Wellega	25,207	*	*	-	-	*	21,381	*
East Welega	67,834	3,342	4,499	*	*	-	58,142	*
Illubabor	35,958	1,147	*	*	*	-	33,860	*
Jimma	116,964	*	*	*	*	*	99,012	*
West Shewa	66,396	4,696	*	-	*	*	58,187	*
North Shewa	48,394	3,239	2,611	-	-	*	42,300	*
East Shewa	217,438	8,083	13,577	-	44,606	*	150,882	*
Arsi	137,863	12,021	3,074	*	3,932	*	115,942	*
West Harerghe	211,755	12,532	12,715	*	37,538	*	146,519	*
East Harerghe	305,096	17,223	19,663	*	21,950	1,513	242,036	*
Bale	219,877	9,592	4,542	*	87,609	*	116,885	*
Borena	272,962	11,064	29,419	-	27,903	*	200,284	*
South West Shewa	52,340	5,124	3,302	*	*	*	42,069	*
Guji	108,764	1,336	14,025	*	*	*	78,942	*

TABLE 3-9 CONT'D

Geographic Area	GOATS AGED 2 YEARS AND OLDER							
	Total	MALE			FEMALE			
		Meat	Breeding	Other	Meat	Milk	Breeding	Other
Somale	299,676	12,711	33,245	*	42,976	1,297	208,588	*
Shinele	40,302	2,450	2,707	-	9,242	329	25,536	*
Jijiga	129,405	5,268	15,476	*	2,911	-	105,537	*
Liben	129,969	*	15,062	*	30,823	*	77,515	*
Benshangul-Gumuz	100,226	3,414	9,983	1,735	1,668	*	82,214	*
Metekel	42,873	2,576	3,557	*	*	*	34,225	*
Asosa	42,331	*	4,876	*	*	*	34,865	*
Kemeshi	15,022	*	1,549	*	-	-	13,125	*
S.N.N.P.R	1,110,494	65,214	143,395	8,309	86,902	3,369	797,348	5,957
Gurage	61,354	3,297	*	*	*	-	54,554	*
Hadiya	63,186	1,902	2,285	*	4,568	-	52,860	*
Kembata Tembaro	16,016	*	*	-	2,499	-	12,195	*
Sidama	85,187	*	3,887	*	20,170	*	51,872	3,736
Gedio	4,481	*	-	-	-	*	3,898	*
Wolayita	49,489	*	*	-	*	*	41,980	*
South Omo	419,357	*	93,252	*	*	*	252,156	*
Shaka	3,195	*	*	-	*	-	2,989	*
Kaffa	41,218	1,804	*	808	-	-	38,089	*
Gamo Gofa	105,014	4,073	*	*	*	*	85,384	*
Bench-Maji	24,806	*	*	-	*	-	20,688	*
Yem Sp. Wereda	8,832	110	256	*	-	-	8,388	*
Amaro Sp. Wereda	20,780	891	1,923	*	*	*	16,841	*
Burji Sp. Wereda	11,701	352	1,735	-	240	-	9,374	*
Konso Sp. Wereda	64,675	12,034	6,715	*	842	*	44,728	*
Dirashe Sp. Wereda	28,298	2,612	4,220	*	*	*	20,375	*
Dawro	14,691	*	1,087	-	*	*	13,135	*
Basketo Sp. Wereda	1,856	167	*	-	*	*	1,621	*
Konta Sp. Wereda	2,739	*	201	-	-	-	2,429	*
Konta Special	62,617	2,197	*	-	4,464	*	46,386	*
Alaba Special	21,002	944	*	*	1,860	*	17,406	*
Harari	12,431	685	331	-	2,203	*	9,128	*
Hundene	12,431	685	331	-	2,203	*	9,128	*
Addis Ababa	5,002	369	*	-	-	*	4,337	*
Zone 3	3,886	345	*	-	-	-	3,315	*
Zone 6	1,117	*	*	-	-	*	1,022	*
Dire Dawa	60,861	2,921	*	-	9,254	*	44,724	*

TABLE 3-10: HORSES AGED 3 YEARS AND OLDER BY SEX, PURPOSE, ZONE, AND REGION

Geographic Area	HORSES AGED 3 YEARS AND OLDER						
	Total	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Ethiopia	1,148,616	463,621	76,064	14,187	509,675	85,068	*
Tigray	2,136	1,540	-	-	*	*	*
North West Tigray	-	-	-	-	-	-	*
Central Tigray	-	-	-	-	-	-	*
Eastern Tigray	*	*	-	-	-	-	*
Southern Tigray	1,404	*	-	-	-	*	*
Western Tigray	*	*	-	-	*	*	*
Afar	-	-	-	-	-	-	*
Zone 1	-	-	-	-	-	-	*
Zone 3	-	-	-	-	-	-	*
Amhara	206,711	27,858	62,439	5,467	59,796	51,151	*
North Gonder	32,350	5,019	*	*	9,954	*	*
South Gonder	18,615	2,972	*	-	*	*	*
North Wolo	14,221	2,177	*	-	*	*	*
South Wolo	24,621	6,133	*	*	14,153	*	*
North Shewa	23,867	*	*	-	11,433	*	*
East Gojam	42,411	5,976	13,590	*	9,781	9,309	*
West Gojam	6,243	*	*	*	*	*	*
Waghamera	*	*	-	-	*	-	*
Agewawie	44,184	*	23,669	*	2,113	15,963	*
Oromia	-	-	-	-	-	-	*
Oromia	702,226	330,059	6,027	5,646	341,692	18,802	*
West Wellega	*	*	-	-	*	-	*
East Welega	30,779	12,365	*	*	15,481	*	*
Illubabor	23,243	8,007	-	*	14,584	*	*
Jimma	87,563	37,170	-	-	49,996	*	*
West Shewa	98,659	47,436	*	-	38,366	*	*
North Shewa	50,979	16,929	*	*	33,277	*	*
East Shewa	13,229	10,351	-	-	*	-	*
Arsi	172,354	81,835	-	*	88,437	*	*
West Harerghe	*	-	-	-	*	-	*
East Harerghe	*	-	-	-	*	-	*
Bale	122,350	67,019	-	*	53,406	*	*
Borena	3,890	2,850	-	-	*	-	*
South West Shewa	15,129	9,895	*	*	4,155	*	*
Guji	78,806	33,995	*	*	37,034	*	*

TABLE 3-10 CONT'D

Geographic Area	HORSES AGED 3 YEARS AND OLDER						
	Total	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Somale	*	*	-	-	*	-	*
Shinele	-	-	-	-	-	-	*
Jijiga	-	-	-	-	-	-	*
Liben	*	*	-	-	*	-	*
Benshangul-Gumuz	*	-	-	-	*	-	*
Metekel	*	-	-	-	*	-	*
Asosa	-	-	-	-	-	-	*
Kemeshi	-	-	-	-	-	-	*
S.N.N.P.R	236,413	103,283	7,598	*	107,722	14,736	*
Gurage	40,669	11,676	*	-	24,036	4,649	*
Hadiya	18,234	8,277	-	-	8,972	*	*
Kembata Tembaro	7,243	2,547	*	-	3,465	*	*
Sidama	53,361	22,271	*	*	26,524	*	*
Gedio	18,388	11,801	*	-	5,885	*	*
Wolayita	*	*	-	-	-	-	*
South Omo	8,399	2,358	733	*	3,565	822	*
Shaka	2,405	1,955	*	*	*	-	*
Kaffa	36,658	21,922	*	*	13,643	*	*
Gamo Gofa	18,888	6,176	*	-	5,160	4,718	*
Bench-Maji	9,073	4,430	-	*	4,381	*	*
Yem Sp. Wereda	414	*	*	-	252	*	*
Amaro Sp. Wereda	2,508	977	*	-	1,184	*	*
Burji Sp. Wereda	*	-	*	-	*	-	*
Konso Sp. Wereda	-	-	-	-	-	-	*
Dirashe Sp. Wereda	*	*	-	-	-	-	*
Dawro	5,235	1,772	-	*	3,180	*	*
Basketo Sp. Wereda	285	*	*	165	*	-	*
Konta Sp. Wereda	889	595	-	-	294	-	*
Konta Special	12,106	5,218	-	-	6,347	*	*
Alaba Special	1,020	604	-	-	416	-	*
Harari	-	-	-	-	-	-	*
Hundene	-	-	-	-	-	-	*
Addis Ababa	859	829	-	-	*	-	*
Zone 3	685	654	-	-	*	-	*
Zone 6	174	174	-	-	-	-	*
Dire Dawa	-	-	-	-	-	-	*

TABLE 3-11: ASSES AGED 3 YEARS AND OLDER BY SEX, PURPOSE, ZONE, AND REGION

Geographic Area	ASSES AGED 3 YEARS AND OLDER						
	TOTAL	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Ethiopia	2,870,537	927,786	331,844	51,436	1,031,643	406,664	121,164
Tigray	297,951	118,794	45,488	6,908	84,021	35,587	7,153
North West Tigray	53,849	24,435	*	-	25,301	2,971	*
Central Tigray	74,776	22,118	12,223	*	21,540	15,615	*
Eastern Tigray	52,255	17,957	5,434	4,367	13,580	6,457	4,460
Southern Tigray	89,443	39,484	17,425	*	22,290	8,605	*
Western Tigray	27,628	14,799	9,580	-	1,311	1,939	*
Afar	10,285	3,318	*	*	6,529	*	280
Zone 1	1,898	538	-	*	1,238	*	*
Zone 3	8,387	2,780	*	*	5,291	-	*
Amhara	970,891	219,078	130,434	15,096	304,321	233,412	68,550
North Gondar	129,639	47,982	*	*	41,671	23,408	4,683
South Gondar	103,001	10,967	9,973	*	46,893	29,357	*
North Wolo	96,889	27,013	2,980	*	50,961	12,039	*
South Wolo	196,619	61,667	21,841	-	66,759	34,091	12,261
North Shewa	160,597	45,410	21,598	*	58,910	30,733	1,973
East Gojam	111,350	7,251	31,910	*	11,870	49,906	9,448
West Gojam	100,849	3,522	22,610	6,912	4,122	42,173	21,510
Waghamera	28,134	8,740	4,051	-	7,289	5,072	2,982
Agewawie	23,637	*	*	3,706	2,424	5,607	6,683
Oromia	20,175	4,723	639	*	13,421	1,025	*
Oromia	1,245,362	434,077	130,083	23,601	488,901	128,748	39,951
West Wellega	66,582	22,498	*	*	29,219	*	3,065
East Welega	72,440	23,599	*	*	26,514	*	*
Illubabor	7,959	2,603	*	-	4,901	-	*
Jimma	37,021	17,443	*	-	9,902	*	1,579
West Shewa	68,397	21,884	2,906	4,123	23,158	7,721	8,605
North Shewa	99,313	23,674	16,693	*	32,343	25,750	*
East Shewa	191,681	68,614	13,324	*	91,021	*	*
Arsi	192,602	60,804	18,020	-	93,728	19,650	*
West Harerghe	113,523	49,180	11,038	2,211	40,469	3,957	*
East Harerghe	119,866	47,601	23,610	*	28,529	14,164	*
Bale	129,920	47,241	8,613	*	61,873	*	*
Borena	36,764	13,701	*	-	19,154	*	*
South West Shewa	72,426	21,608	15,399	*	15,090	18,728	1,081
Guji	36,867	13,627	*	*	13,000	*	*

TABLE 3-11 CONT'D

Geographic Area	ASSES AGED 3 YEARS AND OLDER						
	TOTAL	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Somale	68,591	33,586	*	166	29,665	136	670
Shinele	2,780	1,135	76	113	1,170	104	182
Jijiga	49,006	24,593	*	-	19,978	-	*
Liben	16,804	7,858	*	*	8,517	*	*
Benshangul-Gumuz	32,931	9,728	9,940	3,887	5,162	1,660	2,554
Metekel	16,288	1,256	8,396	3,694	*	1,027	1,761
Asosa	13,228	6,566	*	*	4,574	*	*
Kemeshi	3,415	1,905	*	*	434	*	*
S.N.N.P.R	217,200	95,472	6,497	1,611	106,846	4,795	*
Gurage	33,005	18,699	-	-	14,306	-	*
Hadiya	30,106	8,541	-	-	19,889	*	*
Kembata Tembaro	18,999	15,168	*	-	3,153	*	*
Sidama	32,860	14,915	*	-	16,028	-	*
Gedio	*	*	-	-	-	-	*
Wolayita	22,368	13,492	*	*	*	-	*
South Omo	5,451	*	*	*	*	*	*
Shaka	905	*	*	*	-	-	*
Kaffa	*	*	-	-	-	-	*
Gamo Gofa	9,544	5,397	*	-	*	-	*
Bench-Maji	*	*	-	-	-	-	*
Yem Sp. Wereda	1,752	646	*	*	746	*	*
Amaro Sp. Wereda	*	*	*	-	*	-	*
Burji Sp. Wereda	2,379	966	349	-	911	153	*
Konso Sp. Wereda	1,679	829	*	-	*	533	*
Dirashe Sp. Wereda	6,406	1,132	3,343	-	530	1,329	*
Dawro	2,976	1,836	-	600	540	-	*
Basketo Sp. Wereda	*	*	-	-	*	-	*
Konta Sp. Wereda	-	-	-	-	-	-	*
Konta Special	34,828	8,271	*	-	26,423	-	*
Alaba Special	11,407	1,279	-	-	9,675	*	*
Harari	5,234	2,149	951	*	1,555	523	*
Hundene	5,234	2,149	951	*	1,555	523	*
Addis Ababa	14,608	9,048	3,407	*	1,033	1,094	*
Zone 3	10,024	7,811	1,704	-	266	*	*
Zone 6	4,584	1,237	1,704	*	767	850	*
Dire Dawa	7,486	2,535	652	-	3,610	689	*

TABLE 3-12: MULES AGED 3 YEARS AND OLDER BY SEX, PURPOSE, ZONE, AND REGION

Geographic Area	MULES AGED 3 YEARS AND OLDER						
	TOTAL	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Ethiopia	271,461	120,804	10,552	2,937	128,950	5,503	2,716
Tigray	9,789	2,903	*	-	6,114	*	*
North West Tigray	1,218	*	-	-	1,049	-	*
Central Tigray	2,039	*	-	-	*	*	*
Eastern Tigray	2,035	*	-	-	1,261	-	*
Southern Tigray	3,625	771	-	-	*	-	*
Western Tigray	872	400	*	-	*	*	*
Afar	382	235	-	-	147	-	*
Zone 1	-	-	-	-	-	-	*
Zone 3	382	235	-	-	147	-	*
Amhara	70,938	20,059	7,516	*	37,290	2,835	*
North Gondar	9,219	3,873	-	-	5,346	-	*
South Gondar	11,324	2,262	*	-	5,695	*	*
North Wolo	8,423	*	-	-	6,354	-	*
South Wolo	17,036	4,701	*	-	11,931	-	*
North Shewa	7,537	*	*	-	2,521	*	*
East Gojam	5,097	-	*	*	*	*	*
West Gojam	8,028	*	*	*	2,138	*	*
Waghamera	2,270	926	-	-	1,249	*	*
Agewawie	1,910	*	*	-	*	-	*
Oromia	*	*	-	-	-	-	*
Oromia	126,869	65,711	1,323	*	59,180	*	*
West Wellega	8,121	5,145	-	-	2,976	-	*
East Welega	9,385	4,697	-	-	4,688	-	*
Illubabor	4,809	1,684	-	-	3,125	-	*
Jimma	28,330	8,402	*	-	19,482	-	*
West Shewa	3,494	*	-	-	2,332	-	*
North Shewa	3,134	1,367	-	-	1,768	-	*
East Shewa	5,594	4,909	-	-	*	*	*
Arsi	21,898	14,301	-	-	7,596	-	*
West Harerghe	2,885	*	-	-	*	-	*
East Harerghe	*	*	-	-	-	-	*
Bale	14,596	9,747	-	-	4,848	-	*
Borena	4,386	2,795	*	-	1,295	-	*
South West Shewa	6,823	3,186	-	-	3,636	-	*
Guji	12,731	6,675	*	*	5,096	-	*

TABLE 3-12 CONT'D

Geographic Area	MULES AGED 3 YEARS AND OLDER						
	TOTAL	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Somale	*	-	-	-	*	-	*
Shinele	-	-	-	-	-	-	*
Jijiga	-	-	-	-	-	-	*
Liben	*	-	-	-	*	-	*
Benshangul-Gumuz	1,521	568	*	*	691	-	*
Metekel	1,304	513	*	*	529	-	*
Asosa	*	-	-	-	*	-	*
Kemeshi	147	*	-	-	*	-	*
S.N.N.P.R	61,230	30,745	1,503	*	25,436	*	485
Gurage	5,688	2,882	-	-	2,805	-	*
Hadiya	12,084	6,103	-	-	5,982	-	*
Kembata Tembaro	1,987	792	*	-	784	-	*
Sidama	*	*	-	-	*	-	*
Gedio	3,261	1,954	-	-	1,306	-	*
Wolayita	2,840	1,990	-	-	*	-	*
South Omo	2,656	892	*	*	1,403	*	*
Shaka	*	*	-	-	*	-	*
Kaffa	8,135	5,648	*	-	1,931	-	*
Gamo Gofa	7,008	2,491	*	-	2,421	*	*
Bench-Maji	2,156	*	-	-	1,769	-	*
Yem Sp. Wereda	137	*	-	-	115	-	*
Amaro Sp. Wereda	816	422	-	-	345	*	*
Burji Sp. Wereda	92	*	-	-	71	-	*
Konso Sp. Wereda	-	-	-	-	-	-	*
Dirashe Sp. Wereda	*	*	-	-	-	-	*
Dawro	3,991	1,847	-	*	1,217	-	*
Basketo Sp. Wereda	369	*	*	143	93	-	80
Konta Sp. Wereda	752	485	-	-	267	-	*
Konta Special	4,070	2,038	-	*	1,668	-	*
Alaba Special	701	409	-	-	292	-	*
Harari	-	-	-	-	-	-	*
Hundene	-	-	-	-	-	-	*
Addis Ababa	603	553	*	-	*	-	*
Zone 3	*	*	-	-	-	-	*
Zone 6	331	281	*	-	*	-	*
Dire Dawa	*	*	*	-	-	-	*

TABLE 3-13: CAMELS AGED 4 YEARS AND OLDER BY SEX, PURPOSE, ZONE, AND REGION

Geographic Area	CAMELS AGED 4 YEARS AND OLDER									
	TOTAL	MALE				FEMALE				
		Transportation	Meat	Draught	Other	Transportation	Meat	Draught	Milk	Others
Ethiopia	341,263	94,902	4,050	3,336	20,776	17,055	*	*	158,213	38,788
Tigray	36,663	29,477	-	*	4,793	*	-	*	-	*
North West Tigray	3,018	2,368	-	*	-	-	-	-	-	*
Central Tigray	6,445	5,983	-	-	-	*	-	-	-	*
Eastern Tigray	*	*	-	-	-	-	-	-	-	*
Southern Tigray	24,861	*	-	*	*	-	-	*	-	*
Western Tigray	1,854	*	-	*	747	*	-	-	-	*
Afar	86,424	13,483	295	*	242	7,416	*	*	61,682	2,233
Zone 1	11,946	4,692	*	*	199	*	-	-	5,874	*
Zone 3	74,478	8,791	*	-	*	6,805	*	*	55,808	1,886
Amhara	18,357	12,884	-	*	3,382	*	*	-	-	*
North Gonder	*	-	-	-	*	-	-	-	-	*
South Gonder	-	-	-	-	-	-	-	-	-	*
North Wolo	*	*	-	-	-	*	-	-	-	*
South Wolo	*	*	-	-	-	-	-	-	-	*
North Shewa	-	-	-	-	-	-	-	-	-	*
East Gojam	*	-	-	-	-	-	*	-	-	*
West Gojam	-	-	-	-	-	-	-	-	-	*
Waghamera	-	-	-	-	-	-	-	-	-	*
Agewawie	-	-	-	-	-	-	-	-	-	*
Oromia	7,538	4,250	-	*	2,557	*	-	-	-	*
Oromia	71,750	10,549	*	*	*	*	-	*	41,080	10,519
West Wellega	-	-	-	-	-	-	-	-	-	*
East Welega	-	-	-	-	-	-	-	-	-	*
Illubabor	-	-	-	-	-	-	-	-	-	*
Jimma	-	-	-	-	-	-	-	-	-	*
West Shewa	-	-	-	-	-	-	-	-	-	*
North Shewa	-	-	-	-	-	-	-	-	-	*
East Shewa	*	-	-	-	*	-	-	-	*	*
Arsi	*	-	-	-	-	-	-	*	-	*
West Harerghe	16,693	*	*	*	-	*	-	-	6,905	*
East Harerghe	*	*	*	-	*	-	-	-	*	*
Bale	*	*	-	-	*	-	-	-	*	*
Borena	21,874	4,181	-	*	-	-	-	*	10,684	6,569
South West Shewa	-	-	-	-	-	-	-	-	-	*
Guji	*	*	-	-	-	-	-	-	*	*

TABLE 3-13 CONT'D

Geographic Area	CAMELS AGED 4 YEARS AND OLDER									
	TOTAL	MALE				FEMALE				
		Transportation	Meat	Draught	Other	Transportation	Meat	Draught	Milk	Others
Somale	120,860	25,761	*	*	*	4,011	*	-	52,434	*
Shinele	4,961	1,836	64	-	19	146	-	-	2,815	82
Jijiga	22,832	11,972	*	*	*	*	-	-	*	*
Liben	93,066	11,953	*	-	*	1,576	*	-	43,196	*
Benshangul-Gumuz	-	-	-	-	-	-	-	-	-	*
Metekel	-	-	-	-	-	-	-	-	-	*
Asosa	-	-	-	-	-	-	-	-	-	*
Kemeshi	-	-	-	-	-	-	-	-	-	*
S.N.N.P.R	*	-	-	-	*	-	-	-	-	*
Gurage	-	-	-	-	-	-	-	-	-	*
Hadiya	-	-	-	-	-	-	-	-	-	*
Kembata Tembaro	-	-	-	-	-	-	-	-	-	*
Sidama	-	-	-	-	-	-	-	-	-	*
Gedio	-	-	-	-	-	-	-	-	-	*
Wolayita	-	-	-	-	-	-	-	-	-	*
South Omo	*	-	-	-	*	-	-	-	-	*
Shaka	-	-	-	-	-	-	-	-	-	*
Kaffa	-	-	-	-	-	-	-	-	-	*
Gamo Gofa	-	-	-	-	-	-	-	-	-	*
Bench-Maji	-	-	-	-	-	-	-	-	-	*
Yem Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Amaro Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Burji Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Konso Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Dirashe Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Dawro	-	-	-	-	-	-	-	-	-	*
Basketo Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Konta Sp. Wereda	-	-	-	-	-	-	-	-	-	*
Konta Special	-	-	-	-	-	-	-	-	-	*
Alaba Special	-	-	-	-	-	-	-	-	-	*
Harari	*	*	*	-	-	*	-	*	*	*
Hundene	*	*	*	-	-	*	-	*	*	*
Addis Ababa	-	-	-	-	-	-	-	-	-	*
Zone 3	-	-	-	-	-	-	-	-	-	*
Zone 6	-	-	-	-	-	-	-	-	-	*
Dire Dawa	5,742	2,626	*	*	*	*	-	*	2,043	*

TABLE 3-14: POULTRY INVENTORY BY TYPE, ZONE, AND REGION

Geographic Area	Total Poultry	Cocks	Cockerels	Pullets	Non-Laying Hens	Chicks	Laying Hens
Ethiopia	35,656,385	3,054,730	2,268,705	3,473,259	1,294,577	15,959,783	9,605,331
Tigray	3,725,111	276,409	288,938	436,586	218,848	1,644,603	859,726
North West Tigray	951,892	61,480	84,645	120,826	56,264	442,128	186,549
Central Tigray	1,170,285	82,853	92,182	150,723	40,075	517,386	287,065
Eastern Tigray	411,602	45,180	27,240	32,760	28,348	121,923	156,152
Southern Tigray	656,997	50,451	45,470	73,511	52,541	290,619	144,404
Western Tigray	534,335	36,446	39,400	58,766	41,619	272,547	85,557
Afar	49,285	5,471	2,446	4,073	3,169	20,862	13,264
Zone 1	1,343	223	*	197	*	*	368
Zone 3	47,942	5,248	2,391	3,876	3,075	20,456	12,896
Amhara	11,243,773	960,894	556,999	914,636	391,835	5,580,664	2,838,747
North Gondar	2,497,880	140,672	142,123	219,581	99,766	1,426,509	469,230
South Gondar	1,257,047	53,445	93,592	106,911	38,396	668,195	296,510
North Wolo	1,102,246	177,246	39,973	93,479	29,088	484,944	277,516
South Wolo	1,835,430	297,452	94,221	144,862	85,168	672,307	541,420
North Shewa	1,241,219	118,189	48,333	82,545	29,530	501,951	460,671
East Gojam	680,805	36,703	29,415	68,783	23,177	271,985	250,742
West Gojam	1,554,778	71,397	45,977	99,315	59,976	975,973	302,140
Waghamera	210,172	14,850	13,700	23,222	4,902	105,111	48,387
Agewawie	580,755	25,840	37,355	51,860	16,657	318,137	130,905
Oromia	283,441	25,101	12,309	24,078	5,174	155,552	61,226
Oromia	12,761,341	1,128,826	805,757	1,176,931	491,695	5,488,463	3,669,670
West Wellega	1,355,853	114,716	83,513	113,395	56,243	677,818	310,169
East Welega	991,945	77,528	66,800	97,779	53,123	492,383	204,331
Illubabor	823,774	62,318	50,710	66,506	23,464	398,032	222,744
Jimma	1,545,644	118,474	102,268	145,363	43,557	700,048	435,934
West Shewa	962,426	67,102	67,549	82,908	36,846	465,235	242,787
North Shewa	622,974	45,742	31,818	42,660	36,069	211,388	255,296
East Shewa	1,239,484	108,567	95,691	122,212	50,739	509,306	352,968
Arsi	1,308,172	121,282	55,702	109,556	56,956	534,828	429,848
West Harerghe	929,057	102,581	57,484	85,767	33,256	400,331	249,639
East Harerghe	1,001,395	119,984	51,525	76,196	42,491	332,997	378,202
Bale	532,256	46,913	31,473	57,936	13,352	201,565	181,017
Borena	412,825	46,997	37,220	60,708	9,361	136,919	121,621
South West Shewa	514,731	30,922	27,387	48,911	14,956	232,360	160,194
Guji	520,804	65,702	46,617	67,034	21,282	195,251	124,918

TABLE 3-14 CONT'D

Geographic Area	Total Poultry	Cocks	Cockerels	Pullets	Non-Laying Hens	Chicks	Laying Hens
Somale	173,187	24,279	11,314	16,202	10,918	49,010	61,464
Shinele	6,625	698	399	552	347	2,189	2,439
Jijiga	117,387	17,866	8,829	11,505	8,047	29,603	41,536
Liben	49,176	5,715	2,085	4,145	2,524	17,218	17,488
Benshangul-Gumuz	785,357	58,954	57,395	83,637	26,844	387,769	170,758
Metekel	310,417	23,123	25,642	34,483	11,257	155,089	60,822
Asosa	347,656	26,387	23,211	34,300	10,668	165,016	88,075
Kemeshi	127,284	9,444	8,542	14,855	4,919	67,664	21,861
S.N.N.P.R	6,779,900	585,471	537,822	828,229	146,983	2,745,547	1,935,857
Gurage	529,856	50,172	23,577	52,198	8,176	202,199	193,534
Hadiya	940,491	49,825	68,899	118,551	5,476	504,976	192,764
Kembata Tembaro	305,863	15,550	25,650	37,073	1,777	136,631	89,181
Sidama	1,012,428	79,441	87,427	132,875	17,720	398,694	296,272
Gedio	208,479	19,348	15,259	27,248	1,851	85,983	58,791
Wolayita	653,380	58,828	78,992	96,213	31,683	197,446	190,218
South Omo	303,706	39,151	28,284	38,897	7,954	105,731	83,689
Shaka	133,058	9,485	10,091	15,337	3,715	60,122	34,309
Kaffa	591,667	64,198	41,517	63,536	7,001	234,051	181,364
Gamo Gofa	446,640	45,847	31,353	62,222	8,769	144,026	154,422
Bench-Maji	465,486	46,723	38,070	43,737	25,957	190,150	120,850
Yem Sp. Wereda	30,521	1,746	1,408	2,151	593	14,515	10,108
Amaro Sp. Wereda	58,137	6,585	5,039	7,341	569	22,338	16,264
Burji Sp. Wereda	19,790	3,169	1,601	3,128	335	5,376	6,182
Konso Sp. Wereda	87,141	12,665	7,099	10,598	5,662	23,913	27,204
Dirashe Sp. Wereda	73,305	12,193	5,660	8,268	3,771	21,410	22,003
Dawro	138,172	14,496	12,791	17,208	6,458	40,296	46,923
Basketo Sp. Wereda	27,274	3,067	2,929	3,880	1,066	9,344	6,987
Konta Sp. Wereda	54,263	5,723	4,397	5,329	2,535	21,901	14,378
Konta Special	578,657	39,541	39,607	71,150	4,844	262,136	161,380
Alaba Special	121,585	7,717	8,170	11,288	1,074	64,306	29,030
Harari	31,590	3,921	2,872	4,294	1,478	8,759	10,265
Hundene	31,590	3,921	2,872	4,294	1,478	8,759	10,265
Addis Ababa	62,364	5,577	3,512	4,815	1,599	21,899	24,962
Zone 3	40,031	3,844	1,933	2,533	1,293	14,302	16,125
Zone 6	22,333	1,733	1,579	2,282*		7,596	8,837
Dire Dawa	44,479	4,928	1,651	3,857	1,209	12,213	20,622

TABLE 3-15: BEEHIVE INVENTORY AND PRODUCTION OF HONEY BY TYPE, ZONE, AND REGION

Geographic Area	All Beehives		Traditional Beehives			Intermediate Beehives			Modern Beehives		
	Number of hives	Total annual honey production	Number of hives	Avg. frequency of production	Total annual honey production	Number of hives	Avg. frequency of production	Total annual honey production	Number of hives	Avg. frequency of production	Total annual honey production
Ethiopia	4,228,612	25,186,378	4,205,824	1	25,078,551	15,341	1	*	7,448	2	107,827
Tigray	173,948	1,376,956	171,522	1	1,345,829	923	*	*	1,503	2	31,127
North West Tigray	31,729	358,569	30,304	1	358,569	758	*	*	666	*	*
Central Tigray	45,608	541,124	45,140	1	541,124	-	-	-	468	*	*
Eastern Tigray	40,271	472,034	39,950	2	472,034	165	-	-	156	*	*
Southern Tigray	39,607	310,054	39,395	1	310,054	-	-	-	212	*	*
Western Tigray	16,733	348,748	16,733	2	348,748	-	-	-	*	-	-
Afar	674	2,325	436	2	2,325	238	-	-	*	-	-
Zone 1	-	-	-	-	-	-	-	-	*	-	-
Zone 3	674	4,650	436	2	4,650	238	-	-	*	-	-
Amhara	766,383	5,831,444	758,761	1	5,831,444	6,680	*	*	942	*	*
North Gondar	109,015	1,155,707	108,638	2	1,155,707	-	-	-	377	*	*
South Gondar	107,000	913,224	107,000	1	913,224	-	-	-	*	-	-
North Wolo	61,997	580,642	61,219	1	580,642	778	*	*	*	-	-
South Wolo	109,366	899,639	106,982	2	899,639	2,384	-	-	*	-	-
North Shewa	47,845	398,316	44,875	2	398,316	2,970	-	-	*	-	-
East Gojam	60,279	802,288	59,912	2	802,288	367	-	-	*	-	-
West Gojam	149,011	2,731,081	149,011	1	2,731,081	-	-	-	*	-	-
Waghamera	39,535	358,684	39,535	1	358,684	-	-	-	*	-	-
Agewawie	70,788	1,333,835	70,041	1	1,333,835	181	-	-	566	*	*
Oromia	11,548	144,520	11,548	1	144,520	-	-	-	*	-	-
Oromia	2,289,877	11,703,817	2,280,900	1	11,669,081	5,543	*	*	3,435	2	34,736
West Wellega	593,766	3,946,935	593,766	1	3,946,935	-	-	-	*	-	-
East Welega	190,373	1,191,836	190,373	1	1,191,836	-	*	-	*	-	-
Illubabor	551,474	4,114,318	549,973	1	4,114,318	-	-	-	1,501	*	*
Jimma	360,914	2,160,934	358,260	1	2,160,934	926	-	-	1,728	*	*
West Shewa	61,765	585,793	61,765	1	585,793	-	-	-	*	-	-
North Shewa	34,852	276,057	34,852	2	276,057	-	-	-	*	-	-
East Shewa	32,029	167,609	32,029	2	167,609	-	-	-	*	-	-
Arsi	77,046	120,504	73,962	1	120,504	3,085	-	-	*	-	-
West Harerghe	42,244	627,698	42,244	1	627,698	-	-	-	*	-	-
East Harerghe	47,467	445,390	47,467	1	445,390	-	*	*	*	-	-
Bale	109,414	1,127,614	109,047	1	1,127,614	367	-	-	*	-	-
Borena	36,245	351,387	36,245	2	351,387	-	-	-	*	-	-
South West Shewa	28,277	264,058	28,277	2	264,058	-	-	-	*	-	-
Guji	124,010	872,434	122,638	1	872,434	1,166	-	-	206	*	*

TABLE 3-15 CONT'D

Geographic Area	All Beehives		Traditional Beehives			Intermediate Beehives			Modern Beehives		
	Number of hives	Total annual honey production	Number of hives	Avg. frequency of production	Total annual honey production	Number of hives	Avg. frequency of production	Total annual honey production	Number of hives	Avg. frequency of production	Total annual honey production
Somale	9,186	80,663	9,186	2	80,663	-	-	-	*	-	-
Shinele	29	117	29	1	117	-	-	-	*	-	-
Jijiga	9,157	161,209	9,157	2	161,209	-	-	-	*	-	-
Liben	-	-	-	-	-	-	-	-	*	-	-
Benshangul-Gumuz	156,409	713,394	155,638	1	713,394	474	-	-	297	*	*
Metekel	95,353	828,670	94,879	1	828,670	474	-	-	*	-	-
Asosa	50,432	214,130	50,134	1	214,130	-	-	-	297	*	*
Kemeshi	10,624	62,691	10,624	1	62,691	-	-	-	*	-	-
S.N.N.P.R	829,795	5,425,515	827,194	2	5,425,515	1,331	*	*	1,270	*	*
Gurage	28,161	211,125	27,894	2	211,125	-	-	-	267	*	*
Hadiya	39,810	638,976	39,810	2	638,976	-	-	-	*	-	-
Kembata Tembaro	18,514	196,825	18,514	2	196,825	-	-	-	*	-	-
Sidama	35,164	271,924	35,164	1	271,924	-	-	-	*	-	-
Gedio	30,937	136,261	30,937	1	136,261	-	-	-	*	-	-
Wolayita	27,844	*	27,290	2	*	277	*	*	277	*	*
South Omo	89,403	1,438,370	89,403	2	1,438,370	-	-	-	*	-	-
Shaka	84,141	906,710	84,141	1	906,710	-	-	-	*	-	-
Kaffa	267,360	2,304,132	267,360	1	2,304,132	-	-	-	*	-	-
Gamo Gofa	70,106	521,296	69,327	1	521,296	260	*	*	519	*	*
Bench-Maji	26,667	308,592	26,667	2	308,592	-	-	-	*	-	-
Yem Sp. Wereda	5,281	68,595	5,102	2	68,595	155	*	*	24	*	*
Amaro Sp. Wereda	4,046	32,976	4,046	1	32,976	-	-	-	*	-	-
Burji Sp. Wereda	1,938	47,311	1,938	2	47,311	-	-	-	*	-	-
Konso Sp. Wereda	15,293	182,980	15,000	2	182,980	292	-	-	*	-	-
Dirashe Sp. Wereda	6,842	135,630	6,690	1	135,630	151	-	-	*	-	-
Dawro	46,351	57,456	46,351	1	57,456	-	-	-	*	-	-
Basketo Sp. Wereda	2,176	22,258	2,176	1	22,258	-	-	-	*	-	-
Konta Sp. Wereda	9,317	116,914	9,317	1	116,914	-	-	-	*	-	-
Konta Special	17,206	252,174	16,827	2	252,174	196	*	*	183	*	*
Alaba Special	3,239	44,025	3,239	2	44,025	-	-	-	*	-	-
Harari	977	6,335	951	2	6,335	26	*	*	*	-	-
Hundene	977	12,670	951	2	12,670	26	*	*	*	-	-
Addis Ababa	692	1,804	566	2	1,804	126	*	*	*	-	-
Zone 3	354	779	228	2	779	126	*	*	*	-	-
Zone 6	338	1,694	338	2	1,694	-	-	-	*	-	-
Dire Dawa	670	2,161	670	1	2,161	-	-	-	*	-	-

TABLE 3-16: NUMBER OF DAIRY ANIMALS, MILK PRODUCTION, AND LACTATION PERIOD BY ZONE AND REGION

Geographic Area	Number Of Dairy Cows	Number Of Milking Cows	Average Daily Milk Prod.	Average Lactation Period (Mn)	Total Milk Production (Lt)	Number Of Dairy Camels	Number Of Milking Camels	Average Daily Milk Prod.	Average Lactation Period (Mn)	Total Milk Production (Lt)
Ethiopia	7,086,577	8,712,548	1.324	7	2,431,148,647	158,213	148,362	4.182	10	217,494,663
Tigray	138,935	458,615	1.308	7	137,461,724	-	*	*	*	-
North West Tigray	29,120	138,734	1.424	7	103,124,911	-	*	*	-	-
Central Tigray	37,852	102,939	0.957	6	33,659,248	-	*	-	-	-
Eastern Tigray	26,172	64,893	1.236	7	29,752,458	-	*	*	-	-
Southern Tigray	*	64,034	1.538	7	42,842,765	-	*	-	-	-
Western Tigray	*	88,015	1.559	6	54,053,560	-	*	*	*	-
Afar	115,597	96,995	2.29	6	44,038,503	61,682	65,549	4.89	10	*
Zone 1	40,885	32,090	2.753	6	35,963,371	5,874	*	7.252	10	8,627,877
Zone 3	74,712	64,904	2.011	6	52,113,635	55,808	36,956	4.273	10	92,478,806
Amhara	654,102	1,835,603	1.362	6	426,443,600	-	*	*	-	-
North Gonder	180,935	349,820	1.146	7	162,031,661	-	*	*	-	-
South Gonder	70,967	207,337	0.927	6	76,744,221	-	*	-	-	-
North Wolo	64,572	167,627	1.386	6	81,017,890	-	*	-	-	-
South Wolo	101,799	263,636	1.438	6	137,387,414	-	*	*	-	-
North Shewa	29,722	162,552	0.272	5	75,711,449	-	*	*	-	-
East Gojam	53,382	182,107	0.872	7	61,835,774	-	*	-	-	-
West Gojam	84,760	251,518	0.877	7	91,350,588	-	*	-	-	-
Waghamera	28,390	43,715	1.111	6	16,632,274	-	*	-	-	-
Agewawie	9,575	134,390	1.083	7	58,575,905	-	*	-	-	-
Oromia	29,998	72,901	1.046	6	29,236,194	-	*	-	-	-
Oromia	3,583,905	4,022,286	1.321	7	1,179,114,839	41,080	48,239	4.747	10	39,315,620
West Wellega	257,504	287,178	1.128	7	116,557,845	-	*	-	-	-
East Welega	165,101	277,555	1.057	7	129,249,329	-	*	-	-	-
Illubabor	118,197	184,017	1.137	6	80,907,945	-	*	-	-	-
Jimma	379,359	425,507	1.133	6	180,148,294	-	*	-	-	-
West Shewa	367,863	351,533	1.182	7	180,364,465	-	*	-	-	-
North Shewa	234,825	265,790	1.426	8	206,272,431	-	*	*	-	-
East Shewa	225,802	258,368	1.173	7	142,238,747	*	*	2.2	5	1,575,600
Arsi	449,682	489,634	1.435	7	305,880,839	-	*	-	-	-
West Harerghe	119,994	164,109	1.459	6	100,075,896	6,905	9,518	1.291	9	13,562,473
East Harerghe	233,939	234,253	1.725	7	158,873,924	*	*	1.25	10	735,408
Bale	496,474	460,258	1.167	7	219,339,800	*	*	2.385	11	7,005,355
Borena	183,463	270,552	1.38	7	142,074,546	10,684	15,591	3.537	9	24,514,701
South West Shewa	136,680	110,625	1.079	6	45,972,624	-	*	-	-	-
Guji	215,021	242,906	1.145	8	139,216,030	*	*	3.696	*	*

TABLE 3-16 CONT'D

Geographic Area	Number Of Dairy Cows	Number Of Milking Cows	Average Daily Milk Prod.	Average Lactation Period (Mn)	Total Milk Production (Lt)	Number Of Dairy Camels	Number Of Milking Camels	Average Daily Milk Prod.	Average Lactation Period (Mn)	Total Milk Production (Lt)
Somale	81,721	108,913	1.811	6	42,888,125	52,434	31,451	3.599	9	35,431,547
Shinele	6,816	4,098	1.695	6	2,560,655	2,815	1,321	2.981	10	1,982,316
Jijiga	30,900	61,492	1.713	6	45,827,750	*	4,229	2.891	9	3,388,817
Liben	44,004	43,322	2.053	7	37,387,845	43,196	25,901	3.868	10	62,103,144
Benshangul-Gumuz	26,175	68,014	1.196	7	17,188,858	-	*	*	-	-
Metekel	3,947	45,226	1.093	7	20,027,449	-	*	-	-	-
Asosa	17,358	14,339	1.287	7	7,418,511	-	*	-	-	-
Kemeshi	4,870	8,449	1.444	6	4,037,633	-	*	*	-	-
S.N.N.P.R	2,446,775	2,091,611	1.259	7	573,033,327	-	*	*	*	-
Gurage	314,398	236,163	0.857	7	83,312,993	-	*	-	-	-
Hadiya	186,590	187,514	1.07	7	84,697,548	-	*	-	-	-
Kembata Tembaro	89,388	89,131	1.358	7	52,489,933	-	*	-	-	-
Sidama	578,277	451,146	1.272	7	248,554,216	-	*	-	-	-
Gedio	25,529	22,717	0.423	6	3,059,103	-	*	-	-	-
Wolayita	218,672	196,184	1.451	8	148,582,168	-	*	-	-	-
South Omo	153,799	113,521	1.457	7	89,494,000	-	*	-	-	-
Shaka	22,138	23,466	1.554	6	12,494,509	-	*	-	-	-
Kaffa	157,060	163,269	1.46	6	87,890,549	-	*	-	-	-
Gamo Gofa	241,924	218,914	1.194	6	97,263,718	-	*	-	-	-
Bench-Maji	122,621	108,010	1.727	7	77,847,814	-	*	*	*	-
Yem Sp. Wereda	10,817	9,511	0.899	7	3,566,252	-	*	*	*	-
Amaro Sp. Wereda	18,192	17,724	0.883	6	5,353,105	-	*	-	-	-
Burji Sp. Wereda	7,381	5,812	0.886	6	1,691,444	-	*	-	-	-
Konso Sp. Wereda	16,757	14,517	0.931	8	7,013,018	-	*	-	-	-
Dirashe Sp. Wereda	13,393	9,832	1.131	7	4,857,934	-	*	-	-	-
Dawro	104,888	70,960	1.162	7	35,884,455	-	*	-	-	-
Basketo Sp. Wereda	6,446	5,345	0.993	7	2,001,477	-	*	-	-	-
Konta Sp. Wereda	17,267	15,378	1.257	6	7,548,865	-	*	-	-	-
Konta Special	113,293	103,432	1.004	6	42,432,960	-	*	-	-	-
Alaba Special	27,946	29,066	1.034	7	12,461,567	-	*	-	-	-
Harari	8,177	8,527	1.814	6	2,947,857	*	*	3.746	11	*
Hundene	8,177	8,527	1.814	6	5,895,714	*	*	3.746	11	*
Addis Ababa	13,851	11,435	1.881	7	5,213,738	-	*	-	-	-
Zone 3	10,795	8,645	1.862	8	8,110,431	-	*	-	-	-
Zone 6	3,055	2,790	1.938	6	2,317,044	-	*	-	-	-
Dire Dawa	17,340	10,550	1.518	6	2,818,076	2,043	1,579	2.632	10	929,890

TABLE 3-17 TOTAL EGG PRODUCTION BY ZONE, AND REGION

Geographic Area	Total Laying Hens	Average Number of Clutches /Anum	Average Number of Days /Clutch	Average Number of Eggs /Hen /Clutch	Total Egg Production (Number)
Ethiopia	9,605,331	5	20	12	63,523,379
Tigray	859,726	5	21	13	6,664,608
North West Tigray	186,549	4	17	12	1,885,125
Central Tigray	287,065	5	21	14	5,207,199
Eastern Tigray	156,152	8	24	12	3,051,113
Southern Tigray	144,404	5	24	15	2,414,033
Western Tigray	85,557	3	17	12	771,745
Afar	13,264	4	19	11	69,789
Zone 1	368	4	20	12	*
Zone 3	12,896	4	19	11	131,633
Amhara	2,838,747	5	21	12	19,685,104
North Gondar	469,230	4	20	11	4,498,067
South Gondar	296,510	4	21	11	3,063,053
North Wolo	277,516	6	22	11	4,152,319
South Wolo	541,420	7	24	12	9,683,004
North Shewa	460,671	5	21	12	5,438,111
East Gojam	250,742	7	20	13	5,006,251
West Gojam	302,140	4	20	13	4,041,102
Waghamera	48,387	6	22	11	700,381
Agewawie	130,905	4	21	13	1,625,205
Oromia	61,226	4	21	12	626,530
Oromia	3,669,670	5	20	12	25,628,624
West Wellega	310,169	4	18	11	2,681,485
East Welega	204,331	3	19	11	1,715,484
Illubabor	222,744	3	17	10	1,671,742
Jimma	435,934	4	19	10	4,144,315
West Shewa	242,787	6	21	12	3,893,243
North Shewa	255,296	6	23	14	4,667,138
East Shewa	352,968	7	22	13	6,442,851
Arsi	429,848	5	22	13	6,580,947
West Harerghe	249,639	5	19	12	3,234,668
East Harerghe	378,202	6	18	11	5,327,489
Bale	181,017	6	21	13	2,853,375
Borena	121,621	4	19	12	1,365,569
South West Shewa	160,194	7	21	12	2,813,509
Guji	124,918	4	17	12	1,365,213

TABLE 3-17 CONT'D

Geographic Area	Total Laying Hens	Average Number of Clutches /Anum	Average Number of Days /Clutch	Average Number of Eggs /Hen /Clutch	Total Egg Production (Number)
Somale	61,464	5	15	13	415,959
Shinele	2,439	6	19	13	31,696
Jijiga	41,536	5	15	12	558,920
Liben	17,488	5	16	13	203,945
Benshangul-Gumuz	170,758	4	17	11	832,964
Metekel	60,822	3	17	12	612,379
Asosa	88,075	4	17	10	851,105
Kemeshi	21,861	3	18	10	202,444
S.N.N.P.R	1,935,853	4	18	11	9,669,317
Gurage	193,534	4	19	11	1,989,408
Hadiya	192,764	3	17	11	1,512,359
Kembata Tembaro	89,181	3	15	11	755,155
Sidama	296,272	4	19	12	3,583,740
Gedio	58,791	3	18	11	592,020
Wolayita	190,218	4	18	11	1,901,282
South Omo	83,689	4	19	11	787,137
Shaka	34,309	3	17	11	311,078
Kaffa	181,364	3	16	10	1,403,086
Gamo Gofa	154,422	5	19	11	1,735,104
Bench-Maji	120,850	5	16	11	1,550,092
Yem Sp. Wereda	10,108	4	19	11	110,539
Amaro Sp. Wereda	16,264	4	18	11	147,858
Burji Sp. Wereda	6,182	3	19	11	55,523
Konso Sp. Wereda	27,204	5	16	10	307,155
Dirashe Sp. Wereda	22,003	5	18	11	239,367
Dawro	46,923	5	15	9	448,305
Basketo Sp. Wereda	6,987	5	20	11	85,722
Konta Sp. Wereda	14,378	3	16	9	103,985
Konta Special	161,380	4	19	10	1,328,263
Alaba Special	29,030	4	19	10	273,244
Harari	10,265	7	17	11	84,373
Hundene	10,265	7	17	11	168,747
Addis Ababa	24,962	8	22	14	339,882
Zone 3	16,125	8	22	14	434,406
Zone 6	8,837	8	22	14	245,358
Dire Dawa	20,622	5	18	11	132,759

TABLE 3-18: NUMBER OF CATTLE BY SEX, BREED, ZONE, AND REGION

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Ethiopia	38,102,682	16,756,692	98,329	5,245	21,073,435	158,589	10,391
Tigray	2,546,790	1,222,517	*	*	1,289,261	*	*
North West Tigray	691,608	299,246	*	-	365,800	*	*
Central Tigray	614,861	334,281	*	-	280,091	*	*
Eastern Tigray	284,386	141,062	1,661	*	137,952	*	*
Southern Tigray	574,215	292,330	*	-	279,295	*	*
Western Tigray	381,721	155,598	-	-	226,123	-	*
Afar	385,805	77,443	-	-	308,361	-	*
Zone 1	126,374	22,606	-	-	103,767	-	*
Zone 3	259,431	54,837	-	-	204,594	-	*
Amhara	9,592,252	4,876,887	25,342	*	4,654,381	32,349	*
North Gonder	1,547,651	745,684	*	-	798,263	*	*
South Gonder	1,118,652	581,338	*	-	535,440	*	*
North Wolo	822,188	411,232	*	-	408,258	*	*
South Wolo	1,426,158	710,679	*	*	701,677	*	*
North Shewa	972,172	539,786	16,510	-	395,638	20,238	*
East Gojam	1,150,217	636,075	-	-	513,862	*	*
West Gojam	1,406,586	740,756	-	-	665,124	*	*
Waghamera	234,682	110,161	-	-	124,522	-	*
Agewawie	607,051	268,713	*	-	337,167	*	*
Oromia	306,895	132,464	-	-	174,431	-	*
Oromia	16,806,160	7,391,057	48,459	3,345	9,283,126	75,976	4,199
West Wellega	993,996	470,969	-	-	523,027	-	*
East Welega	1,279,640	605,362	*	-	673,657	*	*
Illubabor	736,599	339,114	*	-	396,869	*	*
Jimma	1,805,856	828,911	-	-	976,945	-	*
West Shewa	1,492,408	701,106	*	-	781,910	*	*
North Shewa	1,146,266	527,765	22,034	*	556,006	36,997	*
East Shewa	1,187,320	556,920	*	-	629,517	*	*
Arsi	2,205,631	1,010,901	18,365	2,139	1,144,915	28,495	*
West Harerghe	756,426	330,011	-	-	426,414	-	*
East Harerghe	927,849	341,218	*	-	582,566	*	*
Bale	1,765,230	681,715	*	-	1,082,209	*	*
Borena	987,814	349,488	*	-	637,407	*	*
South West Shewa	661,697	344,784	*	*	315,255	*	*
Guji	859,428	302,792	*	-	556,427	-	*

TABLE 3-18 CONT'D

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Somale	462,958	154,526	-	-	308,357	*	*
Shinele	17,146	5,076	-	-	12,069	-	*
Jijiga	289,939	108,022	-	-	181,918	-	*
Liben	155,873	41,428	-	-	114,370	*	*
Benshangul-Gumuz	281,496	124,360	*	-	156,949	*	*
Metekel	181,039	80,939	-	-	100,099	-	*
Asosa	66,100	29,195	-	-	36,905	-	*
Kemeshi	34,357	14,225	*	-	19,945	*	*
S.N.N.P.R	7,881,688	2,845,974	10,386	*	4,994,412	27,736	*
Gurage	893,060	255,734	-	*	636,253	-	*
Hadiya	670,527	278,811	*	-	389,817	*	*
Kembata Tembaro	290,637	104,834	2,285	*	166,014	15,610	*
Sidama	1,411,920	361,771	*	-	1,042,757	*	*
Gedio	92,202	36,614	-	-	55,588	-	*
Wolayita	695,489	272,723	*	-	414,687	*	*
South Omo	681,454	253,691	*	-	426,896	*	*
Shaka	75,324	28,300	-	-	47,023	-	*
Kaffa	560,122	241,921	-	*	317,173	*	*
Gamo Gofa	910,216	353,573	*	-	556,158	*	*
Bench-Maji	364,466	136,046	*	-	227,788	*	*
Yem Sp. Wereda	48,701	23,046	-	-	25,654	-	*
Amaro Sp. Wereda	83,371	32,435	-	-	50,936	-	*
Burji Sp. Wereda	33,434	18,520	-	-	14,914	-	*
Konso Sp. Wereda	84,142	41,458	-	-	42,685	-	*
Dirashe Sp. Wereda	67,797	35,239	-	-	32,558	-	*
Dawro	296,086	106,876	-	-	189,211	-	*
Basketo Sp. Wereda	21,854	9,640	-	-	12,214	-	*
Konta Sp. Wereda	55,516	23,635	-	-	31,881	-	*
Konta Special	437,503	182,892	-	-	254,611	-	*
Alaba Special	107,868	48,215	*	-	59,595	-	*
Harari	32,736	11,872	*	-	20,406	*	*
Hundene	32,736	11,872	*	-	20,406	*	*
Addis Ababa	67,268	37,205	461	-	27,619	1,859	*
Zone 3	47,673	24,995	257	-	21,003	*	*
Zone 6	19,595	12,211	204	-	6,616	*	*
Dire Dawa	45,529	14,850	*	-	30,563	*	*

TABLE 3-19 NUMBER OF SHEEP BY SEX, BREED, ZONE, AND REGION

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Ethiopia	16,575,493	4,111,273	*	*	12,443,625	1,444	13,946
Tigray	652,521	156,655	*	*	494,904	*	*
North West Tigray	47,869	13,151	-	-	34,718	-	*
Central Tigray	137,969	32,982	-	-	104,988	-	*
Eastern Tigray	309,223	67,889	*	-	240,932	*	*
Southern Tigray	128,557	34,055	-	-	94,501	-	*
Western Tigray	28,903	8,579	-	*	19,765	-	*
Afar	238,667	53,960	-	-	184,707	-	*
Zone 1	67,581	13,765	-	-	53,816	-	*
Zone 3	171,086	40,195	-	-	130,891	-	*
Amhara	6,116,336	1,463,761	-	*	4,639,633	*	*
North Gondar	487,561	109,325	-	-	378,237	-	*
South Gondar	496,970	105,852	-	-	391,118	-	*
North Wolo	638,067	148,146	-	-	489,921	-	*
South Wolo	1,661,367	429,138	-	*	1,221,776	-	*
North Shewa	1,155,696	319,900	-	*	833,967	-	*
East Gojam	854,352	157,369	-	-	696,682	*	*
West Gojam	453,949	112,245	-	-	341,347	-	*
Waghamera	51,587	12,592	-	-	38,994	-	*
Agewawie	292,642	58,530	-	-	234,113	-	*
Oromia	24,143	10,665	-	-	13,478	-	*
Oromia	5,969,518	1,514,255	-	*	4,450,202	*	4,349
West Wellega	207,081	57,905	-	-	148,851	*	*
East Welega	308,188	80,244	-	-	227,944	-	*
Illubabor	287,655	64,816	-	-	222,839	-	*
Jimma	678,820	155,413	-	-	523,408	-	*
West Shewa	664,207	159,412	-	*	502,956	-	*
North Shewa	829,306	219,479	-	-	608,793	-	*
East Shewa	250,456	67,267	-	-	183,189	-	*
Arsi	1,239,594	325,194	-	-	913,420	-	*
West Harerghe	122,142	28,092	-	-	94,051	-	*
East Harerghe	210,549	60,482	-	-	150,067	-	*
Bale	631,007	147,141	-	-	483,191	-	*
Borena	161,880	43,587	-	-	118,293	-	*
South West Shewa	133,509	33,596	-	-	99,912	-	*
Guji	245,124	71,626	-	-	173,289	-	*

TABLE 3-19 CONT'D

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Somale	460,116	121,750	-	-	338,367	-	*
Shinele	42,463	11,063	-	-	31,400	-	*
Jijiga	282,051	66,807	-	-	215,244	-	*
Liben	135,602	*	-	-	91,723	-	*
Benshangul-Gumuz	58,027	16,065	*	-	41,303	*	*
Metekel	32,384	8,945	*	-	22,780	*	*
Asosa	12,697	3,438	-	-	9,259	-	*
Kemeshi	12,946	3,682	-	-	9,264	-	*
S.N.N.P.R	3,007,969	763,959	-	-	2,243,038	*	*
Gurage	241,086	48,674	-	-	192,412	-	*
Hadiya	202,869	47,123	-	-	155,746	-	*
Kembata Tembaro	95,010	28,538	-	-	66,471	-	*
Sidama	315,089	68,840	-	-	246,249	-	*
Gedio	105,712	27,027	-	-	78,685	-	*
Wolayita	122,653	41,049	-	-	81,604	-	*
South Omo	486,963	169,720	-	-	317,243	-	*
Shaka	41,033	9,793	-	-	31,240	-	*
Kaffa	319,369	68,985	-	-	250,384	-	*
Gamo Gofa	473,939	99,445	-	-	373,521	*	*
Bench-Maji	148,821	31,908	-	-	116,913	-	*
Yem Sp. Wereda	18,240	3,393	-	-	14,847	-	*
Amaro Sp. Wereda	50,091	12,211	-	-	37,880	-	*
Burji Sp. Wereda	1,975	700	-	-	1,274	-	*
Konso Sp. Wereda	68,468	26,945	-	-	41,523	-	*
Dirashe Sp. Wereda	10,190	3,053	-	-	7,137	-	*
Dawro	76,207	21,962	-	-	54,246	-	*
Basketo Sp. Wereda	9,241	1,645	-	-	7,596	-	*
Konta Sp. Wereda	13,576	4,361	-	-	9,215	-	*
Konta Special	182,228	41,960	-	-	140,269	-	*
Alaba Special	25,211	6,628	-	-	18,583	-	*
Harari	3,757	868	-	-	2,889	-	*
Hundene	3,757	868	-	-	2,889	-	*
Addis Ababa	16,494	5,135	-	-	11,359	-	*
Zone 3	11,172	3,702	-	-	7,470	-	*
Zone 6	5,322	1,433	-	-	3,889	-	*
Dire Dawa	52,088	14,865	-	-	37,223	-	*

TABLE 3-20: NUMBER OF GOATS BY SEX, BREED, ZONE, AND REGION

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Ethiopia	13,834,703	4,099,309	*	-	9,721,375	*	*
Tigray	2,034,710	597,581	*	-	1,423,252	*	*
North West Tigray	682,642	194,670	*	-	474,305	*	*
Central Tigray	786,190	236,206	-	-	549,984	-	*
Eastern Tigray	144,445	39,622	-	-	104,823	-	*
Southern Tigray	251,078	69,578	-	-	181,500	-	*
Western Tigray	170,356	57,505	-	-	112,641	-	*
Afar	438,083	92,560	-	-	345,523	-	*
Zone 1	115,851	20,435	-	-	95,416	-	*
Zone 3	322,232	72,125	-	-	250,107	-	*
Amhara	3,969,106	1,238,534	-	-	2,730,572	-	*
North Gondar	791,826	223,876	-	-	567,950	-	*
South Gondar	421,895	125,016	-	-	296,879	-	*
North Wolo	550,433	156,483	-	-	393,950	-	*
South Wolo	799,454	269,460	-	-	529,994	-	*
North Shewa	537,105	210,320	-	-	326,785	-	*
East Gojam	163,133	46,341	-	-	116,792	-	*
West Gojam	189,759	61,666	-	-	128,093	-	*
Waghamera	271,727	69,438	-	-	202,289	-	*
Agewawie	104,976	33,511	-	-	71,465	-	*
Oromia	138,798	42,423	-	-	96,376	-	*
Oromia	4,081,039	1,173,806	-	-	2,907,233	-	*
West Wellega	74,458	26,312	-	-	48,145	-	*
East Welega	153,038	49,093	-	-	103,945	-	*
Illubabor	83,951	24,795	-	-	59,156	-	*
Jimma	232,125	69,118	-	-	163,007	-	*
West Shewa	153,087	45,830	-	-	107,257	-	*
North Shewa	104,112	30,395	-	-	73,717	-	*
East Shewa	445,803	117,148	-	-	328,655	-	*
Arsi	288,098	82,134	-	-	205,964	-	*
West Harerghe	502,589	145,590	-	-	356,999	-	*
East Harerghe	647,955	196,101	-	-	451,854	-	*
Bale	472,863	127,397	-	-	345,466	-	*
Borena	584,729	164,275	-	-	420,454	-	*
South West Shewa	121,776	34,838	-	-	86,938	-	*
Guji	216,453	60,779	-	-	155,674	-	*

TABLE 3-20 CONT'D

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Somale	606,717	159,886	-	-	446,832	-	*
Shinele	84,949	20,894	-	-	64,054	-	*
Jijiga	274,491	77,535	-	-	196,956	-	*
Liben	247,277	61,456	-	-	185,821	-	*
Benshangul-Gumuz	218,515	64,500	-	-	154,015	-	*
Metekel	89,579	27,803	-	-	61,776	-	*
Asosa	94,199	27,584	-	-	66,615	-	*
Kemeshi	34,737	9,114	-	-	25,623	-	*
S.N.N.P.R	2,317,624	726,326	*	-	1,591,156	-	*
Gurage	115,767	25,422	-	-	90,345	-	*
Hadiya	133,425	37,059	-	-	96,367	-	*
Kembata Tembaro	36,042	10,152	*	-	25,748	-	*
Sidama	175,321	49,911	-	-	125,410	-	*
Gedio	9,157	2,234	-	-	6,922	-	*
Wolayita	119,539	33,932	-	-	85,608	-	*
South Omo	900,132	320,579	-	-	579,553	-	*
Shaka	8,087	2,342	-	-	5,745	-	*
Kaffa	87,847	23,564	-	-	64,283	-	*
Gamo Gofa	224,314	65,243	-	-	159,071	-	*
Bench-Maji	48,407	11,342	-	-	37,065	-	*
Yem Sp. Wereda	17,340	3,690	-	-	13,650	-	*
Amaro Sp. Wereda	39,738	11,908	-	-	27,831	-	*
Burji Sp. Wereda	21,507	6,862	-	-	14,645	-	*
Konso Sp. Wereda	116,310	44,513	-	-	71,796	-	*
Dirashe Sp. Wereda	52,133	17,241	-	-	34,891	-	*
Dawro	39,033	11,046	-	-	27,988	-	*
Basketo Sp. Wereda	3,270	875	-	-	2,395	-	*
Konta Sp. Wereda	7,144	2,124	-	-	5,020	-	*
Konta Special	122,610	36,466	-	-	86,143	-	*
Alaba Special	40,501	9,819	-	-	30,681	-	*
Harari	26,356	7,569	-	-	18,787	-	*
Hundene	26,356	7,569	-	-	18,787	-	*
Addis Ababa	10,218	3,290	-	-	6,928	-	*
Zone 3	7,588	2,345	-	-	5,242	-	*
Zone 6	*	*	-	-	1,686	-	*
Dire Dawa	132,335	35,258	-	-	97,077	-	*

TABLE 3-21: ESTIMATED NUMBER OF LIVESTOCK VACCINATED BY ZONE AND REGION

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Ethiopia	8,694,197	1,133,056	989,759	493,498	38,005	141,284
Tigray	1,271,974	217,466	496,885	62,348	15,457	38,563
North West Tigray	272,050	13,077	132,162	7,447	341	13,661
Central Tigray	297,170	31,738	203,130	19,951	2,121	6,701
Eastern Tigray	217,383	117,529	54,613	13,855	-	359
Southern Tigray	391,160	48,943	79,999	17,761	12,622	12,387
Western Tigray	94,211	6,179	26,981	3,334	373	5,456
Afar	11,834	3,082	5,129	-	1,177	105
Zone 1	6,058	930	1,052	-	-	*
Zone 3	5,775	2,152	4,077	-	1,177	105
Amhara	1,386,735	505,745	187,056	84,805	809	76,187
North Gondar	145,558	33,550	50,954	20,306	-	*
South Gondar	148,021	15,664	7,230	8,949	-	*
North Wolo	92,731	1,643	13,572	1,421	331	292
South Wolo	357,286	208,691	48,686	16,821	-	59,602
North Shewa	116,014	102,494	20,190	5,165	-	11,254
East Gojam	220,301	117,198	13,773	18,222	-	1,368
West Gojam	130,586	10,519	-	3,161	-	*
Waghamera	27,516	5,874	23,727	1,533	-	*
Agewawie	66,283	8,978	2,767	9,056	-	3,294
Oromia	82,439	1,134	6,158	170	478	377
Oromia	4,170,912	327,868	167,580	311,392	2,520	22,392
West Wellega	429,408	1,228	297	10,681	341	1,822
East Welega	287,640	8,548	-	32,629	-	310
Illubabor	172,871	2,710	-	7,984	-	*
Jimma	270,138	-	-	6,576	-	1,900
West Shewa	225,451	67,050	674	36,346	-	8,972
North Shewa	316,298	74,751	3,157	1,110	-	3,251
East Shewa	414,219	20,270	33,230	34,099	-	*
Arsi	579,801	105,753	3,612	98,696	-	*
West Harerghe	206,591	10,323	46,662	5,141	343	*
East Harerghe	120,635	21,585	30,714	7,437	-	*
Bale	446,996	4,225	6,702	24,310	-	*
Borena	282,191	6,810	13,431	1,120	1,392	3,476
South West Shewa	166,821	2,320	-	34,312	-	887
Guji	251,851	2,294	29,102	10,952	444	1,775

Note: Draught animals in this and the following tables refer to Horses, Asses, and Mules.

TABLE 3-21 CONT'D

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Somale	53,599	32,788	74,563	4,152	17,940	*
Shinele	1,431	313	1,560	-	8	*
Jijiga	6,266	6,891	2,409	110	134	*
Liben	45,903	25,584	70,594	4,041	17,797	*
Benshangul-Gumuz	59,989	371	2,696	1,364	-	451
Metekel	30,731	308	-	1,083	-	*
Asosa	19,034	-	2,539	156	-	*
Kemeshi	10,224	63	157	125	-	451
S.N.N.P.R	1,683,191	29,052	23,050	29,151	-	2,738
Gurage	182,093	906	3,929	3,682	-	*
Hadiya	201,009	747	491	6,342	-	*
Kembata Tembaro	85,286	1,351	981	3,568	-	*
Sidama	232,708	3,289	-	1,242	-	*
Gedio	18,308	-	-	1,603	-	*
Wolayita	156,711	3,144	-	575	-	627
South Omo	55,293	2,789	4,930	880	-	*
Shaka	50,012	4,629	1,599	369	-	76
Kaffa	110,362	3,139	874	3,218	-	754
Gamo Gofa	215,434	-	2,046	-	-	*
Bench-Maji	141,790	2,499	715	1,384	-	230
Yem Sp. Wereda	25,176	-	-	-	-	23
Amaro Sp. Wereda	12,129	374	844	-	-	*
Burji Sp. Wereda	9,961	48	887	14	-	*
Konso Sp. Wereda	13,690	1,467	3,224	-	-	*
Dirashe Sp. Wereda	7,735	601	540	104	-	*
Dawro	50,606	-	-	604	-	*
Basketo Sp. Wereda	7,740	398	-	62	-	*
Konta Sp. Wereda	12,184	206	-	131	-	268
Konta Special	65,525	2,321	-	3,836	-	759
Alaba Special	29,440	1,143	1,990	1,538	-	*
Harari	2,402	23	176	81	-	*
Hundene	2,402	23	176	81	-	*
Addis Ababa	37,132	588	98	27	-	514
Zone 3	23,221	452	98	27	-	514
Zone 6	13,911	136	-	-	-	*
Dire Dawa	16,428	16,074	32,526	179	102	334

TABLE 3-22: ESTIMATED NUMBER OF LIVESTOCK AFFLICTED/DISEASED BY ZONE AND REGION

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Ethiopia	5,592,656	2,671,938	2,117,792	558,748	53,877	9,239,119
Tigray	179,794	77,786	236,837	19,496	1,183	592,450
North West Tigray	47,900	11,508	56,910	1,647	457	115,327
Central Tigray	37,574	15,826	125,858	7,808	273	246,914
Eastern Tigray	23,028	35,599	15,651	2,820	-	19,176
Southern Tigray	38,708	10,860	28,953	5,372	383	63,132
Western Tigray	32,584	3,992	9,465	1,849	70	147,901
Afar	167,063	108,766	142,716	2,162	26,296	24,274
Zone 1	70,402	34,802	40,941	45	2,027	76
Zone 3	96,661	73,964	101,775	2,117	24,269	24,199
Amhara	1,050,525	834,559	576,434	130,651	2,698	2,467,306
North Gondar	180,495	68,308	139,598	21,257	-	944,630
South Gondar	112,334	88,764	64,116	19,237	-	164,444
North Wolo	57,582	133,413	52,276	5,594	624	80,144
South Wolo	94,829	175,386	111,310	9,619	1,435	108,927
North Shewa	74,204	92,477	79,180	15,576	-	304,481
East Gojam	119,698	137,323	20,226	17,936	-	118,195
West Gojam	225,209	74,309	14,923	14,419	-	386,530
Waghamera	33,619	4,910	49,467	5,389	-	30,887
Agewawie	127,405	58,022	30,772	20,508	-	318,219
Oromia	25,150	1,648	14,565	1,116	639	10,849
Oromia	2,838,753	1,129,746	637,750	316,521	18,341	3,970,305
West Wellega	306,683	27,919	15,189	21,022	-	422,837
East Welega	297,941	49,064	29,294	26,455	-	337,432
Illubabor	189,219	58,519	14,291	10,382	-	264,284
Jimma	310,705	101,354	24,128	26,321	-	454,903
West Shewa	306,811	147,579	29,619	26,796	-	545,144
North Shewa	112,246	153,432	20,534	8,855	-	153,775
East Shewa	129,813	52,601	89,124	20,988	2,600	427,474
Arsi	381,421	296,973	30,305	67,906	3,279	476,169
West Harerghe	113,572	11,347	56,273	13,852	1,815	145,409
East Harerghe	153,596	12,856	61,214	11,288	904	150,099
Bale	256,257	134,065	96,280	43,774	3,080	107,103
Borena	72,143	27,556	83,082	3,282	4,183	108,439
South West Shewa	96,755	19,741	15,789	13,852	-	211,235
Guji	111,592	36,740	72,629	21,748	2,481	166,002

TABLE 3-22 CONT'D

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Somale	32,895	52,204	62,706	1,478	3,935	11,152
Shinele	6,217	17,187	27,171	553	1,035	568
Jijiga	19,045	26,674	21,856	459	1,033	3,903
Liben	7,633	8,342	13,678	466	1,866	6,682
Benshangul-Gumuz	130,875	30,868	162,103	14,252	-	657,915
Metekel	60,077	9,849	31,257	4,869	-	137,893
Asosa	55,663	15,283	117,887	8,040	-	478,118
Kemeshi	15,135	5,736	12,959	1,343	-	41,903
S.N.N.P.R	1,170,517	428,155	280,851	72,250	-	1,473,265
Gurage	108,209	25,467	5,140	3,000	-	73,025
Hadiya	89,196	15,705	15,109	6,523	-	147,490
Kembata Tembaro	30,664	5,589	1,455	2,677	-	26,700
Sidama	142,985	33,826	12,604	14,169	-	87,231
Gedio	10,924	11,396	174	5,144	-	37,902
Wolayita	157,564	9,980	18,489	5,204	-	102,239
South Omo	79,349	58,453	107,958	2,573	-	77,811
Shaka	9,448	6,501	1,180	537	-	63,447
Kaffa	83,604	69,577	15,509	8,368	-	258,029
Gamo Gofa	190,211	91,758	27,813	5,118	-	157,751
Bench-Maji	59,348	29,315	5,216	3,155	-	204,374
Yem Sp. Wereda	5,105	1,320	1,273	222	-	5,711
Amaro Sp. Wereda	16,243	7,660	6,555	858	-	3,761
Burji Sp. Wereda	13,424	527	6,894	695	-	7,898
Konso Sp. Wereda	21,491	11,543	20,012	410	-	15,589
Dirashe Sp. Wereda	13,963	2,302	9,352	1,126	-	19,049
Dawro	66,740	11,301	2,301	3,217	-	28,505
Basketo Sp. Wereda	1,622	694	391	25	-	2,578
Konta Sp. Wereda	16,867	2,184	746	350	-	9,031
Konta Special	40,325	28,804	16,768	7,670	-	114,860
Alaba Special	13,235	4,254	5,913	1,209	-	30,284
Harari	6,203	364	2,618	431	341	2,755
Hundene	6,203	364	2,618	431	341	2,755
Addis Ababa	7,554	3,643	1,059	1,273	-	34,241
Zone 3	5,543	2,032	864	502	-	18,575
Zone 6	2,011	1,611	195	771	-	15,666
Dire Dawa	8,477	5,847	14,717	233	1,083	5,455

TABLE 3-23: ESTIMATED NUMBER OF LIVESTOCK TREATED BY ZONE AND REGION

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Ethiopia	2,014,274	322,280	328,991	146,688	8,061	179,118
Tigray	79,052	21,597	85,852	8,358	498	24,561
North West Tigray	27,644	6,189	28,125	886	155	*
Central Tigray	12,261	3,597	34,086	2,745	273	7,387
Eastern Tigray	8,936	8,030	12,001	1,926	-	1,716
Southern Tigray	19,687	1,432	9,000	2,388	-	7,474
Western Tigray	10,525	2,349	2,640	413	70	7,984
Afar	4,147	2,673	3,346	-	71	*
Zone 1	1,802	243	484	-	12	*
Zone 3	2,344	2,430	2,862	-	58	*
Amhara	351,750	127,891	99,564	23,935	187	36,740
North Gondar	43,570	7,517	24,503	4,560	-	4,890
South Gondar	27,243	9,569	2,985	3,550	-	*
North Wolo	5,809	13,008	5,272	-	-	307
South Wolo	21,958	26,297	19,179	3,669	-	1,866
North Shewa	15,281	14,534	7,750	1,711	-	16,743
East Gojam	47,658	22,517	2,892	1,348	-	*
West Gojam	112,873	15,363	4,058	3,374	-	1,658
Waghamera	8,130	1,558	19,198	782	-	*
Agewawie	63,187	17,528	10,567	4,847	-	10,531
Oromia	6,042	-	3,161	93	187	746
Oromia	1,096,963	136,419	78,343	90,093	6,524	88,011
West Wellega	228,729	10,199	3,080	12,229	-	25,608
East Welega	171,941	10,298	6,567	10,691	-	21,835
Illubabor	105,155	7,489	1,054	5,152	-	2,138
Jimma	130,813	8,208	-	6,333	-	4,156
West Shewa	68,637	13,526	-	6,028	-	8,947
North Shewa	28,138	24,153	848	566	-	1,102
East Shewa	39,074	5,818	12,862	5,220	-	13,760
Arsi	83,238	29,410	347	16,295	798	7,137
West Harerghe	34,320	1,734	13,641	1,586	-	*
East Harerghe	45,402	3,223	9,274	1,444	339	396
Bale	68,629	14,610	972	16,766	2,407	*
Borena	21,259	4,362	13,999	1,247	703	2,139
South West Shewa	40,415	1,589	188	4,321	-	189
Guji	31,212	1,801	15,510	2,216	2,277	604

TABLE 3-23 CONT'D

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Somale	3,729	3,978	7,887	139	410	*
Shinele	122	347	404	-	14	*
Jijiga	1,380	840	231	-	-	*
Liben	2,227	2,791	7,252	139	396	*
Benshangul-Gumuz	93,054	5,791	16,530	6,552	-	9,341
Metekel	38,335	2,106	1,695	2,649	-	3,253
Asosa	45,073	2,384	13,908	3,598	-	4,908
Kemeshi	9,647	1,302	927	305	-	1,180
S.N.N.P.R	379,927	21,676	32,581	17,172	-	17,012
Gurage	27,084	246	-	556	-	*
Hadiya	10,496	714	-	489	-	1,147
Kembata Tembaro	9,925	927	134	1,003	-	*
Sidama	27,604	1,016	1,920	1,530	-	*
Gedio	3,258	328	174	1,101	-	496
Wolayita	90,103	887	891	2,866	-	4,755
South Omo	16,871	4,284	14,133	550	-	155
Shaka	3,911	334	25	163	-	675
Kaffa	15,240	870	-	1,859	-	*
Gamo Gofa	76,294	-	3,626	1,480	-	650
Bench-Maji	14,802	4,719	371	977	-	3,366
Yem Sp. Wereda	3,382	221	23	46	-	65
Amaro Sp. Wereda	7,340	1,059	1,319	180	-	127
Burji Sp. Wereda	9,524	185	2,276	145	-	233
Konso Sp. Wereda	13,249	2,426	6,156	57	-	*
Dirashe Sp. Wereda	2,743	-	831	170	-	*
Dawro	28,976	1,247	196	2,100	-	*
Basketo Sp. Wereda	827	146	20	-	-	*
Konta Sp. Wereda	7,972	189	111	210	-	64
Konta Special	9,095	1,878	377	1,545	-	5,278
Alaba Special	1,233	-	-	146	-	*
Harari	2,134	-	887	143	26	21
Hundene	2,134	-	887	143	26	21
Addis Ababa	2,255	374	-	214	-	3,432
Zone 3	1,678	374	-	59	-	2,590
Zone 6	577	-	-	154	-	842
Dire Dawa	1,263	1,880	4,002	83	345	*

TABLE 3-24: ESTIMATED NUMBER OF LIVESTOCK DIED BY ZONE AND REGION

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Ethiopia	2,840,323	2,058,296	1,552,485	345,953	35,119	8,645,703
Tigray	77,975	55,034	161,878	10,488	171	534,612
North West Tigray	13,266	7,080	32,860	144	-	102,980
Central Tigray	17,313	11,552	93,527	5,061	-	230,255
Eastern Tigray	11,738	24,830	10,729	1,615	-	16,168
Southern Tigray	21,961	9,833	20,788	2,969	171	57,740
Western Tigray	13,697	1,739	3,974	700	-	127,470
Afar	126,481	85,218	104,900	1,318	20,013	22,395
Zone 1	56,142	28,688	32,585	45	1,371	76
Zone 3	70,339	56,531	72,315	1,273	18,643	22,319
Amhara	506,836	653,195	410,213	99,590	1,995	2,344,458
North Gonder	60,007	50,480	86,847	15,228	-	895,606
South Gonder	68,581	76,665	54,630	16,945	-	158,491
North Wolo	36,575	101,101	41,628	4,725	293	71,998
South Wolo	51,918	142,522	66,984	5,439	1,435	101,928
North Shewa	43,985	76,048	63,952	11,346	-	292,207
East Gojam	63,811	101,312	18,419	15,796	-	116,716
West Gojam	84,920	55,375	9,520	9,613	-	374,243
Waghamera	21,883	3,363	35,759	4,300	-	26,370
Agewawie	59,967	45,066	23,258	15,580	-	296,430
Oromia	15,190	1,264	9,216	618	267	10,468
Oromia	1,487,756	879,757	491,925	185,460	11,019	3,721,765
West Wellega	110,423	15,103	10,451	9,546	-	362,843
East Welega	138,215	39,701	23,583	14,749	-	313,336
Illubabor	75,216	41,352	11,445	3,681	-	251,174
Jimma	161,609	71,140	21,208	14,014	-	414,092
West Shewa	174,238	120,452	20,412	16,357	-	524,011
North Shewa	54,878	121,969	16,243	7,310	-	151,256
East Shewa	68,853	45,199	68,806	17,162	2,340	411,052
Arsi	273,739	244,748	27,653	42,101	2,067	458,124
West Harerghe	70,708	6,451	40,767	7,440	1,815	142,534
East Harerghe	95,675	6,439	45,774	8,335	339	140,657
Bale	138,010	103,432	74,979	23,807	356	103,995
Borena	26,664	19,651	58,968	728	2,475	97,464
South West Shewa	38,669	15,054	13,567	8,893	-	203,970
Guji	60,859	29,065	58,069	11,336	1,627	147,257

TABLE 3-24 CONT'D

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Somale	17,213	30,202	34,474	938	1,292	10,020
Shinele	5,062	13,932	19,065	423	798	515
Jijiga	9,085	11,812	11,025	285	-	3,333
Liben	3,065	4,458	4,385	230	494	6,172
Benshangul-Gumuz	46,824	20,855	132,429	8,837	-	596,007
Metekel	21,668	6,591	25,181	2,891	-	129,762
Asosa	18,140	10,331	96,592	4,944	-	427,547
Kemeshi	7,015	3,932	10,657	1,001	-	38,697
S.N.N.P.R	562,667	327,947	204,181	38,140	-	1,374,891
Gurage	71,284	22,500	4,838	1,381	-	68,392
Hadiya	48,096	12,408	12,922	4,066	-	132,517
Kembata Tembaro	14,874	4,786	1,326	2,002	-	26,162
Sidama	60,461	15,340	6,002	5,455	-	76,102
Gedio	4,842	5,884	-	2,210	-	33,471
Wolayita	53,828	8,779	16,873	2,268	-	89,493
South Omo	38,694	44,350	70,690	1,265	-	69,991
Shaka	6,146	5,323	1,180	253	-	60,980
Kaffa	56,035	60,516	14,260	5,595	-	249,843
Gamo Gofa	84,151	71,797	16,805	2,579	-	151,440
Bench-Maji	34,729	21,128	3,883	1,609	-	189,446
Yem Sp. Wereda	1,593	988	1,082	152	-	5,567
Amaro Sp. Wereda	6,841	6,160	4,721	550	-	3,428
Burji Sp. Wereda	3,456	351	3,894	212	-	6,613
Konso Sp. Wereda	6,179	7,340	14,228	189	-	14,485
Dirashe Sp. Wereda	6,082	1,786	7,636	358	-	17,534
Dawro	26,072	8,341	1,831	1,768	-	26,817
Basketo Sp. Wereda	572	489	366	-	-	2,225
Konta Sp. Wereda	8,352	1,558	662	137	-	8,762
Konta Special	21,199	24,537	15,688	4,882	-	112,276
Alaba Special	9,180	3,588	5,292	1,209	-	29,346
Harari	3,081	173	1,196	183	209	2,627
Hundene	3,081	173	1,196	183	209	2,627
Addis Ababa	4,541	2,357	996	907	-	33,734
Zone 3	3,240	1,174	802	415	-	18,428
Zone 6	1,302	1,183	195	492	-	15,306
Dire Dawa	6,950	3,557	10,293	90	418	5,195

TABLE 3-25: ANIMAL FEED PRACTICES OF PEASNT HOLDERS – PERCENTAGE USED BY TYPE OF FEED, ZONE, AND REGION

Geographic Area	Total (%)	Green Fodder	Crop Residue	Improved Feed	Hay	By-Product	Others
Ethiopia	100	63.83	25.87	0.14	5.92	0.96	3.29
Tigray	100	40.5	39.39	0.22	14.72	1.11	4.05
North West Tigray	100	50.07	30.43	0.31	15.61	1.31	2.28
Central Tigray	100	32.53	49.63	0.07	16.74	0.14	0.89
Eastern Tigray	100	34.61	37.13	0.49	12.97	1.64	13.16
Southern Tigray	100	38.4	42.6	0.17	13.87	0.7	4.26
Western Tigray	100	66.78	16.8	0.16	11.39	4.49	0.38
Afar	100	86.38	7.7	0.65	3.31	0.78	1.18
Zone 1	100	84.6	13.48	0.03	1.37	0.1	0.43
Zone 3	100	87.39	4.43	1.01	4.4	1.17	1.6
Amhara	100	48.8	35.57	0.12	12.81	0.84	1.86
North Gonder	100	51.5	27.26	0.18	18.24	0.65	2.17
South Gonder	100	39.79	40.72	0.16	17.59	0.61	1.13
North Wolo	100	46.89	41.28	0.07	11.37	0.12	0.27
South Wolo	100	38.41	41.86	0.07	18.63	0.13	0.91
North Shewa	100	43.03	38.05	0.11	15.99	1.38	1.44
East Gojam	100	54.21	37.82	0.11	2.68	2.2	2.98
West Gojam	100	55.44	32.54	0.11	7.38	1.08	3.44
Waghamera	100	49.85	37.18	0.2	11.66	0.13	0.98
Agewawie	100	69.26	20.79	0.05	5.56	1	3.34
Oromia	100	72.04	16.62	0.04	9.78	0.11	1.41
Oromia	100	71.11	22.03	0.2	2.63	1.04	3
West Wellega	100	87.24	7.63	0.02	0.17	0.94	4.01
East Welega	100	82.82	11.14	0.05	0.64	0.64	4.72
Illubabor	100	91.02	3.73	0.01	-	1.07	4.17
Jimma	100	85.62	11.18	0.02	0.09	0.14	2.95
West Shewa	100	75.35	17.21	0.06	2.26	2.49	2.63
North Shewa	100	55.67	23.77	1.18	16.16	1.8	1.42
East Shewa	100	63.92	32.6	0.11	0.88	1.4	1.1
Arsi	100	65.92	27.26	0.06	2.21	1.76	2.78
West Harerghe	100	44.34	46.51	0.04	2.99	0.2	5.92
East Harerghe	100	45.64	43.96	0.76	6.64	0.57	2.44
Bale	100	85.97	10.07	0.23	0.53	1.27	1.93
Borena	100	91.21	7.56	-	0.01	0.02	1.2
South West Shewa	100	63.01	30.98	0.03	2.83	1.57	1.59
Guji	100	83.32	10.32	0.01	0.48	0.02	5.84

TABLE 3-25 CONT'D

Geographic Area	Total (%)	Green Fodder	Crop Residue	Improved Feed	Hay	By-Product	Others
Somale	100	74.96	20.9	0.03	2.36	0.12	1.63
Shinele	100	83.8	12.85	0.11	-	1.07	2.18
Jijiga	100	70.89	23.97	0.04	3.04	0.03	2.04
Liben	100	84.57	13.95	-	0.97	0.16	0.35
Benshangul-Gumuz	100	88.22	8.22	0.15	0.89	0.57	1.95
Metekel	100	85.07	10.31	0.14	1.39	0.16	2.93
Asosa	100	89.9	7.44	0.2	0.7	0.89	0.87
Kemeshi	100	92.12	4.64	0.02	0.01	0.73	2.47
S.N.N.P.R	100	74.1	18.07	0.04	1.36	0.93	5.5
Gurage	100	67.9	25.15	0.01	4.28	0.77	1.89
Hadiya	100	67.12	21.16	0.09	1.12	0.68	9.84
Kembata Tembaro	100	54.8	28.07	0.13	2.08	1.66	13.25
Sidama	100	74.68	18.6	0.03	1.18	1.3	4.22
Gedio	100	77.23	18.48	0.04	0.89	1.28	2.07
Wolayita	100	72.87	18.69	0.11	1.24	0.36	6.73
South Omo	100	86.2	8.4	-	0.05	0.14	5.21
Shaka	100	93.61	2.46	-	*	2.67	1.25
Kaffa	100	93.39	1.97	-	-	2.13	2.5
Gamo Gofa	100	72.69	17.16	-	0.64	0.09	9.41
Bench-Maji	100	91.68	2.41	0.01	0.02	3.04	2.84
Yem Sp. Wereda	100	75.6	17.25	0.06	3.69	0.38	3.01
Amaro Sp. Wereda	100	75.06	16.44	-	0.26	0.02	8.22
Burji Sp. Wereda	100	76.67	20.47	0.04	1.02	0.05	1.75
Konso Sp. Wereda	100	56.97	32.58	0.03	4.44	0.03	5.96
Dirashe Sp. Wereda	100	71.18	20.45	-	1.05	0.63	6.68
Dawro	100	81.09	11.18	0.04	0.63	0.22	6.84
Basketo Sp. Wereda	100	75.03	11.84	0.02	0.02	0.03	13.07
Konta Sp. Wereda	100	79.31	15.07	-	0.28	0.05	5.29
Konta Special	100	70	26.02	-	1.64	0.49	1.85
Alaba Special	100	70.06	28.47	0.03	0.52	0.06	0.85
Harari	100	35.58	59.06	0.16	0.33	4.11	0.76
Hundene	100	35.58	59.06	0.16	0.33	4.11	0.76
Addis Ababa	100	45.48	39.01	0.34	8.96	3.71	2.5
Zone 3	100	53.04	32.36	0.28	9.63	3.2	1.49
Zone 6	100	28.82	53.66	0.46	7.48	4.86	4.72
Dire Dawa	100	75.71	19.17	-	0.1	3.18	1.85

TABLE 3-26: ANIMAL FEED PRACTICES OF PEASNT HOLDERS – NUMBER OF HOLDERS REPORTING BY TYPE OF FEED, ZONE, AND REGION

Geographic Area	Green Fodder	Crop Residue	Improved Feed	Hay	By-Product	Others
Ethiopia	9,523,678	7,842,032	63,491	2,646,808	876,525	2,516,827
Tigray	577,203	549,182	5,163	435,570	54,792	146,670
North West Tigray	111,240	105,506	1,242	91,544	16,869	30,904
Central Tigray	173,243	174,964	376	143,487	2,275	18,743
Eastern Tigray	96,938	89,523	1,899	68,766	13,776	54,367
Southern Tigray	149,348	145,256	1,196	104,883	9,632	40,441
Western Tigray	46,434	33,934	449	26,890	12,240	2,216
Afar	27,637	13,009	762	2,862	1,615	1,495
Zone 1	10,079	8,456	-	440	77	344
Zone 3	17,559	4,553	762	2,422	1,538	1,151
Amhara	2,683,491	2,520,282	18,825	1,439,823	216,238	531,864
North Gonder	365,873	314,950	3,925	250,364	17,565	66,849
South Gonder	339,891	330,063	2,759	216,024	20,548	50,788
North Wolo	255,168	245,487	602	129,491	1,515	11,917
South Wolo	434,468	420,917	2,544	311,567	2,827	38,416
North Shewa	305,742	292,821	1,547	198,425	37,189	63,006
East Gojam	341,448	325,258	3,172	61,430	78,987	85,630
West Gojam	359,600	346,429	2,750	151,809	41,154	144,178
Waghamera	62,995	60,884	517	35,026	322	8,259
Agewawie	153,620	133,649	1,009	52,557	15,679	54,039
Oromia	64,685	49,824	-	33,131	453	8,784
Oromia	3,761,438	2,876,695	31,678	534,472	401,282	930,475
West Wellega	236,298	117,817	599	2,678	15,397	85,787
East Welega	242,442	148,436	2,434	10,670	16,650	106,166
Illubabor	175,190	52,088	212	-	23,422	68,073
Jimma	436,977	321,319	539	4,084	4,856	94,892
West Shewa	302,264	255,128	730	46,536	96,874	75,597
North Shewa	227,270	208,983	6,806	186,060	46,688	51,129
East Shewa	286,431	244,823	382	20,768	30,865	38,405
Arsi	481,735	427,500	2,068	81,052	66,454	102,413
West Harerghe	256,347	259,852	346	42,964	3,997	87,897
East Harerghe	359,534	358,942	9,771	91,605	18,106	59,998
Bale	304,906	180,435	7,053	16,339	44,755	62,033
Borena	128,413	53,147	-	181	458	11,040
South West Shewa	162,292	149,408	547	27,319	32,152	25,517
Guji	161,338	98,817	191	4,215	606	61,529

TABLE 3-26 CONT'D

Geographic Area	Green Fodder	Crop Residue	Improved Feed	Hay	By-Product	Others
Somale	101,762	81,921	56	15,803	689	14,287
Shinele	5,696	2,965	56	-	364	891
Jijiga	71,003	65,189	-	13,919	249	12,643
Liben	25,063	13,768	-	1,884	76	754
Benshangul-Gumuz	98,171	42,134	1,207	7,990	6,235	17,668
Metekel	40,659	19,648	285	4,554	919	8,645
Asosa	43,359	18,308	922	3,435	4,235	5,374
Kemeshi	14,153	4,177	-	-	1,081	3,649
S.N.N.P.R	2,231,527	1,718,925	5,563	202,981	185,946	868,705
Gurage	242,101	220,880	259	57,353	20,569	51,969
Hadiya	191,293	178,918	712	21,423	10,875	129,427
Kembata Tembaro	115,367	105,014	1,188	16,574	12,966	102,022
Sidama	436,686	355,803	1,403	27,031	40,815	93,590
Gedio	82,252	61,175	161	4,536	5,604	15,094
Wolayita	254,026	220,979	1,480	30,715	6,426	100,622
South Omo	68,358	31,577	-	244	975	19,558
Shaka	23,305	7,677	-	45	6,932	5,528
Kaffa	143,431	33,436	-	-	32,540	66,381
Gamo Gofa	231,193	172,523	-	9,343	1,272	108,960
Bench-Maji	98,993	25,414	128	291	37,969	41,103
Yem Sp. Wereda	13,567	12,400	24	3,051	450	4,307
Amaro Sp. Wereda	22,594	19,326	-	452	41	12,291
Burji Sp. Wereda	7,152	6,553	13	497	26	1,308
Konso Sp. Wereda	30,715	26,269	54	6,864	55	12,915
Dirashe Sp. Wereda	18,371	14,258	-	837	780	7,850
Dawro	71,000	62,290	93	3,834	2,606	57,406
Basketo Sp. Wereda	7,599	5,662	-	-	-	5,101
Konta Sp. Wereda	15,550	11,475	-	192	55	6,347
Konta Special	126,661	117,626	-	18,586	4,888	24,488
Alaba Special	31,312	29,671	49	1,113	102	2,438
Harari	12,803	13,685	84	311	2,758	810
Hundene	12,803	13,685	84	311	2,758	810
Addis Ababa	13,576	12,104	153	6,867	3,697	3,233
Zone 3	9,424	8,053	128	4,849	2,087	1,191
Zone 6	4,152	4,051	25	2,018	1,609	2,042
Dire Dawa	16,070	14,094	-	128	3,273	1,621

**ANNEX TABLES PRESENTING
ESTIMATES, STANDARD ERRORS, AND COEFFICIENTS OF VARIATION
FOR
SELECTED LIVESTOCK VARIABLES**

[Annex Tables 1 –10]

Annex Tabel 1- Estimates of Livestock, Standard Errors and Coefficients of Variation by Type, and Region

Geographic Area	CATTLE			SHEEP			GOATS		
	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	38,102,682	521,254	1	16,575,493	564,283	3	13,834,703	475,541	3
Tigray	2,546,790	112,186	4	652,521	80,422	12	2,034,710	153,274	8
Afar	385,805	48,294	13	238,667	41,335	17	438,083	61,449	14
Amhara	9,592,252	200,305	2	6,116,336	400,173	7	3,969,106	227,878	6
Oromia.....	16,806,160	392,030	2	5,969,518	313,586	5	4,081,039	202,670	5
Somali	462,958	42,425	9	460,116	83,470	18	606,717	83,743	14
Benshangul-Gumuz.....	281,496	27,877	10	58,027	6,573	11	218,515	20,490	9
S.N.N.P.....	7,881,688	245,671	3	3,007,969	210,777	7	2,317,624	312,601	13
Gambella	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari.....	32,736	2,926	9	3,757	613	16	26,356	1,665	6
Addis Ababa.....	67,268	4,925	7	16,494	2,694	16	10,218	1,955	19
Dire-dawa	45,529	3,726	8	52,088	17,872	34	132,335	26,614	20

Annex Tabel 1-Cont'd

Geographic Area	HORSES			ASSES			MULES			CAMELS		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	1,447,274	88,167	6	3,769,871	72,947	2	321,339	16,538	5	471,145	64,570	14
Tigray.....	2,615	937	36	368,312	16,697	5	10,062	2,297	23	38,562	12,582	33
Afar	-	-	-	14,148	1,718	12	382	138	36	124,536	25,422	20
Amhara	250,679	30,429	12	1,356,111	39,825	3	90,652	9,344	10	20,317	5,108	25
Oromia	899,998	77,719	9	1,605,134	54,930	3	149,575	12,147	8	113,527	25,086	22
Somali	157	178	113	86,389	7,204	8	135	143	106	163,494	51,995	32
Benshangul-Gumuz	165	155	94	40,789	4,177	10	1,521	500	33	-	-	-
S.N.N.P.....	292,773	28,395	10	266,505	19,052	7	68,221	5,746	8	216	206	95
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	-	-	-	6,483	919	14	-	-	-	2,543	1,350	53
Addis Ababa	859	195	23	15,884	1,213	8	704	231	33	-	-	-
Dire-dawa.....	27	28	104	10,118	1,198	12	87	50	57	7,948	1,986	25

Annex Tabel 2- Estimates of Cattle, Standard Errors and Coefficients of Variation by Age group, and Region

Male Cattle

Geographic Area	<6MONTHS			6MONTHS -<1YEAR			1-<3YEARS			3-<10YEARS			10YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	1,786,233	38,917	2	1,568,324	34,881	2	2,898,690	56,220	2	9,988,239	130,452	1	618,780	30,892	5
Tigray.....	94,349	8,443	9	108,990	7,208	7	185,406	10,610	6	786,292	25,484	3	61,093	6,173	10
Afar	23,915	2,917	12	10,968	1,830	17	15,617	2,305	15	26,152	3,276	13	793	345	44
Amhara	403,140	17,119	4	325,904	15,098	5	697,799	22,592	3	3,177,522	62,006	2	298,353	21,435	7
Oromia	821,520	29,077	4	689,355	25,431	4	1,349,018	43,050	3	4,363,079	98,822	2	219,888	20,742	9
Somali	25,505	3,140	12	22,209	3,023	14	28,303	2,855	10	77,233	6,294	8	1,276	780	61
Benshangul-Gumuz	12,217	1,738	14	12,773	1,447	11	21,348	2,386	11	75,525	8,222	11	2,609	667	26
S.N.N.P.....	398,985	16,823	4	392,636	16,592	4	588,802	25,776	4	1,446,209	51,322	4	30,985	4,976	16
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari.....	2,473	358	14	1,685	244	14	2,702	330	12	5,063	1,011	20	-	-	-
Addis Ababa.....	1,370	279	20	1,598	231	14	5,426	719	13	25,490	2,102	8	3,783	757	20
Diredawa.....	2,759	361	13	2,207	295	13	4,269	512	12	5,675	653	12	-	-	-

Annex Tabel 2- Cont'd

Female Cattle

Geographic Area	<6MONTHS			6MONTHS -<1YEAR			1-<3YEARS			3-<10YEARS			10YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	1,940,906	44,459	2	1,691,778	40,017	2	3,618,448	76,776	2	13,303,419	210,000	2	687,865	34,144	5
Tigray.....	111,304	10,357	9	120,953	8,945	7	211,616	16,745	8	819,246	41,157	5	47,541	6,749	14
Afar	46,440	6,131	13	28,301	5,492	19	52,105	8,371	16	173,386	21,900	13	8,130	2,188	27
Amhara	424,514	17,990	4	340,643	15,210	4	774,999	27,347	4	2,931,923	75,645	3	217,453	19,263	9
Oromia	907,740	33,151	4	734,367	28,525	4	1,635,033	57,506	4	5,813,910	159,575	3	272,250	22,045	8
Somali	32,491	4,438	14	26,952	3,898	14	42,116	5,837	14	204,488	20,179	10	2,385	1,188	50
Benshangul-Gumuz	14,061	1,807	13	15,608	1,819	12	23,956	2,687	11	100,922	10,410	10	2,476	649	26
S.N.N.P.....	398,090	19,642	5	419,039	20,673	5	862,750	38,039	4	3,208,159	101,083	3	136,035	16,015	12
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari.....	2,175	280	13	1,797	253	14	4,033	440	11	12,561	1,157	9	249	114	46
Addis Ababa.....	1,985	362	18	2,205	327	15	5,467	589	11	19,011	1,531	8	933	209	22
Diredawa.....	2,107	372	18	1,914	292	15	6,372	732	11	19,813	1,809	9	413	142	34

Annex Tabel 3- Estimates of Sheep, Standard Errors and Coefficients of Variation by Age group, and Region

Male Sheep

Geographic Area	<6MONTHS			6MONTHS - <1YEAR			1-<2YEARS			2 YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	2,138,852	76,183	4	726,512	33,499	5	495,247	32,565	7	755,868	48,325	6
Tigray.....	81,451	11,905	15	24,771	3,778	15	21,345	3,915	18	29,377	4,895	17
Afar	19,160	2,587	14	11,344	2,138	19	7,160	1,683	24	16,296	4,229	26
Amhara	739,396	49,451	7	221,823	17,836	8	178,720	17,133	10	328,139	35,763	11
Oromia	900,158	52,935	6	294,096	22,201	8	137,474	15,352	11	182,913	18,195	10
Somali	36,702	4,737	13	23,718	5,425	23	24,951	7,936	32	36,378	11,286	31
Benshangul-Gumuz	6,754	1,148	17	3,787	693	18	2,197	463	21	3,540	764	22
S.N.N.P.	346,556	19,516	6	143,148	16,151	11	119,616	21,184	18	154,639	23,498	15
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	370	103	28	152	78	51	149	65	44	197	84	43
Addis Ababa	1,944	406	21	882	297	34	1,098	330	30	1,212	290	24
Diredawa.....	6,359	1,765	28	2,790	1,212	43	2,538	1,027	40	3,178	1,802	57

Annex Tabel 3-Cont'd

Female Sheep

Geographic Area	<6MONTHS			6MONTHS - <1YEAR			1-<2YEARS			2 YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	2,281,451	82,281	4	1,147,189	50,689	4	1,294,073	60,038	5	7,736,302	271,665	4
Tigray.....	85,100	12,408	15	40,011	6,301	16	62,702	11,516	18	307,764	36,392	12
Afar	33,761	5,408	16	24,883	4,219	17	28,822	5,121	18	97,240	18,449	19
Amhara	811,015	56,021	7	384,856	32,800	9	410,925	35,827	9	3,041,463	205,909	7
Oromia	915,248	53,903	6	403,348	29,289	7	434,905	31,785	7	2,701,375	144,916	5
Somali	47,532	9,533	20	48,583	9,827	20	49,482	12,580	25	192,770	29,775	15
Benshangul-Gumuz	9,041	1,390	15	3,214	532	17	5,423	834	15	24,071	2,607	11
S.N.N.P.	370,819	21,096	6	236,521	21,834	9	294,268	31,423	11	1,342,402	88,377	7
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	473	136	29	199	66	33	425	128	30	1,793	305	17
Addis Ababa	1,991	471	24	1,044	223	21	1,180	267	23	7,143	1,304	18
Diredawa.....	6,471	2,221	34	4,530	2,122	47	5,941	2,325	39	20,281	5,693	28

Annex Tabel 4- Estimates of Goats, Standard Errors and Coefficients of Variation by Age group, and Region

Male Goats

Geographic Area	<6MONTHS			6MONTHS - <1YEAR			1-<2YEARS			2 YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	1,746,658	55,479	3	766,329	34,486	5	578,899	36,284	6	1,010,264	59,472	6
Tigray.....	255,488	20,433	8	92,793	9,568	10	93,602	10,719	11	158,396	17,401	11
Afar	33,346	4,040	12	18,523	2,741	15	15,195	2,560	17	25,496	5,012	20
Amhara	554,229	33,314	6	211,167	15,788	7	156,196	12,534	8	316,942	27,621	9
Oromia	571,339	31,044	5	238,608	15,480	6	141,083	12,319	9	222,776	20,834	9
Somali	52,576	4,964	9	30,134	5,772	19	30,991	7,923	26	46,184	8,834	19
Benshangul-Gumuz	27,009	2,688	10	14,234	1,912	13	8,125	1,409	17	15,132	2,179	14
S.N.N.P.	232,139	23,058	10	151,357	23,704	16	126,054	28,592	23	216,918	43,847	20
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	3,924	412	11	1,810	255	14	819	154	19	1,016	181	18
Addis Ababa	1,112	322	29	689	244	35	848	316	37	641	238	37
Diredawa.....	15,497	2,581	17	7,012	1,520	22	5,985	1,956	33	6,763	2,560	38

Annex Tabel 4 – Cont'd

Female Goats

Geographic Area	<6MONTHS			6MONTHS - <1YEAR			1-<2YEARS			2 YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	1,895,985	64,844	3	1,074,240	49,452	5	1,162,820	61,101	5	5,599,507	185,111	3
Tigray.....	278,406	26,559	10	146,727	15,172	10	178,117	20,631	12	831,181	57,369	7
Afar	62,947	8,960	14	49,150	7,642	16	54,233	8,837	16	179,194	26,430	15
Amhara	578,746	37,441	6	269,179	20,157	7	259,623	20,245	8	1,623,024	101,215	6
Oromia	597,648	33,765	6	312,233	24,447	8	333,281	24,836	7	1,664,071	84,506	5
Somali	75,748	10,741	14	54,184	9,912	18	63,408	12,280	19	253,492	30,886	12
Benshangul-Gumuz	29,106	3,063	11	22,660	2,890	13	17,155	2,588	15	85,095	8,469	10
S.N.N.P.	250,459	27,214	11	207,187	32,224	16	239,933	45,044	19	893,577	108,517	12
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	3,800	374	10	2,170	257	12	1,402	275	20	11,415	747	7
Addis Ababa	1,469	327	22	652	161	25	445	161	36	4,361	831	19
Diredawa.....	17,658	3,392	19	10,099	2,815	28	15,223	4,048	27	54,097	9,346	17

Annex Tabel 5- Estimates of Horses, Standard Errors and Coefficients of Variation by Age group, and Region

Geographic Area	MALE						FEMALE					
	<3YEARS			3YEARS & OLDER			<3YEARS			3YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	148,870	11,185	8	553,873	36,403	7	149,788	12,034	-	594,743	39,757	-
Tigray.....	-	-	-	1,540	670	44	479	288	-	596	339	-
Afar	-	-	-	-	-	-	-	-	-	-	-	-
Amhara	20,848	3,305	16	95,763	13,121	14	23,121	3,838	-	110,947	14,735	-
Oromia	99,936	10,030	10	341,732	32,357	9	97,836	10,644	-	360,494	33,577	-
Somali	-	-	-	52	59	113	52	59	-	52	59	-
Benshangul-Gumuz	-	-	-	-	-	-	-	-	-	165	155	-
S.N.N.P.....	28,087	3,684	13	113,956	10,276	9	28,273	4,086	-	122,458	15,361	-
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	-	-	-	-	-	-	-	-	-	-	-	-
Addis Ababa	-	-	-	829	193	23	-	-	-	31	28	-
Diredawa.....	-	-	-	-	-	-	27	28	-	-	-	-

Annex Tabel 6- Estimates of Asses, Standard Errors and Coefficients of Variation by Age group, and Region

Geographic Area	MALE						FEMALE					
	<3YEARS			3YEARS & OLDER			<3YEARS			3YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	450,726	15,459	3	1,311,066	39,340	3	448,608	15,760	12	1,559,471	38,129	9
Tigray.....	38,546	4,121	11	171,190	12,473	7	31,815	3,205	70	126,761	8,058	63
Afar	1,920	312	16	3,454	499	14	1,943	367	19	6,830	893	13
Amhara	185,485	9,531	5	364,607	21,127	6	199,734	11,111	22	606,283	22,045	17
Oromia	180,142	10,660	6	587,761	29,422	5	179,630	10,175	17	657,600	27,546	14
Somali	11,510	1,580	14	38,120	4,048	11	6,288	1,253	133	30,471	3,193	123
Benshangul-Gumuz	4,046	831	21	23,555	2,525	11	3,813	821	22	9,375	1,500	110
S.N.N.P.....	26,591	3,756	14	103,581	7,434	7	22,714	2,933	27	113,619	11,409	23
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	609	163	27	3,129	642	21	640	188	29	2,105	408	19
Addis Ababa	701	197	28	12,482	1,073	9	575	155	27	2,126	396	111
Diredawa.....	1,177	277	24	3,187	454	14	1,455	284	123	4,299	588	14

Annex Tabel 7- Estimates of Mules, Standard Errors and Coefficients of Variation by Age group, and Region

Geographic Area	MALE						FEMALE					
	<3YEARS			3YEARS & OLDER			<3YEARS			3YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	22,289	3,056	14	134,293	8,968	7	27,589	3,608	13	137,168	8,841	6
Tigray.....	272	274	101	2,973	919	31	-	-	-	6,816	1,820	27
Afar	-	-	-	235	94	40	-	-	-	147	69	47
Amhara	6,581	1,519	23	28,818	4,949	17	13,133	2,431	19	42,120	5,053	12
Oromia	10,728	2,265	21	67,229	6,660	10	11,977	2,566	21	59,641	6,216	10
Somali	68	72	106	-	-	-	-	-	-	68	72	106
Benshangul-Gumuz	-	-	-	777	283	36	-	-	-	744	273	37
S.N.N.P.	4,539	1,349	30	33,621	3,257	10	2,453	722	29	27,610	3,257	12
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	-	-	-	-	-	-	-	-	-	-	-	-
Addis Ababa	101	49	48	579	201	35	-	-	-	24	25	106
Diredawa.....	-	-	-	61	44	71	26	26	100	-	-	-

Annex Tabel 8- Estimates of Camels, Standard Errors and Coefficients of Variation by Age group, and Region

Geographic Area	MALE						FEMALE					
	<4YEARS			4YEARS & OLDER			<4YEARS			4YEARS & OLDER		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	53,855	7,735	14	123,064	17,184	14	76,026	13,118	17	218,200	34,210	16
Tigray.....	1,514	769	51	35,390	11,955	34	385	321	83	1,273	707	56
Afar	9,304	1,608	17	14,203	2,425	17	28,808	6,293	22	72,221	16,489	23
Amhara	1,960	780	40	16,699	4,605	28	-	-	-	1,658	1,081	65
Oromia	20,636	4,878	24	16,320	4,377	27	21,142	5,240	25	55,430	11,963	22
Somali	18,876	5,667	30	37,381	10,273	27	23,759	10,226	43	83,479	27,428	33
Benshangul-Gumuz	-	-	-	-	-	-	-	-	-	-	-	-
S.N.N.P.	-	-	-	108	103	95	-	-	-	108	103	95
Gambella.....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	390	234	60	201	144	72	902	556	62	1,050	600	57
Addis Ababa	-	-	-	-	-	-	-	-	-	-	-	-
Diredawa.....	1,176	287	24	2,762	753	27	1,030	234	23	2,980	969	33

Annex Tabel 9- Estimates of Poultry, Standard Errors and Coefficients of Variation By Type, and Region

Geographic Area	Total Poultry			Cocks			Cockerels			Pullets			Non-laying Hens			Chicks			Laying Hens		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	35,656,385	538,129	2	3,054,730	64,116	2	2,268,705	70,612	3	3,473,259	90,195	3	1,294,577	58,891	5	15,959,783	313,056	2	9,605,331	132,975	1
Tigray	3,725,111	172,818	5	276,409	15,891	6	288,938	28,401	10	436,586	38,374	9	218,848	16,013	7	1,644,603	92,592	6	859,726	29,827	3
Afar	49,285	6,848	14	5,471	815	15	2,446	459	19	4,073	798	20	3,169	712	22	20,862	3,478	17	13,264	2,185	16
Amhara	11,243,773	313,037	3	960,894	34,748	4	556,999	37,376	7	914,636	48,051	5	391,835	37,901	10	5,580,664	209,646	4	2,838,747	73,189	3
Oromia	12,761,341	344,163	3	1,128,826	45,578	4	805,757	42,759	5	1,176,931	52,164	4	491,695	39,402	8	5,488,463	186,126	3	3,669,670	92,869	3
Somali	173,187	29,104	17	24,279	4,990	21	11,314	3,209	28	16,202	4,754	29	10,918	3,192	29	49,010	8,791	18	61,464	10,725	17
Benshangul-Gumuz	785,357	40,280	5	58,954	4,084	7	57,395	6,142	11	83,637	7,219	9	26,844	4,956	18	387,769	22,808	6	170,758	10,487	6
S.N.N.P.	6,779,900	201,785	3	585,471	23,036	4	537,822	30,081	6	828,229	39,436	5	146,983	13,672	9	2,745,542	101,066	4	1,935,853	50,745	3
Gambella	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	31,590	3,193	10	3,921	437	11	2,872	611	21	4,294	788	18	1,478	457	31	8,759	1,413	16	10,265	1,048	10
Addis Ababa	62,364	3,925	6	5,577	428	8	3,512	697	20	4,815	736	15	1,599	438	27	21,899	2,783	13	24,962	1,517	6
Dire-dawa	44,479	4,173	9	4,928	574	12	1,651	376	23	3,857	826	21	1,209	401	33	12,213	1,676	14	20,622	1,792	9

Annex Tabel 10- Estimates of Beehives, Standard Errors and Coefficients of Variation By Type, and Region

Geographic Area	ALL BEEHIVES			TRADITIONAL			INTERMEDIATE			MODERN		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	4,228,612	286,829	7	4,205,824	286,804	7	15,341	5,121	33	7,448	2,128	29
Tigray	173,948	16,778	10	171,522	16,745	10	923	548	59	1,503	713	47
Afar	674	364	54	436	180	41	238	250	105	-	-	-
Amhara	766,383	56,387	7	758,761	56,294	7	6,680	3,652	55	942	566	60
Oromia	2,289,877	265,139	12	2,280,900	265,142	12	5,543	3,461	62	3,435	1,778	52
Somali	9,186	2,993	33	9,186	2,993	33	-	-	-	-	-	-
Benshangul-Gumuz	156,409	30,593	20	155,638	30,587	20	474	457	96	297	289	97
S.N.N.P.	829,795	86,981	10	827,194	86,962	11	1,331	570	43	1,270	675	53
Gambella	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Harari	977	221	23	951	219	23	26	28	107	-	-	-
Addis Ababa	692	220	32	566	180	32	126	122	97	-	-	-
Dire-dawa	670	222	33	670	222	33	-	-	-	-	-	-

APPENDIX I

Number of Planned and Actually Covered Sampling Units

APPENDIX I. Number of Planned and Actually Covered Sampling Units (EAs & Households)
of the 2003/4 (1996 E.C.) annual agricultural sample survey (Meher Season).

Region	Stratum	Enumeration Areas		Households	
	Zone/Sp.wereda	Planned	Covered	Planned	Covered
Tigray	North Western Tigray	32	32	800	800
	Central Tigray	36	36	900	900
	Eastern Tigray	32	32	800	800
	Southern Tigray	36	35	900	875
	Western Tigray	28	27	700	675
	Region Total	164	162	4100	4050
Afar	Zone One	28	28	700	683
	Zone Three	28	28	700	697
	Region Total	56	56	1400	1380
Amhara	North Gondar	40	40	1000	1000
	South Gondar	40	39	1000	975
	North Wello	40	40	1000	1000
	South Wello	48	48	1200	1199
	North Shewa	40	40	1000	1000
	East Gojam	44	44	1100	1100
	West Gojam	44	44	1100	1100
	Wag Hemira	32	32	800	775
	Awi	36	36	900	899
	Oromia	32	32	800	800
	Region Total	396	395	9900	9848
Oromia	West Wellega	40	40	1000	1000
	East Wellega	36	36	900	899
	Illubabor	36	36	900	899
	Jimma	44	44	1100	1100
	West Shewa	36	36	900	900
	North Shewa	36	36	900	900
	East Shewa	40	40	1000	1000
	Arsi	44	44	1100	1100
	West Harerghe	36	36	900	900
	East Harerghe	44	44	1100	1098
	Bale	36	36	900	897
	Borena	36	36	900	899
	South West Shewa	36	36	900	900
	Guji	36	36	900	895
	Region Total	536	536	13400	13387

APPENDIX I Cont'd

Region	Stratum	Enumeration Areas		Households	
	Zone/Sp.wereda	Planned	Covered	Planned	Covered
Somali	Shinile	24	24	600	598
	Jijiga	32	32	800	800
	Liben	28	28	700	693
	Region Total	84	84	2100	2091
Benishangul-Gumuz	Metekel	28	28	700	689
	Asosa	28	28	700	700
	Kemashi	28	28	700	694
	Region Total	84	84	2100	2083
SNNP	Guraghe	36	36	900	900
	Hadiya	32	32	800	800
	Kembata_Tambaro	32	32	800	800
	Sidama	44	44	1100	1100
	Gedeo	32	32	800	799
	Wolayita	36	36	900	900
	South Omo	32	32	800	800
	Shaka	28	28	700	700
	Keffa	32	32	800	799
	Gamo_Gofa	36	36	900	899
	Benchi_Maji	32	32	800	796
	Yem Specia Wereda	24	24	600	600
	Amaro Special W.	24	24	600	600
	Burji Special Wereda	24	24	600	599
	Konso Special Wereda.	24	24	600	598
	Derashe Special Wereda.	24	24	600	600
	Dawro	32	32	800	800
	Basketo Special Wereda.	24	24	600	600
	Konta Special Wereda.	24	23	600	575
	Siltie	28	28	700	699
	Alaba Special Wereda.	24	24	600	600
	Region Total	624	623	15600	15564
Gambella	Zone One	28	-	700	-
	Zone Two	28	-	700	-
	Region Total	56	-	1400	-
Harari	Harari	24	24	600	598
Addis Ababa	Addis Ababa	24	24	600	600
Dire Dawa	Dire Dawa	24	24	600	600
Country Total		2072	2012	51800	50201

APPENDIX II

Estimation Procedures of Totals, Ratios, and Sampling Errors

APPENDIX II Estimation Procedures of Totals, Ratios and Sampling Errors

The following formulas were used to estimate total livestock and its products, and ratio of specific characteristics in a stratum.

1. For estimating Total livestock and products:

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

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.

y_{hij} is the value of a specific livestock(its products) for agricultural households j , in the i^{th} EA in the h^{th} stratum.

y_{hi} is the sample total values of a specific livestock(its products) for EA i in stratum h

\hat{Y}_h is estimated total of specific livestock and its products in stratum h

2. For estimating Ratios in stratum h :

$$\hat{R}_h = \frac{\hat{Z}_h}{\hat{X}_h}$$

Where the numerator and denominator are estimates of domain totals for characteristic z and x , respectively.

3. Sampling Variance of Estimates:

Sampling variance for the estimate of stratum total of livestock and its products, and ratios are estimated by the following formulas.

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

$$Var(\hat{R}_h) = \frac{1}{\hat{X}_h^2} \left[Var(\hat{Z}_h) + \hat{R}_h^2 Var(\hat{X}_h) - 2\hat{R}_h Cov(\hat{Z}_h, \hat{X}_h) \right]$$

Where,

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

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 .

$\hat{Y}_{hi}, \hat{Z}_{hi}, \hat{X}_{hi}$ are weighted total livestock and its products, characteristic, z and x , respectively, in the i^{th}

EA and h^{th} stratum.

$\hat{Y}_{hij}, \hat{Z}_{hij}, \hat{X}_{hij}$ are weighted value of livestock and its products, characteristic z and x , respectively, from

j^{th} agricultural household in the i^{th} EA and h^{th} stratum.

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

$$Var(\hat{Y}) = \sum_h^L Var(\hat{Y}_h), Var(\hat{R}) = \sum_{i=1}^L Var(\hat{R}_h)$$

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

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

4. Coefficient of Variation (CV) of Estimates:

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

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

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

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

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

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

APPENDIX III
Survey Questionnaire

Annual Agricultural Sample Survey
Livestock and Beehives Population - 2003/04 (1996 E.C.)

Part I - Identification Particulars

Region	Zone	Wereda	Farmers' Association	Enumeration Area	Household Number	Holder Number	Holder					Type of Holding	
							Name	Age	Sex M=1 F=2	Edu. Status (Highest Grade Completed)	Family Size	Crop=1 Livestock=2 Both=3	

PART II - LIVESTOCK POPULATION AND PRODUCTS**QST I - Did You Have Livestock and/or Beehives on February 9, 2004?**
☐ Yes Complete questions below

☐ No - End of the question
Number of Cattle by Age and Purpose on Feb 9, 2004

1. Cattle of all ages _____
- a. Cattle less than 6 months _____
- b. Cattle 6 months and less than 1 year _____
- c. Cattle 1 year and less than 3 years _____
- d. Cattle 3 years and less than 10 years _____
1. Beef Cattle _____
2. Cattle for breeding _____
3. Dairy cows _____
4. Cows that gave milk for the last 12 months _____
5. Draft cattle _____
6. Cattle for other purposes _____
- e. Cattle 10 years and older _____
- f. Grand Total _____
1. Local breed _____
2. Exotic _____
3. Hybrid _____

None	Total	Male	Female
	1	2	3
	4	5	6
	7	8	9
	10	11	12
	13	14	15
	16	17	18
	19	20	21
	22		23
	24		25
	26	27	28
	29	30	31
	32	33	34
	35	36	37
	38	39	40
	41	42	43
	44	45	46

Form ASS - 96/7 Cont'd

Number of Sheep by Age and Purpose on Feb 9, 2004

	None	Total	Male	Female
2. Sheep of all ages		47	48	49
a. Sheep less than 6 months		50	51	52
b. Sheep 6 months and less than 1 year		53	54	55
c. Sheep 1 year and less than 2 years		56	57	58
d. Sheep 2 years and older		59	60	61
1. Sheep for mutton		62	63	64
2. Sheep for wool		65	66	67
3. Sheep for breeding		68	69	70
4. Sheep for other purposes		71	72	73
e. Grand Total		74	75	76
1. Local breed		77	78	79
2. Exotic		80	81	82
3. Hybrid		83	84	85

Number of Goats by Age and Purpose on Feb 9, 2004

	None	Total	Male	Female
3. Goats of all ages		86	87	88
a. Goats less than 6 months		89	90	91
b. Goats 6 months and less than 1 year		92	93	94
c. Goats 1 year and less than 2 years		95	96	97
d. Goats 2 years and older		98	99	100
1. Goats for meat		101	102	103
2. Dairy Goats		104		105
3. Goats for breeding		106	107	108
4. Goats for other purposes		109	110	111
e. Grand Total		112	113	114
1. Local breed		115	116	117
2. Exotic		118	119	120
3. Hybrid		121	122	123

Form ASS - 96/7 Cont'd

Number of Horses, Mules, Asses and Camels by age and Purpose on Feb 9,2004

Horses

4. Horses of all ages _____
 a. Horses less than 3 years _____
 b. Horses 3 years and older _____
 1. Horses used primary for draft purposes _____
 2. Horses for transportation _____
 3. Horses for other purposes _____

None

Total	
124	
127	
130	
133	
136	
139	

Male	
125	
128	
131	
134	
137	
140	

Female	
126	
129	
132	
135	
138	
141	

Mules

5. Mules of all ages _____
 a. Mules less than 3 years _____
 b. Mules 3 years and older _____
 1. Mules used primary for draft purposes _____
 2. Mules for transportation _____
 3. Mules for other purposes _____

None

Total	
142	
145	
148	
151	
154	
157	

Male	
143	
146	
149	
152	
155	
158	

Female	
144	
147	
150	
153	
156	
159	

Asses

6. Asses of all ages _____
 a. Asses less than 3 years _____
 b. Asses 3 years and older _____
 1. Asses used for draft purposes _____
 2. Asses for transportation _____
 3. Asses for other purposes _____

None

Total	
160	
163	
166	
169	
172	
175	

Male	
161	
164	
167	
170	
173	
176	

Female	
162	
165	
168	
171	
174	
177	

Camels

7. Camels of all ages _____
 a. Camels less than 4 years _____
 b. Camels 4 years and older _____
 1. Camels for slaughter _____
 2. Camels for draft purposes _____
 3. Camels for milk _____
 4. Camels for transportation _____
 5. Camels for other purposes _____

None

Total	
178	
181	
184	
187	
190	
193	
195	
198	

Male	
179	
182	
185	
188	
191	
209	
196	
199	

Female	
180	
183	
186	
189	
192	
194	
197	
200	

Form ASS - 96/7 Cont'd

Poultry and Beehives

8. Poultry total on Feb 9, 2004

- a. Laying hens _____
- b. Non-Laying hens _____
- c. Cocks _____
- d. Cockerels _____
- e. Pullets _____
- f. Chicks _____

None	Total	
	201	
	202	
	203	
	204	
	205	
	206	
	207	

9. Total Beehives (produced honey during the reference period)

- a. Traditional Beehives _____
- b. Intermediate Beehives _____
- c. Modern Beehives _____

None	Total	
	208	
	209	
	210	
	211	

QST II- Did You Have Livestock During The Reference Period (Feb 9, 2003 to Feb 9, 2004) ?

☐ Yes Complete questions below

☐ No - End of the question

Milk, Egg, and Honey Production during the reference period

10. Dairy cows and Camels

- a. Cows that gave milk during the reference period _____
- b. Average number of months cows actually milked _____
- c. Average lactation period of cows in months _____
- d. Milk production per day per cow in liters _____
- e. Camels that gave milk during th reference period _____
- f. Average number of months camels actually milked _____
- g. Average lactation period of camels in months _____
- h. Milk production per day per camel _____

None		
	212	
	213	
	214	
	215	
	216	
	217	
	218	
	219	

11. Egg production per hen per clutch _____

None		
	220	

12. Average number of clutches _____

	221	
--	-----	--

13. Total Number of clutch during the reference period _____

	222	
--	-----	--

Form ASS - 96/7 Cont'd

14. Honey production per beehive in kg. during the reference period

- a. Average honey production/ Traditional hive/harvest _____
 Number of harvests/Traditional hive/year _____
- b. Average honey production/ Intermediate hive/harvest _____
 Number of harvests/Intermediate hive/year _____
- c. Average honey production/ Modern hive/harvest _____
 Number of harvests/Modern hive/year _____

None

	223	
	224	
	225	
	226	
	227	
	228	

15. Livestock diseases, treatment and Vaccination during the reference period

1	2	3	4	5	6	7
Sr. No.	Type of Livestock	Total Vaccinated	Total Afflicted	Total Treated	Total Died due to diseases	Remark
1	Cattle					
2	Sheep					
3	Goats					
4	Draft Animals					
5	Camels					
6	Poultry					
7	Total					

16. Livestock Feeds used during the reference period

1	2	3	4	5
Sr. No.	Type of Livestock Feed	Code	Used yes=1 no=2	Percent used
1	Green fodder/Grazing	1		
2	Crop Residue	2		
3	Improved Feed	3		
4	Hay	4		
5	Bi-products	5		
6	Others	7		
Total				100