

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

**AGRICULTURAL SAMPLE SURVEY
2009/10 [2002 E.C.]**

VOLUME II

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



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Abbreviations

CSA	-	Central Statistical Agency
CV	-	Coefficient of Variation
E.C.	-	Ethiopian Calendar
EA	-	Enumeration Area
NA	-	Not Available
SE	-	Standard Error
SNNP	-	Southern Nation Nationalities and People's Region

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 ---etc provide mainly 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 and policies 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 plans and programs in the sector. These livestock data can be generated mainly using surveys and censuses. In this regard, subsequent surveys and a solitary agricultural census have been carried out by the Central Statistical Agency (CSA) to make available data on livestock. The 2009/10 Annual Agricultural Sample Survey was also conducted to produce these same data so as to keep hold of continuity and update users .

In this report: estimates of livestock that include cattle, sheep, goats, draught animals (horses, mules, donkeys 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 (November 10, 2009 or Hidar 1, 2002 E.C.) and reference period (November 11, 2008 to November 10, 2009 or Hidar 2, 2001 E.C. to Hidar 1, 2002 E.C.). The report comprises the results obtained from the livestock survey as well as brief discussions made on the results. The survey results at regional levels for the sedentary rural areas are presented in Statistical Tables 3.1 - 3.30. 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 regional 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 COVERAGE

The 2009/10 (2002 E.C) Annual Livestock Sample Survey covered the rural agricultural population in all the regions of the country except the non-sedentary population of three zones of Afar & six zones of Somali regions.

To be covered by the survey, a total of 1,660 enumeration areas (EAs) were selected. However, due to various reasons that are beyond control, in 10 EAs the survey could not be successful and hence interrupted. Thus, all in all the survey succeeded to cover 1,650 EAs (99.4%) throughout the regions. The Livestock Sample Survey was conducted on the basis of 30 agricultural households selected from each EA. Regarding the ultimate sampling units, it was intended to cover a total of 49,800 agricultural households, however, 49,738 (99.9%) were actually covered by the survey.

2.2 SAMPLING FRAME

The list containing EAs of all regions and their respective agricultural households obtained from the 1999 E.C Cartographic Census Frame was used as the sampling frame in order to select EAs (Primary Sampling Units). Consequently, all sample EAs were selected from this frame based on the design proposed for the survey. Second stage sampling units, households, on the other hand, were selected from a fresh list of households that were prepared for each EA at the beginning of the survey.

2.3 SAMPLE DESIGN

A two stage stratified cluster sample design was used to select the sample in which the clusters or primary sampling units (PSUs) were enumeration areas and second stage sampling units were households.

Regions are considered as domain of estimation for which major findings of the survey are reported.

2.4 SELECTION SCHEME

Enumeration areas from each stratum were selected systematically using probability proportional to size sampling technique; size being number of households of EAs obtained from the 1999 E.C Cartographic Census frame. Within each sample EA 30 agricultural households were selected systematically from the fresh list of households prepared at the beginning of the survey.

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

2.5 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 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, Nov 11, 2008 to Nov 10, 2009.

Meat Animals: Cattle, sheep, goats, and camels reared only for meat either for home

consumption and/or for sale, are defined as meat animals.

Laying Hens: Refer to all hens and pullets of all types that laid eggs during the reference period, Nov 11, 2008 to Nov 10, 2009.

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.

2.6 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, enumerators and 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.

2.7 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 about twelve days 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 three weeks in branch offices, which are distributed around the country. During the 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 strengthen the concepts discussed in the classroom.

2.8 METHOD OF DATA COLLECTION

In each selected site, a fresh list of households was prepared and then agricultural households were identified from the list of households. From these identified agricultural households, 30 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 November 10, 2009 (Hidar 1/2002 E.C.).

2.9 DATA PROCESSING

2.9.1 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.

2.9.2 Data Entry, Cleaning, and Processing

The data were entered in personal computers by data encoders using CSpro (Census and Survey Processing system) software. Then the data were 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 2009/10 livestock survey 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 (November 10, 2009), irrespective of ownership, were recorded by interviewing each holder within the selected 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 50.8 million. Out of this total cattle population, the female cattle constitute about 54.87 percent and the remaining 45.13 percent are male cattle.

Regarding age groups, the majority of the cattle population (that is about 63.9 percent) is in the 3 years and less than 10 years age category, with about 28.3 percent female and about 35.6 percent male. Moreover, about 15.92 percent are less than three years and and more than one year, those with age category 10 years and over took small portion i.e. 2.71 percent of the total estimated number of cattle population (also see Fig III.1).

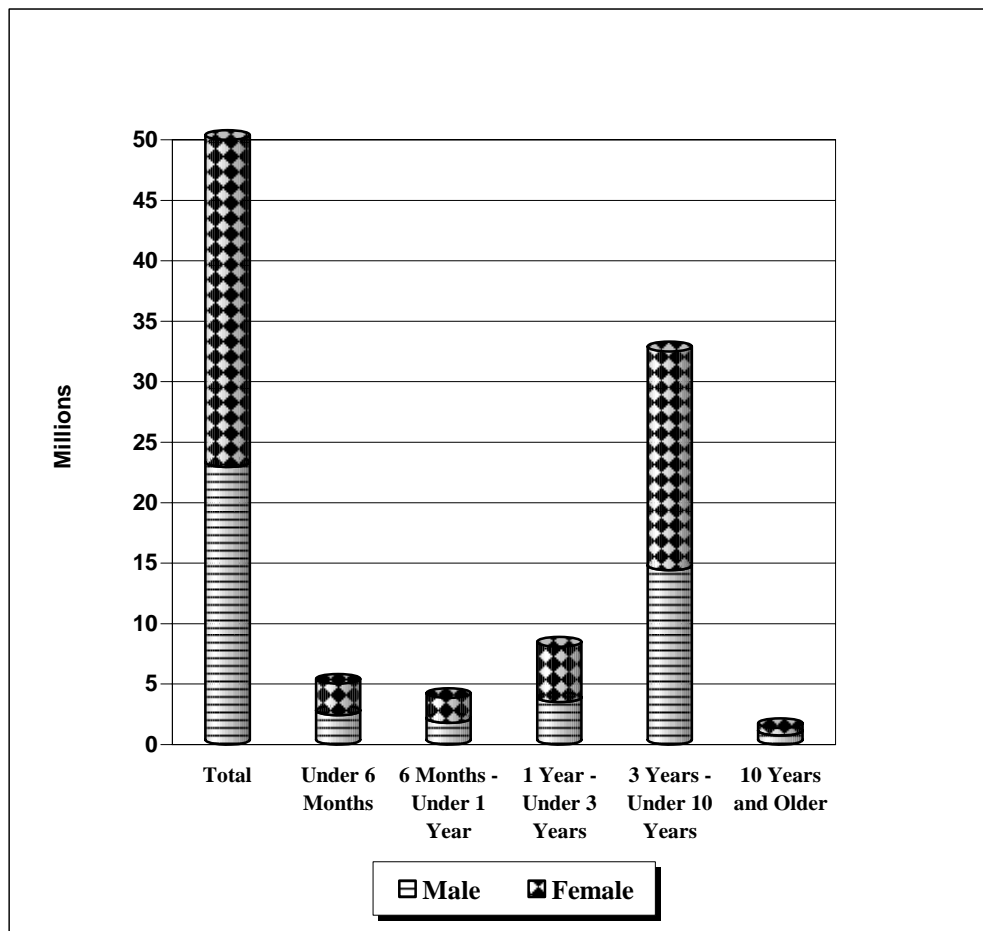
On the other hand, the results obtained indicated that 99.19 percent of the total cattle in the country are local breeds. The remaining are hybrid and exotic breeds that accounted for about 0.72 percent and 0.09 percent, respectively. Moreover, distribution of cattle by purpose is given in the same table. Among cattle aged 3 years and less than 10 years, those used for draught purposes accounted for 25.2

percent and the percentage share of beef cattle is the lowest that is about 0.65 percent. Beef cattle here refer to all cattle reared exclusively for meat that is used either for home consumption or for sale.

SUMMARY TABLE III.1: Estimated Number of Cattle by Sex, Age, Breed, and Purpose, Ethiopia - 2009/10

Age, Breed, and Purpose	Total		Male		Female	
	Number	%	Number	%	Number	%
Total.....	50,884,005	100	22,962,496	45.1	27,921,509	54.87
Under 6 months	5,033,459	9.89	2,446,645	4.81	2,586,815	5.08
6 months - under 1 year.....	3,858,534	7.58	1,812,283	3.56	2,046,251	4.02
1 year – under 3 years.....	8,098,576	15.92	3,526,579	6.93	4,571,997	8.99
3 years – under 10 years.....	32,516,353	63.9	14,420,383	28.3	18,095,970	35.56
10 years and older.....	1,377,084	2.71	756,607	1.49	620,477	1.22
Cattle by Breed						
Total.....	50,884,005	100	22,962,496	45.1	27,921,509	54.87
Indigenous.....	50,473,023	99.19	22,803,451	44.8	27,669,572	54.38
Hybrid.....	367,452	0.72	145,440	0.29	222,012	0.44
Exotic.....	43,530	0.09	13,606	0.03	29,925	0.06
Aged 3 – 10 Years by Purpose						
Total.....	32,516,353	63.9	14,420,383	28.3	18,095,970	35.56
Used for Milk.....	6,727,303	13.22			6,727,303	13.22
Used for Draught	12,849,282	25.25	12,717,153	25	132,129	0.26
Used for Beef.....	332,130	0.65	268,933	0.53	63,197	0.12
Used for Breeding.....	11,082,251	21.78	944,171	1.86	10,138,081	19.92
Used for Other	1,525,386	3	490,126	0.96	1,035,260	2.03
Dairy Animals						
Dairy Cows.....	6,727,303	13.22			6,727,303	13.22
Milking Cows.....	9,627,747	18.92			9,627,747	18.92

FIGURE III.1 DISTRIBUTION OF CATTLE BY AGE AND SEX



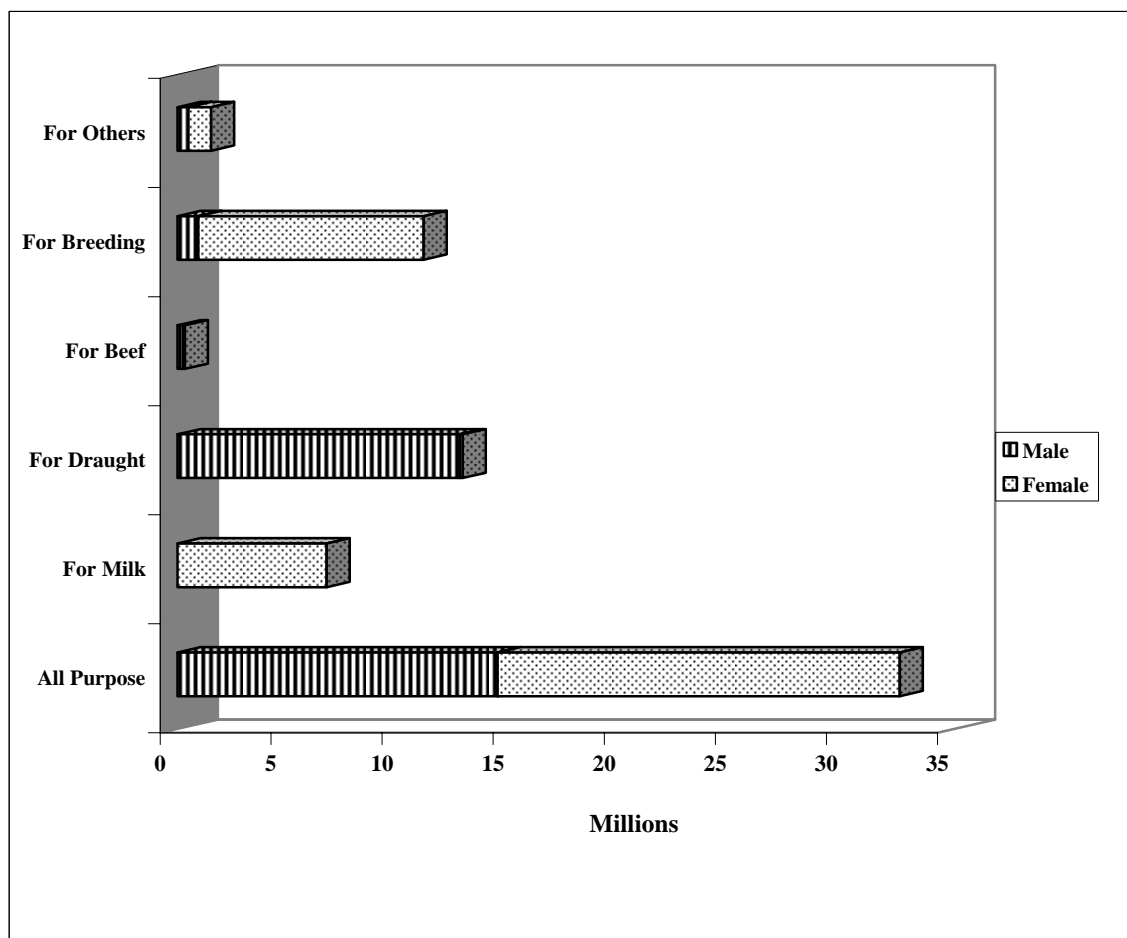
Dairy-cows¹ are estimated to be around 6.7 million and milking-cows² are 9.6 million heads during the reference period.

Moreover, cattle population by sex, age, breed, and purpose are presented for each region 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 (Nov. 11, 2008 to Nov. 10, 2008).

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



3.1.2 Sheep And Goat Populations

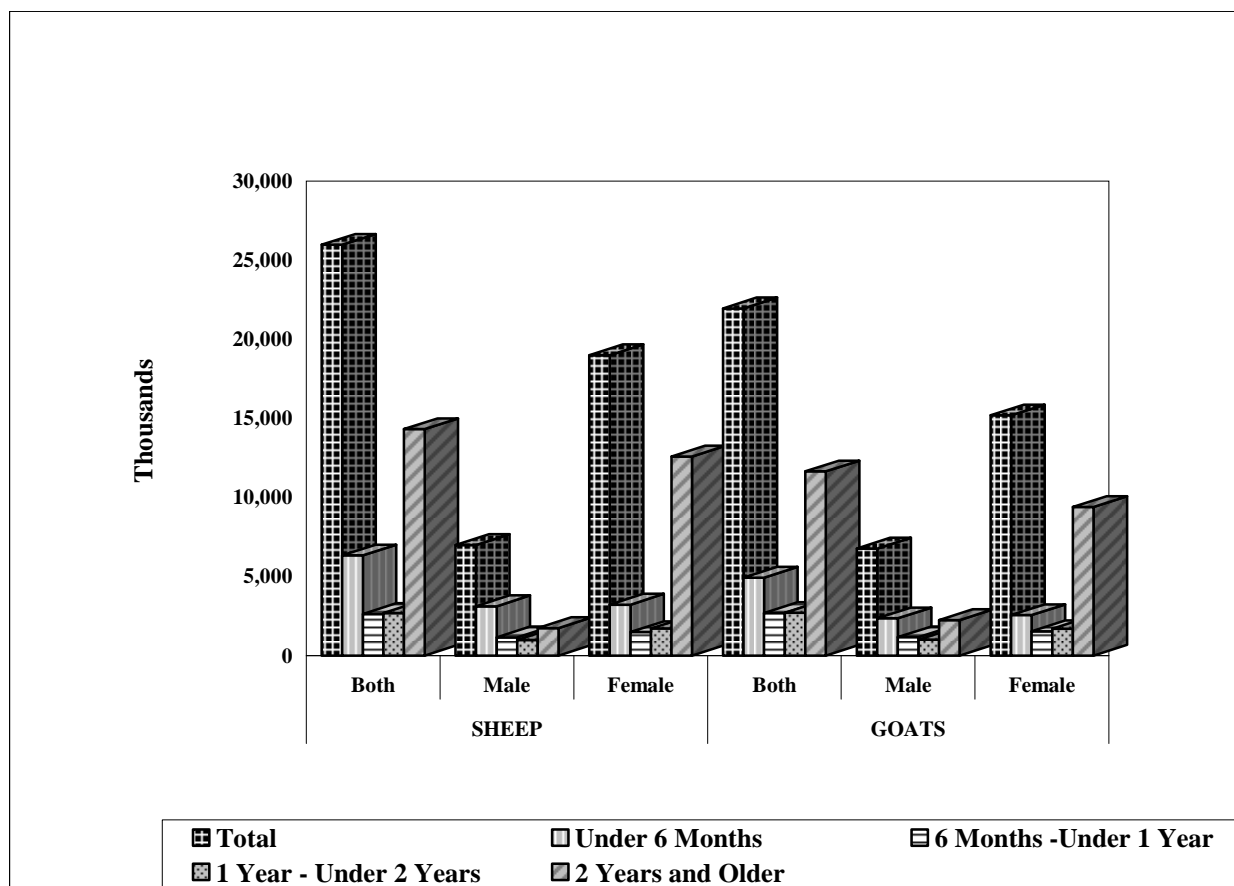
The estimated numbers and percentage distributions of sheep and goats in the rural sedentary areas of the country are given in Summary Table III.2. As pointed out in this table, about 25.9 million sheep are estimated to be found in the country, out of which about 73.1 percent are females, and about 26.9 percent are males. According to the survey result, the number of goats reported in the country is estimated to be about 21.9 million. Out of these total goats, about 69.17 percent are females and 30.83 percent are males (see Summary Table III. 2 and Fig. III. 3).

SUMMARY TABLE III.2: Estimated Numbers of Sheep and Goats by Sex, Age, Breed,
and Purpose, Ethiopia - 2009/10

Age, Breed, and Purpose	Total		Male		Female	
	Number	%	Number	%	Number	%
Total Sheep	25,979,919	100	6,988,627	26.9	18,991,292	73.1
Under 6 months.....	6,332,749	24.38	3,119,907	12.01	3,212,842	12.37
6 months - under 1 year	2,627,372	10.11	1,145,455	4.41	1,481,917	5.7
1 year - under 2 years.....	2,694,438	10.37	984,155	3.79	1,710,282	6.58
2 years and older	14,325,360	55.14	1,739,110	6.69	12,586,250	48.45
Sheep by Breed						
Total	25,979,919	100	6,988,627	26.9	18,991,292	73.1
Indigenous	25,954,696	99.9	6,976,987	26.86	18,977,709	73.05
Hybrid.....	*	*	*	*	13,025	0.05
Exotic	*	*	*	*	*	*
Sheep Aged 2 Years and Older by Purpose						
Total	14,325,360	55.14	1,739,110	6.69	12,586,250	48.45
Used for Mutton.....	650,123	2.5	586,095	2.26	64,028	0.25
Used for Wool.....	75,079	0.29	7,625	0.03	67,455	0.26
Used for Breeding	13,475,770	51.87	1,079,065	4.15	12,396,705	47.72
Used for Other.....	124,388	0.48	66,325	0.26	58,063	0.22
Total Goats	21,960,706	100	6,770,895	30.83	15,189,810	69.17
Under 6 months...	4,918,861	22.4	2,356,603	10.73	2,562,258	11.67
6 months - under 1 year	2,697,169	12.28	1,161,585	5.29	1,535,584	6.99
1 year - under 2 years.....	2,699,024	12.29	1,002,131	4.56	1,696,893	7.73
2 years and older	11,645,651	53.03	2,250,576	10.25	9,395,075	42.78
Goats by Breed						
Total	21,960,706	100	6,770,895	30.83	15,189,810	69.17
Indigenous	21,956,729	99.98	6,770,369	30.83	15,186,360	69.15
Hybrid.....	1,639	0.01	*	*	*	*
Exotic	*	*	*	*	*	*
Goats Aged 2 Years and Older by Purpose						
Total	11,645,651	53.03	2,250,576	10.25	9,395,075	42.78
Used for Milk	659,664	3			659,664	3
Used for Meat.....	738,134	3.36	692,188	3.15	45,946	0.21
Used for Breeding	10,167,788	46.3	1,508,076	6.87	8,659,713	39.43
Used for Other.....	80,065	0.36	50,312	0.23	29,753	0.14

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 (55.14 percent and 53.03 percent, in that order). These are followed by the young stock under six months for both sheep and goats i.e. about 24.38 percent and 22.4 percent, correspondingly (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 (99.9 percent and 99.98 percent, respectively).

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 (55.14% of the total sheep), 51.87 percent are kept for breeding; about two percent for mutton and less than one percent of them were kept for wool production. Likewise, amid the goat population aged two years and older (53.03% of the total), goats kept for breeding accounted for about 46.3 percent while goats kept for meat accounted for about three percent. The number of female goats kept for milk at country level is estimated to be about 659 thousand, which is 3 percent of the total goats (see Figures III.4 and III.5).

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

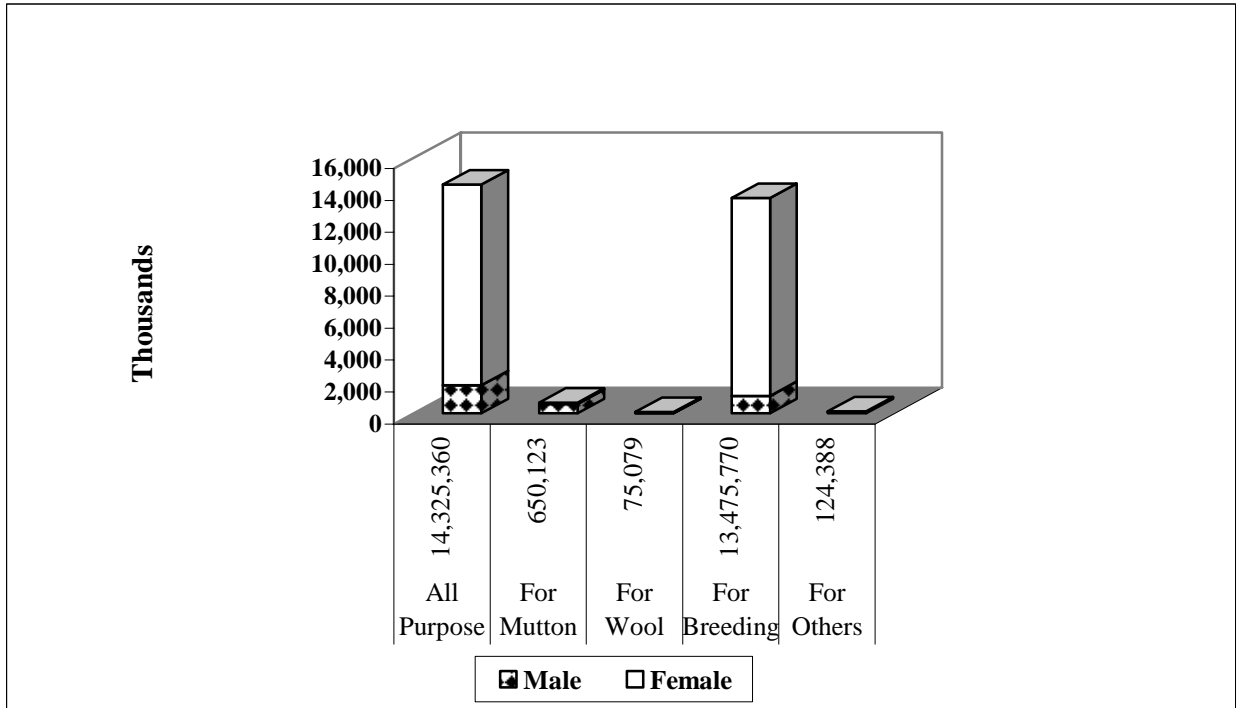
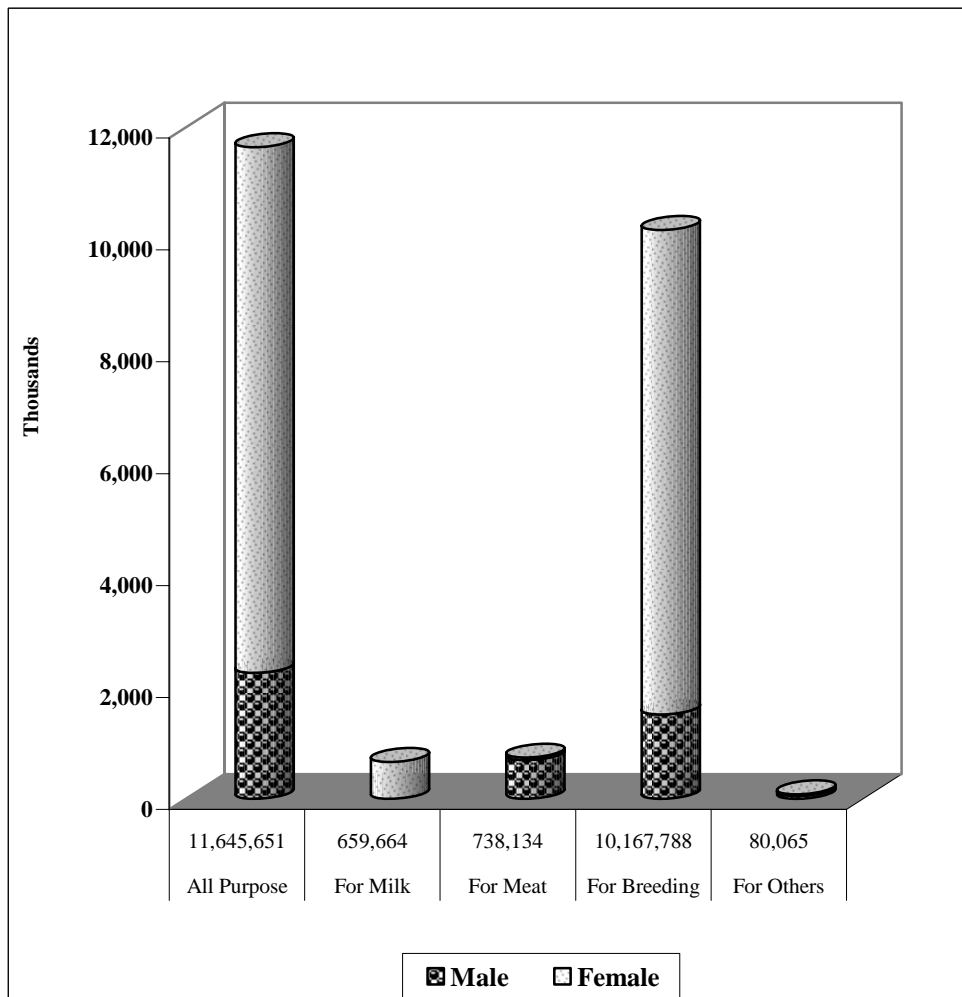


FIGURE III.5 DISTRIBUTION OF GOATS AGED 2 YEARS AND OLDER BY SEX, AND PURPOSE



The numbers and percentage distributions of sheep and goats at regional level are given in the *Statistical Tables* and Figure III.9.

3.1.3 Horse, Donkey, Mule And Camel Populations

Summary Table III.3 shows the estimates of horses, donkeys, mules, and camels for the rural sedentary areas of the country for private holdings. As per the survey results, there are about 1.9 million horses, five million donkeys, 0.3 million mules, and 0.8 million camels in the sedentary areas of the country.

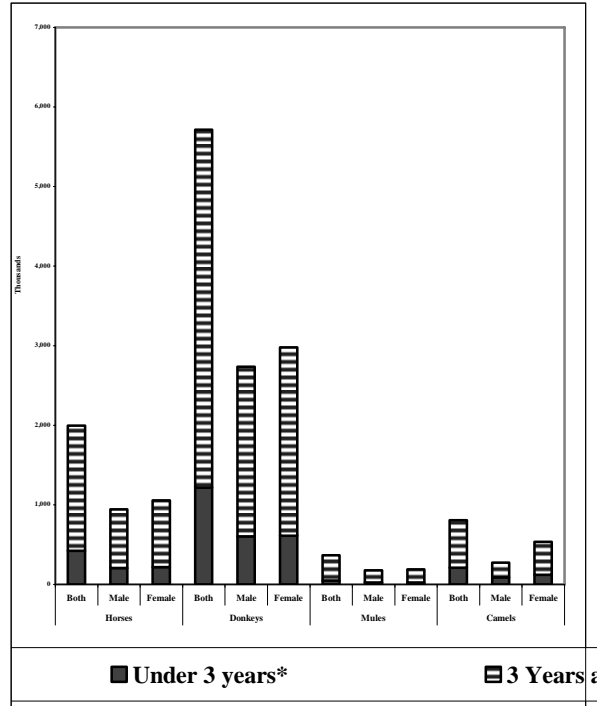
As indicated in the same table, donkeys are the overwhelming majority compared with the other draught animals. Out of the total donkey population in the country, about 52.12 percent are females and the remaining 47.88 percent are males. With respect to age distribution, the majorities of the horses, donkeys and mules are of the age group 3 years and older. Furthermore, 74.06 percent of the camels are of the age group 4 years and older.

The estimates of these animals by purpose are also given in Summary Table III.3. Among the horses aged 3 years and older, about 1.2 million were used for transportation, 0.14 million were for draught and the remaining 0.22 million were used for other purposes. With regard to donkeys, about 3.4 million were used for transportation whereas about 0.8 million and 0.2 million were used for draught and other purposes, respectively.

SUMMARY TABLE III.3: Estimated Numbers of Horses, Donkeys, Mules, and Camels by Sex, Age, and Purpose, Ethiopia - 2009/10

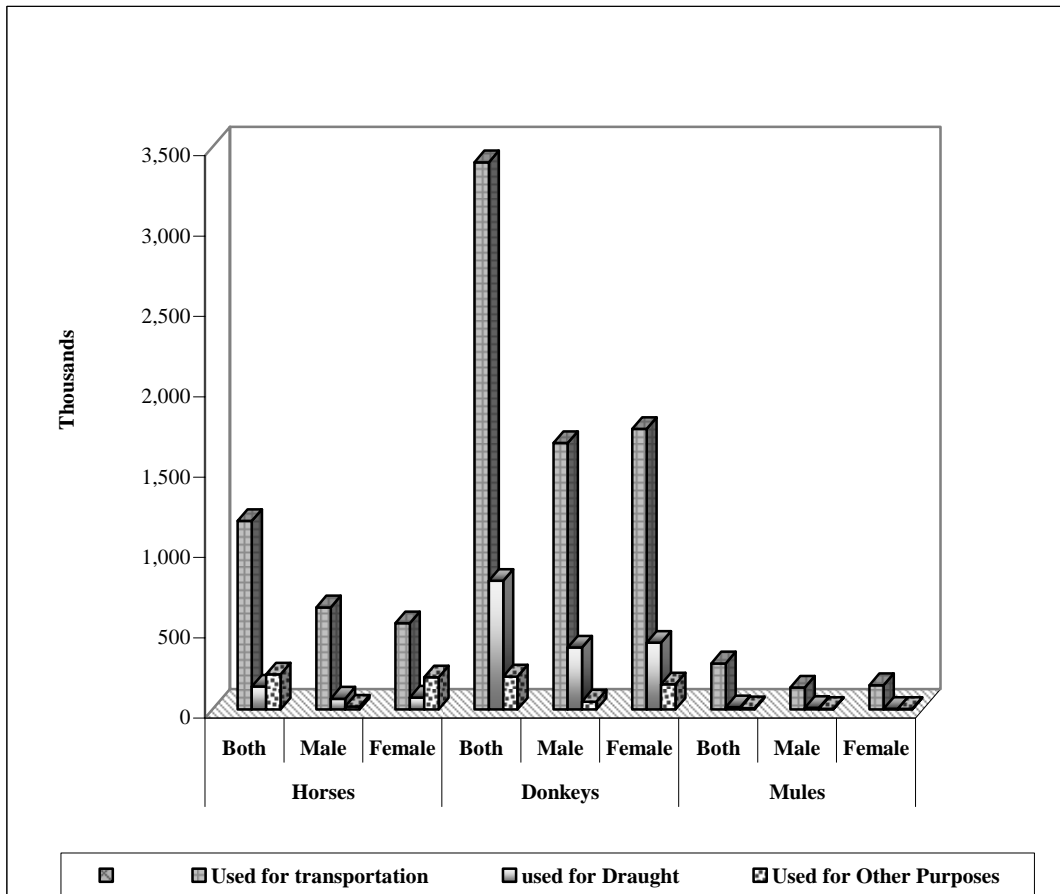
Age, Breed, and Purpose	Total		Male		Female	
	Number	%	Number	%	Number	%
Total Horses.....	1,995,306	100	941,347	47.18	1,053,95	52.82
Under 3 Years.....	422,775	21.19	203,979	10.22	218,797	10.97
3 years and older.....	1,572,530	78.81	737,369	36.96	835,162	41.86
Horses Aged 3 Years and Older by Purpose						
All Uses	1,572,530	78.81	737,369	36.96	835,162	41.86
Transportation.....	1,208,433	60.56	650,147	32.58	558,286	27.98
Draught	143,955	7.21	68,755	3.45	75,200	3.77
Other Uses.....	220,142	11.03	18,466	0.93	201,675	10.11
Total Donkeys.....	5,715,129	100	2,736,29	47.88	2,978,83	52.12
Under 3 Years...	1,216,711	21.29	603,774	10.56	612,937	10.72
3 years and older.....	4,498,417	78.71	2,132,52	37.31	2,365,89	41.4
Donkeys Aged 3 Years and Older by Purpose						
All Uses	4,498,417	78.71	2,132,52	37.31	2,365,89	41.4
Transportation.....	3,478,579	60.87	1,693,43	29.63	1,785,14	31.24
Draught	813,845	14.24	389,994	6.82	423,852	7.42
Other Uses.....	205,993	3.6	49,095	0.86	156,899	2.75
Total Mules.....	365,584	100	177,793	48.63	187,791	51.37
Under 3 Years.....	49,582	13.56	24,949	6.82	24,633	6.74
3 years and older.....	316,002	86.44	152,844	41.81	163,158	44.63
Mules Aged 3 Years and Older by Purpose						
All Uses	316,002	86.44	152,844	41.81	163,158	44.63
Transportation.....	292,492	80.01	137,660	37.65	154,832	42.35
Draught	15,062	4.12	10,592	2.9	4,470	1.22
Other Uses.....	8,448	2.31	4,592	1.26	3,855	1.05
Total Camels.....	807,581	100	273,606	33.88	533,975	66.12
Under 4 Years.....	209,456	25.94	88,792	10.99	120,664	14.94
4 years and older.....	598,125	74.06	184,814	22.88	413,311	51.18
Camels Aged 4 Years and Older by Purpose						
All Uses	598,125	74.06	184,814	22.88	413,311	51.18
Meat.....	11,181	1.38	8,673	1.07	-	-
Milk.....	239,708	29.68	-	-	239,708	29.68
Transportation.....	169,962	21.05	145,290	17.99	24,672	3.06
Draught	10,309	1.28	8,392	1.04	-	-
Other Uses	166,964	20.67	22,459	2.78	144,505	17.89

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



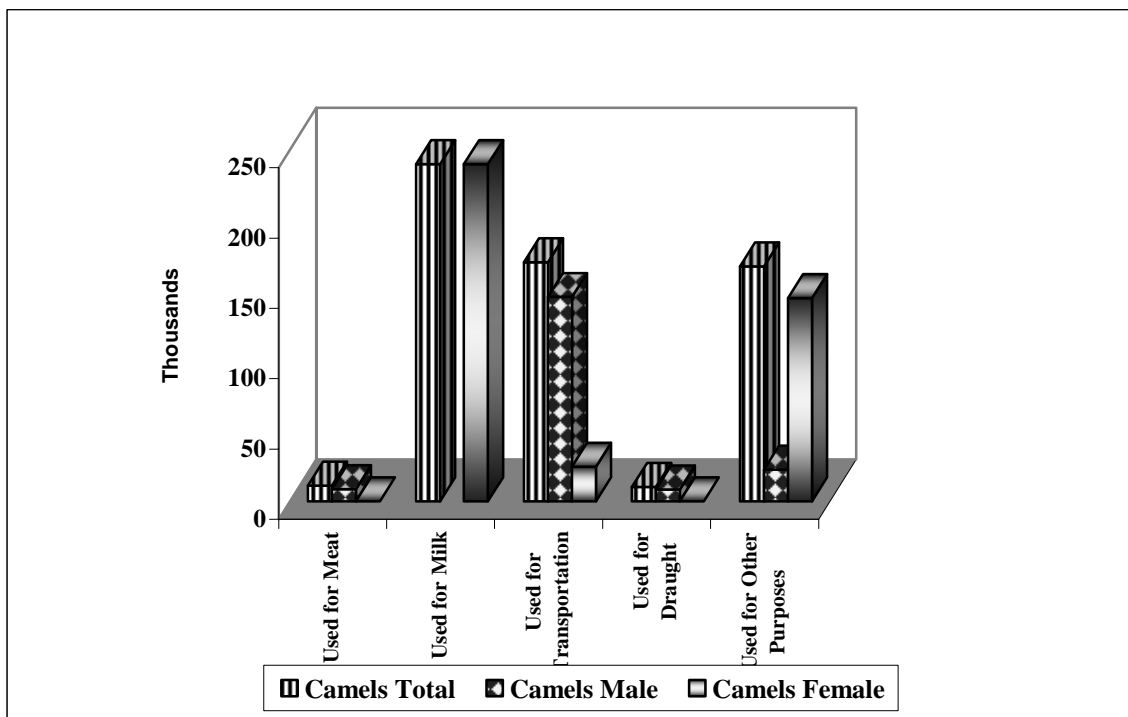
* Note that for camels the 'Age Categories' are under 4 years and 4 years & older

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



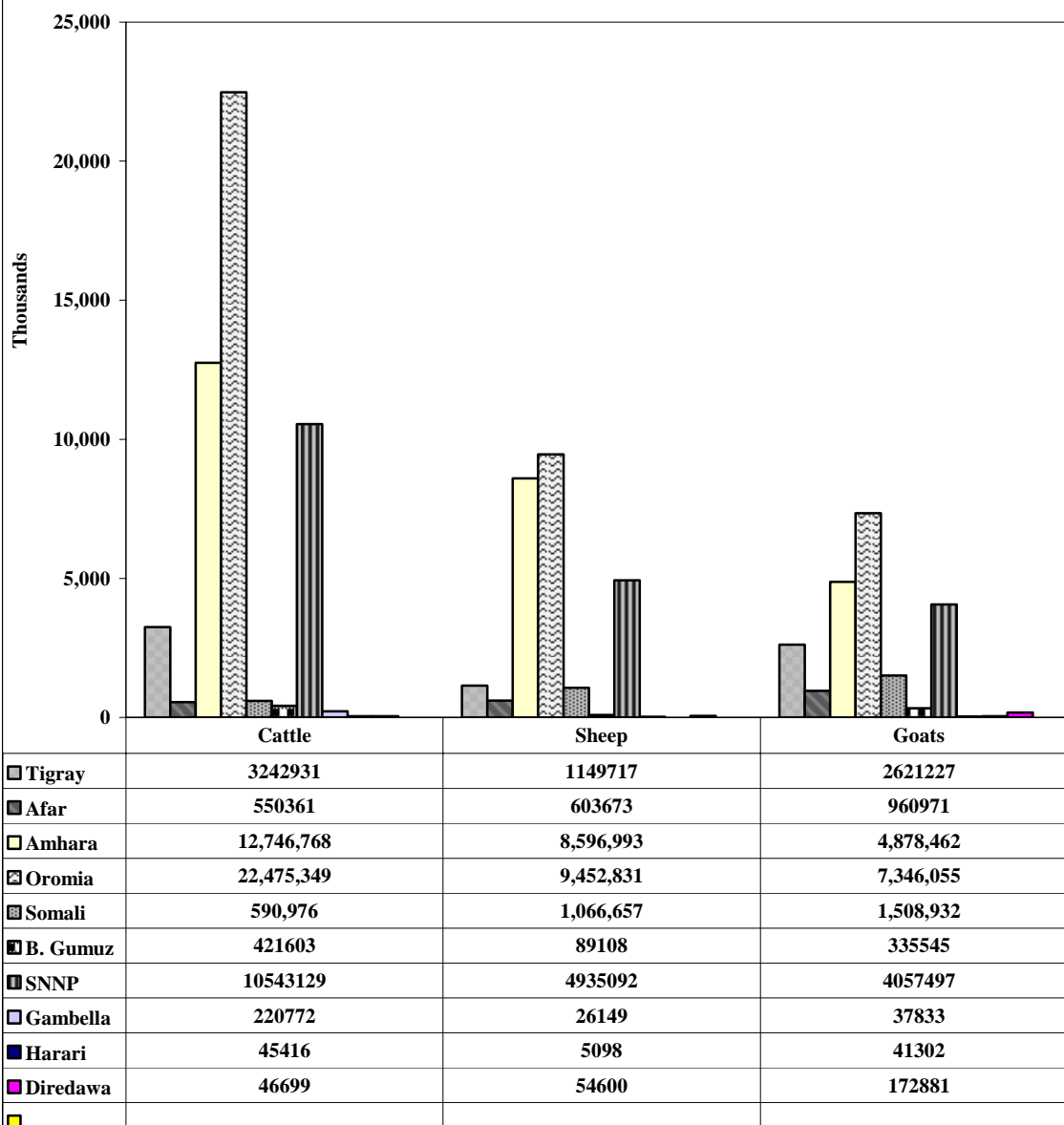
Considering the purpose of the mules, the data shows that the predominance(80.01%) was used for transportation and very few were intended for draught and other purposes. The survey result also indicates that 29.68 percent of the camels reported were kept for milk, 21.05 percent were for transportation, and only 1.28 percent was for draught purposes. On the other hand, the number of camels kept for meat was about 11 thousand heads (see also Figures III.6 to III.8).

FIGURE III.8 DISTRIBUTION OF CAMELS BY PURPOSE AND SEX



For the regional distributions of draught animals refer to the statistical tables presented at the end of this chapter and Figure III.9.

FIGURE III.9 DISTRIBUTION OF MAJOR LIVESTOCK TYPES BY REGION



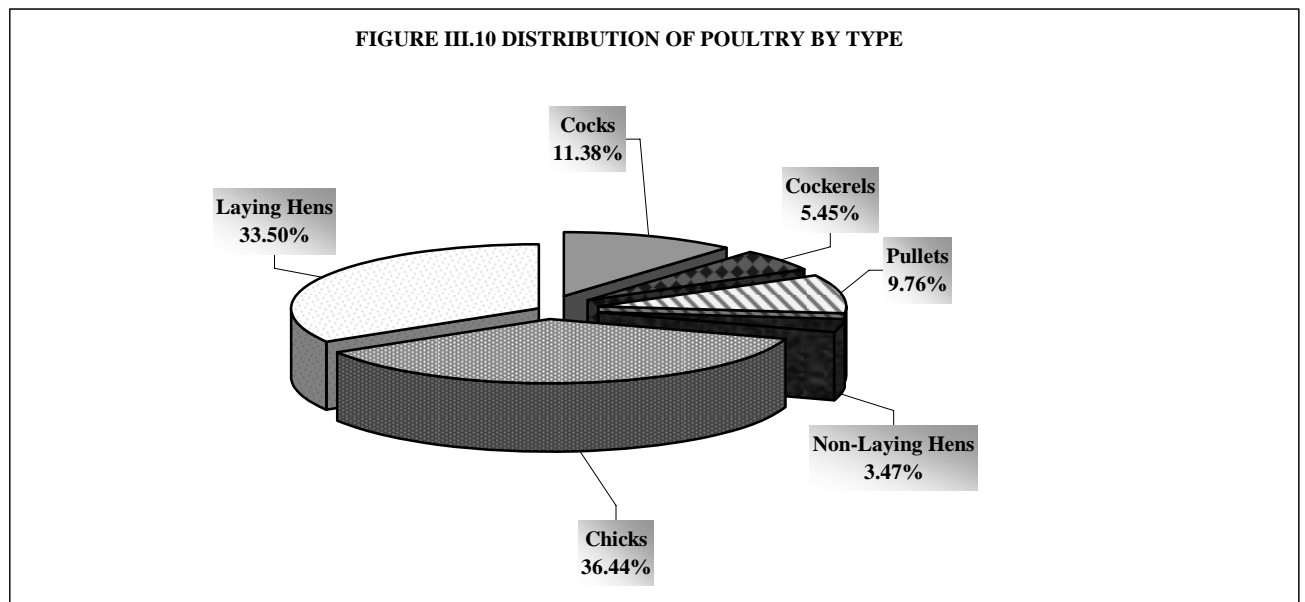
3.1.4 Poultry Population

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 42 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 (36.44 percent), followed by laying hens (33.5 percent). Pullets are estimated to be 4.1 million in the country. Cocks and cockerels are also estimated separately, and are 4.7 million and 2.2 million,

respectively. The others are non-laying hens that make up about 3.4 percent (1.45 million) of the total poultry population in the country. With regard to breed, 96.61 percent, 0.55 percent and 2.84 percent of the total poultry were reported to be indigenous, hybrid and exotic, respectively. For the regional distributions of poultry refer to the statistical tables presented at the end of this chapter.

SUMMARY TABLE III.4: Estimated Number of Poultry by Type and Breed, Ethiopia - 2009/10

Type of Poultry	All		Indigenous		Hybrid		Exotic	
	Number	%	Number	%	Number	%	Number	%
All Poultry	42,053,263	100	40,627,571	96.61	231,478	0.55	1,194,214	2.84
Cocks	4,786,694	11.38	4,602,222	10.94	42,594	0.1	141,877	0.34
Cockerels	2,291,393	5.45	2,221,212	5.28	11,853	0.03	58,328	0.14
Pullets	4,105,852	9.76	3,960,665	9.42	36,369	0.09	108,818	0.26
Non-Laying Hens	1,459,862	3.47	1,417,969	3.37	7,889	0.02	34,004	0.08
Chicks	15,323,056	36.44	14,967,301	35.59	16,628	0.04	339,127	0.81
Laying Hens	14,086,407	33.5	13,458,202	32	116,145	0.28	512,059	1.22



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 Taddesse, 1993 E.C.; P.Seegeren et al, 1996).

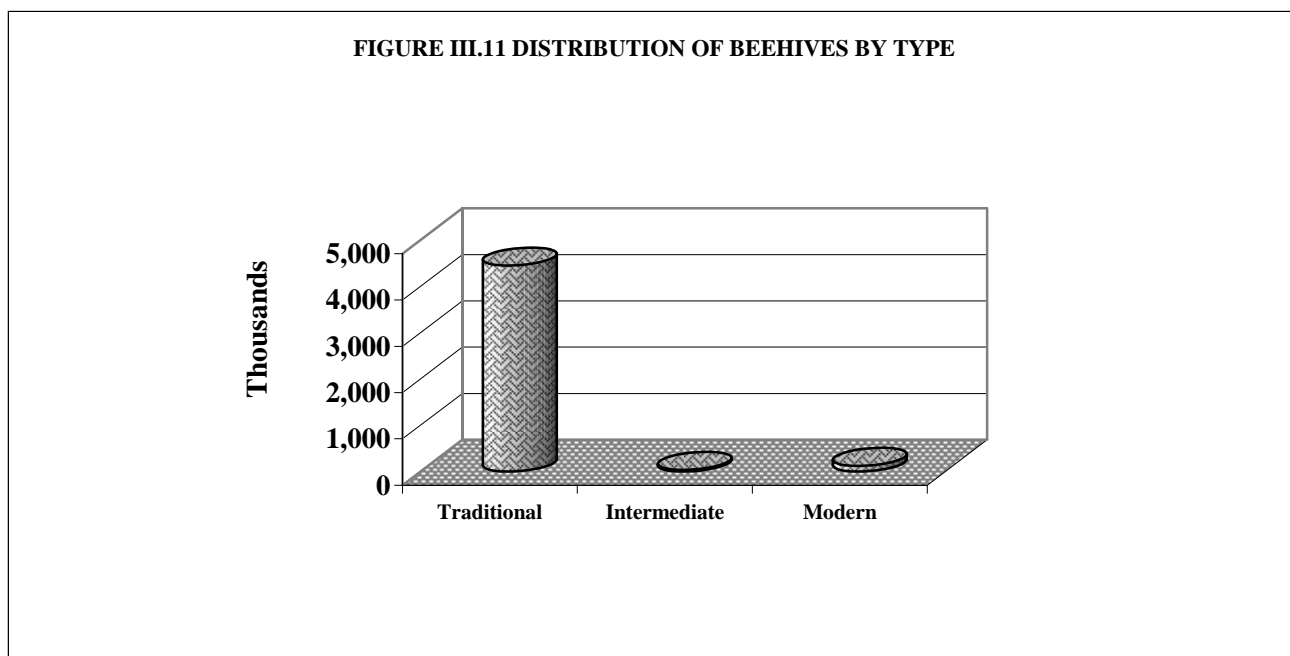
Modern Hive [Hive with Frames] is a brood (offspring) chamber (box) with a fixed bottom board and flight board. In the bottom board there is a ventilation hole of size (15cmx30cm), which can be covered with fine wire mesh or other suitable material. The brood chamber holds ten frames, which are kept 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 Taddesse, 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 (November 11, 2008 to November 10, 2009). Accordingly, the result of the survey revealed that a total of about 4.5 million hives is estimated to be found in the rural

sedentary areas of the country. From this total hives, the greater part (96.7 percent) is reported to be traditional (see Summary Table III.5).

SUMMARY TABLE III.5: Estimated Number of Beehives by Type, Ethiopia - 2009/10

Type of Beehive	Number	%
All Beehives	4,598,226	100
Traditional Beehives	4,447,011	96.71
Intermediate Beehives	33,151	0.72
Modern Beehives	118,064	2.57



For the regional distributions refer to the statistical tables presented at the end of this chapter.

3.2 NUMBERS OF BIRTHS, PURCHASES, AND ACQUIRED ANIMALS BY TYPE (ACQUISITION)

According to the survey result, about 57.3 million chickens, 11.1 million sheep, 9.5 million cattle and 8.6 million goats were born during the reference period in the rural sedentary areas of the country. Females accounted for the greater portions of most of the newly born animals (see Summary Table III.6).

With regard to other acquisitions, households have purchased about 16.2 million animals (either to build their stock or for some other reasons) and acquired about 1.6 million animals through gifts or any other means during the reference period (see Summary Table III.6).

SUMMARY TABLE III.6 Estimated Numbers of Births, Purchases, and Acquired Animals by Type during the Reference Period, Ethiopia - 2009/10

Type of Livestock	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Cattle	9,540,559	4,588,667	4,951,892	3,376,501	2,014,474	1,362,028	554,875	235,760	319,115
Sheep.....	11,155,855	5,361,205	5,794,651	3,521,001	1,797,747	1,723,254	452,947	68,966	383,980
Goats	8,662,714	4,032,083	4,630,631	1,597,004	618,556	978,448	219,637	44,520	175,117
Horses.....	198,770	100,624	98,146	179,745	105,553	74,192	13,695	1,856	11,839
Donkeys	430,644	217,153	213,491	500,876	327,522	173,354	23,544	8,972	14,572
Mules.....	19,577	8,440	11,137	46,380	20,688	25,692	2,262	2,262	-
Camels.....	99,842	45,368	54,473	24,621	20,861	3,760	1,640	733	907
Poultry	57,318,012	27,656,084	29,661,928	7,316,008	3,300,236	4,015,772	418,830	106,941	311,889

3.3 NUMBERS OF SALES, SLAUGHTERS, DEATHS, AND OFFERINGS BY TYPE (ATTENUATION)

The estimated numbers of sales, slaughters, deaths and offered animals are indicated in Summary Table III.7. About 10 million chickens, 6 million sheep, 5 million cattle and 4 million goats were sold and about 15.3 million animals (chicken, cattle, sheep, goats and camels) were slaughtered by households during the reference period. The estimated number of deaths is about 37.1 million chicks, 4.5 million cattle, 6.9 million sheep, 4.8 million goats and households have also offered about 1.1 million animals to their relatives or others as gifts.

SUMMARY TABLE III.7 Estimated Numbers of Sales, Slaughters, Deaths, and Offerings by Type during the Reference Period,
Ethiopia - 2009/10

Type of Livestock	Number of Sales			Number of Slaughters			Number of Deaths*			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Cattle	5,236,888	3,115,126	2,121,762	352,009	198,309	153,700	4,529,978	1,941,127	2,588,851	418,187	177,721	240,466
Sheep	6,283,985	3,242,163	3,041,822	3,314,765	2,427,347	887,418	6,963,566	2,159,750	4,803,816	233,207	62,396	170,811
Goats	4,251,167	2,144,074	2,107,093	1,775,170	1,201,230	573,940	4,841,077	1,696,766	3,144,310	201,209	68,661	132,549
Horses	140,721	88,588	52,134				210,326	88,109	122,218	8,487	1,466	7,021
Donkeys	344,773	208,141	136,631				352,357	181,204	171,154	11,329	3,592	7,737
Mules	34,724	15,559	19,165				18,249	7,904	10,345	*	*	-
Camels	63,986	49,156	14,830	5,160	2,727	2,433	62,377	20,308	42,068	*	*	*
Poultry	10,255,532	5,531,427	4,724,105	10,904,517	6,811,267	4,093,250	37,161,451	16,928,590	20,232,861	367,310	131,787	235,522

* Includes animals that died from diseases and other causes

3.4 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.

3.4.1 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.8, the estimate of total cow milk production for the rural sedentary areas of the country during the reference period, is about 2 .94 billion liters. On the other hand, the estimate of camel milk for the same areas of the country is about 150 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 during the reference period at country level is estimated to be about *six* months, and average milk yield per cow per day is about 1.6 liters. With regard to camel, the average lactation period is about *ten* months whereas the average daily milk yield is about 5 liters in the sedentary areas of the country.

3.4.2 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 in the rural sedentary areas of the country. As a result, the estimate of total honey production is about 41 million kilograms of which the greater portion is harvested from traditional hives (see Summary Table III.8).

As can be seen from the survey data, honey was harvested on average 1.52, 1.86, and 1.56 times during the reference period from traditional, intermediate and modern hives, respectively (see Summary Table III.8).

3.4.3 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 76 million (Summary Table III.8). Average egg-laying period per hen and average number of eggs laid per hen during the reference period are also estimated for local, hybrid and exotic breeds. Consequently, the average number egg-laying period per hen per year is about four and five for the local, hybrid and exotic breeds, respectively. The average length of a single egg-laying period per hen is estimated to be about 21, 38 and 159 days for local, hybrid and exotic breeds, in that order. The average number of eggs laid per hen per egg- laying period in the country is about 12,33 and 135 eggs, correspondingly (see Summary Table III.8)

**SUMMARY TABLE III.8: Milk, Honey, and Egg Production,
Ethiopia - 2009/10**

Item	Quantity Produced and Frequency		
Milk Production			
Cow Milk			
Average Daily Milk Production (Liters/Cow)...			1.688
Average Lactation Period (Months).....			6
Total Milk Production (Liters)			2,940,216,526
Camel Milk			
Average Daily Milk Production (Liters/Camel)...			5.053
Average Lactation Period (Months).....			10
Total Milk Production (Liters)			150,315,343
Honey Production			
All Types of Beehives (Number).....			
Production (Kilograms).....			4,598,226
Average Frequency (Harvests/Year).....			41,524,967
Traditional Beehives (Number).....			1.53
Production (Kilograms).....			4,447,011
Average Frequency (Harvests/Year)			38,833,445
Intermediate Beehives (Number).....			1.52
Production (Kilograms).....			33,151
Average Frequency (Harvests/Year)			580,891
Modern Beehives (Number).....			1.86
Production (Kilograms).....			118,064
Average Frequency (Harvests/Year).....			2,110,631
Total Egg Production (Number).....			1.56
Egg Production	Indigenous	Hybrid	Exotic
Average Number of Egg-laying Period/Year.....	4	5	*
Average Length of a Period (in days).....	21	38	159
Average Number of Eggs/Hen/Period.....	12	33	134
Total Egg Production (Number).....	78,065,930	*	*

3.5 LIVESTOCK VACCINATION, DISEASE, AND TREATMENT

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, 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.

SUMMARY TABLE III.9a: Estimated Number of Vaccinated Livestock by Type,
Ethiopia - 2009/10

Type of Livestock	Total Vaccinated	Vaccinated against:					
		Anthrax ³	Blackleg ⁴	Pleuro-Pneumonia ⁵	Hemorrhagic Septicemia ⁶	Rinderpest ⁷	Others
Cattle.....	14,796,122	4,709,580	4,893,469	1,506,774	2,244,017	1,233,549	208,733
Sheep	4,167,599	391,629	371,749	1,205,484	1,046,332	92,346	1,060,060
Goats	2,758,930	326,898	202,376	798,949	875,502	*	489,680
Camels	93,410	*	*	*	*	*	4,668

SUMMARY TABLE III.9b: Estimated Numbers of Livestock Afflicted and Treated, Ethiopia - 2008/09

Item	Number	%
Total Afflicted	40,187,550	100
Cattle	8,454,729	21.04
Sheep	7,275,541	18.1
Goats	4,963,025	12.35
Horses, Donkeys, and Mules .	908,902	2.26
Camels.....	87,441	0.22
Poultry	18,497,913	46.03
Total Treated	8,733,744	21.73
Cattle	4,311,038	10.73
Sheep	2,100,809	5.23
Goats	1,056,267	2.63
Horses, Donkeys, and Mules .	350,355	0.87
Camels.....	18,806	0.05
Poultry	896,470	2.23

Data on these parameters specifically on numbers of vaccinated, afflicted, and treated animals were therefore collected and the results are shown in Summary Tables III.9a and III.9b. The estimated number of vaccinated animals within the reference period in the rural areas of the country is about 14.7 million. Out of these animals, about 68 percent were cattle followed by sheep, which took about 19 percent share. Goats also accounted for about 12.6 percent of the total vaccinated animals. The survey results also revealed that 93.4 thousand camel was vaccinated during the reference period.

As indicated in Summary Tabel III.9b, about 40 million animals were diseased / afflicted by different types of diseases during the reference period and only 8.7 million of them

³ Anthrax- is an infectious disease of animals especially cattle and sheep that causes skin ulcers and is transmittable to humans by inhalation and through feces and infected meat.

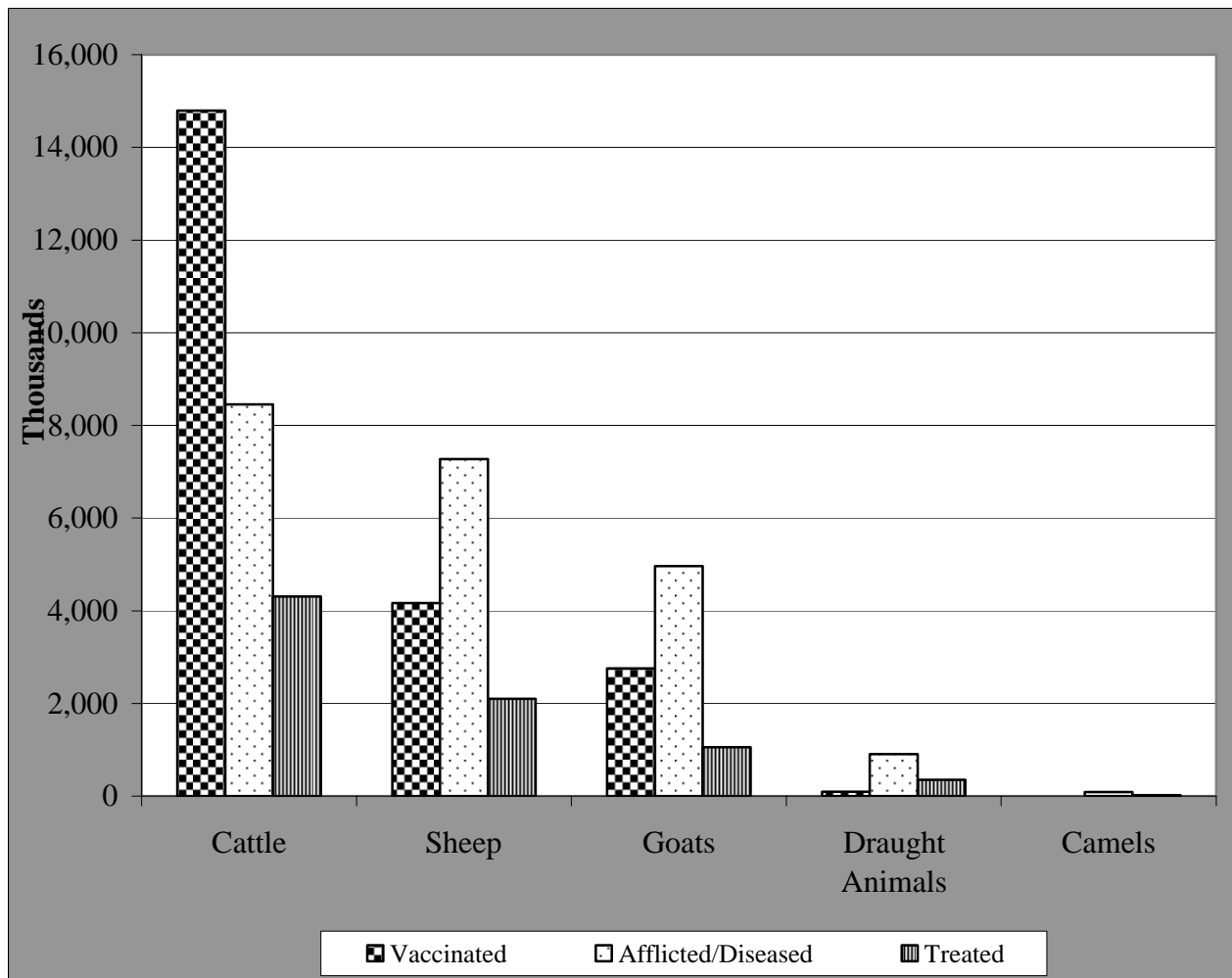
⁴ Blackleg- is an infectious bacterial disease of farm animals that causes swellings on the legs.

⁵ Pleuro-pneumonia – is an infectious bacterial disease of animals mainly cattle that causes cough and fever and is transmittable to other animals easily.

⁶ Hemorrhagic- septicemia- is an infectious bacterial disease of animals.

were treated. The cattle constituted about 21 percent of the total treated animals in the country and substantial numbers of sheep and goats were treated as well (see Summary Table III.9b). For the regional distributions refer to the statistical tables presented at the end of this chapter.

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



3.6 NUMBER OF HOLDINGS BY SIZE OF LIVESTOCK⁸

Concerning the number of holdings by size of livestock, the summary results for cattle, sheep, goats, draught animals, and poultry are given in the following tables (Summary Table III.10a – d).

⁷ Rinder pest – is sometimes a fatal viral disease mainly affecting cattle, sheep, and goats that occurs chiefly in Africa and Asia.

Most of the holdings, about 52 percent, reported one to four cattle and considerable portion (20 percent) of the holdings possess five to nine cattle. About 19.83 percent of the total holdings were also without cattle during the reference date (Summary Table III.10a).

Summary Table III.10a: Number of Holdings by Size of Cattle,
Ethiopia - 2009/10

Size	Number of Holdings	%
All Holdings.....	14,003,803	100
Holdings with no Cattle...	2,777,472	19.83
1-2 Head.....	3,751,421	26.79
3-4 Head.....	3,706,240	26.47
5-9 Head.....	2,929,966	20.92
10-19 Head.....	709,179	5.06
20-49 Head.....	110,253	0.79
50-99 Head.....	10,747	0.08
100-199 Head.....	5,986	0.04
>=200 Head.....	2,539	0.02

The result of the survey also revealed that about 24.34 percent and 17 percent of the total holdings were with one to four head of sheep and goats, in that order. The majority of the holdings, about 62.15 percent and about 72.55 percent have reported no sheep and no goat, correspondingly (see Summary Table III.10b).

Summary Table III.10b: Number of Holdings by Sizes of Sheep and Goats,
Ethiopia – 2009/10

Size	Sheep		Goats	
	Number Of Holdings	%	Number of Holdings	%
All Holdings.....	14,003,803	100	14,003,803	100
Holdings with no Sheep/Goats.	8,703,114	62.15	10,160,328	72.55
1-4 Head.....	3,408,543	24.34	2,381,109	17
5-9 Head.....	1,370,648	9.79	980,415	7
10-49 Head.....	505,906	3.61	458,952	3.28
50-99 Head.....	11,855	0.08	13,963	0.1
100-199 Head.....	3,048	0.02	6,215	0.04
200-499 Head.....	689	*	2,586	0.02
>=500 Head.....	-	-	235	*

With regard to draught animals, from the holdings that owned draught animals, most of them were with one to two head. About 98 percent, 97 percent, 91 percent, and 70 percent

⁸ The measures of size used for classification were adapted from FAO recommendation (2005).

of the total holdings were with no camel; no mule, no horse, and no donkey, respectively (see Summary Table III.10c).

Summary Table III.10c: Number of Holdings by Size of Draught Animals,
Ethiopia - 2009/10

Size	Horses		Donkeys		Mules		Camels	
	Number of Holdings	%	Number of Holdings	%	Number of Holdings	%	Number of Holdings	%
All Holdings.....	14,003,803	100	14,003,803	100	14,003,803	100	14,003,803	100
Holdings with no Animals.	12,743,792	91	9,934,645	70.94	13,664,002	97.57	13,823,166	98.71
1-2 Head.....	1,093,727	7.81	3,798,309	27.12	336,986	2.41	99,593	0.71
3-4 Head.....	140,793	1.01	249,134	1.78	2,406	0.02	33,098	0.24
5-9 Head.....	24,144	0.17	19,508	0.14	409	*	27,074	0.19
>= 10 Head.....	1,347	0.01	2,207	0.02	-	-	20,872	0.15

The size of poultry that most holdings reported is the 10 to 49 size group followed by the one to nine size group. Sizeable (44.77 percent) holdings were also without poultry (see Summary Table III.10d).

Summary Table III.10d: Number of Holdings by size of Poultry,
Ethiopia - 2009/10

Size	Number of Holdings	%
All Holdings.....	14,003,803	100
Holdings with no Poultry...	6,269,815	44.77
1-9 Head.....	6,465,008	46.17
10-49 Head.....	1,267,630	9.05
50-99 Head.....	1,248	0.01
100-199 Head.....	102	*
200-499 Head.....	-	-

3.7 ANIMAL FEED

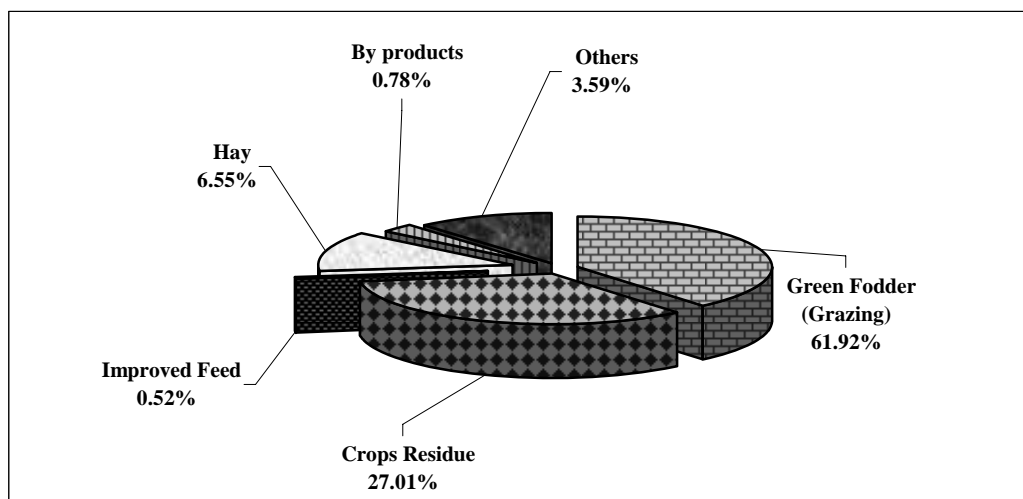
Data on animal feed practices of holders in the rural sedentary areas of the country were gathered to assess the feed utilization experience. For the purpose of this report, animal feeds are classified as green fodder (grazing), crop residue, improved feed, hay, industrial by-products, and other feeds. *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 61.92 percent) followed by crops residue that is 27.01 percent. Hay and by-products were also used as animal feeds that comprise about 6.55 and 0.78 percent of the total feeds, respectively. Moreover, as shown in Summary Table III.11 and Figure III.13, very small amount of improved feed (only 0.52 percent) was used as animal feed and other types of feed that accounted for about 3.59 percent were also used in the country.

SUMMARY TABLE III.11: Animal Feed Practices in Ethiopia - 2009/10

Item	Number of Holders Reporting	Percentage from the total feed utilized
Total		100
Green Fodder/Grazing	12,294,191	61.92
Crops Residue.....	10,569,128	27.01
Improved Feed.....	162,750	0.52
Hay	4,048,369	6.55
By-products	903,056	0.78
Others	3,548,044	3.59

FIGURE III.13 ANIMAL FEED PRACTICES OF HOLDERS



Summary Table III.11 also highlights the number of holders reported each type of feed. According to the data, about 12 million holders have used green fodder to feed their animals. Significant number of holders (about 10 million) in the rural areas of the country also reported that they used to feed crops residue for their animals. Moreover, about 3.9 million, and about 0.8 million holders have reported to use hay and by-products, respectively. Quite a number of holders (about 3 million) as well reported to use other

types of feeds while about 161 thousand holders used improved feed during the reference period.

Sources of animal feeds were also assessed and own holdings were the major source of all types of feeds for the majority of the holders during the reference period. Communal holdings were also observed as the main sources of green fodder for considerable number of holders. Substantial numbers of holders have also purchased different types of feed to nourish their animals (see Summary Table III.12).

SUMMARY TABLE III.12 Estimated Number of Holders
Reporting Animal Feed by Source and Type of Feed, Ethiopia - 2009/10

Source of Feed	Green fodder/ Grazing	Crops Residue	Improved Feed	Hay	By- products	Others
All Sources.....	4,530,270	9,412,617	131,188	2,759,990	465,942	2,318,375
Own Holding.....	209,937	141,160	21,109	507,613	374,330	656,717
Purchased.....	3,987,015	121,012	553	81,991	2,214	53,162
Communal Holdings/Government	3,323,856	784,019	9,099	648,764	38,459	342,436
From any Two or More Sources...	243,112	110,320	800	50,012	22,112	177,354
Other Sources.....						

3.8 LIVESTOCK EXTENSION

This section of the survey results elicited information about livestock extension packages practiced by holders during the reference period. As can be seen from Summary Table III.13, a total of about 164.8 thousand holders (about 1 percent of the total holders) were involved in livestock extension packages during the reference period. More than 47,612 of these holders were involved in beef and poultry development packages. About a (one third) of them were engaged in poultry development packages whereas 14.14 % of them have practiced honey and wax development package. Moreover, about 2.33 % of the holders practiced at least two types of packages concurrently within the reference period.

SUMMARY TABLE III.13 Estimated Number of Holders Practiced Livestock Extension Packages during the Reference Period by Type of Package, Ethiopia - 2009/10

Type of Livestock Extension Packages	Number of Holders Practiced	%
Total	166,334	100
Dairy Development Package.....	40,496	24.3462
Beef/Meat/Mutton Development Package.....	47,612	28.62433
Poultry Development Package.....	50,821	30.55358
Honey and Wax Development Package.....	23,521	14.14083
Two or More of the Packages.....	3,884	2.335061

**STATISTICAL TABLES PRESENTING
RESULTS AT
REGION LEVEL**

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

Geographic Area	ALL LIVESTOCK								
	CATTLE	SHEEP	GOATS	HORSES	DONKEYS	MULES	CAMELS	POULTRY	BEEHIVES
Ethiopia	50,884,005	25,979,919	21,960,706	1,995,306	5,715,129	365,584	807,581	42,053,263	4,598,226
Tigray	3,242,931	1,149,717	2,621,227	*	456,093	4,920	32,288	4,266,077	195,662
Afar	550,361	603,673	960,971	-	36,992	*	218,430	29,369	*
Amhara	12,746,768	8,596,993	4,878,462	352,648	2,108,347	127,716	34,649	12,739,620	822,336
Oromia	22,475,349	9,452,831	7,346,055	1,299,295	2,494,536	174,676	257,322	15,336,939	2,485,754
Somale	590,976	1,066,657	1,508,932	-	118,089	-	254,839	55,752	1,852
Benshangul-Gumuz	421,603	89,108	335,545	*	52,718	758	-	820,994	232,798
SNNP	10,543,129	4,935,092	4,057,497	335,709	424,931	57,431	-	8,503,564	774,980
Gambela	220,772	26,149	37,833	375	*	*	-	210,332	83,417
Harari	45,416	5,098	41,302	-	9,091	-	*	39,185	731
Dire Dawa	46,699	54,600	172,881	-	13,979	-	7,821	51,431	534

TABLE 3-2: NUMBER OF CATTLE BY AGE AND SEX OF ANIMAL, 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	50,884,005	2,446,645	1,812,200	3,526,579	14,420,380	756,607	2,586,815	2,046,251	4,571,997	18,095,970	620,477
Tigray	3,242,931	133,804	119,977	224,886	994,304	75,118	153,851	148,448	296,062	1,046,405	50,075
Afar	550,361	27,081	20,414	19,540	38,221	2,101	43,665	39,186	60,452	289,528	10,174
Amhara	12,746,768	510,884	401,285	877,889	4,406,587	393,656	545,942	425,231	941,576	3,983,081	260,636
Oromia	22,475,349	1,140,845	792,263	1,646,883	6,407,406	245,604	1,169,837	876,192	2,079,719	7,911,361	205,239
Somale	590,976	31,876	26,311	37,381	85,143*		39,011	37,337	69,997	258,263	5,318
Benshangul-Gumuz	421,603	16,492	21,220	35,750	108,276	7,907	21,001	22,077	44,069	136,210	8,602
SNNP	10,543,129	568,695	415,470	656,918	2,337,823	28,002	589,959	476,637	1,038,506	4,358,111	73,008
Gambela	220,772	11,883	11,526*		27,618	3,815	18,159*	*		78,123	6,141
Harari	45,416	2,222	2,026	4,763	6,874*		2,865	2,827	5,556	17,624	635
Dire Dawa	46,699	2,862	1,789	5,135	8,130*		2,526	1,747	6,556	17,264	648

TABLE 3-3: NUMBER OF SHEEP BY AGE AND SEX OF ANIMAL, 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	25,979,919	3,119,907	1,145,455	984,155	1,739,110	3,212,842	1,481,917	1,710,282	12,586,250
Tigray	1,149,717	76,284	61,810	53,811	94,229	88,814	83,973	107,716	583,081
Afar	603,673	36,486	26,399	23,066	50,476	52,706	45,435	64,761	304,345
Amhara	8,596,993	949,481	354,080	326,365	525,038	933,488	415,404	516,937	4,576,199
Oromia	9,452,831	1,405,479	411,555	306,353	410,311	1,423,431	542,457	547,178	4,406,068
Somale	1,066,657	80,757	55,719	68,392	172,146	90,803	81,146	99,781	417,913
Benshangul-Gumuz	89,108	12,651	5,452	3,059	5,761	11,956	7,293	6,797	36,139
SNNP	4,935,092	549,803	225,208	197,874	473,649	601,491	299,851	359,441	2,227,774
Gambela	26,149	3,248	1,277	1,117	3,090	3,993	1,662	1,479	10,283
Harari	5,098	516	257	517	555	406	347	496	2,005
Dire Dawa	54,600	5,202	3,699	3,602	3,855	5,755	4,350	5,695	22,443

TABLE 3-4: NUMBER OF GOATS BY AGE AND SEX OF ANIMAL, 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	21,960,706	2,356,603	1,161,585	1,002,131	2,250,576	2,562,258	1,535,584	1,696,893	9,395,075
Tigray	2,621,227	181,804	138,935	124,356	257,530	223,049	218,118	269,585	1,207,851
Afar	960,971	56,496	37,954	35,202	67,813	95,489	87,598	117,507	462,911
Amhara	4,878,462	541,257	260,203	234,062	517,001	553,666	331,239	343,292	2,097,740
Oromia	7,346,055	1,014,689	399,437	279,177	450,090	1,056,906	488,380	471,552	3,185,824
Somale	1,508,932	116,466	83,884	87,812	204,772	142,305	113,227	139,446	621,019
Benshangul-Gumuz	335,545	45,168	21,753	12,984	14,537	52,510	27,157	26,494	134,942
SNNP	4,057,497	375,644	202,483	214,704	720,073	408,532	249,695	304,101	1,582,265
Gambela	37,833	3,970	2,222	1,543	4,486	5,626	3,717	3,678	12,591
Harari	41,302	4,090	3,305	2,626	2,390	4,618	2,516	4,247	17,510
Dire Dawa	172,881	17,020	11,408	9,665	11,884	19,557	13,935	16,990	72,423

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

Geographic Area	HORSES AND DONKEYS									
	ALL HORSES	HORSES				ALL DONKEYS	DONKEYS			
		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	1,995,306	203,979	737,369	218,797	835,162	5,715,129	603,774	2,132,521	612,937	2,365,897
Tigray	*	*	*	*	*	456,093	48,293	209,257	38,867	159,677
Afar	-	-	-	-	-	36,992	3,708	11,361	3,005	18,917
Amhara	352,648	31,167	123,613	37,862	160,006	2,108,347	248,472	689,439	271,415	899,020
Oromia	1,299,295	145,346	470,311	151,800	531,837	2,494,536	255,681	962,328	251,876	1,024,651
Somale	*	-	*	-	-	118,089	15,761	44,334	11,640	46,354
Benshangul-Gumuz	*	*	*	-	*	52,718	4,791	28,163	4,963	14,800
SNNP	335,709	27,099	140,008	28,080	140,521	424,931	25,217	178,398	28,720	192,596
Gambela	375	-	375	-	-	*	*	-	-	-
Harari	-	-	-	-	-	9,091	541	5,054	548	2,949
Dire Dawa	-	-	-	-	-	13,979	1,310	3,834	1,904	6,931

TABLE 3-6: NUMBER OF MULES AND CAMELS BY AGE AND SEX OF ANIMAL, 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	365,584	24,949	152,844	24,633	163,158	807,581	88,792	184,814	120,664	413,311
Tigray	4,920	-	2,323	-	2,597	32,288	2,825	29,463	-	-
Afar	*	-	*	-	-	218,430	17,996	31,209	38,542	130,683
Amhara	127,716	11,610	44,296	13,908	57,902	34,649	6,549	28,101	-	-
Oromia	174,676	9,007	74,443	9,434	81,792	257,322	33,183	41,577	45,604	136,957
Somale	*	-	-	-	*	254,839	26,707	51,844	34,802	141,487
Benshangul-Gumuz	758	-	412	-	346	-	-	-	-	-
SNNP	57,431	4,331	31,313	1,291	20,496	-	-	-	-	-
Gambela	*	-	*	-	-	-	-	-	-	-
Harari	-	-	-	-	-	*	*	*	*	*
Dire Dawa	-	-	-	-	-	7,821	1,211	2,406	1,249	2,955

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

Geographic Area	CATTLE AGED 3 – 10 YEARS									
	Total	MALE				FEMALE				
		Draught	Beef	Breeding	Other	Milk	Draught	Beef	Breeding	Other
Ethiopia	32,516,352	12,717,153	268,933	944,171	490,126	6,727,303	132,129	63,197	10,138,081	1,035,260
Tigray	2,040,710	952,444	2,704	27,881	11,277	54,211	6,836	2,131	971,066	12,161
Afar	327,749	14,113	1,775	21,909	424	150,614*	*	*	133,871*	*
Amhara	8,389,617	4,198,171	35,914	66,444	106,059	358,854	77,803	12,506	3,329,751	204,160
Oromia	14,318,767	5,796,690	168,634	250,728	191,354	3,336,552	33,648	24,434	4,189,850	326,877
Somale	343,407	60,537	7,286	14,623*	*	99,312*	*	*	153,640*	*
Benshangul-Gumuz	244,486	101,154*	*	2,155	4,491	25,020	2,657*	*	103,416	4,948
SNNP	6,695,934	1,576,559	46,221*	*	168,383	2,663,545	9,778	21,677	1,188,183	474,928
Gambela	105,741	6,628	2,653	13,218*	*	27,758*	*	*	46,714*	*
Harari	24,498	5,007	1,532*	*	*	4,872*	-	-	12,029	660
Dire Dawa	25,394	5,852	1,739	348*	*	6,566*	-	-	9,554	1,114

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

Geographic Area	SHEEP AGED 2 YEARS AND OLDER									
	Total	MALE				FEMALE				
		Mutton/Meat	Wool	Breeding	Other	Mutton/Meat	Wool	Breeding	Other	
Ethiopia	14,325,360	586,095	7,625	1,079,065	66,325	64,028	67,455	12,396,705	58,063	
Tigray	677,310	4,430	2,087	85,663*	*	495	8,844	572,936	805	
Afar	354,821	3,261*	*	46,756*	*	748	552	302,959	86	
Amhara	5,101,238	221,456*	*	264,898	36,714	14,698	17,408	4,524,292	19,801	
Oromia	4,816,379	160,955*	*	227,595	19,419	33,040	34,154	4,308,525	30,349	
Somale	590,060	94,985*	*	76,860*	*	10,822	1,456	405,346	289	
Benshangul-Gumuz	41,900	1,846	-	3,792*	*	19	194	35,926	-	
SNNP	2,701,423	97,090*	-	368,243	7,425	3,934	4,829	2,212,279	6,733	
Gambela	13,372	439	-	2,513*	*	33	17	10,233	-	
Harari	2,560	461	-	*	*	-	-	2,005	-	
Dire Dawa	26,298	1,174	-	*	-	238	-	22,205	-	

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

Geographic Area	GOATS AGED 2 YEARS AND OLDER							
	Total	MALE			FEMALE			
		Meat	Breeding	Other	Meat	Milk	Breeding	Other
Ethiopia	11,645,651	692,188	1,508,076	50,312	45,946	659,664	8,659,713	29,753
Tigray	1,465,380	35,208	215,872*			4,585	1,195,107*	
Afar	530,724	6,819	60,512*		1,210	200,776	260,327*	
Amhara	2,614,742	252,587	239,225	25,189	11,366	5,535	2,069,270	11,570
Oromia	3,635,914	187,108	252,156	10,826	12,358	319,087	2,845,460	8,918
Somale	825,792	98,379	104,699	1,694*		72,778	538,974*	
Benshangul-Gumuz	149,479	2,957	10,725*				133,542*	
SNNP	2,302,338	100,403*		4,670*		52,315	1,518,857	3,635
Gambela	17,077	295	4,097*		108	675	11,773*	
Harari	19,900	1,918	420*				16,908*	
Dire Dawa	84,307	6,514	5,370-			2,772	69,493-	

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

Geographic Area	HORSES AGED 3 YEARS AND OLDER						
	Total	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Ethiopia	1,572,530	650,147	68,755	18,466	558,286	75,200	201,675
Tigray	*	*	*		*	*	*
Afar	-	-	-		-	-	-
Amhara	283,619	65,611	55,771*		43,817	58,459	57,730
Oromia	1,002,149	457,136	7,186	5,989	414,197	8,434	109,207
Somale	*	*					
Benshangul-Gumuz	*	*			*	*	
SNNP	280,529	124,075*		*	98,012	7,907	34,602
Gambela	375	375-					
Harari	-	-			-	-	-
Dire Dawa	-	-			-	-	-

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

Geographic Area	DONKEYS AGED 3 YEARS AND OLDER						
	TOTAL	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Ethiopia	4,498,417	1,693,432	389,994	49,095	1,785,146	423,852	156,899
Tigray	368,934	166,401	42,697*		120,404	38,556*	
Afar	30,278	11,200*	*		16,998*		1,806
Amhara	1,588,459	489,458	188,598	11,383	559,729	243,240	96,052
Oromia	1,986,979	793,734	136,772	31,822	845,785	125,544	53,322
Somale	90,688	44,210-	*		45,388*		*
Benshangul-Gumuz	42,964	13,647	12,262*		11,053	3,011*	
SNNP	370,995	166,800	8,351	3,247	176,866	12,267	3,463
Gambela	*	*	-	-	-	-	-
Harari	8,003	4,175	878-		2,334	562*	
Dire Dawa	10,765	3,455	379-		6,589	310*	

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

Geographic Area	MULES AGED 3 YEARS AND OLDER						
	TOTAL	MALE			FEMALE		
		Transportation	Draught	Other	Transportation	Draught	Other
Ethiopia	316,002	137,660	10,592	4,592	154,832	4,470	3,855
Tigray	4,920	2,101*	-		2,597-		
Afar	*	*	-		-		
Amhara	102,198	36,638*	*		54,862	2,578*	
Oromia	156,235	70,794*	*		79,502*		*
Somale	*	-	-		*	-	-
Benshangul-Gumuz	758	412-	-		230-		*
SNNP	51,809	27,658*	*		17,616	1,232*	
Gambela	*	*	-		-		-
Harari	-	-	-		-		-
Dire Dawa	-	-	-		-		-

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

Geographic Area	CAMELS AGED 4 YEARS AND OLDER									
	TOTAL	MALE				FEMALE				
		Transportation	Meat	Draught	Other	Transportation	Meat	Draught	Milk	Others
Ethiopia	598,125	145,290	8,673	8,392	22,459*	-	24,672*	-	239,708	144,505
Tigray	29,463	23,481*	-	3,188*	-	-	-	-	-	-
Afar	161,892	30,340*	-	-	*	-	*	-	72,642	52,720
Amhara	28,101	21,641*	-	*	*	-	-	-	-	-
Oromia	178,534	32,958*	-	*	6,132*	-	*	-	100,048	23,680
Somale	193,330	34,375	6,152	1,750	9,567*	-	7,974*	-	65,024	66,913
Benshangul-Gumuz	-	-	-	-	-	-	-	-	-	-
SNNP	-	-	-	-	-	-	-	-	-	-
Gambela	-	-	-	-	-	-	-	-	-	-
Harari	*	*	*	-	-	-	-	*	-	*
Dire Dawa	5,361	2,307*	-	-	-	-	998-	-	1,236	721

TABLE 3-14: NUMBER OF CATTLE BY SEX, BREED, AND REGION

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Ethiopia	50,884,005	22,803,451	145,440	13,606	27,669,572	222,012	29,925
Tigray	3,242,931	1,539,986	7,204*	-	1,679,097	13,125	2,619
Afar	550,361	107,045*	-	-	442,520*	-	*
Amhara	12,746,768	6,557,268	28,695	4,339	6,107,543	42,501	6,422
Oromia	10,127,447	98,630	6,924	12,089,076	137,274	15,999	-
Somale	590,976	181,050	-	-	409,926	-	-
Benshangul-Gumuz	421,603	189,645	-	-	231,897*	-	-
SNNP	10,543,129	3,995,176	10,397*	-	6,503,629	28,119	4,472
Gambela	220,772	72,232*	-	-	148,428*	-	-
Harari	45,416	15,644*	-	*	28,713*	-	*
Dire Dawa	46,699	17,957	-	-	28,742	-	-

TABLE 3-15 NUMBERS OF SHEEP BY SEX, BREED, AND REGION

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Ethiopia	25,979,919	6,976,987*		*	18,977,709	13,025*	
Tigray	1,149,717	286,134-		-	863,583-		-
Afar	603,673	136,426-		-	467,247-		-
Amhara	8,596,993	2,143,946*		*	6,432,341*		-
Oromia	9,452,831	2,533,104*		-	6,916,073*		-
Somale	1,066,657	377,014-		-	689,643-		-
Benshangul-Gumuz	89,108	26,923-		-	62,186-		-
SNNP	4,935,092	1,446,535-		-	3,487,751*		*
Gambela	26,149	8,704-		*	17,389-		*
Harari	5,098	1,845-		-	3,253-		-
Dire Dawa	54,600	16,357-		-	38,243-		-

TABLE 3-16: NUMBER OF GOATS BY SEX, BREED, AND REGION

Geographic Area	Total	MALE			FEMALE		
		Indigenous	Hybrid	Exotic	Indigenous	Hybrid	Exotic
Ethiopia	21,960,706	6,770,369*		*	15,186,360*		*
Tigray	2,621,227	702,624-		-	1,917,086*		*
Afar	960,971	197,465-		-	763,505-		-
Amhara	4,878,462	1,552,524-		-	3,325,380-		*
Oromia	7,346,055	2,143,022-		*	5,201,919-		*
Somale	1,508,932	492,934-		-	1,015,998-		-
Benshangul-Gumuz	335,545	94,443-		-	241,103-		-
SNNP	4,057,497	1,512,749*		-	2,543,961*		-
Gambela	37,833	12,220-		-	25,613-		-
Harari	41,302	12,411-		-	28,891-		-
Dire Dawa	172,881	49,977-		-	122,904-		-

TABLE 3-17: POULTRY INVENTORY BY TYPE, AND REGION

a. All

Geographic Area	Total Poultry	Cocks	Cockerels	Pullets	Non-Laying Hens	Chicks	Laying Hens
Ethiopia	42,053,263	4,786,697	2,291,393	4,105,852	1,459,862	15,323,056	14,086,407
Tigray	4,266,077	394,067	334,576	484,898	225,914	1,613,931	1,212,691
Afar	29,369	3,635	1,358	2,090	3,524	10,902	7,859
Amhara	12,739,620	1,406,327	572,546	1,149,408	383,892	4,876,295	4,351,151
Oromia	15,336,939	1,923,637	828,175	1,452,045	640,177	4,967,448	5,525,457
Somale	55,752	8,225	5,150	4,936	3,364	14,572	19,506
Benshangul-Gumuz	820,994	72,287	60,804	101,935	13,644	394,268	178,056
SNNP	8,503,564	937,630	465,289	873,079	174,520	3,349,894	2,703,152
Gambela	210,332	29,410	19,413	27,718	11,283	75,523	46,984
Harari	39,185	5,959	2,441	4,926	1,813	10,473	13,573
Dire Dawa	51,431	5,516	1,640	4,817	1,729	9,749	27,979

b. Indigenous Breeds

Geographic Area	Total Poultry	Cocks	Cockerels	Pullets	Non-Laying Hens	Chicks	Laying Hens
Ethiopia	40,627,571	4,602,222	2,221,212	3,960,665	1,417,969	14,967,301	13,458,202
Tigray	3,867,841	358,332	314,648	448,203	211,632	1,492,710	1,042,317
Afar	26,506	3,367	1,179	2,001	3,030	9,960	6,970
Amhara	12,297,019	1,348,634	555,638	1,105,108	372,301	4,772,361	4,142,977
Oromia	14,880,253	1,852,578	803,287	1,404,176	627,538	4,871,314	5,321,361
Somale	55,752	8,225	5,150	4,936	3,364	14,572	19,506
Benshangul-Gumuz	819,158	71,858	60,737	101,868	13,617	393,742	177,336
SNNP	8,386,518	919,124	457,699	858,226	171,834	3,317,313	2,662,321
Gambela	209,198	28,993	19,166	27,511	11,217	75,523	46,787
Harari	37,815	5,880	2,340	4,724	1,813	10,426	12,632
Dire Dawa	47,510	5,231	1,368	3,912	1,622	9,381	25,996

c. Hybrid

Geographic Area	Total Poultry	Cocks	Cockerels	Pullets	Non-Laying Hens	Chicks	Laying Hens
Ethiopia	1,194,214	141,877	58,328	108,818	34,004	339,127	512,059
Tigray	331,403	31,340	18,937	31,055	13,427	119,359	117,286
Afar	*	-	-	-	*	*	*
Amhara	334,733	33,023	10,603	23,377	7,232	92,301	168,196
Oromia	436,702	66,984	24,887	45,285	10,710	95,018	193,818
Somale	-	-	-	-	-	-	-
Benshangul-Gumuz*	*	-	-	-	-	-	*
SNNP	83,440	9,648	3,175	8,365*	-	30,613	29,500
Gambela	*	*	-	*	*	-	*
Harari	1,070*	-	-	-	-	-	666
Dire Dawa	2,238	219*	-	*	*	-	1,329

d. Exotic Breeds

Geographic Area	Total Poultry	Cocks	Cockerels	Pullets	Non-Laying Hens	Chicks	Laying Hens
Ethiopia	231,478	42,594	11,853	36,369	7,889	16,628	116,145
Tigray	66,832	4,395	-	5,640	-	-	53,088
Afar	*	*	*	*	*	*	*
Amhara	107,868	24,670	6,304	20,924	-	-	39,978
Oromia	19,983	4,074	-	-	-	-	10,279
Somale	-	-	-	-	-	-	-
Benshangul-Gumuz*	*	*	*	*	*	*	*
SNNP	33,607	8,858	4,414	6,488*	-	-	11,331
Gambela	*	*	*	*	*	-	*
Harari	300*	-	-	-	-	-	274
Dire Dawa	-	-	*	*	-	*	-

TABLE 3-18: BEEHIVE INVENTORY AND PRODUCTION OF HONEY BY TYPE, 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	4,598,226	41,524,967	4,447,011	1.52	38,833,445	33,151	1.86	580,891	118,064	1.56	2,110,631
Tigray	195,662	3,203,088	157,496	1.47	2,382,789	3,031	1.57	29,958	35,135	1.46	790,342
Afar	161*		161*	*		-	-	-	-	-	-
Amhara	822,336	7,453,349	768,928	1.44	6,732,865	13,225	1.91	183,424	40,183	1.34	537,061
Oromia	2,485,754	15,825,245	2,437,960	1.49	14,879,636	10,935	2.2*	*	*	1.99	701,102
Somale	1,852*		1,852	1.89*		-	-	-	-	-	-
Benshangul-Gumuz	232,798	1,362,948	231,597	1.28	1,337,738*	*	*	*	*	*	*
SNNP	774,980	11,794,672	764,554	1.75	11,621,132	5,670	1.57	120,884	4,755	1.67	52,656
Gambella	83,417	1,857,435	83,238	2.21	1,851,222*	*	*	*	*	*	*
Harari	731	4,182	731	1.66	4,182	-	-	-	-	-	-
Dire Dawa	534*		493	1.52*	*	*	*	*	-	-	-

TABLE 3 – 19: ESTIMATED NUMBERS OF BIRTHS, PURCHASES, AND ACQUIRED ANIMALS DURING THE REFERENCE PERIOD BY REGION

a. Cattle

Geographic Area	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	9,540,559	4,588,667	4,951,892	3,376,501	2,014,474	1,362,028	554,875	235,760	319,115
Tigray	606,495	282,496	323,999	178,607	118,066	60,542	19,255	9,816	9,438
Afar	148,321	55,759	92,562	4,229	1,510	2,719	2,371	490	1,881
Amhara	1,986,850	982,422	1,004,429	872,726	590,833	281,893	59,632	22,784	36,848
Oromia	4,248,041	2,060,506	2,187,535	1,438,245	905,643	532,602	254,439	117,084	137,355
Somale	144,031	62,713	81,318	9,387	4,295	5,092	1,866	884	982
Benshangul-Gumuz	91,508	43,984	47,523	35,333	19,876	15,457	1,415	474	941
SNNP	2,235,942	1,068,098	1,167,843	824,909	366,904	458,005	120,237	17,419	102,817
Gambela	59,520	23,424	36,096	9,799	5,795	4,005	2,495	831	1,665
Harari	10,370	4,312	6,058	1,759	754	1,005	657	137	520
Dire Dawa	9,480	4,952	4,528	1,506	798	709	812	284	528

b. Sheep

Geographic Area	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	11,155,855	5,361,205	5,794,651	3,521,001	1,797,747	1,723,254	452,947	68,966	383,980
Tigray	369,426	166,940	202,487	108,870	42,388	66,482	6,649	2,981	3,667
Afar	183,838	73,389	110,449	10,647	5,778	4,869	1,929	562	1,367
Amhara	4,084,883	2,023,990	2,060,893	1,720,618	997,343	723,275	161,706	24,210	137,497
Oromia	4,347,560	2,093,204	2,254,357	1,105,278	559,184	546,094	156,719	21,871	134,847
Somale	312,468	136,919	175,549	11,644	5,083	6,560	3,523	*	2,305
Benshangul-Gumuz	48,631	22,804	25,827	18,690	6,381	12,309	395	-	395
SNNP	1,774,932	828,642	946,290	536,277	176,698	359,579	120,237	17,419	102,817
Gambela	10,828	4,791	6,038	6,687	3,511	3,175	720	158	562
Harari	1,605	783	822	996	657	339	*	*	*
Dire Dawa	21,683	9,744	11,939	1,296	723	573	950	*	476

c. Goats

Geographic Area	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	8,662,714	4,032,083	4,630,631	1,597,004	618,556	978,448	219,637	44,520	175,117
Tigray	922,120	388,398	533,722	142,616	42,707	99,909	5,560	*	4,298
Afar	301,265	106,665	194,600	13,004	6,908	6,097	4,227	1,168	3,059
Amhara	2,251,727	1,100,897	1,150,830	674,282	330,437	343,846	43,444	7,639	35,806
Oromia	3,163,375	1,505,782	1,657,594	486,708	147,598	339,111	101,474	20,120	81,355
Somale	461,764	204,079	257,685	17,777	7,416	10,361	4,619	2,361	2,257
Benshangul-Gumuz	218,293	96,387	121,906	47,575	11,839	35,736	999	*	965
SNNP	1,248,093	586,910	661,183	206,064	67,076	138,988	55,811	10,976	44,835
Gambela	15,005	5,735	9,270	2,307	889	1,418	*	*	*
Harari	14,978	7,423	7,555	1,994	748	1,245	690	*	605
Dire Dawa	66,093	29,808	36,285	4,677	2,939	1,738	1,746	506	1,240

d. Horses

Geographic Area	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	198,770	100,624	98,146	179,745	105,553	74,192	13,695	1,856	11,839
Tigray	*	*	*	*	*	*	-	-	-
Afar	*	*	*	*	*	*	-	-	-
Amhara	31,463	15,816	15,647	47,522	26,232	21,290	2,559	*	2,143
Oromia	136,610	69,015	67,595	100,005	59,960	40,046	8,930	*	7,715
Somale	*	*	*	-	-	-	-	-	-
Benshangul-Gumuz	*	*	*	*	*	*	-	-	-
SNNP	27,029	14,024	13,005	30,308	18,393	11,914	2,182	*	1,982
Gambela	*	*	-	*	*	*	-	*	-
Harari	-	-	-	-	-	-	-	-	-
Dire Dawa	-	-	-	-	-	-	-	-	-

e. Donkeys

Geographic Area	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	430,644	217,153	213,491	500,876	327,522	173,354	23,544	8,972	14,572
Tigray	29,049	16,868	12,181	43,652	30,855	12,798	1,119	*	*
Afar	2,631	1,297	1,334	*	*	*	*	*	*
Amhara	175,062	87,796	87,266	186,327	121,222	65,105	4,362	*	3,493
Oromia	195,509	96,749	98,760	204,477	132,817	71,660	12,090	4,648	7,441
Somale	3,700	1,971	1,729	1,933	1,263	670	*	*	*
Benshangul-Gumuz	4,004	2,231	1,773	12,539	8,176	4,363	*	*	-
SNNP	19,884	9,851	10,033	49,962	31,551	18,411	4,919	1,998	2,921
Gambela	-	-	-	*	*	-	*	-	-
Harari	271	161	*	202	156	*	*	-	*
Dire Dawa	534	229	305	221	*	169	252	*	*

f. Mules

Geographic Area	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	19,577	8,440	11,137	46,380	20,688	25,692	2,262	2,262	-
Tigray	*	*	-	*	*	*	*	*	-
Afar	-	-	-	*	*	-	-	-	-
Amhara	4,555	1,864	2,692	21,133	7,864	13,269	-	-	-
Oromia	11,059	4,680	6,380	17,258	7,706	9,552	*	*	-
Somale	*	*	*	-	-	-	-	-	-
Benshangul-Gumuz	-	-	-	*	*	*	-	-	-
SNNP	2,886	*	*	6,848	4,316	2,532	*	*	-
Gambela	-	-	-	-	-	-	*	*	-
Harari	-	-	-	-	-	-	-	*	-
Dire Dawa	-	-	-	-	-	-	-	-	-

g. Camels

Geographic Area	Number of Births			Number of Purchases			Acquired by any Other Means		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	99,842	45,368	54,473	24,621	20,861	3,760	1,640	733	907
Tigray	-	-	-	9,569	9,569	-	*	-	*
Afar	28,317	10,239	18,078	990	604	386	*	*	*
Amhara	-	-	-	6,258	5,866	*	-	-	-
Oromia	38,727	21,327	17,400	4,921	4,006	*	*	*	*
Somale	29,626	11,875	17,751	2,662	660	2,002	559	*	274
Benshangul-Gumuz	-	-	-	-	-	-	-	-	-
SNNP	*	*	*	-	-	-	-	-	-
Gambela Region	-	-	-	-	-	-	-	-	-
Harari	*	*	*	-	-	-	-	-	-
Dire Dawa	535	189	347	220	156	*	-	-	-

h. Poultry

Geographic Area	Total Number of Births	Total Number of Purchases	Total Acquired by any Other Means
Ethiopia	57,318,012	7,316,008	418,830
Tigray	6,309,119	567,735	45,457
Afar	25,306	262,990	227
Amhara	19,895,770	3,373,781	97,772
Oromia	18,060,598	2,038,428	170,765
Somale	54,010	4,244	928
Benshangul-Gumuz	1,632,374	126,536	2,166
SNNP	11,020,653	1,175,912	96,881
Gambela	233,651	21,519	2,080
Harari	36,217	1,213	380
Dire Dawa	50,316	1,128	2,173

TABLE 3 – 20: ESTIMATED NUMBERS OF SALES, SLAUGHTERS, DEATHS, AND OFFERED ANIMALS DURING THE REFERENCE PERIOD BY REGION

a. Cattle

Geographic Area	Number of Sales			Number of Slaughters			Number of Deaths			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	5,236,888	3,115,126	2,121,762	352,009	198,309	153,700	870,811	372,152	498,659	418,187	177,721	240,466
Tigray	342,831	205,517	137,314	39,899	23,532	16,367	341,654	145,461	196,193	32,134	14,099	18,035
Afar	39,666 1,139,372	20,959	18,706	9,813	*	2,706	122,873	30,233	92,640	895	305	590
Amhara	2,524,993	1,547,472	413,986	88,801	47,457	41,344	890,719	410,856	479,863	43,369	20,499	22,870
Oromia	2,524,993	1,547,472	413,986	127,900	70,062	57,838	2,079,244	1,157,073	1,157,073	192,569	83,680	108,889
Somale	55,243	37,587	17,656	3,165	2,486	679	125,658	41,464	84,195	1,251	*	528
Benshangul-Gumuz	27,381 1,088,232	14,129	13,251	2,666	1,332	1,334	58,882	27,621	31,261	997	643	*
SNNP	32	551,364	536,868	79,090	45,849	33,241	890,339	355,130	535,209	143,211	56,615	86,596
Gambela Region	12,601	8,884	3,717	422	256	166	11,829	5,386	6,443	*	*	*
Harari	3,179	1,961	1,218	*	*	*	2,310	800	1,511	576	101	475
Dire Dawa	3,391	1,891	1,501	123	123	-	6,470	2,006	4,464	529	*	303

b. Sheep

Geographic Area	Number of Sales			Number of Slaughters			Number of Deaths			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	6,283,985	3,242,163	3,041,822	3,314,765	2,427,347	887,418	6,963,566	2,159,750	4,803,816	233,207	62,396	170,811
Tigray	311,432	149,014	162,419	190,314	136,426	53,888	341,654	145,461	196,193	331,816	89,800	242,015
Afar	130,268	73,492	56,776	20,456	13,047	7,409	122,873	30,233	92,640	895	305	590
Amhara	2,323,601	1,133,620	1,189,981	2,077,898	1,495,346	582,552	3,037,758	910,074	2,127,683	92,502	2	68,510
Oromia	2,587,032	1,420,162	1,166,870	762,863	578,481	184,382	2,208,985	723,889	1,485,096	21,457	5	52,651
Somale	171,396	114,844	56,552	54,310	40,428	13,882	218,997	77,026	141,972	74,106	6	170,811
Benshangul-Gumuz	16,413	7,593	8820	13,253	10,309	2,944	30,107	10,691	19,416	*	*	*
SNNP	732,088	335,656	396,432	188,279	147,333	40,946	851,193	265,351	585,842	48,008	0	36,578
Gambela	3,379	2,086	1,293	3,396	2,620	776	2,541	860	1,681	*	*	*
Harari	1,003	643	360	793	718	*	388	*	281	*	*	*
Dire Dawa	7,371	5,054	2,318	3,203	2,637	565	11,813	3,178	8,634	544	*	354

c. Goats

Geographic Area	Number of Sales			Number of Slaughters			Number of Deaths			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	4,251,167	2,144,074	2,107,093	1,775,170	1,201,230	573,940	4,841,077	1,696,766	3,144,310	201,209	68,661	132,549
Tigray	506,341	260,300	246,042	286,901	193,012	93,889	726,477	214,685	511,793	554,774	153,731	401,043
Afar	247,360	131,964	115,396	37,566	24,395	13,171	194,842	60,632	134,211	7,290	2,352	4,937
Amhara	1,130,767	537,979	592,788	852,637	570,588	282,049	1,570,734	578,803	991,931	15,968	8	32,396
Oromia	1,709,049	847,383	861,666	390,271	263,842	126,429	1,541,121	553,793	987,328	48,365	29,612	59,947
Somale	268,239	175,510	92,730	63,781	45,037	18,744	260,447	91,806	168,641	6,505	2,445	4,059
Benshangul-Gumuz	46,635	24,173	22,462	28,321	17,944	10,377	169,457	62,093	107,363	155,800	57,313	98,487
SNNP	309,904	145,932	163,972	105,402	78,369	27,032	325,609	120,528	205,081	31,660	11,464	20,196
Gambela	2,468	1,544	924	515	405	*	3,584	1,334	2,250	227	*	*
Harari	5,084	2,690	2,394	2,594	2,407	186	3,962	1,203	2,759	701	*	609
Dire Dawa	25,318	16,599	8,719	7,181	5,228	1,953	44,843	11,890	32,954	2,456	649	1,807

d. Horses

Geographic Area	Number of Sales			Number of Deaths			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	140,721	88,588	52,134	210,326	88,109	122,218	8,487	1,466	7,021
Tigray	2,956	2,184	*	*	*	*	*	-	*
Afar	*	*	*	*	*	*	*	-	*
Amhara	27,182	16,615	10,567	42,569	15,385	27,184	*	*	*
Oromia	85,624	53,861	31,764	129,357	52,537	76,820	*	*	*
Somale	*	*	*	*	*	*	-	-	-
Benshangul-Gumuz	*	*	*	*	*	*	-	-	-
SNNP	22,855	14,871	7,984	27,844	15,452	12,392	2,413	*	2,220
Gambela Region	-	-	-	*	*	*	-	-	-
Harari	*	*	-	-	-	-	-	-	-
Dire Dawa	*	*	*	-	-	-	*	-	*

e. Donkeys

Geographic Area	Number of Sales			Number of Deaths			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	344,773	208,141	136,631	352,357	181,204	171,154	11,329	3,592	7,737
Tigray	31,094	20,709	10,385	32,350	15,280	17,070	*	*	-
Afar	601	494	*	2,048	1,075	974	-	-	-
Amhara	129,945	71,413	58,532	126,467	67,100	59,366	*	*	*
Oromia	146,418	94,293	52,125	154,752	79,489	75,263	6,491	2,371	4,120
Somale	2,061	*	840	3,317	1,981	1,337	*	*	*
Benshangul-Gumuz	2,805	1,987	818	7,794	4,757	3,038	*	*	-
SNNP	31,613	17,891	13,722	24,868	11,098	13,771	*	*	*
Gambela Region	*	*	-	*	*	-	-	-	-
Harari	*	*	*	346	288	*	*	*	-
Dire Dawa	*	*	*	349	*	279	*	-	*

f. Mules

Geographic Area	Number of Sales			Number of Deaths			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	34,724	15,559	19,165	18,249	7,904	10,345	*	*	-
Tigray	*	*	*	*	-	*	-	-	-
Afar	*	*	-	*	*	-	-	-	-
Amhara	19,631	9,140	10,490	3,769	1,989	1,780	-	-	-
Oromia	10,135	3,239	6,896	10,846	4,232	6,614	*	*	-
Somale	-	-	-	-	-	-	-	-	-
Benshangul-Gumuz	*	*					-	-	-
SNNP	4,074	2,531	*	2,595	1,459	1,136	-	-	-
Gambela Region	-	-	-	-	-	-	-	-	-
Harari	-	-	-	-	-	-	-	-	-
Dire Dawa	-	-	-	-	-	-	-	-	-

g. Camels

Geographic Area	Number of Sales			Number of Slaughters			Number of Deaths			Offerings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ethiopia	63,986	49,156	14,830	5,160	2,727	2,433	62,377	20,308	42,068	*	*	*
Tigray	6,852	6,852	-	-	-	-	2,561	2,310	*	-	-	-
Afar	7,976	5,786	*	1,979	*	758	23,256	4,717	18,538	*	*	*
Amhara	8,862	8,519	*	-	-	-	2,517	2,031	*	-	-	-
Oromia	29,320	20,335	8,985	*	*	*	20,438	6,131	14,307	*	*	-
Somale	10,752	7,573	3,179	1,697	1,145	552	12,540	4,438	8,102	*	*	-
Benshangul-Gumuz	-	-	-	-	-	-	*	*	*	-	-	-
SNNP	-	-	-	-	-	-	*	*	-	*	*	*
Gambela Region	-	-	-	-	-	-	-	-	-	-	-	-
Harari	*	*	-	-	-	-	*	*	-	-	-	-
Dire Dawa	154	*	133	-	-	-	495	256	*	-	-	-

h. Poultry

Geographic Area	Total Number of Sales	Total Number of Slaughters	Total Number of Deaths	Offerings
Ethiopia	10,255,532	10,904,517	37,161,451	367,310
Tigray	1,512,565	2,256,601	3,062,506	78,890
Afar	2,720	4,432	17,314	*
Amhara	3,894,457	5,271,941	13,226,932	81,319
Oromia	3,313,679	2,294,332	13,226,932	119,442
Somale	12,077	2,874	49,569	*
Benshangul-Gumuz	172,983	208,880	1,087,725	6,850
SNNP	1,310,713	844,378	7,965,974	77,526
Gambela	22,420	19,415	156,287	1,097
Harari	8,439	1,450	24,648	954
Dire Dawa	5,480	*	41,873	547

TABLE 3-21: NUMBER OF DAIRY ANIMALS, MILK PRODUCTION, AND LACTATION PERIOD BY REGION

Geographic Area	Number of Dairy Cows	Number of Milking Cows	Average Daily Milk Prod.	Average Lactation Period (Months)	Total Milk Production (Lt)	Number of Dairy Camels	Number of Milking Camels	Average Daily Milk Prod.	Average Lactation Period (Months)	Total Milk Production (Lt)
Ethiopia	6,727,303	9,627,747	1.688	6	2,940,216,526	239,708	143,087	5.053	10	150,315,343
Tigray	54,211	592,757	1.291	6	155,429,348	-	-	*	-	-
Afar	150,614	128,042	2.636	6	79,738,518	72,642	34,035	4.656	9	49,275,840
Amhara	358,854	2,150,823	2.131	6	634,109,344	-	*	-	-	-
Oromia	3,336,552	4,395,333	1.503	6	1,308,958,104	100,048	64,675	*	10	55,297,340
Somale	99,312	138,569	1.601	6	41,318,417	65,024	40,412	3.657	10	44,115,537
Benshangul-Gumuz	25,020	85,517	1.249	7	24,219,827	-	-	-	*	-
SNNP	2,663,545	2,076,458	1.65	6	667,561,669	-	-	*	-	-
Gambela	27,758	38,436	2.11	6	21,616,465	-	-	-	-	-
Harari	4,872	11,132	2.09	6	4,621,620	*	*	*	*	*
Dire Dawa	2,663,545	2,076,458	1.481	5	2,643,214	1,236	1,136	2.891	10	948,571

TABLE 3-22: TOTAL EGG PRODUCTION BY REGION

a. Indigenous Breeds

Geographic Area	Total Laying Hens	Average Number of Egg-laying period/Year	Average Length of a Period	Average Number of Eggs /Hen /Period	Total Egg Production (Number)
Ethiopia	13,458,202	4	21	12	78,065,930
Tigray	1,042,317	5	22	13	7,735,336
Afar	6,970	6	21	12	60,799
Amhara	4,142,977	4	21	12	25,749,751
Oromia	5,321,361	4	21	12	31,275,830
Somale	19,506	4	16	12	106,819
Benshangul-Gumuz	177,336	3	18	11	736,616
SNNP	2,662,321	4	19	11	11,996,046
Gambela	46,787	3	17	12	200,055
Harari	12,632	4	19	11	66,043
Dire Dawa	25,996	5	18	10	138,635

b. Hybrid

Geographic Area	Total Laying Hens	Average Number of Egg-laying period/Year	Average Length of a Period	Average Number of Eggs /Hen /Period	Total Egg Production (Number)
Ethiopia	512,059	5	38	33*	
Tigray	117,286	5	45	43	1,697,561
Afar	*	*	*	*	
Amhara	168,196	6	33	27*	
Oromia	193,818	4	39	34	2,096,074
Somale	*	*	*	*	
Benshangul-Gumuz*	*	4	20	17*	
SNNP	29,500	4	35	32	354,644
Gambela	*	*	27	22*	
Harari	666	3*	*	*	9,242
Dire Dawa	1,329	6	21	16	12,277

c. Exotic Breeds

Geographic Area	Total Laying Hens	Average Number of Egg-laying period/Year	Average Length of a Period	Average Number of Eggs /Hen /Period	Total Egg Production (Number)
Ethiopia	116,145*		159	134*	
Tigray	53,088*		216	195*	
Afar	*	-	-	-	-
Amhara	39,978*		133	100*	
Oromia	10,279*		98	71-	
Somale	-	-	*	*	-
Benshangul-Gumuz*	*	-	*	*	-
SNNP	11,331*		105	98-	
Gambela	*	*	*	*	*
Harari	274-		102	98-	
Dire Dawa	*	-	*	*	-

TABLE 3-23: ESTIMATED NUMBER OF VACCINATED LIVESTOCK BY REGION

a. Cattle

Geographic Area	Total Vaccinated	Vaccinated against:					
		Anthrax	Blackleg	Pleuro-Pneumonia	Hemorrhagic Septicemia	Rinderpest	Others
Ethiopia	14,796,122	4,709,580	4,893,469	1,506,774	2,244,017	208,733	1,233,549
Tigray	1,837,917	691,165	620,138	273,085	132,987	*	109,880
Afar	**			**		-	*
Amhara	2,759,444	1,113,332	753,053	295,244	79,263*		418,693
Oromia	7,225,243	2,043,011	2,413,475	635,405	1,553,626	95,746	483,980
Somale	79,030*		*	*		-	-
Benshangul-Gumuz	180,243	11,208	89,911	10,356	66,862-		*
SNNP	2,656,947	817,807	1,010,811	242,595	378,401*		204,899
Gambela	13,132	6,005	555	3,306*		-	*
Harari	7,475	3,085		**	*		*
Dire Dawa	21,005	5,286	4,493*		5,325*		*

b. Sheep

Geographic Area	Total Vaccinated	Vaccinated against:					
		Anthrax	Blackleg	Pleuro-Pneumonia	Hemorrhagic Septicemia	Rinderpest	Others
Ethiopia	4,167,599	391,629	371,749	1,205,484	1,046,332	92,346	1,060,060
Tigray	627,831	41,138	55,543	88,184	404,363	*	*
Afar	*	*	*	*	-	-	*
Amhara	2,264,793	166,289	205,080	622,698	304,914	70,975	894,838
Oromia	895,793	125,953	76,630	400,942	189,010	19,875	83,384
Somale	128,038	*	*	40,181	*	-	*
Benshangul-Gumuz	7,127	*	*	*	-	-	*
SNNP	200,710	34,667	26,026	43,081	78,611	*	*
Gambela	*	*	*	*	-	*	*
Harari	*	-	-	-	-	-	*
Dire Dawa	*	*	*	*	*	*	*

c. Goats

Geographic Area	Total Vaccinated	Vaccinated against:					
		Anthrax	Blackleg	Pleuro-Pneumonia	Hemorrhagic Septicemia	Rinderpest	Others
Ethiopia	2,758,930	326,898	202,376	798,949	875,502	*	489,680
Tigray	897,645	60,514	81,839	48,262	592,922	*	112,947
Afar	*	*	*	5,473	-	-	-
Amhara	567,310	112,321	28,027	120,747	52,557	*	201,749
Oromia	810,711	106,005	67,855	448,607	71,627	*	104,294
Somale	265,583	*	*	97,710	*	-	*
Benshangul-Gumuz	*	*	*	*	*	-	*
SNNP	59,088	9,506	*	*	14,504	-	7,694
Gambela	*	*	*	*	*	*	*
Harari	*	*	-	-	-	-	*
Dire Dawa	*	*	*	*	32,035	*	*

d. Camels

Geographic Area	Total Vaccinated	Vaccinated against:					
		Anthrax	Blackleg	Pleuro-Pneumonia	Hemorrhagic Septicemia	Rinderpest	Others
Ethiopia	-	-	-	-	-	-	-
Tigray	-	-	-	-	-	-	-
Afar	-	-	-	-	-	-	-
Amhara	-	-	-	-	-	-	-
Oromia	-	-	-	-	-	-	-
Somale	-	-	-	-	-	-	-
Benshangul-Gumuz	-	-	-	-	-	-	-
SNNP	-	-	-	-	-	-	-
Gambela	-	-	-	-	-	-	-
Harari	-	-	-	-	-	-	-
Dire Dawa	-	-	-	-	-	-	-

TABLE 3-24: ESTIMATED NUMBER OF LIVESTOCK AFFLICTED/DISEASED BY REGION

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Ethiopia	8,454,729	7,275,541	4,963,025	908,902	87,441	18,497,913
Tigray	474,887	390,392	780,051	41,172	3,112	1,717,362
Afar	129,487	131,456	201,358	3,106	16,916	14,196
Amhara	1,743,235	3,159,275	1,477,462	269,743	4,732	6,043,257
Oromia	4,098,335	2,398,128	1,592,359	483,816	40,851	6,706,667
Somale	113,926	178,536	219,353	4,433	20,748	24,551
Benshangul-Gumuz	183,126	36,781	217,025	19,375	-	746,491
SNNP	1,675,940	964,915	428,293	85,703*	-	3,140,865
Gambela	22,861	3,300	3,936*	-	-	93,724
Harari	4,434	218	3,577	616*	-	3,359
Dire Dawa	8,498	12,540	39,612	825	845	7,440

Note: Draught animals in this table refer to Horses, Donkeys, and Mules.

TABLE 3-25: ESTIMATED NUMBER OF LIVESTOCK TREATED BY REGION

Geographic Area	Cattle	Sheep	Goats	Draught Animals	Camels	Poultry
Ethiopia	4,311,038	2,100,809	1,056,267	350,355	18,806	896,470
Tigray	231,067	150,418	248,477	11,615	2,853	96,282
Afar	2,307	3,066	7,657*		*	*
Amhara	961,367	1,161,218	309,934	105,674	2,359	221,009
Oromia	2,200,707	632,013	315,828	198,400	8,918	500,173
Somale	*	31,391	28,315	1,027	4,160	-
Benshangul-Gumuz	116,228	10,617	61,935	8,469	-	13,801
SNNP	747,844	110,589	78,986	24,413*		63,801
Gambela	8,693	946*		*	-	942
Harari	1,515*		1,022	330*		-
Dire Dawa	1,634	499	2,978*		*	*

TABLE 3-26- a: ESTIMATED NUMBER OF LIVESTOCK DIED FROM DISEASE BY REGION

Geographic Area	Cattle	Sheep	Goats	Horses	Donkeys	Mules	Camels	Poultry
Ethiopia	3,659,167	5,827,590	3,777,540	176,419	294,763	15,227	49,756	18,133,711
Tigray	239,379	331,816	554,774*		22,255*		1,788	1,586,966
Afar	113,112	112,187	164,754*		1,825-		19,699	12,501
Amhara	659,182	2,687,201	1,240,628	36,341	108,589	3,367*		6,317,334
Oromia	1,724,756	1,810,497	1,221,383	109,793	130,506	8,692	17,188	6,410,168
Somale	58,037	95,877	130,959*		2,533-		8,688	20,642
Benshangul-Gumuz	52,892	26,102	155,800*		7,406	279*		707,210
SNNP	794,199	751,809	270,247	21,731	21,008	2,324*		2,974,121
Gambela	10,290	2,004	2,791*		*	-	-	94,652
Harari	1,985	289	2,804-		325-		*	2,999
Dire Dawa	5,334	9,808	33,400-		250-		*	7,121

TABLE 3-26- b: ESTIMATED NUMBER OF LIVESTOCK DIED FROM OTHER CAUSES
BY REGION

Geographic Area	Cattle	Sheep	Goats	Horses	Donkeys	Mules	Camels	Poultry
Ethiopia	870,811	1,135,976	1,063,537	33,907	57,594	3,022	12,620	19,027,740
Tigray	102,275	139,055	171,703*		10,095*	*		1,475,540
Afar	9,762	18,727	30,088*	*		*	*	
Amhara	231,537	350,556	330,105	6,228	17,878*	*		5,211,289
Oromia	354,487	398,488	319,738	19,564	24,246	2,155*		6,816,765
Somale	67,621	123,120	129,489*		785-		3,853	28,928
Benshangul-Gumuz	5,991	4,005	13,656-		389-			380,515
SNNP	96,140	99,383	55,363	6,114	3,860*			4,991,853
Gambela	1,538	537	793-					61,636
Harari	325*		1,158-		*			21,649
Dire Dawa	1,135	2,005	11,444-		*		153	34,753

TABLE 3 -27- a: NUMBER OF HOLDINGS BY SIZE OF CATTLE

Geographic Area	Holdings with no cattle	1-2 Head	3-4 Head	5-9 Head	10-19 Head	20-49 Head	50-99 Head	100-199 Head	>=200 Head
Ethiopia	2,777,472	3,751,421	3,706,240	2,929,966	709,179	110,253	10,747	5,986	2,539
Tigray	191,890	219,771	254,041	181,191	49,526	9,836-		99-	
Afar	14,030	3,435	5,115	7,904	9,045	8,519	1,358	215-	
Amhara	753,048	1,174,560	1,201,327	774,613	126,032	19,615	601-		
Oromia	1,107,579	1,352,977	1,332,528	1,353,415	438,801	55,489	2,995	650-	
Somale	48,889	28,021	27,371	32,717	12,992	3,047	82-		
Benshangul-Gumuz	77,627	20,910	17,292	19,633	9,690	2,231	257-		
SNNP	556,468	928,872	854,082	554,320	60,921	8,818	4,511	4,905	2,536
Gambela	18,561	5,766	3,758	2,482	1,740	2,656	943	118	3
Harari	3,720	7,529	4,964	2,156	198	23-			
Dire Dawa	5,650	9,580	5,761	1,535	236	21-			

TABLE 3 -27- b: NUMBER OF HOLDINGS BY SIZE OF SHEEP

Geographic Area	Holdings with no Sheep	1-4 Head	5-9 Head	10-49 Head	50-99 Head	100-199 Head	200-499 Head	>=500 Head
Ethiopia	8,703,114	3,408,543	1,370,648	505,906	11,855	3,048	689	
Tigray	705,569	97,848	73,215	29,308	414			
Afar	18,588	5,125	5,525	18,092	2,053	238		
Amhara	2,443,449	877,908	525,331	202,394	714			
Oromia	3,549,891	1,387,359	522,362	183,657	1,165			
Somale	72,984	24,953	17,390	34,486	3,154	152		
Benshangul-Gumuz	125,620	16,038	4,809	1,173				
SNNP	1,728,677	985,536	218,432	35,138	4,302	2,659	689	
Gambela	30,308	3,937	1,191	591				
Harari	16,245	2,192	133	20				
Dire Dawa	11,776	7,648	2,260	1,046	53			

TABLE 3 -27- c: NUMBER OF HOLDINGS BY SIZE OF GOATS

Geographic Area	Holdings with no Goats	1-4 Head	5-9 Head	10-49 Head	50-99 Head	100-199 Head	200-499 Head	>=500 Head
Ethiopia	10,160,328	2,381,109	980,415	458,952	13,963	6,215	2,586	235
Tigray	579,580	110,537	119,273	96,627	176	161		
Afar	10,906	5,076	4,404	24,608	4,091	536		
Amhara	3,009,077	654,608	281,084	104,690	337			
Oromia	4,019,637	1,066,191	420,855	136,483	1,268			
Somale	46,021	28,659	23,662	50,861	3,483	404	29	
Benshangul-Gumuz	90,323	29,922	18,132	9,064	199			
SNNP	2,365,361	465,665	102,276	30,088	4,137	5,114	2,557	235
Gambela	29,773	3,005	2,219	1,027	3			
Harari	6,634	9,143	2,509	304				
Dire Dawa	3,007	8,304	6,001	5,202	269			

TABLE 3 -27- d: NUMBER OF HOLDINGS BY SIZES OF HORSES AND DONKEYS

Geographic Area	Horses					Donkeys				
	Holdings with no Horses	1-2 Head	3-4 Head	5-9 Head	>=10 Head	Holdings with no Donkeys	1-2 Head	3-4 Head	5-9 Head	>=10 Head
Ethiopia	12,743,792	1,093,727	140,793	24,144	1,347	9,934,645	3,798,309	249,134	19,508	2,207
Tigray	903,035	1,963	1,356	-	-	571,270	315,178	19,699	207	-
Afar	49,621	-	-	-	-	32,212	12,686	3,704	864	155
Amhara	3,794,977	237,808	15,628	1,383	-	2,528,331	1,438,349	79,643	3,473	-
Oromia	4,905,890	601,410	113,901	21,886	1,347	3,917,030	1,585,299	128,055	13,092	958
Somale	153,027	92	-	-	-	77,732	67,768	7,205	414	-
Benshangul-Gumuz	147,057	515	68	-	-	109,609	34,790	3,097	144	-
SNNP	2,713,154	251,563	9,841	875	-	2,639,424	326,452	7,150	1,313	1,094
Gambela	35,652	375	-	-	-	35,674	353	-	-	-
Harari	18,590	-	-	-	-	10,795	7,700	95	-	-
Dire Dawa	22,783	-	-	-	-	12,562	9,734	487	-	-

TABLE 3 -27- e: NUMBER OF HOLDINGS BY SIZES OF MULES AND CAMELS

Geographic Area	Mules					Camels				
	Holdings with no Mules	1-2 Head	3-4 Head	5-9 Head	>=10 Head	Holdings with no Camels	1-2 Head	3-4 Head	5-9 Head	>=10 Head
Ethiopia	13,664,002	336,986	2,406	409	-	13,823,166	99,593	33,098	27,074	20,872
Tigray	901,661	4,693	-	-	-	885,711	17,846	1,624	1,173	-
Afar	49,588	33	-	-	-	29,174	6,535	2,707	3,551	7,654
Amhara	3,927,223	122,573	-	-	-	4,026,123	21,610	1,249	814	-
Oromia	5,487,470	154,306	2,249	409	-	5,574,997	33,293	17,657	13,169	5,318
Somale	153,093	26	-	-	-	110,247	18,029	9,070	8,039	7,734
Benshangul-Gumuz	146,901	739	-	-	-	147,640	-	-	-	-
SNNP	2,920,683	54,593	157	-	-	2,975,433	-	-	-	-
Gambela	36,003	24	-	-	-	36,027	-	-	-	-
Harari	18,590	-	-	-	-	18,198	168	51	75	98
Dire Dawa	22,783	-	-	-	-	19,608	2,113	740	253	69

TABLE 3 -27- f: NUMBER OF HOLDINGS BY SIZE OF POULTRY

Geographic Area	Holdings with no poultry	1-9 Head	10-49 Head	50-99 Head	100-199 Head	>=200 Head
Ethiopia	6,269,815	6,465,008	1,267,630	1,248	102	
Tigray	259,107	492,958	154,289			
Afar	44,960	3,789	872			
Amhara	1,420,254	2,270,568	358,974			
Oromia	2,830,015	2,371,946	442,473			
Somale	140,625	11,547	947			
Benshangul-Gumuz	50,356	63,013	34,138	133		
SNNP	1,486,211	1,221,214	267,101	907		
Gambela	17,508	10,999	7,210	208	102	
Harari	11,617	5,880	1,093			
Dire Dawa	9,158	13,094	531			

TABLE 3-28: ANIMAL FEED PRACTICES OF PEASNT HOLDERS – PERCENTAGE USED BY TYPE OF FEED, AND REGION

Geographic Area	Total (%)	Green Fodder	Crop Residue	Improved Feed	Hay	By-Product	Others
Ethiopia	100	59.53	28.27	0.2	7.36	0.79	3.86
Tigray	100	38.37	39.17	0.35	16.86	1.62	3.62
Afar	100	88.25	6.67	0.09	1.63	0.93	2.42
Amhara	100	43.72	36.35	0.31	15.72	0.54	3.35
Oromia	100	66.65	24.8	0.11	3.22	0.91	4.3
Somale	100	80.21	18.44		0.53	0.29	0.53
Benshangul-Gumuz	100	86.63	7.56	0.03	1.19	0.24	4.34
SNNP	100	70.54	22.69	0.17	2	0.63	3.98
Gambela	100	93.92	4.03	0.28	0.03	0.63	1.12
Harari	100	38.57	47.93	1.68	3.78	6.71	1.33
Dire Dawa	100	71.51	19.73	0.24	1.42	2.94	4.16

TABLE 3-29 - a: ANIMAL FEED PRACTICES OF PEASNT HOLDERS – NUMBER OF HOLDERS REPORTING BY TYPE OF FEED, AND REGION

Geographic Area	Green Fodder	Crop Residue	Improved Feed	Hay	By-Product	Others
Ethiopia	12,294,191	10,569,128	162,750	4,048,369	903,056	3,548,044
Tigray	770,841	742,233	12,133	607,788	110,776	169,386
Afar	47,418	18,374	169	3,156	1,223	4,179
Amhara	3,568,927	3,381,277	64,887	2,299,883	174,263	1,006,510
Oromia	4,887,266	4,045,671	43,515	811,687	425,793	1,384,908
Somale	147,867	91,463		5,255	2,302	7,550
Benshangul-Gumuz	119,247	51,183	315	11,603	2,619	27,477
SNNP	2,694,293	2,198,510	39,899	305,631	173,910	938,393
Gambela	20,860	5,044	147	21	1,874	1,549
Harari	15,511	16,765	1,398	2,002	4,889	987
Dire Dawa	21,961	18,607	287	1,345	5,407	7,105

TABLE 3-29 - b: NUMBER OF HOLDERS REPORTING ANIMAL FEED BY SOURCE OF FEED, AND REGION

1. Green Fodder

Geographic Area	Own Holding	Purchased	Communal/ Government Holding	From any Two or More Sources	Others
Ethiopia	4,530,270	209,937	3,987,015	3,323,856	243,112
Tigray	87,021	2,307	505,508	173,635	2,371
Afar	2,029	223	42,983	2,162	22
Amhara	887,254	55,302	1,600,232	992,299	33,840
Oromia	1,988,948	124,894	1,263,990	1,352,347	157,087
Somale	8,788	182	117,632	20,877	387
Benshangul-Gumuz	4,477	653	103,106	10,899	112
SNNP	1,535,613	26,292	317,903	767,632	46,852
Gambela	5,694	45	12,614	130	2,378
Harari	9,279		3,237	2,967	28
Dire Dawa	1,167	38	19,810	910	36

2. Crop Residue

Geographic Area	Own Holding	Purchased	Communal/ Government Holding	From any Two or More Sources	Others
Ethiopia	9,412,617	141,160	121,012	784,019	110,320
Tigray	585,616	12,906	4,208	137,120	2,383
Afar	15,740	446	1,526	576	87
Amhara	2,983,522	43,976	19,694	298,038	36,047
Oromia	3,660,668	54,225	56,702	221,061	53,015
Somale	73,347	7,426	4,363	5,871	455
Benshangul-Gumuz	44,888	355	2,857	2,900	183
SNNP	2,010,913	21,540	30,712	117,811	17,534
Gambela	4,760	-	201	84	-
Harari	15,441	140	512	388	284
Dire Dawa	17,722	147	237	170	332

3. Improved Feed

Geographic Area	Own Holding	Purchased	Communal/ Government Holding	From any Two or More Sources	Others
Ethiopia	131,188	21,109	553	9,099	800
Tigray	6,678	1,819	326	3,144	166
Afar	134	35	-	-	-
Amhara	57,401	5,124	-	2,008	354
Oromia	30,831	10,979	185	1,520	-
Somale	-	-	-	-	-
Benshangul-Gumuz	237	20	-	58	-
SNNP	34,638	3,045	-	2,052	164
Gambela	42	-	42	63	-
Harari	1,002	56	-	254	85
Dire Dawa	225	31	-	-	31

4. Hay

Geographic Area	Own Holding	Purchased	Communal/ Government Holding	From any Two or More Sources	Others
Ethiopia	2,759,990	507,613	81,991	648,764	50,012
Tigray	418,273	30,509	17,355	134,678	6,973
Afar	1,643	564	847	102	-
Amhara	1,526,151	307,417	43,696	399,717	22,901
Oromia	589,217	120,903	11,795	71,994	17,777
Somale	2,818	1,069	-	-	1,369
Benshangul-Gumuz	8,328	227	2,294	754	-
SNNP	210,842	46,349	6,005	41,443	992
Gambela	-	-	-	-	-
Harari	1,925	22	-	55	-
Dire Dawa	792	552	-	-	-

5. By-Product

Geographic Area	Own Holding	Purchased	Communal/ Government Holding	From any Two or More Sources	Others
Ethiopia	465,942	374,330	2,214	38,459	22,112
Tigray	67,160	29,146	137	6,775	7,558
Afar	166	1,022	35	-	-
Amhara	115,206	39,982	1,054	14,497	3,525
Oromia	189,869	211,215	989	15,036	8,684
Somale	1,179	1,032	-	92	-
Benshangul-Gumuz	1,938	-	-	570	112
SNNP	88,449	81,808	-	1,444	2,210
Gambela	1,734	69	-	46	24
Harari	148	4,741	-	-	-
Dire Dawa	92	5,315	-	-	-

TABLE 3 – 30: ESTIMATED NUMBER OF HOLDERS PRACTICED LIVESTOCK EXTENSION PACKAGES DURING THE REFERENCE PERIOD BY REGION

Geographic Area	Number of Holders Practiced				
	Dairy Development Package	Beef/Meat/Mutton Development Package	Poultry Development Package	Honey and Wax Development Package	Any Two or More Packages
Ethiopia	40,496	47,612	50,821	23,521	3,884
Tigray	15,562	15,354	11,157	15,741	845
Afar	32	70	-	-	-
Amhara	5,640	24,925	14,518	4,460	335
Oromia	9,537	5,823	11,229	2,161	2,509
Somale	194	22	-	-	-
Benshangul-Gumuz	19	19	132	75	-
SNNP	9,480	1,240	13,638	1,084	195
Gambela	-	-	-	-	-
Harari	-	-	25	-	-
Dire Dawa	31	160	122	-	-

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

[Annex Tables 1 –10]

Annex Table 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	50,884,005	1,235,503	2.43	25,979,919	985,687	3.79	21,960,706	1,277,480	5.82
Tigray	3,242,931	123,583	3.81	1,149,717	110,420	9.6	2,621,227	171,889	6.56
Afar	550,361	72,094	13.1	603,673	98,273	16.28	960,971	123,242	12.82
Amhara	12,746,768	366,493	2.88	8,596,993	490,396	5.7	4,878,462	318,410	6.53
Oromia	22,475,349	525,983	2.34	9,452,831	480,264	5.08	7,346,055	404,619	5.51
Somali	590,976	60,859	10.3	1,066,657	174,021	16.31	1,508,932	147,298	9.76
Benshangul-Gumuz	421,603	38,631	9.16	89,108	8,650	9.71	335,545	35,003	10.43
SNNP	10,543,129	1,040,172	9.87	4,935,092	669,393	13.56	4,057,497	1,139,493	28.08
Gambella	220,772	88,547	40.11	26,149	4,389	16.78	37,833	10,484	27.71
Harari	45,416	3,917	8.62	5,098	899	17.64	41,302	2,754	6.67
Dire Dawa	46,699	3,496	7.49	54,600	11,032	20.2	172,881	25,180	14.56

Annex Table 1-Cont'd

Geographic Area	HORSES			MULES			DONKEYS			CAMELS		
	Number	SE	CV	Number	SE	CV	Number	SE	CV	Number	SE	CV
Ethiopia	1,995,306	130,915	6.56	365,584	20,223	5.53	5,715,129	119,761	2.1	807,581	85,904	10.64
Tigray	6,470	3,427	52.97	4,920	1,400	28.45	456,093	20,545	4.5	32,288	5,463	16.92
Afar	-	-	-	33	30	91.37	36,992	5,901	15.95	218,430	46,969	21.5
Amhara	352,648	42,413	12.03	127,716	12,179	9.54	2,108,347	61,315	2.91	34,649	7,248	20.92
Oromia	1,299,295	119,921	9.23	174,676	14,793	8.47	2,494,536	89,153	3.57	257,322	55,634	21.62
Somali	92	92	100.36	26	25	98.75	118,089	15,128	12.81	254,839	44,617	17.51
Benshangul-Gumuz	717	425	59.23	758	217	28.59	52,718	4,081	7.74	-	-	-
SNNP	335,709	30,769	9.17	57,431	6,310	10.99	424,931	43,931	10.34	-	-	-
Gambella	375	175	46.51	24	22	93.62	353	301	85.29	-	-	-
Harari	-	-	-	-	-	-	9,091	829	9.12	2,232	1,141	51.13
Dire Dawa	-	-	-	-	-	-	13,979	1,364	9.76	7,821	1,984	25.37

Annex Table 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	2,446,645	65,926	2.69	1,812,283	56,872	3.14	3,526,579	108,584	3.08	14,420,383	368,542	2.56	756,607	51,888	6.86
Tigray.....	133,804	9,024	6.74	119,977	9,302	7.75	224,886	11,003	4.89	994,304	31,521	3.17	75,118	8,959	11.93
Afar	27,081	4,431	16.36	20,414	3,102	15.2	19,540	3,572	18.28	38,221	4,859	12.71	2,101	802	38.18
Amhara	510,884	24,815	4.86	401,285	20,893	5.21	877,889	34,321	3.91	4,406,587	102,346	2.32	393,656	42,341	10.76
Oromia.....	1,140,845	44,300	3.88	792,263	30,008	3.79	1,646,883	58,110	3.53	6,407,406	152,865	2.39	245,604	27,625	11.25
Somali	31,876	3,791	11.89	26,311	3,628	13.79	37,381	4,954	13.25	85,143	10,278	12.07	339	265	78.3
Benshangul-Gumuz	16,492	2,100	12.73	21,220	2,235	10.53	35,750	4,018	11.24	108,276	11,462	10.59	7,907	2,607	32.97
SNNP.....	568,695	40,472	7.12	415,470	41,935	10.09	656,918	83,537	12.72	2,337,823	317,238	13.57	28,002	6,752	24.11
Gambella.....	11,883	3,139	26.42	11,526	4,935	42.82	17,434	9,082	52.09	27,618	9,173	33.22	3,815	1,762	46.18
Harari.....	2,222	334	15.04	2,026	315	15.55	4,763	530	11.12	6,874	936	13.61	23	23	98.28
Dire Dawa.....	2,862	417	14.57	1,789	278	15.56	5,135	441	8.6	8,130	1,154	14.19	42	41	97.15

Annex Table 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	2,586,815	79,079	3.06	2,046,251	70,469	3.44	4,571,997	152,273	3.33	18,095,970	466,112	2.58	620,477	40,539	6.53
Tigray.....	153,851	10,825	7.04	148,448	12,045	8.11	296,062	16,612	5.61	1,046,405	45,192	4.32	50,075	6,470	12.92
Afar	43,665	6,805	15.58	39,186	5,435	13.87	60,452	8,926	14.76	289,528	38,903	13.44	10,174	3,177	31.23
Amhara	545,942	27,811	5.09	425,231	28,252	6.64	941,576	43,502	4.62	3,983,081	120,893	3.04	260,636	33,020	12.67
Oromia.....	1,169,837	49,328	4.22	876,192	33,657	3.84	2,079,719	75,382	3.62	7,911,361	215,151	2.72	205,239	18,245	8.89
Somali	39,011	5,299	13.58	37,337	5,486	14.69	69,997	11,721	16.75	258,263	24,578	9.52	5,318	2,394	45.01
Benshangul-Gumuz	21,001	2,719	12.95	22,077	2,165	9.81	44,069	4,809	10.91	136,210	13,040	9.57	8,602	3,281	38.15
SNNP.....	589,959	52,742	8.94	476,637	52,389	10.99	1,038,506	121,539	11.7	4,358,111	389,030	8.93	73,008	12,102	16.58
Gambella.....	18,159	8,112	44.67	16,569	8,986	54.23	29,504	17,982	60.95	78,123	26,046	33.34	6,141	2,266	36.9
Harari.....	2,865	485	16.93	2,827	338	11.97	5,556	748	13.47	17,624	1,333	7.56	635	221	34.74
Dire Dawa.....	2,526	398	15.75	1,747	252	14.43	6,556	622	9.48	17,264	1,268	7.35	648	204	31.42

Annex Table 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	3,119,907	108,937	3.49	1,145,455	57,234	5	984,155	65,951	6.7	1,739,110	190,326	10.94
Tigray.....	76,284	8,817	11.56	61,810	7,709	12.47	53,811	6,613	12.29	94,229	15,018	15.94
Afar	36,486	6,369	17.46	26,399	4,712	17.85	23,066	4,391	19.04	50,476	10,090	19.99
Amhara	949,481	62,851	6.62	354,080	28,988	8.19	326,365	31,620	9.69	525,038	52,427	9.99
Oromia	1,405,479	74,128	5.27	411,555	29,597	7.19	306,353	34,795	11.36	410,311	38,281	9.33
Somali	80,757	11,352	14.06	55,719	10,174	18.26	68,392	16,959	24.8	172,146	41,811	24.29
Benshangul-Gumuz	12,651	1,784	14.1	5,452	721	13.22	3,059	493	16.12	5,761	1,044	18.12
SNNP	549,803	46,588	8.47	225,208	37,054	16.45	197,874	42,278	21.37	473,649	173,003	36.53
Gambella.....	3,248	539	16.58	1,277	230	18.03	1,117	260	23.26	3,090	866	28.04
Harari	516	141	27.41	257	87	33.92	517	131	25.24	555	111	19.95
Dire Dawa.....	5,202	1,026	19.71	3,699	846	22.87	3,602	806	22.39	3,855	1,573	40.8

Annex Table 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	3,212,842	118,098	3.68	1,481,917	71,313	4.81	1,710,282	84,972	4.97	12,586,250	431,940	3.43
Tigray.....	88,814	9,719	10.94	83,973	9,587	11.42	107,716	13,349	12.39	583,081	56,592	9.71
Afar	52,706	7,328	13.9	45,435	6,811	14.99	64,761	10,781	16.65	304,345	58,534	19.23
Amhara	933,488	62,826	6.73	415,404	29,643	7.14	516,937	39,484	7.64	4,576,199	264,378	5.78
Oromia	1,423,431	78,790	5.54	542,457	42,525	7.84	547,178	43,399	7.93	4,406,068	223,229	5.07
Somali	90,803	13,466	14.83	81,146	13,880	17.11	99,781	16,875	16.91	417,913	60,154	14.39
Benshangul-Gumuz	11,956	1,504	12.58	7,293	1,029	14.11	6,797	1,059	15.57	36,139	3,638	10.07
SNNP	601,491	58,805	9.78	299,851	45,439	15.15	359,441	56,534	15.73	2,227,774	237,837	10.68
Gambella.....	3,993	962	24.09	1,662	497	29.93	1,479	446	30.15	10,283	1,637	15.92
Harari	406	126	31.02	347	113	32.48	496	138	27.71	2,005	371	18.52
Dire Dawa.....	5,755	1,224	21.28	4,350	1,185	27.25	5,695	1,108	19.46	22,443	3,893	17.35

Annex Table 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	2,356,603	98,847	4.19	1,161,585	70,552	6.07	1,002,131	80,446	8.03	2,250,576	338,717	15.05
Tigray.....	181,804	15,553	8.55	138,935	11,391	8.2	124,356	11,856	9.53	257,530	29,430	11.43
Afar	56,496	7,286	12.9	37,954	5,402	14.23	35,202	5,691	16.17	67,813	11,550	17.03
Amhara	541,257	39,086	7.22	260,203	24,613	9.46	234,062	25,474	10.88	517,001	50,268	9.72
Oromia	1,014,689	55,760	5.5	399,437	28,914	7.24	279,177	22,988	8.23	450,090	42,088	9.35
Somali	116,466	10,735	9.22	83,884	9,203	10.97	87,812	15,031	17.12	204,772	31,680	15.47
Benshangul-Gumuz	45,168	5,188	11.49	21,753	3,019	13.88	12,984	1,646	12.68	14,537	2,296	15.79
SNNP	375,644	68,497	18.23	202,483	57,264	28.28	214,704	69,899	32.56	720,073	329,254	45.73
Gambella.....	3,970	606	15.26	2,222	583	26.26	1,543	637	41.29	4,486	1,799	40.09
Harari	4,090	402	9.83	3,305	397	12	2,626	373	14.21	2,390	400	16.72
Dire Dawa.....	17,020	2,105	12.37	11,408	1,831	16.05	9,665	2,457	25.42	11,884	3,289	27.68

Annex Table 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	2,562,258	117,495	4.59	1,535,584	88,509	5.76	1,696,893	108,180	6.38	9,395,075	471,680	5.02
Tigray.....	223,049	20,643	9.25	218,118	17,826	8.17	269,585	22,805	8.46	1,207,851	75,986	6.29
Afar	95,489	13,165	13.79	87,598	14,009	15.99	117,507	15,718	13.38	462,911	65,989	14.26
Amhara	553,666	40,512	7.32	331,239	29,794	8.99	343,292	33,401	9.73	2,097,740	123,558	5.89
Oromia	1,056,906	65,161	6.17	488,380	38,128	7.81	471,552	36,017	7.64	3,185,824	178,968	5.62
Somali	142,305	13,639	9.58	113,227	10,672	9.43	139,446	16,796	12.04	621,019	58,143	9.36
Benshangul-Gumuz	52,510	6,045	11.51	27,157	4,468	16.45	26,494	3,635	13.72	134,942	15,243	11.3
SNNP	408,532	84,169	20.6	249,695	69,519	27.84	304,101	90,636	29.8	1,582,265	401,703	25.39
Gambella.....	5,626	1,759	31.27	3,717	1,577	42.41	3,678	1,142	31.04	12,591	2,845	22.59
Harari	4,618	517	11.19	2,516	334	13.25	4,247	472	11.11	17,510	1,087	6.21
Dire Dawa.....	19,557	2,832	14.48	13,935	3,006	21.57	16,990	3,351	19.73	72,423	8,345	11.52

Annex Table 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	203,979	16,532	8.1	737,369	47,418	6.43	218,797	21,289	9.73	835,162	60,070	7.19
Tigray.....	232	228	98.32	2,522	1,287	51.04	1,054	622	58.96	2,662	1,550	58.22
Afar												
Amhara	31,167	4,784	15.35	123,613	17,766	14.37	37,862	6,437	17	160,006	22,457	14.04
Oromia	145,346	15,207	10.46	470,311	41,691	8.86	151,800	19,814	13.05	531,837	53,619	10.08
Somali	-	-	-	92	92	100.36	-	-	-	-	-	-
Benshangul-Gumuz	135	133	98.67	447	227	50.79	-	-	-	135	131	96.82
SNNP	27,099	4,370	16.12	140,008	13,891	9.92	28,080	4,338	15.45	140,521	15,053	10.71
Gambella.....	-	-	-	375	175	46.51	-	-	-	-	-	-
Harari	-	-	-	-	-	-	-	-	-	-	-	-
Dire Dawa.....	-	-	-	-	-	-	-	-	-	-	-	-

Annex Table 6- Estimates of Donkeys, 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	603,774	22,239	3.68	2,132,521	69,279	3.25	612,937	23,830	3.89	2,365,897	67,861	2.87
Tigray.....	48,293	3,975	8.23	209,257	16,065	7.68	38,867	3,624	9.32	159,677	10,620	6.65
Afar	3,708	654	17.65	11,361	1,902	16.74	3,005	677	22.53	18,917	3,649	19.29
Amhara	248,472	14,029	5.65	689,439	38,593	5.6	271,415	15,953	5.88	899,020	35,340	3.93
Oromia	255,681	15,949	6.24	962,328	51,618	5.36	251,876	16,482	6.54	1,024,651	50,725	4.95
Somali	15,761	2,659	16.87	44,334	5,386	12.15	11,640	2,523	21.68	46,354	7,517	16.22
Benshangul-Gumuz	4,791	736	15.37	28,163	2,292	8.14	4,963	714	14.39	14,800	2,181	14.74
SNNP	25,217	4,411	17.49	178,398	18,678	10.47	28,720	4,597	16.01	192,596	24,390	12.66
Gambella.....	-	-	-	353	301	85.29	-	-	-	-	-	-
Harari	541	135	24.88	5,054	804	15.9	548	177	32.35	2,949	458	15.54
Dire Dawa.....	1,310	258	19.71	3,834	433	11.28	1,904	271	14.22	6,931	840	12.11

Annex Table 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	24,949	4,341	17.4	152,844	10,934	7.15	24,633	4,421	17.95	163,158	12,045	7.38
Tigray.....	-	-	-	2,323	779	33.54	-	-	-	2,597	889	34.23
Afar	-	-	-	33	30	91.37	-	-	-	-	-	-
Amhara	11,610	2,775	23.9	44,296	6,475	14.62	13,908	3,613	25.98	57,902	6,358	10.98
Oromia	9,007	2,970	32.97	74,443	7,774	10.44	9,434	2,475	26.24	81,792	9,720	11.88
Somali	-	-	-	-	-	-	-	-	-	26	25	98.75
Benshangul-Gumuz	-	-	-	412	141	34.27	-	-	-	346	153	44.28
SNNP	4,331	1,523	35.16	31,313	4,070	13	1,291	601	46.55	20,496	3,060	14.93
Gambella.....	-	-	-	24	22	93.62	-	-	-	-	-	-
Harari	-	-	-	-	-	-	-	-	-	-	-	-
Dire Dawa.....	-	-	-	-	-	-	-	-	-	-	-	-

Annex Table 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	88,792	10,656	12	184,814	16,927	9.16	120,664	16,099	13.34	413,311	52,154	12.62
Tigray.....	2,825	1,274	45.08	29,463	5,297	17.98	-	-	-	-	-	-
Afar	17,996	4,643	25.8	31,209	5,643	18.08	38,542	9,111	23.64	130,683	32,350	24.75
Amhara	6,549	2,339	35.72	28,101	6,374	22.68	-	-	-	-	-	-
Oromia	33,183	7,878	23.74	41,577	11,171	26.87	45,604	11,517	25.25	136,957	30,083	21.97
Somali	26,707	4,761	17.83	51,844	7,799	15.04	34,802	6,574	18.89	141,487	27,704	19.58
Benshangul-Gumuz	-	-	-	-	-	-	-	-	-	-	-	-
SNNP	-	-	-	-	-	-	-	-	-	-	-	-
Gambella.....	-	-	-	-	-	-	-	-	-	-	-	-
Harari	322	164	51.02	215	125	58.16	467	242	51.82	1,229	643	52.35
Dire Dawa.....	1,211	386	31.85	2,406	595	24.72	1,249	488	39.05	2,955	808	27.36

Annex Table 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	42,053,263	678,410	1.61	4,786,694	91,215	1.91	2,291,393	77,967	3.4	4,105,852	109,010	2.65	1,459,862	69,719	4.78	15,323,056	353,869	2.31	14,086,407	208,176	1.48
Tigray	4,266,077	177,211	4.15	394,067	20,371	5.17	334,576	26,859	8.03	484,898	29,764	6.14	225,914	21,881	9.69	1,613,931	97,715	6.05	1,212,691	44,182	3.64
Afar	29,369	6,737	22.94	3,635	788	21.68	1,358	461	33.96	2,090	525	25.11	3,524	1,221	34.65	10,902	3,080	28.25	7,859	1,759	22.38
Amhara	12,739,620	382,341	3	1,406,327	50,355	3.58	572,546	39,839	6.96	1,149,408	57,073	4.97	383,892	36,364	9.47	4,876,295	229,527	4.71	4,351,151	112,482	2.59
Oromia	15,336,939	441,228	2.88	1,923,636	62,773	3.26	828,175	51,936	6.27	1,452,045	72,349	4.98	640,177	51,835	8.13	4,967,448	205,078	4.13	5,525,457	151,234	2.74
Somali	55,752	11,572	20.76	8,225	1,659	20.17	5,150	2,040	39.61	4,936	1,083	21.94	3,364	1,070	31.79	14,572	4,470	30.68	19,506	4,058	20.8
Benshangul-Gumuz	820,994	47,600	5.8	72,287	4,088	5.65	60,804	5,618	9.24	101,935	8,303	8.15	13,644	2,931	21.10	394,268	30,020	7.61	178,056	9,713	5.46
SNNP	8,503,564	291,422	3.43	937,630	37,163	3.96	465,289	32,063	6.89	873,079	49,183	5.63	174,520	18,882	18.18	3,349,894	141,176	4.21	2,703,152	75,643	2.8
Gambella	210,332	23,293	11.07	29,410	5,178	17.61	19,413	2,909	14.98	27,718	3,723	13.43	11,283	2,108	31.68	75,523	8,239	10.91	46,984	3,716	7.91
Harari	39,185	5,358	13.67	5,959	849	14.25	2,441	547	22.39	4,926	985	20	1,813	569	31.4	10,473	1,932	18.44	13,573	1,822	13.42
Dire Dawa	51,431	5,193	11.58	5,516	639	11.58	1,640	466	28.42	4,817	1,193	24.76	1,729	529	30.59	9,749	1,542	15.81	27,979	2,940	10.51

Annex Table 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	4,598,226	194,055	4.22	4,447,011	193,294	4.35	33,151	6,135	18.51	118,064	14,758	12.5
Tigray	195,662	17,049	8.71	157,496	15,578	9.89	3,031	1,100	36.28	35,135	5,582	15.89
Afar	161	87	53.86	161	87	53.86	-	-	-	-	-	-
Amhara	822,336	51,644	6.28	768,928	50,600	6.58	13,225	3,655	27.64	40,183	6,932	17.25
Oromia	2,485,754	168,940	6.8	2,437,960	168,709	6.92	10,935	4,300	39.32	36,859	11,661	31.64
Somali	1,852	890	48.09	1,852	890	48.09	-	-	-	-	-	-
Benshangul-Gumuz	232,798	37,787	16.23	231,597	37,808	16.32	203	138	68.08	998	568	56.9
SNNP	774,980	61,732	7.97	764,554	61,210	8.01	5,670	2,133	37.63	4,755	1,511	31.76
Gambella	83,417	30,323	36.35	83,238	30,328	36.44	45	44	98.21	134	99	73.96
Harari	731	186	25.49	731	186	25.49	-	-	-	-	-	-
Dire Dawa	534	218	40.77	493	202	41.1	42	41	97.15	-	-	-

APPENDIX I

Number of Planned and Actually Covered Sampling Units

APPENDIX-I (a). Number of Planned and Actually Covered Sampling Units
(EAs & Households) of the 2008/09 (2001 E.C.), Livestock Sample Survey

Region	Enumeration Areas		Households	
	Planned	Covered	Planned	Covered
Tigray	152	152	4560	4560
Afar	49	48	1470	1409
Amhara	336	336	10590	10575
Oromia	452	452	13560	13560
Somali	72	70	2160	1950
Benishangul-	90	90	2700	2699
SNNP	380	380	11400	11400
Gambella	81	74	2430	2156
Harari	24	24	720	717
Dire Dawa	24	24	720	712
Country Total	1660	1650	49800	49738

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 & its products, and ratio of specific characteristics in a stratum.

1. For Estimating Total livestock and products:

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

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 :

$$\hat{R}_h = \frac{\hat{Z}_h}{\hat{X}_h}, \text{ where the numerator and denominator are estimates of domain totals}$$

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 of characteristic y, 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 of characteristic y, 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 livestock and its products is given by:

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

5. Ninety-five percent confidence interval (CI) of stratum total of Livestock (its product):

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

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

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 - 2008/09 (2001 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 November 10, 2008?

Yes Complete questions below

No – End of the question

Number of Cattle by Age and Purpose on Feb 10, 2008

	None	Total	Male	Female
1. Cattle of all ages _____		1	2	3
a. Cattle less than 6 months _____		4	5	6
b. Cattle 6 months and less than 1 year _____		7	8	9
c. Cattle 1 year and less than 3 years _____		10	11	12
d. Cattle 3 years and less than 10 years _____		13	14	15
1. Beef Cattle _____		16	17	18
2. Cattle for breeding _____		19	20	21
3. Dairy cows _____		22		23
4. Cows that gave milk for the last 12 months _____		24		25
5. Draft cattle _____		26	27	28
6. Cattle for other purposes _____		29	30	31
e. Cattle 10 years and older _____		32	33	34
f. Grand Total _____		35	36	37
1. Local breed _____		38	39	40
2. Exotic _____		41	42	43
3. Hybrid _____		44	45	46

Form ASS – 2001/7 Cont'd

Number of Sheep by Age and Purpose on Nov 10, 2008

	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 Nov 10, 2008

	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

Number of Horses, Mules, Donkeys and Camels by age and Purpose on Nov 10, 2008

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	Male	Female
	124	125	126
	127	128	129
	130	131	132
	133	134	135
	136	137	138
	139	140	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	Male	Female
	142	143	144
	145	146	147
	148	149	150
	151	152	153
	154	155	156
	157	158	159

Donkeys

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

None	Total	Male	Female
	160	161	162
	163	164	165
	166	167	168
	169	170	171
	172	173	174
	175	176	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	Male	Female
	178	179	180
	181	182	183
	184	185	186
	187	188	189
	190	191	192
	193	209	194
	195	196	197
	198	199	200

Form ASS – 2001/7 Cont'd

Poultry

8. Poultry total on **Nov 10, 2008**

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

None	Total
	201
	205
	209
	213
	217
	221
	225

Indigenous		Hybrid		Exotic	
202		223		204	
206		207		208	
210		211		212	
214		215		216	
218		219		220	
222		223		224	
226		227		228	

QST II- Did You Have Livestock During The Reference Period (Nov 12, 2007 to Nov 10, 2008)?

Yes=1 No=2

Yes Complete questions below

No – End of the question

9. Total Beehives (produced honey during the reference period)
- a. Traditional Beehives _____
 - b. Intermediate Beehives _____
 - c. Modern Beehives _____

None	Total
	229
	230
	231
	232

10. 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 _____

233	
234	
235	
236	
237	
238	

Form ASS – 2001/7 Cont'd

Milk, Egg, and Honey Production during the reference period

11. Dairy cows and Camels	None			
a. Cows that gave milk during the reference Period _____		239		
b. Average number of months cows actually milked _____		240		
c. Average lactation period of cows in months _____		241		
d. Milk production per day per cow in liters _____		242		
e. Camels that gave milk during the reference period _____		243		
f. Average number of months camels actually milked _____		244		
g. Average lactation period of camels in months _____		245		
h. Milk production per day per camel _____		246		

	None	Indigenous	Hybrid	Exotic
12. Egg production per hen per clutch _____		247	248	249
13. Average number of days per clutch _____		250	251	252
14. Total Number of clutch during the reference period _____		253	254	255

15. Livestock Diseases and Treatments during the Reference Period

1	2	4			5		
		Afflicted/Diseased			Total Treated		
Sr. No.	Livestock Type	Total	Male	Female	Total	Male	Female
1	Cattle						
2	Sheep						
3	Goats						
4	Horses						
5	Donkeys						
6	Mules						
7	Camel						
8	Poultry						

18. Livestock Feeds utilized during the reference period

1	2	3	4	5	5	6
Sr. No.	Type of Livestock Feed	Code	Utilized yes=1 no=2	Percent from the total feed Utilized	Source of Feed	Code
2	Crop Residue	2				
3	Improved Feed	3				
4	Hay	4				
5	Bi-products	5				
6	Others	7				
Total				100		



Own Holding=1 Purchased=2 Communal Holding=3
 1 & 2 =4 1 & 3=5 2 & 3=6 1, 2, & 3=7 Others=8

19. Did you participate in any Livestock Extension Program during the reference period?

Yes=1 No=2

20. If yes to 19, what was the type of the package?

- Dairy development package =1
- Beef/Meat/Mutton development package =2
- Poultry development package =3
- Honey and Wax development Package =4
- Any two or more of the above packages =5
- Any other livestock package =6