

## **CHAPTER VIII**

### **FARM IMPLEMENTS, DRAUGHT ANIMALS AND STORAGE FACILITIES**

#### **1. INTRODUCTION**

Agriculture is the single largest sector in the Ethiopian economy. The position of the agricultural sector for the past few decades does not only concern the peasants, but on account of the extent of its inputs, outputs and its function as a largest employer of labour has a profound impact on the entire economy. It is worth to point-out that Ethiopia has large resources in terms of land, agricultural labour, draught animals... etc.

Despite all these facts, the average yield of the main food crops and livestock products attained by private peasant holders is very low and it is not adequate to feed the ever-growing population. Because of such prevailing conditions in the agricultural sector, the economy remained at subsistence level. Among the factors that hampered the country not to prosper is the use of primitive farm implements and tools by the peasants to operate their land and to raise livestock.

The role of improved agricultural implements and tools in raising the standard of farming efficiency and increasing average yield of production has been recognized for many years. Land preparation requires modern power source that results in considerable farm efficiency and expansion of production. Sowing and fertilization are among the agricultural operations where animal and tractor drawn machines appear to be capable of greater efficiency than only hand method. Power-driven line sowing and fertilization are more efficient than hand spreading and this is usually expected to result in higher yield for the same amount of fertilizers and seeds.

The traditional unimproved farm implements used by the peasants and the poor conditions of the draught animals are considered to be among the main factors that retarded the agricultural productivity in the country. On the other hand, the development of farm implements and machineries can also be crippled by small land size holdings, abundant labour in rural area and non-availability of adequate access to

modern farm implements and machineries, which the private peasant holders can afford to rent or buy. In general, effective development of farm implements and machineries takes place when land is abundant and labour is being rapidly absorbed by non-agricultural sector, (WB, 1984).

Since development programmes are in progress in Ethiopia, data generated from censuses and sample surveys on different types of agricultural outputs and inputs are necessary for the formulation of programmes and policies in the sector and thereby for monitoring and evaluation of the impact of the programmes. One of the objectives of this census was to provide benchmark data that can help to assess the growth, quantity, quality and value of farm implements and other farm equipment used by the private peasant holders so as to easily identify the implements that are abundant and those that are in short supply. The structural characteristics of these farm implements and other farm equipment do not change much from year to year and such data are usually obtained from a census of agriculture, which is conducted every 5 or 10 years.

Data on farm implements and other farm equipment have not been collected in Ethiopia and as a result only very little is known about the status and growth of these implements. Thus, in the Ethiopian agricultural census conducted in 2001/2002, data was collected on farm implements, other farm equipment and draught animals. These farm implements include, implements used for clearing land, cultivation, harvesting, threshing and others. In this census draught animals comprises animals engaged specifically in ploughing, threshing and farm transport facilities. Replacement value was one of the variables covered by this census and it is defined as the amount it would cost to replace the farm implement, equipment, draught animals and storage facility with those that are similar in terms of origin, age, quality or condition.

In this chapter the classification of farm implements, farm equipment, draught animals and storage facilities are presented in Section 2. Brief discussions of data on Summary Tables VIII.1 to VIII.4 are also provided in Section 3. Statistical Tables presenting the census results at zonal and wereda levels of the Addis Ababa City Administration are also given as Table series 8.1A-8.25A and 8.1B-8.25B. Finally, the estimates, Standard Errors (S.E.) and Coefficients of Variation (C.V.) on number of holders reporting,

number of farm implements reported and total value are presented in the Annex Table to this chapter.

## **2. CLASSIFICATION OF FARM IMPLEMENTS, OTHER FARM EQUIPMENT AND DRAUGHT ANIMALS**

The farm implements and draught animals reported were classified into the following eight groups: -

- Implements used for clearing land,
- Implements used for cultivation,
- Parts for traditional plough,
- Implements used for harvesting,
- Implements used for threshing,
- Other farm equipment,
- Draught animals for farm activity, and
- Storage facilities.

These eight groups further broken down to include the following implements and other farm equipment:

### **2.1 Implements used for clearing land:-**

- a) Axes,
- b) 'Gejera '(Chopper), and
- c) Shovel.

### **2.2 Implements used for cultivation:-**

- a) Hoe,
- b) 'Mekeskesha',
- c) Pick-Axe, and
- d) Tractor.

### 2.3 Parts for traditional plough:-

- 'Deger',
- 'Erfe',
- Plough-Beam,
- Plough-Tip, and
- 'Wegel'-Tip.

## 2.4 Implement used for harvesting:-

- a) Sickle.

## 2.5 Implements used for threshing:-

- Hay- Fork (metal or wood),
- Threshing Stick, and
- Winnowing (metal or wood).

## 2.6 Other farm equipment:-

- a) Cart (hauling),
- b) Sprayer (hand operated),
- c) Sprayer (power operated),
- d) Tying Tool, and
- e) Wheelbarrow.

## 2.7 Draught animals:-

- a) Animals deployed specifically in ploughing.
- Ass/Donkey,
  - Camel,
  - Horse,
  - Mule, and
  - Ox.
- b) Animals deployed in threshing or transportation: -
- Ass/Donkey,
  - Camel,
  - Cattle (Working Age),
  - Horse, and
  - Mule,

## **2.8 Storage facilities:-**

- a) 'Debignit'(Local storage),
- b) 'Gottera' (Local storage),
- c) 'Gudguad'(Local storage), and
- d) Modern storage.

### **Definitions of storage facilities**

'Debignit': - is a round vessel of earthenware storage attached with the wall of a house. The shape of 'Debignit' is similar to the shape of a barrel. Debignit is usually around 1 metre high and 0.5-1 metres wide.

'Gottera': - is storage made of bamboo plant. The bamboo is split and then crisscrossed and woven like a giant basket. Finally, it is laminated with a mixture of animal dung and dry grass. 'Gottera' is usually about 1-3 metres high and about 1 metre wide

'Gudguad':- is an underground storage, which is formed by digging the ground with certain depth and radius. The wall of 'Gudguad' is usually laminated with animal dung.

Modern storage: - is a storage that has a better quality in protecting grains from humidity and pests than the above-mentioned storages.

## **3. ESTIMATES OF FARM IMPLEMENTS, DRAUGHT ANIMALS AND STORAGE FACILITIES.**

The type, quality and quantity of tools and implements in use usually indicate the level of farming practice and agricultural development of a country. Hence, the results of this census can give us some highlights to evaluate the farming system in the rural areas of Addis Ababa City Administration. In this report farm implements are grouped in terms of their operation and this can help to make appropriate comparisons.

### **3.1 Farm Implements and Tools**

The data in Summary Table VIII.1 indicates that the number of holders reporting axe was the highest followed by shovel while 'Gejera' (Chopper) was the lowest. In the rural areas of Addis Ababa City Administration it is estimated that there were about 12,998 crop holders of which about 9,674 (74.43%) reported to own axes, about 53.43% reporting shovels, and 2.85% reporting 'Gejeras' (choppers). Among the farm implements used for clearing land the number of observation for axe was highest and the total value for axe was also the highest followed by shovels and 'Gejeras'. The expected duration of service of an axe was estimated to be 20 years, while for shovel it was 10 years.

One of the labour and power intensive farm activities is cultivation. It comprises digging, ploughing, sowing and weeding. In order to accomplish such operations, the Ethiopian peasants use hoe, 'Mekeskesha', pick-axe, and traditional plough. Among these farm implements and tools pick-axe was the highest in terms of number of holders reporting, total number of implements reported and total value. The second highest was hoe while 'Mekeskesha' was the lowest. The data in Summary Table VIII.4 revealed that the percentage distribution of the number of crop holders that owned one, two, three, and four pick-axes was 57.09%, 5.22%, 0.65%, and 0.15%, respectively.

### **3.2 Draught Animals**

Peasants in Ethiopia use domestic animals for draught purpose. In several parts of the country since holdings are far from residence and as a result asses, horses, mules and camels are used to transport various types of goods and agricultural products from holding to residence and vice-versa. As it is indicated from the data in Summary Table VIII.2 among the draught animals in the City Administration that are used for ploughing, ox was the highest in terms of number of holders reporting, number of oxen reported and total value the oxen amounted to 24 million Birr. About 9,884 holders (76.04% of the total crop holders in the City Administration) reported 41,255 cattle used for threshing and these cattle had a value of over 32 million Birr and the average replacement value of a working age cattle was about 203.26 Birr. It was also indicated

that asses and horses were used by the holders for threshing and transportation. The estimated number and percentage distribution of crop holders in rural areas of Addis Ababa City Administration that owned implements, equipment and draught animals are shown in Summary Table VIII.4. Thus, the data resulting from the agricultural census shows that there were about 12,998 crop holders in rural areas of the City Administration. Among these 8.69%, 32.04%, 6.87%, 18.35%, and 6.02% holders owned one, two, three, four, and five and above oxen. On the other hand about 28.04% of the holders did not own ox. For details, see Summary Table VIII.4.

### **3.3 Storage Facilities**

One of the methods that minimize post harvest production losses is the usage of modern storage facilities. During the census, data was collected on modern storage facilities and the unimproved local storage facilities such as 'Debignit', 'Gotera' and 'Gudguad'. In this census, buildings or any structure used as storage facilities and other containers that have better storage quality to protect agricultural products from humidity and pests are considered as modern storage facilities.

The data in Summary Table VIII.3 shows the number of crop holders in the City Administration reporting storage facilities and number of such facilities. Thus, the data in the table reveals that 'Debignit' was reported by the highest number of holders. On the other hand, 'Gudguad' and modern storage were reported by insignificant number of holders. The total value of all reported storage facilities was assessed to be 215,526 Birr, of which 65.88% and 34.12% comprises of Debigint and Gottera, respectively. The percentage distribution of the number of crop holders that owned 'Gottera', 'Gudguad', 'Debignit' and modern storage is also presented in Summary Table VIII.4.

**SUMMARY TABLE VIII.1: -Number and Percentage of Holders Reporting Implements and Other Farm Equipment by type, Quantity Reported, Replacement Value, and Duration of Implement, for Private Holdings.**

Implements and Equipment	Number of Holders Reporting	Percent of Total Holders	Number of Implements and Equipment		Total Value of Imp. and Eq. (Birr)	Average Replacement Value Per Imp. and Eq. (Birr)	Average Duration of Service of Imp. and Eq. (Years)
			Total Reported	Average <sup>1</sup> Per Holder			
Used for Clearing Land							
Axes .....	9,674	74.43	14,257	1.10	170,633	8.06	20
'Gejeras' (Choppers).....	370	2.85	377	0.03	6,354	16.22	*
Shovels.....	6,945	53.43	7,646	0.59	108,781	12.96	10
Used for Cultivation							
Hoes .....	3,289	25.30	3,590	0.28	61,384	15.26	14
'Mekeskeshas'.....	462	3.55	493	0.04	10,416	20.46	*
Pick-Axes.....	8,204	63.12	9,111	0.70	142,473	13.90	16
Tractor .....	-		-	-	-	-	-
Parts for traditional Plough							
' Degers'.....	10,121	77.87	27,237	2.10	116,105	1.64	2
' Erfes'.....	10,086	77.60	26,684	2.05	99,234	1.46	1
Plow-Beams .....	10,116	77.83	25,489	1.96	330,334	5.07	5
Plow- Tips.....	10,135	77.97	17,452	1.34	231,632	7.78	6
'Wegel' – Tips .....	9,993	76.88	17,000	1.31	85,626	3.00	5
Yokes .....	10,090	77.63	17,439	1.34	209,443	6.94	7
Used for Harvesting							
Sickles .....	11,271	86.71	22,406	1.72	375,795	8.53	5
Used for Threshing							
Hay-Forks (metal).....	8,496	65.36	12,750	0.98	248,836	13.26	13
Hay-Forks (wood).....	524	4.03	714	0.05	7,989	7.88	10
Threshing Sticks .....	146	1.12	248	0.02	883	2.89	2
Winnowers (metal) .....	*	-	*	-	*	*	*
Winnowers (wood) .....	6,663	51.26	7,530	0.58	139,518	16.25	11
Other farm Equipment							
Carts .....	*	-	*	-	*	*	*
Sprayers (Hand operated) .....	*	-	*	-	208,349	*	*
Sprayers (Power operated) ..	-	-	-	-	-	-	-
Tying Tools.....	-	-	-	-	-	-	-
Wheelbarrows .....	*	-	*	-	*	*	*

- Average<sup>1</sup> per holder is the ratio of total number of each implement reported to total number of crop holders in rural areas in the region.
- Total number of crop holders comprises, holders participated in crop production only and both crop production and livestock rearing.



**SUMMARY TABLE VIII.2:-Number and Percentage of Holders Reporting Draught Animals, Quantity Reported, Replacement Value, and Average Age of Animal, for Private Holdings.**

Animals	Number of Holders Reporting	Percent of Total Holders	Number of Animals		Total Value of Animals (Birr)	Average Replacement Value Per Animal (Birr)	Average Age of Animal (Years)
			Total Reported	Average <sup>1</sup> Per Holder			
Used for Ploughing							
Asses .....	*	-	*	-	*	*	*
Camels.....	-	-	-	-	-	-	-
Horses .....	-	-	-	-	-	-	-
Mules.....	-	-	-	-	-	-	-
Oxen .....	9,353	71.96	26,529	2.04	24,816,334	329.25	8
Used for Threshing or Transportation							
Asses .....	8,552	65.79	12,999	1.00	3,918,132	199.84	9
Camels.....	-	-	-	-	-	-	-
Cattle .....	9,884	76.04	41,255	3.17	32,700,841	203.26	8
Horses .....	175	1.35	183	0.01	136,564	720.12	7
Mules.....	64	0.49	69	0.01	88,607	1,220.25	15

- Average<sup>1</sup> per holder is the ratio of total number of each draught animal reported to total number of crop holders in rural areas in the region.
- Total number of crop holders comprises, holders participated in crop production only and both crop production and livestock rearing.

**SUMMARY TABLE VIII.3: - Number and Percentage of Holders Reporting Storage facilities, Quantity Reported, Replacement Value, and Storage Capacity, for Private Holdings.**

Storage Structure	Number of Holders Reporting	Percent of Total Storage Holders	Number of Storages		Total Value of Storages (Birr)	Average Replacement Value Per Storage (Birr)	Average Storage Capacity Per Storage (Quintal)
			Total Reported	Average <sup>1</sup> Per Holder			
'Debignits' .....	3,734	28.73	8,769	0.67	141,998	6.44	10
'Gotteras' .....	685	5.27	1,176	0.09	73,528	36.65	13
'Gudguads' .....	*	-	*	-	*	*	*
Modern Storage Structures...	*	-	*	-	*	*	*

- Average<sup>1</sup> per holder is the ratio of total number of each storage facility reported to total number of crop holders in rural areas in the region.
- Total number of crop holders comprises, holders participated in crop production only and both crop production and livestock rearing.

SUMMARY TABLE VIII.4:-Number of Crop Holders that Owned Farm Implement, Equipment and Draught Animals.

Name of Implement, Equipment, and Draught Animal	Number of Crop Holders that Owned											
	No Implement, Equipment, or Draught Animal		One Implement, Equipment, and Draught Animal		Two Implements, Equipment, and Draught Animals		Three Implements, Equipment, and Draught Animals		Four Implements, Equipment, and Draught Animals		Five and above Implements, Equipment, and Draught Animals	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Used for Clearing Land												
Axes .....	3,325	25.58	5,961	45.86	3,104	23.88	386	2.97	200	1.54	22	0.17
'Gejera' .....	12,628	97.15	364	2.80	6	0.05	-	-	-	-	-	-
Shovel .....	6,053	46.57	6,330	48.70	547	4.21	50	0.38	18	0.14	-	-
Used for Cultivation												
Hoes .....	9,710	74.70	3,094	23.80	126	0.97	48	0.37	14	0.11	6	0.05
'Mekeskeshas'.....	12,535	96.44	432	3.32	31	0.24	-	-	-	-	-	-
Pick- Axes.....	4,794	36.88	7,421	57.09	679	5.22	84	0.65	20	0.15	-	-
Tractors.....	12,998	100.00	-	-	-	-	-	-	-	-	-	-
Parts for traditional Plough												
'Degers'.....	2,870	22.08	1,899	14.61	4,566	35.13	521	4.01	2,437	18.75	705	5.42
'Erfes' (Handle) .....	2,912	22.40	3,148	24.22	3,301	25.40	808	6.22	1,704	13.11	1,125	8.66
Plough-Beam. ....	2,883	22.18	3,042	23.40	3,580	27.54	1,287	9.90	1,293	9.95	913	7.02
Plough -Tips .....	2,863	22.03	4,755	36.58	4,286	32.97	625	4.81	303	2.33	166	1.28
'Wegel' -Tips.....	3,006	23.13	4,926	37.90	3,922	30.17	613	4.72	391	3.01	140	1.08
Yokes .....	2,908	22.37	4,692	36.10	4,215	32.43	605	4.65	435	3.35	143	1.10
Used for Harvesting												
Sickles.....	1,728	13.29	4,795	36.89	4,050	31.16	1,138	8.76	917	7.05	370	2.85
Used for Threshing												
Hay-Forks (Metal) .....	4,482	34.48	5,065	38.97	2,809	21.61	517	3.98	94	0.72	31	0.24
Hay-Forks (Wood) .....	12,475	95.98	360	2.77	153	1.18	-	-	5	0.04	5	0.04
Threshing Sticks .....	12,852	98.88	72	0.55	53	0.41	15	0.12	6	0.05	-	-
Winnowers (Metal) .....	12,594	100.00	*	-	-	-	-	-	-	-	-	-
Winnowers (Wood) .....	6,336	48.75	5,821	44.78	820	6.31	16	0.12	5	0.04	-	-
Other Farm Equipment												
Carts .....	12,990	100.00	*	-	-	-	-	-	-	-	-	-
Sprayers (Hand Operated)	12,423	95.58	575	4.42	-	-	-	-	-	-	-	-
Sprayers (Power Operated)	12,998	100.00	-	-	-	-	-	-	-	-	-	-
Tying Tools.....	12,998	100.00	-	-	-	-	-	-	-	-	-	-
Wheelbarrows.....	12,975	100.00	*	-	-	-	-	-	-	-	-	-
Animals Used for Ploughing												
Asses .....	12,723	100.00	*	-	-	-	-	-	-	-	-	-
Camels .....	12,998	100.00	-	-	-	-	-	-	-	-	-	-
Horses .....	12,998	100.00	-	-	-	-	-	-	-	-	-	-
Mules .....	12,998	100.00	-	-	-	-	-	-	-	-	-	-
Oxen .....	3,645	28.04	1,129	8.69	4,164	32.04	893	6.87	2,385	18.35	782	6.02
AnimalsUsed for Threshing or Transportation												
Asses .....	4,446	34.21	4,891	37.63	3,033	23.33	510	3.92	93	0.72	25	0.19
Camels .....	12,998	100.00										
Cattle.....	3,114	23.96	904	6.95	2,217	17.06	1,707	13.13	1,743	13.41	3,313	25.49
Horses .....	12,819	98.62	167	1.28	12	0.09	-	-	-	-	-	-
Mules .....	12,934	99.51	59	0.45	5	0.04	-	-	-	-	-	-
Storage Structure												
'Debignits' .....	9,264	71.27	946	7.28	1,503	11.56	714	5.49	327	2.52	244	1.88
'Gutteras' .....	12,312	94.72	325	2.50	266	2.05	71	0.55	12	0.09	12	0.09
'Gudguads' .....	12,985	100.00	*	-	-	-	-	-	-	-	-	-
Modern Storages.....	12,916	100.00	*	-	-	-	-	-	-	-	-	-

STATISTICAL TABLES PRESENTING THE CENSUS  
RESULTS AT  
ZONAL AND WOREDA LEVELS

Tables 8.1A- 8.25A

TABLE 8.1A: - Number of Holders Reporting Axe Owned, Quantity Reported, Replacement Value, and Duration of Service of Axe, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Axes Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Axe (Birr)	Average Duration of Service of Axe (Years)
Addis Ababa Region .....	12,998	9,674	14,257	1.10	170,633	8.06	20
Zone 3 .....	10,293	8,046	11,800	1.15	138,506	7.90	*
Wereda 17.....	7,137	*	*	-	93,707	*	*
Wereda 19.....	812	501	895	1.10	12,770	8.23	16
Wereda 28.....	2,345	1,838	2,520	1.07	32,029	8.98	15
Zone 6 .....	2,705	1,628	2,457	0.91	32,127	8.83	19
Wereda 26.....	1,430	838	1,284	0.90	14,292	7.53	13
Wereda 27.....	1,275	790	1,173	0.92	17,834	10.24	26

TABLE 8.2A: - Number of Holders Reporting 'Gejera' Owned, Quantity Reported, Replacement Value, and Duration of Service of 'Gejera', for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of 'Gejeras' Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per 'Gejera' (Birr)	Average Duration of Service of 'Gejera' (Years)
Addis Ababa Region .....	12,998	370	377	0.03	6,354	16.22	*
Zone 3 .....	10,293	334	341	0.03	5,871	16.51	*
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	*	*	-	*	*	*
Wereda 28.....	2,345	145	145	0.06	1,650	11.38	17
Zone 6 .....	2,705	36	36	0.01	484	13.43	13
Wereda 26.....	1,430	36	36	0.03	484	13.43	13
Wereda 27.....	1,275	-	-	-	-	-	-

TABLE 8.3A:- Number of Holders Reporting Shovel Owned, Quantity Reported, Replacement Value, and Duration of Service of Shovel, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Shovels Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Shovel (Birr)	Average Duration of Service of Shovel (Years)
Addis Ababa Region .....	12,998	6,945	7,646	0.59	108,781	12.96	10
Zone 3 .....	10,293	5,807	6,415	0.62	91,609	13.02	9
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	308	352	0.43	5,335	13.26	9
Wereda 28.....	2,345	1,406	1,620	0.69	22,123	11.70	9
Zone 6 .....	2,705	1,138	1,231	0.46	17,172	12.67	11
Wereda 26.....	1,430	483	500	0.35	6,252	12.00	9
Wereda 27.....	1,275	655	731	0.57	10,919	13.12	13

TABLE 8.4A: - Number of Holders Reporting Hoe Owned, Quantity Reported, Replacement Value, and Duration of Service of Hoe, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Hoes Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Hoe (Birr)	Average Duration of Service of Hoe (Years)
Addis Ababa Region .....	12,998	3,289	3,590	0.28	61,384	15.26	14
Zone 3 .....	10,293	2,525	2,587	0.25	41,027	15.41	14
Wereda 17.....	7,137	*	1,727	0.24	27,838	16.06	*
Wereda 19.....	812	255	289	0.36	5,836	17.46	16
Wereda 28.....	2,345	549	571	0.24	7,353	12.41	13
Zone 6 .....	2,705	765	1,003	0.37	20,358	14.88	15
Wereda 26.....	1,430	288	306	0.21	4,956	15.29	10
Wereda 27.....	1,275	477	698	0.55	15,402	14.67	18

TABLE 8.5A: - Number of Holders Reporting 'Mekeskesha' Owned, Quantity Reported, Replacement Value, and Duration of Service of 'Mekeskesha', for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of 'Mekeskeshas' Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per 'Mekeskesha' (Birr)	Average Duration of Service of 'Mekeskesha' (Years)
Addis Ababa Region .....	12,998	462	493	0.04	10,416	20.46	*
Zone 3 .....	10,293	*	*	-	*	*	*
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	*	*	-	*	*	*
Wereda 28.....	2,345	118	136	0.06	2,398	16.32	10
Zone 6 .....	2,705	145	150	0.06	2,792	18.31	*
Wereda 26.....	1,430	30	30	0.02	*	*	*
Wereda 27.....	1,275	*	*	-	*	*	*

TABLE 8.6A:- Number of Holders Reporting Pick-Axe Owned, Quantity Reported, Replacement Value, and Duration of Service of Pick-Axe, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Pick-Axes Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Pick-Axe (Birr)	Average Duration of Service of Pick-Axe (Years)
Addis Ababa Region .....	12,998	8,204	9,111	0.70	142,473	13.90	16
Zone 3 .....	10,293	6,341	6,891	0.67	104,648	13.96	16
Wereda 17.....	7,137	4,149	4,310	0.60	67,238	*	*
Wereda 19.....	812	519	724	0.89	11,029	11.04	13
Wereda 28.....	2,345	1,673	1,857	0.79	26,381	12.66	12
Zone 6 .....	2,705	1,863	2,220	0.82	37,825	13.71	17
Wereda 26.....	1,430	805	880	0.62	13,381	13.91	13
Wereda 27.....	1,275	1,058	1,340	1.05	24,444	13.58	20

TABLE 8.7A: - Number of Holders Reporting 'Deger' Owned, Quantity Reported, Replacement Value, and Duration of Service of 'Deger', for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of 'Degers' Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per 'Deger' (Birr)	Average Duration of Service of 'Deger' (Years)
Addis Ababa Region .....	12,998	10,121	27,237	2.10	116,105	1.64	2
Zone 3 .....	10,293	8,641	23,757	2.31	99,541	1.57	2
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	467	1,729	2.13	7,010	1.11	2
Wereda 28.....	2,345	1,448	4,419	1.88	17,178	1.29	2
Zone 6 .....	2,705	1,479	3,480	1.29	16,564	2.12	2
Wereda 26.....	1,430	1,072	2,772	1.94	12,875	1.84	2
Wereda 27.....	1,275	407	708	0.56	3,689	3.20	3

TABLE 8.8A:- Number of Holders Reporting 'Erfe'(Handle) Owned, Quantity Reported, Replacement Value, and Duration of Service of 'Erfe', for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of 'Erfe's' Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per 'Erfe' (Birr)	Average Duration of Service of 'Erfe' (Years)
Addis Ababa Region .....	12,998	10,086	26,684	2.05	99,234	1.46	1
Zone 3 .....	10,293	8,614	22,963	2.23	85,508	1.48	1
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	458	1,373	1.69	4,287	1.03	1
Wereda 28.....	2,345	1,441	4,407	1.88	15,011	1.09	2
Zone 6 .....	2,705	1,473	3,721	1.38	13,726	1.39	1
Wereda 26.....	1,430	1,065	3,050	2.13	11,488	1.24	1
Wereda 27.....	1,275	407	671	0.53	2,238	2.07	2

TABLE 8. 9A:- Number of Holders Reporting Plough-Beam Owned, Quantity Reported, Replacement Value, and Duration of Service of Plough-Beam, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Plough-Beams Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Plough-Beam (Birr)	Average Duration of Service of Plough-Beam (Years)
Addis Ababa Region .....	12,998	10,116	25,489	1.96	330,334	5.07	5
Zone 3 .....	10,293	8,636	22,003	2.14	282,306	4.92	5
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	467	1,338	1.65	21,647	5.50	3
Wereda 28.....	2,345	1,439	4,219	1.80	48,746	3.56	5
Zone 6 .....	2,705	1,479	3,486	1.29	48,029	5.99	4
Wereda 26.....	1,430	1,072	2,828	1.98	37,666	5.06	3
Wereda 27.....	1,275	407	658	0.52	10,363	9.95	6

TABLE 8.10A: - Number of Holders Reporting Plough-Tip (Metal) Owned, Quantity Reported, Replacement Value, and Duration of Service of Plough-Tip, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Plough-Tips Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Plough-Tip (Birr)	Average Duration of Service of Plough-Tip (Years)
Addis Ababa Region .....	12,998	10,135	17,452	1.34	231,632	7.78	6
Zone 3 .....	10,293	8,655	14,819	1.44	196,363	7.78	6
Wereda 17.....	7,137	*	*	-	134,002	*	*
Wereda 19.....	812	467	967	1.19	13,138	6.74	6
Wereda 28.....	2,345	1,462	2,684	1.14	49,223	9.75	7
Zone 6 .....	2,705	1,479	2,633	0.97	35,270	7.78	8
Wereda 26.....	1,430	1,072	2,045	1.43	26,521	6.97	7
Wereda 27.....	1,275	407	588	0.46	8,748	10.61	12

TABLE 8.11A: - Number of Holders Reporting 'Wegel' -Tip Owned, Quantity Reported, Replacement Value, and Duration of Service of 'Wegel' -Tip, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of 'Wegel' -Tips Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per 'Wegel' -Tip (Birr)	Average Duration of Service of 'Wegel' -Tip (Years)
Addis Ababa Region .....	12,998	9,993	17,000	1.31	85,626	3.00	5
Zone 3 .....	10,293	8,514	14,377	1.40	72,302	3.00	5
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	467	981	1.21	4,966	2.41	4
Wereda 28.....	2,345	1,453	2,571	1.10	14,904	3.26	5
Zone 6 .....	2,705	1,479	2,623	0.97	13,325	3.01	7
Wereda 26.....	1,430	1,072	2,030	1.42	9,720	2.64	5
Wereda 27.....	1,275	407	594	0.47	3,604	4.27	12

TABLE 8.12A: - Number of Holders Reporting Yoke Owned, Quantity Reported, Replacement Value, and Duration of Service of Yoke, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Yokes Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Yoke (Birr)	Average Duration of Service of Yoke (Years)
Addis Ababa Region .....	12,998	10,090	17,439	1.34	209,443	6.94	7
Zone 3 .....	10,293	8,623	14,927	1.45	171,866	6.62	7
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	467	921	1.13	13,430	7.18	8
Wereda 28.....	2,345	1,440	2,522	1.08	25,243	5.59	8
Zone 6 .....	2,705	1,467	2,512	0.93	37,576	8.85	9
Wereda 26.....	1,430	1,059	1,938	1.36	28,533	8.14	7
Wereda 27.....	1,275	407	574	0.45	9,044	11.27	12

TABLE 8.13A: -Number of Holders Reporting Sickle Owned, Quantity Reported, Replacement Value, and Duration of Service of Sickle, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Sickles Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Sickle (Birr)	Average Duration of Service of Sickle (Years)
Addis Ababa Region .....	12,998	11,271	22,406	1.72	375,795	8.53	5
Zone 3 .....	10,293	9,190	18,216	1.77	318,246	8.84	5
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	555	1,449	1.78	24,823	6.57	5
Wereda 28.....	2,345	1,898	4,346	1.85	73,955	7.21	5
Zone 6 .....	2,705	2,081	4,190	1.55	57,549	7.20	6
Wereda 26.....	1,430	1,240	2,319	1.62	37,527	8.65	4
Wereda 27.....	1,275	841	1,871	1.47	20,022	5.41	7

TABLE 8.14A: - Number of Holders Reporting Hay-Fork (Metal) Owned, Quantity Reported, Replacement Value, and Duration of Service of Hay-Fork, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Hay-Forks Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Hay-Fork (Birr)	Average Duration of Service of Hay-Fork (Years)
Addis Ababa Region .....	12,998	8,496	12,750	0.98	248,836	13.26	13
Zone 3 .....	10,293	7,302	10,802	1.05	212,832	13.58	13
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	362	619	0.76	10,903	10.50	10
Wereda 28.....	2,345	1,158	1,807	0.77	32,357	11.60	13
Zone 6 .....	2,705	1,194	1,949	0.72	36,004	11.47	10
Wereda 26.....	1,430	926	1,532	1.07	28,542	11.42	10
Wereda 27.....	1,275	269	416	0.33	7,462	11.66	11

TABLE 8.15A: - Number of Holders Reporting Hay-Fork (Wood) Owned, Quantity Reported, Replacement Value, and Duration of Service of Hay-Fork, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Hay-Forks Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Hay-Fork (Birr)	Average Duration of Service of Hay-Fork (Years)
Addis Ababa Region .....	12,998	524	714	0.05	7,989	7.88	10
Zone 3 .....	10,293	386	471	0.05	4,574	7.91	7
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	116	154	0.19	1,454	6.79	7
Wereda 28.....	2,345	163	210	0.09	1,819	6.56	8
Zone 6 .....	2,705	138	244	0.09	*	7.79	*
Wereda 26.....	1,430	39	64	0.04	172	*	8
Wereda 27.....	1,275	99	*	-	*	*	*



TABLE 8.16A: - Number of Holders Reporting Threshing Stick Owned, Quantity Reported, Replacement Value, and Duration of Service of Threshing Stick, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Threshing Sticks Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Threshing Stick (Birr)	Average Duration of Service of Threshing Stick (Years)
Addis Ababa Region .....	12,998	146	248	0.02	883	2.89	2
Zone 3 .....	10,293	116	185	0.02	697	3.09	2
Wereda 17.....	7,137	61	*	-	*	*	2
Wereda 19.....	812	*	*	-	*	*	-
Wereda 28.....	2,345	*	*	-	*	*	*
Zone 6 .....	2,705	31	63	0.02	*	*	*
Wereda 26.....	1,430	31	63	0.04	*	*	*
Wereda 27.....	1,275	-	-	-	-	-	-

TABLE 8.17A:- Number of Holders Reporting Winnower(Wood) Owned, Quantity Reported, Replacement Value, and Duration of Service of Winnower, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Winnowers Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Winnower (Birr)	Average Duration of Service of Winnower (Years)
Addis Ababa Region .....	12,998	6,663	7,530	0.58	139,518	16.25	11
Zone 3 .....	10,293	5,636	6,263	0.61	116,597	16.61	11
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	316	397	0.49	7,548	14.79	14
Wereda 28.....	2,345	1,019	1,146	0.49	19,465	14.98	12
Zone 6 .....	2,705	1,027	1,267	0.47	22,921	14.44	10
Wereda 26.....	1,430	747	928	0.65	17,804	15.21	9
Wereda 27.....	1,275	280	339	0.27	5,118	12.33	13

TABLE 8. 18A: - Number of Holders Reporting Sprayer (Hand operated) Owned, Quantity Reported, Replacement Value, Duration of Service of Sprayer, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Sprayers Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Sprayer (Birr)	Average Duration of Service of Sprayer (Years)
Addis Ababa Region .....	12,998	*	*	-	208,349	*	*
Zone 3 .....	10,293	*	*	-	*	*	*
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	70	70	0.09	28,589	408.42	10
Wereda 28.....	2,345	66	66	0.03	28,145	426.44	*
Zone 6 .....	2,705	80	80	0.03	32,122	401.52	10
Wereda 26.....	1,430	54	54	0.04	21,812	403.92	9
Wereda 27.....	1,275	26	26	0.02	*	*	10

TABLE 8.19A: -Number of Holders Reporting Ox (Specifically for ploughing) Owned, Quantity Reported, Replacement Value and Average age of Ox, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Oxen Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Ox (Birr)	Average Age of Ox (Years)
Addis Ababa Region .....	12,998	9,353	26,529	2.04	24,816,334	329.25	8
Zone 3 .....	10,293	7,920	22,569	2.19	21,330,051	331.59	8
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	462	1,366	1.68	1,100,134	267.50	8
Wereda 28.....	2,345	1,373	4,029	1.72	3,642,023	308.68	8
Zone 6 .....	2,705	1,434	3,960	1.46	3,486,283	315.85	7
Wereda 26.....	1,430	1,043	2,922	2.04	2,610,075	316.29	6
Wereda 27.....	1,275	390	1,039	0.81	876,208	314.34	10

TABLE 8.20A: - Number of Holders Reporting Ass (For Threshing / Transportation) Owned, Quantity Reported, Replacement Value and Average age of Ass, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Asses Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Ass (Birr)	Average Age of Ass (Years)
Addis Ababa Region .....	12,998	8,552	12,999	1.00	3,918,132	199.84	9
Zone 3 .....	10,293	7,301	10,817	1.05	3,269,238	204.71	9
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	424	751	0.92	205,645	154.95	9
Wereda 28.....	2,345	1,299	1,992	0.85	562,782	186.03	9
Zone 6 .....	2,705	1,251	2,182	0.81	648,894	175.70	9
Wereda 26.....	1,430	875	1,442	1.01	452,259	194.38	8
Wereda 27.....	1,275	376	739	0.58	196,636	139.49	11

TABLE 8.21A: - Number of Holders Reporting Cattle (Working Age for Threshing / Transportation) Owned, Quantity Reported, Replacement Value and Average age of Cattle, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Cattle Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Cattle (Birr)	Average Age of Cattle (Years)
Addis Ababa Region .....	12,998	9,884	41,255	3.17	32,700,841	203.26	8
Zone 3 .....	10,293	8,392	34,988	3.40	27,939,778	206.50	8
Wereda 17.....	7,137	*	26,001	3.64	*	*	*
Wereda 19.....	812	511	2,561	3.15	1,659,005	132.30	8
Wereda 28.....	2,345	1,460	6,426	2.74	4,766,148	182.17	8
Zone 6 .....	2,705	1,492	6,267	2.32	4,761,063	185.17	7
Wereda 26.....	1,430	1,096	4,658	3.26	3,595,665	183.40	6
Wereda 27.....	1,275	396	1,609	1.26	1,165,397	190.29	10

TABLE 8.22A:- Number of Holders Reporting Horse (For Threshing / Transportation) Owned, Quantity Reported, Replacement Value and Average age of Horse, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Horses Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Horse (Birr)	Average Age of Horse (Years)
Addis Ababa Region .....	12,998	175	183	0.01	136,564	720.12	7
Zone 3 .....	10,293	148	148	0.01	*	*	7
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	-	-	-	-	-	-
Wereda 28.....	2,345	87	87	0.04	59,873	688.20	*
Zone 6 .....	2,705	27	*	-	26,190	*	6
Wereda 26.....	1,430	27	*	-	26,190	*	6
Wereda 27.....	1,275	-	-	-	-	-	-

TABLE 8.23A:- Number of Holders Reporting Mule (For threshing/ transportation) Owned, Quantity Reported, Replacement Value and Average age of Mule, for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of Mules Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per Mule (Birr)	Average Age of Mule (Years)
Addis Ababa Region .....	12,998	64	69	0.01	88,607	1,220.25	15
Zone 3 .....	10,293	*	*	-	*	*	*
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	*	*	-	*	*	*
Wereda 28.....	2,345	*	*	-	*	*	*
Zone 6 .....	2,705	42	47	0.02	49,415	957.55	13
Wereda 26.....	1,430	42	47	0.03	49,415	957.55	13
Wereda 27.....	1,275	-	-	-	-	-	-

TABLE 8.24A:- Number of Holders Reporting 'Debignit' Owned, Quantity Reported, Replacement Value and Storage Capacity of 'Debignit', for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of 'Debignits' Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per 'Debignit' (Birr)	Average Storage Capacity of 'Debignit' (Quintal)
Addis Ababa Region .....	12,998	3,734	8,769	0.67	141,998	6.44	10
Zone 3 .....	10,293	3,265	7,696	0.75	124,183	6.36	*
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	135	355	0.44	7,539	6.62	4
Wereda 28.....	2,345	530	1,358	0.58	21,101	6.13	4
Zone 6 .....	2,705	469	1,072	0.40	17,815	7.02	4
Wereda 26.....	1,430	350	797	0.56	14,716	7.91	4
Wereda 27.....	1,275	119	275	0.22	3,100	4.44	4

TABLE 8.25A: - Number of Holders Reporting 'Gottera' Owned, Quantity Reported, Replacement Value and Storage Capacity of 'Gottera', for Private Holdings.

Geographic Area	Total Number of Crop Holders	Number of Holders Reporting	Number of 'Gotteras' Reported	Average Number Per Holder	Total Value (Birr)	Average Replacement Value Per 'Gottera' (Birr)	Average Storage Capacity of 'Gottera' (Quintal)
Addis Ababa Region .....	12,998	685	1,176	0.09	73,528	36.65	13
Zone 3 .....	10,293	329	549	0.05	17,487	20.94	11
Wereda 17.....	7,137	*	*	-	*	*	*
Wereda 19.....	812	81	123	0.15	4,008	22.02	8
Wereda 28.....	2,345	81	112	0.05	5,236	39.55	17
Zone 6 .....	2,705	356	626	0.23	56,041	50.49	14
Wereda 26.....	1,430	312	571	0.40	51,168	47.11	15
Wereda 27.....	1,275	44	56	0.04	4,873	83.99	9

STATISTICAL TABLES PRESENTING THE CENSUS  
RESULTS AT  
ZONAL AND WOREDA LEVELS

Tables 8.1B- 8.25B

Table 8.1B:- Number of Crop Holders that Owned Axe by Geographic area.

Geographic Area	Number of Crop holders that owned											
	No Axe		One Axe		Two Axes		Three Axes		Four Axes		Five and above Axes	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	3,325	25.58	5,961	45.86	3,104	23.88	386	2.97	200	1.54	22	0.17
Zone 3 .....	2,247	21.83	5,037	48.94	2,515	24.43	284	2.76	188	1.83	22	0.21
Wereda 17 .....	1,431	20.05	3,523	49.36	1,859	26.05	154	2.16	170	2.38	-	-
Wereda 19 .....	311	38.30	225	27.71	214	26.35	40	4.93	5	0.62	17	2.09
Wereda 28 .....	507	21.62	1,288	54.93	442	18.85	90	3.84	13	0.55	5	0.21
Zone 6 .....	1,077	39.82	924	34.16	590	21.81	102	3.77	12	0.44	-	-
Wereda 26 .....	592	41.40	489	34.20	258	18.04	85	5.94	6	0.42	-	-
Wereda 27 .....	486	38.12	434	34.04	332	26.04	17	1.33	6	0.47	-	-

Table 8.2B:- Number of Crop Holders that Owned 'Gejera' by Geographic area.

Geographic area	Number of Crop holders that owned											
	No 'Gejera'		One 'Gejera'		Two 'Gejeras'		Three 'Gejeras'		Four 'Gejeras'		Five and above 'Gejeras'	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,628	97.15	364	2.80	6	0.05	-	-	-	-	-	-
Zone 3 .....	9,959	96.76	328	3.19	6	0.06	-	-	-	-	-	-
Wereda 17 .....	6,964	97.58	167	2.34	6	0.08	-	-	-	-	-	-
Wereda 19 .....	796	98.03	16	1.97	-	-	-	-	-	-	-	-
Wereda 28 .....	2,200	93.82	145	6.18	-	-	-	-	-	-	-	-
Zone 6 .....	2,669	98.67	36	1.33	-	-	-	-	-	-	-	-
Wereda 26 .....	1,394	97.48	36	2.52	-	-	-	-	-	-	-	-
Wereda 27 .....	1,275	100.00	-	-	-	-	-	-	-	-	-	-

Table 8.3B:- Number of Crop Holders that Owned Shovel by Geographic area

Geographic area	Number of Crop holders that owned											
	No Shovel		One Shovel		Two Shovels		Three Shovels		Four Shovels		Five and above Shovels	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	6,053	46.57	6,330	48.70	547	4.21	50	0.38	18	0.14	-	-
Zone 3 .....	4,486	43.58	5,270	51.20	483	4.69	36	0.35	18	0.17	-	-
Wereda 17 .....	3,045	42.66	3,742	52.43	350	4.90	-	-	-	-	-	-
Wereda 19 .....	504	62.07	264	32.51	44	5.42	-	-	-	-	-	-
Wereda 28 .....	938	40.00	1,264	53.90	89	3.80	36	1.54	18	0.77	-	-
Zone 6 .....	1,567	57.93	1,060	39.19	64	2.37	14	0.52	-	-	-	-
Wereda 26 .....	947	66.22	467	32.66	16	1.12	-	-	-	-	-	-
Wereda 27 .....	621	48.71	593	46.51	47	3.69	14	1.10	-	-	-	-

Table 8.4B: - Number of Crop Holders that Owned Hoe by Geographic area

Geographic area	Number of Crop holders that owned											
	No Hoe		One Hoe		Two Hoes		Three Hoes		Four Hoes		Five and above Hoes	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region .....	9,710	74.70	3,094	23.80	126	0.97	48	0.37	14	0.11	6	0.05
Zone 3 .....	7,769	75.48	2,468	23.98	51	0.50	5	0.05	-	-	-	-
Wereda 17.....	5,416	75.89	1,715	24.03	6	0.08	-	-	-	-	-	-
Wereda 19.....	558	68.72	226	27.83	23	2.83	5	0.62	-	-	-	-
Wereda 28.....	1,796	76.59	527	22.47	22	0.94	-	-	-	-	-	-
Zone 6 .....	1,940	71.72	627	23.18	75	2.77	43	1.59	14	0.52	6	0.22
Wereda 26.....	1,142	79.86	270	18.88	18	1.26	-	-	-	-	-	-
Wereda 27.....	799	62.67	356	27.92	57	4.47	43	3.37	14	1.10	6	0.47

Table 8.5B: - Number of Crop Holders that Owned 'Mekeskesha' by Geographic area

Geographic area	Number of Crop holders that owned											
	No 'Mekeskesha'		One 'Mekeskesha'		Two 'Mekeskeshas'		Three 'Mekeskeshas'		Four 'Mekeskeshas'		Five and above 'Mekeskeshas'	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,535	96.44	432	3.32	31	0.24	-	-	-	-	-	-
Zone 3 .....	9,975	96.91	293	2.85	25	0.24	-	-	-	-	-	-
Wereda 17.....	6,953	97.42	184	2.58	-	-	-	-	-	-	-	-
Wereda 19.....	796	98.03	9	1.11	7	0.86	-	-	-	-	-	-
Wereda 28.....	2,227	94.97	100	4.26	18	0.77	-	-	-	-	-	-
Zone 6 .....	2,560	94.64	139	5.14	6	0.22	-	-	-	-	-	-
Wereda 26.....	1,400	97.90	30	2.10	-	-	-	-	-	-	-	-
Wereda 27.....	1,160	90.98	109	8.55	6	0.47	-	-	-	-	-	-

Table 8.6B:- Number of Crop Holders that Owned Pick-Axe by Geographic area

Geographic area	Number of Crop holders that owned											
	No Pick-Axe		One Pick-Axe		Two Pick-Axes		Three Pick-Axes		Four Pick-Axes		Five and above Pick-Axes	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	4,794	36.88	7,421	57.09	679	5.22	84	0.65	20	0.15	-	-
Zone 3 .....	3,952	38.40	5,848	56.82	442	4.29	46	0.45	5	0.05	-	-
Wereda 17.....	2,988	41.87	4,002	56.07	134	1.88	13	0.18	-	-	-	-
Wereda 19.....	294	36.21	339	41.75	160	19.70	14	1.72	5	0.62	-	-
Wereda 28.....	672	28.66	1,507	64.26	148	6.31	18	0.77	-	-	-	-
Zone 6 .....	842	31.13	1,574	58.19	237	8.76	38	1.40	14	0.52	-	-
Wereda 26.....	624	43.64	741	51.82	55	3.85	10	0.70	-	-	-	-
Wereda 27.....	217	17.02	833	65.33	182	14.27	29	2.27	14	1.10	-	-

Table 8.7B: - Number of Crop Holders that Owned 'Deger' by Geographic area

Geographic area	Number of Crop holders that owned											
	No 'Deger'		One 'Deger'		Two 'Degers'		Three 'Degers'		Four 'Degers'		Five and above 'Degers'	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	2,870	22.08	1,899	14.61	4,566	35.13	521	4.01	2,437	18.75	705	5.42
Zone 3 .....	1,644	15.97	1,346	13.08	4,036	39.21	474	4.61	2,227	21.64	566	5.50
Wereda 17 .....	410	5.74	1,016	14.24	3,373	47.26	402	5.63	1,634	22.89	302	4.23
Wereda 19 .....	337	41.50	45	5.54	165	20.32	11	1.35	160	19.70	94	11.58
Wereda 28 .....	897	38.25	285	12.15	498	21.24	61	2.60	434	18.51	170	7.25
Zone 6 .....	1,226	45.32	554	20.48	530	19.59	47	1.74	209	7.73	139	5.14
Wereda 26 .....	357	24.97	304	21.26	436	30.49	42	2.94	164	11.47	127	8.88
Wereda 27 .....	867	68.00	250	19.61	94	7.37	6	0.47	46	3.61	12	0.94

Table 8.8B:- Number of Crop Holders that Owned 'Erfe' by Geographic area.

Geographic area	Number of Crop holders that owned											
	No 'Erfe'		One 'Erfe'		Two 'Erfes'		Three 'Erfes'		Four 'Erfes'		Five and above 'Erfes'	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	2,912	22.40	3,148	24.22	3,301	25.40	808	6.22	1,704	13.11	1,125	8.66
Zone 3 .....	1,680	16.32	2,653	25.77	2,796	27.16	701	6.81	1,490	14.48	973	9.45
Wereda 17 .....	423	5.93	2,165	30.33	2,212	30.99	498	6.98	1,150	16.11	689	9.65
Wereda 19 .....	353	43.47	108	13.30	155	19.09	36	4.43	91	11.21	69	8.50
Wereda 28 .....	904	38.55	380	16.20	430	18.34	167	7.12	249	10.62	215	9.17
Zone 6 .....	1,232	45.55	495	18.30	505	18.67	107	3.96	214	7.91	152	5.62
Wereda 26 .....	365	25.52	251	17.55	403	28.18	84	5.87	175	12.24	152	10.63
Wereda 27 .....	867	68.00	244	19.14	102	8.00	23	1.80	39	3.06	-	-

Table 8.9B:- Number of Crop Holders that Owned Plow-Beam by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Plow-Beam		One Plow-Beam		Two Plow-Beams		Three Plow-Beams		Four Plow-Beams		Five and above Plow-Beams	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	2,883	22.18	3,042	23.40	3,580	27.54	1,287	9.90	1,293	9.95	913	7.02
Zone 3 .....	1,657	16.10	2,486	24.15	3,150	30.60	1,086	10.55	1,114	10.82	800	7.77
Wereda 17 .....	407	5.70	1,988	27.85	2,571	36.02	800	11.21	820	11.49	551	7.72
Wereda 19 .....	344	42.36	122	15.02	149	18.35	65	8.00	62	7.64	70	8.62
Wereda 28 .....	907	38.68	377	16.08	429	18.29	221	9.42	232	9.89	179	7.63
Zone 6 .....	1,226	45.32	555	20.52	431	15.93	201	7.43	179	6.62	113	4.18
Wereda 26 .....	358	25.03	291	20.35	355	24.83	157	10.98	162	11.33	107	7.48
Wereda 27 .....	868	68.08	264	20.71	76	5.96	44	3.45	17	1.33	6	0.47



Table 8.10B:- Number of Crop Holders that Owned Plow-Tip by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Plow-Tip		One Plow-Tip		Two Plow-Tips		Three Plow-Tips		Four Plow-Tips		Five and above Plow-Tips	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	2,863	22.03	4,755	36.58	4,286	32.97	625	4.81	303	2.33	166	1.28
Zone 3 .....	1,638	15.91	4,038	39.23	3,742	36.35	507	4.93	232	2.25	136	1.32
Wereda 17 .....	411	5.76	3,201	44.85	2,982	41.78	321	4.50	120	1.68	102	1.43
Wereda 19 .....	345	42.49	171	21.06	186	22.91	55	6.77	33	4.06	22	2.71
Wereda 28 .....	882	37.61	666	28.40	574	24.48	132	5.63	79	3.37	12	0.51
Zone 6 .....	1,226	45.32	716	26.47	544	20.11	118	4.36	70	2.59	31	1.15
Wereda 26 .....	359	25.10	466	32.59	409	28.60	95	6.64	70	4.90	31	2.17
Wereda 27 .....	867	68.00	250	19.61	135	10.59	23	1.80	-	-	-	-

Table 8.11B:- Number of Crop Holders that Owned 'wegel'-Tip by Geographic area.

Geographic area	Number of Crop holders that owned											
	No 'wegel'-Tip		One 'wegel'-Tip		Two 'wegel'-Tips		Three 'wegel'-Tips		Four 'wegel'-Tips		Five and above 'wegel'-Tips	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	3,006	23.13	4,926	37.90	3,922	30.17	613	4.72	391	3.01	140	1.08
Zone 3 .....	1,779	17.28	4,227	41.07	3,368	32.72	498	4.84	302	2.93	119	1.16
Wereda 17 .....	542	7.59	3,431	48.07	2,541	35.60	321	4.50	207	2.90	95	1.33
Wereda 19 .....	345	42.49	147	18.10	210	25.86	55	6.77	38	4.68	17	2.09
Wereda 28 .....	892	38.04	650	27.72	616	26.27	122	5.20	57	2.43	8	0.34
Zone 6 .....	1,225	45.29	699	25.84	555	20.52	116	4.29	89	3.29	21	0.78
Wereda 26 .....	358	25.03	449	31.40	420	29.37	99	6.92	83	5.80	21	1.47
Wereda 27 .....	867	68.00	250	19.61	135	10.59	17	1.33	6	0.47	-	-

Table 8.12B:- Number of Crop Holders that Owned Yoke by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Yoke		One Yoke		Two Yokes		Three Yokes		Four Yokes		Five and above Yokes	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	2,908	22.37	4,692	36.10	4,215	32.43	605	4.65	435	3.35	143	1.10
Zone 3 .....	1,669	16.21	3,951	38.39	3,704	35.99	476	4.62	363	3.53	130	1.26
Wereda 17 .....	421	5.90	3,060	42.88	3,005	42.10	302	4.23	254	3.56	95	1.33
Wereda 19 .....	346	42.61	188	23.15	167	20.57	72	8.87	22	2.71	17	2.09
Wereda 28 .....	904	38.55	702	29.94	531	22.64	103	4.39	86	3.67	19	0.81
Zone 6 .....	1,238	45.77	741	27.39	511	18.89	129	4.77	73	2.70	13	0.48
Wereda 26 .....	370	25.87	477	33.36	391	27.34	106	7.41	73	5.10	13	0.91
Wereda 27 .....	868	68.08	264	20.71	120	9.41	23	1.80	-	-	-	-

Table 8.13B:- Number of Crop Holders that Owned Sickle by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Sickle		One Sickle		Two Sickles		Three Sickles		Four Sickles		Five and above Sickles	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	1,728	13.29	4,795	36.89	4,050	31.16	1,138	8.76	917	7.05	370	2.85
Zone 3 .....	1,103	10.72	3,884	37.73	3,374	32.78	900	8.74	751	7.30	281	2.73
Wereda 17.....	400	5.60	3,039	42.58	2,444	34.24	629	8.81	573	8.03	52	0.73
Wereda 19.....	257	31.65	183	22.54	208	25.62	60	7.39	21	2.59	83	10.22
Wereda 28.....	448	19.10	662	28.23	723	30.83	211	9.00	156	6.65	145	6.18
Zone 6 .....	624	23.07	911	33.68	676	24.99	238	8.80	166	6.14	90	3.33
Wereda 26.....	191	13.36	536	37.48	484	33.85	105	7.34	86	6.01	28	1.96
Wereda 27.....	434	34.04	375	29.41	191	14.98	133	10.43	80	6.27	62	4.86

Table 8.14B:- Number of Crop Holders that Owned Hay-Fork(metal) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Hay-Fork (metal)		One Hay-Fork (metal)		Two Hay-Forks (metal)		Three Hay-Forks (metal)		Four Hay-Forks (metal)		Five and above Hay-Forks (metal)	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	4,482	34.48	5,065	38.97	2,809	21.61	517	3.98	94	0.72	31	0.24
Zone 3 .....	2,972	28.87	4,432	43.06	2,410	23.41	383	3.72	65	0.63	31	0.30
Wereda 17.....	1,336	18.72	3,633	50.90	1,814	25.42	316	4.43	13	0.18	25	0.35
Wereda 19.....	449	55.30	164	20.20	158	19.46	22	2.71	19	2.34	-	-
Wereda 28.....	1,187	50.62	636	27.12	439	18.72	45	1.92	33	1.41	5	0.21
Zone 6 .....	1,511	55.86	633	23.40	398	14.71	134	4.95	29	1.07	-	-
Wereda 26.....	505	35.31	468	32.73	331	23.15	102	7.13	24	1.68	-	-
Wereda 27.....	1,006	78.90	164	12.86	67	5.25	32	2.51	6	0.47	-	-

Table 8.15B:- Number of Crop Holders that Owned Hay-Fork (wood) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Hay-Fork (wood)		One Hay-Fork (wood)		Two Hay-Forks (wood)		Three Hay-Forks (wood)		Four Hay-Forks (wood)		Five and above Hay-Forks (wood)	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,475	95.98	360	2.77	153	1.18	-	-	5	0.04	5	0.04
Zone 3 .....	9,908	96.26	328	3.19	47	0.46	-	-	5	0.05	5	0.05
Wereda 17.....	7,030	98.50	107	1.50	-	-	-	-	-	-	-	-
Wereda 19.....	696	85.71	95	11.70	16	1.97	-	-	-	-	5	0.62
Wereda 28.....	2,182	93.05	127	5.42	31	1.32	-	-	5	0.21	-	-
Zone 6 .....	2,567	94.90	32	1.18	106	3.92	-	-	-	-	-	-
Wereda 26.....	1,391	97.27	15	1.05	24	1.68	-	-	-	-	-	-
Wereda 27.....	1,176	92.24	17	1.33	82	6.43	-	-	-	-	-	-

Table 8.16B:- Number of Crop Holders that Owned Threshing Stick by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Threshing Stick		One Threshing Stick		Two Threshing Sticks		Three Threshing Sticks		Four Threshing Sticks		Five and above Threshing Sticks	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,852	98.88	72	0.55	53	0.41	15	0.12	6	0.05	-	-
Zone 3 .....	10,178	98.88	66	0.64	37	0.36	6	0.06	6	0.06	-	-
Wereda 17 .....	7,077	99.16	28	0.39	20	0.28	6	0.08	6	0.08	-	-
Wereda 19 .....	803	98.89	9	1.11	-	-	-	-	-	-	-	-
Wereda 28 .....	2,299	98.04	29	1.24	17	0.72	-	-	-	-	-	-
Zone 6 .....	2,675	98.89	6	0.22	16	0.59	8	0.30	-	-	-	-
Wereda 26 .....	1,400	97.90	6	0.42	16	1.12	8	0.56	-	-	-	-
Wereda 27 .....	1,275	100.00	-	-	-	-	-	-	-	-	-	-

Table 8.17B:- Number of Crop Holders that Owned Winnower (wood) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Winnower (wood)		One Winnower (wood)		Two Winnowers (wood)		Three Winnowers (wood)		Four Winnowers (wood)		Five and above Winnowers (wood)	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	6,336	48.75	5,821	44.78	820	6.31	16	0.12	5	0.04	-	-
Zone 3 .....	4,657	45.24	5,018	48.75	608	5.91	10	0.10	-	-	-	-
Wereda 17 .....	2,836	39.74	3,882	54.39	419	5.87	-	-	-	-	-	-
Wereda 19 .....	496	61.08	245	30.17	61	7.51	10	1.23	-	-	-	-
Wereda 28 .....	1,326	56.55	891	38.00	128	5.46	-	-	-	-	-	-
Zone 6 .....	1,679	62.07	803	29.69	212	7.84	6	0.22	5	0.18	-	-
Wereda 26 .....	683	47.76	582	40.70	154	10.77	6	0.42	5	0.35	-	-
Wereda 27 .....	995	78.04	221	17.33	59	4.63	-	-	-	-	-	-

Table 8.18B:- Number of Crop Holders that Owned Sprayer (hand operated) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Sprayer		One Sprayer		Two Sprayers		Three Sprayers		Four Sprayers		Five and above Sprayers	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,423	95.58	575	4.42	-	-	-	-	-	-	-	-
Zone 3 .....	9,798	95.19	495	4.81	-	-	-	-	-	-	-	-
Wereda 17 .....	6,778	94.97	359	5.03	-	-	-	-	-	-	-	-
Wereda 19 .....	742	91.38	70	8.62	-	-	-	-	-	-	-	-
Wereda 28 .....	2,279	97.19	66	2.81	-	-	-	-	-	-	-	-
Zone 6 .....	2,625	97.04	80	2.96	-	-	-	-	-	-	-	-
Wereda 26 .....	1,376	96.22	54	3.78	-	-	-	-	-	-	-	-
Wereda 27 .....	1,249	97.96	26	2.04	-	-	-	-	-	-	-	-

Table 8.19B:- Number of Crop Holders that Owned Ox (Specifically for ploughing) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Ox		One Ox		Two Oxen		Three Oxen		Four Oxen		Five and above Oxen	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	3,645	28.04	1,129	8.69	4,164	32.04	893	6.87	2,385	18.35	782	6.02
Zone 3 .....	2,373	23.05	886	8.61	3,609	35.06	754	7.33	1,993	19.36	678	6.59
Wereda 17 .....	1,052	14.74	680	9.53	2,790	39.09	632	8.86	1,495	20.95	488	6.84
Wereda 19 .....	349	42.98	64	7.88	185	22.78	31	3.82	140	17.24	43	5.30
Wereda 28 .....	972	41.45	142	6.06	634	27.04	92	3.92	358	15.27	147	6.27
Zone 6 .....	1,271	46.99	243	8.98	555	20.52	140	5.18	392	14.49	104	3.84
Wereda 26 .....	386	26.99	209	14.62	364	25.45	62	4.34	322	22.52	87	6.08
Wereda 27 .....	886	69.49	34	2.67	191	14.98	77	6.04	70	5.49	17	1.33

Table 8.20B:- Number of Crop Holders that Owned Ass (For threshing or transportation) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Ass		One Ass		Two Asses		Three Asses		Four Asses		Five and above Asses	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	4,446	34.21	4,891	37.63	3,033	23.33	510	3.92	93	0.72	25	0.19
Zone 3 .....	2,992	29.07	4,309	41.86	2,551	24.78	378	3.67	50	0.49	13	0.13
Wereda 17 .....	1,560	21.86	3,361	47.09	1,977	27.70	219	3.07	7	0.10	13	0.18
Wereda 19 .....	388	47.78	174	21.43	194	23.89	35	4.31	21	2.59	-	-
Wereda 28 .....	1,046	44.61	773	32.96	380	16.20	124	5.29	22	0.94	-	-
Zone 6 .....	1,454	53.75	582	21.52	482	17.82	132	4.88	43	1.59	12	0.44
Wereda 26 .....	555	38.81	475	33.22	279	19.51	89	6.22	26	1.82	6	0.42
Wereda 27 .....	899	70.51	107	8.39	203	15.92	43	3.37	17	1.33	6	0.47

Table 8.21B:- Number of Crop Holders that Owned Cattle (For threshing or transportation) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Cattle		One Cattle		Two Cattle		Three Cattle		Four Cattle		Five and above Cattle	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	3,114	23.96	904	6.95	2,217	17.06	1,707	13.13	1,743	13.41	3,313	25.49
Zone 3 .....	1,901	18.47	698	6.78	1,925	18.70	1,499	14.56	1,531	14.87	2,739	26.61
Wereda 17 .....	715	10.02	506	7.09	1,418	19.87	1,235	17.30	1,175	16.46	2,088	29.26
Wereda 19 .....	302	37.19	69	8.50	117	14.41	40	4.93	85	10.47	199	24.51
Wereda 28 .....	885	37.74	124	5.29	390	16.63	224	9.55	270	11.51	452	19.28
Zone 6 .....	1,213	44.84	206	7.62	292	10.79	208	7.69	212	7.84	574	21.22
Wereda 26 .....	334	23.36	172	12.03	156	10.91	175	12.24	180	12.59	413	28.88
Wereda 27 .....	878	68.86	34	2.67	136	10.67	33	2.59	32	2.51	162	12.71

Table 8.22B:- Number of Crop Holders that Owned Horse (For threshing or transportation) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Horse		One Horse		Two Horses		Three Horses		Four Horses		Five and above Horses	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,819	98.62	167	1.28	12	0.09	-	-	-	-	-	-
Zone 3 .....	10,141	98.52	148	1.44	4	0.04	-	-	-	-	-	-
Wereda 17 .....	7,076	99.15	61	0.85	-	-	-	-	-	-	-	-
Wereda 19 .....	812	100.00	-	-	-	-	-	-	-	-	-	-
Wereda 28 .....	2,254	96.12	87	3.71	4	0.17	-	-	-	-	-	-
Zone 6 .....	2,678	99.00	19	0.70	8	0.30	-	-	-	-	-	-
Wereda 26 .....	1,403	98.11	19	1.33	8	0.56	-	-	-	-	-	-
Wereda 27 .....	1,275	100.00	-	-	-	-	-	-	-	-	-	-

Table 8.23B:- Number of Crop Holders that Owned Mule (For threshing or transportation) by Geographic area.

Geographic area	Number of Crop holders that owned											
	No Mule		One Mule		Two Mules		Three Mules		Four Mules		Five and above Mules	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,934	99.51	59	0.45	5	0.04	-	-	-	-	-	-
Zone 3 .....	10,270	99.78	23	0.22	-	-	-	-	-	-	-	-
Wereda 17 .....	7,133	99.94	4	0.06	-	-	-	-	-	-	-	-
Wereda 19 .....	807	99.38	5	0.62	-	-	-	-	-	-	-	-
Wereda 28 .....	2,331	99.40	14	0.60	-	-	-	-	-	-	-	-
Zone 6 .....	2,663	98.45	37	1.37	5	0.18	-	-	-	-	-	-
Wereda 26 .....	1,388	97.06	37	2.59	5	0.35	-	-	-	-	-	-
Wereda 27 .....	1,275	100.00	-	-	-	-	-	-	-	-	-	-

Table 8.24B:- Number of Crop Holders that Owned Local Storage 'Debignit' by Geographic area.

Geographic area	Number of Crop holders that owned											
	No 'Debignit'		One 'Debignit'		Two 'Debignits'		Three 'Debignits'		Four 'Debignits'		Five and above 'Debignits'	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	9,264	71.27	946	7.28	1,503	11.56	714	5.49	327	2.52	244	1.88
Zone 3 .....	7,029	68.29	836	8.12	1,293	12.56	622	6.04	283	2.75	230	2.23
Wereda 17 .....	4,537	63.57	697	9.77	1,032	14.46	518	7.26	183	2.56	170	2.38
Wereda 19 .....	676	83.25	38	4.68	43	5.30	5	0.62	33	4.06	17	2.09
Wereda 28 .....	1,815	77.40	101	4.31	218	9.30	100	4.26	67	2.86	44	1.88
Zone 6 .....	2,236	82.66	110	4.07	210	7.76	92	3.40	44	1.63	13	0.48
Wereda 26 .....	1,080	75.52	77	5.38	182	12.73	45	3.15	33	2.31	13	0.91
Wereda 27 .....	1,157	90.75	33	2.59	27	2.12	47	3.69	11	0.86	-	-

Table 8.25B:- Number of Crop Holders that Owned Local Storage 'Gottera' by Geographic area.

Geographic area	Number of Crop holders that owned											
	No 'Gottera'		One 'Gottera'		Two 'Gudguads'		Three 'Gudguads'		Four 'Gudguads'		Five and above 'Gudguads'	
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
Addis Ababa Region.....	12,312	94.72	325	2.50	266	2.05	71	0.55	12	0.09	12	0.09
Zone 3 .....	9,964	96.80	140	1.36	173	1.68	7	0.07	4	0.04	5	0.05
Wereda 17 .....	6,970	97.66	19	0.27	148	2.07	-	-	-	-	-	-
Wereda 19 .....	731	90.02	64	7.88	5	0.62	7	0.86	-	-	5	0.62
Wereda 28 .....	2,264	96.55	57	2.43	20	0.85	-	-	4	0.17	-	-
Zone 6 .....	2,348	86.80	186	6.88	93	3.44	64	2.37	8	0.30	6	0.22
Wereda 26 .....	1,118	78.18	147	10.28	93	6.50	58	4.06	8	0.56	6	0.42
Wereda 27 .....	1,230	96.47	39	3.06	-	-	6	0.47	-	-	-	-

ANNEX TABLES PRESENTING  
ESTIMATES, STANDARD ERRORS AND  
COEFFICIENT OF VARIATION  
FOR SELECTED FARM IMPLEMENT VARIABLES

Annex Tables 8.1-8.3

ANNEX TABLE 8.1:- Standard Errors and Coefficient of Variation For the Number of Holders Reporting, Quantity Reported and Total Value, for Private Holdings, Addis Ababa City Administration.

Implements, Equipment, Farm animals and Storage facilities	Number of Holders			Number of Implements, Equipment, Farm animals and Storages			Total Value		
	Reporting	S.E	C.V	Reported	S.E	C.V	(Birr)	S.E	C.V
Used for Clearing Land									
Axes .....	9,674	2,938.39	30.38	14,257	4,324.85	30.33	170,633	4,738,668.69	27.77
'Gejeras' .....	370	134.94	36.43	377	134.81	35.77	6,354	257,463.93	40.52
Shovels .....	6,945	2,225.42	32.04	7,646	2,389.77	31.26	108,781	3,629,644.70	33.37
Used for Cultivation									
Hoes .....	3,289	873.58	26.56	3,590	886.88	24.71	61,384	1,374,408.77	22.39
'Mekeskeshas' .....	462	179.64	38.84	493	183.20	37.16	10,416	484,807.84	46.55
Pick Axes.....	8,204	2,099.79	25.59	9,111	2,146.32	23.56	142,473	3,418,755.01	24.00
Tractors.....	-	-	-	-	-	-	-	-	-
Parts for traditional Plough									
'Degers' .....	10,121	3,616.85	35.74	27,237	9,792.14	35.95	116,105	4,056,435.42	34.94
'Erfes' (Handle) .....	10,086	3,619.78	35.89	26,684	9,229.66	34.59	99,234	3,504,373.57	35.31
Plough-Beams. ....	10,116	3,615.71	35.74	25,489	8,517.48	33.42	330,334	10,917,227.27	33.05
Plough -Tips (Metal) .....	10,135	3,616.84	35.69	17,452	5,868.65	33.63	231,632	6,693,676.45	28.90
'Wegel' -Tips.....	9,993	3,525.46	35.28	17,000	5,621.64	33.07	85,626	2,642,951.12	30.87
Yokes.....	10,090	3,617.73	35.85	17,439	6,153.48	35.29	209,443	6,933,363.93	33.10
Used for Harvesting									
Sickles.....	11,271	3,557.06	31.56	22,406	6,394.51	28.54	375,795	11,300,812.87	30.07
Used for Threshing									
Hay-Forks (Metal) .....	8,496	3,302.80	38.87	12,750	4,530.74	35.53	248,836	9,318,014.09	37.45
Hay-Forks (Wood) .....	524	105.61	20.17	714	147.59	20.66	7,989	216,333.81	27.08
Threshing Sticks.....	146	42.91	29.32	248	83.33	33.60	883	28,404.82	32.17
Winnowers (Metal) .....	*	*	*	*	*	*	*	*	*
Winnowers (Wood) .....	6,663	2,403.77	36.08	7,530	2,607.15	34.62	139,518	5,192,678.20	37.22
Other Farm Equipment									
Carts (Hauling) .....	*	*	*	*	*	*	*	*	*
Sprayers (Hand Operated) ..	*	*	*	*	*	*	208,349	9,835,229.55	47.21
Sprayers (Power Operated)	-	-	-	-	-	-	-	-	-
Tying Tools .....	-	-	-	-	-	-	-	-	-
Wheelbarrows.....	*	*	*	*	*	*	*	*	*
Animals Used for Ploughing									
Asses .....	*	*	*	*	*	*	*	*	*
Camels .....	-	-	-	-	-	-	-	-	-
Horses .....	-	-	-	-	-	-	-	-	-
Mules .....	-	-	-	-	-	-	-	-	-
Oxen .....	9,353	3,155.43	33.74	26,529	8,731.06	32.91	24,816,334	874,203,818.95	35.23
AnimalsUsed for Threshing or Transportation									
Asses.....	8,552	3,038.70	35.53	12,999	4,323.02	33.26	3,918,132	139,482,405.46	35.60
Camels .....	-	-	-	-	-	-	-	-	-
Cattle.....	9,884	3,386.48	34.26	41,255	12,915.01	31.31	32,700,841	1,151,889,314.74	35.23
Horses .....	175	72.45	41.33	183	73.60	40.15	136,564	5,739,815.48	42.03
Mules .....	64	20.52	31.87	69	21.87	31.57	88,607	2,993,473.29	33.78
Storage Structure									
'Debiginits' .....	3,734	1,358.42	36.38	8,769	3,269.23	37.28	141,998	5,712,840.60	40.23
'Gotteras' .....	685	135.12	19.71	1,176	267.68	22.77	73,528	1,331,620.67	18.11
'Gudguads' .....	*	*	*	*	*	*	*	*	*
Modern Storages.....	*	*	*	*	*	*	*	*	*



Implements, Equipment, Farm animals and Storage facilities				Number of Implements,					
	Number of Holders			Equipment, Farm animals and Storages			Total Value		
	Reporting	S.E	C.V	Reported	S.E	C.V	(Birr)	S.E	C.V
Used for Clearing Land									
Axes.....	8,046	2,929.76	36.41	11,800	4,309.83	36.52	138,506	4,709,227.35	34.00
'Gejeras' .....	334	134.12	40.10	341	133.99	39.31	5,871	256,534.51	43.70
Shovels .....	5,807	2,215.62	38.16	6,415	2,379.81	37.10	91,609	3,617,696.39	39.49
Used for Cultivation									
Hoes.....	2,525	868.39	34.40	2,587	867.17	33.53	41,027	1,311,597.67	31.97
'Mekeskeshas' .....	*	*	*	*	*	*	*	*	*
Pick Axes.....	6,341	2,079.73	32.80	6,891	2,115.53	30.70	104,648	3,357,204.68	32.08
Tractors.....	-	-	-	-	-	-	-	-	-
Parts for traditional Plough									
'Degers' .....	8,641	3,616.36	41.85	23,757	9,790.16	41.21	99,541	4,055,300.07	40.74
'Erfes' (Handle) .....	8,614	3,619.29	42.02	22,963	9,227.25	40.18	85,508	3,503,053.89	40.97
Plough-Beams. ....	8,636	3,615.23	41.86	22,003	8,515.28	38.70	282,306	10,913,288.28	38.66
Plough -Tips (Metal) .....	8,655	3,616.35	41.78	14,819	5,867.19	39.59	196,363	6,691,398.21	34.08
'Wegel' -Tips .....	8,514	3,524.96	41.40	14,377	5,620.32	39.09	72,302	2,642,035.31	36.54
Yokes.....	8,623	3,617.24	41.95	14,927	6,152.27	41.22	171,866	6,930,447.74	40.32
Used for Harvesting									
Sickles .....	9,190	3,552.46	38.66	18,216	6,384.36	35.05	318,246	11,295,324.68	35.49
Used for Threshing									
Hay-Forks (Metal) .....	7,302	3,302.37	45.23	10,802	4,529.49	41.93	212,832	9,315,432.85	43.77
Hay-Forks (Wood) .....	386	92.66	24.01	471	107.79	22.90	4,574	122,807.75	26.85
Threshing Sticks.....	116	40.54	35.07	185	77.33	41.87	697	26,099.54	37.44
Winnowers (Metal) .....	*	*	*	*	*	*	*	*	*
Winnowers (Wood) .....	5,636	2,402.87	42.64	6,263	2,605.68	41.60	116,597	5,190,382.29	44.52
Other Farm Equipment									
Carts (Hauling) .....	-	-	-	-	-	-	-	-	-
Sprayers (Hand Operated)..	*	*	*	*	*	*	*	*	*
Sprayers (Power Operated)	-	-	-	-	-	-	-	-	-
Tying Tools .....	-	-	-	-	-	-	-	-	-
Wheelbarrows .....	*	*	*	*	*	*	*	*	*
Animals Used for Ploughing									
Asses.....	*	*	*	*	*	*	*	*	*
Camels .....	-	-	-	-	-	-	-	-	-
Horses.....	-	-	-	-	-	-	-	-	-
Mules .....	-	-	-	-	-	-	-	-	-
Oxen .....	7,920	3,154.81	39.84	22,569	8,728.52	38.67	21,330,051	873,963,263.23	40.97
AnimalsUsed for Threshing or Transportation									
Asses.....	7,301	3,038.00	41.61	10,817	4,321.04	39.95	3,269,238	139,429,541.54	42.65
Camels.....	-	-	-	-	-	-	-	-	-
Cattle .....	8,392	3,385.93	40.35	34,988	12,909.69	36.90	27,939,778	1,151,538,978.07	41.22
Horses.....	148	71.35	48.08	148	71.35	48.08	*	*	*
Mules .....	*	*	*	*	*	*	*	*	*
Storage Structure									
'Debiginits' .....	3,265	1,357.10	41.57	7,696	3,266.17	42.44	124,183	5,707,260.99	45.96
'Gotteras' .....	329	128.47	39.05	549	254.36	46.31	17,487	516,194.18	29.52
'Gudguads' .....	*	*	*	*	*	*	*	*	*
Modern Storages .....	*	*							

ANNEX TABLE 8.3:- Standard Errors and Coefficient of Variation For the Number of Holders Reporting, Quantity Reported and Total Value, for Private Holdings, Zone 6.

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