

CHAPTER VI

FARM MANAGEMENT PRACTICES

1 INTRODUCTION

Ethiopia is endowed with abundant resource suitable for agriculture. As result of which the agricultural activity in Ethiopia is quite varied being conditioned by such factors as climate, soils topography, ...etc that have favored not only the employment of the majority of the country's population but also served as the main source of input (raw material) for the large and medium Scale industries as well as the main generator of the country's foreign currency earnings.

Though agriculture is the backbone of Ethiopian economy, the sector is characterized by low level of productivity and subsistence farming system, that have resulted to hand to mouth production. Nowadays the problems mentioned have become more acute as a result of two factors. First the number of people is increasing at a rate that doubles the present population of the country in about a generation. Secondly this is occurring at a time when the area of new land suitable for cultivation is rapidly diminishing.

Even though traditional practice such as use of animal dung and crop residue crop rotation and expanding cultivable cropland had helped a lot to increase productivity, the problem mentioned above has become more acute and beyond the limits of the traditional practices which of course had already been exhausted. Hence, the scale of severity of the country's food problem will be so great that a massive short and long-range innovative efforts will be required to solve it.

As a result, increasing productivity on various field crops is the only realistic option to raise the living standards of the rural population, and to ensure food security and poverty alleviation. There are many modern techniques and technologies of achieving enhanced crop productivity. Accordingly, the major factors behind achieving high level of crop productivity increases are greater and more efficient use of fertilizers, wide spread uses of improved variety seeds, pesticides, expanded use of irrigation and effective extension

services. Thus, during the 2001/02 Agricultural Sample Enumeration, basic data on agricultural inputs and practices were collected, processed and the results are presented in this chapter.

In general, this chapter deals with the agricultural census data that indicates the type of inputs applied, quantity of inputs applied, the irrigated cropland area, estimates of cropland area damage, number of holders who applied different agricultural inputs and farm management practices, and number of holders covered by extension package programs in Afar region. However, the census covers only Dubti and Asyita and Afambo weredas from Zone-1 and Amibara, Awash Fentale and Argobaliyu weredas from Zone-3. Thus, for these areas of the region, data are presented for private holdings in rural areas for both Meher and Belg seasons, and in urban areas of holdings for Meher season only. For urban areas, data are collected and presented only to the inputs applied and the irrigated cropland area and number of holders who applied farm inputs. Moreover, this chapter presents statistical tables 6.1 – 6.54 that show the results of the census at Zonal and Wereda levels. In the Annex to this chapter are also given tables showing estimates, standard errors (S.E) and coefficient of variation (C.V), i.e. in Tables 6.1 and 6.2 for some relevant variables.

2 CROPLAND AREA UNDER AGRICULTURAL INPUTS AND FARM MANAGEMENT PRACTICES

This section of the chapter deals with the agricultural inputs applied and the irrigated cropland area for both rural and urban areas of Afar Region*. Agricultural holders in the sampled households were asked whether they have applied agricultural inputs on their fields or not and the area of all plots operated by the holders were actually measured objectively for private holdings in rural areas. While in urban areas all types of data on farm practices were obtained by interview methods. This helped to estimate area under total crop, irrigated land, fertilizers, pesticides and improved seeds used during the agricultural year. Following data on area under agricultural farm inputs for Afar Region are briefly discussed.

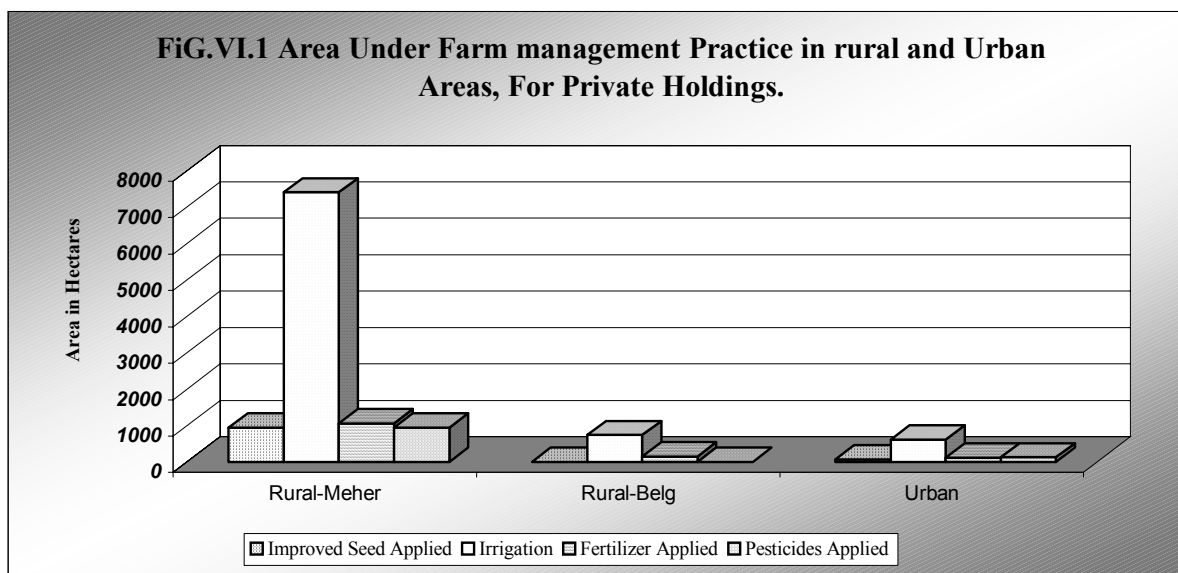
* It should be noted that the results of Afar Region refers to only 6 weredas that are found in Zone-1 and Zone-3 and indicated in the introductory section of this chapter.

The census data show that Afar Region predominantly produces grain crops and the major crops either in terms of the magnitude of area and volume of production includes maize, sorghum and Teff, that accounted for about 80.82% of the area cultivated under all crops. On the other hand, vegetables and root crops are not widely grown as grains in the region particularly in terms of crop area coverage. As a result, the agricultural inputs were applied to a great extent on the area under grain crops in order to increase the volume of production. Among different types of agricultural inputs that were applied, it is found that fertilizers application had relatively high coverage of area under grain crops. Moreover, the census data indicate that vast majority of agricultural holders have used agricultural inputs on small size of holdings. In general, the holders in the region as a whole have practiced modern agricultural techniques and technologies but in a much smaller extent.

2.1 Fertilized Cropland Areas

The effects of fertilizers on improving the efficiency of crop production are well known and can be hardly over emphasized. Moreover, the fertilizing materials and mixture are not restricted to inorganic Chemicals but include organic substances such as crop residue animal dung, ... etc. Therefore, fertilizers refer to anything added to the soil with the intention of increasing the amount of plant nutrients available for crop growth. In the census, data on application, type and quantity of natural and chemical fertilizers were collected. The Natural fertilizers consisted of animal dung and compost while chemical fertilizers consisted of DAP (Di-Ammonium phosphate) and UREA (Ammonium Nitrate).

Although fertilizers are one of the very important agricultural inputs to increase the level of production, in Afar Region fertilizers, were applied on only 1,329 hectares (11.41%) of the total cultivated cropland area. Of this total fertilized cropland area, the share of rural areas was found to be 91.05%. Moreover, the proportion of total fertilized cropland areas in rural areas for Meher season was 1,057 hectares (79.53%) as compared to only 152 hectares (11.43%) for Belg season. Regarding private holdings in urban areas, data are collected and presented only for Meher season, which was estimated to be 119 hectares (8.95%). For details, refer to Summary Table VI.1 and Fig VI.1.



Furthermore, out of the total fertilized cropland areas, 63.05% were under cereals, 1.05% under pulses, 0.25% under oilseeds, 6.09% under vegetables, 21.07% under root crops and 0.15 % under other permanent crops. Most of the fertilized cropland areas in the region were allotted to cereals in both rural and urban areas (See Summary Table VI.1).

With regard to a specific crop, maize is the most important fertilized crop that comprised an area of 47.71% of the total cropland area under fertilizers. The second important fertilized crop is onion covering 21.41% of the total cropland area under fertilizers. Teff ranks third taking up 10.16% of the total cropland area under fertilizers. For details, refer to Summary Table VI.2. Moreover, fertilizer applied cropland areas by zone for private holdings in rural and urban areas are presented in Summary Table VI.3. As can be seen from this table, the total fertilizer applied cropland areas differ from zone to zone. The census data indicate that Zone-3 has relatively the highest share from the total fertilizer applied cropland area i.e (73.21%) as compared to Zone-1, which contributed only 26.79% to the regional total fertilized crop land area.

2.2 Cropland Areas Treated with Pesticides

Pesticides are chemicals that are used for the control of mitigation or elimination of pests that are detrimental to crops. Examples of pesticides are insecticides, herbicides and fungicides. Summary Table VI.1 reveals that the total cropland area treated with pesticides was estimated to be 1,076 hectares. This indicates only 9.24 percent of the total cultivated cropland areas were treated with pesticides. Of the total cropland areas treated with pesticides, the share of rural and urban areas was found to be 95.40% and 11.25%, respectively. Thus, private holdings in rural areas had the highest share, while the contribution of the urban areas to the total pesticide applied cropland area was limited in scale. Moreover, the total pesticides applied cropland areas in rural areas of the region for Meher season was 86.99 percent while belg season fertilized cropland area was very limited.

Furthermore, most of the pesticide applied land areas in the region was under root crops (about 26.17%). Moreover, out of all cropland areas on which pesticides are applied, onion accounts for about 281 hectares, which is the highest. For Details, see Summary Tables VI.1 and VI.2. Moreover, Crop land areas treated with pesticides by zone for private holdings in rural and urban areas are presented in Summary Table VI.3. As can be seen from the data in this table, the total cropland areas treated with pesticides differ from zone to zone. The census data indicate that Zone-3 has relatively the highest share from the total fertilizer applied cropland area i.e (97.68%) as compared to Zone-1, which contributed only about 2.23% of the total regional pesticide applied cropland area.

2.3 Cropland Areas on which Improved Seeds are Used

Improved seeds are defined as crop varieties that give significantly higher yield and better quality compared to locally produced varieties of seeds. As illustrated in Summary Table VI.1, the total cultivated cropland area was estimated at 11,650 hectares. Of this total, only 1,150 hectares (9.92% of the total crop land area) was sown with improved variety of seeds. The share of rural and urban areas was found to be 94.05 percent and 5.95 percent of the total cropland areas on which improved seeds are used, respectively. Like other inputs, the

private holdings in the rural areas during Meher season had the highest share; while the contribution of belg season and the private holdings in urban areas to the total improved seeds applied cropland area in the region were limited in scale. (See Fig VI.1).

Summary Table VI.1 also presents the total cropland area with application of improved agricultural practices and inputs by crop category for private holdings in rural and urban areas. The data in this table indicate that 6.99% of the total area under improved seeds was reported to be under vegetables. In the rural private holdings, land areas under vegetables constituted the highest proportion of improved seeds as compared to other crops.

Moreover, crop land areas under improved seeds by zone for private holdings in rural and urban areas of the two zones covered in the region are presented in Summary Table VI.3. As can be seen from this table, the total cropland area under each agricultural inputs show variation among the zones. The census data indicate that Zone-3 has relatively the highest share from the total cropland area on which improved seeds are used (95.17%) as compared to Zone-1.

2.4 Cropland Areas Under Irrigation

The increase in crop production, to keep pace with the increased population demand, can be achieved among others by the efficient utilization of irrigation practices. Moreover, irrigation practices make possible the utilization of advanced technology in farming: these include the proper application of fertilizers, the adoption of good crop rotation practices and the use of the better seed varieties.

Irrigated cropland areas refer to the practice where an area of land is purposely and actually provided with water, other than the precipitation obtained from rain to improve the production of crops. The uncontrolled flooding of land by the overflow of rivers or streams is not considered to be as practice of irrigation.

The census data show that the cropland areas that are actually irrigated in the two zones covered in the region was estimated to be 8,739 hectares and this accounted for about 75.01 percent of the total cropland areas. Of course, the estimated total irrigated cropland areas, was contributed from irrigation schem operated in the rural and urban areas. (See summary Tables VI.1 and VI.2).

3 HOLDERS APPLYING FERTILIZERS, AREA, AND QUANTITY OF FERTILIZERS APPLIED

In 2001/02 Agricultural Sample Enumeration, the total number of holders applying fertilizers in Afar Regional State, is estimated to be about 2,802. Of these total private holders, about 2,732 holders (97.50%) were in rural and about 2.50% in urban areas. The application of fertilizers in Meher and Belg seasons for private holdings in rural areas shows a great variation, that is, 93% of the holders applied fertilizers in Meher season while only 12.30 percent applied in Belg season (See Summary Tables VI.4).

With regard to the type of fertilizers applied, the great majority of holder's applied natural fertilizers (2,128). When we come to the utilization of commercial fertilizers, about 861 holders have applied chemical fertilizer in the region. Out of this total about 117 holders (13.59%), 519 holders (60.28%) and 238 holders (27.64%) in the rural areas of the region have utilized DAP, UREA and a mixture of DAP and UREA in both seasons, respectively. While in the urban areas of the region, only 53 holders (6.16%) have utilized chemical fertilizers.

Among the types of fertilizers used, natural fertilizers was applied in smaller cultivated cropland area, which is about 657 hectares (49.44% of fertilized cropland area). On the other hand, considerable amount of cropland area was covered by chemical fertilizers, from which DAP and UREA covered 91 hectares (6.85%) and 285 hectares (21.44%) respectively (See Fig VI.2 and Summary Table VI.4 and VI.5)

Furthermore, the data in Summary Table VI.4 indicates that the total quantity of chemical fertilizers applied by holders in the rural areas was estimated at about 334 quintals, of which, the share of UREA was the highest accounting for about 73.95 percent of the total quantity of chemical fertilizers applied. This is followed by a mixture of DAP+UREA accounting for about 12.87 percent, while the remaining 12.57% was the share of DAP was the smallest (See Fig VI.3 and Summary Table VI.4).

Moreover, the total amount of Chemical fertilizers applied on cropland areas by zone is presented in Summary Table VI.9. The data in the table shows that the highest quantity of chemical fertilizers application was reported in Zone-3, 98.80% while almost none is reported in Zone-1.

3.1 Application of Natural Fertilizers in the Rural and Urban Areas

According to the census findings, about 2,128 holders in rural areas have applied natural fertilizers on 657 hectares of cropland (comprising 49.44 of the total fertilized land area). Of the total cropland area on which natural fertilizers are applied, the share of Meher and Belg season in rural areas was 43.34 and 4.97 percent, respectively. Moreover, of the total land area on which natural fertilizers are applied 78.69% was under cereals, 1.98% under pulses, 0.15% under oilseeds and 0.30% under other permanent crops. For details, refer to Summary Tables VI.4 .

3.2 Application of DAP in the Rural Areas

As illustrated in Summary Table VI.4, about 117 holders in rural areas have applied DAP on about 42 hectares, which is about 6.85% of the total fertilized cropland area. Cropland area under the application of DAP varied markedly from one group of crops to another, i.e., 53% of the total DAP was applied for cereals, while the remaining was applied on pulses, oil seeds vegetables root and permanent crop categories. Variations in the application of fertilizers with respect to specific crops are also considerable, i.e., relatively it is higher for Teff (For details, refer to Summary Tables VI.4 and VI.5). Furthermore, the total quantity of

**SUMMARY TABLE VI.1: Total Area Under Improved Farm Management Practices
by Crop Categories in Rural and Urban Areas, Both Seasons, for Private Holdings.**

ITEM	Area in Hectares									
	Total	Grains				Vegetables	Root Crops	Permanent Crops		
		Cereals	Pulses	Oilseeds	Others			Fruits	Stimulant	Other
Total Area										
Rural and Urban ..	11650	9514	155	142	*	240	344	382	7	3
Rural	11015	9006	155	142	*	180	285	382	7	3
Meher	10085	8291	103	142	*	67	236	382	7	3
Belg	929	715	52	*	*	*	49	*	*	*
Urban (Meher)	635	509	*	*	*	60	59	*	*	1
Improved Seeds										
Rural and Urban ..	1159	*	*	*	*	81	*	*	*	*
Percent..	100.00	*	*	*	*	6.99	*	*	*	*
Rural	1090	*	*	*	*	*	*	*	*	*
Percent..	94.05	*	*	*	*	*	*	*	*	*
Meher	946	*	*	*	*	*	*	*	*	*
Percent..	81.62	*	*	*	*	*	*	*	*	*
Belg	*	*	*	*	*	*	*	*	*	*
Percent..	*	-	-	-	-	-	-	-	-	-
Urban (Meher)	69	*	*	*	*	*	*	*	*	*
Percent..	5.95	-	-	-	-	-	-	-	-	-
Irrigation										
Rural and Urban ..	8739	6873	8	*	*	230	338	370	*	3
Percent..	100.00	78.65	0.09	*	*	2.63	3.87	4.23	*	0.03
Rural	8132	6382	8	*	*	176	285	370	*	3
Percent..	93.05	78.48	0.10	*	*	2.16	3.50	4.55	*	0.04
Meher	7399	5813	*	*	*	*	236	370	*	3
Percent..	84.67	78.56	*	*	*	*	3.19	5.00	*	0.04
Belg	733	569	*	*	*	*	49	*	*	*
Percent..	8.39	77.63	*	*	*	*	6.68	*	*	*
Urban (Meher)	607	491	*	*	*	54	54	*	*	1
Percent..	6.95	80.89	*	*	*	8.90	8.90	*	*	0.16
Fertilizer										
Rural and Urban ..	1329	838	14	3	*	81	280	*	*	2
Percent..	100	63.05	1.05	0.23	*	6.09	21.07	*	*	0.15
Rural	1210	824	14	3	*	*	228	*	*	2
Percent..	91.05	68.10	1.16	0.25	*	*	18.84	*	*	0.17
Meher	1057	745	9	3	*	2	*	*	*	2
Percent..	79.53	70.48	0.85	0.28	*	0.19	*	*	*	0.19
Belg	152	79	4	*	*	*	39	*	*	*
Percent..	11.44	51.97	2.63	*	*	*	25.66	*	*	*
Urban (Meher)	119	14	*	*	*	*	52	*	*	*
Percent..	8.95	11.76	*	*	*	*	43.70	*	*	*
Pesticides										
Rural and Urban ..	1076	215	*	*	*	56	281	*	*	*
Percent..	100.00	19.98	*	*	*	5.20	26.12	*	*	*
Rural	954	*	*	*	*	*	223	*	*	*
Percent..	88.66	*	*	*	*	*	23.38	*	*	*
Meher	936	*	*	*	*	*	207	*	*	*
Percent..	86.99	*	*	*	*	*	22.12	*	*	*
Belg	*	3	*	*	*	*	*	*	*	*
Percent..	*	*	*	*	*	*	*	*	*	*
Urban (Meher)	121	9	*	*	1	53	58	*	*	*
Percent..	11.25	7.44	*	*	0.83	43.80	47.93	*	*	*

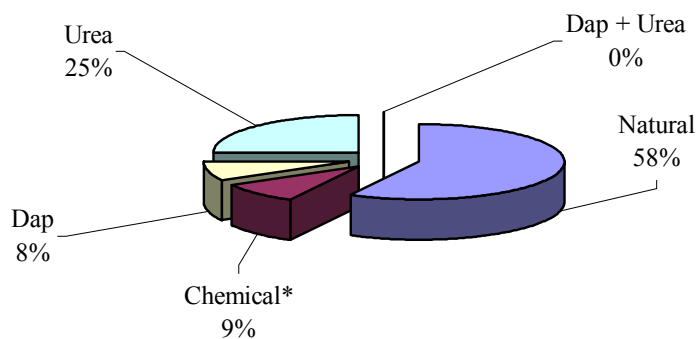
**SUMMARY TABLE VI.2: Total Area Under Improved Seed, Irrigation, Fertilizer, and Pesticide
by Type of Crops in Rural and Urban Areas, for Private Holdings**

TYPE OF CROP	Total Crop	Improved Seed		Irrigation		Fertilizer		Pesticide	
	Hectares	Hectares	%	Hectares	%	Hectares	%	Hectares	%
TOTAL	11650	1159	9.95	8739	75.01	1329	11.41	1076	9.24
Grain Crops	10674	928	8.69	7794	73.02	863	8.09	739	6.92
Cereals	9514	*	*	6872	72.23	838	8.81	215	2.26
Teff	817	*	*	*	*	135	16.52	24	2.94
Barley	22	-	-	-	-	6	27.27	*	*
Wheat	57	-	-	-	-	6	10.53	*	*
Maize	7193	*	*	6746	93.79	634	8.81	*	*
Sorghum	1406	5	0.36	105	7.47	56	3.98	*	*
Finger millet	*	-	-	*	*	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulses	155	*	*	8	5.16	14	9.03	*	*
Horse beans	2	*	*	*	*	-	-	-	-
Field peas	*	-	-	-	-	-	-	-	-
Haricot beans	62	*	*	*	*	9	14.52	*	*
Chick peas	83	-	-	-	-	4	4.82	-	-
Lentils	3	-	-	-	-	*	*	-	-
Vetch	-	-	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-	-	-
Fenugreek	*	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oil Seeds	142	*	*	*	*	3	2.11	*	*
Neug	1	-	-	-	-	*	*	-	-
Linseed	*	-	-	*	*	-	-	-	-
Ground nuts	*	*	*	*	*	*	*	-	-
Sufflower	11	*	*	-	-	1	9.09	*	*
Sesame	*	*	*	*	*	*	*	-	-
Rapeseed	-	-	-	-	-	-	-	-	-
Other Grains	*	*	*	*	*	*	*	*	*
Vegetables	239	81	33.89	230	96.23	81	33.89	56	23.43
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	*	-	-	*	*	-	-	-	-
Kale	*	-	-	*	*	-	-	*	*
Tomatoes	216	81	37.5	211	97.69	80	37.04	56	25.93
Green peppers	2	-	-	*	*	*	*	-	-
Red peppers	*	-	-	*	*	1	*	*	*
Swiss chard	-	-	-	-	-	-	-	-	-
Others	*	-	-	*	*	*	*	-	-
Root Crops	344	*	*	338	98.26	280	81.4	281	81.69
Beet root	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onions	340	*	*	334	98.24	280	82.35	281	82.65
Potatoes	*	-	-	-	-	*	*	-	-
Garlic	-	-	-	-	-	-	-	-	-
Taro	-	-	-	-	-	-	-	-	-
Sweet potatoes	*	-	-	*	*	*	*	-	-
Others	*	*	*	*	*	-	-	-	-
Permanent Crops	393	*	*	377	95.93	*	*	*	*
Fruit Crops	382	*	*	370	96.86	*	*	*	*
Avocado	-	-	-	-	-	-	-	-	-
Bananas	*	*	*	*	*	*	*	*	*
Guava	*	-	-	*	*	*	*	-	-
Lemons	5	*	*	*	*	*	*	*	*
Mangoes	-	-	-	-	-	-	-	-	-
Oranges	*	-	-	*	*	-	-	*	*
Papayas	1	-	-	*	*	*	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Others	219	-	-	216	98.63	*	*	-	-
Stimulant Crops	7	*	*	*	*	*	*	-	-
Chat	*	-	-	*	*	*	*	-	-
Coffee	1	*	*	*	*	*	*	-	-
Hops	4	-	-	-	-	*	*	-	-
Others	-	-	-	-	-	-	-	-	-
Other Permanent	3	*	*	3	100	2	66.67	-	-
Enset	-	-	-	-	-	-	-	-	-
Sugar Cane	3	*	*	3	100	2	66.67	-	-
Others	*	-	-	-	-	-	-	-	-

SUMMARY TABLE VI.3: Area Under Agricultural Inputs and Irrigation Practices by Season and Zones in Rural and Urban Areas, for Private Holdings

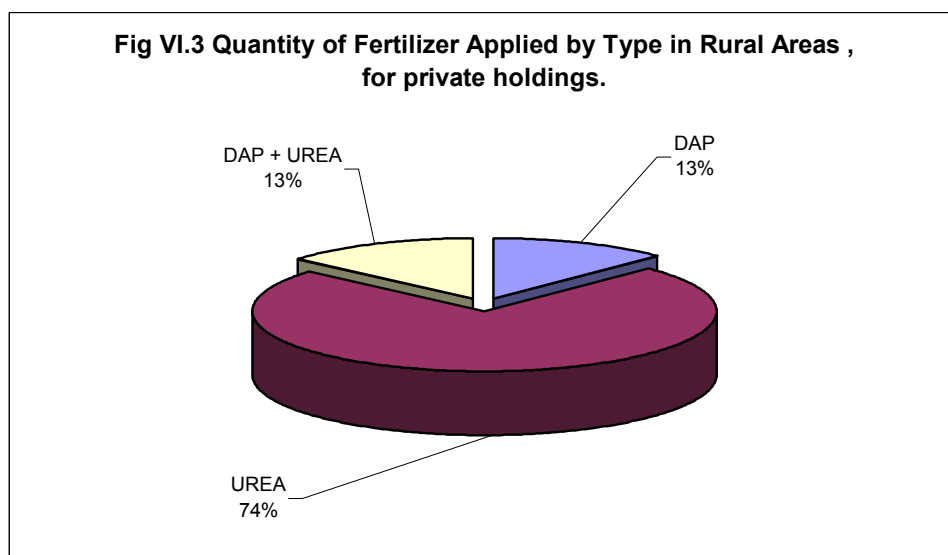
Practices	Area under Agricultural Inputs and Irrigation in Hectares							
	Rural and Urban	Percent	Rural Meher	Rural Belg	Rural	Percent	Urban Meher	Percent
Afar Killil								
Irrigation	8739	100	7399	733	8132	100	607	100
Imroved seeds..	1159	100	946	*	1090	100	69	100
Pesticides.....	1076	100	935	*	954	100	121	100
Fertilizer.....	1329	100	1057	152	1210	100	119	100
Zone 1								
Irrigation	5895	67.46	5402	-	5402	66.43	493	81.22
Imroved seeds..	*	*	*	*	*	*	*	*
Pesticides.....	24	2.23	19	-	19	1.99	5	4.13
Fertilizer.....	356	26.79	342	-	342	28.26	14	11.76
Zone 3								
Irrigation	2844	32.54	1998	733	2730	33.57	114	18.78
Imroved seeds..	1103	95.17	896	*	1040	95.41	*	*
Pesticides.....	1051	97.68	916	*	935	98.01	116	95.87
Fertilizer.....	973	73.21	716	152	868	71.74	105	88.24

Fig. VI.2 Fertilizer Applied area by Type in Rural and Urban Areas For Private Holdings.



* Reffers to Urban areas only

DAP applied in rural areas is estimated to be about 42 quintals, which is 12.57% of the total quantity of chemical fertilizers applied. In general, the quantity of DAP applied was the highest for cereals.



3.3 Application of UREA in the Rural Areas

About 519 holders in rural areas have applied UREA, and the cropland areas under UREA occupied 285 hectares, which is 21.44% of the total fertilizers applied cropland area (See Summary Table VI.4 and VI.5). Moreover, an estimated total of 247 quintals of UREA, have been utilized in rural areas of the region and out of this total, the highest quantity i.e about 74.49% and 17.41% was applied on root crops and cereals, respectively.

3.4 Application of a Mixture of DAP and UREA in the Rural Areas

The census findings depicts the fact that holders have applied a mixture of DAP and UREA on their crop fields. As presented in Summary Table VI.6 there were about 238 holders in rural areas who have applied a mixture of DAP and UREA on a very limited cropland area.

In addition, out of the total quantity of chemical fertilizers applied, the amount of a mixture of DAP and UREA was 45 quintals, which is 13.47% of the total quantity of chemical fertilizers. Of the total quantity of the mixed chemical fertilizers applied, Teff took the highest proportion accounting for almost 68.89% (31 quintals). For details, refer to Summary Tables VI.4 and VI.5.

4 HOLDERS UTILIZING IMPROVED SEEDS AND QUANTITY OF IMPROVED SEEDS USED

In the 2001/02 Agricultural Sample Enumeration, data on number of holders that have used improved seeds and quantity of seeds used was collected. Hence, the number of holders that have used improved variety seeds and quantity of improved cereals, pulses and oil seeds are presented in Summary Table VI.6. However, the census data indicate that the use of improved seeds in Afar Region is very limited.

4.1 Number of Holders using Improved Seeds.

As portrayed in Summary Table VI.6 the use of improved seeds is limited to only 1,107 holders in rural and 28 holders in urban areas of the region. Of the total holders using improved seeds, 10.66% utilized improved tomato seeds, 15.07% improved onion seeds, and 1.67% improved sorghum seeds.

4.2 Quantity of Improved Seeds Used

Information on quantity of improved varieties of seeds is limited to grain crops only. As can be seen from Summary Table VI.6, the use of improved seeds in the region is very limited. Such low utilization of improved seeds, obviously indicates that holders' continued to rely on low yielding local/traditional seeds.

SUMMARY TABLE VI.4: Number of Holders Applying Fertilizers, Area Under Fertilizers and Quantity of Fertilizers Applied by Type in Rural and Urban Areas, for Private Holdings

Type of Fertilizer	Number of Holders Applying Fertilizer by Type									
	Total	Grains				Vegetables	Root Crops	Permanent Crops		
		Cereals	Pulses	Oilseeds	Others			Fruits	Stimulant	Other
Rural and Urban	2802	1894	181	72	36	213	370	*	29	126
Percent..	100									
Natural	2128	1435	145	50	*	141	32	*	29	126
Chemical	861	514	-	22	-	-	337	-	-	-
DAP	117	95	-	-	-	-	*	-	-	-
UREA	519	*	*	*	*	*	284	-	-	-
DAP+UREA	238	230	*	*	-	-	*	-	-	-
Urban	70	17	-	-	*	26	49	1	-	3
Percent..	2.5									
Natural	24	11	-	-	*	*	*	1	-	3
Chemical	53	*	-	-	*	21	45	-	-	-
Rural Meher	2606	1763	136	72	*	98	285	*	29	123
Percent..	93									
Natural	1949	1304	100	50	*	90	*	*	29	123
Chemical	785	508	*	22	*	*	261	-	-	-
DAP	117	95	-	-	-	-	*	-	-	-
UREA	460	*	*	*	*	*	261	-	-	-
DAP+UREA	230	230	*	*	-	-	-	-	-	-
Rural Belg	340	237	45	-	-	*	58	-	-	-
Percent..	12.13									
Natural	215	159	45	-	-	*	*	-	-	-
Chemical	*	*	-	-	-	*	53	-	-	-
DAP	-	-	-	-	-	-	-	-	-	-
UREA	*	*	-	-	-	*	*	-	-	-
DAP+UREA	*	-	-	-	-	-	*	-	-	-
Area in Hectares										
Rural and Urban	1329	838	14	3	*	81	280	*	*	2
Percent..	100	63.05	1.05	0.23	*	6.09	21.07	*	*	0.15
Natural	657	517	13	1	*	*	*	*	*	2
Percent..	49.44	78.69	1.98	0.15	*	*	*	*	*	0.3
Chemical	671	321	-	-	-	63	279	-	-	-
Percent..	50.49	47.84	-	-	-	9.39	41.58	-	-	-
DAP	91	53	-	-	-	-	*	-	-	-
Percent..	6.85	58.24	-	-	-	-	*	-	-	-
UREA	285	128	*	*	*	*	151	-	-	-
Percent..	21.44	44.91	*	*	*	*	52.98	-	-	-
DAP+UREA	*	*	*	*	-	-	-	-	-	-
Percent..	*	*	*	*	-	-	-	-	-	-
Urban	119	14	-	-	*	*	52	*	-	*
Percent..	8.95	11.76	-	-	*	*	43.7	*	-	*
Natural	16	11	-	-	*	*	*	*	-	*
Percent..	1.20	68.75	-	-	*	*	*	*	-	*
Chemical (Urban)	103	*	-	-	*	*	51	-	-	-
Percent..	7.75	*	-	-	*	*	49.51	-	-	-
Rural Meher	1057	745	9	3	*	2	*	*	*	2
Percent..	79.53	70.48	0.85	0.28	*	0.19	*	*	*	0.19
Natural	576	460	8	1	*	2	*	*	*	2
Percent..	43.34	79.86	1.39	0.17	*	0.35	*	*	*	0.35
Chemical	482	285	*	*	*	*	*	-	-	-
Percent..	36.27	59.13	*	*	*	*	*	-	-	-
DAP	91	53	-	-	-	-	*	-	-	-
Percent..	6.85	58.24	-	-	-	-	*	-	-	-
UREA	285	128	*	*	*	*	151	-	-	-
Percent..	21.44	44.91	*	*	*	*	52.98	-	-	-
DAP+UREA	*	*	*	*	-	-	-	-	-	-
Percent..	*	*	*	*	-	-	-	-	-	-
Rural Belg	152	79	4	-	-	*	39	-	-	-
Percent..	11.44	51.97	2.63	-	-	*	25.66	-	-	-
Natural	66	47	4	-	-	*	*	-	-	-
Percent..	4.97	71.21	6.06	-	-	*	*	-	-	-
Chemical	*	*	-	-	-	*	39	-	-	-
Percent..	*	*	-	-	-	*	*	-	-	-
DAP	-	-	-	-	-	-	-	-	-	-
Percent..	-	-	-	-	-	-	-	-	-	-
UREA	*	*	-	-	-	*	*	-	-	-
Percent..	*	*	-	-	-	*	*	-	-	-
DAP+UREA	*	-	-	-	-	-	*	-	-	-
Percent..	*	-	-	-	-	-	*	-	-	-

SUMMARY TABLE VI.4 CONTD.

	Quantity in Quintals									
Rural	334	114	*	*	*	*	200	-	-	-
Percent..	100.00	34.13	*	*	*	-	59.88	-	-	-
DAP	42	28	-	-	-	-	*	-	-	-
Percent..	12.57	66.67	-	-	-	-	*	-	-	-
UREA	247	43	*	-	*	*	184	-	-	-
Percent..	73.95	17.41	*	-	*	*	74.49	-	-	-
DAP+UREA	45	42	*	*	-	-	*	-	-	-
Percent..	13.47	93.33	*	*	-	-	*	-	-	-
Rural Meher	284	114	*	*	*	*	166	-	-	-
Percent..	85.03	40.14	*	*	*	-	58.45	-	-	-
DAP	42	28	-	-	-	-	*	-	-	-
Percent..	12.57	66.67	-	-	-	-	*	-	-	-
UREA	199	43	*	-	*	-	152	-	-	-
Percent..	59.58	21.61	*	-	*	-	76.38	-	-	-
DAP+UREA	43	42	*	*	-	-	-	-	-	-
Percent..	12.87	97.67	*	*	-	-	-	-	-	-
Rural Belg	50	*	-	-	-	*	34	-	-	-
Percent..	14.97	-	-	-	-	-	-	-	-	-
DAP	-	-	-	-	-	-	-	-	-	-
Percent..	-	-	-	-	-	-	-	-	-	-
UREA	48	*	-	-	-	*	32	-	-	-
Percent..	14.37	*	-	-	-	*	66.67	-	-	-
DAP+UREA	*	-	-	-	-	-	*	-	-	-
Percent..	*	-	-	-	-	-	*	-	-	-

To avoid duplication number of holders that applied fertilizers in rural and urban areas for private holdings do not add up to the totals. Hence, the sum of estimates may not be equal to the tota

5 FARM MANAGEMENT PRACTICES AND EDUCATIONAL ATTAINMENT OF HOLDERS

This section of the chapter presents data on educational attainment of holders in relation to their farm management practices. At the time of enumeration all holders in the sampled households were asked to state their educational attainment. As presented in Summary Table VI.8 data on literacy status and highest grade completed for literate holders were collected. The census findings indicate that the level of educational attainment of the holders in Afar Region is very low. Thus, this situation may have a direct impact on the level of awareness of the holders with respect to better and improved farming technologies and this is a typical characteristic of peasant community in developing countries. A large number of holders (79.22% in rural and 53.63 % in urban areas) were found to be illiterate, while 11.90% in rural and 20.50% in urban areas have participated in informal education. Moreover, the data shows that 6.22% of the holders in rural and 15.80% of holders in urban areas have completed grades 1 to 6 and only 2.53% of the holders in rural and 8.24 % in urban areas have completed grades 7-12.

SUMMARY TABLE VI.5: Number of Holders Applying Fertilizers, Fertilized Area, and Quantity of Fertilizers by Crop Type in Rural and Urban Areas, for Private Holdings

CROP	Application of total Fertilizers		Application of Fertilizers by Type and Quantity				
			Natural			Chemical – DAP	
	Holders	Hectares	Holders	Hectares	Holders	Hectares	Quintals
TOTAL	2802	1329	2128	657	117	91	42
Grain Crops	1939	863	1479	533	95	53	28
Cereals	1894	838	1435	517	95	53	28
Teff	424	135	225	43	85	44	23
Barley	116	6	116	6	-	-	-
Wheat	59	6	49	5	*	*	*
Maize	1521	634	1208	416	*	*	*
Sorghum	206	56	190	47	-	-	-
Finger millet	-	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	181	14	145	13	-	-	-
Horse beans	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-
Haricot beans	153	9	118	9	-	-	-
Chick peas	26	4	23	4	-	-	-
Lentils	*	*	*	*	-	-	-
Vetch	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oil Seeds	72	3	50	1	-	-	-
Neug	*	*	*	*	-	-	-
Linseed	-	-	-	-	-	-	-
Ground nuts	*	*	*	*	-	-	-
Sufflower	41	1	26	1	-	-	-
Sesame	*	*	*	*	-	-	-
Rapeseed	-	-	-	-	-	-	-
Other Grains	36	*	*	*	-	-	-
Vegetables	213	81	141	*	-	-	-
Lettuce	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-
Kale	-	-	-	-	-	-	-
Tomatoes	*	80	*	*	-	-	-
Green peppers	38	*	*	*	-	-	-
Red peppers	55	1	48	1	-	-	-
Swiss chard	-	-	-	-	-	-	-
Others	*	*	*	*	-	-	-
Root Crops	370	280	32	*	*	*	*
Beet root	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-
Onions	355	280	18	*	*	*	*
Potatoes	*	*	*	*	-	-	-
Garlic	-	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-	-
Sweet potatoes	*	*	*	*	-	-	-
Others	-	-	-	-	-	-	-
Permanent Crops	*	*	*	*	-	-	-
Fruit Crops	*	*	*	*	-	-	-
Avocado	-	-	-	-	-	-	-
Bananas	*	*	*	*	-	-	-
Guava (Zeytuna)	*	*	*	*	-	-	-
Lemons	*	*	*	*	-	-	-
Mangoes	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-
Papayas	67	*	67	*	-	-	-
Pineapples	-	-	-	-	-	-	-
Others	*	*	*	*	-	-	-
Stimulant Crops	29	*	29	*	-	-	-
Chat	*	*	*	*	-	-	-
Coffee	*	*	*	*	-	-	-
Hops	24	*	24	*	-	-	-
Others	-	-	-	-	-	-	-
Other Permanent	126	2	126	2	-	-	-
Enset	-	-	-	-	-	-	-
Sugar Cane	126	2	126	2	-	-	-
Others	-	-	-	-	-	-	-

SUMMARY TABLE VI.5 Contd.

CROP	Application of Fertilizers by Type and Quantity							
	Chemical – UREA			Chemical - DAP & UREA			Chemical(Urban)	
	Holders	Hectares	Quintals	Holders	Hectares	Quintals	Holders	Hectares
TOTAL	519	369	247	238	*	45	53	103
Grain Crops.....	*	*	62	230	*	43	*	*
Cereals	*	*	58	230	*	42	*	*
Teff	*	*	*	111	38	31	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	*	*	53	*	*	*	*	*
Sorghum	-	-	-	*	*	*	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulses	*	*	*	*	*	*	-	-
Horse beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
Haricot beans	*	*	*	-	-	-	-	-
Chick peas	-	-	-	*	*	*	-	-
Lentils	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oil Seeds	*	*	-	*	*	*	-	-
Neug	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Sufflower	*	*	-	*	*	*	-	-
Sesame	-	-	-	*	*	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Other Grains	*	*	*	-	-	-	*	*
Vegetables	*	*	*	-	-	-	21	*
Lettuce	-	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-	-
Kale	-	-	-	-	-	-	-	-
Tomatoes	*	*	*	-	-	-	21	*
Green peppers	*	*	*	-	-	-	-	-
Red peppers	*	*	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Root Crops	284	187	185	*	*	*	45	51
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onions	284	187	185	*	*	*	45	51
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Permanent Crops	-	-	-	-	-	-	-	-
Fruit Crops	-	-	-	-	-	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava (Zeytuna)	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangoes	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	-	-	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Stimulant Crops	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Hops	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Other Permanent Crops	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar Cane	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-

**SUMMARY TABLE VI.6: Number of Holders Utilizing Improved Seeds and Quantity of
Improved Seeds Applied by Crop Type in Rural and Urban Areas, for Private Holdings**

Type of Crop	Holders Applying Improved Seeds					Quantity in Quintals			
	Total	%	Rural		Urban Meher	Rural	%	Meher	Belg
			Meher	Belg					
Total.....	1135	100	987	*	28	*	*	*	*
Cereals.....	*	*	*	*	15	*	*	*	*
Teff.....	*	*	*	-	-	*	*	*	-
Barley.....	-	-	-	-	-	-	-	-	-
Wheat.....	-	-	-	-	-	-	-	-	-
Maize.....	*	*	*	*	15	*	*	*	*
Sorghum.....	19	1.67	19	-	-	*	*	*	-
Finger millet.....	-	-	-	-	-	-	-	-	-
Oats ('Aja').....	-	-	-	-	-	-	-	-	-
Rice.....	-	-	-	-	-	-	-	-	-
Pulses.....	24	2.11	*	*	-	*	*	*	*
Horse beans.....	*	*	-	*	-	*	*	-	*
Field peas.....	-	-	-	-	-	-	-	-	-
Haricot beans.....	*	*	*	-	-	*	*	*	-
Chick peas.....	-	-	-	-	-	-	-	-	-
Lentils.....	-	-	-	-	-	-	-	-	-
Vetch.....	-	-	-	-	-	-	-	-	-
Soya.....	-	-	-	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-	-	-	-
Oil Seeds.....	*	*	*	-	-	*	*	*	-
Neug.....	-	-	-	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-	-	-	-
Ground nuts.....	*	*	*	-	-	*	*	*	-
Sufflower.....	*	*	*	-	-	-	-	-	-
Sesame.....	*	*	*	-	-	*	*	*	-
Rapeseed.....	-	-	-	-	-	-	-	-	-
Other Grains.....	251	22.11	246	-	*	*	*	*	-
Vegetables.....	121	10.66	*	*	13	-	-	-	*
Lettuce.....	-	-	-	-	-	-	-	-	-
Head cabbage.....	-	-	-	-	-	-	-	-	-
Kale.....	-	-	-	-	-	-	-	-	-
Tomatoes.....	121	10.66	*	*	13	-	-	-	*
Green peppers.....	-	-	-	-	-	-	-	-	-
Red peppers.....	-	-	-	-	-	-	-	-	-
Swiss chard.....	-	-	-	-	-	-	-	-	-
Others.....	-	-	-	-	-	-	-	-	-
Root Crops.....	184	16.21	161	*	10	-	-	-	*
Beet root.....	-	-	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-	-	-
Onions.....	171	15.07	*	*	10	-	-	-	*
Potatoes.....	-	-	-	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-	-	-	-
Taro ('Godere').....	-	-	-	-	-	-	-	-	-
Sweet potatoes.....	-	-	-	-	-	-	-	-	-
Others.....	*	*	*	-	-	-	-	-	-
Fruit Crops.....	*	*	*	-	1	-	-	-	-
Avocado.....	-	-	-	-	-	-	-	-	-
Bananas.....	*	*	*	-	1	-	-	-	-
Guava (Zeytuna).....	-	-	-	-	-	-	-	-	-
Lemons.....	*	*	*	-	-	-	-	-	-
Mangoes.....	-	-	-	-	-	-	-	-	-
Oranges.....	-	-	-	-	-	-	-	-	-
Papayas.....	-	-	-	-	-	-	-	-	-
Pineapples.....	-	-	-	-	-	-	-	-	-
Others.....	-	-	-	-	-	-	-	-	-
Stimulant Crops.....	*	*	*	-	-	-	-	-	-
Chat.....	-	-	-	-	-	-	-	-	-
Coffee.....	*	*	*	-	-	-	-	-	-
Other Permanent Crops.....	*	*	*	-	-	-	-	-	-

Summary Table VI.7 Quantity of Chemical Fertilizers Applied and Improved Seeds Used by Zone and Season in Rural Areas, for Private Holdings

Item	Quantity in Quintals		
	Total	Zone –1	Zone –3
Chemical Fertilizers			
Total	334	*	330
Percent	100	*	98.80
Meher	284	*	280
Belg	50	-	50
Improved seeds			
Total	*	*	*
Percent	*	*	*
Meher	*	*	*
Percent	*	*	*
Belg	*	-	*
Percent	*	-	*

As a result of insignificant number of holders who have been exposed to extension packages as well as to education, hence the impact of education on the use of improved farm practices was not clearly exhibited by the census data. The data indicates that out of all holders who have practiced irrigation, applied fertilizers and pesticides, 76.05, 78.27 and 58.04 percents were illiterate, respectively (For details, refer to Summary Table VI.8).

Furthermore, in each zone, the proportions of the total holders who have applied fertilizers were the highest as compared to other inputs and irrigation. Thus, fertilizers are the most important input and used by 2107 holders (75.20%) and 695(24.80%) in Zone-3 and Zone-1 respectively. The second most widely used input was improved seeds and used by 1060 holders (93.39%) in Zone-3, while in Zone-1 only few holders used improved seed. For details, refer to Summary Table VI.9.

SUMMARY TABLE VI.8: Holders Applying Agricultural Inputs and Participating in Extension Programs by Level of Education in Rural and Urban Areas, for Private Holdings

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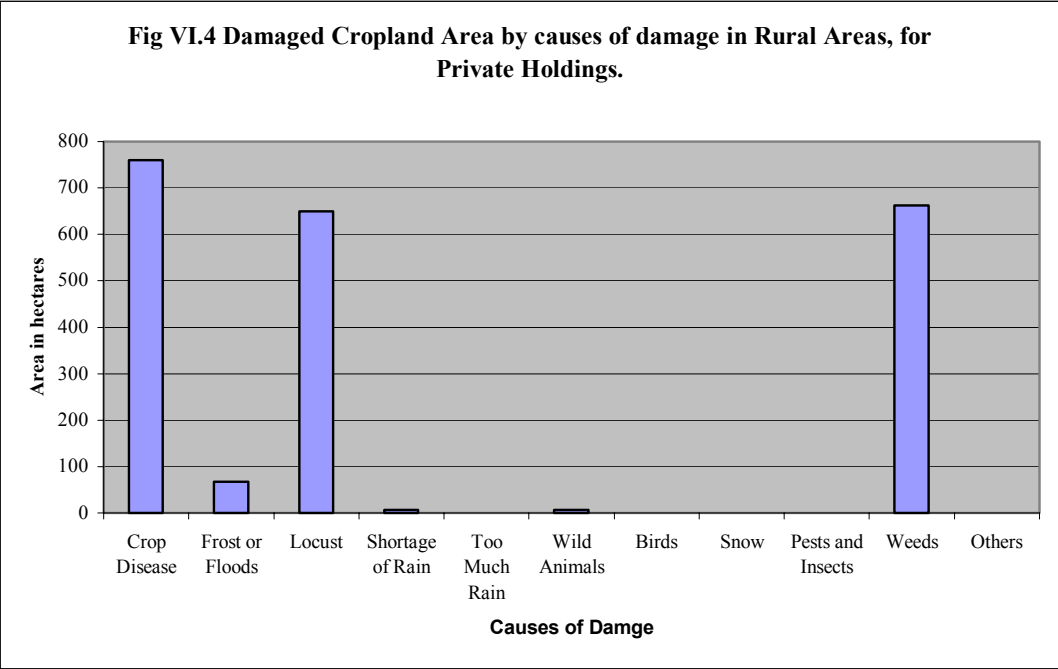
**SUMMARY TABLE VI.9: Holders Applying Agricultural Inputs and Practices in Rural
and Urban Areas and Zones, for Private Holdings**

Data Items	Number of Holders							
	Total	Percent	Rural Meher	Rural Belg	Rural	Percent	Urban Meher	Percent
Afar Region								
Irrigation.....	8782	100	7902	1224	8209	100	573	100
Improved Seeds.....	1135	100	987	*	1106	100	28	100
Pesticides.....	970	100	859	40	895	100	75	100
Fertilizers.....	2802	100	2606	340	2733	100	70	100
Zone 1								
Irrigation.....	5821	66.28	5318	-	5318	64.78	502	87.61
Improved Seeds.....	*	*	*	-	*	*	*	*
Pesticides.....	33	3.40	22	-	22	2.46	11	14.67
Fertilizers.....	695	24.80	680	-	680	24.88	15	21.43
Zone 3								
Irrigation.....	2962	33.73	2583	1224	2891	35.22	71	12.39
Improved Seeds.....	1060	93.39	919	*	1038	93.85	23	82.14
Pesticides.....	937	96.60	838	40	873	97.54	64	85.33
Fertilizers.....	2107	75.20	1926	340	2052	75.08	55	78.57

6 DAMAGED CROPLAND AREAS AND SIZE OF HOLDINGS IN RURAL AREAS

This section of the chapter deals with the estimates of damaged cropland areas by size of holdings in Afar Region. Cropland area damage includes any cropland planted or sown with intension to harvest crops, but failed to produce crop partly or fully due to various reasons. Out of the total cultivated cropland area, 20.97% in Meher and 19.70% in Belg seasons were affected by crop damage. The highest cropland area damage that accounted for 37.34% fall under holders in rural areas who had holding size that ranges from 1.01 and 2 hectares. Followed by, holders in rural areas who had holding size of between 2.01 and 5 hectares accounted for 25.37% of the cropland area damage. The third highest crop area damage , which accounts for about 17.80% was reported by holders with holding size 0.51 and 1 hectares. With regard to the causes of crop damage, it is reported that 33.07% was damaged

due to crop disease, weeds caused 28.81% crop damage and 28.24% was caused due to locust (For details see Summary Table VI.10 and Fig VI.4).



7 FARM MANAGEMENT PRACTICES OF HOLDERS IN RURAL AREAS

In order to obtain more detailed information concerning the various types of farm practices of holders in rural areas, data were collected subjectively by interviewing sampled agricultural holders on the sources of water for irrigation schemes, method to improve soil fertility, method of ploughing and soil conservation, participation in extension package programs, and use of credit or advisory services. Hence, the total number of holders reporting different farm management practices and their percentage distribution by type of farm management practices is presented in Summary Table VI.11. Following are discussions of the major findings with respect to these data.

7.1 Sources of Water for Irrigation Schemes

In a country like Ethiopia, where the amount, timing and distribution of rainfall is irregular, use of irrigation would significantly improve and raise the level of crop production. However, irrigation is not extensive in Afar Region. The census data reveals that of the total holders in the rural areas of the region, about 63.84% reported to have used irrigation practices.

**SUMMARY TABLE VI.10: Causes of Damage of Cropland Area by Size of Holdings and
Seasons in Rural Areas, for Private Holdings**

Cause of Damage	Size of Holding (Hectares)							
	Total	Under 0.1	0.1 – 0.5	0.51 – 1.0	1.01 – 2.0	2.01 – 5.00	5.01 – 10.0	Over 10
	Both Seasons							
Total	2298	7	158	409	858	583	98	*
Percent,,	100.00	0.30	6.88	17.80	37.34	25.37	4.26	*
Crop Disease	760	1	64	153	308	169	*	*
Percent..	33.07	0.13	8.42	20.13	40.53	22.24	*	*
Frost or Floods	67	*	*	*	*	*	-	-
Percent,,	2.92	*	*	*	*	*	-	-
Locust.....	649	*	*	122	238	203	*	-
Percent,,	28.24	*	*	18.80	36.67	31.28	*	-
Shortage of Rain	6	*	-	*	3	*	-	-
Percent,,	0.26	*	-	*	50.00	*	-	-
Too Much Rain	*	-	*	5	22	24	*	*
Percent,,	*	-	*	*	*	*	*	*
Wild Animals	6	-	*	-	*	*	-	-
Percent,,	0.26	-	*	-	*	*	-	-
Birds	-	-	-	-	-	-	-	-
Percent,,	-	-	-	-	-	-	-	-
Hailstone	*	*	*	-	*	*	-	-
Percent,,	*	*	*	-	*	*	-	-
Pests and Insects	*	-	*	-	*	-	-	-
Percent,,	*	-	*	-	*	-	-	-
Weeds.....	662	*	48	113	253	153	-	*
Percent,,	28.81	*	7.25	17.07	38.22	23.11	-	*
Others	*	*	-	*	*	-	-	-
Percent,,	*	*	-	*	*	-	-	-
Meher Season								
Total	2115	7	117	376	769	564	98	*
Crop Disease	714	1	39	152	292	167	*	*
Frost or Floods	40	*	*	*	5	*	-	-
Locust.....	626	*	*	111	226	203	*	-
Shortage of Rain	6	*	-	*	3	*	-	-
Too Much Rain	*	-	*	5	22	24	*	*
Wild Animals	6	-	*	-	*	*	-	-
Birds	-	-	-	-	-	-	-	-
Hailstone	*	*	*	-	*	*	-	-
Pests and Insects	*	-	*	-	*	-	-	-
Weeds.....	575	*	36	92	215	138	-	*
Others	*	-	-	-	*	-	-	-
Belg Season								
Total	183	5	107	42	*	-	-	-
Crop Disease	*	*	*	*	*	-	-	-
Frost or Floods	*	-	*	*	*	-	-	-
Locust.....	*	*	*	*	*	-	-	-
Shortage of Rain	-	-	-	-	-	-	-	-
Percent,,	*	*	-	-	-	-	-	-
Wild Animals	-	-	-	-	-	-	-	-
Birds	-	-	-	-	-	-	-	-
Hailstone	-	-	-	-	-	-	-	-
Pests and Insects	-	-	-	-	-	-	-	-
Weeds.....	86	5	61	19	*	-	-	-
Others	*	*	*	-	-	-	-	-

Among those holders who practice this scheme sources of water for 98.86% percent and 0.04 percent of the holders were rivers and lakes, respectively. Utilization of other sources of water for irrigation is limited in the region. It should be noted that data on the number of holders who practice irrigation schemes and the number of holders reporting the sources of water for irrigation were collected in different period of time in the process of the 2001/02 agricultural activities. In an enumeration area a total of 30 households were systematically sampled that mainly resulted a bout 30 holders. Thus, the data on number of holders practicing irrigation was collected in September 2001 (for ten households) and in December 2001 (for twenty households). However, the data on the holders reporting the sources of water for irrigation was collected only in March. Hence, some discrepancy is observed in the total numbers of holders who have reported the use of irrigation practices presented in Summary Table VI.8 and VI.11.

During the 2001/02 EASE, an attempt has also been made to asses the extent of irrigation practice in urban areas. Thus, sources of water for irrigation in urban areas for Meher season have been assessed; according to the assement about 94.62% and 1.51% holders used rivers and tap water as the major source of water for irrigation, respectively (See Summary Table V1.12).

However, in the same summary table, out of the total holders in urban areas, it is reported that only 69 holders (16.60 percent) in urban areas have practiced Belg crop production in the past three years prior to 2001/02 (1994 E.C.).

7.2 Methods Used to Improve Soil Fertility

The fertility of the soil in Ethiopia is being depleted slowly as time passes because of continuous cropping. In the census, holders were asked to state their method of improving soil fertility, that is whether they use crop rotation or burning of soil. Hence, the data showed that of the total holders about 25.96% have reported practicing crop rotation, while 2.95% reported practicing burning of soil as their main method for improving soil fertility.

7.3 Application of Chemical Fertilizers and Reasons for not Applying Fertilizers

In section 3 of this chapter, it was indicated that about 24.74% of the holders have applied both natural and chemical fertilizers. However, it was only 7.60% of the total holders that applied chemical fertilizers. In order to gauge the attitude of holders who did not use chemical fertilizers, sampled households were asked the reasons for not using chemical fertilizers. The data in Summary Table VI.11, indicate that the majority of the holders did not use chemical fertilizers due to various reasons. A total of about 3,425 holders, which is the highest proportion, did not use chemical fertilizers due to insufficient supply of fertilizers in their area, about 2,659 holders due to lack of knowledge regarding the advantage, about 1,949 holders due to shortage of money, and about 1,240 holders mentioned “other reasons” for not using chemical fertilizers.

7.4 Method of Ploughing

One aspect to increase agricultural production is through mechanization. The replacement of hand digging and ox/horse driven ploughing method by tractor is of paramount importance for increasing the volume of agricultural production. In light of this, an attempt has been made to collect some basic information on method of ploughing by the holders at the time of the census enumeration. Thus, the majority of the holders (34.59%) reported to have used both hand dug and ox/horse driven methods, 24.06 % of the holders reported to have used hand digging method and 26.61% of the holders that used ox/horse driven ploughing methods. Besides, 3.13% of the holders reported to have used tractors to plough their crop fields. While the remaining 0.83% of the holders reported to have used tractors and ox/horse driven ploughing methods.

7.5 Methods Used for Soil Conservation

According to the data in Summary Table VI.11, the majority of the holders reported using different methods of soil conservation. Of which, 9.77, 13.9 and 11.89 percent of holders have practiced ploughing along the contour, water catchments, and terracing, respectively.

Moreover, 2.04% of the total holders reported that they have other methods for soil conservation.

7.6 Extension Packages, and Use of Agricultural Credit and Advisory Services

Extension packages are outreach programs operating in rural areas for private holdings aiming to transfer modern agricultural technologies to increase crop and livestock productivity. The programs are usually undertaken through close follow-up and advisory services by the agricultural development agents. A holder is said to be a participant of this program if and only if he/she obtains agricultural advices, apply the recommended inputs and other related services such as close follow up by the extension agent, supervision by wereda and zonal agricultural bureaus...etc on a regular basis. The prevalence of different types of extension packages were assessed during the Agricultural Sample Enumeration. These include, rain shortage area packages, rain abundant area packages, post harvest technology packages, ...etc. Thus, the data showed that only about 0.2% of the agricultural holders were covered by rain shortage area extension packages while very few holders participated in economically important crop extension packages. In response to why they have not been covered by these extension packages from the inception of the program, holders reported the reasons as follows: 9.358% of the holders reported no knowledge about the advantage, 74.43% reported program not available, 0.29% were suspicious of its efficiency and 1.51% reported other reasons., and 0.85% reported not sufficient arable land available.

In the country, there are institutions that provide credit and assist peasants by furnishing short and intermediate term loans for the purchase of chemical fertilizers, improved variety seeds, and pesticides. These institutions not only give great emphasis to making loans to peasants but also aiding them with advice on farming practices. Then, data are collected by interviewing sampled holders on use of credit and advisory services and are presented in Summary Table VI.11. Thus, the data in this table shows that about 4.97 percent of holders have obtained advice on agricultural practices. This indicates that the use of credit and advisory services were limited in scope.

7.7 SOURCES AND COST OF CHEMICAL FERTILIZERS.

As illustrated in Summary Table V1.13, it is estimated that a total of 631 holders (4.37%) reported “Government” as their major sources of chemical fertilizers, while about 414 holders (2.87%) traders as their major sources of chemical fertilizers. Regardless of the source, the average cost was 268 Birr/Quintal for DAP and 196.25 Birr/Quintal for UREA.

8 USES OF CROP SPECIFIC EXTENSION PACKAGE PROGRAMS

Extension package is one of the means by which productivity improves and thereby food production increases. Moreover, Agricultural Development Agents (ADA) assist the peasants by operating demonstration plots to provide information to agricultural holders on improved seed varieties, on use of fertilizers and pesticides, and improvements in production practices to increase yields. Further, advisory services are provided to holders to those who are willing to participate in the extension package programs.

8.1 Holders Participating in Crop Specific Extension Package Programs

In rural areas of the Afar Region, data on the distributions of holders participating in crop specific extension package programs are presented in Summary Tables VI.14. Since the estimates of holders who have been participating in crop specific package are negligible, hence the data were found to be unreliable and replaced by asterikes and this indicates that very few holders in the region have participated in crop specific extension package programs.

8.2 Area Under Crop Specific Extension Package Programs

In the 2001/02 EASE, data on cropland area under extension package programs was collected and the results are presented in Summary Table VI.14. Eventhough the estimates of total cropland area under the extension package progams were found to be unreliable due to negligible observations and replaced by asterikes, and this indicates that very limited cropland area have been covered by crop specific extension package programs.

**SUMMARY TABLE VI.11: Number of Holders by Type of Farm Management Practices
in Rural Areas, for Private Holdings**

Farm Practices	Number of Holders Reporting	Percentage
Total Crop Holders	14435	100
Source of Water for Irrigation		
Holders who Practice Irrigation	9216	63.84
River	9111	98.86
Lake	31	0.34
Pond	*	*
Other	*	*
Method to Improve Soil Fertility		
Crop Rotation	3314	22.96
Burning of Soil	512	3.55
Reason for Not Using Chemical Fertilizer		
Do Not Know Advantages	2659	
Too Expensive	*	
Shortage of Money	1949	
Insufficient Supply	3425	
No Credit Service	*	
Suspicious of Efficacy	71	
Other	1240	
Method of Ploughing		
Hand Dug	3473	24.06
Ox/Horse Driven	3841	26.61
Tractor	452	3.13
Hand Dug and Ox/Horse Driven	4993	34.59
Tractor and Ox/Horse Driven	120	0.83
Method of Soil Conservation		
Terracing	1717	11.89
Water Catchments	2007	13.9
Afforestation	*	*
Ploughing Along the Contour	1410	9.77
Others	295	2.04
All Holders	26963	100
Participation in Extension Package by Type		
Rain Shortage Areas Package	54	0.2
Rain Abundant Areas Package	-	-
Post Harvest Technology Package	-	-
Livestock Development Package	-	-
Economically Important Crops Package	*	*
Any Two or More Packages	-	-
Reason For Not Participating in Extension Packages		
Do Not Know the Advantages	2522	9.35
Shortage of Money	*	*
Suspicious of Efficacy	77	0.29
Programs Not Available	20069	74.43
Not Sufficient Arable Land	229	0.85
Others	406	1.51
Use of Credit or Advisory Services		
Credit Services	*	*
Advisory Services	1339	4.97

Summary Table VI.12 Holders who Practice Irrigation by Sources of Water in Meher Season and Holders who Practice Belg From 1999/2000 to 2001/02 in Urban Areas

Sources of Water	Number of Holders	Percent
Those who Practice Irrigation in Meher Season (2001/02)		
Crop Holders.....	595	100
Holders who Practice Irrigation Sources	573	96.30
River.....	563	94.62
Lake.....	-	-
Well.....	-	-
Tap Water.....	9	1.51
Others.....	-	-
Not Stated.....	1	0.17
Those who Practice Belg from 1999/2000 to 2001/02		
Crop Holders.....	595	100
Holders who Practice Belg.....	69	16.60
Male.....	69	16.60
Female.....	-	-

Summary Table VI.13: Holders by Sources of Chemical Fertilizers and Cost of Chemical Fertilizers in Rural Areas for Private Holdings.

Sources and Type Of Fertilizers	Number of Holders	Percent
Crop Holders.....	14435	100.00
Sources		
Government.....	631	4.37
Private Organization	*	*
Traders.....	414	2.87
Others.....	*	*
Do not Buy.....	11602	80.37
Not Reported.....	1584	10.97
Type of Fertilizers	Cost in Birr/Quintal	
DAP.....	268.00	
UREA.....	196.25	

Summary Table VI.14: Number of Holders Participating Crop Specific Extension Package Program and Area under Crop Specific Extension Package Program
By Season in Rural Areas, for Private Holdings.

Ext. Package by Crop	Rural				Meher		Belg	
	Holder	%	Area	%	Holder	Area	Holder	Area
Total	*	*	*	*	*	*	*	*
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	*	*	*	*	*	*	*	*
Sorghum	*	*	*	*	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
Haricot beans	*	*	*	*	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-
Nueg	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	*	*	*	*	-	-	-	-
Sesame	*	*	*	*	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Other Grains	*	*	*	*	-	-	-	-
Tomatoes	-	-	-	-	-	-	-	-
Red Papper	-	-	-	-	-	-	-	-
Onion	*	*	*	*	-	-	-	-
Potatoes	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-

TABLE 6.1: AREA OF CROPLAND UNDER IMPROVED FARM MANAGEMENT PRACTICES BY TYPE OF CROPS IN RURAL AREAS, BOTH SEASONS, FOR PRIVATE HOLDINGS

TYPE OF CROP	Total Crop	Improved Seed		Irrigation		Fertilizer		Pesticide	
	Hectares	Hectares	%	Hectares	%	Hectares	%	Hectares	%
TOTAL	11015	1090	9.9	8132	73.83	1210	10.99	954	8.66
Grain Crops	10158	918	9.04	7295	71.82	846	8.33	729	7.18
Cereals	9006	*	*	6382	70.86	824	9.15	*	*
Teff	817	*	*	*	*	135	16.52	24	2.94
Barley	22	-	-	-	-	6	27.27	*	*
Wheat	57	-	-	-	-	6	10.53	*	*
Maize	6685	*	*	6256	93.58	620	9.27	*	*
Sorghum	1406	5	0.36	105	7.47	56	3.98	*	*
Finger millet	*	-	-	*	*	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulses	155	*	*	8	5.16	14	9.03	*	*
Horse beans	2	*	*	*	*	-	-	-	-
Field peas	*	-	-	-	-	-	-	-	-
Haricot beans	62	*	*	*	*	9	14.52	*	*
Chick peas	83	-	-	-	-	4	4.82	-	-
Lentils	3	-	-	-	-	*	*	-	-
Vetch	-	-	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-	-	-
Fenugreek	*	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oil Seeds	142	*	*	*	*	3	2.11	*	*
Neug	1	-	-	-	-	*	*	-	-
Linseed	*	-	-	*	*	-	-	-	-

Ground nuts	*	*	*	*	*	*	*	*	*
Sufflower	11	*	*	*	-	-	1	9.09	*
Sesame	*	*	*	*	*	*	*	*	*
Rapeseed	-	-	-	-	-	-	-	-	-
Other Grains	*	*	*	*	*	*	*	*	*
Vegetables	180	*	*	*	176	97.78	*	*	*
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage.....	*	-	-	-	*	*	-	-	-
Kale.....	*	-	-	-	*	*	-	-	*
Tomatoes	157	*	*	*	157	100.00	*	*	*
Green peppers.....	2	-	-	-	*	*	*	*	-
Red peppers	*	-	-	-	*	*	1	*	*
Swiss chard	-	-	-	-	-	-	-	-	-
Others.....	*	-	-	-	*	*	*	*	-
Root Crops	285	*	*	*	285	100.00	228	80	223
Beet root.....	-	-	-	-	-	-	-	-	78.25
Carrot	-	-	-	-	-	-	-	-	-
Onions.....	281	*	*	*	281	100.00	228	81.14	223
Potatoes.....	*	-	-	-	-	-	*	*	79.36
Garlic	-	-	-	-	-	-	-	-	-
Taro ('Godere').....	-	-	-	-	-	-	-	-	-
Sweet potatoes.....	*	-	-	-	*	*	*	*	-
Others.....	*	*	*	*	*	*	-	-	-
Permanent Crops.....	392	*	*	*	376	95.92	*	*	*
Fruit Crops	382	*	*	*	370	96.86	*	*	*
Avocado.....	-	-	-	-	-	-	-	-	-
Bananas.....	*	*	*	*	*	*	*	*	-
Guava (Zeytuna).....	*	-	-	-	*	*	*	*	-
Lemons	5	*	*	*	*	*	*	*	*
Mangoes.....	-	-	-	-	-	-	-	-	-
Oranges	*	-	-	-	*	*	-	-	*
Papayas	1	-	-	-	*	*	*	*	*
Pineapples.....	-	-	-	-	-	-	-	-	-
Others.....	219	-	-	-	216	98.63	*	*	-
Stimulant Crops	7	*	*	*	*	*	*	*	-
Chat.....	*	-	-	-	*	*	*	*	-
Coffee	1	*	*	*	*	*	*	*	-
Hops	4	-	-	-	-	-	*	*	-
Others.....	-	-	-	-	-	-	-	-	-
Other Permanent Crops	3	*	*	*	3	100.00	2	66.67	-
Enset	-	-	-	-	-	-	-	-	-
Sugar Cane	3	*	*	*	3	100.00	2	66.67	-
Others	*	-	-	-	-	-	-	-	-

TABLE 6.1.1: RURAL MEHER

TYPE OF CROP	Total Crop	Improved Seed		Irrigation		Fertilizer		Pesticide	
	Hectares	Hectares	%	Hectares	%	Hectares	%	Hectares	%
TOTAL	10085	946	9.38	7399	73.37	1057	10.48	935	9.27
Grain Crops	9391	*	*	6725	71.61	763	8.12	726	7.73
Cereals	8291	*	*	5813	70.11	745	8.99	*	*
Teff	695	*	*	-	-	116	16.69	21	3.02
Barley	21	-	-	-	-	6	28.57	*	*
Wheat	50	-	-	-	-	5	10	*	*
Maize	6100	*	*	5688	93.25	561	9.2	*	*
Sorghum	1405	5	0.36	105	7.47	56	3.99	*	*
Finger millet	*	-	-	*	*	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-	-
Pulses	103	*	*	*	*	9	8.74	*	*
Horse beans	*	-	-	-	-	-	-	-	-
Field peas	*	-	-	-	-	-	-	-	-
Haricot beans	35	*	*	*	*	*	*	*	*
Chick peas	60	-	-	-	-	*	*	-	-
Lentils	3	-	-	-	-	*	*	-	-
Vetch	-	-	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-	-	-
Fenugreek	*	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-	-
Oil Seeds	142	*	*	*	*	3	2.11	*	*
Neug	1	-	-	-	-	*	*	-	-
Linseed	*	-	-	*	*	-	-	-	-
Ground nuts	*	*	*	*	*	*	*	-	-
Sufflower	11	*	*	*	*	1	9.09	*	*
Sesame	*	*	*	*	*	*	*	-	-
Rapeseed	*	-	-	-	-	-	-	-	-
Other Grains	*	*	*	*	*	*	*	*	*
Vegetables	67	*	*	*	*	2	2.99	*	*
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-	-	-
Kale	*	-	-	*	*	-	-	*	*
Tomatoes	*	*	*	*	*	*	*	*	*
Green peppers	2	-	-	*	*	*	*	-	-
Red peppers	5	-	-	*	*	1	20	*	*
Swiss chard	-	-	-	-	-	-	-	-	-
Others	*	-	-	*	*	*	*	-	-
Root Crops	236	*	*	236	100	*	*	206	87.29
Beet root	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onions	234	*	*	234	100	*	*	206	88.03
Potatoes	*	-	-	-	-	*	*	-	-
Garlic	-	-	-	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-	-	-	-
Sweet potatoes	*	-	-	*	*	*	*	-	-
Others	*	*	*	*	*	-	-	-	-
Permanent Crops	392	*	*	376	95.92	*	*	*	*
Fruit Crops	382	*	*	370	96.86	*	*	*	*
Avocado	-	-	-	-	-	-	-	-	-
Bananas	*	*	*	*	*	*	*	-	-
Guava (Zeytuna)	*	-	-	*	*	*	*	-	-
Lemons	5	*	*	*	*	*	*	*	*
Mangoes	-	-	-	-	-	-	-	-	-
Oranges	*	-	-	*	*	-	-	*	*
Papayas	1	-	-	*	*	*	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Others	219	-	-	216	98.63	*	*	-	-
Stimulant Crops	7	*	*	*	*	*	*	-	-
Chat	*	-	-	*	*	*	*	-	-
Coffee	1	*	*	*	*	*	*	-	-
Hops	4	-	-	-	-	*	*	-	-
Others	-	-	-	-	-	-	-	-	-
Other Permanent Crops	3	*	*	3	100	2	66.67	-	-
Enset	-	-	-	-	-	-	-	-	-
Sugar Cane	3	*	*	3	100	2	66.67	-	-
Others	*	-	-	-	-	-	-	-	-

TABLE 6.1.2: RURAL BELG

[illegible]

TABLE 6.2: AREA OF CROPLAND UNDER IMPROVED FARM MANAGEMENT PRACTICES BY TYPE OF CROPS IN URBAN AREAS, MEHER SEASON

[illegible]

Sugar Cane.....	*	-	-	*	*	*	*	-	-
Others.....	-	-	-	-	-	-	-	-	-

TABLE 6:3 AREA OF CROPLAND UNDER IMPROVED FARM MANAGEMENT PRACTICES BY CROP CATEGORY IN RURAL AND URBAN AREAS, BOTH SEASONS, FOR PRIVATE HOLDINGS

Geographic Area	All Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
A far Killil	11650	1159	9.95	8739	75.01	1329	11.41	1076	9.24
Zone 1	6010	*	*	5895	98.09	356	5.92	24	0.4
Dubti	334	-	-	334 100.00	*	*	-	-	-
Asayita	3398	22	0.65	3325	97.85	283	8.33	24	0.71
Afambo	2278	*	*	2236	98.16	*	*	-	-
Zone 3	5640	1103	19.56	2844	50.43	973	17.25	1051	18.63
Amibara	1510	*	*	1476	97.75	*	*	*	*
Awash Fentale	1305	214	16.4	1278	97.93	396	30.34	324	24.83
Argoba Liyu	2825	6	0.21	89	3.15	282	9.98	51	1.81

TABLE 6.3.1:RURAL HOLDINGS

Geographic Area	All Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
A far Killil	11015	1090	9.9	8132	73.83	1210	10.99	954	8.66
Zone 1	5498	*	*	5402	98.25	342	6.22	19	0.35
Dubti	334	-	-	334 100.00	*	*	-	-	-
Asayita	2887	*	*	2832	98.09	269	9.32	19	0.66
Afambo	2278	*	*	2236	98.16	*	*	-	-
Zone 3	5516	1040	18.85	2730	49.49	868	15.74	935	16.95
Amibara	1500	*	*	1466	97.73	*	*	*	*
Awash Fentale	1191	*	*	1175	98.66	292	24.52	215	18.05
Argoba Liyu	2825	6	0.21	89	3.15	282	9.98	51	1.81

TABLE 6.3.2 RURAL MEHER

Geographic Area	All Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	10085	946	9.38	7399	73.37	1057	10.48	935	9.27
Zone 1	5498	*	*	5402	98.25	342	6.22	19	0.35
Dubti	334	-	-	334 100.00	*	*	-	-	-
Asayita	2887	*	*	2832	98.09	269	9.32	19	0.66
Afambo	2278	*	*	2236	98.16	*	*	-	-
Zone 3	4587	896	19.53	1998	43.56	716	15.61	916	19.97
Amibara	1248	*	*	1230	98.56	*	*	*	*
Awash Fentale	722	*	*	705	97.65	250	34.63	215	29.78
Argoba Liyu	2617	6	0.23	62	2.37	232	8.87	32	1.22

TABLE 6.3.3 RURAL BELG

Geographic Level	All Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	929	*	*	733	78.9	152	16.36	*	*
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	929	*	*	733	78.9	152	16.36	*	*
Amibara	*	*	*	*	*	*	*	-	-
Awash Fentale	469	*	*	469	100	42	8.96	-	-

Argoba Liyu	208	-	-	27	12.98	50	24.04	*	*
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TABLE 6.3.4 URBAN HOLDING

Geographic Area	All Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	635	69	10.87	607	95.59	119	18.74	121	19.06
Zone 1	511	*	*	493	96.48	14	2.74	5	0.98
Dubti	-	-	-	-	-	-	-	-	-
Asayita	511	*	*	493	96.48	14	2.74	5	0.98
Zone 3	124	*	*	114	91.94	105	84.68	116	93.55
Amibara	10	7	70	10	100	1	10	8	80
Awash Fentale	114	*	*	104	91.23	104	91.23	109	95.61

TABLE 6.4 AREA OF CROPLAND UNDER IMPROVED FARM PRACTICES BY CROP CATEGORY IN RURAL AND URBAN AREAS, BOTH SEASONS, FOR PRIVATE HOLDINGS

Geographic Level	Grain Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	10674	928	8.69	7794	73.02	863	8.09	739	6.92
Zone 1	5786	*	*	5674	98.06	345	5.96	24	0.41
Dubti	334	-	-	334 100.00	*	*	-	-	-
Asayita	3386	22	0.65	3315	97.9	283	8.36	24	0.71
Afambo	2066	*	*	2024	97.97	*	*	-	-
Zone 3	4888	*	*	2120	43.37	518	10.6	714	14.61
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	923	5	0.54	906	98.16	94	10.18	58	6.28
Argoba Liyu	2774	6	0.22	57	2.05	256	9.23	35	1.26

TABLE 6.4.1 RURAL HOLDING

Geographic Level	Grain Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	10158	918	9.04	7295	71.82	846	8.33	729	7.18
Zone 1	5275	*	*	5180	98.2	330	6.26	19	0.36
Dubti	334	-	-	334 100.00	*	*	-	-	-
Asayita	2875	*	*	2822	98.16	269	9.36	19	0.66
Afambo	2066	*	*	2024	97.97	*	*	-	-
Zone 3	4883	*	*	2115	43.31	516	10.57	709	14.52
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	919	*	*	902	98.15	93	10.12	*	*
Argoba Liyu	2774	6	0.22	57	2.05	256	9.23	35	1.26

TABLE 6.4.2 RURAL MEHER

Geographic Area	Grain Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	9391	*	*	6725	71.61	763	8.12	726	7.73
Zone 1	5275	*	*	5180	98.2	330	6.26	19	0.36
Dubti	334	-	-	334 100.00	*	*	-	-	-
Asayita	2875	*	*	2822	98.16	269	9.36	19	0.66
Afambo	2066	*	*	2024	97.97	*	*	-	-
Zone 3	4116	*	*	1544	37.51	432	10.5	707	17.18
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	490	-	-	473	96.53	*	*	*	*
Argoba Liyu	2592	6	0.23	55	2.12	230	8.87	32	1.23

TABLE 6.4.3 RURAL BELG

Geographic Level	Grain Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	767	*	*	571	74.45	84	10.95	3	0.39
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	767	*	*	571	74.45	84	10.95	3	0.39
Amibara	*	*	*	*	*	*	*	-	-
Awash Fentale	430	*	*	430	100	*	*	-	-
Argoba Liyu	183	-	-	*	*	26	14.21	3	1.64

TABLE 6.4.4 URBAN HOLDING

Geographic Level	Grain Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	516	*	*	498	96.51	16	3.1	10	1.94
Zone 1	511	*	*	493	96.48	14	2.74	5	0.98
Dubti	-	-	-	-	-	-	-	-	-
Asayita	511	*	*	493	96.48	14	2.74	5	0.98
Zone 3	5	*	*	5	100	*	*	5	100
Amibara	1	*	*	1	100	*	*	1	100
Awash Fentale	*	*	*	*	*	*	*	*	*

TABLE 6.5 AREA OF CROPLAND UNDER IMPROVED FARM PRACTICES BY CROP CATEGORY IN RURAL AND URBAN AREAS, BOTH SEASONS, FOR PRIVATE HOLDINGS

Geographic Level	Cereals								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	9514	*	*	6872	72.23	838	8.81	215	2.26
Zone 1	5738	*	*	5627	98.07	338	5.89	16	0.28
Dubti	326	-	-	326	100.00	*	-	-	-
Asayita	3359	*	*	3288	97.89	276	8.22	16	0.48
Afambo	2053	*	*	2012	98	*	*	-	-
Zone 3	3776	*	*	1246	33	500	13.24	*	*
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	915	*	*	898	98.14	94	10.27	58	6.34
Argoba Liyu	2528	5	0.2	48	1.9	239	9.45	34	1.34

TABLE 6.5.1 RURAL HOLDINGS

Geographic Level	Cereals								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	9006	*	*	6382	70.86	824	9.15	*	*
Zone 1	5234	*	*	5140	98.2	326	6.23	*	*
Dubti	326	-	-	326	100.00	*	-	-	-
Asayita	2855	*	*	2802	98.14	264	9.25	*	*
Afambo	2053	*	*	2012	98	*	*	-	-
Zone 3	3772	*	*	1242	32.93	498	13.2	*	*
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	912	-	-	895	98.14	93	10.2	*	*
Argoba Liyu	2528	5	0.2	48	1.9	239	9.45	34	1.34

TABLE 6.5.2 RURAL MEHER

Geographic Area	Cereals								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	8291	*	*	5813	70.11	745	8.99	*	*
Zone 1	5234	*	*	5140	98.2	326	6.23	*	*
Dubti	326	-	-	326 100.00	*	*	-	-	-
Asayita	2855	*	*	2802	98.14	264	9.25	*	*
Afambo	2053	*	*	2012	98	*	*	-	-
Zone 3	3057	*	*	673	22.02	419	13.71	*	*
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	483	-	-	466	96.48	*	*	*	*
Argoba Liyu	2396	5	0.21	46	1.92	217	9.06	31	1.29

TABLE 6.5.2a Teff

Geographic Area	Total Crop	Improved Seed		Irrigated		Fertilizer		Pesticide	
	Area	Area	%	Area	%	Area	%	Area	%
Afar Killil	695	*	*	-	-	116	16.69	21	3.02
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	695	*	*	-	-	116	16.69	21	3.02
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	695	*	*	-	-	116	16.69	21	3.02

TABLE 6.5.2b Barley

Geographic Area	Total Crop	Improved Seed		Irrigated		Fertilizer		Pesticide	
	Area	Area	%	Area	%	Area	%	Area	%
Afar Killil	21	-	-	-	-	6	28.57	*	*
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	21	-	-	-	-	6	28.57	*	*
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	21	-	-	-	-	6	28.57	*	*

TABLE 6.5.2c Wheat

Geographic Area	Total Crop	Improved Seed		Irrigated		Fertilizer		Pesticide	
	Area	Area	%	Area	%	Area	%	Area	%
Afar Killil	50	-	-	-	-	5	10	*	*
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	50	-	-	-	-	5	10	*	*
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	50	-	-	-	-	5	10	*	*

TABLE 6.5.2d Maize

Geographic Level	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	6100	*	*	5688	93.25	561	9.2	*	*
Zone 1	5151	*	*	5057	98.18	326	6.33	*	*
Dubti	326	-	-	326	100	*	*	*	*
Asayita	2836	*	*	2783	98.13	264	9.31	*	*
Afambo	1989	*	*	1948	97.94	*	*	-	*
Zone 3	950	*	*	632	66.53	*	*	*	*
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	483	-	-	466	96.48	*	*	*	*
Argoba Livu	289	*	*	*	*	34	11.76	*	*

TABLE 6.5.2e Sorghum

Geographic Level	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	1405	5	0.36	105	7.47	56	3.99	*	*
Zone 1	64	-	-	64	100	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	64	-	-	64	100	-	-	-	-
Zone 3	1341	5	0.37	41	3.06	56	4.18	*	*
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Livu	1341	5	0.37	41	3.06	56	4.18	*	*

TABLE 6.5.3 RURAL BELG

Geographic Level	Cereals									
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide		
		Area	%	Area	%	Area	%	Area	%	
Afar Killil	715	*	*	569	79.58	79	11.05	3	0.42	
Zone 1	-	-	-	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	
Asayita	-	-	-	-	-	-	-	-	-	
Afambo	-	-	-	-	-	-	-	-	-	
Zone 3	715	*	*	569	79.58	79	11.05	3	0.42	
Amibara	*	*	*	*	*	*	*	-	-	
Awash Fentale	428	-	-	428	100	*	*	-	-	
Argoba Liyu	132	-	-	*	*	21	15.91	3	2.27	

TABLE 6.5.4 URBAN HOLDINGS

[illegible]

Geographic Level	Pulses									
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide		
		Area	%	Area	%	Area	%	Area	%	
Afar Killil	155	*	*	8	5.16	14	9.03	*	*	
Zone 1	*	-	-	*	*	*	*	-	-	
Dubti	-	-	-	-	-	-	-	-	-	
Asayita	*	-	-	*	*	*	*	-	-	
Afambo	*	-	-	*	*	-	-	-	-	
Zone 3	149	*	*	*	*	9	6.04	*	*	
Amibara	*	-	-	*	*	*	*	-	-	
Awash Fentale	*	*	*	*	*	-	-	-	-	
Argoba Liyu	147	*	*	-	-	8	5.44	*	*	

Geographic Level	Pulses								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	155	*	*	8	5.16	14	9.03	*	*
Zone 1	*	-	-	*	*	*	*	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	*	-	*	*	*	*	*	-	-
Afambo	*	-	-	*	*	-	-	-	-
Zone 3	149	*	*	*	*	9	6.04	*	*
Amibara	*	-	-	*	*	*	*	-	-
Awash Fentale	*	*	*	*	*	-	-	-	-
Argoba Liyu	147	*	*	-	-	8	5.44	*	*

Geographic Level	Pulses								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	Area	%	Area	%	Area	%	Area
Afar Killil	103	*	*	*	*	9	8.74	*	*
Zone 1	*	-	-	*	*	*	*	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	*	-	-	*	*	*	*	-	-
Afambo	*	-	-	*	*	-	-	-	-
Zone 3	97	*	*	*	*	5	5.15	*	*
Amibara	*	-	-	*	*	*	*	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	97	*	*	-	-	4	4.12	*	*

[illegible]

Argoba Liyu	28	*	*	-	-	2	7.14	*	*
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TABLE 6.6.2b Chick pea

Geographic Level	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	60	-	-	-	-	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	60	-	-	-	-	*	*	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	60	-	-	-	-	*	*	-	-

TABLE 6.6.2c Lintiles

Geographic Level	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	3	-	-	-	-	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	3	-	-	-	-	*	*	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	3	-	-	-	-	*	*	-	-

TABLE 6.6.3 RURAL BELG

Geographic Area	Pulses								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	52	*	*	*	*	4	7.69	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	52	*	*	*	*	4	7.69	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	*	*	*	*	*	-	-	-	-
Argoba Livu	50	-	-	-	-	4	8	-	-

TABLE 6.7: AREA OF CROPLAND UNDER IMPROVED FARM PRACTICES BY CROP CATEGORY IN RURAL AND URBAN AREAS, BOTH SEASONS, FOR PRIVATE HOLDINGS

[illegible]

Awash Fentale	*	-	-	*	*	-	-	-	-
Argoba Liyu	45	*	*	*	*	3	6.67	*	*

TABLE 6.7.1 RURAL HOLDINGS

Geographic Level	Oil Seeds								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	142	*	*	*	*	3	2.11	*	*
Zone 1	26	-	-	25	96.15	-	-	-	-
Dubti	*	-	-	*	*	-	-	-	-
Asayita	*	-	-	*	*	-	-	-	-
Afambo	*	-	-	*	*	-	-	-	-
Zone 3	*	*	*	*	*	3	*	*	*
Amibara	*	*	*	*	*	*	*	-	-
Awash Fentale	*	-	-	*	*	-	-	-	-
Argoba Livu	45	*	*	*	*	3	6.67	*	*

TABLE 6.7.2 RURAL MEHER

Geographic Area	Oil Seeds								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	142	*	*	*	*	3	2.11	*	*
Zone 1	26	-	-	25	96.15	-	-	-	-
Dubti	*	-	-	*	*	-	-	-	-
Asayita	*	-	-	*	*	-	-	-	-
Afambo	*	-	-	*	*	-	-	-	-
Zone 3	*	*	*	*	*	3	*	*	*
Amibara	*	*	*	*	*	*	*	-	-
Awash Fentale	*	-	-	*	*	-	-	-	-
Argoba Livu	45	*	*	*	*	3	6.67	*	*

TABLE 6.7.2a Neug

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	1	-	-	-	-	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	1	-	-	-	-	*	*	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	1	-	-	-	-	*	*	-	-

TABLE 6.7.2b Sufflower

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	11	*	*	-	-	1	9.09	*	*
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	11	*	*	-	-	1	9.09	*	*
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	11	*	*	-	-	1	9.09	*	*

Awash Fentale	*	*	*	*	*	-	-	*	*
Argoba Liyu	4	-	-	*	*	1	25	*	*

TABLE 6.9.2a Green peppers

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	2	-	-	*	*	*	*	-	-
Zone 1	*	-	-	*	*	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	*	-	-	*	*	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	*	-	-	*	*	*	*	-	-
Amibara	*	-	-	*	*	*	*	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	1	-	-	-	-	*	*	-	-

TABLE 6.9.2b Red peppers

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	5	-	-	*	*	1	20	*	*
Zone 1	*	-	-	*	*	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	*	-	-	*	*	-	-	-	-
Zone 3	4	-	-	*	*	1	25	*	*
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	*	-	-	*	*	-	-	-	-
Argoba Liyu	3	-	-	*	*	1	33.33	*	*

TABLE 6.9.3 RURAL BELG

Geographic Area	Vegetables								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	*	*	*	*	*	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	*	*	*	*	*	*	*	-	-
Amibara	*	*	*	*	*	*	*	-	-
Awash Fentale	*	*	*	*	*	-	-	-	-
Argoba Liyu	1	-	-	*	*	*	*	-	-

TABLE 6.9.4 URBAN HOLDINGS

Geographic Level	Vegetables								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	59	*	*	54	91.53	*	*	53	89.83
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Zone 3	59	*	*	54	91.53	*	*	53	89.83
Amibara	4	3	75	4	100	-	-	3	75
Awash Fentale	55	*	*	*	*	*	*	*	*

TABLE 6.10. AREA OF CROPLAND UNDER IMPROVED FARM PRACTICES BY CROP CATEGORY IN RURAL AND URBAN AREAS, BOTH SEASONS, FOR PRIVATE HOLDINGS

RURAL AND URBAN AREAS, BOTH SEASONS, FOR PRIVATE HOLDINGS									
Geographic Area	Root Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	Area	%	Area	%	Area	%	Area
Afar Killil	344	*	*	338	98.26	280	81.4	281	81.69
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	344	*	*	338	98.26	280	81.4	281	81.69
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	267	*	*	261	97.75	251	94.01	215	80.52
Areoba Liyu	25	-	-	25	100	24	96	*	*

TABLE 6.10.1 RURAL HOLDINGS

Geographic Level	Root Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	285	*	*	285	100	228	80	223	78.25
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	285	*	*	285	100	228	80	223	78.25
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	*	*	*	*	*	*	*	*	*
Argoba Ljvu	25	-	-	25	100	24	96	*	*

TABLE 6.10.2 RURAL MEHER

Geographic Area	Root Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	Area	%	Area	%	Area	%	Area
Afar Killil	236	*	*	236	100	*	*	206	87.29
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	236	*	*	236	100	*	*	206	87.29
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	*	*	*	*	*	*	*	*	*
Argoba Liyu	*	-	-	-	-	*	*	-	-

TABLE 6.10.2a Onion

[illegible]

[illegible]

Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	2	-	-	-	*	*	-

TABLE 6.12.1b Papayas

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	1	-	-	*	*	*	*	*	*
Zone 1	*	-	-	*	*	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	*	-	-	*	*	-	-	-	-
Zone 3	1	-	-	*	*	*	*	*	*
Amibara	*	-	-	*	*	*	*	*	*
Awash Fentale	*	-	-	*	*	-	-	-	-
Argoba Liyu	1	-	-	*	*	*	*	-	-

TABLE 6.12.1i Other Fruits

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	219	-	-	216	98.63	*	*	-	-
Zone 1	218	-	-	216	99.08	*	*	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	10	-	-	8	80	*	*	-	-
Afambo	208	-	-	208	100	*	*	-	-
Zone 3	*	-	-	-	-	-	-	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	*	-	-	-	-	-	-	-	-

TABLE 6.13: AREA OF CROPLAND UNDER IMPROVED FARM PRACTICES BY CROP CATEGORY IN RURAL AND URBAN AREAS, MEHER SEASON, FOR PRIVATE HOLDINGS

Geographic Area	Stimulant Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	7	*	*	*	*	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	7	*	*	*	*	*	*	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	7	*	*	*	*	*	*	-	-

TABLE 6.13.1: RURAL MEHER

Geographic Area	Stimulant Crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	7	*	*	*	*	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	7	*	*	*	*	*	*	-	-

Amibara	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	7	*	*	*	*	*	*	-

TABLE 6.13.1a Coffee

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	1	*	*	*	*	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	1	*	*	*	*	*	*	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	1	*	*	*	*	*	*	-	-

TABLE 6.13.1b Gesho

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	4	-	-	-	-	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	4	-	-	-	-	*	*	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	4	-	-	-	-	*	*	-	-

TABLE 6.14: AREA OF CROPLAND UNDER IMPROVED FARM PRACTICES BY CROP CATEGORY IN RURAL AND URBAN AREAS, MEHER SEASON, FOR PRIVATE HOLDINGS

Geographic Area	Other permanent crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	3	*	*	3	100	2	66.67	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	3	*	*	3	100	2	66.67	-	-
Amibara	3	*	*	3	100	2	66.67	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	1	*	*	*	*	*	*	-	-

TABLE 6.14.1 RURAL MEHER

Geographic Area	Other permanent crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	3	*	*	3	100	2	66.67	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	3	*	*	3	100	2	66.67	-	-

Amibara	*	*	*	*	*	*	*	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	1	*	*	*	*	*	*	-	-

TABLE 6.14.1a Sugar cane

Geographic Area	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	3	*	*	3	100	2	66.67	-	-
Zone 1	-	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	3	*	*	3	100	2	66.67	-	-
Amibara	*	*	*	*	*	*	*	-	-
Awash Fentale	-	-	-	-	-	-	-	-	-
Argoba Liyu	1	*	*	*	*	*	*	-	-

TABLE 6.14.2 URBAN HOLDINGS

Geographic Level	Other permanent crops								
	Total Crop Area	Improved Seed		Irrigated		Fertilizer		Pesticide	
		Area	%	Area	%	Area	%	Area	%
Afar Killil	5	-	-	*	*	-	-	-	-
Zone 1	*	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-	-
Asayita	*	-	-	-	-	-	-	-	-
Zone 3	5	-	-	*	*	-	-	-	-
Amibara	-	-	-	-	-	-	-	-	-
Awash Fentale	5	-	-	*	*	-	-	-	-

TABLE 6.15: NUMBER OF HOLDERS APPLYING FERTILIZERS, FERTILIZED AREA, AND QUANTITY OF FERTILIZERS BY CROP TYPE IN RURAL AREAS FOR BOTH SEASONS

CROP	Application of total Fertilizers		Application of Fertilizers by Type and Quantity				
	Holders	Hectares	Natural		Chemical – DAP		
			Holders	Hectares	Holders	Hectares	Quintals
TOTAL	2606	1057	1949	576	117	91	42
Grain Crops	1803	763	1336	470	95	53	28
Cereals	1763	745	1304	460	95	53	28
Teff	329	116	132	25	85	44	23
Barley	100	6	100	6	-	-	-
Wheat	44	5	34	*	*	*	*
Maize	1447	561	1139	378	*	*	*
Sorghum	206	56	190	47	-	-	-
Finger millet	-	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	136	9	100	8	-	-	-
Horse beans	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-
Haricot beans	116	*	80	*	-	-	-
Chick peas	19	*	15	*	-	-	-
Lentils	*	*	*	*	-	-	-
Vetch	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oil Seeds	72	3	50	1	-	-	-
Neug	*	*	*	*	-	-	-
Linseed	-	-	-	-	-	-	-
Ground nuts	*	*	*	*	-	-	-
Sufflower	41	1	26	1	-	-	-
Sesame	*	*	*	*	-	-	-
Rapeseed	-	-	-	-	-	-	-
Other Grains	*	*	*	*	-	-	-
Vegetables	98	2	90	2	-	-	-
Lettuce	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-
Kale	-	-	-	-	-	-	-
Tomatoes	*	*	*	*	-	-	-
Green peppers	*	*	*	*	-	-	-
Red peppers	49	1	41	1	-	-	-
Swiss chard	-	-	-	-	-	-	-
Others	*	*	*	*	-	-	-
Root Crops	285	*	*	*	*	*	*
Beet root	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-
Onions	271	*	*	*	*	*	*
Potatoes	*	*	*	*	-	-	-
Garlic	-	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-	-
Sweet potatoes	*	*	*	*	-	-	-
Others	-	-	-	-	-	-	-
Permanent Crops	*	*	*	*	-	-	-
Fruit Crops	*	*	*	*	-	-	-
Avocado	-	-	-	-	-	-	-
Bananas	*	*	*	*	-	-	-
Guava (Zeytuna)	*	*	*	*	-	-	-
Lemons	*	*	*	*	-	-	-
Mangoes	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-
Papayas	66	*	66	*	-	-	-
Pineapples	-	-	-	-	-	-	-
Others	*	*	*	*	-	-	-
Stimulant Crops	29	*	29	*	-	-	-
Chat	*	*	*	*	-	-	-
Coffee	*	*	*	*	-	-	-

Hops	24	*	24	*	-	-	-
Others	-	-	-	-	-	-	-
Other Permanent Crops.....	123	2	123	2	-	-	-
Enset	-	-	-	-	-	-	-
Sugar Cane	123	2	123	2	-	-	-
Others	-	-	-	-	-	-	-

TABLE 6.15 CONTD.

CROP	Application of Fertilizers by Type and Quantity					
	Chemical – UREA			Chemical - DAP & UREA		
	Holders	Hectares	Quintals	Holders	Hectares	Quintals
TOTAL	460	285	199	230	*	43
Grain Crops.....	*	134	47	230	*	43
Cereals	*	128	43	230	*	42
Teff	*	*	*	111	38	31
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	*	*	39	*	*	*
Sorghum.....	-	-	-	*	*	*
Finger millet	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulses	*	*	*	*	*	*
Horse beans.....	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
Haricot beans	*	*	*	-	-	-
Chick peas.....	-	-	-	*	*	*
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oil Seeds	*	*	-	*	*	*
Neug.....	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Sufflower	*	*	-	*	*	*
Sesame	-	-	-	*	*	-
Rapeseed.....	-	-	-	-	-	-
Other Grains	*	*	*	-	-	-
Vegetables	*	*	-	-	-	-
Lettuce	-	-	-	-	-	-
Head cabbage.....	-	-	-	-	-	-
Kale.....	-	-	-	-	-	-
Tomatoes	*	*	-	-	-	-
Green peppers	-	-	-	-	-	-
Red peppers	*	*	-	-	-	-
Swiss chard	-	-	-	-	-	-
Others.....	-	-	-	-	-	-
Root Crops	261	151	152	-	-	-
Beet root.....	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onions.....	261	151	152	-	-	-
Potatoes.....	-	-	-	-	-	-
Garlic	-	-	-	-	-	-
Taro ('Godere').....	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-
Others.....	-	-	-	-	-	-
Permanent Crops.....	-	-	-	-	-	-
Fruit Crops	-	-	-	-	-	-
Avocado.....	-	-	-	-	-	-
Bananas.....	-	-	-	-	-	-
Guava (Zeytuna).....	-	-	-	-	-	-
Lemons	-	-	-	-	-	-
Mangoes.....	-	-	-	-	-	-
Oranges	-	-	-	-	-	-
Papayas	-	-	-	-	-	-
Pineapples.....	-	-	-	-	-	-
Others.....	-	-	-	-	-	-
Stimulant Crops	-	-	-	-	-	-
Chat.....	-	-	-	-	-	-
Coffee	-	-	-	-	-	-
Hops	-	-	-	-	-	-
Others.....	-	-	-	-	-	-

Other Permanent Crops	-	-	-	-	-	-
Enset	-	-	-	-	-	-
Sugar Cane.....	-	-	-	-	-	-
Others.....	-	-	-	-	-	-

TABLE 6.15.1 RURAL MEHER

CROP	Application of total Fertilizers		Application of Fertilizers by Type and Quantity				
	Holders	Hectares	Natural		Chemical – DAP		
			Holders	Hectares	Holders	Hectares	Quintals
TOTAL	2606	1057	1949	576	117	91	42
Grain Crops	1803	763	1336	470	95	53	28
Cereals	1763	745	1304	460	95	53	28
Teff	329	116	132	25	85	44	23
Barley.....	100	6	100	6	-	-	-
Wheat.....	44	5	34	*	*	*	*
Maize	1447	561	1139	378	*	*	*
Sorghum	206	56	190	47	-	-	-
Finger millet	-	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses.....	136	9	100	8	-	-	-
Horse beans	-	-	-	-	-	-	-
Field peas.....	-	-	-	-	-	-	-
Haricot beans	116	*	80	*	-	-	-
Chick peas	19	*	15	*	-	-	-
Lentils	*	*	*	*	-	-	-
Vetch.....	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oil Seeds	72	3	50	1	-	-	-
Neug.....	*	*	*	*	-	-	-
Linseed	-	-	-	-	-	-	-
Ground nuts	*	*	*	*	-	-	-
Sufflower.....	41	1	26	1	-	-	-
Sesame.....	*	*	*	*	-	-	-
Rapeseed.....	-	-	-	-	-	-	-
Other Grains.....	*	*	*	*	-	-	-
Vegetables	98	2	90	2	-	-	-
Lettuce	-	-	-	-	-	-	-
Head cabbage.....	-	-	-	-	-	-	-
Kale.....	-	-	-	-	-	-	-
Tomatoes	*	*	*	*	-	-	-
Green peppers.....	*	*	*	*	-	-	-
Red peppers	49	1	41	1	-	-	-
Swiss chard.....	-	-	-	-	-	-	-
Others.....	*	*	*	*	-	-	-
Root Crops	285	*	*	*	*	*	*
Beet root	-	-	-	-	-	-	-
Carrot.....	-	-	-	-	-	-	-
Onions.....	271	*	*	*	*	*	*
Potatoes.....	*	*	*	*	-	-	-
Garlic	-	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-	-
Sweet potatoes	*	*	*	*	-	-	-
Others.....	-	-	-	-	-	-	-
Permanent Crops.....	*	*	*	*	-	-	-
Fruit Crops	*	*	*	*	-	-	-
Avocado.....	-	-	-	-	-	-	-
Bananas.....	*	*	*	*	-	-	-
Guava (Zeytuna).....	*	*	*	*	-	-	-
Lemons	*	*	*	*	-	-	-
Mangoes	-	-	-	-	-	-	-
Oranges.....	-	-	-	-	-	-	-
Papayas.....	66	*	66	*	-	-	-
Pineapples.....	-	-	-	-	-	-	-
Others.....	*	*	*	*	-	-	-
Stimulant Crops	29	*	29	*	-	-	-
Chat.....	*	*	*	*	-	-	-
Coffee	*	*	*	*	-	-	-
Hops	24	*	24	*	-	-	-

Others.....	-	-	-	-	-	-	-
Other Permanent Crops.....	123	2	123	2	-	-	-
Enset	-	-	-	-	-	-	-
Sugar Cane.....	123	2	123	2	-	-	-
Others.....	-	-	-	-	-	-	-

TABLE 6.15 .1 CONTD.

CROP	Application of Fertilizers by Type and Quantity					
	Chemical – UREA			Chemical - DAP & UREA		
	Holders	Hectares	Quintals	Holders	Hectares	Quintals
TOTAL	460	285	199	230	*	43
Grain Crops	*	134	47	230	*	43
Cereals	*	128	43	230	*	42
Teff.....	*	*	*	111	38	31
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize.....	*	*	39	*	*	*
Sorghum.....	-	-	-	*	*	*
Finger millet.....	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulses	*	*	*	*	*	*
Horse beans.....	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
Haricot beans	*	*	*	-	-	-
Chick peas.....	-	-	-	*	*	*
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya.....	-	-	-	-	-	-
Fenugreek.....	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oil Seeds	*	*	-	*	*	*
Neug.....	-	-	-	-	-	-
Linseed.....	-	-	-	-	-	-
Ground nuts.....	-	-	-	-	-	-
Sufflower.....	*	*	-	*	*	*
Sesame	-	-	-	*	*	-
Rapeseed	-	-	-	-	-	-
Other Grains	*	*	*	-	-	-
Vegetables	*	*	-	-	-	-
Lettuce.....	-	-	-	-	-	-
Head cabbage.....	-	-	-	-	-	-
Kale	-	-	-	-	-	-
Tomatoes.....	*	*	-	-	-	-
Green peppers	-	-	-	-	-	-
Red peppers.....	*	*	-	-	-	-
Swiss chard	-	-	-	-	-	-
Others.....	-	-	-	-	-	-
Root Crops	261	151	152	-	-	-
Beet root.....	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onions.....	261	151	152	-	-	-
Potatoes	-	-	-	-	-	-
Garlic.....	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-
Others	-	-	-	-	-	-
Permanent Crops	-	-	-	-	-	-
Fruit Crops	-	-	-	-	-	-
Avocado	-	-	-	-	-	-
Bananas	-	-	-	-	-	-
Guava (Zeytuna)	-	-	-	-	-	-
Lemons.....	-	-	-	-	-	-
Mangoes.....	-	-	-	-	-	-
Oranges	-	-	-	-	-	-
Papayas	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-
Others	-	-	-	-	-	-
Stimulant Crops	-	-	-	-	-	-
Chat.....	-	-	-	-	-	-
Coffee.....	-	-	-	-	-	-
Hops	-	-	-	-	-	-
Others	-	-	-	-	-	-
Other Permanent Crops.....	-	-	-	-	-	-
Enset.....	-	-	-	-	-	-
Sugar Cane	-	-	-	-	-	-
Others	-	-	-	-	-	-

TABLE 6.15.2 RURAL BELG

CROP	Application of Total Fertilizer		Application of Fertilizer by Type and Quantity				
			Natural		Chemical – DAP		
	Holders	Hectares	Holders	Hectares	Holders	Hectares	Quintals
TOTAL	340	152	215	66	-	-	-
Grain Crops	247	84	169	51	-	-	-
Cereals	237	79	159	47	-	-	-
Teff	111	19	103	17	-	-	-
Barley	*	*	*	*	-	-	-
Wheat	15	2	15	2	-	-	-
Maize	*	*	68	*	-	-	-
Sorghum	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	45	4	45	4	-	-	-
Horse beans	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-
Haricot beans	37	3	37	3	-	-	-
Chick peas	*	*	*	*	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oil Seeds	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-
Sufflower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Other Grains	-	-	-	-	-	-	-
Vegetables	*	*	*	*	-	-	-
Lettuce	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-
Kale	-	-	-	-	-	-	-
Tomatoes	*	*	*	*	-	-	-
Green peppers	*	*	*	*	-	-	-
Red peppers	*	*	*	*	-	-	-
Swiss chard	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-
Root Crops	58	39	*	*	-	-	-
Beet root	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-
Onions	58	39	*	*	-	-	-
Potatoes	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-

TABLE 6.15 .2 CONTD.

CROP	Application of Fertilizers by Type and Quantity					
	Chemical – UREA			Chemical - DAP & UREA		
	Holders	Hectares	Quintals	Holders	Hectares	Quintals
TOTAL	*	*	48	*	*	*
Grain Crops	*	*	*	-	-	-
Cereals	*	*	*	-	-	-
Teff	*	*	*	-	-	-
Barley	-	-	-	-	-	-
Wheat	-	-	-	-	-	-
Maize	*	*	*	-	-	-
Sorghum	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulses	-	-	-	-	-	-
Horse beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
Haricot beans	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oil Seeds	-	-	-	-	-	-
Neug	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-
Sufflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Other Grains	-	-	-	-	-	-
Vegetables	*	*	*	-	-	-
Lettuce	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-
Kale	-	-	-	-	-	-
Tomatoes	*	*	*	-	-	-
Green peppers	*	*	*	-	-	-
Red peppers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Others	-	-	-	-	-	-
Root Crops	*	*	32	*	*	*
Beet root	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onions	*	*	32	*	*	*
Potatoes	-	-	-	-	-	-
Garlic	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-
Others	-	-	-	-	-	-
Permanent Crops	*	*	48	*	*	*
Fruit Crops	*	*	*	-	-	-
Avocado	*	*	*	-	-	-
Bananas	*	*	*	-	-	-
Guava (Zeytuna)	-	-	-	-	-	-
Lemons	-	-	-	-	-	-
Mangoes	*	*	*	-	-	-
Oranges	-	-	-	-	-	-
Papayas	-	-	-	-	-	-
Pineapples	-	-	-	-	-	-
Others	-	-	-	-	-	-
Stimulant Crops	-	-	-	-	-	-
Chat	-	-	-	-	-	-
Coffee	-	-	-	-	-	-
Hops	-	-	-	-	-	-
Others	-	-	-	-	-	-
Other Permanent Crops	-	-	-	-	-	-
Enset	-	-	-	-	-	-
Sugar Cane	-	-	-	-	-	-
Others	-	-	-	-	-	-

TABLE 6.16: Number of Holders Applying Fertilizer, Fertilized Area, and Quantity of Fertilizers by Crop Type for Urban Areas in Meher Season, for Private Holdings

CROP	Application of Total Fertilizers		Application of Fertilizers by Type					
	Holders	Hectares	Natural		Chemical		Natural and Chemical	
			Holders	Hectares	Holders	Hectares	Holders	Hectares
TOTAL	70	119	24	16	47	93	*	*
Grain Crops	22	16	13	12	*	*	*	*
Cereals	17	14	11	11	-	-	*	*
Teff	-	-	-	-	-	-	-	-
Barley	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-
Maize	17	14	11	11	-	-	*	*
Sorghum	-	-	-	-	-	-	-	-
Finger millet	-	-	-	-	-	-	-	-
Oats ('Aja')	-	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-	-
Pulses	-	-	-	-	-	-	-	-
Horse beans	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-
Haricot beans	-	-	-	-	-	-	-	-
Chick peas	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-
Soya	-	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-	-
Oil Seeds	-	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-
Ground nuts	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-	-
Other Grains	*	*	*	*	*	*	*	*
Vegetables	26	*	*	*	21	*	*	*
Lettuce	-	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-	-
Kale	-	-	-	-	-	-	-	-
Tomatoes	26	*	*	*	21	*	*	*
Green peppers	-	-	-	-	-	-	-	-
Red peppers	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Root Crops	49	52	*	*	41	44	*	*
Beet root	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-
Onions	49	52	*	*	41	44	*	*
Potatoes	-	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-	-
Taro ('Godere')	-	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Permanent Crops	3	*	3	*	-	-	-	-
Fruit Crops	1	*	1	*	-	-	-	-
Avocado	-	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-	-
Guava (Zeytuna)	-	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-	-
Mangoes	-	-	-	-	-	-	-	-
Oranges	-	-	-	-	-	-	-	-
Papayas	1	*	1	*	-	-	-	-
Pineapples	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Stimulant Crops	-	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Hops	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
Other Permanent Crops	3	*	3	*	-	-	-	-
Enset	-	-	-	-	-	-	-	-
Sugar Cane	3	*	3	*	-	-	-	-
	-	-	-	-	-	-	-	-

TABLE 6.17: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS

All Crops

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	2802	1329	2128	657	117	91	42
Zone 1	695	356	677	343	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	536	283	518	270	*	*	*
Afambo	143	*	143	*	-	-	-
Zone 3	2107	973	1451	314	107	82	37
Amibara	*	*	*	*	-	-	-
Awash Fentale	407	396	53	*	*	*	*
Argoba Liyu	816	282	637	146	85	45	24

TABLE 6.17 Contd.

All Crops								
Geographic Area	Application of Fertilizers by Type and Quantity							
	Chemical – UREA			Chemical - DAP & UREA			Chemical(Urban)	
	Holders	Hectares	Quintals	Holders	Hectares	Quintals	Holders	Hectares
Afar Killil	519	369	247	238	*	45	53	103
Zone 1	*	*	-	-	-	-	*	*
Dubti	-	-	-	-	-	-	-	-
Asayita	*	*	-	-	-	-	*	*
Afambo	-	-	-	-	-	-	-	-
Zone 3	512	366	247	238	*	45	52	101
Amibara	*	*	*	*	*	*	*	*
Awash Fentale	313	227	193	-	-	-	49	101
Argoba Liyu	45	38	30	131	53	34	-	-

TABLE 6.17.1: RURAL HOLDING

All Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	2606	1057	1949	576	117	91	42
Zone 1	680	342	664	331	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	521	269	505	258	*	*	*
Afambo	143	*	143	*	-	-	-
Zone 3	1926	716	1286	245	107	82	37
Amibara	*	*	*	*	-	-	-
Awash Fentale	313	250	-	-	*	*	*
Argoba Liyu	735	232	562	122	85	45	24

TABEL 6.17.1: CONTD.

All Crops

Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	460	285	199	230	*	43
Zone 1	*	*	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	*	*	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	454	283	199	230	*	43
Amibara	*	*	*	*	*	*
Awash Fentale	313	212	182	-	-	-
Argoba Liyu	*	*	*	124	50	32

TABEL 6.17.2: RURAL MEHER

All Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	2606	1057	1949	576	117	91	42
Zone 1	680	342	664	331	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	521	269	505	258	*	*	*
Afambo	143	*	143	*	-	-	-
Zone 3	1926	716	1286	245	107	82	37
Amibara	*	*	*	*	-	-	-
Awash Fentale	313	250	-	-	*	*	*
Argoba Liyu	735	232	562	122	85	45	24

TABEL 6.17.2: CONTD.

All Crops						
Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	460	285	199	230	*	43
Zone 1	*	*	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	*	*	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	454	283	199	230	*	43
Amibara	*	*	*	*	*	*
Awash Fentale	313	212	182	-	-	-
Argoba Liyu	*	*	*	124	50	32

TABEL 6.17.3: RURAL BELG

All Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	340	152	215	66	-	-	-
Zone 1	-	-	-	-	-	-	-

Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	340	152	215	66	-	-
Amibara	*	*	*	*	-	-
Awash Fentale	68	42	*	*	-	-
Argoba Liyu	165	50	135	24	-	-

TABEL 6.17.3: CONTD.

All Crops						
Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	*	48	*	*	*
Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	*	48	*	*	*
Amibara	*	*	*	-	-	-
Awash Fentale	*	*	*	-	-	-
Argoba Liyu	*	*	*	*	*	*

TABEL 6.17.4: URBAN HOLDINGS.

All Crops								
Geographic Area	Application of Total Fertilizers		Type of Fertilizer Applied					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	70	119	24	16	47	93	*	*
Zone 1	15	14	13	12	-	-	*	*
Dubti	-	-	-	-	-	-	-	-
Asayita	15	14	13	12	-	-	*	*
Zone 3	55	105	10	*	47	93	*	*
Amibara	6	1	3	*	*	*	-	-
Awash Fentale	49	104	*	*	44	93	*	*

TABLE 6.18: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS

Grain Crops								
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied					
			Natural		Dap			
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal	
Afar Killil	1939	863	1479	533	95	53	28	

Zone 1	626	345	608	332	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	532	283	514	270	*	*	*
Afambo	*	*	*	*	-	-	-
Zone 3	1312	518	871	201	85	45	24
Amibara	*	*	*	*	-	-	-
Awash Fentale	114	94	*	*	-	-	-
Argoba Liyu	751	256	594	144	85	45	24

TABLE 6.18 CONTD.

Grain Crops									
Geographic Area	Application of Fertilizers by Type and Quantity								
	Chemical – UREA			Chemical - DAP & UREA			Chemical(Urban)		
	Holders	Hectares	Quintals	Holders	Hectares	Quintals	Holders	Hectares	
Afar Killil	*	*	62	230	*	43	*	*	*
Zone 1	*	*	-	-	-	-	*	*	*
Dubti	-	-	-	-	-	-	-	-	-
Asayita	*	*	-	-	-	-	*	*	*
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	*	*	62	230	*	43	*	*	*
Amibara	*	*	*	*	*	*	*	*	*
Awash Fentale	64	*	*	-	-	-	*	*	*
Argoba Liyu	*	*	*	124	50	32	-	-	-

TABLE 6.18.1: RURAL HOLDING

Grain Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	1803	763	1336	470	95	53	28
Zone 1	611	330	595	319	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	517	269	500	258	*	*	*
Afambo	*	*	*	*	-	-	-
Zone 3	1192	432	741	150	85	45	24
Amibara	*	*	*	*	-	-	-
Awash Fentale	64	*	-	-	-	-	-
Argoba Liyu	683	230	509	120	85	45	24

TABLE 6.18.1: CONTD.

Grain Crops						
Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	134	47	230	*	43
Zone 1	*	*	-	-	-	-

Dubti	-	-	-	-	-	-
Asayita	*	*	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	132	47	230	*	43
Amibara	*	*	*	*	*	*
Awash Fentale	64	*	*	-	-	-
Argoba Liyu	*	*	*	124	50	32

TABEL 6.18.2: RURAL MEHER

Geographic Area	Grain Crops						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	1803	763	1336	470	95	53	28
Zone 1	611	330	595	319	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	517	269	500	258	*	*	*
Afambo	*	*	*	*	-	-	-
Zone 3	1192	432	741	150	85	45	24
Amibara	*	*	*	*	-	-	-
Awash Fentale	64	*	-	-	-	-	-
Argoba Liyu	683	230	509	120	85	45	24

TABLE 6.18.2: CONTD.

Geographic Area	Grain Crops					
	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	134	47	230	*	43
Zone 1	*	*	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	*	*	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	132	47	230	*	43
Amibara	*	*	*	*	*	*
Awash Fentale	64	*	*	-	-	-
Argoba Liyu	*	*	*	124	50	32

TABEL 6.18.3 : RURAL BELG

Geographic Area	Grain Crops						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	247	84	169	51	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	247	84	169	51	-	-	-

Amibara	*	*	-	-	-	-	-
Awash Fentale	*	*	*	*	-	-	-
Argoba Liyu	131	26	123	24	-	-	-

TABEL 6.18.4: URBAN HOLDINGS

Geographic Area	Grain Crops							
	Application of Total Fertilizers		Application of Fertilizers by Type and Quality					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	22	16	13	12	*	*	*	*
Zone 1	15	14	13	12	-	-	*	*
Dubti	-	-	-	-	-	-	-	-
Asayita	15	14	13	12	-	-	*	*
Zone 3	*	*	-	-	*	*	*	*
Amibara	*	*	-	-	*	*	-	-
Awash Fentale	*	*	-	-	-	-	*	*

TABLE 6.19: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS.

Cereals							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	1894	838	1435	517	95	53	28
Zone 1	619	338	601	326	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	525	276	506	264	*	*	*
Afambo	*	*	*	*	-	-	-
Zone 3	1275	500	834	192	85	45	24
Amibara	*	*	*	*	-	-	-
Awash Fentale	114	94	*	*	-	-	-
Argoba Liyu	737	239	578	135	85	45	24

TABLE 6.19 CONTD.

Cereals									
Geographic Area	Application of Fertilizers by Type and Quantity								
	Chemical – UREA			Chemical – DAP & UREA			Chemical(Urban)		
	Holders	Hectares	Quintals	Holders	Hectares	Quintals	Holders	Hectares	
Afar Killil	*	*	58	230	*	42	*	*	*
Zone 1	*	*	-	-	-	-	*	*	*
Dubti	-	-	-	-	-	-	-	-	-
Asayita	*	*	-	-	-	-	*	*	*
Afambo	-	-	-	-	-	-	-	-	-
Zone 3	*	*	58	230	*	42	*	*	*
Amibara	*	*	*	*	*	*	-	-	-
Awash Fentale	64	*	*	-	-	-	*	*	*
Argoba Liyu	*	*	*	124	48	32	-	-	-

TABEL 6.19.1 RURAL HOLDING

Geographic Area	Cereals						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
			Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	1763	745	1304	460	95	53	28
Zone 1	606	326	589	315	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	511	264	495	253	*	*	*
Afambo	*	*	*	*	-	-	-
Zone 3	1157	419	714	145	85	45	24
Amibara	*	*	*	*	-	-	-
Awash Fentale	64	*	-	-	-	-	-
Argoba Liyu	669	217	503	115	85	45	24

TABLE 6.19.1 CONTD.

Geographic Area	Cereals					
	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	128	43	230	*	42
Zone 1	*	*	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	*	*	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	125	43	230	*	42
Amibara	*	*	*	*	*	*
Awash Fentale	64	*	*	-	-	-
Argoba Liyu	*	*	*	124	48	32

TABEL 6.19.2 RURAL MEHER

Geographic Area	Cereals						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
			Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	1763	745	1304	460	95	53	28
Zone 1	606	326	589	315	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	511	264	495	253	*	*	*
Afambo	*	*	*	*	-	-	-
Zone 3	1157	419	714	145	85	45	24
Amibara	*	*	*	*	-	-	-
Awash Fentale	64	*	-	-	-	-	-
Argoba Liyu	669	217	503	115	85	45	24

TABEL 6.19..2 : CONTD.

Geographic Area	Cereals					
	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	128	43	230	*	42
Zone 1	*	*	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	*	*	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	125	43	230	*	42
Amibara	*	*	*	*	*	*
Awash Fentale	64	*	*	-	-	-
Argoba Liyu	*	*	*	124	48	32

TABEL 6.19.2a: Teff

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	329	116	132	25	85	44	23
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	329	116	132	25	85	44	23
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	329	116	132	25	85	44	23

TABEL 6.19.2a: CONTD.

Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	*	*	111	38	31
Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	*	*	111	38	31
Amibara	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-
Argoba Liyu	*	*	*	111	38	31

TABEL 6.19.2b: Barley

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	100	6	100	6	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	100	6	100	6	-	-	-
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	100	6	100	6	-	-	-

TABEL 6.19.2c : Wheat

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	44	5	34	*	*	*	*
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	44	5	34	*	*	*	*
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	44	5	34	*	*	*	*

TABEL 6.19.2d : Maize

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	1447	561	1139	378	*	*	*
Zone 1	606	326	589	315	*	*	*
Dubti	*	*	*	*	-	-	-
Asayita	511	264	495	253	*	*	*
Afambo	*	*	*	*	-	-	-
Zone 3	841	*	550	63	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	64	*	-	-	-	-	-
Argoba Liyu	353	34	339	33	-	-	-

TABEL 6.19.2d: CONTD.

Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	*	39	*	*	*
Zone 1	*	*	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	*	*	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	*	39	*	*	*
Amibara	*	*	*	*	*	*
Awash Fentale	64	*	*	-	-	-
Argoba Liyu	*	*	-	*	*	-

TABEL 6.19.2e : Sorghum

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	44	5	34	*	*	*	*
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	44	5	34	*	*	*	*
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	44	5	34	*	*	*	*

TABEL 6.19.3: RURAL BELG

Cereals							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	237	79	159	47	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	237	79	159	47	-	-	-
Amibara	*	*	-	-	-	-	-
Awash Fentale	*	*	*	*	-	-	-
Argoba Liyu	121	21	113	20	-	-	-

TABEL 6.19.4: URBAN HOLDINGS

Cereals								
Geographic Area	Application of Total Fertilizers		Application of Fertilizers by Type and Quality					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	17	14	11	11	-	-	*	*
Zone 1	13	13	11	11	-	-	*	*
Dubti	-	-	-	-	-	-	-	-

Asayita	13	13	11	11	-	-	*	*
Zone 3	*	*	-	-	-	-	*	*
Amibara	-	-	-	-	-	-	-	-
Awash Fentale	*	*	-	-	-	-	*	*

TABLE 6.20: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS.

Geographic Area	Total Fertilized Cropland		Pulses				
			Type of Fertilizer Applied				
	Holder	Hectar	Natural		Dap		
			Holder	Hectar	Holder	Hectar	Quintal
A far Killil	181	14	145	13	-	-	-
Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	175	9	140	8	-	-	-
Amibara	*	*	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	140	8	140	8	-	-	-

TABEL 6.20.1: RURAL HOLDING

Geographic Area	Total Fertilized Cropland		Pulses				
			Type of Fertilizer Applied				
	Holder	Hectar	Natural		Dap		
			Holder	Hectar	Holder	Hectar	Quintal
A far Killil	136	9	100	8	-	-	-
Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	130	5	95	4	-	-	-
Amibara	*	*	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	95	4	95	4	-	-	-

TABEL 6.20.2: RURAL MEHER

Geographic Area	Total Fertilized Cropland		Pulses				
			Type of Fertilizer Applied				
	Holder	Hectar	Natural		Dap		
			Holder	Hectar	Holder	Hectar	Quintal
A far Killil	136	9	100	8	-	-	-
Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	130	5	95	4	-	-	-
Amibara	*	*	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	95	4	95	4	-	-	-

TABEL 6.20.2a : Haricot beans

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Type of Fertilizer Applied				
	Holder	Hectar	Natural		Dap		
			Holder	Hectar	Holder	Hectar	Quintal
A far Killil	116	*	80	*	-	-	-
Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-

Asayita	*	*	*	*	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	110	2	75	2	-	-	-
Amibara	*	*	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	75	2	75	2	-	-	-

TABEL 6.20.2b : Chick Peas

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
A far Killil	19	*	15	*	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	19	*	15	*	-	-	-
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	19	*	15	*	-	-	-

TABEL 6.20.3: RURAL BELG

Pulses							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
A far Killil	45	4	45	4	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	45	4	45	4	-	-	-
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	45	4	45	4	-	-	-

TABLE 6.21: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS

Oilseeds							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
A far Killil	72	3	50	1	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	72	3	50	1	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	62	3	39	1	-	-	-

TABLE 6.21.1: RURAL HOLDING

Oilseeds							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
A far Killil	72	3	50	1	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-

Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	72	3	50	1	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	62	3	39	1	-	-	-

TABLE 6.21.2: RURAL MEHER

Geographic Area	Oilseeds						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	72	3	50	1	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	72	3	50	1	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	62	3	39	1	-	-	-

TABLE 6.21.2a: Sunflower

Geographic Area	Oilseeds						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	41	1	26	1	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	41	1	26	1	-	-	-
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	41	1	26	1	-	-	-

TABLE 6.22: NUMBER OF HOLDERS APPLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Other Grains						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	62	*	62	*	-	-	-
Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	58	*	58	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	*	*	*	*	-	-	-
Argoba Liyu	-	-	-	-	-	-	-

TABLE 6.22.1: RURAL HOLDING

Geographic Area	Other Grains						
	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal

Afar Killil	*	*	*	*	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	*	*	*	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	21	*	13	*	-	-	-

TABLE 6.22.2: RURAL MEHER

Other Grains							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	*	*	*	*	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	*	*	*	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	21	*	13	*	-	-	-

TABLE 6.23: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS

Vegetables							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	213	81	141	*	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	213	81	141	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	26	*	*	*	-	-	-
Argoba Liyu	83	1	67	1	-	-	-

TABLE 6.23 Contd.

Vegetables								
Geographic Area	Application of Fertilizers by Type and Quantity							
	Chemical – UREA			Chemical – DAP & UREA			Chemical(Urban)	
	Holders	Hectares	Quintals	Holders	Hectares	Quintals	Holders	Hectares
Afar Killil	*	*	*	-	-	-	21	*
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	*	*	*	-	-	-	21	*
Amibara	*	*	*	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	21	*
Argoba Liyu	*	*	*	-	-	-	-	-

TABLE 6.23.1: RURAL HOLDING

Vegetables							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	98	2	90	2	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	98	2	90	2	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	64	1	56	1	-	-	-

TABLE 6.23.2: RURAL MEHER

Vegetables							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	98	2	90	2	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	98	2	90	2	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	64	1	56	1	-	-	-

TABLE 6.23.2a: Red peppers

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	49	1	41	1	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	49	1	41	1	-	-	-
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	49	1	41	1	-	-	-

TABEL 6.23.3: URBAN HOLDINGS

Vegetables								
Geographic Area	Application of Total Fertilizers		Application of Fertilizers by Type and Quality					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	26	*	*	*	21	*	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Zone 3	26	*	*	*	21	*	-	-
Amibara	-	-	-	-	-	-	-	-
Awash Fentale	26	*	*	*	21	*	-	-

TABLE 6.24: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS.

Root Crops

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	370	280	32	*	*	*	*
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	370	280	32	*	*	*	*
Amibara	*	*	*	*	-	-	-
Awash Fentale	297	251	*	*	*	*	*
Argoba Liyu	50	24	19	*	-	-	-

TABLE 6.24 Contd.

Root Crops								
Geographic Area	Application of Fertilizers by Type and Quantity							
	Chemical – UREA			Chemical – DAP & UREA			Chemical(Urban)	
	Holders	Hectares	Quintals	Holders	Hectares	Quintals	Holders	Hectares
Afar Killil	284	187	185	*	*	*	45	51
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	284	187	185	*	*	*	45	51
Amibara	*	*	*	-	-	-	-	-
Awash Fentale	249	*	*	-	-	-	45	51
Argoba Liyu	*	*	*	*	*	*	-	-

TABLE 6.24.1: RURAL HOLDING

Root Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	285	*	*	*	*	*	*
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	285	*	*	*	*	*	*
Amibara	*	*	*	*	-	-	-
Awash Fentale	249	*	-	-	*	*	*
Argoba Liyu	*	*	*	*	-	-	-

TABEL 6.24.1: CONTD.

Root Crops						
Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	261	151	152	-	-	-
Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	261	151	152	-	-	-
Amibara	*	*	*	-	-	-
Awash Fentale	249	*	*	-	-	-
Argoba Liyu	-	-	-	-	-	-

TABLE 6.24.2: RURAL MEHER

Root Crops		
Geographic	Total Fertilized	Type of Fertilizer Applied

Area	Cropland		Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	285	*	*	*	*	*	*
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	285	*	*	*	*	*	*
Amibara	*	*	*	*	-	-	-
Awash Fentale	249	*	-	-	*	*	*
Argoba Liyu	*	*	*	*	-	-	-

TABEL 6.24.2: CONTD.

Root Crops						
Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	261	151	152	-	-	-
Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	261	151	152	-	-	-
Amibara	*	*	*	-	-	-
Awash Fentale	249	*	*	-	-	-
Argoba Liyu	-	-	-	-	-	-

TABLE 6.24.2a: Onion

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	271	*	*	*	*	*	*
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	271	*	*	*	*	*	*
Amibara	*	*	-	-	-	-	-
Awash Fentale	249	*	-	-	*	*	*
Argoba Liyu	*	*	*	*	-	-	-

TABEL 6.24.2a: CONTD.

Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	261	151	152	-	-	-
Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	261	151	152	-	-	-
Amibara	*	*	*	-	-	-
Awash Fentale	249	*	*	-	-	-
Argoba Liyu	-	-	-	-	-	-

TABLE 6.24.3: RURAL BELG

Root Crops						
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied			
			Natural		Dap	
	Holder	Hectar	Holder	Hectar	Holder	Quintal
	58	39	*	*	-	-

Afar Killil

Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	58	39	*	*	-	-
Amibara	-	-	-	-	-	-
Awash Fentale	*	*	-	-	-	-
Argoba Liyu	36	24	*	*	-	-

TABEL 6.24.3: CONTD.

Root Crops						
Geographic Area	Type of Fertilizer Applied					
	UREA			DAP & UREA		
	Holder	Hectar	Quintal	Holder	Hectar	Quintal
Afar Killil	*	*	32	*	*	*
Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	*	*	32	*	*	*
Amibara	-	-	-	-	-	-
Awash Fentale	*	*	*	-	-	-
Argoba Liyu	*	*	*	*	*	*

TABEL 6.24.4: URBAN HOLDINGS

Root Crops								
Geographic Area	Application of Total Fertilizers		Application of Fertilizers by Type and Quality					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	49	52	*	*	41	44	*	*
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Zone 3	49	52	*	*	41	44	*	*
Amibara	-	-	-	-	-	-	-	-
Awash Fentale	49	52	*	*	41	44	*	*

TABLE 6.25: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR MEHER SEASON.

Permanent Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	*	*	*	*	-	-	-
Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-
Afambo	*	*	*	*	-	-	-
Zone 3	*	*	*	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	73	1	73	1	-	-	-

TABLE 6.25.1: RURAL MEHER

Permanent Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal

Afar Killil	*	*	*	*	-	-	-
Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-
Afambo	*	*	*	*	-	-	-
Zone 3	*	*	*	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	73	1	73	1	-	-	-

TABEL 6.25.2: URBAN HOLDINGS

Permanent Crops								
Geographic Area	Application of Total Fertilizers		Application of Fertilizers by Type and Quality					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	3	*	3	*	-	-	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Zone 3	3	*	3	*	-	-	-	-
Amibara	3	*	3	*	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-

TABLE 6.26: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN AREAS, FOR MEHER SEASON

Fruit Crops								
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied					
			Natural		Dap			
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal	
Afar Killil	*	*	*	*	-	-	-	-
Zone 1	*	*	*	*	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-	-
Afambo	*	*	*	*	-	-	-	-
Zone 3	*	*	*	*	-	-	-	-
Amibara	*	*	*	*	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	36	*	36	*	-	-	-	-

TABLE 6.26.1: RURAL MEHER

Fruit Crops								
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied					
			Natural		Dap			
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal	
Afar Killil	*	*	*	*	-	-	-	-
Zone 1	*	*	*	*	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	*	*	*	-	-	-	-
Afambo	*	*	*	*	-	-	-	-
Zone 3	*	*	*	*	-	-	-	-
Amibara	*	*	*	*	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	36	*	36	*	-	-	-	-

TABLE 6.26.1a: Lemons

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied					
			Natural		Dap			
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal	
Afar Killil	*	*	*	*	-	-	-	-

Zone 1	*	*	*	*	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	*	*	*	*	-	-	-
Zone 3	*	*	*	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	15	*	15	*	-	-	-

TABLE 6.26.1b: Papays

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	66	*	66	*	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	66	*	66	*	-	-	-
Amibara	*	*	*	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	21	*	21	*	-	-	-

TABEL 6.26.2: URBAN HOLDINGS

Permanent Crops								
Geographic Area	Application of Total Fertilizers		Application of Fertilizers by Type and Quality					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	1	*	1	*	-	-	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Zone 3	1	*	1	*	-	-	-	-
Amibara	1	*	1	*	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-

TABLE 6.27: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN ASREAS, FOR MEHER SEASON

Stimulant Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	29	*	29	*	-	-	
Zone 1	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	
Asayita	-	-	-	-	-	-	
Afambo	-	-	-	-	-	-	
Zone 3	29	*	29	*	-	-	
Amibara	-	-	-	-	-	-	
Awash Fentale	-	-	-	-	-	-	
Argoba Ljvu	29	*	29	*	-	-	

TABLE 6.27.1: RURAL MEHER

Stimulant Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	29	*	29	*	-	-	
Zone 1	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	

Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	29	*	29	*	-	-	-
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	29	*	29	*	-	-	-

TABLE 6.27.1a: Gesho

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	24	*	24	*	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	24	*	24	*	-	-	-
Amibara	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	24	*	24	*	-	-	-

TABLE 6.28: NUMBER OF HOLDERS APPLLYING FERTILIZERS, AREA, AND QUANTITY APPLIED BY CROP IN RURAL AND URBAN ASREAS, FOR MEHER SEASON

Other Permanent Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	126	2	126	2	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	126	2	126	2	-	-	-
Amibara	104	2	104	2	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	22	*	22	*	-	-	-

TABLE 6.28.1: RURAL MEHER

Other Permanent Crops							
Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	123	2	123	2	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-
Zone 3	123	2	123	2	-	-	-
Amibara	101	*	101	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	22	*	22	*	-	-	-

TABLE 6.28.1a: Suger Cane

Geographic Area	Total Fertilized Cropland		Type of Fertilizer Applied				
			Natural		Dap		
	Holder	Hectar	Holder	Hectar	Holder	Hectar	Quintal
Afar Killil	123	2	123	2	-	-	-
Zone 1	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-

Zone 3	123	2	123	2	-	-	-
Amibara	101	*	101	*	-	-	-
Awash Fentale	-	-	-	-	-	-	-
Argoba Liyu	22	*	22	*	-	-	-

TABEL 6.28.2: URBAN HOLDINGS

Geographic Area	Permanent Crops							
	Application of Total Fertilizers		Application of Fertilizers by Type and Quality					
			Natural		Chemical		Natural and Chemical	
	Holders	Hectars	Holders	Hectars	Holders	Hectars	Holders	Hectars
Afar Killil	3	*	3	*	-	-	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Zone 3	3	*	3	*	-	-	-	-
Amibara	3	*	3	*	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-

TABLE 6.29: HOLDERS APPLYING IMPROVED SEEDS AND QUANTITY BY TYPE OF CROP FOR RURAL AREAS IN MEHER SEASON, FOR PRIVATE HOLDINGS

Geographic Area	All crop		Grain		Cereals		Teff	
	Holder	Quintal	Holder	Quintal	Holder	Quintal	Holder	Quintal
Afar Killil	987	*	*	*	*	*	*	*
Zone 1	*	*	*	*	*	*	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	*	*	*	*	*	-	-
Afambo	*	*	*	*	*	*	-	-
Zone 3	919	*	*	*	*	*	*	*
Amibara	*	*	*	*	*	*	-	-
Awash Fentale	*	-	-	-	-	-	-	-
Argoba Liyu	38	*	34	*	31	*	*	*

TABLE 6.29: CONTD.

Geographic Area	Sunflower		Sesame		Rape seed		Other grains	
	Holder	Quintal	Holder	Quintal	Holder	Quintal	Holder	Quintal
Afar Killil	*	-	*	*	-	-	246	*
Zone 1	-	-	-	-	-	-	*	*
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	*	*
Afambo	-	-	-	-	-	-	-	-
Zone 3	*	-	*	*	-	-	240	-
Amibara	-	-	*	*	-	-	240	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	*	-	-	-	-	-	-	-

TABLE 6.29: CONTD.

Geographic Area	Number of Holders who used Improved Seeds				
	Root crops	Beet root	Carrot	Onions	Potatoes

Afar Killil	161	-	-	*	-
Zone 1	-	-	-	-	-
Dubti	-	-	-	-	-
Asayita	-	-	-	-	-
Afambo	-	-	-	-	-
Zone 3	161	-	-	*	-
Amibara	*	-	-	*	-
Awash Fentale	*	-	-	*	-
Argoba Liyu	-	-	-	-	-

TABLE 6.30: Holders Applying Agricultural Inputs and Participating in Extension Programs by Level of Education in Rural and Urban Areas, for Private Holdings

[illegible]

TABLE 6.30.1: RURAL HOLDINGS

[illegible]

TABLE 6.30.2: RURAL MEHER

EDUCATIONAL ATTAINMENT			Number of Holders Applying Agricultural Inputs								Number and Percentage of Holders Participating in Agriculture Extension Programs	
			Improved Seed		Irrigation		Fertilizer		Pesticide			
	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%	Holders	%
ALL.....	10497	100	987	9.4	7902	75.28	2606	24.83	859	8.18	*	*
Illiterate	8267	100	*	*	6062	73.33	2051	24.81	510	6.17	*	*
Literate, but no formal Education.....	1276	100	*	*	961	75.31	314	24.61	155	12.15	*	*
Completed Grade 1 .	72	100	*	*	*	*	*	*	-	-	-	-
Completed Grade 2 .	155	100	*	*	137	88.39	*	*	*	*	-	-
Completed Grade 3 .	92	100	*	*	63	68.48	*	*	*	*	-	-
Completed Grade 4 .	146	100	*	*	146	100	*	*	*	*	*	*
Completed Grade 5 .	107	100	*	*	107	100	*	*	*	*	-	-
Completed Grade 6 .	96	100	*	*	86	89.58	*	*	*	*	-	-
Completed Grade 7 .	49	100	-	-	*	*	*	*	-	-	-	-

[illegible]

TABLE 6.30.3: RURAL BELG

[illegible]

TABLE 6.30.4: URBAN HOLDINGS

[illegible]

TABLE 6.37: CROP AREA (HECTARES) DAMAGED BY CROP DISEASE AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Total Area Damaged							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	2298	7	158	409	858	583	98	*
Zone 1	875	*	26	127	346	280	95	-
Dubti	88	-	3	*	*	*	*	-
Asayita	559	*	20	75	203	195	*	-
Afambo	229	-	*	*	*	*	-	-
Zone 3	1423	7	131	281	512	302	*	*
Amibara	*	5	*	*	*	*	*	*
Awash Fentale	262	*	15	62	94	90	-	-
Argoba Liyu	752	2	54	146	356	194	-	-

TABLE 6.37.1: MEHER

Geographic Area	Total Area Damaged							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	2115	7	117	376	769	564	98	*
Zone 1	875	*	26	127	346	280	95	-
Dubti	88	-	3	*	*	*	*	-
Asayita	559	*	20	75	203	195	*	-
Afambo	229	-	*	*	*	*	-	-
Zone 3	1240	7	90	248	423	283	*	*
Amibara	*	5	*	*	*	*	*	*
Awash Fentale	226	*	15	60	61	90	-	-
Argoba Liyu	653	1	39	123	315	175	-	-

TABLE 6.37.2: BELG

Geographic Area	Total Area Damaged							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	183	5	107	42	*	-	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	183	5	107	42	*	-	-	-
Amibara	*	-	*	*	-	-	-	-
Awash Fentale	*	-	-	*	*	-	-	-
Argoba Liyu	99	5	66	24	*	-	-	-

TABLE 6.38: CROP AREA (HECTARES) DAMAGED BY CROP DISEASE AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Area Damaged by Crop Disease							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	760	1	64	153	308	169	*	*
Zone 1	293	-	8	67	*	64	*	-
Dubti	*	-	*	-	*	-	*	-
Asayita	52	-	4	20	15	*	-	-
Afambo	*	-	*	*	*	*	-	-
Zone 3	467	1	56	86	184	106	*	*
Amibara	*	*	*	*	*	*	*	*
Awash Fentale	151	*	15	30	51	54	-	-
Argoba Liyu	169	*	7	31	80	51	-	-

TABLE 6.38.1: MEHER

Geographic Area	Area Damaged by Crop Disease							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	714	1	39	152	292	167	*	*
Zone 1	293	-	8	67	*	64	*	-
Dubti	*	-	*	-	*	-	*	-
Asayita	52	-	4	20	15	*	-	-
Afambo	*	-	*	*	*	*	-	-
Zone 3	421	1	31	85	167	103	*	*
Amibara	*	*	*	*	*	*	*	*
Awash Fentale	151	*	15	30	51	54	-	-
Argoba Liyu	160	*	5	30	77	48	-	-

TABLE 6.38.2: BELG

Geographic Area	Area Damaged by Crop Disease							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	*	*	*	*	*	-	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	*	*	*	*	*	-	-	-
Amibara	*	-	*	*	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	10	*	*	*	*	-	-	-

TABLE 6.39: CROP AREA (HECTARES) DAMAGED BY FROST OR FLOODS AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Area Damaged by Frost or Floods							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	67	*	*	*	*	*	-	-
Zone 1	*	-	-	*	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	-	-	*	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	66	*	*	*	*	*	-	-
Amibara	*	*	*	*	-	-	-	-
Awash Fentale	48	-	-	*	*	*	-	-
Argoba Liyu	9	-	*	*	5	3	-	-

TABLE 6.39.1: MEHER

Geographic Area	Area Damaged by Frost or Floods							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	40	*	*	*	5	*	-	-
Zone 1	*	-	-	*	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	-	-	*	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	39	*	*	*	5	*	-	-
Amibara	*	*	*	*	-	-	-	-
Awash Fentale	25	-	-	*	-	*	-	-
Argoba Liyu	9	-	*	-	5	*	-	-

TABLE 6.40: CROP AREA (HECTARES) DAMAGED BY LOCUST AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Area Damaged by Locust							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	649	*	*	122	238	203	*	-
Zone 1	481	-	15	54	188	178	*	-
Dubti	11	-	*	*	*	-	-	-
Asayita	466	-	13	51	181	176	*	-
Afambo	*	-	-	*	-	*	-	-
Zone 3	169	*	*	*	50	*	-	-
Amibara	*	*	*	*	*	*	-	-
Awash Fentale	54	-	-	*	*	*	-	-
Argoba Liyu	31	-	2	3	20	6	-	-

TABLE 6.40.1: MEHER

Geographic Area	Area Damaged by Locust							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
Gambela Killil	626	*	*	111	226	203	*	-
ZONE 1	481	-	15	54	188	178	*	-
Jikawo	11	-	*	*	*	-	-	-
Itang	466	-	13	51	181	176	*	-
Gambela	*	-	-	*	-	*	-	-
ZONE 2	145	*	*	*	38	*	-	-
Abobo	*	*	*	*	*	*	-	-
Jor	*	-	-	*	*	*	-	-
Gog	28	-	1	3	19	6	-	-
Godare	626	*	*	111	226	203	*	-

TABLE 6.40.2: RURAL BELG

Geographic Area	Area Damaged by Locust							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	*	*	*	*	*	-	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	*	*	*	*	*	-	-	-
Amibara	*	-	*	-	-	-	-	-
Awash Fentale	*	-	-	*	*	-	-	-
Argoba Liyu	3	*	2	*	-	-	-	-

TABLE 6.41: CROP AREA (HECTARES) DAMAGED BY SHORTAGE OF RAIN AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Area Damaged by Shortage of Rain							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	6	*	-	*	3	*	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-

Afambo	-	-	-	-	-	-	-	-
Zone 3	6	*	-	*	3	*	-	-
Amibara	*	*	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	5	-	-	*	3	*	-	-

TABLE 6.41.1: RURAL MEHER

Geographic Area	Area Damaged by Shortage of Rain							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	6	*	-	*	3	*	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	6	*	-	*	3	*	-	-
Amibara	*	*	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	5	-	-	*	3	*	-	-

TABLE 6.42: CROP AREA (HECTARES) DAMAGED BY TOO MUCH RAIN AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Area Damaged by Too Much Rain							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	*	-	*	5	22	24	*	*
Zone 1	46	-	*	*	*	*	*	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	-	*	*	*	*	*	-
Afambo	*	-	-	*	*	*	-	-
Zone 3	*	-	*	*	9	*	-	*
Amibara	*	-	-	*	-	-	-	*
Awash Fentale	*	-	-	-	-	*	-	-
Argoba Liyu	15	-	*	*	9	5	-	-

TABLE 6.42.1: RURAL MEHER

Geographic Area	Area Damaged by Too Much Rain							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far Killil	*	-	*	5	22	24	*	*
Zone 1	46	-	*	*	*	*	*	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	-	*	*	*	*	*	-
Afambo	*	-	-	*	*	*	-	-
Zone 3	*	-	*	*	9	*	-	*
Amibara	*	-	-	*	-	-	-	*
Awash Fentale	*	-	-	-	-	*	-	-
Argoba Liyu	15	-	*	*	9	5	-	-

TABLE 6.43: CROP AREA (HECTARES) DAMAGED BY HAIL STONE AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Area Damaged by Wild Animals							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far K illil	6	-	*	-	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	6	-	*	-	*	*	-	-
Amibara	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	6	-	*	-	*	*	-	-

TABLE 6.43.1: RURAL MEHER

Geographic Area	Area Damaged by Wild Animals							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far K illil	6	-	*	-	*	*	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	6	-	*	-	*	*	-	-
Amibara	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	6	-	*	-	*	*	-	-

TABLE 6.44: CROP AREA (HECTARES) DAMAGED BY INSECT AND PESTS AND TOTAL SIZE OF HOLDING IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Area Damaged by Weeds							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far K illil	662	*	48	113	253	153	-	*
Zone 1	*	*	*	*	*	*	-	-
Dubti	*	-	-	-	*	*	-	-
Asayita	8	*	*	*	*	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	610	*	45	110	236	124	-	*
Amibara	*	*	*	*	-	-	-	*
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	515	1	44	109	236	124	-	-

TABLE 6.44.1: RURAL MEHER

Geographic Area	Area Damaged by Weeds							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far K illil	575	*	36	92	215	138	-	*
Zone 1	*	*	*	*	*	*	-	-
Dubti	*	-	-	-	*	*	-	-
Asayita	8	*	*	*	*	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	523	*	33	89	198	109	-	*
Amibara	*	*	*	*	-	-	-	*
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	429	1	32	88	198	109	-	-

TABLE 6.44.2: RURAL BELG

Geographic Area	Area Damaged by Weeds							
	Size of Holding (Hectares)							
	All	Under 0.1	0.1-0.5	0.51-1.00	1.01-2.00	2.01-5.00	5.01-10.00	Over 10
A far K illil	86	5	61	19	*	-	-	-
Zone 1	-	-	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	-	-	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	86	5	61	19	*	-	-	-
Amibara	-	-	-	-	-	-	-	-
Awash Fentale	-	-	-	-	-	-	-	-
Argoba Liyu	86	5	61	19	*	-	-	-

TABLE 6.31: TOTAL NUMBER OF HOLDERS BY EDUCATIONAL ATTAINMENT IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS

Geographic Area	All Holding											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	11326	8832	1398	76	162	119	166	121	117	60	*	
Zone 1	5914	4684	733	*	104	56	77	46	52	42	*	
Dubti	342	330	*	-	-	*	-	-	-	-	-	
Asayita	3663	2912	402	15	*	53	62	46	52	42	12	
Afambo	1908	1442	321	*	*	-	*	-	-	-	*	
Zone 3	5412	4148	665	*	*	63	*	76	65	*	*	
Amibara	1733	*	224	*	*	*	*	*	*	*	*	
Awash Fentale	1149	967	122	-	*	*	-	*	*	-	*	
Argoba Liyu	2529	2159	320	*	*	*	-	-	*	*	-	

TABLE 6.31.1: RURAL HOLDINGS

Geographic Area	All Holding											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate But not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	10731	8501	1276	72	155	92	146	107	96	49	*	
Zone 1	5393	4380	618	*	98	38	57	*	42	*	*	
Dubti	342	330	*	-	-	*	-	-	-	-	-	
Asayita	3142	2609	288	*	*	35	*	*	42	*	-	
Afambo	1908	1442	321	*	*	-	*	-	-	-	*	
Zone 3	5338	4121	658	*	*	*	*	*	*	*	*	
Amibara	1711	*	217	*	*	*	*	*	*	*	*	
Awash Fentale	1098	941	122	-	*	-	-	*	-	-	-	
Argoba Liyu	2529	2159	320	*	*	*	-	-	*	*	-	

TABLE 6.31.2: RURAL MEHER

Geographic Area	All Holding											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	10497	8267	1276	72	155	92	146	107	96	49	*	
Zone 1	5393	4380	618	*	98	38	57	*	42	*	*	
Dubti	342	330	*	-	-	*	-	-	-	-	-	.
Asayita	3142	2609	288	*	*	35	*	*	42	*	*	.
Afambo	1908	1442	321	*	*	-	*	-	-	-	*	
Zone 3	5104	3887	658	*	*	*	*	*	*	*	*	*
Amibara	1699	*	217	*	*	*	*	*	*	*	*	*
Awash Fentale	876	719	122	-	*	-	-	*	-	-	-	.
Argoba Liyu	2529	2159	320	*	*	*	-	-	*	*	*	-

TABLE 6.31.3: RURAL BELG

Geographic Area	All Holding											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	2002	1812	105	*	*	-	*	*	-	-	-	.
Zone 1	-	-	-	-	-	-	-	-	-	-	-	.
Dubti	-	-	-	-	-	-	-	-	-	-	-	.
Asayita	-	-	-	-	-	-	-	-	-	-	-	.
Afambo	-	-	-	-	-	-	-	-	-	-	-	.
Zone 3	2002	1812	105	*	*	-	*	*	-	-	-	.
Amibara	*	*	*	-	-	-	*	*	-	-	-	.
Awash Fentale	685	634	*	-	-	-	-	*	-	-	-	.
Argoba Liyu	782	715	55	*	*	-	-	-	-	-	-	.

Geographic Area	All Holding										
	All Holders	Grades Completed by Holder									
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Afar Killil	595	331	122	4	7	27	20	14	21	11	1
Zone 1	521	303	115	4	6	18	20	8	11	11	1
Dubti	-	-	-	-	-	-	-	-	-	-	-
Asayita	521	303	115	4	6	18	20	8	11	11	1
Zone 3	74	27	7	-	1	*	-	7	11	-	1
Amibara	22	1	7	-	1	*	-	3	6	-	-
Awash Fentale	52	26	-	-	-	*	-	*	*	-	1

[illegible]

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TABLE 6.32.3: RURAL BELG

Geographic Area	Holders Applying Improved Seeds											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	*	*	-	-	-	-	*	*	-	-	-	
Zone 1	-	-	-	-	-	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	-	-	-	-	-	-	-	-	-	-	-	
Afambo	-	-	-	-	-	-	-	-	-	-	-	
Zone 3	*	*	-	-	-	-	*	*	-	-	-	
Amibara	*	*	-	-	-	-	*	-	-	-	-	
Awash Fentale	*	-	-	-	-	-	-	*	-	-	-	
Argoba Liyu	-	-	-	-	-	-	-	-	-	-	-	

TABLE 6.32.4: URBAN HOLDINGS

Geographic Area	Holders Applying Improved Seeds											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	28	*	*	-	-	*	-	2	10	-	-	
Zone 1	*	*	*	-	-	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	*	*	*	-	-	-	-	-	-	-	-	
Zone 3	23	-	1	-	-	*	-	2	10	-	-	
Amibara	10	-	1	-	-	*	-	2	5	-	-	
Awash Fentale	13	-	-	-	-	*	-	-	*	-	-	

TABLE 6.33: USES OF IRRIGATION BY EDUCATIONAL ATTAINMENT IN RURAL AND URBAN AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Holders With Irrigation											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	8782	6679	1086	*	144	90	165	121	107	49	*	
Zone 1	5821	4599	729	*	104	56	76	46	52	39	*	
Dubti	342	330	*	-	-	*	-	-	-	-	-	
Asayita	3585	2842	399	15	*	53	61	46	52	39	12	
Afambo	1894	1427	321	*	*	-	*	-	-	-	*	
Zone 3	2962	2080	357	*	*	*	*	76	*	*	*	
Amibara	*	*	198	*	*	*	*	*	*	*	*	
Awash Fentale	1146	964	122	-	*	*	-	*	*	-	*	
Argoba Liyu	194	153	37	-	-	-	-	-	*	-	-	

TABLE 6.33.1: RURAL HOLDINGS

Geographic Area	Holders Practicing Irrigation											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	8209	6362	968	*	137	63	146	107	86	*	*	
Zone 1	5318	4306	618	*	98	38	57	*	42	*	*	
Dubti	342	330	*	-	-	*	-	-	-	-	-	
Asayita	3082	2549	288	*	*	35	*	*	42	*	*	
Afambo	1894	1427	321	*	*	-	*	-	-	-	*	
Zone 3	2891	2056	350	*	*	*	*	*	*	*	*	
Amibara	*	*	191	*	*	*	*	*	*	*	*	
Awash Fentale	1098	941	122	-	*	-	-	*	-	-	-	
Argoba Liyu	194	153	37	-	-	-	-	-	*	-	-	

TABLE 6.33.2: RURAL MEHER

Geographic Area	Holders Practicing Irrigation											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	7902	6062	961	*	137	63	146	107	86	*	*	
Zone 1	5318	4306	618	*	98	38	57	*	42	*	*	
Dubti	342	330	*	-	-	*	-	-	-	-	-	
Asayita	3082	2549	288	*	*	35	*	*	42	*	*	
Afambo	1894	1427	321	*	*	-	*	-	-	-	*	
Zone 3	2583	1756	342	*	*	*	*	*	*	*	*	
Amibara	*	*	191	*	*	*	*	*	*	*	*	
Awash Fentale	853	696	122	-	*	-	-	*	-	-	-	
Argoba Liyu	179	145	30	-	-	-	-	-	*	-	-	

TABLE 6.33.3: RURAL BELG

Geographic Area	Holders Practicing Irrigation											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	1224	1084	66	-	-	-	*	*	-	-	-	
Zone 1	-	-	-	-	-	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	-	-	-	-	-	-	-	-	-	-	-	
Afambo	-	-	-	-	-	-	-	-	-	-	-	
Zone 3	1224	1084	66	-	-	-	*	*	-	-	-	
Amibara	*	*	*	-	-	-	*	*	-	-	-	
Awash Fentale	685	634	*	-	-	-	-	*	-	-	-	
Argoba Liyu	39	*	*	-	-	-	-	-	-	-	-	

TABLE 6.33.4: URBAN HOLDINGS

Geographic Area	Holders Practicing Irrigation											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	573	317	118	4	7	27	19	14	21	8	1	
Zone 1	502	293	111	4	6	18	19	8	11	8	1	
Dubti	-	-	-	-	-	-	-	-	-	-		
Asayita	502	293	111	4	6	18	19	8	11	8	1	
Zone 3	71	24	7	-	1	*	-	7	11	-		
Amibara	22	1	7	-	1	*	-	3	6	-		
Awash Fentale	49	23	-	-	-	*	-	*	*	-		

TABLE 6.34: APPLICATION OF FERTILIZERS BY EDUCATIONAL ATTAINMENT IN AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Holders Applying Fertilizers											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	2802	2193	335	*	*	29	*	*	12	*	*	
Zone 1	695	589	*	*	*	-	*	-	-	-	-	
Dubti	*	*	-	-	-	-	-	-	-	-	-	
Asayita	536	494	20	*	-	-	*	-	-	-	-	
Afambo	143	*	*	-	*	-	*	-	-	-	-	
Zone 3	2107	1604	290	*	*	29	*	*	12	*	*	
Amibara	*	*	*	*	-	-	*	*	*	-	-	
Awash Fentale	407	314	*	-	*	*	-	*	*	-	*	
Argoba Liyu	816	642	136	*	-	*	-	-	*	*	-	

TABLE 6.34.1: RURAL HOLDINGS

Geographic Area	Holders Applying Fertilizers										
	All Holders	Grades Completed by Holder									
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Afar Killil	2733	2162	329	*	*	*	*	*	*	*	.
Zone 1	680	581	*	-	*	-	*	-	-	-	.
Dubti	*	*	-	-	-	-	-	-	-	-	.
Asayita	521	487	*	-	-	-	*	-	-	-	.
Afambo	143	*	*	-	*	-	*	-	-	-	.
Zone 3	2052	1581	288	*	*	*	*	*	*	*	.
Amibara	*	*	*	*	-	-	*	*	-	-	.
Awash Fentale	359	291	*	-	*	-	-	-	-	-	.
Argoba Liyu	816	642	136	*	-	*	-	-	*	*	.

TABLE 6.34.2: RURAL MEHER

	Holdings Applying Fertilizer
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Geographic Area	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	2606	2051	314	*	*	*	*	*	*	*	.	.
Zone 1	680	581	*	-	*	-	*	-	-	-	-	.
Dubti	*	*	-	-	-	-	-	-	-	-	-	.
Asayita	521	487	*	-	-	-	*	-	-	-	-	.
Afambo	143	*	*	-	*	-	*	-	-	-	-	.
Zone 3	1926	1470	273	*	*	*	*	*	*	*	.	.
Amibara	*	*	*	*	*	-	*	*	-	-	-	.
Awash Fentale	313	245	*	-	*	-	-	-	-	-	-	.
Argoba Ljvu	735	576	121	*	-	*	-	-	*	*	.	.

TABLE 6.34.3: RURAL BELG

Geographic Area	Holders Applying Fertilizers											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	340	274	30	-	-	-	*	-	-	-	-	.
Zone 1	-	-	-	-	-	-	-	-	-	-	-	.
Dubti	-	-	-	-	-	-	-	-	-	-	-	.
Asayita	-	-	-	-	-	-	-	-	-	-	-	.
Afambo	-	-	-	-	-	-	-	-	-	-	-	.
Zone 3	340	274	30	-	-	-	*	-	-	-	-	.
Amibara	*	*	-	-	-	-	*	-	-	-	-	.
Awash Fentale	68	68	-	-	-	-	-	-	-	-	-	.
Argoba Liyu	165	135	30	-	-	-	-	-	-	-	-	.

TABLE 6.34.4: URBAN HOLDINGS

Geographic Area	Holders Applying Fertilizers											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	70	30	6	*	-	*	-	*	*	-	*	
Zone 1	15	8	4	*	-	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	15	8	4	*	-	-	-	-	-	-	-	
Zone 3	55	23	2	-	-	*	-	*	*	-	*	
Amibara	6	-	2	-	-	-	-	-	*	-	-	
Awash Fentale	49	23	-	-	-	*	-	*	*	-	*	

TABLE 6.35: APPLICATION OF PESTICIDES BY EDUCATIONAL ATTAINMENT IN AREAS, FOR PRIVATE HOLDINGS

Geographic	Holders With Application of Pesticides	
		Grades Completed by Holder

Area	All Holders	Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Afar Killil	970	563	170	-	*	*	*	*	*	-	*
Zone 1	33	26	-	-	*	-	*	-	-	-	.
Dubti	-	-	-	-	-	-	-	-	-	-	.
Asayita	33	26	-	-	*	-	*	-	-	-	.
Afambo	-	-	-	-	-	-	-	-	-	-	.
Zone 3	937	537	170	-	*	*	*	*	*	-	*
Amibara	458	*	*	-	-	*	*	*	*	-	*
Awash Fentale	325	232	*	-	*	*	-	*	*	-	*
Argoba Liyu	154	93	46	-	-	*	-	-	*	-	.

TABLE 6.35.1: RURAL HOLDINGS

Geographic Area	Holders With Application of Pesticides											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	895	533	168	-	*	*	*	*	*	-	*	
Zone 1	22	22	-	-	-	-	-	-	-	-	.	
Dubti	-	-	-	-	-	-	-	-	-	-	.	
Asayita	22	22	-	-	-	-	-	-	-	-	.	
Afambo	-	-	-	-	-	-	-	-	-	-	.	
Zone 3	873	511	168	-	*	*	*	*	*	-	*	
Amibara	446	*	*	-	-	*	*	*	*	-	*	
Awash Fentale	273	206	*	-	*	-	-	-	-	-	.	
Argoba Liyu	154	93	46	-	-	*	-	-	*	-	.	

TABLE 6.35.2: RURAL MEHER

Geographic Area	Holders With Application of Pesticides											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate But not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	859	510	155	-	*	*	*	*	*	-	-	
Zone 1	22	22	-	-	-	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	22	22	-	-	-	-	-	-	-	-	-	
Afambo	-	-	-	-	-	-	-	-	-	-	-	
Zone 3	838	488	155	-	*	*	*	*	*	-	-	
Amibara	446	*	*	-	-	*	*	*	*	-	-	
Awash Fentale	273	206	*	-	*	-	-	-	-	-	-	
Argoba Liyu	119	70	34	-	-	*	-	-	*	-	-	

TABLE 6.35.3: RURAL BELG

Geographic Area	Holders With Application of Pesticides											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	40	27	*	-	-	-	-	-	-	-	-	
Zone 1	-	-	-	-	-	-	-	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	-	-	-	-	-	-	-	-	-	-	-	
Afambo	-	-	-	-	-	-	-	-	-	-	-	
Zone 3	40	27	*	-	-	-	-	-	-	-	-	
Amibara	-	-	-	-	-	-	-	-	-	-	-	
Awash Fentale	-	-	-	-	-	-	-	-	-	-	-	
Argoba Liyu	40	27	*	-	-	-	-	-	-	-	-	

TABLE 6.35.4: URBAN HOLDINGS

Geographic Area	Holders With Application of Pesticides											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	75	31	2	-	*	*	*	7	10	-	-	
Zone 1	11	4	-	-	*	-	*	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	11	4	-	-	*	-	*	-	-	-	-	
Zone 3	64	26	2	-	-	*	-	7	10	-	-	
Amibara	12	-	2	-	-	*	-	3	5	-	-	
Awash Fentale	52	26	-	-	-	*	-	*	*	-	-	

TABLE 6.36: HOLDERS PARTICIPATING IN AGRICULTURAL EXTENSION BY EDUCATION AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Holders Participating in Agricultural Extension											
	All Holders	Grades Completed by Holder										
		Illiterate	Literate but not Formal Education	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	
Afar Killil	*	*	*	-	-	-	*	-	-	-	-	
Zone 1	*	*	*	-	-	-	*	-	-	-	-	
Dubti	-	-	-	-	-	-	-	-	-	-	-	
Asayita	*	*	*	-	-	-	*	-	-	-	-	
Afambo	-	-	-	-	-	-	-	-	-	-	-	
Zone 3	*	*	*	-	-	-	*	-	-	-	-	
Amibara	*	*	-	-	-	-	*	-	-	-	-	
Awash Fentale	*	-	*	-	-	-	-	-	-	-	-	
Argoba Livu	26	*	*	-	-	-	-	-	-	-	-	

[illegible]

TABLE 6.44:NUMBER OF AGRICULTURAL HOLDERS APPLYING IRRIGATION BY
SOURCE OF WATER IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Source of Water			
	River	Lake	Pond	Others
Afar Killil	9216	9111	31	*
Zone 1	6315	6289	19	*
Dubti	936	929	*	-
Asayita	3404	3385	*	*
Afambo	1976	1976	-	-
Zone 3	2900	2822	*	*
Amibara	*	*	-	-
Awash Fentale	1181	1181	-	-
Argoba Liyu	190	161	*	*

TABLE 6.45:NUMBER OF AGRICULTURAL HOLDERS IMPROVING SOIL FERTILITY
BY METHOD OF APPLICATION IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Method to Improve Soil Fertility	
	Crop Rotation	Burning of Soil
Afar Killil	3314	512
Zone 1	121	253
Dubti	*	-
Asayita	*	228
Afambo	94	*
Zone 3	3193	259
Amibara	*	*
Awash Fentale	335	190
Argoba Liyu	2053	*

TABLE 6.46: NUMBER OF HOLDERS BY REASON FOR NOT USING CHEMICAL FERTILIZER IN
RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Reason for not Using Chemical Fertilizer						
	Do not Know The Advantage	Too Expensive	Shortage of Money	Insufficient Supply	No Credit Service	Suspicious of its Efficiency	Others
Afar Killil	2659	*	1949	3425	*	71	1240
Zone 1	1733	33	376	2559	-	*	254
Dubti	*	*	*	133	-	*	*
Asayita	1364	30	314	792	-	-	238
Afambo	197	-	*	1634	-	-	*
Zone 3	927	*	1574	866	*	68	986
Amibara	190	*	*	193	*	*	326
Awash Fentale	56	-	*	321	-	-	269
Argoba Liyu	681	*	1203	353	24	64	391

TABLE 6.47:NUMBER OF AGRICULTURAL HOLDERS BY PLOWING METHOD
IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Method of Plowing				
	Hand	Ox/Horse	Tractor	Hand Dung	Tractor
	Dung	Driven		and Ox/Horse	and Ox/horse
				Driven	Driven
Afar Killil	3473	3841	452	4993	120
Zone 1	2187	1643	39	3306	114
Dubti	1166	*	*	159	*
Asayita	801	649	37	2201	89
Afambo	220	963	-	946	-
Zone 3	*	2198	413	1687	*
Amibara	*	-	413	*	-
Awash Fentale	-	840	-	511	-
Argoba Liyu	61	1358	-	1113	*

TABLE 6.48:NUMBER OF AGRICULTURAL HOLDERS BY METHOD OF
SOIL CONSERVATION IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Method of Soil Conservation				
	Terracing	Water Catchment	Afforestation	Plowing along The Counter	Others
Afar Killil	1717	2007	*	1410	295
Zone 1	433	485	*	150	243
Dubti	*	243	-	*	-
Asayita	312	242	*	125	143
Afambo	*	-	-	*	*
Zone 3	1284	1522	*	1260	52
Amibara	*	*	*	*	*
Awash Fentale	148	393	-	373	-
Argoba Liyu	843	499	-	767	50

TABLE 6.49: NUMBER OF AGRICULTURAL HOLDERS PRACTICING EXTENSION PACKAGES BY TYPE IN
RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Rain Shortage Areas	Rain Abundant Areas	Post Harvest Technology	Livestock Development	Economically Important Crops	Any two or more packages
Afar Killil	54	-	-	-	*	-
Zone 1	-	-	-	-	-	-
Dubti	-	-	-	-	-	-
Asayita	-	-	-	-	-	-
Afambo	-	-	-	-	-	-
Zone 3	54	-	-	-	*	-
Amibara	-	-	-	-	*	-
Awash Fentale	-	-	-	-	-	-

Argoba Liyu	54	-	-	-	-	-
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TABLE 6.50: NUMBER OF HOLDERS BY REASON FOR NOT BEING COVERED BY EXTENSION PROGRAM IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Reason for not Being Covered by Extension Program					
	Do not Know the Advantage	Shortage of Money	Suspicious of Its Efficiency	Program not Available	Insufficient Arable Land	Others
Afar Killil	2522	*	77	20069	229	406
Zone 1	1629	80	*	6868	-	*
Dubti	977	*	-	861	-	*
Asayita	590	74	*	3793	-	*
Afambo	*	-	-	2214	-	-
Zone 3	893	*	69	13200	229	263
Amibara	864	*	-	7621	*	*
Awash Fentale	-	-	-	2760	*	*
Argoba Liyu	29	*	69	2819	77	35

TABLE 6.51: NUMBER OF AGRICULTURAL HOLDERS WHO USE SERVICES IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Service Type			
	Credit Service	%	Advisory Service	%
Afar Killil	*	*	1339	100.00
Zone 1	53	*	485	36.22
Dubti	*	*	*	*
Asayita	51	*	474	35.40
Afambo	-	*	-	-
Zone 3	*	*	853	63.70
Amibara	*	*	*	*
Awash Fentale	-	*	513	38.31
Argoba Liyu	67	*	68	5.08

TABLE 6.52: NUMBER OF HOLDERS BY SOURCE OF CHEMICAL FERTILIZERS AND COST OF CHEMICAL FERTILIZERS IN RURAL AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Number of Holders by Source of Chemical Fertilizer						Cost of Chemical Fertilizer (Birr/Quintal)	
	Government	Private Organization	Traders	Others	Do not buy	Not Reporting	DAP	UREA
Afar Killil	631	*	414	*	11602	1584	268.00	195.26
Zone 1	239	94	*	-	6926	1095	256.79	196.00
Dubti	-	-	-	-	1380	106	-	-
Asayita	239	-	*	-	3512	537	256.79	196.00

Afambo	-	94	-	-	2034	452	-	-
Zone 3	392	*	407	*	4676	489	269.20	
Amibara	*	*	*	-	1444	368	257.80	193.04
Awash Fentale	*	*	317	-	996	72	260.00	196.00
Argoba Liyu	208	*	78	*	2236	49	275.77	195.89

TABLE 6.53: NUMBER OF HOLDERS WHO PRACTICE BELG FROM 1999/2000 TO 2001/02
IN URBAN AREAS, FOR PRIVATE HOLDINGS

Geographic Area	Holders who Practice Belg from 1999/2000 to 2001/02				
	Total	Female	%	Male	%
Afar Killil	69	-	-	69	100
Zone 1	42	-	-	42	100
Dubti	-	-	-	-	-
Asayita	42	-	-	42	100
Zone 3	27	-	-	27	100
Amibara	15	-	-	15	100
Awash	13	-	-	13	100

TABLE 6.54: NUMBER OF HOLDERS PARTICIPATING IN CROP SPECIFIC EXTENSION PACKAGE AND
AREA UNDER CROP SPECIFIC EXTENSION PACKAGE FOR RURAL AREAS IN MEHER SEASON

Geographic Area	All crops		Teff		Barley		Wheat	
	Holder	Hectare	Holder	Hectare	Holder	Hectare	Holder	Hectare
Afar Killil	*	*	-	-	-	-	-	-
Zone 1	*	*	-	-	-	-	-	-
Dubti	-	-	-	-	-	-	-	-
Asayita	*	*	-	-	-	-	-	-
Afambo	-	-	-	-	-	-	-	-
Zone 3	*	*	-	-	-	-	-	-
Amibara	*	*	-	-	-	-	-	-
Awash Fentale	*	*	-	-	-	-	-	-
Argoba Liyu	26	18	-	-	-	-	-	-

Annex - TABLE 6.1: AREA UNDER FARM MANAGEMENT PRACTICES WITH THEIR STANDAD ERRORS AND COEFFICIENT OF VARIATION IN RURAL AREAS FOR MEHER SEASON

[illegible]

Annex - TABLE 6.2: AREA UNDER FARM MANAGEMENT PRACTICES WITH THEIR STANDAD ERRORS AND COEFFICIENT OF VARIATION IN URBAN AREAS FOR MEHER SEASON

[illegible]

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