CHAPTER V

AREA AND PRODUCTION OF CROPS AND CROP UTILIZATION

1 INTRODUCTION

Ethiopian farming largely produces only enough food for the peasant holder and his family for consumption, leaving little to sell. This inadequate volume of production is ascribed to the tardy progress in the farming methods and scattered pieces of land holdings. Under this traditional sector, agriculture is practiced on public land and most of the produce is mainly for own consumption. The diverse climate of the country and the multiple utilizations of crops have prompted the vast majority of agricultural holders to grow various temporary and permanent crops. Despite the variation in the volume of production, the relative importance and pattern of growth of these crops are largely similar across many of the regions. This similarity is well observed and demonstrated in the statistical tables presented in this report. In some regions there seems to be a shift in choice of crops grown. Teff, barley and wheat do not figure prominently. Instead, maize, Groundnuts, sorghum & Sweet Potatoes are grown in greater volume than these crops. Dire Dawa Administraive Council, is a case in this regard.

There is a general agreement that the performance of an agricultural system should achieve a steady supply of food to the people of a country. But, unless special attention is focused on agriculture its performance can be impeded by vagaries of nature, population growth and scarcity and fragmentation of land, thus, affecting food supply and posing a challenge to the federal and regional governments. This situation calls for an overhaul of the agricultural system in the country or the regions.

In order to have a flourishing agriculture, which sustains reliable food supply, the federal and regional governments have to formulate and implement farm programs that ensure food security. The preparation, execution, monitoring and assessment of these programs entail statistics on agriculture particularly crop production since it is the prime target that national or regional agricultural policies aim at.

The collection of data on crop production should encompass all crop seasons in the agricultural calendar and farming activities in both rural and urban areas. It should also include the wide range of crops that are grown and embodied in the food security system, which are indispensable for a sustained provision of staple diet and other cash crops like coffee and Chat.

In view of this, crop production data for private peasant holdings for both Meher and Belg seasons in both rural and urban areas were collected in the census to provide the basis for decision making in the process of implementing timely food security measures and to make policy makers aware of the food situation in the country.

Thus, in this chapter the census data on production of temporary crops/annual crops such as cereals, pulses, oilseeds, vegetables and root crops are presented in Section 2. Also production of permanent crops that included fruit crops, stimulant crops and other permanent crops are dealt with in Section 3. Moreover, the utilization of temporary crops as well as permanent crops for various purposes such as household consumption, seed, sale, paying wages in kind …etc are indicated in Section 4.Furthermore S.E & C.V are provided as an annex to this chapter.

2. PRODUCTION OF TEMPORARY /ANNUAL CROPS

The types of temporary crops on which data were collected during the census are those that food security embraces: that is, the crops that are the staple diets in the country. In the statistical tables, these crops have been categorized into five groups for simplicity of description and comparison purposes. The groups are cereals, pulses, oilseeds, vegetables and root crops. The crops within each group have some similarity, which made the categorization necessary.

2.1 Cereals

These are crops that are produced in greater volume compared to the other crops because these are the principal staple crops every year and export commodities at times of bumper harvest in the country. Between the months of September 2001 and August 2002 it was learned that 242,794 quintals of cereals worth 106,028,521 Birr was exported from Ethiopia to various countries. (CSA,External Trade Statistics).

Cereals are grown in almost all regions of Ethiopia with notable variation in the extent of areas planted and the volume of production obtained. This variation is seemingly caused by a shift in choice of crops by the holders and difference in weather conditions. Summary Tables V-1 and V-2 and figures V-1 and V-2 reinforce this thought further by giving a highlight on the size of area planted to sorghum and maize and volume of production of these crops harvested in Dire Dawa Administrative council when compared to Teff, barley & wheat produced in the same region.

Summary Tables V-1 and V-2 show that 96.63% of the regional grain crop area was devoted to cereals and 97.65% of the grain production was that of cereals. Out of all area under grain, sorghum and maize took up

89.93% and 6.58%, these crops yield was 92.22% and 5.37% of the regional grain production. The area planted to grains in Belg season was 5.27% of the total grain crop area.

As the census result depicts, agricultural households in urban areas of the region contributed 2.11% and 1.34% of the regional grain crop area and grain production, respectively. Out of the total area under cereals and production, 2.19 % and 1.37 % were added by urban agricultural households, in the same order. The pattern of the principal crops is the same for both rural and urban holders.

2.2 Pulses

These crops are essential part of the dietary requirements for most Ethiopians. These crops also form a significant commodity group of export, earning a considerable amount of foreign exchange for the country and cash for peasant farmers. In 2001/02 (1994) E.C, between the months of September and August, 1,229,366 quintals of pulses valued at 351,997,759 Birr was exported from Ethiopia to various countries. (CSA,External Trade Statistics). These are some of the grounds for growing various pulses in all regions of the country with varying quantities. There is no doubt that economic benefits can accrue to the country from the production and export of more pulses if the agriculture in Ethiopia is given due attention in this regard.

A view of Summary Tables V-1 and V-2 enables to detect that only 2.88 % of the regional grain crop area was under pulses and 2.13 % of the grain production consisted of the same crops. Of the regional area under grain crops 2.85 % was planted to haricot beans, & the remaining area was under other pulses. The production obtained from haricot beans, was 2.12 % of the regional grain total.

2.3 Oilseeds

These crops are also of paramount importance as a source of cooking oil used to provide the fat required in the food consumed by the residents in the region. Moreover, oil crops have become a major commodity of export earning a great deal of foreign exchange. Between September 2001 and August 2002, Ethiopia exported 953,088 quintals of oilseeds valued at 351,952,634 Birr signaling that an increase in the production and export of these crops will definitely generate more money. (CSA,External Trade Statistics).

Summary Tables V-1 and V-2 indicate that only 0.49 % of the regional grain crop area was under oilseeds and 0.22 % of the regional grain production was that of the oil seeds. Of the total area under grain crops and grain production in Dire Dada Administrative Council, 0.35 %went for groundnuts.

2.4 Vegetables

These crops like fruits are also a good source of nourishment necessary for the healthy growth of humans. Dieticians often advise people to eat more of vegetables for their nutritional values. Vegetables are relatively cheaper and better available than other farm products in urban centers because these crops are usually grown as garden produces sometimes using irrigation. It may be worth to know that a certain amount of foreign exchange is drawn from vegetable exports. For instance between September 2001 - August 2002 Ethiopia exported 61,070 quintals of vegetables worth 11,543,144 Barr to various countries. Thus, on the grounds that vegetables are nutritionally and economically important, it is worth expanding vegetable farming. When one looks at Summary Tables V-1 – V-2 to have a picture of the vegetable production in Dire dawa Administrative Council one realizes that a lot has to be done in this regard.

Summary Tables V-1 and V-2 show that only 1.15 % of the regional crop area is under vegetables which formed 5.37 % of the total volume of production in the region. Tomatoes took up 1.08 % of the regional area under vegetables. The same crop made up 5.36 % of the vegetable production of the region. The contribution of vegetables to the regional production by urban holders was 0.03%.

2.5 Root Crops

Some root crops like onion and garlic are indispensable part of the daily meal of the Ethiopian population. These crops are essential to improve the taste and scent of the food. Potato, which is one of nature's precious gifts, is also very common in the dishes of most Ethiopians. This importance necessitated the growth and production of many of the root crops throughout the year often via the use of irrigation. Root crops are also a good source of cash and foreign exchange for the growers and the country, respectively. In 2001/02 (1994 E.C), the country has acquired a sum of 22,423,972 million Birr by exporting 120,497 quintals of root crops. The economic and nutritional importance of root crops has been a factor for practicing the agriculture in all the regions and growing the crops more than one time in a year. (CSA,External Trade Statistics).

Summary Tables V-1 and V-2 indicate the root crop situation in Dire Dawa Administrative Council. As the tables show, root crops covered only 2.2 % of the regional crop area and 11.17 % of the production volume. Onions and sweet potatoes shared 29.93 % and 58.94 % of the regional root crop area. Sweet potatoes added 6.04 % to the regional volume of root crop production.

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SUMMARY TABLE V-1 AREA UNDER TEMPORARY CROPS BY CROP TYPE FOR PRIVATE PEASANT HOLDINGS

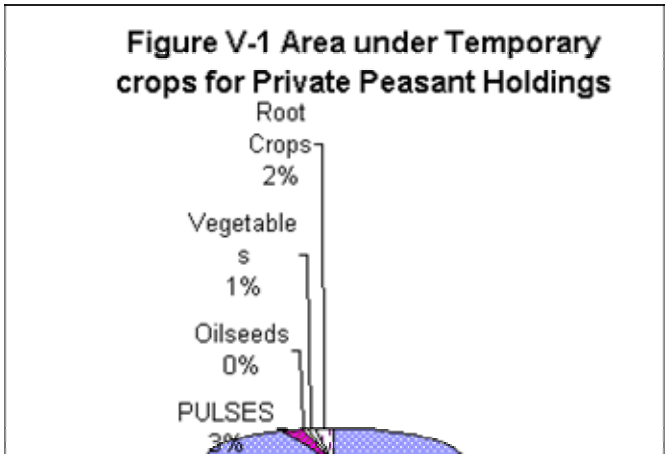
Dire Dawa Administrative Council

Crop	All		Rural		Urban
			Area (HA)		Area (HA)
	Area (HA)	%	Meher	Belg	Meher
All	7314.98		6778.91	385.33	150.75
Grain Crops	7070.31	100	6663.89	257.07	149.35
Cereals	6832.11	96.63	6425.9	256.85	149.35
Teff	-	-	-	-	-
Barley	*	*	*	-	*
Wheat	*	*	*	-	-
Maize	465.54	6.58	257.46	197.22	10.86
Sorghum	6358.04	89.93	6160.24	59.63	138.17
Finger Millet	*	*	*	-	-
Oats/"Aja"	*	*	*	-	-
Rice	-	-	-	-	-
Pulses	203.85	2.88	203.63	*	-
Horse beans	-	-	-	-	-
Field peas	-	-	-	-	-
Haricot beans	201.42	2.85	201.21	*	-
Chick-peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Soya beans	-	-	-	-	-
Fenugreek	*	*	*	-	-
Gibto	-	-	-	-	-
Oilseeds	34.36	0.49	34.36	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Groundnuts	24.57	0.35	24.57	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	*	-	-
Rapeseed	-	-	-	-	-
Vegetables	84.04	100	29.57	53.71	*
Lettuce	-	-	-	-	-
Head cabbage	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-
Tomatoes	79.08	94.1	29.32	49	*
Green peppers	*	*	*	*	-
Red peppers	-	-	-	-	-
Swiss chard	-	-	-	-	-
Root crops	160.63	100	85.44	74.55	*
Beetroot	-	-	-	-	-
Carrot	-	-	-	-	-
Onion	48.08	29.93	*	33.81	*
Potatoes	*	*	*	*	-
Garlic	*	*	*	-	-
Taro/'Godere'	-	-	-	-	-
Sweet potatoes	94.67	58.94	64.44	30.23	-

SUMMARY TABLE V-2 PRODUCTION UNDER TEMPORARY CROPS BY CROP TYPE FOR PRIVATE PEASANT HOLDINGS

Dire Dawa Administrative Council

Crop	All		Rural		Urban
			Production(QT)		Production (QT)
	Production(QT)	%	Meher	Belg	Meher
All	120308.4		104890.02	14018.89	1399.29
Grain Crops	100411	100	91460.05	*	1347.06
Cereals	98047.77	97.65	89096.8	*	1347.06
Teff	-	-	-	-	-
Barley	*	*	*	-	*
Wheat	*	*	*	-	-
Maize	5393.36	5.37	3299.87	*	110.81
Sorghum	92062.97	92.22	85749.42	*	1232.32
Finger Millet	-	-	-	-	-
Oats/"Aja"	*	*	*	-	-
Rice	-	-	-	-	-
Pulses	2139.11	2.13	2139.11	-	-
Horse beans	-	-	-	-	-
Field peas	-	-	-	-	-
Haricot beans	2126.76	2.12	2126.76	-	-
Chick-peas	-	-	-	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Soya beans	-	-	-	-	-
Fenugreek	*	*	*	-	-
Gibto	-	-	-	-	-
Oilseeds	224.13	0.22	224.13	-	-
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Groundnuts	*	*	*	-	-
Sunflower	-	-	-	-	-
Sesame	*	*	*	-	-
Rapeseed	-	-	-	-	-
Vegetables	6459.82	100	4398.22	*	34.14
Lettuce	-	-	-	-	-
Head cabbage	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-
Tomatoes	6454.49	99.92	4398.22	*	34.14
Green peppers	*	*	-	*	-
Red peppers	-	-	-	-	-
Swiss chard	-	-	-	-	-
Root crops	13437.57	100	9031.96	*	*
Beetroot	-	-	-	-	*
Carrot	-	-	-	-	*
Onion	*	*	*	*	*
Potatoes	*	*	*	*	*
Garlic	-	-	-	-	*
Taro/'Godere'	-	-	-	-	-
Sweet potatoes	7269.77	54.1	6443.74	*	*



3. PRODUCTION OF PERMANENT CROPS

Permanent crops are long term crops that occupy the field planted for a long period of time and largely harvested every year and do not have to be replanted for several years after each harvest. These include tree crops such as coffee, Enset, Chat, oranges, mangoes, bananas, papayas, avocados… etc. The trees that yield fruits like oranges; mangoes, papayas, apples and others are also known as fruit trees.

Permanent crops are a good source of cash both for the holders and the country generating handsome income and foreign exchange at the best of times. For instance, between September 2001 and August 2002 Ethiopia exported 53,142 quintals of fruits and nuts and 91,705quintals of Chat valued at16.5 and 426.7 million Birr,respectively . (CSA,External Trade Statistics). With these bits of information and the dietary and economic importance of the crops in mind, it is not difficult to project the profits that can be reaped from the permanent crops if the farming in this regard is well developed and managed.

Fruits are not only a source of cash but are also a reliable source of nutrition that is essential for the health and growth of humans. There has even been an oft-repeated advice from health authorities that we should include fruits in our daily meals to make it nutritious. The two points made on the importance of permanent crops underscore the fact that fruit farming should be encouraged and expanded to have a steady supply of the desired products.

It is possible to conjecture that permanent crops in Ethiopia are not as well developed as they are in other countries. But the potential to develop them is great as Ethiopia is blessed with diverse climate conducive to the crops. In order to direct efforts towards the development of permanent crops, one requires statistical data regarding this sector of the agriculture. Adequate data on type and volume of production, area under permanent crops
and their distribution have not been available. Hence, to bridge up this gap and alleviate the chagrin to data users the CSA has collected data on permanent crops.

Prior to the census, the CSA surveyed the situation about permanent crops in the country and then decided on the types of permanent crops, range of data items and method of enumeration to be included in the census. Hence, only major permanent

crops were covered during the census. Data on the types of crops were collected by holder interview while area and yield data were recorded by objective measurements. The numbers of Enset, Hops (Gesho) and fruit trees with the exception of pineapple were determined by counting the plants excluding seedlings.

In estimating the production of permanent crops, area, yield per unit area, yield per tree and number of fruit bearing trees are essential ingredients. These inputs were determined by physically measuring the area under crops in question, picking fruits, coffee berries and Chat produce from randomly demarcated plots or selected trees. The method involved crop cutting from small plots of rectangular shape of different sizes randomly placed in the selected crop field and a tree of fruit bearing age selected from all fruit bearing trees for each crop type and subsequent husking, drying weighing and recording the weight of the harvest of permanent crops. The crop cutting was performed for a sub sample of 20 households of the 30 households selected in each enumeration area. A 4m X 4m plot was demarcated for coffee and Chat and a 2m X 2m for pineapple and 1m X 1m plot for sugar cane were designated for the crop cutting exercise. The yields harvested from these plots and trees were immediately weighed (green weight) and/or weighed again after two weeks of drying to conform to the normal holder harvesting and drying practices. The coffee weight registered was that of clean coffee beans and the hops (Gesho) weight taken was that of the dry one. The green and dry weights were recorded on the appropriate forms.

For simplicity of description of the statistical tables and comparison purposes permanent crops have been grouped into three categories. Each category has a semblance of similarity, which necessitated the categorization. The categories are fruit crops, stimulant crops and other permanent crops. These categories include only permanent crops on which yield data have been collected.

3.1. Fruit Crops

Various kinds of fruit crops grow in different regions of the country yielding varying quantities of fruits within the private peasant holdings in the traditional way. There are

also a few fruit farms that are run by enterprises in the modern way. The volume of fruit production obtained from the peasant farms is small signalling the absence of development in fruit farming. A look at the tables helps to crystallize this point.

In Dire Dawa Administrative Council fruit crops constituted 10.4% of the permanent crop area yielding about 7.8 thousand quintals of fruits. Papayas, oranges, and mangoes shared 47.12%, 17.81 % and 16.27 % of the fruit crop area. Urban agricultural holders added 2.64 % to the regional permanent crop area. The same holders, contributed about 3.61 % of the regional fruit crop production. Oranges grown by urban holders accounted for 60.48 % of the urban area under fruit crops and 54.50 % of the urban fruit production in the region. For details, refer to Summary Table V-3 and figures V-3 and V-4.

3.2. <u>Stimulant Crops</u>:

This category embraces cash crops like coffee and Chat, which are extensively grown in many parts of the country. It is needless work to verify by quoting statistical evidences that coffee is a major foreign exchange earner. It may not be even surprising to hear that Chat farming is becoming a rapidly expanding phenomenon in Ethiopia because of its economic importance. As the census covered a wide range of crops, the statistics on Chat would perhaps be more tantalizing than the others. Summary Table V-3 shows the situation in which coffee, Chat, are found in Dire Dawa Administrative Council.

The data in the table demonstrates, more than three fourth ie, 89.6 % of the regional permanent crop area is under stimulant crops. Of the total area under stimulant crops in the region, 92.43 % is that of chat resulting in 98.2 % of the volume of stimulant crop production. About 92.46 % of the regional rural stimulant crop area and 98.21 % of the production were that of Chat.

SUMMARY TABLE V-3 AREA AND PRODUCTION OF PERMANENT CROPS BY CROP TYPE FOR PRIVATE

PEASANT HOLDINGS

Dire Dawa Administrative council

Crop type	All				Rural		Urban	
	Are in Crop (HA)	%	Production (QT)	%	Are in Crop (HA)	Production (QT)	Are in Crop (HA)	Production (QT)
All	909.29				885.3		23.99	
Fruit Crops	94.57	100	7818.59	100	71.95	7536.54	22.62	282.05
Avocados	-	-	-	-	-	-	-	-
Bananas	6.41	6.78	*	*	6.41	*	-	-
Guavas	*	*	-	-	*	-	-	-
Lemons	2.01	2.13	*	*	*	*	*	-
Mangoes	15.39	16.27	*	*	9.11	-	6.28	*
Oranges	16.84	17.81	370.75	4.74	*	*	13.68	153.71
Papayas	44.56	47.12	*	*	42.55	*	*	*
Pineapples	-	-	-	-	-	-	-	-
Stimulant Crops	814.72	100	13258.96	100	813.35	13258.33	*	*
Chat	753.06	92.43	13020.44	98.2	752.02	13020.44	*	-
Coffee	61.68	7.57	238.52	1.8	61.34	237.89	*	*
Hops	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-

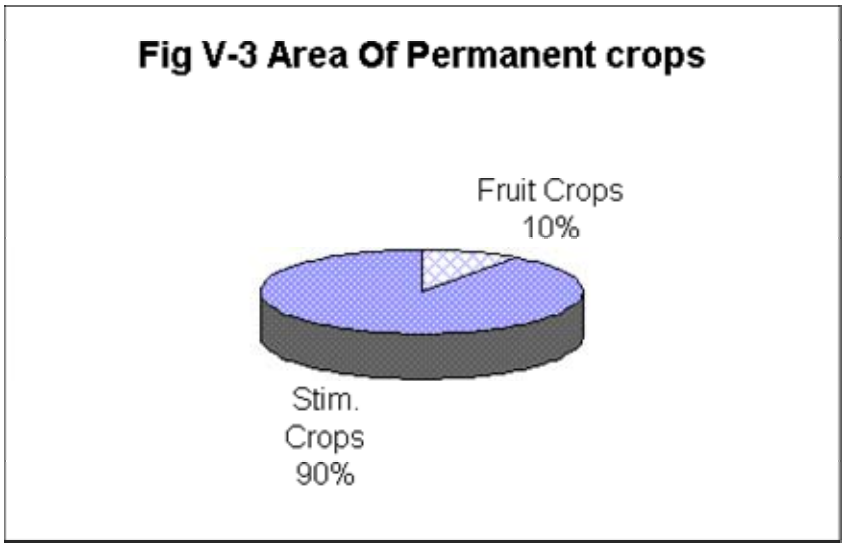


Fig V-4 production Of Permanent Crops

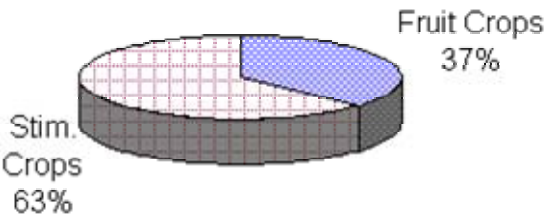
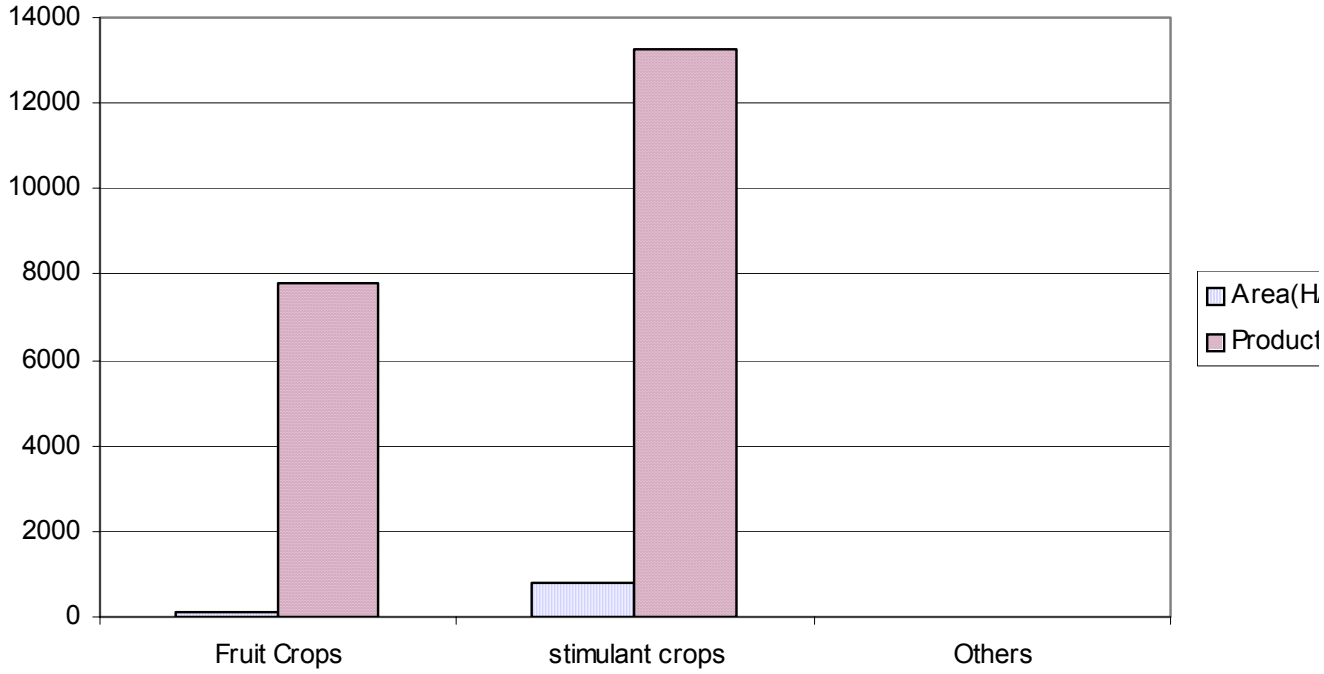


Fig.6 Area & Production Of Permanent crops



4. CROP UTILIZATION

Agriculture is the livelihood of the overwhelming majority of the Ethiopians. It is the source of food and cash for those who are engaged in the sector and others. Most agricultural holders acquire the food they consume and the cash they need to cover other expenses only from farming activities. Since farming in Ethiopia is often precarious and usually at the mercy of nature, it is invariably an arduous struggle for the holders to make ends meet. This, it often transpires, is true to the frequent shortfalls in the volume of production that occur in the country.

It is often said that what most Ethiopian agricultural holders produce is only enough to live, hand to mouth. This would be better said if it was statistically substantiated. There is plenty of information on the volume of crops produced within the private peasant holdings. But there is hardly any information on how the peasants utilize the crops they produce which will be indicative of the fact whether the holders have enough or little to sell in order to meet other expenses for living. Hence, data on crop utilization was collected in the 2001/02 Ethiopian Agricultural Sample Enumeration. Thus in the census taking, crop utilization was defined as the amount of agricultural produce used for own consumption, sale, seed, and wages in kind, animal feed and other purposes.

In light of this information gap, the CSA has collected some data on how holders use their agricultural produce in the agricultural year to provide some information on the subject. Interviewing the holders collected the data. They were asked to quantify their yearly crop utilization experience in percent based on common practice. Summary Table V-4 convey this information to shed some light on how holders utilize their crop produce. Information was sought for each crop type produced during the census year. The resulting data may help users to have some idea about crop usages by agricultural holders. In order to detect the differences in utilization of the various crops, it is better to look into the data by group of crops as categorized in the summary tables for simplicity and analogy.

Needless to say, as Summary Table V-4 points out, most of the cereal crops produced were used for household consumption. In Dire Dawa Administrative council about 85 % of the cereals produced were used for household consumption. About 9 % and 2 % were used for seed and sale, respectively. The remaining 4 % of the cereals produced was used for other purposes like wages, animal feed, etc. When the utilization is considered by crop type, it is easy to realize that between 84 % and 100 % of the crops in the cereals group were used for own consumption and between 9 % and 11 % of these crops were used for seed. Moreover, 1 % of the same crops in the same group were used for sale.

The pattern of utilization of pulses isn't much different either. As shown in Summary Table V-4 about 92 % of pulses were used for household consumption, 5 % for seed. The remaining 3 % of pulses were used for wages, animal feed and others. Considering utilization by crop type within the pulses group, between 92 % and 100 % of the crops were utilized for household consumption and 5 % of the same crops in the same group were use for seed in 2001/02 (1994 E.C.).

The picture of oilseeds utilization is distinctly different from that of cereals and pulses as portrayed in Summary Table V-4. About 49 %, 44 % and 2 % were used for sale, household consumption and seed, respectively. Taking utilization by crop type into account, between 27 % and 85 % of each crop type in the oilseeds category were used for household consumption, between 3-68 % for sale and 2-3 % for seed. It may reasonably be summed up that more of the oilseeds produced are used for sale or as cash crops.

The percentage of vegetables sold is more than that of cereals and pulses. About 80 % and 16 % of the vegetables produced were sold and used for household consumption respectively. The remaining percent were used for seed, wages, animal feed and others. The percent used by crop type with in the vegetables group were 80 % for sale, 16% for household consumption and 1 % for seed. For details, refer to Summary Table V-4.

The utilization of root crop production is the same as that of vegetables as indicated in the regional Summary Table V-4 About 95 % of the root crops were sold, 5% used for household consumption. The ranges of percent utilized by crop type within the root crops category fall between 20 %-60 % for consumption, 13 %-33 % for sale and 22-38 % for seed.

The permanent crop utilization is not different from that of cereals, pulses, vegetables and root crops. Thus, about 39 % of the crop was used for consumption at home and about 53 % for sale. The utilization by crop type within the permanent crop group ranges between 5 % and 50 % for household consumption and between 39 % and 93 %

for sale. Permanent crops are also used as cash crops like oilseeds. It is rational to conclude by looking at Summary Table V-4 that the peasant farmers sell more of what they produce leaving less to consumption.

SUMMARY TABLE V-4- CROP PRODUCTION AND PERCENT OF UTILIZATION
ALL HOLDINGS

Dire Dawa Administrative Council

Type of Crop	Total Production (Quintal)	Percent Utilized For: Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total							
Grain Crops	100411	84.64	9.06	2.35	*	1.16	2.79
Cereals	98047.77	84.74	9.6	0.83	0.83	0.97	3.02
Teff	-	-	-	-	-	-	-
Barley	*	88.65	11.35	-	-	-	-
Wheat	*	100	-	-	-	-	-
Maize	5393.36	86.08	9.18	1.11	-	2.83	0.79
Sorghum	92602.97	84.36	9.7	0.79	1.01	0.6	3.53
Finger millet	-	-	-	-	-	-	-
Oats “Aja”	*	100	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	2139.11	92.11	4.65	-	-	2.99	0.25
Horse beans	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-
Haricot beans	2126.76	91.88	4.78	-	-	3.08	0.26
Chick – peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	*	100	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	224.13	43.81	2.46	49.05	-	2	2.68
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	*	26.73	2.3	68.14	-	2.83	-
Safflower	-	-	-	-	-	-	-
Sesame	*	84.96	2.84	3.07	-	-	9.13
Rapeseed	-	-	-	-	-	-	-
Vegetables	6459.82	16.11	1.38	80.44	0.25	-	1.82
Lettuce	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-
Tomatoes	6454.49	16.11	1.38	80.44	0.25	-	1.82
Green peppers	*	-	-	-	-	-	-
Red peppers	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-
Root Crops	13437.57	5	-	95	-	-	-
Beetroot	-	-	-	-	-	-	-
Carrot	-	31.6	33.6	33.19	-	-	1.61
Onion	*	19.75	38.18	41.87	-	-	0.2
Potatoes	*	60.25	21.83	12.88	-	-	5.04
Garlic	-	-	-	-	-	-	-
Taro / Godere	-	-	-	-	-	-	-
Sweet potatoes	7269.77	92.93	-	2.6	-	0.08	4.39
Permanent crops	21300.64	38.83	0.73	52.55	0.54	0.02	7.32
Avocados	-	-	-	-	-	-	-
Bananas	*	22.39	-	77.06	-	-	0.54
Guavas	-	-	-	-	-	-	-
Lemons	*	7.38	-	92.62	-	-	-
Mangoes	*	5	-	92	-	-	3
Oranges	370.75	13.27	-	85.36	-	-	1.37
Papayas	*	22.42	1.47	73.11	-	-	3.01
Pineapple	-	-	-	-	-	-	-
Chat	13020.44	49.53	0.76	39.38	0.81	0.03	9.49
Coffee	461.61	9.76	-	87.03	-	-	3.21
Hops	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-

TABLE 5.1- ESTIMATE OF HOLDERS, AREA, PRODUCTION AND YIELD OF TEMPORARY CROPS FOR PRIVATE PEASANT HOLDINGS FOR MEHER SEASON

RURAL HOLDINGS

Dire Dawa Administrative Council

Crop	Number of Holders	Area		Production		Yield
		Hectares	%	Quintals	%	QT / HA
TOTAL	14051	6778.91	100	104890.2	100	
Grain Crops	14032	6663.89	98.3	91460.05	87.2	
Cereals	14032	6425.9	94.79	89096.8	84.94	
Teff	-	-	-	-	-	-
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	4690	257.46	3.8	3299.87	3.15	12.82
Sorghum	13750	6160.24	90.87	85749.42	81.75	13.92
Finger Millet	*	*	*	-	-	-
Oats / “Aja”	*	*	*	*	*	*
Rice	-	-	-	-	-	-
Pulses	3143	203.63	3	2139.11	2.04	
Horse beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
Haricot beans	3101	201.21	2.97	2126.76	2.03	10.57
Chick – peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*
Gibto.	-	-	-	-	-	-
Oilseeds	439	34.36	0.51	224.13	0.21	
Neug.	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Groundnuts	308	24.57	0.36	*	*	*
Safflower	-	-	-	-	-	-
Sesame	*	*	*	*	*	*
Rapeseed	-	-	-	-	-	-
Vegetables	1228	29.57	0.44	4398.22	4.19	
Lettuce	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-
Tomatoes	1200	29.32	0.43	4398.22	4.19	150.01
Green peppers	*	*	*	-	-	-
Red peppers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root Crops	2669	85.44	1.26	9031.96	8.61	
Beetroot	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	*	*	*	*	*	*
Potatoes	*	*	*	*	*	*
Garlic	*	*	*	-	-	-
Taro / “Godere”	-	-	-	-	-	-
Sweet potatoes	2208	64.44	0.95	6443.74	6.14	100

TABLE 5.2 ESTIMATES OF HOLDERS, AREA PRODUCTION AND YIEDL OF TEMPORARY CROP FOR PRIVATE PEASANT HOLDERS FOR BELG SEASON 2001/02 (1994 E.C.)

Dire Dawa Administrative Council

Crop	Holders	Area Hectares	%	Quintals	%	Production Yield QT/HA
TOTAL	4737	385.33		14018.89		
Grain Crop	3521	257.07	100	*	*	
Cereals	3521	256.85	99.91	*	*	
Teff	-	-	-	-	*	-
Barley	-	-	-	-	*	-
Wheat	-	-	-	-	*	-
Maize	3133	197.22	76.72	*	*	*
Sorghum	787	59.63	23.2	*	*	*
Finger Millet	-	-	-	-	*	-
Oats/'Aja'	-	-	-	-	*	-
Rice	-	-	-	-	*	-
Pulses	*	*	*	-	*	
Horse beans	-	-	-	-	*	-
Field peas	-	-	-	-	*	-
Haricot beans	*	*	*	-	*	-
Chick-peas	-	-	-	-	*	-
Lentils	-	-	-	-	*	-
Vetch	-	-	-	-	*	-
Soya bean		-	-	-	-	*
Fenugreek	-	-	-	-	*	-
Gibto	-	-	-	-	*	-
Oilseeds	-	-	-	-	*	
Neug	-	-	-	-	*	-
Linseed	-	-	-	-	*	-
Groundnut	-	-	-	-	-	*
Sunflower	-	-	-	-	*	-
Sesame	-	-	-	-	*	-
Rapeseed	-	-	-	-	*	-
Vegetables	1487	53.71	100	*	*	
Lettuce	-	-	-	-	*	-
Head Cabbage	-	-	-	-	*	-
Ethiopian	-	-	-	-	*	-
Tomatoes	1438	49	91.23	*	*	*
Green pepper	*	*	*	*	*	*
Red pepper	-	-	-	-	*	-
Swiss chard	-	-	-	-	*	-
Root crops	1936	74.55	100	*	*	
Beetroot	-	-	-	-	*	-
Carrot	-	-	-	-	*	-
Onion	896	33.81	45.35	*	*	*
Potatoes	*	*	*	*	*	*
Garlic	-	-	-	-	*	-
Taro/Godere		-	-	-	-	*
Sweet potatoes	984	30.23	40.55	*	*	*

TABLE 5.3- ESTIMATE OF HOLDERS, AREA, PRODUCTION AND YIELD OF TEMPORARYCROPS FOR PRIVATE PEASANT HOLDINGS FOR MEHER SEASON

URBAN HOLDINGS

Dire Dawa Administrative Council

Crop	Number of Holders	Area		Production		Yield
		Hectares	%	Quintals	%	QT / HA
TOTAL	588	150.75		1399.29		
Grain Crops	579	149.35	100	1347.06	100	
Cereals	579	149.35	100	1347.06	100	
Teff	-	-	-	-	-	-
Barley	*	*	*	*	*	*
Wheat	-	-	-	-	-	-
Maize	50	10.86	7.27	110.81	8.23	10.2
Sorghum	552	138.17	92.51	1232.32	91.48	8.92
Finger Millet	-	-	-	-	-	-
Oats / 'Aja'	-	-	-	-	-	-
Rice	-	-	-	-	-	-
Pulses	-	-	-	-	-	
Horse beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
Haricot beans	-	-	-	-	-	-
Chick – peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	
Neug	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	11	*	*	34.14	100	
Lettuce	-	-	*	-	-	-
Head cabbage	*	-	*	-	-	-
Ethiopian cabbage	-	-	*	-	-	-
Tomatoes	10	*	*	34.14	100	*
Green peppers	*	-	*	-	-	-
Red peppers	-	-	*	-	-	-
Swiss chard	-	-	*	-	-	-
Root Crops	*	*	*	*	*	
Beetroot	-	-	*	-	*	-
Carrot	-	-	*	-	*	-
Onion	*	*	*	*	*	*
Potatoes	-	-	*	-	*	-
Garlic	-	-	*	-	*	-
Taro / 'Godere'	-	-	*	-	*	-
Sweet potatoes	-	-	*	-	*	-

TABLE 5.4 - ESTIMATE OF HOLDERS, AREA, PRODUCTION AND YIELD OF TEMPORARY CROPS FOR PRIVATE PEASANT HOLDINGS FOR BOTH SEASONS

ALL HOLDINGS

Dire Dawa Administrative Council

Crop	Number of Holders	Area		Production		Yield
		Hectares	%	Quintals	%	QT / HA
TOTAL	14716	7314.98		120308.4		
Grain Crops	14689	7070.31	100	100411	100	
Cereals	14689	6832.11	96.63	98047.77	97.65	
Teff	-	-	-	-	-	-
Barley	*	*	*	*	*	*
Wheat	*	*	*	*	*	*
Maize	5889	465.54	6.58	5393.36	5.37	11.59
Sorghum	14351	6358.04	89.93	92602.97	92.22	14.56
Finger Millet	*	*	*	-	-	-
Oats / “Aja”	*	*	*	*	*	*
Rice	-	-	-	-	-	-
Pulses	3165	203.85	2.88	2139.11	2.13	
Horse beans	-	-	-	-	-	-
Field peas	-	-	-	-	-	-
Haricot beans	3123	201.42	2.85	2126.76	2.12	10.56
Chick – peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*
Gibto.	-	-	-	-	-	-
Oilseeds	439	34.36	0.49	224.13	0.22	
Neug.	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Groundnuts	308	24.57	0.35	*	*	*
Safflower	-	-	-	-	-	-
Sesame	*	*	*	*	*	*
Rapeseed	-	-	-	-	-	-
Vegetables	2070	84.04	100	6459.82	100	
Lettuce	-	-	-	-	-	-
Head cabbage	*	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-
Tomatoes	2041	79.08	94.1	6454.49	99.92	81.62
Green peppers	*	*	*	*	*	*
Red peppers	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-
Root Crops	3765	160.63	100	13437.57	100	
Beetroot	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	1193	48.08	29.93	*	*	*
Potatoes	*	*	*	*	*	*
Garlic	*	*	*	-	-	-
Taro / “Godere”	-	-	-	-	-	-
Sweet potatoes	2849	94.67	58.94	7269.77	54.1	76.79

TABLE 5.5 - ESTIMATE OF HOLDERS, AREA, PRODUCTION AND YIELD OF PERMANENT CROPS FOR PRIVATE PEASANT HOLDINGS

RURAL HOLDINGS

Dire Dawa Administrative Council

PERMANENT CROPS	NUMBER OF HOLDERS REPORTING	AREA IN CROP (HA)	%	TOTAL NUMBER OF TREES	NUMBER OF TREES PER HECTARE	NUMBER OF TREES BEARING	PRODUCTION (QT)	%	YIELD (QT / HA)
ALL	9461	885.3							
Fruit Crops	3214	71.95	100	77214	1073	53849	7536.54	100	
Avocados	-	-	-	-	-	-	-	-	-
Bananas	537	6.41	8.91	*	*	*	*	*	*
Guavas	762	*	*	2425	*	-	-	-	-
Lemons	142	*	*	*	*	*	*	*	*
Mangoes	465	9.11	12.66	879	96	-	-	-	-
Oranges	189	*	*	*	*	*	*	*	*
Papayas	2066	42.55	59.14	51781	1217	41858	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Stimulant Crops	8653	813.35	100	13848	17	13672	13258.33	100	
Chat	7802	752.02	92.46				*	98.21	*
Coffee	2436	61.34	7.54				237.89	1.79	3.88
Hops (Gesho)	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	
Sugar Cane	-	-	-		-	-	-	-	-

TABLE 5.6 - ESTIMATE OF HOLDERS, AREA, PRODUCTION AND YIELD OF PERMANENT CROPS FOR PRIVATE PEASANT HOLDINGS
URBAN HOLDINGS

Dire Dawa Adminisrative Council

PERMANENT CROPS	NUMBER OF HOLDERS REPORTING	AREA IN CROP (HA)	%	TOTAL NUMBER OF TREES	NUMBER OF TREES PER HECTARE	NUMBER OF TREES BEARING	PRODUCTION (QT)	%	YIELD (QT / HA)
ALL	158	23.99							
Fruit Crops	148	22.62	100	13314	589	10273	282.05	100	
Avocados	-	-	-	-	-	-	-	-	-
Bananas	*	-	-	-	-	-	-	-	-
Guavas	-	-	-	-	-	-	-	-	-
Lemons	*	*	*	*	*	*	-	-	-
Mangoes	50	6.28	27.76	1052	168	766	*	*	*
Oranges	99	13.68	60.48	9840	719	7903	153.71	54.50	11.24
Papayas	22	*	*	*	*	*	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Stimulant Crops	*	*	*	-	-	-	*	*	
Chat	*	*	*	-	-	-	-	-	-
Coffee	*	*	*	-	-	-	*	*	*
Hops (Gesho)	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	
Sugar Cane	-	-	-	-	-	-	-	-	-

TABLE 5.7 - ESTIMATE OF HOLDERS, AREA, PRODUCTION AND YIELD OF PERMANENT CROPS FOR PRIVATE PEASANT HOLDINGS

ALL HOLDINGS

Dire Dawa Administrative Council

PERMANENT CROPS	NUMBER OF HOLDERS REPORTING	AREA IN CROP (HA)	%	TOTAL NUMBER OF TREES	NUMBER OF TREES PER HECTARE	NUMBER OF TREES BEARING	PRODUCTION (QT)	%	YIELD (QT / HA)
ALL	9619	909.29							
Fruit Crops	3362	94.57	100	90528	957	64122	7818.59	100	
Avocados	-	-	-	-	-	-	-	-	-
Bananas	538	6.41	6.78	*	*	*	*	*	*
Guavas	762	*	*	2425	*	-	-	-	-
Lemons	147	2.01	2.13	*	*	*	*	*	*
Mangoes	515	15.39	16.27	1931	125	766	*	*	*
Oranges	287	16.84	17.81	11279	670	8915	370.75	4.74	22.02
Papayas	2088	44.56	47.12	53603	1203	43456	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Stimulant Crops	8667	814.72	100	13848	17	13672	13258.96	100	
Chat	7813	753.06	92.43				*	98.2	*
Coffee	2444	61.68	7.57				238.52	1.8	3.87
Hops (Gesho)	-	-	-	-	-	-	-	-	-
Other Permanent	-	-	-	-	-	-	-	-	
Sugar Cane	-	-	-		-	-	-	-	-

TABLE 5.8 - CROP PRODUCTION AND PERCENT OF UTILIZATION
RURAL HOLDINGS

Dire Dawa Administrative Council

Type of Crop	Total Production (Quintal)	Percent Utilized For					
		Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total							
Grain Crops	99063.95	84.51	9.19	2.36	-	1.17	2.76
Cereals	96700.71	84.6	9.77	0.8	0.85	0.97	3.01
Teff	-	-	-	-	-	-	-
Barley	*	88.65	11.35	-	-	-	-
Wheat	*	100	-	-	-	-	-
Maize	5282.55	86.37	9.23	0.92	-	2.74	0.74
Sorghum	91370.65	84.12	9.89	0.79	1.05	0.62	3.54
Finger millet	-	-	-	-	-	-	-
Oats “Aja”	*	100	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	2139.11	92.11	4.65	-	-	2.99	0.25
Horse beans	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-
Haricot beans	2126.76	91.88	4.78	-	-	3.08	0.26
Chick – peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	*	100	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	224.13	43.81	2.46	49.05	-	2	2.68
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	*	26.73	2.3	68.14	-	2.83	-
Safflower	-	-	-	-	-	-	-
Sesame	*	84.96	2.84	3.07	-	-	9.13
Rapeseed	-	-	-	-	-	-	-
Vegetables	6425.68	16.12	1.37	80.46	0.22	-	1.83
Lettuce	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-
Tomatoes	6420.35	16.12	1.37	80.46	0.22	-	1.83
Green peppers	*	-	-	-	-	-	-
Red peppers	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-
Root Crops	13419.48	31.6	33.6	33.19	-	-	1.61
Beetroot	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-
Onion	*	19.85	38.43	41.52	-	-	0.2
Potatoes	*	60.25	21.83	12.88	-	-	5.04
Garlic	-	-	-	-	-	-	-
Taro / Godere	-	-	-	-	-	-	-
Sweet potatoes	7269.77	92.93	-	2.6	-	0.08	4.39
Permanent crops	21017.96	38.98	0.74	52.35	0.55	0.02	7.36
Avocados	-	-	-	-	-	-	-
Bananas	*	22.39	-	77.06	-	-	0.54
Guavas	-	-	-	-	-	-	-
Lemons	*	7.38	-	92.62	-	-	-
Mangoes	-	-	-	-	-	-	-
Oranges	*	17.58	-	80	-	-	2.42
Papayas	*	22.34	1.48	73.16	-	-	3.02
Pineapple	-	-	-	-	-	-	-
Chat	13020.44	49.53	0.76	39.38	0.81	0.03	9.49
Coffee	460.98	9.79	-	86.99	-	-	3.22
Hops	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-

TABLE 5.9 - CROP PRODUCTION AND PERCENT OF UTILIZATION
URBAN HOLDINGS

Dire Dawa Administrative Council

Type of Crop	Total Production (Quintal)	Percent Utilized For					
		Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total							
Grain Crops	1347.06	88.85	4.97	1.74	0.14	0.83	3.47
Cereals	1347.06	88.85	4.97	1.74	0.14	0.83	3.47
Teff	-	-	-	-	-	-	-
Barley	*	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-
Maize	110.81	65.41	5.81	15.03	-	9.71	4.04
Sorghum	1232.32	90.59	4.91	0.76	0.15	0.17	3.43
Finger millet	-	-	-	-	-	-	-
Oats “Aja”	-	-	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	-	-	-	-	-	-	-
Horse beans	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-
Haricot beans	-	-	-	-	-	-	-
Chick – peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Vegetables	34.14	15	2.5	77.5	5	-	-
Lettuce	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-
Tomatoes	34.14	15	2.5	77.5	5	-	-
Green peppers	-	-	-	-	-	-	-
Red peppers	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-
Root Crops	*	5	-	95	-	-	-
Beetroot	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-
Onion	*	5	-	95	-	-	-
Potatoes	-	-	-	-	-	-	-
Garlic	-	-	-	-	-	-	-
Taro / Godere	-	-	-	-	-	-	-
Sweet potatoes	-	-	-	-	-	-	-
Permanent crops	282.68	12.4	-	87.18	-	-	0.42
Avocados	-	-	-	-	-	-	-
Bananas	-	-	-	-	-	-	-
Guavas	-	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-
Mangoes	*	5	-	92	-	-	3
Oranges	153.71	7.61	-	92.39	-	-	-
Papayas	*	31.38	-	67.38	-	-	1.23
Pineapple	-	-	-	-	-	-	-
Chat	-	-	-	-	-	-	-
Coffee	*	-	-	100	-	-	-
Hops	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-

TABLE 5.10 - CROP PRODUCTION AND PERCENT OF UTILIZATION
ALL HOLDINGS

Dire Dawa Administrative Council

Type of Crop	Total Production (Quintal)	Percent Utilized For: Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total							
Grain Crops	100411	84.64	9.06	2.35	*	1.16	2.79
Cereals	98047.77	84.74	9.6	0.83	0.83	0.97	3.02
Teff	-	-	-	-	-	-	-
Barley	*	88.65	11.35	-	-	-	-
Wheat	*	100	-	-	-	-	-
Maize	5393.36	86.08	9.18	1.11	-	2.83	0.79
Sorghum	92602.97	84.36	9.7	0.79	1.01	0.6	3.53
Finger millet	-	-	-	-	-	-	-
Oats “Aja”	*	100	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	2139.11	92.11	4.65	-	-	2.99	0.25
Horse beans	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-
Haricot beans	2126.76	91.88	4.78	-	-	3.08	0.26
Chick – peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	*	100	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	224.13	43.81	2.46	49.05	-	2	2.68
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	*	26.73	2.3	68.14	-	2.83	-
Safflower	-	-	-	-	-	-	-
Sesame	*	84.96	2.84	3.07	-	-	9.13
Rapeseed	-	-	-	-	-	-	-
Vegetables	6459.82	16.11	1.38	80.44	0.25	-	1.82
Lettuce	-	-	-	-	-	-	-
Head cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-
Tomatoes	6454.49	16.11	1.38	80.44	0.25	-	1.82
Green peppers	*	-	-	-	-	-	-
Red peppers	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-
Root Crops	13437.57	5	-	95	-	-	-
Beetroot	-	-	-	-	-	-	-
Carrot	-	31.6	33.6	33.19	-	-	1.61
Onion	*	19.75	38.18	41.87	-	-	0.2
Potatoes	*	60.25	21.83	12.88	-	-	5.04
Garlic	-	-	-	-	-	-	-
Taro / Godere	-	-	-	-	-	-	-
Sweet potatoes	7269.77	92.93	-	2.6	-	0.08	4.39
Permanent crops	21300.64	38.83	0.73	52.55	0.54	0.02	7.32
Avocados	-	-	-	-	-	-	-
Bananas	*	22.39	-	77.06	-	-	0.54
Guavas	-	-	-	-	-	-	-
Lemons	*	7.38	-	92.62	-	-	-
Mangoes	*	5	-	92	-	-	3
Oranges	370.75	13.27	-	85.36	-	-	1.37
Papayas	*	22.42	1.47	73.11	-	-	3.01
Pineapple	-	-	-	-	-	-	-
Chat	13020.44	49.53	0.76	39.38	0.81	0.03	9.49
Coffee	461.61	9.76	-	87.03	-	-	3.21
Hops	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-

Estimate of Area, Production and their Standard Errors and Coefficients of Variation for Temporary Crops

All Holdings

Dire Dawa Administrative Council

Crop	Holders	S.E.	C.V.	Area	S.E.	C.V	Production	S.E.	C.V.
Total	14716	745	5	7314.98	638	9	120308.4	9446	8
Grain Crops	14689	746	5	7070.31	636	9	100411	8426	8
Cereals	14689	746	5	6832.11	609	9	98047.77	8258	8
Teff	-	-	-	-	-	-	-	-	-
Barley	194	134	69	3.65	3	71	37.21	26	69
Wheat	106	64	61	2.8	2	63	13.1	8	61
Maize	5889	783	13	465.54	82	18	5393.36	1461	27
Sorghum	14351	772	5	6358.04	609	10	92602.97	8165	9
Finger millet	21	23	108	1.88	2	108	-	-	-
Oats / 'Aja'	21	21	98	0.19	0	100	1.14	1	97
Rice	-	-	-	-	-	-	-	-	-
Pulses	3165	737	23	203.85	60	29	2139.11	691	32
Horse beans	-	-	-	-	-	-	-	-	-
Field peas	-	-	-	-	-	-	-	-	-
Haricot beans	3123	740	24	201.42	60	30	2126.76	693	33
Chick-peas	-	-	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-
Soya beans	.....	-	-	-	-	-	-	-	-
Fenugreek	43	39	93	2.42	2	93	12.35	11	93
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	439	144	33	34.36	14	40	224.13	100	45
Neug	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Groundnuts	.....	308	134	44	24.57	12	47	196.73	99
Safflower	-	-	-	-	-	-	-	-	-
Sesame	131	72	55	9.79	9	87	27.4	24	87
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables	2070	595	29	84.04	31	37	6459.82	2257	35
Lettuce	-	-	-	-	-	-	-	-	-
Head cabbage	2	1	84	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-	-	-
Tomatoes	2041	592	29	79.08	29	36	6454.49	2256	35
Green peppers	258	158	61	4.96	3	68	5.33	6	107
Red peppers	-	-	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-	-	-
Root crops	3765	774	21	160.63	40	25	13437.57	4336	32
Beet root	-	-	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-	-	-
Onion	1193	405	34	48.08	19	40	5305.86	3545	67
Potatoes	491	284	58	17.64	13	72	861.93	655	76
Garlic	21	22	107	0.25	0	108	-	-	-
Taro / 'Godere'	.....	-	-	-	-	-	-	-	-
Sweet potatoes	2849	633	22	94.67	23	24	7269.77	1882	26

Annex 5.2

Estimates of Holders, Area, Production and their Standard Errors and Coefficients of Variations for Permanent crops

All Holdings

Dire Dawa Administrative Council

Crop	Holders	S.E.	C.V.	Area	S.E	C.V	Production	S.E.	C.V.
Avocados	-	-	-	-	-	-	-	-	-
Bananas	538	227	42	6	3	41	1296.33	964	74
Guavas	762	295	39	9	5	54	-	-	-
Lemons	147	69	47	2	1	47	4.89	3	56
Mangoes	515	170	33	15	5	33	7.14	4	58
Oranges	287	90	31	17	4	27	370.75	127	34
Papayas	2088	630	30	45	17	37	6139.49	3076	50
Pineapples	-	-	-	-	-	-	-	-	-
Chat	8667	887	10	815	137	17	13258.96	3583	27
Coffee	7813	831	11	753	136	18	13020.44	3588	28
Hops	2444	668	27	62	18	29	238.52	86	36
Enset	-	-	-	-	-	-	-	-	-
Sugar cane	-	-	-	-	-	-	-	-	-