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. Harari, 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 standard error (S.E.) and Coefficient of Variation (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, maize, and groundnuts and volume of production of these crops harvested in Harari Region when compared to Teff, barley and wheat produced in the same region.

Summary Tables V-1 and V-2 show that 75.08% of the regional grain crop area was devoted to cereals and 76.6% of the grain production was that of cereals. Out of all area under grain, sorghum, groundnuts & maize took up 59.2%, 18.07% and 14.04%, yielding 59.98%, 20.68% and 15.2% of the regional grain production, respectively.

As the census result depicts, agricultural households in urban areas of the region contributed 2.99% and 4.76% of the regional grain crop area and grain production, respectively. Out of the total area and production under cereals, 3.51% and 5.1% 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 6.72% of the regional grain crop area was under pulses and 2.57% of the grain production consisted of the same crops. Of the regional area under grain crops,

6.48%, was planted to haricot beans, & the remaining area was under other pulses. The production obtained from haricot beans, was 2.44% of the regional grain total. Out of the total area under Belg season grain crops,46.81% was allotted to haricot beans.

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 18.2 % of the regional grain crop area was under oilseeds and 20.83 % of the regional grain production was that of the oil seeds. Of the total area under grain crops and grain production in Harari Region, 18.07% went for groundnuts. Urban holders planted 0.3% of the grain crop area to oil crops and obtained 0.85% of the grain production from oil crops. Groundnuts grown by urban holders accounted for 0.30% of regional area under grain crops. Groundnuts produced by urban holders contributed 0.85% to the regional grain production.

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 Birr 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 Harari region one realizes that a lot has to be done in this regard.

Summary Tables V-1 and V-2 show that only 0.31 % of the regional crop area is under vegetables.

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. (CSA,External Trade Statistics). 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.

Summary Tables V-1 and V-2 indicate the root crop situation in Harari Region. As the tables show, root crops covered only 1.55 % of the regional crop area and 12.44% of the production volume. Sweet potatoes shared 57.01 of the regional root crop area. The same crop added 54.74% to the regional volume of root crop production.

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

Harari Region

Crop	All		Rural		Urban
			Area (HA)		Area (HA)
	Area (HA)	%	Meher	Belg	Meher
All	7194.23		5987.84	989.27	217.12
Grain Crops	7060.51	100	5899.62	949.72	211.17
Cereals	5300.74	75.08	4624.92	*	186.11
Teff	*	*	*	-	-
Barley	20.15	0.29	18.04	-	*
Wheat	104.74	1.48	99.94	-	4.8
Maize	991.14	14.04	667.56	225.95	97.63
Sorghum	4179.82	59.2	3834.52	*	81.55
Finger Millet	*	*	*	-	*
Oats/"Aja"	*	*	*	-	-
Rice	-	-	-	-	-
Pulses	474.48	6.72	25.69	444.59	*
Horse beans	1.42	0.02	*	-	*
Field peas	*	*	*	-	*
Haricot beans	457.8	6.48	10.62	444.59	*
Chick-peas	*	*	*	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Soya beans	-	-	-	-	-
Fenugreek	*	*	*	-	-
Gibto	-	-	-	-	-
Oilseeds	1285.3	18.2	1249.01	*	20.87
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Groundnuts	1275.9	18.07	1239.61	-	20.87
Sunflower	-	-	-	*	-
Sesame	*	*	*	-	-
Rapeseed	-	-	-	-	-
Vegetables	22.32	100	*	*	*
Lettuce	*	*	-	*	*
Head cabbage	*	*	*	-	-
Ethiopian cabbage	*	*	-	-	*
Tomatoes	*	*	-	*	-
Green peppers	*	*	*	*	-
Red peppers	*	*	*	-	-
Swiss chard	*	*	-	-	*
Root crops	111.41	100	87.81	*	*
Beetroot	-	-	-	*	-
Carrot	-	-	-	-	-
Onion	*	*	-	-	-
Potatoes	*	*	*	*	-
Garlic	-	-	-	*	-
Taro/'Godere'	-	-	-	-	-
Sweet potatoes	63.52	57.01	61.1	*	*

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

Harari Region

Crop	All		Rural		Urban
			Production(QT)		Production (QT)
	Production(QT)	%	Meher	Belg	Meher
All	69633.67		63592.36	*	3472.59
Grain Crops	60418.21	100	56063.33	*	2877.13
Cereals	46283.2	76.6	43859.47	*	2359.68
Teff	*	*	*	-	-
Barley	*	*	*	-	4.79
Wheat	695.4	1.15	549.11	-	*
Maize	9186.14	15.2	8267.4	*	854.69
Sorghum	36241.56	59.98	34892.12	-	1349.44
Finger Millet	*	*	-	-	*
Oats/"Aja"	*	*	*	-	-
Rice	*	*	-	-	*
Pulses	1550.56	2.57	130.21	1413.7	*
Horse beans	*	*	*	-	*
Field peas	*	*	*	-	*
Haricot beans	1472.02	2.44	55.59	1413.7	*
Chick-peas	*	*	*	-	-
Lentils	-	-	-	-	-
Vetch	-	-	-	-	-
Soya beans	-	-	-	-	-
Fenugreek	*	*	*	-	-
Gibto	-	-	-	-	-
Oilseeds	12584.35	20.83	12073.66	*	510.69
Neug	-	-	-	-	-
Linseed	-	-	-	-	-
Groundnuts	12494.18	20.68	11983.49	*	510.69
Sunflower	-	-	-	-	-
Sesame	*	*	*	-	-
Rapeseed	-	-	-	-	-
Vegetables	*	*	*	-	*
Lettuce	*	*	-	-	*
Head cabbage	-	*	-	-	-
Ethiopian cabbage	*	*	-	-	*
Tomatoes	-	*	-	-	-
Green peppers	*	*	*	-	-
Red peppers	-	*	-	-	-
Swiss chard	*	*	-	-	*
Root crops	8663.17	100	7510.22	*	61.97
Beetroot	*	*	-	-	*
Carrot	-	-	-	-	-
Onion	*	*	-	-	*
Potatoes	*	*	*	*	*
Garlic	-	-	-	-	-
Taro/'Godere'	-	-	-	*	-
Sweet potatoes	4741.87	54.74	4705.86	*	*

Figure V-1 Area Under Temporary Crops for Private Peasant Holdings

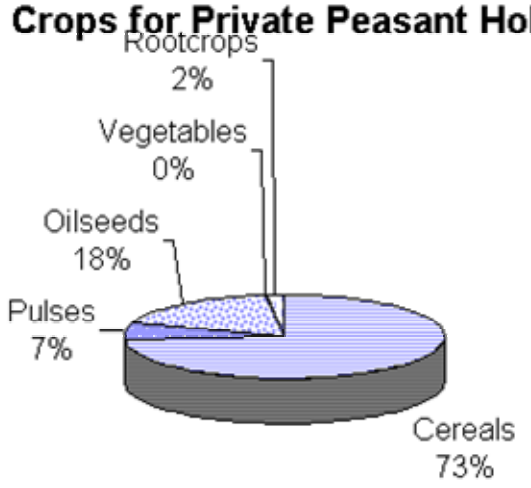
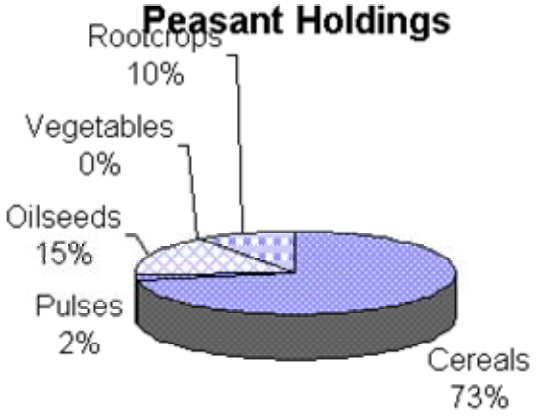


Figure V-2 Production Of Temporary Crops for Private Peasant Holdings



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 91,705 quintals 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 Harari Region, fruit crops constituted 15.06% of the permanent crop area. Mangoes, guavas, and papayas shared 61.29%, 21.33% and 12.46 % of the fruit crop area . Urban agricultural holders added 4.14% to the regional permanent crop area. For details, refer to Summary Table V-3 and figures V-3 and V-4.

3.2. Stimulant Crops:

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 Harari Region.

The data in the table demonstrates, more than three fourth, ie, 83.2% of the regional permanent crop area is under stimulant crops. Of the total area under stimulant crops in the region, 97.88% is that of chat resulting in 99.45% of the volume of stimulant crop production. About 97.80% of the regional stimulant crop area and 99.43% of the production were that of Chat in the rural parts of the region. Chat grown by urban holders accounted for 4.81% of the stimulant crop area and 3.16% of the stimulant crop production in the region.

3.3. Other Permanent Crops

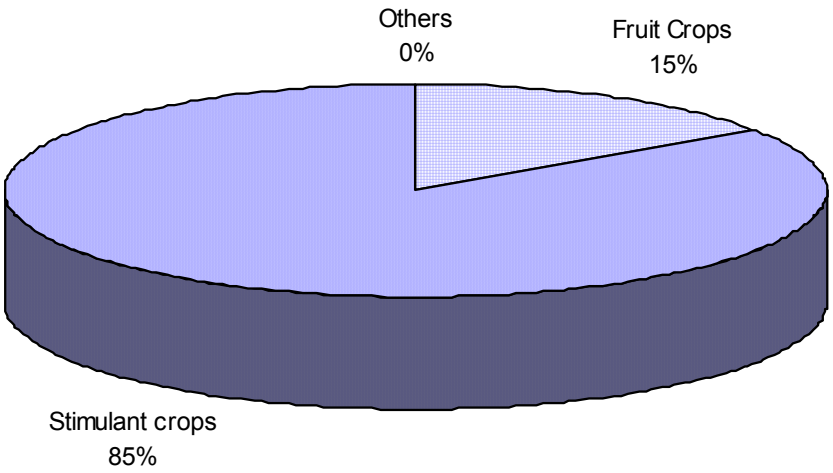
This group includes Enset and sugar cane on which yield data have been collected. Enset is a principal staple crop extensively grown in S.N.N.P and Oromiya Regions. The growers draw a substantial amount of money from the sale of Enset products. Though, sugar cane is an industrial crop it looks that it is not widely practiced by the private peasant holders, as the statistics seem to indicate. It is produced on a small scale by private peasant holders in some pockets of the country and usually does not end up in sugar cane processing plants. The sugar factories in Ethiopia run extensive sugar cane plantations. As the statistics indicate 660,146 quintals of sugar worth 111,773,918 Birr was exported between September 2001 and August 2002. (CSA,External Trade Statistics).

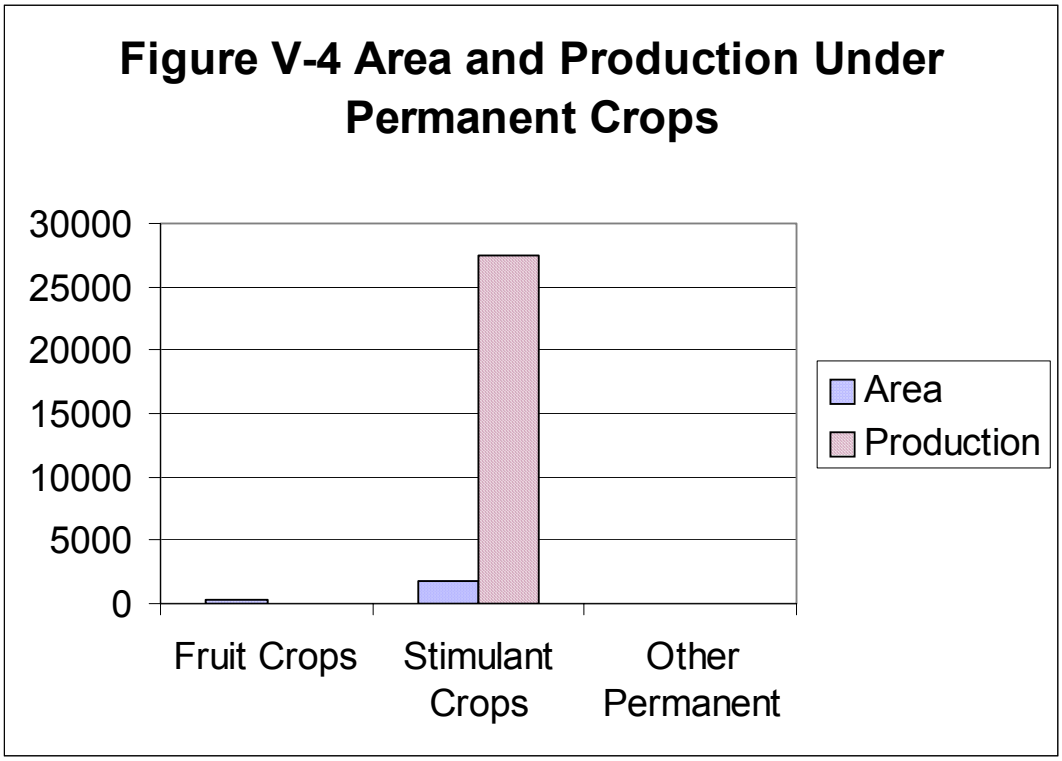
SUMMARY TABLE V-3 AREA AND PRODUCTION OF PERMANENT CROPS BY CROP TYPE FOR PRIVATE PEASANT HOLDINGS

Harari Region

Crop type	All				Rural		Urban	
	Area in Crop (HA)	%	Production (QT)	%	Area in Crop (HA)	Production (QT)	Area in Crop (HA)	Production (QT)
All	2151.62				2062.61		89.01	
Fruit Crops	324.12	100	*	*	321.78	*	2.34	35.05
Avocados	*	*	*	*	*	*	*	*
Bananas	11.6	3.58	213.66	*	11.1	212.12	*	*
Guavas	69.12	21.33	*	*	68.84	*	*	*
Lemons	2.01	0.62	*	*	2.01	*	-	-
Mangoes	198.65	61.29	228.79	*	198.25	222.29	0.4	*
Oranges	0.44	0.14	43.06	*	0.44	43.06	-	-
Papayas	40.4	12.46	*	*	*	*	*	15.3
Pineapples	-	-	-	-	-	-	-	-
Stimulant Crops	1790.12	100	27488.75	100	1703.6	26620.75	86.52	868
Chat	1752.23	97.88	27337.43	99.45	1666.07	26469.51	86.16	867.92
Coffee	34.55	1.93	151.32	0.55	34.19	151.24	0.36	*
Hops	*	*	-	-	*	-	-	-
Other Permanent	*	*	*	*	*	*	*	-
Sugar cane	*	*	*	*	*	*	.*	-

Figure V-3 Area Under 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, ie,subsistence. 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 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. The data were collected by interviewing the holders. 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 Harari Region more than 82% of the cereals produced were used for household consumption. About 11 % and 2 % were used for seed and sale, respectively. The remaining 5 % 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 41 % and 95 % of the crops in the cereals group were used for own consumption and between 1 % and 43 % of these crops were used for sale. Moreover, between 5 % and 15 % of the same crops in the same group were used for seed.

The pattern of utilization of pulses isn't much different either. As shown in Summary Table V-4 about 88 % of pulses were used for household consumption, 8 % for seed and 2 % for sale. The remaining 2 % of pulses were used for wages, animal feed and others. Considering utilization by crop type within the pulses group, between 59 % and 100 % of the crops were utilized for household consumption and between 2 % and 4 % in the pulse group were sold in 2001/02 (1994 E.C.). Moreover, between 4% and 41 % of these crops in the pulses group were also used for seed in the same year.

The picture of oilseeds utilization is distinctly different from that of cereals and pulses as portrayed in Summary Table V-4. About 53 %, 28 % and 16 % were used for sale, household consumption and seed, respectively. Taking utilization by crop type into account, between 28 % and 91 % of each crop type in the oilseeds category were used for household consumption, between 54 % for sale and between 8% and 16 % 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 consumed at home is less than that of cereals and pulses. About 53 % and 40 % of the vegetables produced were used for household consumption and sale, 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 23 %-91 % for household consumption, 55 % and 74% for sale and 3 % for seed. For details, refer to Summary Table V-4.

The utilization of root crop production follows similar trend with that of vegetables as indicated in the regional Summary Table V-4. About 73 % of the root crops were used for household consumption, 19 % for sale and about 2 % for seed. The ranges of percent utilized by crop type within the root crops category fall between 30 % and 46 % for consumption, 49 % and 70 % for sale and 5 % for seed.

The permanent crop utilization is also different from that of cereals, pulses, vegetables and root crops. Thus, about 33 % of the crop was used for consumption at home and about 59 % for sale. The utilization by crop type within the permanent crop group ranges between 8 % and 75 % for household consumption and between 10% and 87% 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 most of what they produce leaving little to consumption.

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

Harari Region

Type of Crop	Total Production (Quintal)	Percent Utilized For: Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total	69633.67						
Grain Crops	60418.21	71.18	12.3	12.52	0.12	0.71	3.17
Cereals	46283.2	82.26	11.36	2.04	0.14	0.93	3.28
Teff	*	79.99	10.71	9.3	-	-	-
Barley	*	70.14	4.54	22.62	-	2.55	0.14
Wheat	695.4	84.95	7.85	5.24	0.07	0.48	1.4
Maize	9186.14	84.49	9.75	1.16	0.12	1.34	3.15
Sorghum	36241.56	80.98	13.01	1.5	0.17	0.66	3.68
Finger millet	*	95.1	4.9	-	-	-	-
Oats “Aja”	*	41.45	15.44	43.11	-	-	-
Rice	*	-	-	-	-	-	-
Pulses	21550.56	87.88	8.44	1.88	-	-	1.8
Horse beans	*	58.56	41.44	-	-	-	-
Field peas	*	91.8	8.2	-	-	-	-
Haricot beans	1472.02	91.64	3.99	2.43	-	-	1.94
Chick – peas	*	84.98	7.43	3.52	-	-	4.07
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	*	100	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	12584.35	28.11	16.26	52.6	0.05	-	2.97
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	12494.18	26.56	16.47	53.89	0.05	-	3.02
Safflower	-	-	-	-	-	-	-
Sesame	*	91.28	7.61	-	-	-	1.1
Rapeseed	-	-	-	-	-	-	-
Vegetables	*	53.26	1.64	40.49	-	-	4.61
Lettuce	*	23.18	-	74.32	-	-	2.51
Head cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	*	39.89	1.57	55.41	-	-	3.13
Tomatoes	-	-	-	-	-	-	-
Green peppers	*	90.92	3.02	-	-	-	6.06
Red peppers	-	-	-	-	-	-	-
Swiss chard	*	23.03	-	69.16	-	-	7.81
Root Crops	8663.17	73.02	2.14	18.91	-	3.85	2.08
Beetroot	*	30.08	-	69.92	-	-	-
Carrot	-	-	-	-	-	-	-
Onion	*	-	-	-	-	-	-
Potatoes	*	45.68	4.82	49.07	-	-	0.43
Garlic	-	-	-	-	-	-	-
Taro / Godere	-	-	-	-	-	-	-
Sweet potatoes	4741.87	80.72	1.39	10.41	-	4.93	2.54
Permanent crops	37953.76	33.41	0.63	58.99	0.24	0.06	6.66
Avocados	93.89	74.81	-	24.65	-	-	0.54
Bananas	213.66	73.3	-	22.74	0.03	-	3.93
Guavas	1213.07	29.71	1.15	61.32	0.4	0.01	7.41
Lemons	50.32	23.75	-	75.63	-	-	0.62
Mangoes	228.79	-	-	-	-	-	-
Oranges	43.06	-	-	-	-	-	-
Papayas	5354.82	52.81	-	36.45	0.01	0.02	10.72
Pineapple	-	16.42	-	80.74	-	-	2.85
Chat	27337.43	20.79	-	74.78	0.11	-	4.31
Coffee	151.32	82.1	-	10.21	-	-	7.69
Hops	-	62.84	-	30.81	0.01	-	6.34
Enset	-	-	-	-	-	-	-
Sugar Cane	2659.14	8.04	-	86.71	-	2.39	2.86

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

RURAL HOLDINGS

Harari Region

Crop	Number of Holders	Area		Production		Yield
		Hectares	%	Quintals	%	QT / HA
TOTAL	13221	5987.84	100	63592.36	100	
Grain Crops	13179	5899.62	98.53	56063.33	88.16	
Cereals	12995	4624.92	77.24	43859.47	68.97	
Teff	*	*	*	*	*	*
Barley	431	18.04	0.3	*	*	*
Wheat	1570	99.94	1.67	549.11	0.86	5.49
Maize	8726	667.56	11.15	8267.4	13	12.38
Sorghum	12374	3834.52	64.04	34892.12	54.87	9.1
Finger Millet	*	*	*	-	-	-
Oats / “Aja”	*	*	*	*	*	*
Rice	-	-	-	-	-	-
Pulses	977	25.69	0.43	130.21	0.2	
Horse beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
Haricot beans	411	10.62	0.18	55.59	0.09	5.23
Chick – peas	334	*	*	*	*	*
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*
Gibto.	-	-	-	-	-	-
Oilseeds	6260	1249.01	20.86	12073.66	18.99	
Neug.	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Groundnuts	6245	1239.61	20.7	11983.49	18.84	9.67
Safflower	-	-	-	-	-	-
Sesame	192	*	*	*	*	*
Rapeseed	-	-	-	-	-	-
Vegetables	126	*	*	*	*	
Lettuce	-	-	-	-	-	-
Head cabbage	*	*	*	-	-	-
Ethiopian cabbage	-	-	-	-	-	-
Tomatoes	-	-	-	-	-	-
Green peppers	*	*	*	*	*	*
Red peppers	*	*	*	-	-	-
Swiss chard	-	-	-	-	-	-
Root Crops	2031	87.81	1.47	7510.22	11.81	
Beetroot	-	-	-	-	-	-
Carrot	-	-	-	-	-	-
Onion	-	-	-	-	-	-
Potatoes	420	*	*	*	*	*
Garlic	-	-	-	-	-	-
Taro / “Godere”	-	-	-	-	-	-
Sweet potatoes	1703	61.1	1.02	4705.86	7.4	77.02

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.) RURAL.

Harari Region

Crop	Holders	Area Hectares	%	Quintals	%	Production Yield QT/HA
TOTAL	3275	989.27		*		
Grain Crop	3182	949.72	100	*	*	
Cereals	1590	*	*	*	*	
Teff	-	-	-	-	*	-
Barley	-	-	-	-	*	-
Wheat	-	-	-	-	*	-
Maize	1378	225.95	23.79	*	*	*
Sorghum	*	*	*	-	*	-
Finger Millet	-	-	-	-	*	-
Oats/'Aja'	-	-	-	-	*	-
Rice	-	-	-	-	*	-
Pulses	2628	444.59	46.81	1413.7	*	
Horse beans	-	-	-	-	*	-
Field peas	-	-	-	-	*	-
Haricot beans	2628	444.59	46.81	1413.7	*	3.18
Chick-peas	-	-	-	-	*	-
Lentils	-	-	-	-	*	-
Vetch	-	-	-	-	*	-
Soya bean	-	-	-	-	*	-
Fenugreek	-	-	-	-	*	-
Gibto	-	-	-	-	*	-
Oilseeds	*	*	*	-	*	
Neug	-	-	-	-	*	-
Linseed	-	-	-	-	*	-
Groundnut	*	*	*	-	*	-
Sunflower	-	-	-	-	*	-
Sesame	-	-	-	-	*	-
Rapeseed	-	-	-	-	*	-
Vegetables	*	*	*	-	-	
Lettuce	-	-	*	-	-	-
Head Cabbage	-	-	*	-	-	-
Ethiopian	*	*	*	-	-	-
Tomatoes	*	*	*	-	-	-
Green pepper	-	-	*	-	-	-
Red pepper	-	-	*	-	-	-
Swiss chan	-	-	*	-	-	-
Root crops	372	*	*	*	*	
Beetroot	-	-	*	-	*	-
Carrot	-	-	*	-	*	-
Onion	*	*	*	-	*	-
Potatoes	305	*	*	*	*	*
Garlic	-	-	*	-	*	-
Taro/Godere	-	-	*	-	*	-
Sweet potatoes	*	*	*	*	*	*

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

URBAN HOLDINGS

Harari Region

Crop	Number of Holders	Area		Production		Yield
		Hectares	%	Quintals	%	QT / HA
TOTAL	780	217.12		3472.59		
Grain Crops	768	211.17	100	2877.13	100	
Cereals	767	186.11	88.13	2359.68	82.02	
Teff	-	-	-	-	-	-
Barley	14	*	*	4.79	0.17	*
Wheat	40	4.8	2.27	*	*	*
Maize	585	97.63	46.23	854.69	29.71	8.75
Sorghum	524	81.55	38.62	1349.44	46.9	16.55
Finger Millet	*	*	*	*	*	*
Oats / 'Aja'	-	-	-	-	-	-
Rice	*	-	-	*	*	-
Pulses	*	*	*	*	*	
Horse beans	*	*	*	*	*	*
Field peas	*	*	*	*	*	*
Haricot beans	*	*	*	*	*	*
Chick – peas	-	-	-	-	-	-
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-
Gibto	-	-	-	-	-	-
Oilseeds	190	20.87	9.88	510.69	17.75	
Neug	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Groundnuts	190	20.87	9.88	510.69	17.75	24.47
Safflower	-	-	-	-	-	-
Sesame	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-
Vegetables	65	*	*	*	*	
Lettuce	33	*	*	*	*	*
Head cabbage	-	-	*	-	*	-
Ethiopian cabbage	61	*	*	*	*	*
Tomatoes	-	-	*	-	*	-
Green peppers	-	-	*	-	*	-
Red peppers	-	-	*	-	*	-
Swiss chard	*	*	*	*	*	*
Root Crops	23	*	*	61.97	100	
Beetroot	*	-	*	*	*	-
Carrot	-	-	*	-	-	-
Onion	*	-	*	*	*	-
Potatoes	*	-	*	*	*	-
Garlic	-	-	*	-	-	-
Taro / 'Godere'	-	-	*	-	-	-
Sweet potatoes	18	*	*	*	*	*

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

ALL HOLDINGS

Harari Region

Crop	Number of Holders	Area		Production		Yield
		Hectares	%	Quintals	%	QT / HA
TOTAL	14153	7194.23		69633.67		
Grain Crops	14070	7060.51	100	60418.21	100	
Cereals	13870	5300.74	75.08	46283.2	76.6	
Teff	*	*	*	*	*	*
Barley	445	20.15	0.29	*	*	*
Wheat	1610	104.74	1.48	695.4	1.15	6.64
Maize	9824	991.14	14.04	9186.14	15.2	9.27
Sorghum	12916	4179.82	59.2	36241.56	59.98	8.67
Finger Millet	*	*	*	*	*	*
Oats / “Aja”	*	*	*	*	*	*
Rice	*	-	-	*	*	-
Pulses	3362	474.48	6.72	1550.66	2.57	
Horse beans	90	1.42	0.02	*	*	*
Field peas	*	*	*	*	*	*
Haricot beans	2910	457.8	6.48	1472.02	2.44	3.22
Chick – peas	334	*	*	*	*	*
Lentils	-	-	-	-	-	-
Vetch	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-
Fenugreek	*	*	*	*	*	*
Gibto.	-	-	-	-	-	-
Oilseeds	6450	1285.3	18.2	12584.35	20.83	
Neug.	-	-	-	-	-	-
Linseed	-	-	-	-	-	-
Groundnuts	6435	1275.9	18.07	12494.18	20.68	9.79
Safflower	-	-	-	-	-	-
Sesame	192	*	*	*	*	*
Rapeseed	-	-	-	-	-	-
Vegetables	391	22.32	100	*	*	
Lettuce	33	*	*	*	*	*
Head cabbage	*	*	*	-	*	-
Ethiopian cabbage	148	*	*	*	*	*
Tomatoes	*	*	*	-	*	-
Green peppers	*	*	*	*	*	*
Red peppers	*	*	*	-	*	-
Swiss chard	*	*	*	*	*	*
Root Crops	2181	111.41	100	8663.17	100	
Beetroot	*	-	-	*	*	-
Carrot	-	-	-	-	-	-
Onion	*	*	*	*	*	*
Potatoes	620	*	*	*	*	*
Garlic	-	-	-	-	-	-
Taro / “Godere”	-	-	-	-	-	-
Sweet potatoes	1721	63.52	57.01	4741.87	54.74	74.65

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

RURAL HOLDINGS

Harari Region

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	12060	2062.61							
Fruit Crops	7277	321.78	100	85300	265	71452	*	*	
Avocados	*	*	*	*	*	*	*	*	*
Bananas	1014	11.1	3.45	4170	376	2901	212.12	*	19.11
Guavas	2507	68.84	21.39	10674	155	8838	*	*	*
Lemons	324	2.01	0.62	510	254	496	*	*	*
Mangoes	4470	198.25	61.61	26298	133	19118	222.29	*	1.12
Oranges	146	0.44	0.14	181	411	166	43.06	*	97.86
Papayas	1884	*	*	*	*	*	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Stimulant Crops	10692	1703.6	100	26221	15	26115	26620.75	100	
Chat	10444	1666.07	97.8				26469.51	99.43	15.89
Coffee	1358	34.19	2.01				151.24	0.57	4.42
Hops (Gesho)	*	*	*	*	*	-	-	-	-
Other Permanent	533	*	*	547	*	514	*	*	
Sugar Cane	501	*	*		*	514	*	*	*

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

Harari Region

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	381	89.01							
Fruit Crops	85	2.34	100	*	*	416	35.05	100	
Avocados	*	*	*	*	*	*	*	*	*
Bananas	15	*	*	*	*	*	*	*	*
Guavas	28	*	*	*	*	*	*	*	*
Lemons	-	-	-	-	-	-	-	-	-
Mangoes	37	0.4	17.09	47	118	21	*	*	*
Oranges	-	-	-	-	-	-	-	-	-
Papayas	30	*	*	*	*	*	15.3	43.65	*
Pineapples	-	-	-	-	-	-	-	-	-
Stimulant Crops	329	86.52	100	7520	87	5757	868	100	
Chat	326	86.16	99.58				867.92	99.99	10.07
Coffee	6	0.36	0.42				*	*	*
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

Harari Region

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	12441	2151.62							
Fruit Crops	7362	324.12	100	86670	267	71868	*	*	
Avocados	*	*	*	*	*	*	*	*	*
Bananas	1029	11.6	3.58	5110	441	2946	213.66	*	18.42
Guavas	2535	69.12	21.33	10719	155	8883	*	*	*
Lemons	324	2.01	0.62	510	254	496	*	*	*
Mangoes	4507	198.65	61.29	26345	133	19139	228.79	*	1.15
Oranges	146	0.44	0.14	181	411	166	43.06	*	97.86
Papayas	1914	40.4	12.46	*	*	*	*	*	*
Pineapples	-	-	-	-	-	-	-	-	-
Stimulant Crops	11021	1790.12	100	33741	19	31872	27488.75	100	
Chat	10771	1752.23	97.88				27337.43	99.45	15.6
Coffee	1363	34.55	1.93				151.32	0.55	4.38
Hops (Gesho)	*	*	*	*	*	-	-	-	-
Other Permanent	534	*	*	782	*	735	*	*	
Enset	*	*	*	*	*	-	-	-	-
Sugar Cane	502	*	*		*	735	*	*	*

TABLE 5.8 - CROP PRODUCTION AND PERCENT OF UTILIZATION
RURAL HOLDINGS

Harari Region

Type of Crop	Total Production (Quintal)	Percent Utilized For					
		Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total	63952.36						
Grain Crops	56063.33	71.21	12.4	12.52	0.05	0.69	3.13
Cereals	43859.47	82.47	11.45	1.88	0.07	0.9	3.22
Teff	*	79.99	10.71	9.3	-	-	-
Barley	*	69.81	4.25	23.31	-	2.63	-
Wheat	549.11	85	7.89	5.28	-	0.45	1.39
Maize	8267.4	85.02	9.79	0.81	0.03	1.33	3.03
Sorghum	34892.12	81.06	13.13	1.4	0.11	0.64	3.67
Finger millet	-	-	-	-	-	-	-
Oats/aja	*	41.45	15.44	43.11	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	130.21	87.6	8.67	1.89	-	-	1.84
Horse beans	*	58.56	41.44	-	-	-	-
Field peas	*	91.5	8.5	-	-	-	-
Haricot beans	55.59	91.41	4.18	2.43	-	-	1.98
Chick – peas	*	84.98	7.43	3.52	-	-	4.07
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	*	100	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	12073.66	28.27	16.34	52.44	-	-	2.95
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	11983.49	26.68	16.56	53.76	-	-	3
Safflower	-	-	-	-	-	-	-
Sesame	*	91.28	7.61	-	-	-	1.1
Rapeseed	-	-	-	-	-	-	-
Vegetables	*	90.92	3.02	-	-	-	6.06
Lettuce	-	-	-	-	-	-	-
Head Cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	-	-	-	-	-	-	-
Tomatoes	-	-	-	-	-	-	-
Green Peppers	*	90.92	3.02	-	-	-	6.06
Red peppers	-	-	-	-	-	-	-
Swiss chard	-	-	-	-	-	-	-
Root Crops	11.81	72.94	2.15	18.93	-	3.89	2.08
Beetroot	-	-	-	-	-	-	-
Carrot	-	-	-	-	-	-	-
Onion	-	-	-	-	-	-	-
Potatoes	*	45.73	4.77	49.06	-	-	0.43
Garlic	-	-	-	-	-	-	-
Taro/Godere	-	-	-	-	-	-	-
Sweet potatoes	7.4	80.63	1.41	10.42	-	4.99	2.54
Permanent crops	7162.56	33.38	0.64	59.03	0.22	0.06	6.67
Avocados	92.46	76	-	24	-	-	-
Bananas	212.12	74	-	22.03	-	-	3.98
Guavas	1202.79	29.76	1.18	61.2	0.37	-	7.49
Lemons	50.32	23.4	-	75.97	-	-	0.62
Mangoes	222.29	-	-	-	-	-	-
Oranges	43.06	-	-	-	-	-	-
Papayas	5339.52	52.62	-	36.67	-	-	10.7
Pineapple	-	16.42	-	80.74	-	-	2.85
Chat	26469.51	20.7	-	74.9	0.11	-	4.29
Coffee	759.5	82.1	-	10.21	-	-	7.69
Hops	-	62.87	-	30.98	-	-	6.16
Enset	-	-	-	-	-	-	-
Sugar Cane	2659.14	8.04	-	86.71	-	2.39	2.86

TABLE 5.9 - CROP PRODUCTION AND PERCENT OF UTILIZATION

URBAN HOLDINGS

Harari Region

Type of Crop	Total Production (Quintal)	Percent Utilized For					
		Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total	3472.59						
Grain Crops	2877.13	70.42	9.99	12.68	1.58	1.14	4.19
Cereals	2359.68	78.01	9.58	5.12	1.61	1.34	4.34
Teff	-	-	-	-	-	-	-
Barley	4.79	80.82	14.34	-	-	-	4.84
Wheat	*	83.3	6.71	3.92	2.64	1.56	1.86
Maize	854.69	76.48	9.09	6.44	1.43	1.53	5.04
Sorghum	1349.44	79.01	10.22	4	1.75	1.18	3.84
Finger millet	*	95.1	4.9	-	-	-	-
Oats/aja		-	-	-	-	-	-
Rice	-	-	-	-	-	-	-
Pulses	*	96.79	0.95	1.56	-	-	0.7
Horse beans	*	-	-	-	-	-	-
Field peas	*	97.23	2.77	-	-	-	-
Haricot beans	*	96.56	-	2.37	-	-	1.06
Chick – peas	-	-	-	-	-	-	-
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	-	-	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	510.69	22.95	13.59	57.98	1.66	0.09	3.74
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	510.69	22.95	13.59	57.98	1.66	0.09	3.74
Safflower	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-
Rapeseed	-	-	-	-	-	-	-
Vegetables	*	32.45	0.88	62.87	-	-	3.81
Lettuce	*	23.18	-	74.32	-	-	2.51
Head Cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	*	39.89	1.57	55.41	-	-	3.13
Tomatoes	-	-	-	-	-	-	-
Green Peppers	-	-	-	-	-	-	-
Red peppers	-	-	-	-	-	-	-
Swiss chard	*	23.03	-	69.16	-	-	7.81
Root Crops	61.97	79.02	1.24	17.31	-	0.4	2.04
Beetroot	*	30.08	-	69.92	-	-	-
Carrot	-	-	-	-	-	-	-
Onion	*	-	-	-	-	-	-
Potatoes	*	29.73	19.82	50.45	-	-	-
Garlic	-	-	-	-	-	-	-
Taro/Godere	-	-	-	-	-	-	-
Sweet potatoes	*	86.88	-	10.3	-	0.46	2.36
Permanent crops		35.05	-	56.69	1.57	0.36	6.34
Avocados	*	9.79	-	60.14	-	-	30.07
Bananas	*	9.97	-	87.47	2.56	-	-
Guavas	*	-	-	-	-	-	-
Lemons	-	-	-	-	-	-	-
Mangoes	*	59.69	-	28.14	-	-	12.17
Oranges	-	-	-	-	-	-	-
Papayas	-	65.53	-	19.12	0.46	0.8	14.09
Pineapple	15.3	-	-	-	-	-	-
Chat	-	27.72	-	65.92	1.88	0.31	4.17
Coffee	*	100	-	-	-	-	-
Hops	-	-	-	-	-	-	-
Enset	-	-	-	-	-	-	-
Sugar Cane	-	-	-	-	-	-	-

TABLE 5.10 - CROP PRODUCTION AND PERCENT OF UTILIZATION

ALL HOLDINGS

Harari Region

Type of Crop	Total Production (Quintal)	Percent Utilized For					
		Household Consumption	Seed	Sale	Wages In kind	Animal Feed	Others
Total	69633.67						
Grain Crops	60418.21	71.18	12.3	12.52	0.12	0.71	3.17
Cereals	46283.2	82.26	11.36	2.04	0.14	0.93	3.28
Teff	*	79.99	10.71	9.3	-	-	-
Barley	*	70.14	4.54	22.62	-	2.55	0.14
Wheat	695.4	84.95	7.85	5.24	0.07	0.48	1.4
Maize	9186.14	84.49	9.75	1.16	0.12	1.34	3.15
Sorghum	36241.56	80.98	13.01	1.5	0.17	0.66	3.68
Finger millet	*	95.1	4.9	-	-	-	-
Oats “Aja”	*	41.45	15.44	43.11	-	-	-
Rice	*	-	-	-	-	-	-
Pulses	21550.56	87.88	8.44	1.88	-	-	1.8
Horse beans	*	58.56	41.44	-	-	-	-
Field peas	*	91.8	8.2	-	-	-	-
Haricot beans	1472.02	91.64	3.99	2.43	-	-	1.94
Chick – peas	*	84.98	7.43	3.52	-	-	4.07
Lentils	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-
Fenugreek	*	100	-	-	-	-	-
Gibto	-	-	-	-	-	-	-
Oilseeds	12584.35	28.11	16.26	52.6	0.05	-	2.97
Neug	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-
Groundnuts	12494.18	26.56	16.47	53.89	0.05	-	3.02
Safflower	-	-	-	-	-	-	-
Sesame	*	91.28	7.61	-	-	-	1.1
Rapeseed	-	-	-	-	-	-	-
Vegetables	*	53.26	1.64	40.49	-	-	4.61
Lettuce	*	23.18	-	74.32	-	-	2.51
Head cabbage	-	-	-	-	-	-	-
Ethiopian cabbage	*	39.89	1.57	55.41	-	-	3.13
Tomatoes	-	-	-	-	-	-	-
Green peppers	*	90.92	3.02	-	-	-	6.06
Red peppers	-	-	-	-	-	-	-
Swiss chard	*	23.03	-	69.16	-	-	7.81
Root Crops	8663.17	73.02	2.14	18.91	-	3.85	2.08
Beetroot	*	30.08	-	69.92	-	-	-
Carrot	-	-	-	-	-	-	-
Onion	*	-	-	-	-	-	-
Potatoes	*	45.68	4.82	49.07	-	-	0.43
Garlic	-	-	-	-	-	-	-
Taro / Godere	-	-	-	-	-	-	-
Sweet potatoes	4741.87	80.72	1.39	10.41	-	4.93	2.54
Permanent crops	37953.76	33.41	0.63	58.99	0.24	0.06	6.66
Avocados	93.89	74.81	-	24.65	-	-	0.54
Bananas	213.66	73.3	-	22.74	0.03	-	3.93
Guavas	1213.07	29.71	1.15	61.32	0.4	0.01	7.41
Lemons	50.32	23.75	-	75.63	-	-	0.62
Mangoes	228.79	-	-	-	-	-	-
Oranges	43.06	-	-	-	-	-	-
Papayas	5354.82	52.81	-	36.45	0.01	0.02	10.72
Pineapple	-	16.42	-	80.74	-	-	2.85
Chat	27337.43	20.79	-	74.78	0.11	-	4.31
Coffee	151.32	82.1	-	10.21	-	-	7.69
Hops	-	62.84	-	30.81	0.01	-	6.34
Enset	-	-	-	-	-	-	-
Sugar cane	2659.14	8.04	-	86.71	-	2.39	2.86

Annex Table 5.1

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

All Holdings

Harari Region

Crop	Holders	S.E.	C.V.	Area	S.E.	C.V	Production	S.E.	C.V.
Total	14153	416	3	7194.23	758	11	68255.32	7741	11
Grain Crops	14070	403	3	7060.51	748	11	59039.85	7383	13
Cereals	13870	407	3	5300.74	555	10	46283.2	5332	12
Teff	48	28	58	3.42	2	68	17.11	12	68
Barley	445	173	39	20.15	9	44	136.43	74	54
Wheat	1610	493	31	104.74	34	33	695.4	209	30
Maize	9824	621	6	991.14	134	14	9186.14	1231	13
Sorghum	12916	409	3	4179.82	473	11	36241.56	4763	13
Finger millet	44	30	67	0.73	1	69	0.17	0	82
Oats / 'Aja'	44	27	60	0.74	1	70	2.08	1	70
Rice	4	5	115	-	-	-	4.3	5	115
Pulses	3362	588	17	474.48	113	24	172.31	41	24
Horse beans	90	43	49	1.42	1	49	1.11	1	57
Field peas	194	110	57	4.57	2	53	43.34	28	64
Haricot beans	2910	601	21	457.8	114	25	93.67	25	27
Chick-peas	334	129	39	9.87	5	56	31.77	18	56
Lentils	-	-	-	-	-	-	-	-	-
Vetch	-	-	-	-	-	-	-	-	-
Soya beans	-	-	-	-	-	-	-	-	-
Fenugreek	61	47	76	0.81	1	75	2.43	2	75
Gibto	-	-	-	-	-	-	-	-	-
Oilseeds	6450	889	14	1285.3	295	23	12584.35	2983	24
Neug	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-
Groundnuts	6435	887	14	1275.9	294	23	12494.18	2960	24
Safflower	-	-	-	-	-	-	-	-	-
Sesame	192	79	41	9.4	5	54	90.16	55	61
Rapeseed	-	-	-	-	-	-	-	-	-
Vegetables	391	129	33	22.32	10	46	552.3	420	76
Lettuce	33	11	33	0.95	1	56	62.83	50	79
Head cabbage	23	24	106	0.07	0	100	-	-	-
Ethiopian cabbage	148	54	36	11.7	6	53	407.44	320	79
Tomatoes	113	103	91	8.89	8	92	-	-	-
Green peppers	71	41	58	0.19	0	74	18.81	14	77
Red peppers	32	24	75	0.16	0	106	-	-	-
Swiss chard	21	11	56	0.36	0	78	63.22	51	81
Root crops	2181	414	19	111.41	32	29	8663.17	2955	34
Beet root	1	1	95	-	-	-	0.07	0	86
Carrot	-	-	-	-	-	-	-	-	-
Onion	31	30	97	0.13	0	108	0.15	0	100
Potatoes	620	262	42	47.76	28	59	3921.09	2832	72
Garlic	-	-	-	-	-	-	-	-	-
Taro / 'Godere'	-	-	-	-	-	-	-	-	-
Sweet potatoes	1721	347	20	63.52	16	25	4741.87	1121	24

Annex Table 5.2

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

All Holdings

Harari Region

Crop	Holders	S.E.	C.V.	Area	S.E	C.V	Production	S.E.	C.V.
Avocados	12441	481	4	2152	185	9	37345.49	6783	18
Bananas	7362	569	8	324	53	16	7197.61	5250	73
Guavas	158	113	72	2	2	79	93.89	69	73
Lemons	1029	214	21	12	5	42	213.66	72	33
Mangoes	2535	372	15	69	15	22	1213.07	713	59
Oranges	324	122	38	2	1	42	50.32	26	51
Papayas	4507	684	15	199	44	22	228.79	53	23
Pineapples	146	61	42	-	-	48	43.06	21	48
Chat	1914	305	16	40	20	49	5354.82	4731	88
Coffee	-	-	-	-	-	-	-	-	-
Hops	11021	734	7	1790	201	11	27488.75	4214	15
Enset	10771	743	7	1752	201	11	27337.43	4215	15
Sugar cane	1363	373	27	35	10	29	151.32	46	30