

TRANSITIONAL GOVERNMENT OF ETHIOPIA
CENTRAL STATISTICAL AUTHORITY

CROP PRODUCTION FORECAST
1991/92 (1984 E.C.)
RESULTS OF
AREA AND PRODUCTION
OF MAJOR CROPS

(PRIVATE PEASANT HOLDINGS
MEHER SEASON)

ADDIS ABABA, MAY 1992

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(PRIVATE PEASANT HOLDINGS
MEHER SEASON)

ADDIS ABABA, MAY 1992

C O N T E N T S

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I. Introduction

1.1 This is the basic crop production forecast for 1991/92. It is based on three major factors, the actual area under crops (measured objectively after sowing in October 1991), last year's (1990/91) crop yield obtained from crop cutting survey and the so called condition factor which compares the yield of this year to that of last year. All specific conditions such as weather and pest damage affecting the growing crops during the current season have been taken into account in this condition factor.

1.2 The calculation of the forecast has been performed for all major and minor temporary crops for which objective area measurements were conducted. Only the Meher season area and production forecasts are available in this publication. The results of the forecast are related to the national as well as the administrative and autonomous regions. The crop production forecast for cooperatives and state farms are not included in this report. For Dire Dawa the crop production forecast is not available and therefore the results are estimated to be equal to last year's Meher season production estimates.

To correct the last year's yield by condition factor the following specific factors were taken into account.

A. Reasons for expected decrease

- Too much rainfall
- Shortage of rainfall
- Insect and pest damage
- Hail and frost damage
- Wild animal and locust damage
- Shortage of seed
- Depletion of the soil

B. Reasons for expected increase

- Good weather conditions
- Improved seed
- Application of fertilizers
- Application of insecticides

This information was collected subjectively by interviewing 6458 households. The expected increase or decrease of yield was reported in percent as compared to last year's yield.

- 1.3 The forecast has been calculated for private peasant holdings only, from sampled 648 Farmers' Association (FAS). The results of this forecast should be interpreted with great care. Eventhough the magnitude of the change is expressed in percentage, it should not be taken as an indicator of true change but rather as an indicator of the general trend of change. In addition the users of this report should know that the information on what is called condition factors was collected in the month of October 1991. During that period the response of the farmers varies according to circumstances preceding that period in the area. Furthermore, the results should be used with great caution in light of the favourable or adverse conditions of weather and rainfall which has occurred since then on crops, the effects of which are not examined in this report.

Attempts have also been made to present the results by administrative regions. However, only results for the national level should be considered as reliable, because of the rather small sample size allotted to each particular administrative region.

2. Methodology of the forecast

The methodology used for 1991/92 crop production forecast was the same as in the previous years.

The objectively measured area under crops in all holdings in the selected agricultural households is used for estimating crop area at the Farmers' Association (FAS) level. This production forecast is based on objective statistical data on area and yield at FA level and partly on the subjective crop condition factor.

2.1 Area under the specific main crops

The average area per sampled household $XB(hi)$ in each selected FA from the h-th Awraja is the sum of all areas of fields under a specific crop in the sampled households in the i-th FA of the h-th Awraja.

$$XB(hi) = \sum_{j=1}^{m(hi)} \sum_{k=1}^L X(hijk) / m(hi) \quad (1)$$

Where:

E= Summation sign

$X(hijk)$ = the area under a specific crop measured objectively for the k-th field of the j-th household in the i-th FA of the h-th Awraja.

$m(hi)$ = the number of sampled households in the i-th FA of the h-th Awraja.

The estimate of the total area under the specific crop at the FA level $XH(hi)$ is defined as:

$$XH(hi) = M(hi) \cdot XB(hi) \quad (2)$$

Where

$M(hi)$ = the total number of agricultural households in the i-th FA of the h-th Awraja.

the estimate of the total area under a specific crop at the Awraja level $XH(h)$ is defined as:

$$XH(h) = \frac{1}{n(h)} \sum_{i=1}^{n(h)} XH(hi) / P(hi) \quad (3)$$

Where:

$p(hi)$ = the probability of selecting the i-th FA from the h-th Awraja.

$n(h)$ = the number of sampled FAs in the h -th Awraja.

The final estimate of total area under the specific crop at the regional level XHr (" r " stands for region) is defined as:

$$XHr = \sum_h XH(h) \quad (4)$$

2.2 Crop condition Factor

The crop condition factor at the FA level is defined as the average of the crop condition factors at the holding level, derived from the reported assessments of the general growing condition of the specific crop in each sampled household during the growing season until the date of interview of the holder.

The crop condition factors at the holding level are expressed and reported subjectively by the holders as percentage of "last year yield" expected by the holders in the current harvest (e.g. 82% or 110% or 50% etc. of last year's yield).

Let $C(hij)$ denote the crop condition factor figures reported for the current growing season by the holders from the j -th shousehold in the i -th FA of the h -th Awraja.

Then the weighted average crop condition factor at the FA level is defined as:

$$CB(hi) = \frac{\sum_j n(hi) C(hij)}{\sum_j n(hi) j(hij)} \quad (5)$$

Where:

$n(hi)$ = the actual number of individuals reporting a condition factor for the specific crop in the i -th FA of the h -th Awraja.

$j(hij)$ = number of fields reported by j th individual for the specific crop in the i th FA of the h th Awraja

2.3 The total crop production forecast

The final forecast of the total production of a specific crop is made at the FA level and then aggregated at the Awraja and Regional levels.

At the FA level, the forecast of the total production of a specific crop is defined as:

$$QH(h_i) = XH(h_i) \cdot YB(h_i) \cdot (CB(h_i)/100) \quad (6)$$

Where:

XH(h_i) = the estimate of the total area (measured objectively) under a specific crop in the i-th FA of the h-th Awraja.

YB(h_i) = Last year's yield of a specific crop obtained from crop cutting in the i-th FA of the h-th Awraja.

CB(h_i) = The weighted average crop condition factor for the i-th FA of the h-th Awraja.

The forecast of the total production of a specific crop at the Awraja level is defined as:

$$QH(h) = \frac{1}{n(h)} \sum_{i=1}^{n(h)} QH(h_i) / P(h_i) \quad (7)$$

Where:

n(h) = the number of sampled FAs in the h-th Awraja.

P(h_i) = the probability of selecting the i-th FA from the h-th Awraja.

Finally the forecast of the total production of a specific crop QH_r at the Regional level ("r" stands for region) is defined as:

$$QH_r = \sum_h QH(h) \quad (8)$$

3. Results of the Forecast

Results of area and production forecast at national, and regional levels are presented in Tables 1-30.

Using the methodology and formula described in section 2, it was possible to estimate the crop area and production forecast of major crops by region and crop. The results of area and production of the country are summarized in Tables 1 and 2.

The total production of major crops for the country is expected to decrease by about 26% compared to 1990/91. This change amounts to 17,028 thousand quintals. The highest decrease is found to be in East Gojam about 2871 thousand quintals, or 49%; In Merkel, about 531 thousand quintals or 62%; In East Shoa about 1412 thousand quintals or 51%; And in Gambela, about 83 thousand quintals or 77% ,for all major crops compared to last year. And also except in Wellega, South Wollo and North Wollo all the other administrative regions are expected to have decrease in production for every specific crop.

In general, the expected production in 1991/92 for the country is below the average and even the minimum of the last three years (1988/89-1990/91) forecast estimates. This year the decrease in production forecast is mainly brought by low condition factor.

Area under major crops for the country is expected to increase by 915 thousand hectares or 19% compared to last year. Highly significant increases in area cultivated are reported for teff, horsebeans and neug (niger seed). Area cultivated under major crops for the country obtained from the crop production forecasts in 1988/89-1990/91 was averaged and it is found to be less than that of 1991/92 by about 872 thousand hectares.

Forecast of yield of major crops was calculated and the results for the country are presented in Table 3. The decrease in overall yield of major crops is 38%. For cereal crops the reduction ranges from 49% for teff to 3% for maize.

According to the RRC'S report of November 1991, cultivated area under major crops in South Wollo, East Gojam, West Gojam and North Omo shows increase compared to last years'. While the other administrative regions show decrease in cultivated area under major crops and the decrease is mostly on maize and sorghum. CSA reports to the contrary in some of these administrative regions.

According to the RRC report again, except for South Wollo all the other administrative regions have decreases in production mainly for Maize ,Sorghum and Teff. Except for the magnitude CSA and RRC do not mismatch on production prospect in most regions.

Most of these results will be verified when the post harvest estimates are available.

Table 1.

Forecast of 1991/92 and Estimates of 1990/91
of Area and production for private
holdings Meher season
in Ethiopia*

Region	Total area ('000 hectares)			Total Production ('000 quintals)		
	Estimate 1990/91	Forecast 1991/92	± Change	Estimate 1990/91	Forecast 1991/92	± Change
Arsi	444.17	405.68	-8.67	6809.57	4914.34	-27.83
Bale	110.22	99.98	-9.29	1355.12	906.22	-33.13
North Omo	123.76	145.27	17.38	1644.74	939.69	-42.87
South Omo	10.35	9.84	-4.93	126.22	120.38	-4.63
East Gojam	434.51	412.11	-5.16	5867.15	2996.22	-48.93
West Gojam	489.56	502.55	2.65	6374.22	3574.38	-43.92
Metekel	61.20	68.26	11.54	853.30	322.24	-62.24
North Gonder	185.74	210.93	13.56	2576.03	1711.76	-33.55
South Gonder	117.36	247.16	110.60	1563.73	1366.69	-12.60
DireDawa	5.13	5.13	0.00	73.34	73.34	0.00
East Harerghe	166.07	117.17	-29.45	2192.83	1150.60	-47.53
West Harerghe	125.48	134.79	7.42	1779.03	1492.44	-16.11
Gambela	8.77	2.55	-70.92	107.04	24.54	-77.07
Illubabor	377.60	305.69	-19.04	4706.73	3164.94	-32.76
Keffa	81.29	77.08	-5.18	1235.86	1180.36	-4.49
Addis Ababa	111.50	98.42	-11.73	1455.14	916.39	-37.02
East Shoa	209.14	416.25	99.03	2775.26	1363.47	-50.87
North Shoa	227.46	313.30	37.74	2988.40	2687.84	-10.06
South Shoa	436.24	341.05	-21.82	6195.51	4162.65	-32.81
West Shoa	396.89	167.25	-57.86	5110.30	2985.88	-41.57
Borena	21.13	16.93	-19.88	305.21	257.88	-15.51
Sidamo	109.73	88.16	-19.66	1195.13	1151.80	-3.63
Assosa	18.10	12.60	-30.39	239.72	125.09	-47.82
Wellega	331.32	1182.84	257.01	5059.31	7741.54	53.02
North Wollo	60.87	93.76	54.03	731.33	875.67	19.74
South Wollo	152.29	261.06	71.42	2601.00	2686.47	3.29
TOTAL	4815.88	5735.81	19.10	65921.23	48892.82	-25.83

*Excluding Eritrea, Tigray, Aseb and Ogaden autonomous regions.

Table 2.

Forecast of 1991/92 and Estimate of 1990/91
of Area and Production for private
holdings Meher season
in Ethiopia*

Crop	Total area ('000 hectares)			Total Production ('000 quintals)		
	Estimate 1990/91	Forecast 1991/92	% Change	Estimate 1990/91	Forecast 1991/92	% Change
CEREALS	3898.63	4511.14	15.71	53201.71	41946.26	-21.16
Teff	1262.66	1885.12	49.30	18044.65	13644.87	-24.38
Barley	550.66	607.45	10.31	7113.79	6150.02	-13.55
Wheat	487.40	581.31	19.27	6995.37	5786.41	-17.28
Maize	908.67	809.15	-10.95	11589.34	10033.86	-13.42
Sorghum	489.05	438.38	-10.36	6706.15	4793.59	-28.52
Millet	163.41	156.31	-4.34	2209.63	1186.78	-46.29
Oats	36.78	33.42	-9.14	542.78	350.73	-35.38
PULSES	674.10	862.17	27.90	9586.30	5927.34	-38.17
Horsebeans	243.31	431.80	77.47	3665.58	2981.36	-18.67
Field Peas	116.97	163.51	39.79	1719.45	1190.97	-30.74
Haricot Beans	91.60	55.91	-38.96	1271.34	514.88	-59.50
Chick Peas	116.69	102.82	-11.89	1501.59	645.71	-57.00
Lentils	40.65	40.96	0.76	623.79	187.51	-69.94
Vetch	64.88	67.17	3.53	804.55	406.91	-49.42
OTHERS	243.14	362.50	49.09	3133.22	1019.22	-67.47
Neug	158.79	281.72	77.42	2036.25	768.38	-62.26
Linseed	62.69	65.62	4.67	804.41	214.90	-74.43
Fenugreek	9.98	5.38	-46.09	116.89	17.40	-85.11
Rapeseed	11.68	9.78	-16.27	139.67	18.55	-86.72
TOTAL	4815.87	5735.81	19.10	65921.23	48892.82	-25.83

* Excluding Eritrea, Tigray, Aseb and Ogaden autonomous regions.

Table 3.

Forecast of 1991/92 and Estimate of 1990/91
of yield of major crops for private
holdings Meher season
in Ethiopia*

Crop	Estimate Yield 1990/91	Forecast Yield 1991/92	% Change
CEREALS	13.65	9.30	-31.87
Teff	14.29	7.24	-49.34
Barley	12.92	10.12	-21.67
Wheat	14.35	9.95	-30.66
Maize	12.75	12.40	-2.75
Sorghum	13.71	10.93	-20.28
Millet	13.52	7.59	-43.86
Oats	14.76	10.49	-28.93
PULSES	14.22	6.87	-51.69
Horse beans	15.07	6.90	-54.21
Field peas	14.70	7.28	-50.48
Haricot beans	13.88	9.21	-33.65
Chick peas	12.87	6.28	-51.20
Lentils	15.35	4.58	-70.16
Vetch	12.40	6.06	-51.13
OTHERS	12.89	2.81	-78.20
Neug	12.82	2.73	-78.71
Linseed	13.41	3.27	-75.62
Fenugreek	11.71	3.23	-72.42
Rapeseed	11.96	1.90	-84.11
TOTAL	13.69	8.52	-37.76

*Excluding Eritrea, Tigray, Aseb and Ogaden autonomous regions.

Table 4.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

ETHIOPIA*

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	4511.14	41946.26
Teff	1885.12	13644.87
Barley	607.45	6150.02
Wheat	581.31	5786.41
Maize	809.15	10033.86
Sorghum	438.38	4793.59
Millet	156.31	1186.78
Oats	33.42	350.73
PULSES	862.16	5927.34
Horse Beans	431.80	2981.36
Field Peas	163.51	1190.97
Haricot Beans	55.91	514.88
Chick Peas	102.82	645.71
Lentils	40.96	187.51
Vetch	67.17	406.91
OTHERS	362.50	1019.22
Neug	281.72	768.38
Linseed	65.62	214.90
Fenugreek	5.38	17.40
Rapeseed	9.78	18.55
ALL CROPS	5735.81	48892.82

* Excluding Eritrea, Tigray, Aseb, and Ogaden autonomous regions.

Table 5

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984E.C.)

Arssi

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	322.34	4329.89
Teff	39.62	273.45
Barley	125.79	2030.02
Wheat	111.66	1426.83
Maize	35.24	455.48
Sorghum	3.18	68.12
Millet	0.00	0.00
Oats	6.85	75.99
PULSES	57.33	475.49
Horse Beans	27.78	309.64
Field Peas	18.15	95.27
Haricot Beans	6.16	48.27
Chick Peas	0.17	0.28
Lentils	2.67	10.22
Vetch	2.39	11.81
OTHERS	26.01	108.96
Neug	0.02	0.02
Linseed	24.89	105.80
Fenugreek	0.09	0.39
Rapeseed	1.01	2.75
ALL CROPS	405.68	4914.34

Table 6.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Bale

CROPS	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	86.74	817.44
Teff	5.22	19.81
Barley	32.56	348.94
Wheat	38.60	355.19
Maize	1.78	24.34
Sorghum	0.26	0.43
Millet	0.00	0.00
Oats	8.34	68.72
PULSES	8.08	66.04
Horse Beans	3.43	33.10
Field Peas	3.66	30.97
Haricot Beans	0.06	0.01
Chick Peas	0.19	0.17
Lentils	0.48	1.60
Vetch	0.27	0.19
OTHERS	5.16	22.74
Neug	0.23	0.27
Linseed	4.44	22.22
Fenugreek	0.49	0.25
Rapeseed	0.00	0.00
ALL CROPS	99.98	906.22

Table 7.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
North Omo

CROPS	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	104.00	734.93
Teff	36.99	213.90
Barley	22.08	221.62
Wheat	7.52	46.43
Maize	6.44	39.93
Sorghum	30.50	208.81
Millet	0.00	0.00
Oats	0.47	4.24
PULSES	41.22	204.66
Horse Beans	8.63	61.27
Field Peas	23.86	97.07
Haricot Beans	6.03	27.67
Chick Peas	2.61	18.48
Lentils	0.08	0.17
Vetch	0.00	0.00
OTHERS	0.05	0.10
Neug	0.00	0.00
Linseed	0.04	0.10
Fenugreek	0.01	0.00
Rapeseed	0.00	0.00
ALL CROPS	145.27	939.69

Table 8.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

South Omo

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	7.92	82.72
Teff	2.19	13.39
Barley	0.70	8.88
Wheat	0.20	2.15
Maize	2.13	22.06
Sorghum	2.71	36.24
Millet	0.00	0.00
Oats	0.00	0.00
PULSES	1.91	37.66
Horse Beans	0.60	23.41
Field Peas	1.12	12.08
Haricot Beans	0.18	2.17
Chick Peas	0.00	0.00
Lentils	0.00	0.00
Vetch	0.00	0.00
OTHERS	0.01	0.00
Neug	0.01	0.00
Linseed	0.00	0.00
Fenugreek	0.00	0.00
Rapeseed	0.00	0.00
ALL CROPS	9.84	120.38

Table 9.

Forecast of Area and Production of Major
Crops for Private Holdings
(In 1991/92 (1984 E.C.))

East Gojjam

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	317.70	2519.45
Teff	166.12	1333.53
Barley	50.79	306.81
Wheat	60.87	453.18
Maize	26.40	241.74
Sorghum	12.60	171.48
Millet	0.92	12.72
Oats	0.00	0.00
PULSES	67.36	398.93
Horse Beans	20.58	158.63
Field Peas	9.70	40.43
Haricot Beans	1.38	8.16
Chick Peas	15.82	98.22
Lentils	2.12	2.93
Vetch	17.76	90.57
OTHERS	27.05	77.84
Neug	20.13	52.79
Linseed	5.60	19.08
Fenugreek	0.57	1.79
Rapeseed	0.75	4.18
ALL CROPS	412.11	2996.22

Table 10.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

West Gojjam

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	412.44	3184.04
Teff	188.89	1268.90
Barley	62.57	268.82
Wheat	8.94	121.55
Maize	80.14	917.97
Sorghum	2.50	11.38
Millet	69.11	593.25
Oats	0.30	2.16
PULSES	37.27	277.65
Horse Beans	15.10	99.79
Field Peas	6.99	40.47
Haricot Beans	0.86	9.16
Chick Peas	8.01	64.22
Lentils	0.05	0.35
Vetch	6.28	63.66
OTHERS	52.83	112.68
Neug	39.87	92.54
Linseed	12.79	19.53
Fenugreek	0.10	0.30
Rapeseed	0.08	0.30
ALL CROPS	502.55	3574.38

Table 11.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Metekel

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	56.63	282.83
Teff	16.01	63.55
Barley	0.33	0.00
Wheat	0.52	3.84
Maize	9.94	61.37
Sorghum	11.06	67.90
Millet	18.77	86.17
Oats	0.00	0.00
PULSES	3.05	19.00
Horse Beans	0.70	4.57
Field Peas	0.00	0.00
Haricot Beans	0.37	1.99
Chick Peas	1.98	12.43
Lentils	0.00	0.00
Vetch	0.00	0.00
OTHERS	8.59	20.42
Neug	8.46	18.93
Linseed	0.02	0.01
Fenugreek	0.00	0.00
Rapeseed	0.11	1.47
ALL CROPS	68.26	322.24

Table 12.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
North Gondar

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	165.97	1494.04
Teff	51.60	468.45
Barley	21.95	248.28
Wheat	7.44	48.20
Maize	10.25	65.08
Sorghum	60.60	537.97
Millet	12.78	120.17
Oats	1.34	5.89
PULSES	36.96	185.64
Horse Beans	14.08	81.50
Field Peas	6.01	27.51
Haricot Beans	0.02	0.16
Chick Peas	14.62	63.32
Lentils	0.35	3.03
Vetch	1.88	10.13
OTHERS	8.00	32.08
Neug	6.26	25.61
Linseed	1.30	4.80
Fenugreek	0.40	1.38
Rapeseed	0.05	0.29
ALL CROPS	210.93	1711.76

Table 13

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
South Gondar

CROP	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	178.53	1055.69
Teff	77.10	401.23
Barley	31.61	222.63
Wheat	24.20	152.82
Maize	18.96	130.48
Sorghum	5.12	19.56
Millet	21.18	128.97
Oats	0.35	0.00
PULSES	41.29	249.38
Horse Beans	17.31	120.20
Field Peas	2.16	10.76
Haricot Beans	0.00	0.00
Chick Peas	9.33	42.54
Lentils	0.31	0.68
Vetch	12.19	75.20
OTHERS	27.34	61.62
Neug	21.63	47.09
Linseed	5.56	14.47
Fenugreek	0.15	0.05
Rapeseed	0.00	0.00
ALL CROPS	247.16	1366.69

Table 14

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Dire Dawa

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	5.11	73.03
Teff	0.00	0.00
Barley	0.00	0.00
Maize	0.31	2.41
Sorghum	4.80	70.62
PULSES	0.02	0.31
Field Peas	0.01	0.06
Haricot Beans	0.01	0.24
Chick Peas	0.00	0.01
TOTAL	5.13	73.34

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Table 15.

Forecast of Area and Production of Major
Crops for Private Holdings
In 19991/92 (1984 E.C.)

East Hararghe

CROPS	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	105.09	1014.13
Teff	0.59	5.61
Barley	4.37	44.04
Wheat	8.01	93.58
Maize	18.40	170.22
Sorghum	73.37	697.39
Millet	0.00	0.00
Oats	0.36	3.28
PULSES	11.97	135.85
Horse Beans	5.05	58.84
Field Peas	1.61	17.81
Haricot Beans	5.31	59.19
Chick Peas	0.00	0.00
Lentils	0.00	0.00
Vetch	0.00	0.00
OTHERS	0.11	0.62
Neug	0.00	0.00
Linseed	0.00	0.00
Fenugreek	0.11	0.62
Rapeseed	0.00	0.00
ALL CROPS	117.17	1150.60

Table 16.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
West Hararghe

CROP	Total Area (,000 hectare)	Total Production (,000 quintal)
CEREALS	115.54	1251.99
Teff	26.33	97.27
Barley	3.93	29.33
Wheat	2.22	12.76
Maize	23.91	314.31
Sorghum	57.66	790.74
Millet	0.21	0.00
Oats	1.28	7.58
PULSES	19.06	239.87
Horse Beans	3.36	35.83
Field Peas	0.38	3.66
Haricot Beans	11.64	184.50
Chick Peas	2.84	12.50
Lentils	0.51	2.90
Vetch	0.33	0.47
OTHERS	0.19	0.58
Neug	0.00	0.00
Linseed	0.18	0.54
Fenugreek	0.01	0.04
Rapeseed	0.00	0.00
ALL CROPS	134.79	1492.44

Table 17.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Gambella

CROP	Total Area ('000 hectare)	Total Production (('000' quintal)
CEREALS	2.53	24.29
Teff	0.32	1.97
Barley	0.19	1.49
Wheat	0.04	0.32
Maize	1.57	16.04
Sorghum	0.40	4.48
Millet	0.00	0.00
Oats	0.00	0.00
PULSES	0.03	0.25
Horse Beans	0.03	0.25
Field Peas	0.00	0.00
Haricot Beans	0.00	0.00
Chick Peas	0.00	0.00
Letils	0.00	0.00
Vetch	0.00	0.00
OTHERS	0.00	0.00
Neug	0.00	0.00
Linseed	0.00	0.00
Fenugreek	0.00	0.00
Rapeseed	0.00	0.00
ALL CROPS	2.55	24.54

Table 18.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Illubabor

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	263.26	2656.16
Teff	95.71	694.90
Barley	16.26	146.19
Wheat	10.86	89.07
Maize	102.04	1372.96
Sorghum	33.72	306.20
Millet	4.07	37.50
Oats	0.60	9.35
PULSES	39.95	502.26
Horse Beans	15.29	141.31
Field Peas	19.76	319.02
Haircot Beans	2.41	14.13
Chick Peas	1.40	23.70
Lentils	1.09	4.11
Vetch	0.00	0.00
OTHERS	2.48	6.53
Neug	1.85	4.25
Linseed	0.60	2.28
Fenugreek	0.04	0.00
Rapeseed	0.00	0.00
ALL CROPS	305.69	3164.94

Table 19.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Keffa

CROPS	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	64.58	1082.19
Teff	11.25	84.07
Barley	5.95	55.57
Wheat	1.93	19.71
Maize	25.20	642.02
Sorghum	13.49	194.63
Millet	6.76	86.18
Oats	0.00	0.00
PULSES	12.12	97.47
Horse Beans	6.34	53.37
Field Peas	4.06	25.04
Haricot Beans	1.71	19.07
Chick Peas	0.00	0.00
Lentils	0.00	0.00
Vetch	0.00	0.00
OTHERS	0.38	0.70
Neug	0.34	0.56
Linseed	0.03	0.14
Fenugreek	0.00	0.00
Rapeseed	0.00	0.00
ALL CROPS	77.08	1180.36

Table 20.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
Addis Ababa

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	71.53	685.99
Teff	35.96	299.36
Barley	17.47	201.31
Wheat	17.43	178.99
Maize	0.46	4.61
Sorghum	0.17	1.39
Millet	0.00	0.00
Oats	0.03	0.33
PULSES	25.84	227.32
Horse Beans	8.52	75.21
Field Peas	1.45	10.63
Haricot Beans	0.08	0.37
Chick Peas	8.39	79.70
Lentils	4.76	38.04
Vetch	2.65	23.37
OTHERS	1.05	3.08
Neug	0.24	0.44
Linseed	0.64	1.90
Fenugreek	0.13	0.33
Rapeseed	0.05	0.41
ALL CROPS	98.42	916.39

Table 21 .

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92(1984 E.C.)
East-Shoa.

CROP	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	137.88	1142.89
Teff	90.38	684.55
Barley	5.90	58.90
Wheat	21.79	220.74
Maize	18.42	168.20
Sorghum	1.38	10.46
Millet	0.00	0.00
Oats	0.00	0.04
PULSES	29.03	219.33
Horse Beans	4.53	47.76
Field Peas	7.97	70.30
Haricot Beans	6.31	41.78
Chick Peas	5.63	35.63
Lentils	2.98	14.14
Vetch	1.60	9.73
OTHERS	0.35	1.24
Neug	0.00	0.00
Linseed	0.02	0.04
Fenugreek	0.33	1.21
Rapeseed	0.00	0.00
ALL CROPS	167.25	1363.47

Table 22.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
North Shoa

CROP	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	212.89	2004.36
Teff	87.71	846.48
Barley	45.13	463.35
Wheat	73.47	640.98
Maize	1.97	9.83
Sorghum	3.72	37.29
Millet	0.00	0.00
Oats	0.90	6.44
PULSES	77.56	616.91
Horse Beans	54.87	457.20
Field Peas	8.00	81.94
Haricot Beans	0.77	6.38
Chick Peas	4.45	38.81
Lentils	4.50	21.77
Vetch	4.97	10.82
OTHERS	22.85	66.57
Neug	15.92	47.12
Linseed	4.82	10.61
Fenugreek	2.11	8.84
Rapeseed	0.00	0.00
ALL CROPS	313.30	2687.84

Table 23.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
South Shoa

CROP	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	308.27	3957.20
Teff	95.78	619.67
Barley	14.06	201.85
Wheat	55.92	792.06
Maize	125.65	2197.28
Sorghum	13.16	100.83
Millet	0.84	3.77
Oats	2.86	41.74
PULSES	32.61	205.01
Horse Beans	14.17	100.06
Field Peas	8.43	57.77
Haricot Beans	3.58	16.59
Chick Peas	4.37	18.20
Lentils	0.77	2.58
Vetch	1.28	9.81
OTHERS	0.18	0.44
Neug	0.00	0.00
Linseed	0.05	0.24
Fenugreek	0.13	0.20
Rapeseed	0.00	0.00
ALL CROPS	341.05	4162.65

Table 24.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
West Shoa

CROP	Total Area (('000 hectare)	Total Production (('000 quintal)
CEREALS	325.88	2511.81
Teff	169.85	1170.14
Barley	57.90	462.72
Wheat	39.34	287.31
Maize	42.51	416.40
Sorghum	14.70	162.98
Millet	0.41	1.81
Oats	1.17	10.45
PULSES	59.98	403.61
Horse Beans	19.07	165.02
Field Peas	3.18	16.58
Haricot Beans	0.07	0.00
Chick Peas	19.44	116.59
Lentils	4.10	13.43
Vetch	14.11	91.98
OTHERS	30.40	70.46
Neug	25.46	49.76
Linseed	4.03	10.86
Fenugreek	0.40	0.69
Rapeseed	0.51	9.14
ALL CROPS	416.25	2985.88

Table 25.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Borena

CROP	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	14.23	233.48
Teff	0.17	0.25
Barley	2.64	30.39
Wheat	0.51	13.93
Maize	10.70	186.34
Sorghum	0.21	2.57
Millet	0.00	0.00
Oats	0.00	0.00
PULSES	2.71	24.40
Horse Beans	1.58	16.36
Field Peas	0.36	3.07
Haricot Beans	0.72	4.88
Chick Peas	0.05	0.09
Lentils	0.00	0.00
Vetch	0.00	0.00
OTHERS	0.00	0.00
Neug	0.00	0.00
Linseed	0.00	0.00
Fenugreek	0.00	0.00
Rapeseed	0.00	0.00
ALL CROPS	16.93	257.88

Table 26.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Sidamo

CROP	Total Area (('000 hectare)	Total Production (('000' quintal)
CEREALS	80.02	1095.44
Teff	13.61	69.22
Barley	12.89	169.59
Wheat	4.13	33.47
Maize	47.41	800.93
Sorghum	1.93	21.94
Millet	0.00	0.00
Oats	0.04	0.28
PULSES	8.12	56.36
Horse Beans	2.24	25.83
Field Peas	2.84	19.46
Haricot Beans	2.96	11.00
Chick Peas	0.04	0.00
Lentils	0.05	0.08
Vetch	0.00	0.00
OTHERS	0.02	0.00
Neug	0.00	0.00
Linseed	0.02	0.00
Fenugreek	0.00	0.00
Rapeseed	0.00	0.00
ALL CROPS	88.16	1151.80

Table 27.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Assosa

CROP	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	11.81	123.11
Teff	1.79	17.96
Barley	0.09	0.33
Wheat	0.10	0.46
Maize	4.07	65.77
Sorghum	2.25	23.63
Millet	3.50	14.96
Oats	0.00	0.00
PULSES	0.06	0.37
Horse Beans	0.02	0.08
Field Peas	0.00	0.00
Haricot Beans	0.04	0.29
Chick Peas	0.00	0.00
Lentils	0.00	0.00
Vetch	0.00	0.00
OTHERS	0.73	1.61
Negu	0.73	1.61
Linseed	0.00	0.00
Fenugreek	0.00	0.00
Rapeseed	0.00	0.00
ALL CROPS	12.60	125.09

Table 28.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)

Wellega

CROP	Total Area (['] 000 hectare)	Total Production (['] 000 quintal)
CEREALS	854.92	6512.71
Teff	603.82	4449.11
Barley	16.43	121.32
Wheat	12.45	64.39
Maize	172.12	1427.98
Sorghum	32.38	350.43
Millet	17.64	98.95
Oats	0.07	0.53
PULSES	180.51	802.11
Horse Beans	156.99	615.85
Field Peas	17.67	126.79
Haricot Beans	5.16	57.33
Chick Peas	0.49	1.88
Lentils	0.13	0.08
Vetch	0.08	0.17
OTHERS	147.41	426.71
Neug	139.93	426.20
Linseed	0.12	0.18
Fenugreek	0.13	0.34
Rapeseed	7.23	0.00
ALL CROPS	1182.84	7741.54

Table 29.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
North Wollo

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	75.81	757.99
Teff	20.61	168.39
Barley	22.16	187.80
Wheat	17.57	162.06
Maize	3.07	48.23
Sorghum	11.86	183.68
Millet	0.11	2.33
Oats	0.42	5.51
PULSES	17.68	116.84
Horse Beans	6.93	57.73
Field Peas	2.76	15.24
Haricot Beans	0.08	1.55
Chick Peas	1.86	9.12
Lentils	5.68	32.01
Vetch	0.37	1.19
OTHERS	0.26	0.83
Neug	0.03	0.03
Linseed	0.19	0.77
Fenugreek	0.05	0.03
Rapeseed	0.00	0.00
ALL CROPS	93.76	875.67

Table 30.

Forecast of Area and Production of Major
Crops for Private Holdings
In 1991/92 (1984 E.C.)
South Wollo

CROP	Total Area ('000 hectare)	Total Production ('000 quintal)
CEREALS	209.54	2318.44
Teff	47.49	379.72
Barley	33.73	319.83
Wheat	55.60	566.38
Maize	20.05	231.90
Sorghum	44.66	712.41
Millet	0.00	0.00
Oats	8.00	108.20
PULSES	50.47	364.60
Horse Beans	24.60	238.55
Field Peas	13.38	69.06
Haricot Beans	0.00	0.00
Chick Peas	1.13	9.83
Lentils	10.35	39.36
Vetch	1.01	7.81
OTHERS	1.05	3.43
Neug	0.63	1.15
Linseed	0.28	1.33
Fenugreek	0.15	0.94
Rapeseed	0.00	0.00
ALL CROPS	261.06	2686.47

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