

CBD Report 1985/86

MINISTRY OF AGRICULTURE (MOA)

COFFEE IMPROVEMENT PROJECT (CIP)

PLANNING, MONITORING AND EVALUATION SECTION

REPORT ON SAMPLE SURVEY FOR ASSESSMENT OF
LOSS DUE TO COFFEE-BERRY-DISEASE IN CIPAs

1978 E. C. (1985/86)

ADDIS ABABA

JANUARY, 1986

Terramed P. P. 009/78

CBD Report 1985/86

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COFFEE LOSS ASSESSMENT SAMPLE SURVEY RESULTS
DUE TO CBD IN THE CIPAs
1985/86 (1978 E.C.)

1. INTRODUCTION

Introductory Note

The appearance of Coffee Berry Disease in Ethiopia is placed at around 1968/69, while its out break was confirmed in 1971 in four major Coffee Growing Regions (Keffa, Illubabor, Wollega and Sidamo). Since its out break the disease has been causing a considerable damage particularly in these four regions and as of 1974 the disease has been spreading rapidly in major coffee growing areas.

In order to be able to quantify the loss due to CBD in all the project areas the Coffee Improvement Project started conducting CBD Loss Assessment Survey in 1977/78.

The results of the 1985/86 Coffee Loss Assessment sample survey for 15 CIPAs are given in this publication.

An attempt has been made in this report to give a detailed information regarding the loss of coffee due to CBD in the CIPAs.

2. OBJECTIVES:-

The objectives of the survey are:-

- i) to know the extent of coffee loss due to CBD in all CIPAs put together,
- ii) to know the extent of coffee loss in each CIPA and
- iii) to have estimates of the extent of coffee loss by sections within each CIPA.

3. SAMPLING METHODS:-

By CIP staff road maps which show all weather, dry weather, and trails were prepared in all project areas. Wherever roads are accessible spot observations have been taken at an interval of one kilometre and if inaccessible roads observations have been taken at an interval of 15 minutes walking distance, An observation point was considered as effective, $\frac{1}{2}$ effective or ineffective. An effective point is a point where there are coffee fields on both the right and the left side within a radius of about 250 meters. A half effective point is a point where there are coffee fields either on the right or on the left side within a radius of 250 meters. If a point is effective, two fields on the right side and two on the left side are taken. However, if on a point when there is only one field on the right and two fields on the left side or viceversa, the point is still considered as effective. Again if a point is half effective, two fields (it could be only one field if two are not available within a radius of about 250 metres) were taken.

Two types of observations are made on these selected fields:-

- i) objective assessment:- In each field two coffee trees are randomly selected and on two of the stems or branches of each tree, the berries are studied as damaged or healthy ones.
- ii) Subjective assessment:-
 - a) Tree level:- On each of the selected stems/branches the percentage of fallen & damaged berries was subjectively assessed by the surveyers without berry count.

- b) Field level:- The percentage loss of coffee due to CBD at field level was subjectively Judged by the surveyers without berry count.

4. COVERAGE

The survey in the CIPAs is part of a nation wide survey which is conducted by the Planning & Programming Department of the MCTD.

In 204 sections of the CIPAs 2147 kms of trails, dry weather and all weather roads have been covered. The number of sections and kilometres covered by CIPA is given in TABLE 1 while the detail is presented in ANNEX I.

TABLE - 1

Sections & Kilo-metres Covered by Type of Road

Sr. No.	CIPAs	Trails		Dry Weather		All Weather		All + Dry Weather		Total	
		No. of section	Kms.	No. of section	Kms.	No. of section	Kms.	No. of section	Kms.	No. of section	Kms.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Manna	1	7	21	137	3	69	-	-	25	213
2	Gomma	1	8	17	149	4	54	-	-	22	211
3	Chora	-	-	8	71	5	75	-	-	13	146
4	Yayu	-	-	9	79	2	39	-	-	11	118
5	Mettu	-	-	4	146	-	-	-	-	4	146
6	Haru	-	-	5	52	1	30	-	-	6	82
7	Ghimbi	1	14	11	97	3	34	-	-	15	145
8	Anfilo	-	-	9	79	1	20	-	-	10	99
9	Dale	-	-	11	100	2	23	-	-	13	123
10	A'Wondo	-	-	23	192	4	64	-	-	27	256
11	D'Wonago	-	-	14	111	6	57	-	-	20	168
12	Y'Cheffe	-	-	14	105	2	25	-	-	16	130
13	Kunni	-	-	2	43	3	36	-	-	5	79
14	Habro	-	-	9	102	5	39	-	-	14	141
15	D'Lebu	-	-	3	90	-	-	-	-	3	90
TOTAL		3	29	160	1553	41	565	-	-	204	2147

The number of effective, half effective and ineffective points in all CIPAs within the sections given above were 1262, 475, and 410 respectively while the number of fields observed on effective and half effective points were 4008 and 667 giving a total number of 4675 fields. The number of points and fields observed by CIPA is given in TABLE 2. While the details is available in ANNEX II.

TABLE - 2 Number of Points & Fields Covered.

Sr. No.	CIPAs	No. of sections	Number of Points				Number of Fields		
			E	½E	IE	Total	On EP	On ½EP	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Manna	25	113	63	37	213	287	77	364
2	Gomma	22	125	54	32	211	320	67	387
3	Chora	13	43	40	57	146	91	53	144
4	Yayu	11	38	42	38	118	79	46	125
5	Mettu	4	80	32	34	146	250	47	297
6	Haru	6	54	25	3	82	158	32	190
7	Ghimbi	15	112	26	7	145	413	41	454
8	Anfilo	10	41	44	14	99	165	97	262
9	Dale	13	108	13	2	123	435	25	460
10	A'Wondo	27	200	27	29	256	557	34	591
11	D'Wonago	20	157	10	1	168	624	19	643
12	Y'Cheffe	16	113	11	6	130	423	19	442
13	Kunni	5	15	15	49	79	30	17	47
14	Habro	14	39	43	59	141	123	65	188
15	D'Lebu	3	24	24	42	90	53	28	81
TOTAL		204	1262	475	410	2147	4008	667	4675

5. RESULTS

5.1 Distribution of fields by incidence of CBD

As explained in item 3 IIb, a subjective assessment of the extent of loss of coffee due to the disease has been done. The percentage loss classifications were 0% (O), 5% (L), 20% (M), 40% (H) 65% (VH) and 90% (T). The study shows that the number of fields with only 5% loss were as high as 2063 and with that of 90% loss was only 43 fields.

The distribution of fields by percentage loss of coffee (by section and by CIPAs) is shown in ANNEX III and by CIPA in TABLE 3.

TABLE - 3 Distribution of Fields by Percentage Loss of Coffee

Sr. No.	CIPAs	Number of Fields by % Loss						Total
		0% (O)	5% (L)	20% (M)	40% (H)	65% (VH)	90% (T)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Manna	9	181	112	50	12	-	364
2	Gomma	-	160	112	55	53	7	387
3	Chora	1	46	30	29	26	12	144
4	Yayu	21	58	25	14	7	-	125
5	Mettu	26	78	72	65	49	7	297
6	Haru	56	56	19	29	14	16	190
7	Ghimbi	146	186	79	36	7	-	454
8	Anfilo	185	49	26	2	-	-	262
9	Dale	245	177	26	11	-	1	460
10	A'Wondo	107	405	54	18	7	-	591
11	D'Wonago	203	400	32	6	2	-	643
12	Y'Cheffe	193	143	60	38	8	-	442
13	Kunni	18	9	10	7	3	-	47
14	Habo	23	78	50	34	3	-	188
15	D'Lebu	24	37	15	5	-	-	81
TOTAL		1257	2063	722	399	191	43	4675

5.2 Percentage estimate of loss from field assessment

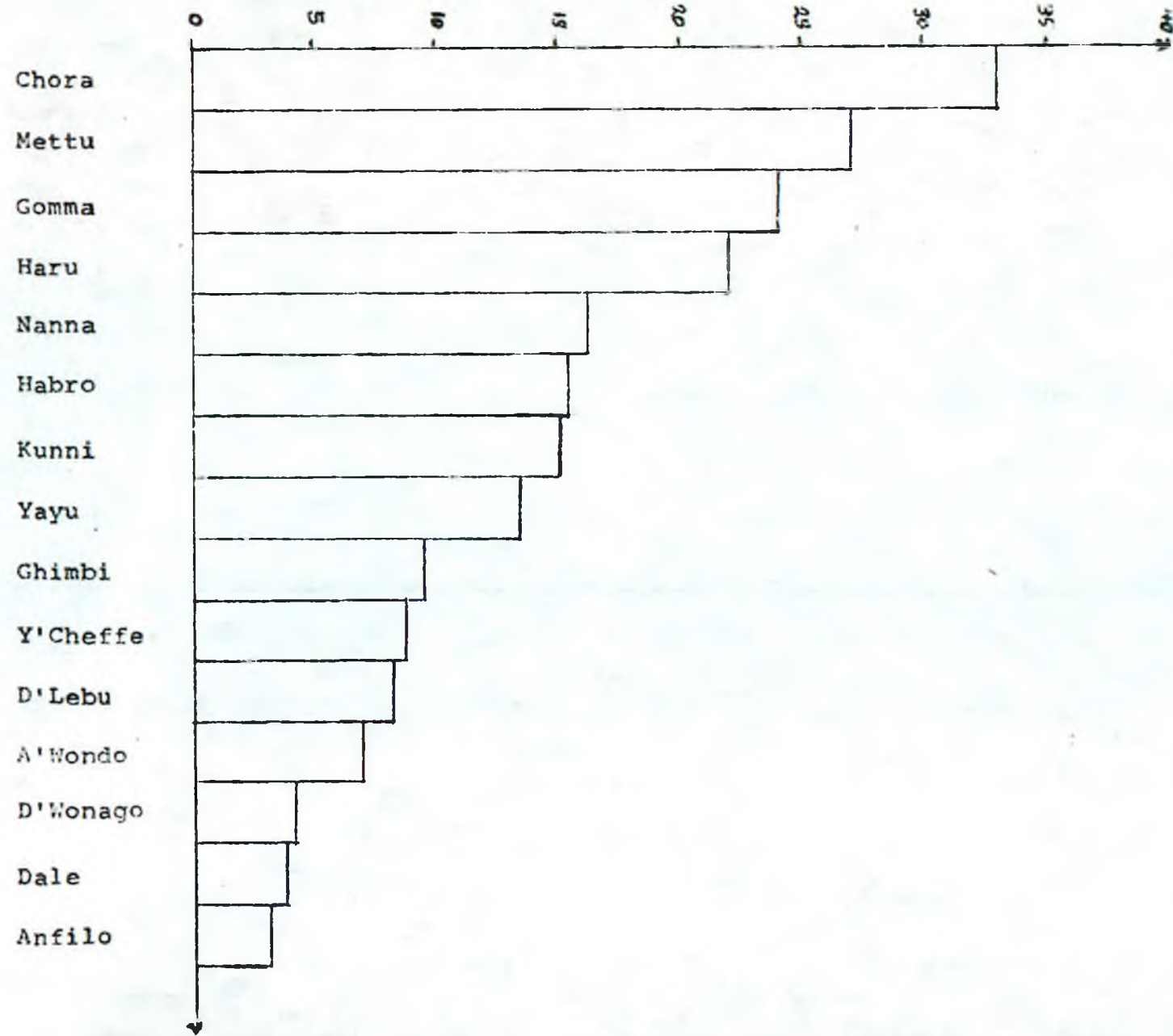
As it is explained earlier, a subjective assessment of coffee loss due to CBD was performed. Taking the number of fields as weights and multiplying the respective percentages by the number of fields by section and by CIPA, the survey indicates that the highest percentage loss in Chora 33.0% and the lowest in Anfilo with only 3.2% loss. However, the loss has increased in most of the CIPAs as compared to last year. The estimates of percentage loss of coffee from field assessment by sections is given in ANNEX-IV and summary by CIPAs is reproduced in TABLE 4.

TABLE - 4 Summary of % loss by CIPAs

Sr. No.	CIPAs	Percentage
(1)	(2)	(3)
1	Chora	33.0
2	Mettu	27.8
3	Gomma	24.0
4	Haru	21.9
5	Manna	16.3
6	Habro	15.7
7	Kunni	15.3
8	Yayu	14.4
9	Ghimbi	9.7
10	Y'Cheffe	8.9
11	D'Lebu	8.4
12	A'Wondo	7.2
13	D'Wonago	4.7
14	Dale	4.2
15	Anfilo	3.2
	All CIPAs	12.2

The graph on page 8 vividly shows the above results.

CBD LOSS BY PERCENT



SUMMARY OF PERCENTAGE LOSS BY CIIMS FOR
1985/86

5.3 Estimates of coffee loss from berry count

i) Tree level

a) Excluding fallen damaged berries:-

It will be recalled that count of berries were made in order to know the number of damaged and good berries on the selected trees whenever the field is found to be effective. Accordingly in all of the CIPAs 73,761 damaged and 863,893 good ones , a total of 937,654 berries were counted on 9,350 coffee trees,

This indicates that the average number of damaged berries per tree is about 8% and the average number of good berries per tree is about 92%.

The number of trees, number of berries counted as damaged and good average, loss per tree by CIPAs is given in TABLE 5.

TABLE - 5 Number of trees, berries as damage and good, average number of berries per trees and percentage

Sr. No.	CIPAs	No. of fields	No. of trees	Number of berries counted			Average number of berries/tree			% of damaged & Good berries/tree		
				Damaged	Good	Total	Damaged	Good	Total	Damaged	Good	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Manna	364	728	12467	81845	94312	17	112	129	13	87	100
2	Gomma	387	774	7192	59678	66870	9	77	86	10	90	100
3	Chora	144	288	6743	14166	20909	23	49	72	32	68	100
4	Yayo	125	250	4443	40619	45062	18	162	180	10	90	100
5	Mettu	297	594	3324	39840	43164	5	67	72	7	93	100
6	Haru	190	380	2172	23566	25738	6	62	68	9	91	100
7	Ghimbi	454	908	4740	60574	65314	5	67	72	7	93	100
8	Anfilo	262	524	2085	37100	39185	4	71	75	5	95	100
9	Dale	460	920	4064	105217	109281	4	114	118	3	97	100
10	A.Wondo	591	1182	10616	117812	128428	9	99	108	8	92	100
11	D'Wonago	643	1286	2585	109863	112448	2	85	87	2	98	100
12	Y'cheffee	442	884	8614	141795	150409	10	160	170	6	94	100
13	Kunni	47	94	1306	3610	4916	14	38	52	27	73	100
14	Habro	188	376	1579	8703	10282	4	23	27	15	85	100
15	D'Lebu	81	162	1831	19505	21336	11	120	131	8	92	100
TOTAL		4675	9350	73761	863893	937654	8	92	100	8	92	100

b) Including fallen damaged berries:-

A similar table like TABLE 5 is constructed for the count of berries including fallen damaged berries, see TABLE 6.

TABLE - 6 Number of trees, berries as damaged & good, average number of berries/trees and percentage including fallen damaged

Sr. No.	CIPAs	No. of fields	No. of trees	Number of berries counted			Average number of berries/trees			% of damaged & good berries/trees		
				Damaged	Good	Total	Damaged	Good	Total	Damaged	Good	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Manna	364	728	24,048	81,845	105,893	33	112	145	23	77	100
2	Gomma	387	774	7,345	59,678	67,023	9	77	86	10	90	100
3	Chora	144	288	70,128	14,166	84,294	243	49	292	83	17	100
4	Yayu	125	250	7,096	40,619	47,715	28	162	190	15	85	100
5	Mettu	297	594	6,254	39,840	46,094	10	67	77	13	87	100
6	Haru	190	380	9,500	23,566	33,066	25	62	87	29	71	100
7	Ghimbi	454	908	7,374	60,574	67,948	8	66	74	11	89	100
8	Anfilo	262	524	2,195	37,100	39,295	4	71	75	5	95	100
9	Dale	460	920	4,212	105,217	109,429	4	114	118	3	97	100
10	A'Wondo	591	1,182	68,075	117,812	185,887	57	100	157	36	64	100
11	D'Wonago	643	1,286	2,952	109,863	112,815	2	85	87	2	98	100
12	Y'Cheffe	442	884	13,619	141,795	155,414	15	160	175	8	92	100
13	Kunni	47	94	1,656	3,610	5,266	17	38	55	31	69	100
14	Habro	188	376	2,285	8,703	10,988	6	23	29	21	79	100
15	D'Lebu	81	162	1,833	19,505	21,338	11	120	131	8	92	100
TOTAL		4,675	9,350	228,572	863,893	1,092,465	24	92	116	21	79	100

ii) CIPA Level

The estimate of percentage loss in the CIPAs has been found out by counting the number of damaged and good berries and calculating the percentage of damaged berries from the total.

The calculation has been done in two ways. One is by taking the number of damaged berries on the stems/branches without taking into consideration fallen damaged berries, and the other by including fallen damaged berries, to damaged berries on the stems/branches. For all CIPAs aggregated, the result show that the loss excluding fallen damaged berries and including fallen damaged berries to be 8% and 21% respectively. The percentage loss by CIPAs is given in TABLE 7 and by sections in ANNEX-V.

.../

TABLE - 7 Loss of coffee due to CBD from berry count

CIPAs	No. of fields	Without fallen damaged berries		%	Including fallen damaged berries		%
		No. of Berries			No. of Berries		
		Damaged	Total	Loss	Damaged	Total	Loss
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Manna	364	12,467	94,312	13	24,048	105,893	23
Gomma	387	7,192	66,870	11	7,345	67,032	11
Chora	144	6,743	20,909	32	70,128	84,294	83
Yayu	125	4,443	45,062	10	7,096	47,715	15
Mettu	297	3,324	43,164	8	6,254	46,094	14
Haru	190	2,172	25,738	8	9,500	33,066	29
Ghimbi	454	4,740	65,314	7	7,374	67,948	11
Anfilo	262	2,085	39,185	5	2,195	39,295	6
Dale	460	4,064	109,281	4	4,212	109,429	4
A'Wondo	591	10,616	128,428	8	68,075	185,887	37
D'Wonago	643	2,585	112,448	2	2,952	112,815	3
Y'Cheffe	442	8,614	150,409	6	13,619	155,414	9
Kunni	47	1,306	4,916	27	1,656	5,266	31
Habro	188	1,579	10,282	15	2,285	10,988	21
D'Lebu	81	1,831	21,336	9	1,833	21,338	8
T O T A L	4,675	73,761	937,654	8	228,572	1,092,465	21

5.4 Rain fall:-

A subjective judgement of the incidence of rain-fall during the time of flowering was enquired from the farmers and the classification of incidence was classified as nil (0) medium (1) and heavy (2). For all the CIPAs put together, there-were 19 sections with nil rainfall 167 with medium, and 5 with heavy rainfall at the time of flowering: TABLE 8 gives the number of sections and incidence of rainfall by CIPA.

TABLE - 8 Incidence of rainfall during flowering by CIPAs

Sr. No.	CIPAs	No. of sections	Rain - fall				Total
			Code 0	Code 1	Code 2	Not available	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Manna	25	4	16	5	-	25
2	Gomma	22	-	22	-	-	22
3	Chora	13	-	13	-	-	13
4	Yayu	11	-	11	-	-	11
5	Mettu	4	-	4	-	-	4
6	Haru	6	-	6	-	-	6
7	Ghimbi	15	-	15	-	-	15
8	Anfilo	10	-	10	-	-	10
9	Dale	13	-	-	-	13	13
10	A'Wondo	27	-	27	-	-	27
11	D'Wonago	20	2	18	-	-	20
12	Y'Cheffe	16	10	6	-	-	16
13	Kunni	5	-	5	-	-	5
14	Habro	14	-	14	-	-	14
15	D'Lebu	3	3	-	-	-	3
TOTAL		204	19	167	5	13	204

5.5 Density of shade

A subjective observation of density of shade was taken at field level based on the following classifications.

NIL = 0
 LIGHT = 1
 MEDIUM = 2
 HEAVEY = 3

Out of the total of 4675 observed fields 1150 found to be with no shade 1735 with light shade, 1260 with medium shade and 530 with heavy shade. Incidence of shade by CIPAs is given in TABLE 9.

TABLE - 9 Incidence of shade by CIPAs

Sr. No.	CIPAs	Incidence of shade by CIPAs				Total
		Code 0	Code 1	Code 2	Code 3	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Manna	42	61	146	115	364
2	Gomma	14	173	168	32	387
3	Chora	19	20	50	55	144
4	Yayu	14	26	33	52	125
5	Mettu	58	115	95	29	297
6	Haru	17	36	78	59	190
7	Ghimbi	90	159	148	57	454
8	Anfilo	31	113	98	20	262
9	Dale	71	268	92	29	460
10	A'Wondo	366	206	17	2	591
11	D'Wonago	203	265	138	37	643
12	Y'Cheffe	89	187	126	40	442
13	Kunni	18	20	8	1	47
14	Habro	75	58	53	2	188
15	D'Lebu	43	28	10	1	81
TOTAL		1150	1735	1260	530	4675

5.6 Incidence of weeds:-

Incidence of weeds by type was observed along with the incidence of shades. The classification of incidence and type of weeds were as:

i) Type of weeds		ii) Incidence of weeds:-	
Nil	= 0	Nil	= 0
Couch grass	= 1	Light	= 1
Engicha	= 2	Medium	= 2
Shoft weeds	= 3	Heavy	= 3
Mixed weeds	= 4		

To acquaint the reader further with the interpretation of the codes, the following explanations has been given.

If there is no weed at all in the field, the code, is 0 and it means there is no weed. If the codes are 1,1 then the first figure (1) indicates that the weed is couch grass and the second figure indicates its incidence to be light. If it is 2,3 it means the weed is 'Engicha' and its incidence is heavy. The incidences of weeds by type and by CIPAs is given in TABLE 10.

.../

TABLE - 10 Number of fields by type and incidence of weeds

Sr. No.	CIPAs	Incidence of Weeds by type													Total
		0,0	1,1	1,2	1,3	2,1	2,2	2,3	3,1	3,2	3,3	4,1	4,2	4,3	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	Manna	10	3	3	-	-	-	1	96	76	96	17	13	49	364
2	Gomma	36	-	--	1	-	-	-	161	7	82	2	1	97	387
3	Chora	1	-	-	1	-	-	3	9	54	44	11	16	5	144
4	Yayu	-	1	2	3	1	-	-	42	15	41	7	4	9	125
5	Mettu	8	-	-	6	-	-	4	64	40	36	46	52	41	297
6	Haru	25	-	-	7	-	-	-	50	34	56	8	-	10	190
7	Ghimbi	25	5	15	39	-	-	-	104	77	66	37	37	49	454
8	Anfilo	7	1	-	-	10	11	2	45	59	22	31	46	28	262
9	Dale	17	-	-	9	-	-	-	169	68	33	63	71	30	460
10	A'Wondo	91	1	7	106	-	2	-	81	27	32	58	54	132	591
11	D'Wonago	136	3	6	308	2	1	89	8	32	12	8	1	37	643
12	Y'Cheffe	60	1	-	5	5	4	4	133	91	20	27	44	48	442
13	Kunni	13	-	1	-	-	-	-	9	8	6	3	3	4	47
14	Habro	19	5	1	39	4	2	1	51	3	3	38	4	18	188
15	D'Lebu	30	3	-	-	-	2	-	-	16	21	-	-	9	81
TOTAL		478	23	35	524	22	22	104	1022	607	570	356	346	566	4675

6. CONCLUSION

- 6.1 In the publications of 1978/79 and 1979/80 the Coffee Loss Assessment Survey due to CBD was conducted in seven CIPAs excluding Daro Lebu since there was not any CBD incidence as reported by CIP field staff. Starting from 1980/81 the survey was conducted in eight CIPAs while the 1982/83, 1983/84, 1984/85 and 1985/86 survey include 15 CIPAs.
- 6.2 In 1985/86 the total number of sections, fields and trees covered in all CIPAs were 204, 4675 and 9350 respectively.
- 6.3 As it is shown in TABLES 5 & 6 the average number of berries and the percentage of damaged and good berries have been estimated.
- 6.4 Informations on type and incidence of weeds in the different CIPAs is available in TABLE 10. This is assumed to help the Extension Section to give some knowledge about the different kinds of weeds and hence enables it to take action.
- 6.5 The loss of CBD in most of the CIPAs has increased as compared to 1984/85's result.

ANNEX - I Sections Type of Road & Distance
Covered

CIPA	No. of sections	From (Name)	To (Name)	Type of Road	Appro. dist. (kms.)
(1)	(2)	(3)	(4)	(5)	(6)
Manna	1	Gembe	Jimma	All weather	31
	2	Gijabe	Oto Jimate	Dry "	6
	3	Inkulu	Sombo Cheka	" "	5
	4	Sombo Checka	Torbako River	" "	3
	5	Debessa	Guwa Gube	" "	9
	6	Debessa	Kella Bilo	" "	5
	7	Yebu	Kora Konjo	" "	16
	8	Kore Gebeya	Seyeodo	" "	7
	9	Seye Odo	Wolo Sefer	" "	2
	10	Kererro	" "	" "	16
	11	Wolo Sefer	Arbeta	" "	3
	12	" "	Seyo	" "	3
	13	Yebu	Tesano	Trail	7
	14	Yebu	Tasano	Dry Weather	4
	15	Alemayhu	Doyo Kaso	" "	4
	16	Gurkie Jimate	Temuga Dale	" "	6
	17	" "	Dayo Melko	" "	11
	18	Mazoria	Gurkie furdisa	" "	6
	19	Mazoria	Aweytu River	All Weather	24
	20	Seteo Semero	Somodo	Dry Weather	9
	21	Blida	Ourgaye	" "	9
	22	Melko	Doyo Haro	All Weather	14
	23	Dayo Haro	Gurkie Jimmatte	Dry Weather	6
	24	Duwa	Metti	" "	4
	25	Duwa	Duwa	" "	3
Sub-Total	x	x	x	x	213
Gomma	1	Suse	Kochole	Dry weather	12
	2	Agaro	Beko Abo	All weather	8
	3	Beshasha	Keda Abakaba	Dry weather	3

(Cont.)

(1)	(2)	(3)	(4)	(5)	(6)	
Gomma	4	Dalecho	G.Tolly	Dry Weather	5	
	5	Agaro	Jawe	" "	3	
	6	Agaro	Kujo pulping	" "	4	
	7	Gembe	Kibi	" "	7	
	8	Gomma 2	Komba	" "	5	
	9	Agaro	Sombo Chamite	All weather	22	
	10	"	Kido	Dry weather	10	
	11	"	Gember	All weatger	10	
	12	"	Urage urtabo	Dry weather	8	
	13	Achemo	Boto	" "	6	
	14	Dalecho	Baresso	" "	6	
	15	Bulbulo	Homecho River	" "	13	
	16	Kesso Hitti	Bulbulo	" "	12	
	17	Agaro	Yachi River	All weather	14	
	18	Gembe	Keta bero	Dry weather	23	
	19	Kaye	Jimate	Trail	8	
	20	Kota	G.Tolly	Dry weather	10	
	21	Kerkir	Tobokesse	" "	15	
	22	Bulbulo	Mechi	" "	7	
	Sub-total	x	x	x	x	211
	Chora	1	Beroseriti	Abagaro	Dry weather	14
		2	Abdella	Semijo	" "	6
3		Tobsihomi	Kuwie	" "	9	
4		Abono	Halilu Geba	Dry weather	8	
5		Tobisi Dekisso	Rundassie	" "	7	
6		Shengelu	Dilbi	" "	7	
7		Kumbabe	Dega	All weather	32	
8		Guji	Hadessa	Dry weather	8	
9		Kumbabe	Geba river	All weather	13	
10		Ababora	Embrosonge	Dry weather	12	
11		Bero borelle	Kemisse	All weather	7	
12		Hawa Yember	Outa river	" "	5	
13		Kumbabe	Abdella	" "	18	
Sub-total	x	x	x	x	146	

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)
Yayo	1	Dogi River	Geba River	All weather	22
	2	Gechi Dogi	Bondaw Gechi	Dry weather	6
	3	Yayo	Gechi	" "	11
	4	Saki	Abiyu	" "	13
	5	Witate	Jitho	" "	13
	6	Yayo	Geba	" "	7
	7	Saki River	Dogi River	All weather	17
	8	Witate	Yambo	Dry weather	17
	9	Yayu	H/Degithu	" "	2
	10	"	Saki	" "	4
	11	Agaro Leku	Gindabo River	" "	6
Sub-total	x	x	x	x	118
Mettu	1	Hospital	Berroye	Dry weather	32
	2	Mettu Mechi	Yember	" "	26
	3	Bubu	Adele Haro	" "	54
	4	Mede River	Keto River	" "	34
Sub-total	x	x	x	x	146
Haru	1	Guie	Bondawo	All weather	30
	2	"	Golja Ganji	Dry weather	13
	3	"	Budi	" "	12
	4	"	Kaki	" /	10
	5	"	Chonge	" "	10
	6	"	Chaqeli	" "	7
Sub-total	x	x	x	x	82
Ghimbi	1	Ghimbi	Sodo Cellel	All weather	17
	2	"	Lalo Huseche	Dry weather	8
	3	"	Gambella	" "	14
	4	Dallal Agemesa	Buko Assabi	" "	7
	5	Gambella	Sewa gedgi	All weather	7
	6	Ghimbi	Chuta Kaki	Dry weather	12
	7	Sotello	Sewa gerogis	Trail	14
	8	Chuta Kebele	Wolo Maiam	Dry weather	7
	9	Gambella	Homma	" "	11
	10	Homma	Homma Birbir	" "	5
	11	Homma	Sotelo	" "	9

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(cont.)

(1)	(2)	(3)	(4)	(5)	(6)
Ghimbi	12	Walo Eyesus	Mekanejo	All weather	10
	13	Hore Mariam	Gambella	Dry weather	7
	14	Homma	Sebayebu	" "	6
	15	Ghimbi	Horemariam	" "	4
Sub-total	x	x	x	x	145
Anfilo	1	Ersa village	Kuro	Dry weather	11
	2	Mugi	Fantoti	" "	13
	3	Ebur	Gobishari	" "	6
	4	Ashi	Dulli	" "	5
	5	Wollali	Dallamosh	" "	6
	6	Della	Yelli	" "	5
	7	Mugi	Sidi	All weather	20
	8	Ebur	Yarer	Dry weather	14
	9	Felefele	Dawa Tobi	" "	12
	10	Ega River	Yetti	" "	7
Sub-total	x	x	x	x	99
Dale	1	Hospital	Raro River	All weather	15
	2	Awada	Manche	Dry weather	14
	3	Manche	Bokosso	" "	15
	4	Bokasso	Duba	" "	15
	5	Duba	Halile	" "	5
	6	Wara	Gajamo	" "	6
	7	Y/Alem	Gokasso	" "	7
	8	Manche	Haylo	" "	6
	9	Gidabo	Waycho	" "	9
	10	"	Boa River	" "	11
	11	Aposto	Soyma	All weather	8
	12	Tao	Furra	Dry weather	8
	13	Wenenata	Hidakalati	" "	4
Sub-total	x	x	x	x	123
Aleta Wondo	1	Titira	Gunde	Dry weather	18
	2	"	Barancho River	All weather	18
	3	"	Korke (Research)	Dry weather	8
	4	"	Chuko	" "	7

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(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	
Aleta Wondo	5	Chuko	Gelma	Dry weather	7	
	6	"	Bishan Dima	" "	5	
	7	Chuko	Chuko Woyama	Dry weather	8	
	8	"	Korke	" "	5	
	9	"	Loko Dama	" "	9	
	10	"	Mirdicha	" "	9	
	11	Wondo	Raro River	All weather	8	
	12	"	Finche Wuha	" "	14	
	13	"	2 nd Mogisa	Dry weather	5	
	14	"	Bunta River	" "	9	
	15	Dobe	Hondowa	" "	7	
	16	Habeja	Hankesa	" "	8	
	17	Gambela	Mekela	" "	4	
	18	Lela Honcha	"	" "	6	
	19	Teferi Kela	Safa Shoiecho	" "	5	
	20	Bultuma	Babe-Comolcha	" "	21	
	21	Shilcho Co.op.	Shabe-Dela	" "	5	
	22	Harangicho	Chuko	" "	14	
	23	Kosericha Coop.	Kilto	" "	7	
	24	Raro River	D-Monocho	" "	13	
	25	Rufo Waeno	Hase/sike/	" "	7	
	26	Raro River	Djigessa	All weather	24	
	27	Gelma	Homecho	Dry weather	5	
	Sub-total	x	x	x	x	256
	D'Wonago	1	Wenago	Sokicha	All weather	8
		2	A'Ketema	B'Okoto	Dry weather	8
		3	Dilla	Wenago	All weather	11
4		"	Kebado	" "	9	
5		Wonago	A'Ktema	" "	8	
6		Dilla	Outilche	Dry weather	12	
7		Dilla (Odolla)	Kebado	" "	8	
8		Chichu	Bulla	All weather	11	
9		"	Akasho	Dry weather	10	
10		Guanga	Sokicha	" "	18	

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(cont.)

(1)	(2)	(3)	(4)	(5)	(6)
D'Wonago	11	Tinkrase	Ressa	Dry weather	8
	12	Gunaga	O.Mike	" "	5
	13	Dilla	Michille	" "	9
	14	Tinkrase	Keleltu	" "	4
	15	Kebade	Benko Marleos	" "	7
	16	Dilla	Saffe	All weather	10
	17	K.Mashine	B.Della	Dry weather	6
	18	Sugule	Debote	" "	5
	19	Dilla	Heraresu	" "	5
	20	K.Mashine	S.Hanqla	" "	6
Sub-total	x	x	x	x	168
Y'Cheffe	1	Yirga Cheffe	Wette-Fesha gent	All Weather	10
	2	" "	Addis Koffe	" "	15
	3	" "			
		Chelba	Tututi	Dry weather	4
	4	Yirga Cheffe	Haru Bukisa	" "	20
	5	Worbi	Bukissa	" "	9
	6	Chaltu	Heredi	" "	5
	7	Haru	Resity	" "	8
	8	Yirga Cheffe	Lakicha	" "	15
	9	" "	Morkato	" "	5
	10	" "	Barko	" "	8
	11	Edido	Gersie	" "	6
	12	Haru	Kedida	" "	6
	13	Melkalole	B.Kaca	" "	5
	14	Yirga Cheffe	Kocity	" "	3
	15	Kombolcha	Dibitu	" "	6
16	Yirga Cheffe	Konga	" "	5	
Sub-total	x	x	x	x	130
Kunni	1	Bedessa	Gebiba	Dry weather	27
	2	Wellargie	Kereyou	All weather	10
	3	Kara Kurkura	Surry	Dry weather	16
	4	Bedessa	Kara Kurkura	All weather	17
	5	Mekanisa	Goda Hora	" "	9
Sub-total	x	x	x	x	79

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)
Habro	1	Karakurkura	Tiro	Dry weather	18
	2	Obicha	Chefeo	" "	7
	3	Mulino	Bella	" "	6
	4	Gatira	Kelina	" "	7
	5	Mulino	Gelemso Keble	All weather	9
	6	Gelemso Kebeol	Weine Kelo	Dry weather	9
	7	" "	Gerbigoba	All weather	7
	8	Gerbigoba	Chireti	Dry weather	7
	9	Gara Guracha	Dereku Aidu	" "	19
	10	Lege Bera	Degfo	All weather	9
	11	Deffo	Daba	Dry weather	11
	12	"	Ibsa	All weather	11
	13	Birbirty	Oda Leleba	Dry weather	18
	14	Gende gara	Mechera	All weather	3
Sub-total	x	x	x	x	141
D'Lebu	1	Micheta	Gadulo	Dry weather	30
	2	Mechara	Milkay	" "	42
	3	Micheta	Mendessa	" "	18
Sub-total	x	x	x	x	90
TOTAL	x	x	x	x	2147

ANNEX-II

Number of points & fields covered

CIPA	Section No.	Number of points				Number of fields observed		
		E	½E	IE	Total	On EP	On ½EP	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Manna	1	11	16	4	31	28	21	49
	2	6	-	-	6	18	-	18
	3	2	3	-	5	4	4	8
	4	1	2	-	3	2	2	4
	5	8	1	-	9	21	1	22
	6	3	2	-	5	7	2	9
	7	12	3	1	16	34	3	37
	8	5	1	1	7	13	1	14
	9	1	-	1	2	2	-	2
	10	10	5	1	16	25	6	31
	11	3	-	-	3	8	-	8
	12	1	1	1	3	3	1	4
	13	3	3	1	7	8	5	13
	14	2	-	2	4	4	-	4
	15	4	-	-	4	10	-	10
	16	2	2	2	6	4	2	6
	17	7	2	2	11	15	2	17
	18	3	-	3	6	7	-	7
	19	8	10	6	24	20	13	33
	20	4	3	2	9	9	3	12
	21	6	2	1	9	15	3	18
	22	3	4	7	14	6	5	11
	23	2	2	2	6	5	2	7
	24	3	1	-	4	10	1	11
	25	3	-	-	3	9	-	9
Sub-total	x	113	63	37	213	287	77	364

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Gonna	1	7	5	-	12	18	7	25
	2	6	1	1	8	18	1	19
	3	3	-	-	3	6	-	6
	4	4	1	-	5	10	1	11
	5	7	2	1	3	-	3	3
	6	4	-	-	4	11	-	11
	7	7	-	-	7	20	-	20
	8	2	-	3	5	4	-	4
	9	10	8	4	22	27	9	36
	10	9	1	-	10	25	1	26
	11	4	3	3	10	10	5	15
	12	5	1	2	8	12	1	13
	13	3	1	2	6	7	1	8
	14	2	3	1	6	5	3	8
	15	9	2	2	13	29	2	31
	16	7	4	1	12	17	4	21
	17	2	7	5	14	4	10	14
	18	15	4	4	23	37	6	43
	19	8	-	-	8	19	-	19
	20	7	2	1	10	15	2	17
	21	7	7	1	15	17	8	25
	22	4	2	1	7	9	3	12
Sub-total	x	125	54	32	211	320	67	387
Chora	1	-	4	10	14	-	5	5
	2	1	1	4	6	4	1	5
	3	2	2	5	9	4	2	6
	4	5	2	1	8	10	2	12
	5	4	-	3	7	8	-	8
	6	3	4	-	7	6	4	10
	7	9	17	6	32	18	20	38
	8	5	2	1	8	11	2	13
	9	4	2	7	13	8	3	11
	10	4	3	5	12	9	3	12
	11	3	2	2	7	7	2	9
	12	-	3	2	5	-	3	3
	13	3	4	11	18	6	6	12
Sub-total	x	43	46	57	146	91	53	144

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Yayu	1	6	9	7	22	12	9	21
	2	1	2	3	6	2	2	4
	3	5	4	2	11	11	4	15
	4	5	6	2	13	10	6	16
	5	6	3	4	13	12	3	15
	6	2	4	1	7	4	4	8
	7	7	5	5	17	15	5	20
	8	2	6	9	17	4	8	12
	9	1	1	-	2	2	2	4
	10	2	-	2	4	5	-	5
	11	1	2	3	6	2	3	5
Sub-total	x	38	42	38	118	79	46	125
Mettu	1	11	10	11	32	28	14	42
	2	17	3	6	26	53	5	58
	3	30	14	10	54	93	24	117
	4	22	5	7	34	76	4	80
Sub-total	x	80	32	34	146	250	47	297
Haru	1	22	6	2	30	70	8	78
	2	10	3	-	13	30	5	35
	3	6	5	1	12	17	7	24
	4	6	4	-	10	13	4	17
	5	3	7	-	10	6	8	14
	6	7	-	-	7	22	-	22
Sub-total	x	54	25	3	82	158	32	190
Ghimbi	1	7	7	3	17	22	12	34
	2	8	-	-	8	28	-	28
	3	13	1	1	14	48	1	49
	4	7	-	-	7	27	-	27
	5	3	4	-	7	11	7	18
	6	6	4	2	12	20	7	27
	7	12	1	1	14	45	1	46
	8	5	2	-	7	18	3	21
	9	11	-	-	11	43	-	43
	10	4	1	-	5	16	1	17

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Ghimbi	11	9	-	-	9	35	-	35
	12	8	2	-	10	34	2	36
	13	7	-	-	7	22	-	22
	14	3	2	1	6	9	3	12
	15	9	2	-	11	35	4	39
Sub-total	x	112	26	7	145	413	41	454
Anfileo	1	9	2	-	11	36	6	42
	2	7	6	-	13	29	12	41
	3	-	6	-	6	-	12	12
	4	1	3	1	5	4	8	12
	5	1	5	-	6	4	14	18
	6	3	2	-	5	12	5	17
	7	6	8	6	20	24	18	42
	8	3	7	4	14	12	11	23
	9	5	4	3	12	20	9	29
	10	6	1	-	7	24	2	26
Sub-total	x	41	44	14	99	165	97	262
Dale	1	13	2	-	15	52	3	55
	2	11	1	2	14	50	3	53
	3	14	1	-	15	55	1	56
	4	13	2	-	15	52	4	56
	5	5	-	-	5	20	-	20
	6	6	-	-	6	24	-	24
	7	7	-	-	7	28	-	28
	8	6	-	-	6	24	-	24
	9	7	2	-	9	27	4	31
	10	9	2	-	11	35	4	39
	11	7	1	-	8	28	2	30
	12	7	1	-	8	28	2	30
	13	3	1	-	4	12	2	14
Sub-total	x	108	13	2	123	435	25	460
A'Wondo	1	12	2	4	18	35	3	38
	2	17	1	-	18	52	2	54
	3	8	-	-	8	25	-	25
	4	6	1	-	7	22	1	23

(Cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A'Wondo	5	7	-	-	7	22	-	22
	6	3	1	1	5	5	2	7
	7	6	-	2	8	16	-	16
	8	4	1	-	5	14	2	16
	9	4	2	3	9	13	2	15
	10	5	1	3	9	11	1	11
	11	8	-	-	8	23	-	23
	12	6	-	8	14	16	-	16
	13	5	-	-	5	11	-	11
	14	9	-	-	9	25	-	25
	15	7	-	-	7	22	-	22
	16	6	1	1	8	14	1	15
	17	3	1	-	4	8	1	9
	18	5	1	-	6	17	1	18
	19	5	-	-	5	14	-	14
	20	20	1	-	21	53	1	54
	21	4	1	-	5	10	1	11
	22	13	1	-	14	32	1	33
	23	4	3	-	7	10	4	14
	24	6	3	4	13	14	3	17
	25	4	1	2	7	11	1	12
	26	18	5	1	24	53	7	60
	27	5	-	-	5	10	-	10
Sub-total	x	200	27	29	256	557	34	591
D'Wonago	1	8	-	-	8	32	-	32
	2	8	-	-	8	32	-	32
	3	10	1	-	11	40	2	42
	4	8	-	1	9	30	-	30
	5	6	2	-	8	24	3	27
	6	11	1	-	12	43	1	44
	7	8	-	-	8	32	-	32
	8	9	2	-	11	36	6	42
	9	10	-	-	10	40	-	40
	10	18	-	-	18	72	-	72
	11	8	-	-	8	32	-	32

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
D'Wonago	12	4	1	-	5	16	2	18
	13	8	1	-	9	32	1	33
	14	4	-	-	4	16	-	16
	15	7	-	-	7	28	-	28
	16	9	1	-	10	35	2	37
	17	5	1	-	6	20	2	22
	18	5	-	-	5	20	-	20
	19	5	-	-	5	20	-	20
	20	6	2	-	6	24	-	24
Sub-total	x	157	10	1	168	624	19	643
Y'Cheffe	1	6	3	1	10	24	6	30
	2	9	3	3	15	24	4	28
	3	4	-	-	4	16	-	16
	4	15	3	2	20	46	5	51
	5	9	-	-	9	33	-	33
	6	5	-	-	5	19	-	19
	7	8	-	-	8	31	-	31
	8	15	-	-	15	59	-	59
	9	5	-	-	5	20	-	20
	10	8	-	-	8	32	-	32
	11	6	-	-	6	24	-	24
	12	4	2	-	6	20	4	24
	13	5	-	-	5	20	-	20
	14	3	-	-	3	12	-	12
	15	6	-	-	6	24	-	24
	16	5	-	-	5	19	-	19
Sub-total	x	113	11	6	130	423	19	442
Kunni	1	7	4	16	27	14	4	18
	2	3	3	4	10	6	4	10
	3	1	3	12	16	2	3	5
	4	3	2	12	17	6	3	9
	5	1	3	5	9	2	3	5
Sub-total	x	15	15	49	79	30	17	47

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Habro	1	-	4	14	18	-	6	6
	2	1	1	5	7	3	1	4
	3	1	-	5	6	3	-	3
	4	3	2	2	7	7	6	13
	5	1	3	5	9	3	1	4
	6	4	4	1	9	11	6	17
	7	3	1	3	7	8	2	10
	8	1	2	4	7	4	3	7
	9	8	9	2	19	27	13	40
	10	4	2	3	9	13	4	17
	11	5	3	3	11	16	6	22
	12	3	3	5	11	10	4	14
	13	4	8	6	18	14	11	25
	14	1	1	1	3	4	2	6
Sub-total	x	39	43	59	141	123	65	188
D'Lebu	1	9	9	12	30	18	9	27
	2	7	9	26	42	15	13	28
	3	8	6	4	18 _m	20	6	26
Sub-total	x	24	24	42	90	53	28	81
TOTAL	x	1262	475	410	2147	4008	667	4675

ANNEX - III

Distribution of Fields by Incidence

CIPAs	Section No.	Number of fields						Total
		O	L	M	H	VH	T	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Manna	1	2	25	11	9	2	-	49
	2	-	11	5	2	-	-	18
	3	-	3	3	2	-	-	8
	4	-	3	1	-	-	-	4
	5	-	10	7	4	1	-	22
	6	-	5	2	1	1	-	9
	7	-	25	8	3	1	-	37
	8	1	9	2	1	1	-	14
	9	-	-	1	1	-	-	2
	10	1	15	8	4	3	-	31
	11	-	7	1	-	-	-	8
	12	-	1	3	-	-	-	4
	13	-	3	7	3	-	-	13
	14	-	3	1	-	-	-	4
	15	1	2	4	3	-	-	10
	16	-	5	1	-	-	-	6
	17	2	7	6	2	-	-	17
	18	-	3	4	-	-	-	7
	19	-	12	13	6	2	-	33
	20	-	5	4	2	1	-	12
	21	-	9	7	2	-	-	18
	22	2	4	3	2	-	-	11
	23	-	1	3	3	-	-	7
	24	-	5	6	-	-	-	11
	25	-	8	1	-	-	-	9
Sub-total	x	9	181	112	50	12	-	364

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(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Gomma	1	-	19	5	1	-	-	25
	2	-	7	7	2	3	-	19
	3	-	1	-	2	3	-	6
	4	-	-	1	5	5	-	11
	5	-	1	2	-	-	-	3
	6	-	1	8	2	-	-	11
	7	-	12	2	6	-	-	20
	8	-	4	-	-	-	-	4
	9	-	5	6	10	10	5	36
	10	-	6	9	8	3	-	26
	11	-	13	2	-	-	-	15
	12	-	5	6	2	-	-	13
	13	-	-	-	2	6	-	8
	14	-	1	-	-	7	-	8
	15	-	21	8	1	1	-	31
	16	-	2	16	1	2	-	21
	17	-	5	8	1	-	-	14
	18	-	30	11	2	-	-	43
	19	-	6	9	2	2	-	19
	20	-	-	1	4	10	2	17
	21	-	20	4	1	-	-	25
	22	-	1	7	3	1	-	12
Sub-total	x	-	160	112	55	53	7	387
Chora	1	-	2	-	1	2	-	5
	2	-	-	-	1	3	1	5
	3	-	1	2	1	1	1	6
	4	-	10	1	-	1	-	12
	5	-	1	3	1	1	2	8
	6	-	2	6	2	-	-	10
	7	1	20	5	6	5	1	38
	8	-	3	-	5	3	2	13
	9	-	1	2	4	3	1	11
	10	-	4	3	2	2	1	12
	11	-	2	2	2	2	1	9
	12	-	-	1	1	-	1	3
	13	-	-	5	3	3	1	12
Sub-total	x	1	46	30	29	26	12	144

(Cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Yayu	1	1	13	3	4	-	-	21
	2	-	2	1	1	-	-	4
	3	1	7	4	2	1	-	15
	4	11	4	1	-	-	-	16
	5	-	13	2	-	-	-	15
	6	-	2	3	1	2	-	8
	7	2	6	6	5	1	-	20
	8	-	5	4	-	3	-	12
	9	-	4	-	-	-	-	4
	10	5	-	-	-	-	-	5
	11	1	2	1	1	-	-	5
Sub-total	x	21	58	25	14	7	-	125
Mettu	1	2	14	9	8	8	1	42
	2	10	19	11	15	11	2	58
	3	10	26	39	24	17	1	117
	4	4	19	13	18	23	3	80
Sub-total	x	26	78	72	65	49	7	297
Haru	1	17	19	9	17	6	10	78
	2	8	15	3	5	3	1	35
	3	8	13	1	2	-	-	24
	4	14	1	1	1	-	-	17
	5	8	3	2	-	1	-	14
	6	1	5	3	4	4	5	22
Sub-total	x	56	56	19	29	14	16	190
Ghimbi	1	14	14	3	3	-	-	34
	2	11	14	3	-	-	-	28
	3	17	18	8	5	1	-	49
	4	3	9	5	6	4	-	27
	5	8	8	2	-	-	-	18
	6	10	14	3	-	-	-	27
	7	12	19	7	8	-	-	46
	8	11	6	2	1	-	-	21
	9	21	17	5	-	-	-	43
	10	9	5	3	-	-	-	17

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Ghimbi	11	10	14	9	2	-	-	35
	12	9	19	6	2	1	-	36
	13	4	9	5	4	-	-	22
	14	3	3	5	1	-	-	12
	15	4	17	13	4	1	-	39
Sub-total	x	146	186	79	36	7	-	454
Anfilo	1	28	14	-	-	-	-	42
	2	27	9	5	-	-	-	41
	3	8	4	-	-	-	-	12
	4	8	-	3	1	-	-	12
	5	18	-	-	-	-	-	18
	6	17	-	-	-	-	-	17
	7	31	4	7	-	--	-	42
	8	16	5	2	-	-	-	23
	9	13	11	4	1	-	-	29
	10	19	2	5	-	-	-	26
Sub-total	x	185	49	26	2	-	-	262
Dale	1	10	38	5	2	-	-	55
	2	29	14	5	5	-	-	53
	3	48	7	1	-	-	-	56
	4	41	11	4	-	-	-	56
	5	17	3	-	-	-	-	20
	6	14	10	-	-	-	-	24
	7	17	6	2	2	-	1	28
	8	13	8	2	1	-	-	24
	9	9	21	1	-	-	-	31
	10	1	17	3	1	-	-	39
	11	7	22	1	-	-	-	30
	12	17	11	2	-	-	-	30
	13	5	9	-	--	-	-	14
Sub-total	x	245	177	26	11	-	1	460

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(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A'Wondo	1	-	25	8	4	1	-	38
	2	11	34	7	1	1	-	54
	3	-	19	6	-	-	-	25
	4	-	20	3	-	-	-	23
	5	-	22	-	-	-	-	22
	6	-	7	-	-	-	-	7
	7	-	16	-	-	-	-	16
	8	6	5	4	1	-	-	16
	9	7	6	1	1	-	-	15
	10	-	11	-	-	-	-	11
	11	-	21	2	-	-	-	23
	12	-	16	-	-	-	-	16
	13	-	11	-	-	-	-	11
	14	22	3	-	-	-	-	25
	15	-	19	2	1	-	-	22
	16	-	15	-	-	-	-	15
	17	4	5	-	-	-	-	9
	18	7	8	1	1	1	-	18
	19	4	9	-	-	1	-	14
	20	1	42	10	1	-	-	54
	21	9	2	-	-	-	-	11
	22	9	22	2	-	-	-	33
	23	14	-	-	-	-	-	14
	24	3	11	3	-	-	-	17
	25	10	2	-	-	-	-	12
	26	-	45	5	7	3	-	60
	27	-	9	-	1	-	-	10
Sub-Total	x	107	405	54	18	7	-	591
D'Wonago	1	4	25	3	-	-	-	32
	2	11	20	1	-	-	-	32
	3	11	34	6	1	-	-	42
	4	14	16	-	-	-	-	30
	5	19	5	1	1	1	-	27

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
D'Wonago	6	16	23	4	1	-	-	44	
	7	9	23	-	-	--	-	32	
	8	2	39	1	-	-	-	42	
	9	1	34	3	1	1	-	40	
	10	7	60	4	1	-	-	72	
	11	10	19	3	-	-	-	32	
	12	3	11	3	1	-	-	18	
	13	10	23	-	-	-	-	33	
	14	13	3	-	-	-	-	16	
	15	16	12	-	-	-	-	28	
	16	29	8	-	-	-	-	37	
	17	18	4	-	-	-	-	22	
	18	-	18	2	-	-	-	20	
	19	3	16	1	-	-	-	20	
	20	17	7	-	-	-	-	24	
	Sub-total	x	203	400	32	6	2	-	643
	Y'Cheffe	1	7	17	4	2	-	-	30
		2	-	12	8	6	2	-	28
		3	6	4	4	1	1	-	16
		4	15	14	17	4	1	-	51
5		8	12	8	5	-	-	33	
6		5	14	-	-	-	-	19	
7		9	22	-	-	-	-	31	
8		33	13	4	6	3	-	59	
9		18	-	-	2	-	-	20	
10		25	6	-	1	-	-	32	
11		6	9	6	3	-	-	24	
12		19	5	-	-	-	-	24	
13		15	4	-	1	-	-	20	
14		12	-	-	-	-	-	12	
15		10	5	4	4	1	-	24	
16		5	6	5	3	-	-	19	
Sub-total	x	193	143	60	38	8	-	442	

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Kunni	1	11	4	2	1	-	-	18
	2	2	1	2	2	3	-	10
	3	1	2	1	1	-	-	5
	4	2	-	4	3	-	-	9
	5	2	2	1	-	-	-	5
Sub-total	x	18	9	10	7	3	-	47
Habro	1	2	2	-	2	-	-	6
	2	1	2	-	1	-	-	4
	3	-	-	1	2	-	-	3
	4	1	1	4	6	1	-	13
	5	2	1	-	1	-	-	4
	6	-	3	8	6	-	-	17
	7	1	5	3	1	-	-	10
	8	2	2	2	1	-	-	7
	9	9	12	15	4	-	-	40
	10	2	6	7	2	-	-	17
	11	1	17	1	2	1	-	22
	12	2	7	3	2	-	-	14
	13	-	15	5	4	1	-	25
	14	-	5	1	-	-	-	6
Sub-total	x	23	78	50	34	3	-	188
D'Lebu	1	8	12	7	-	-	-	27
	2	10	11	5	2	-	-	28
	3	6	14	3	3	-	-	26
Sub-total	x	24	37	15	5	-	-	81
TOTAL	x	1257	2063	722	399	191	43	4675

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ANNEX IV Estimate of Loss from Field Assessment by
Section

	No. of Sections	Section		% Loss
		From (Name)	To (Name)	
(1)	(2)	(3)	(4)	(5)
Manna	1	Gembe	Jimma	17.0
	2	Gijaba	Oto Jimate	13.1
	3	Inkula	Sombo cheka	19.4
	4	Sombo cheka	Torbaho River	13.7
	5	Dabesa	Guwa Gube	18.8
	6	Dabesa	Kela bilo	18.9
	7	Yebu	Kore Kongo	12.7
	8	Kore Gebeya	Saye Odo	13.5
	9	Sayeodo	Wolo sefer	30.0
	10	Kerero	Wolo sefer	19.0
	11	Wolo Sofer	Arbeta	6.9
	12	Wolo Sefer	Seyo	16.3
	13	Yebu	Tosano	21.2
	14	Yebu	Gocho	13.7
	15	Alomeyehu Mecha	Doyo Kaso	21.0
	16	Garke Jimate	Dayo Melke	7.5
	17	Garke Jimate	Temugadale	13.8
	18	Mazoria	Gurke Furdisa	13.6
	19	Mazoria	Awatu River	20.9
	20	Seto Semero	Somodo	20.8
	21	Blida	Ourgoyo	14.7
	22	Melko	Doyo Haro	14.5
	23	Doyo Haro	Gurke Jimate	26.4
	24	Duwa	Netti	13.9
	25	Duwa	Duwa	6.6
Sub-Total	X	X	X	16.3

(cont .)

a	1	2	3	4	5
Gomma	1	Suse	Kochole	9.4	
	2	Agro	Beko Abo	23.6	
	3	Boshasha	Keda Aba Kabe	46.6	
	4	Dalecho	Genji Tali	49.5	
	5	Agaro	Bulbulo	15.0	
	6	Agro	Kujo	23.3	
	7	Gembe	Kibi	17.0	
	8	Gomma 2	Kumba	5.0	
	9	Agaro	Sombo Chaka	45.6	
	10	Agaro	Kido	27.8	
	11	Agaro	Gembe	7.0	
	12	Agaro	Urage Urtabo	17.3	
	13	Achamo	Boto	53.7	
	14	Dalecho	Bareso	57.5	
	15	Bulbalo	Andoele	11.9	
	16	Kesso Hitti	Bulbulo	23.8	
	17	Agaro	Yaehi River	16.1	
	18	Gembe	Keta Bero	10.4	
	19	Koyo	Jimate	22.1	
	20	Kota	Genji Tullu	59.4	
	21	Kerker	Tobo Keso	8.8	
	22	Bulbulo	Meche	27.5	
Sub Total	X	X	X	24.0	
Chora	1	Bero Serite	Abagoro	36.0	
	2	Addele	Somejo	65.0	
	3	Tobse Homi	Kuwie	30.0	
	4	Abono	Halilu Beba	11.2	
	5	Tobsi Debeso	Rundessa	43.7	
	6	Shengollu	Dilibi	21.0	
	7	Kumbabo	Doga	22.5	
	8	Goji	Hadossa	37.7	
	9	Kumbabo	Goba River	44.5	
	10	Aba Bora	Embros Bunga	31.7	
	11	Boro Borllo	Komisse	34.4	
	12	Hawa Yemba	Outa River	20.0	
	13	Kumbabe	Addele	42.1	
Sub-Total	X	X	X	33.0	

(1)	2	3	4	5
Yayu	1	Dogi River	Goba River	13.6
	2	Gechi Dogi	Bondo Gechi	17.5
	3	Yayu	Gechi	17.3
	4	Saki	Abiyu	2.5
	5	Witato	Jitho	7.0
	6	Yayo	Geba	30.0
	7	Saki River	Dogi River	20.7
	8	Witato	Yambo	25.0
	9	Yayu	Hamuma Dogita	5.0
	10	"	Saki	0.0
	11	Agaro Loku	Gindabo Ribber	14.0
Sub- Total	X	X	X	14.4
Mottu	1	Hospital	Berroye	28.1
	2	Mottu Mechi	Yember	20.0
	3	Bubu	AdoleoHaru	26.2
	4	Modi River	Kotto River	35.5
Sub- Total	X	X	X	27.8
Haru	1	Guie	Bondawo	28.8
	2	"	Golja Ganji	17.7
	3	"	Budi	6.8
	4	"	Kaki	3.8
	5	"	Chonge	8.5
	6	"	Chageli	43.4
Sub- Total	X	X	X	21.9
Ghimbi	1	Ghimbi	Ehud Geboya	7.3
	2	"	Lalo Hasecho	4.6
	3	"	Gambolla	10.5
	4	Dullo Agomsa	Buko Asabi	23.8
	5	Gambolla	Sewa Georgis	4.4
	6	Ghimbi	Chuta Kaki	4.8
	7	Sotello	Sewa Gorogis	12.1
	8	Chuba Kebele	Horo Marim	5.2
	9	Gambelea	Homma	4.3
	10	Homma	Bir Bir	5.0
	11	Homma	Sofeoco	9.4
	12	Wolo Iyesus	Meka Nejo	10.0
	13	Horo Marim	Gambala	13.8
	14	Homma	Siba Yobo	12.9
	15	Ghimbi	Horo Marim	14.6
Sub- Total	X	X	X	9.7

(cont.)

1	2	3	4	5
Anfilo	1	Ersa	Kuro	1.7
	2	Mugi	Fana Toti	3.5
	3	Ebur	G/Shari	1.7
	4	Ashi	Duli	8.3
	5	Walalio	Dola Mesh	0.0
	6	Dalla	Yeli	0.0
	7	Mugi	Sedi	3.8
	8	Ebur	Yerer	2.8
	9	Folofli	D.Tobi	6.0
	10	Ega	Yoti	4.2
Sub- Total	X	X	X	3.2
Dale	1	Hospital	Raro River	6.7
	2	Awada	Manche	6.9
	3	Manche	Bokasso	0.9
	4	Bokasso	Duba	2.4
	5	Duba	Halile	0.7
	6	Wara	Gajamo	2.1
	7	Yirgalem	Boka so	7.6
	8	Manche	Hayelo	5.0
	9	Gidabo	Waycho	4.0
	10	"	Bea River	4.7
	11	Aposto	Soyama	4.3
	12	Tao	Fura	3.2
	13	Waynonata	Hida Kalati	3.2
SubO Total	X	X	X	4.2
Aleta Wondo	1	Titra	Gunde	13.4
	2	"	Darencho River	7.7
	3	"	Korke River	8.6
	4	"	Chuko	6.9
	5	Chuko	Golma	5.0
	6	"	Bishan Bima	5.0
	7	"	Chicho Woyama	5.0

(Cont.)

1	2	3	4	5	
Alota Wendo	8	Chuko	Korke	9.0	
	9	"	Loko Dama	6.0	
	10	"	Miri Dicha	5.0	
	11	Wondo	Raro River	6.3	
	12	"	Finchwuha	5.0	
	13	"	2nd Mogisa	5.0	
	14	"	Bunata River	0.6	
	15	Dobe	Hondowa	7.9	
	16	Habeja	Hankisa	5.0	
	17	Gambella	Mokela	5.0	
	18	Lola Monicho	"	9.2	
	19	Toferi Kella	Safa/Shoiocho/	7.8	
	20	Baltuma	Babo-Comolcha	5.5	
	21	Shilcho Co. op.	Shabe Dial	0.9	
	22	Haran Gicho	Chuko	4.5	
	23	Kosericha Co.op	Filto	0.0	
	24	Raro River	D.Moracho	6.7	
	25	Fufe Waeno	Hare Siko	0.8	
	26	Raro River	Djigossa	13.3	
	27	Gelma	Momecho	8.5	
	Sbu-Total	X	X	X	7.2
	Dilla Wenago	1	Wonago	Sokicha	5.9
		2	A.kotema	B.Okoto	3.7
		3	Dilla	Wonago	7.8
		4	"	Kobado	2.6
		5	Wonago	A'Ketema	5.5
		6	Dilla	Outilche	5.3
7		Dilla(odolla)	Koblado	3.6	
8		Chichu	Bulla	5.1	
9		"	Akasho	8.4	
10		Gucanga	Sokicha	5.8	
11		Tinkrase	Rossa	4.8	

(cont.)

1	2	3	4	5
Dilla Wonago	12	Guango	Odamko	8.6
	13	Dilla	Michillo	7.5
	14	Hindrase	Kelaitu	0.9
	15	Kebato	B. maritosa	2.1
	16	Dilla	Harite	1.1
	17	Kimashim	B. Jolla	0.9
	18	Sigalo	Tobosa	6.5
	19	Piela	Haromera	5.4
	20	K. mashim	S. Manslo	1.4
Sub- Total	X	X	X	4.7
Yirga Cheffo	1	Yirga Cheffo	Arto Fishageghé	8.2
	2	" "	Lako Abdilis Kofa	21.1
	3	Chelba	Tubity	12.8
	4	Y. Cheffo	Takissa	12.4
	5	Worabi	Idhica	12.7
	6	Chaltu	Koroda	3.7
	7	Hanu	Rosity	3.5
	8	Yirga Cheffo	Kakicha	9.8
	9	" "	Warkoto	4.0
	10	" "	Leado	2.2
	11	Wido	Garso	11.8
	12	Maru	Kedida	0.8
	13	Halkalala	B. Jolla	3.0
	14	Yirga Cheff.	Kolity	0.0
	15	Komboloch	Lihitu	13.7
	16	Yirga cheffo	Koupa	13.2
Sub-Total	X	X	X	8.9
Kunni	1	Bodessa	Gabiba	5.5
	2	Hollangio	Kerayou	32.0
	3	Kara Parkara	Samy	14.0
	4	Bodessa	Kara Parkara	22.2
	5	Mekenissa	Boda Hara	6.0
Sub- Total	X	X	X	15.3

(cont.)

(1)	(2)	(3)	(4)	(5)
Habro	1	Kar Kurkura	Tiro	15.0
	2	Obicha	Chefa	12.5
	3	Malino	Bella	33.3
	4	Gatira	Kelina	30.0
	5	Malino	Zewde	11.2
	6	Gelemso Kebele 01	Weine Kelo	24.4
	7	Gelemso Kebele 01	Gerbigoba	12.5
	8	Gerbigoba	Chireti	12.8
	9	Gara Guracha	Dereku Aidu	13.0
	10	Lege Bira	Deffo	14.7
	11	Deffo	Daba	11.4
	12	"	Ibsa	12.5
	13	Birbirty	Odaleleba	16.0
	14	Lendegara	Mechara	7.5
Sub-total	x	x	x	15.7
Daro Lebu	1	Micheta	Gadalo	7.4
	2.	"	Mendisa	8.4
	3	Mechara	Milkay	9.6
Sub-total	x	x	x	8.4
TOTAL	x	x	x	12.2

ANNEX - V CBD Loss Form Berry Count

CIPA	No. of sections	Section		age Loss	
		Farm (Name)	To (Name)	without fallen dam. Berries	Including fallen dam. Berries
1	2	3	4	5	6
Manna	1	Gembe	Jimma	14.6	26.7
	2	Gijaba	Oto Jimate	9.7	15.5
	3	Inkulu	Sombo cheka	11.3	20.5
	4	Sombo Cheka	Totbaho River	18.3	24.4
	5	Debesa	Guwa Gube	16.0	25.6
	6	Dabisa	Kilabito	12.2	16.5
	7	Yebu	Kore Knono	10.0	17.2
	8	Kore Gobuya	Sayeodo	8.6	19.8
	9	Seyeado	Wolo Sefer	23.3	24.4
	10	Kerero	Wolo Sefer	10.9	15.4
	11	Wolo Sefer	Arbeta	4.2	4.5
	12	Wolo Sefer	Seyo	23.6	28.8
	13	Yebu	Tasano	24.5	32.3
	14	Yebu	Gecho	3.8	14.9
	15	Alemeyehu Micha	Doyo Kaso	18.4	29.0
	16	Gurke Jimate	Dayo Melko	12.3	13.6
	17	Gurke Jimate	Tumula Dale	8.7	16.4
	18	Majania	Gurke Furdisa	7.4	9.0
	19	Mazoria	Aweta River	18.4	35.9
	20	Seto Semero	Somodo	16.5	26.9
	21	Blida	Ourgeye	9.7	17.4
	22	Melko	Dogohoro	12.2	24.3
	23	Dugo Haro	Gurke Jimate	20.6	31.5
	24	Duwa	Metti	8.3	8.6
	25	Dawa	Duwa	4.8	9.7
Sub- Total		X	X	13.2	22.7

(cont.)

= 42 =

(1)	(2)	(3)	(4)	(5)	(6)
Gomma	1	Suse	Kochole	2.4	2.4
	2	Agaro	Beko Abo	8.9	9.3
	3	Beshashe	Keda Aba Kabi	41.2	42.3
	4	Dalecho	Genji Tolly	22.7	23.2
	5	Agaro	Bulado	6.8	6.8
	6	Agaro	Kujo	3.6	3.6
	7	Gembe	Kibi	7.1	7.1
	8	Gomma 2	Kumba	1.2	1.2
	9	Agaro	Sombe Chamite	19.2	19.2
	10	Agaro	Kodo	13.9	13.9
	11	Agaro	Gembe	10.1	10.2
	12	Agaro	Urage Urtabo	14.6	14.9
	13	Achemo	Boto	33.6	33.6
	14	Dalecho	Boreso	12.3	12.5
	15	Bulbulo	Andode	3.8	3.9
	16	Kasso Hitte	Bulbulo	11.7	11.8
	17	Agaro	Yaehi River	14.6	14.9
	18	Gembe	Keta Bero	5.7	5.7
	19	Kaye	Jimate	11.8	12.7
	20	Kota	Genji Tolly	37.9	38.8
	21	Kerker	Tobo Kese	21.1	21.6
	22	Bulbulo	Mechi	12.6	12.6
Sub- Total	X	X	x	10.7	10.9
Chora	1	Bero geriti	Abagoro	31.6	69.8
	2	Abdella	Semijo	69.1	99.0
	3	Tobsi-Homi	Kuwie	57.4	87.0
	4	Abone	Halilu Geba	16.3	31.1
	5	Tobsi-Debes	Ruadasse	33.9	96.1
	6	Shengella	Dilbi	22.6	35.9
	7	Kumbabe	Dega	25.2	52.0
	8	Guji	Hodessa	23.1	86.5
	9	Kambase	Geba River	44.7	60.9
	10	Aba bora	Embros Bonga	31.5	87.1
	11	Baro Bora ⁺	Kemisse	42.5	73.2
	12	Hawayember ^{lie}	Outa River	24.3	58.2
	13	Kumbabe	Abdella	60.8	90.8
Sub Total	X	X	X	32.2	83.2

(cont .)

(1)	(2)	(3)	(4)	(5)	(6)
Yayo	1	Dogi River	Geba River	4.6	5.7
	2	Gechi Dogi	Bondawo Gachi	5.0	5.4
	3	Yayo	Gechi	10.6	12.5
	4	Saki	Abiyu	7.8	9.9
	5	Wifate	Jitho	4.5	4.7
	6	Yayo	Geba	34.8	45.7
	7	Saki River	Dogi River	11.8	19.5
	8	Wetete	Yembo	17.6	19.4
	9	Yayo	Hamuma Depitu	2.4	2.4
	10	Yayo	Saki	11.5	34.7
	11	Agaro Leku	Gindabo River	12.5	27.6
Sub-Total	X	X	X	9.8	14.8
Mettu	1	Hospital	Berroye	6.1	13.8
	2	Meltu Meohi	Yember	3.8	5.5
	3	Buba	Adele Haro	7.5	9.9
	4	Medi River	Kelto River	14.5	27.8
Sub-Total	X	X	X	7.7	13.5
Haru	1	Guie	Bondawo	7.7	26.8
	2	"	Goljagengi	4.7	13.9
	3	"	Budi	14.5	17.8
	4	"	Kaki	1.8	2.2
	5	"	Chonge	2.8	2.9
	6	"	Chaqeli	22.8	62.1
Sub-Total	X	X	X	8.4	28.7
Ghimbi	1	Ghimbi	Ehude Gebeya	4.9	7.8
	2	"	Lalo Haseche	1.9	2.4
	3	"	Gambella	6.5	10.8
	4	Dallo Agensasa	Buko Asabi	15.6	22.6
	5	Gambella	Sewa Georgis	0.1	0.1
	6	Ghimbi	Chate Kaki	3.5	4.5
	7	Satello	Sewa Georgis	8.2	13.6
	8	ChutatKebele	Hore Marim	4.2	5.2
	9	Gambella	Homma	6.6	6.6
	10	Homma	Bir Bir	6.1	6.4
	11	HommaEyesus	SetelTojo	8.4	10.3
	12	Wolo Eyesus	Meka Nejo	7.6	11.0
	13	Hore Marim	Gambella	10.1	25.0
	14	Homma	Siba Yebe	19.6	19.70
	15	Ghimbi	Hore Marim	9.7	15.8
Sub-Total	X	X	X	7.2	10.8

(cont.)

= 51 =

1	2	3	4	5	6
Anfilo	1	Eresa	Kuro	0.8	0.8
	2	Mugi	Fanatoti	1.4	1.4
	3	Ebur	G/shari	2.3	2.4
	4	Ashi	Duli	17.7	19.2
	5	Wolnie	Dalla Mosh	0.5	0.5
	6	Dalla	Yeli	0.1	0.1
	7	Mugi	Sodi	15.0	15.7
	8	Ebur	Yarer	6.3	6.3
	9	Folfli	D-Tobi	6.3	6.3
	10	Ega	Yeti	5.3	5.9
sub-Total	X	X	X	5.3	5.6
Dale	1	Hospital	Rarc River	6.2	6.5
	2	Awada	Mancho	3.4	3.6
	3	Manche	Bokasso	0.6	0.6
	4	Bokasso	Duba	3.8	4.1
	5	Duba	Halile	0.1	0.1
	6	Wara	Gajamo	1.2	1.2
	7	Yirga Alem	Bokasso	5.3	5.6
	8	Manche	H ayolo	4.4	4.4
	9	Gidabo	Waycho	6.9	6.9
	10	"	Boa River	6.3	6.4
	11	Aposto	Soyama	1.6	1.6
	12	Tao	Fura	4.5	4.6
	13	Weinonata	Hida Kalati	2.4	2.4
Sub-Total	X	X	X	3.7	3.8
Aleta	1	Titira	Gurdo	19.0	62.7
Wondo	2	"	Darancho River	9.6	14.9
	3	"	Korke	4.3	4.5
	4	"	Chu o	12.4	18.4
	5	Chuko	Gelma	7.2	3.5
	6	"	Bishan Dima	0.1	0.1

(Cont .)

= 52

(1)	(2)	(3)	(4)	(5)	(6)	
Aleta Wondo	7	Chuko	Chuko Wayama	0.5	0.5	
	8	"	Korke	15.3	27.9	
	9	"	Loko Dama	4.1	5.5	
	10	"	Miri Dicha	0.4	0.4	
	11	Wondo	Raro River	2.9	3.0	
	12	"	Finchwuha	0.0	0.0	
	13	"	2nd Mogisa	0.0	0.0	
	14	"	Bunata River	0.6	0.6	
	15	Dobe	Hondowa	9.7	18.9	
	16	Habeja	Hankosa	0.0	0.0	
	17	Gambela	Mekela	11.5	30.3	
	18	Lala-Honicho	Mokola	2.6	2.6	
	19	Toferi Kala	Safa/shoiecho/	22.3	37.5	
	20	Bultuma	Babe-Combolcha	7.8	25.3	
	21	Shilcho/Co-op/	Shabo Dela	0.8	0.8	
	22	Harangicho	Chuko	1.1	1.5	
	23	Kosericha/Cop.	Kilto	0.3	0.3	
	24	Raro River	D-Morocho	8.5	9.0	
	25	Rufe Waeno	Hase/sike "	0.4	0.4	
	26	Raro River m	Djigassa	13.9	70.4	
	27	Gelma	Homecho	20.8	30.5	
	Sub-Total	X	X	X	8.3	36.6
	Dilla Wonago	1	Wonago	Sokicha	3.7	5.7
		2	A.Ketema	B.Okoto	1.4	1.5
		3	Dilla	Wonago	2.1	2.2
		4	"	Kebado	1.8	1.8
		5	Wonago	A.Ketema	5.7	5.7
6		Dilla	Outilcho	0.8	0.8	
7		Dilla(odoua)	Kebado	1.2	1.2	
8		Chichu	Bulla	3.2	3.3	
9		"	Akasho	3.1	3.3	
10		Guango	Sokicha	3.6	4.7	

(cont.)

(1)	(2)	(3)	(4)	(5)	(6)
Dilla Wonago	11	Tinkrase	Ressa	1.5	1.8
	12	Guanga	O'Mike	4.1	5.8
	13	Dilla	Michille	2.9	3.1
	14	Tinkrase	Keleltu	0.1	0.1
	15	Kebade	B.Merkose	0.7	0.7
	16	Dilla	Suffa	0.2	0.2
	17	K.Mashine	B.Dilla	0.1	0.1
	18	Sugele	Debeta	1.5	1.5
	19	Dilla	Hareresu	4.2	4.2
	20	K.Mashine	S.Hanqle	0.0	0.0
Sub-total	x	x	x	2.3	2.6
Yirga Cheffe	1	Yirga Cheffe	Fisha Gent	3.9	7.6
	2	" "	Addis Kofe	13.9	22.3
	3	Chelba	Tutity	6.6	11.1
	4	Y'Cheffe	Bukissa	3.7	5.1
	5	Warabi	Bukissa	8.4	15.8
	6	Chaltu	Herdi	0.2	0.2
	7	Haru	Resity	1.3	1.3
	8	Y'Cheffe	Lakieha	7.2	10.3
	9	"	Merkato	3.3	4.8
	10	"	Banko	2.6	3.5
	11	Edido	Garse	6.0	6.5
	12	Haru	Kedida	0.1	0.1
	13	Melkahole	B.Kala	1.9	1.9
	14	Y'Cheffee	Kokity	0.1	0.1
	15	Kombolcha	Dibitu	13.3	18.8
	16	Y'Cheffe	Konqa	12.6	17.8
Sub-total	x	x	x	5.7	8.7
Kunni	1	Bedessa	Gebida	14.3	15.5
	2	Wollargie	Kereyou	35.0	44.0
	3	Kara Kurkura	Surry	13.7	14.5
	4	Bedessa	Kara Kurkura	27.8	31.5
	5	Mekanissa	Goda Hora	36.6	36.6
Sub-total	x	x	x	26.6	31.4

(Cont.)

(1)	(2)	(3)	(4)	(5)	(6)
Habro	1	Karra Kurçura	Tiro	1.8	2.7
	2	Obicha	Chefoa	11.7	22.7
	3	Malino	Bella	35.8	42.0
	4	Gatira	Kalina	22.6	4.3
	5	Mulino	Zewdo	27.8	37.4
	6	Gelemese Kebele 0	Waino Kolo	26.0	30.5
	7	" "	Gerbigoba	17.2	25.6
	8	Gerbigoba	Chireti	17.3	36.5
	9	Gara Guracha	Doreku Aidu	16.1	18.6
	10	Legge Bera	Deffo	19.6	22.0
	11	Deffo	Duba	8.7	12.1
	12	Deffo	ibsa	9.5	9.5
	13	Birbirty	Oda Leleba	16.2	17.4
	14	Londe gara	Mechara	0.7	0.7
Sub-Total	X	X	X	15.3	20.6
Dara Lebu	1	Miche'a	Gadale	3.9	20.9
	2	Miche'a	Mendisa	16.1	16.1
	3	Mechara	Milkay	7.1	7.1
Sub-Total	X	X	X	8.6	8.6
Total	X	X	X	7.8	20.9