

Table III.1.5 Land Use of Dugda Bora in 2000/01 Crop Season (1/2)

No.	Peasant Association	Farmland	Forest	Grazing	Others	Total
1.	Kersa Gambala	1,195	581	469	90	2,335
		51.2	24.9	20.1	3.9	100
2.	Abene Kumuro	1,217	438	529	146	2,330
		52.2	18.8	22.7	6.3	100
3.	Adele Mirt Meteia	1,308	275	400	47	2,030
		64.4	13.5	19.7	2.3	100.0
4.	Biliti Balewoid	1,012	393	575	51	2,031
		49.8	19.4	28.3	2.5	100.0
5.	Koto Biliti	1,446	329	657	143	2,575
		56.2	12.8	25.5	5.6	100.0
6.	Argo Gadilala	626	407	1,191	329	2,553
		25	15.9	46.7	12.9	100.0
7.	Tuchi Denbel	1,077	338	474	55	1,944
		55.4	17.4	24.4	2.8	100.0
8.	Wayo Gebriel	1,175	321	279	67	1,842
		63.8	17.4	15.1	3.6	100.0
9.	Aboro Gebriel	841	259	625	179	1,904
		44.2	13.6	32.8	9.4	100.0
10.	Dodoti Dembel	807	256	782	306	2,151
		37.5	11.9	36.4	14.2	100.0
11.	Mukiye 1	1,942	598	1,160	154	3,854
		50.4	15.5	30.1	4.0	100.0
12.	Birbirsa Guda Sabole	2,081	450	850	151	3,532
		58.9	12.7	24.1	4.3	100.0
13.	Birbirsa Gale	1,057	379	599	80	2,115
		50.0	17.9	28.3	3.8	100.0
14.	Eela Gebre Daiech	864	157	644	60	1,725
		50.1	9.1	37.3	3.5	100.0
15.	Menjegso Weji	947	707	1,044	271	2,969
		31.9	23.8	35.2	9.1	100.0
16.	Joro Reka	952	262	726	100	2,040
		46.7	12.8	35.6	4.9	100.0
17.	Korke Adama	1,237	494	467	206	2,404
		51.5	20.5	19.4	8.6	100.0
18.	Goro Korke	1,652	727	1,097	204	3,680
		44.9	19.8	29.8	5.5	100.0
19.	Kiltu Ombale	1,745	219	792	100	2,856
		61.1	7.7	27.7	3.5	100.0
20.	Doyo Laman	1,303	720	631	91	2,745
		47.5	26.2	23.0	3.3	100.0
21.	Tute Koremtu	1,561	532	855	479	3,427
		45.6	15.5	24.9	14.0	100.0
22.	Koye Jejeba	1,284	751	1,068	327	3,430
		37.4	21.9	31.1	9.5	100.0
23.	Hafe Kemale	1,079	408	525	46	2,058
		52.4	19.8	25.5	2.2	100.0
24.	Weldia Hafa	1,160	301	719	200	2,380
		48.7	12.6	30.2	8.4	100.0
25.	Beyimogusa	1,200	488	1,088	96	2,872
		41.8	17.0	37.9	3.3	100.0
26.	Dongorota	1,002	405	657	50	2,114
		47.4	19.2	31.1	2.4	100.0
27.	Mukiya 2	1,135	400	504	66	2,105
		53.9	19.0	23.9	3.1	100.0
28.	Hate Leman	1,312	315	709	70	2,406
		54.5	13.1	29.5	2.9	100.0

Table III.1.5 Land Use of Dugda Bora in 2000/01 Crop Season (2/2)

No.	Peasant Association	Farmland	Forest	Grazing	Others	Total
29.	Tepho Choroke	1,610	44	307	65	2,026
		79.5	2.2	15.2	3.2	100.0
30.	Giraba Korke Adi	1,990	281	453	270	2,994
		66.5	9.4	15.1	9.0	100.0
31.	Bekele Girisa	1,125	440	465	142	2,172
		51.8	20.3	21.4	6.5	100.0
32.	Weldiyo Mekidela	1,493	94	67	81	1,735
		86.1	5.4	3.9	4.7	100.0
33.	Weldiyo Kelina	1,442	585	812	194	3,033
		47.5	19.3	26.8	6.4	100.0
34.	Saubi Gamo	1,437	243	215	95	1,990
		72.2	12.2	10.8	4.8	100.0
35.	Tuchi Sumeyo	1,533	239	232	56	2,060
		74.4	11.6	11.3	2.7	100.0
36.	Jawe Bofa	1,082	233	499	193	2,007
		53.9	11.6	24.9	9.6	100.0
37.	Oda Bokota	1,254	210	592	271	2,327
		53.9	9.0	25.4	11.6	100.0
38.	Derara Dalecha	1,501	375	150	128	2,154
		69.7	17.4	7.0	5.9	100.0
39.	Burka Debrebeg	1,633	103	300	76	2,112
		77.3	4.9	14.2	3.6	100.0
40.	Jirme Bora	1,501	467	1,412	162	3,542
		42.4	13.2	39.9	4.6	100.0
41.	Berta Sami	1,536	331	836	607	3,310
		46.4	10.0	25.3	18.3	100.0
42.	Sori Dolesa	1,396	422	1,299	355	3,472
		40.2	12.2	37.4	10.2	100.0
43.	Tuka Largamo	808	224	818	189	2,039
		39.6	11.0	40.1	9.3	100.0
44.	Gose Korke	1,610	400	781	478	3,269
		49.3	12.2	23.9	14.6	100.0
45.	Tuchi Deko	1,217	360	884	196	2,657
		45.8	13.5	33.3	7.4	100.0
46.	Elen	1,027	351	1,147	159	2,684
		38.3	13.1	42.7	5.9	100.0
47.	Kushe Huluko	1,080	338	530	96	2,044
		52.8	16.5	25.9	4.7	100.0
48.	Lafesa Germeji	913	377	699	60	2,049
		44.6	18.4	34.1	2.9	100.0
49.	Gora Leman	534	509	636	60	1,739
		30.7	29.3	36.6	3.5	100.0
50.	Dodo Wedera	1,586	428	664	52	2,730
		58.1	15.7	24.3	1.9	100.0
51.	Malema Jere Bera	1,172	39	350	235	1,796
		65.3	2.2	19.5	13.1	100.0
52.	Tube Suti	1,223	264	724	448	2,659
		46.0	9.9	27.2	16.8	100.0
53.	Dalota Mati	792	301	828	737	2,658
		29.8	11.3	31.2	27.7	100.0
54.	Sera Wekele	1,116	403	510	189	2,218
		50.3	18.2	23.0	8.5	100.0
55.	Meki Urban area/Water body				12,999.0	12,999.0
Total(ha)		67,828	19,971	36,326	22,757	146,882
Ratio of Land Use Condition (%)		46	14	25	15	100

Source : Agriculture Bureau Office, Dugda Bora Wareda
Survey Year : 2000-2001

No.	Peasant Association	Farmland	Forest	Grazing	Others	Total
Total(ha)		67,828	19,971	36,326	22,757	146,882
Ratio of Land Use Condition (%)		46	14	25	15	100

Table III.1.6 Farmland, Cropped and Fallow Land by PA in Dugda Bora

No.	PA	Total Land (ha)	Farmland		Cropped Area		Fallow	
			Area (ha)	Extent (%)	Area (ha)	Extent (%)	Area (ha)	Extent (%)
1.	Makue I	3,854	1,942	50.4	1,591	81.9	351	18.1
2.	Gora Korkea	3,680	1,652	44.9	1,306	79.1	346	20.9
3.	Jirme Bora	3,542	1,501	42.4	1,171	78.0	330	22.0
4.	Birbirsa Glsabule	3,532	2,081	58.9	1,749	84.0	332	16.0
5.	Sore Doleasa	3,472	1,396	40.2	1,093	78.3	303	21.7
6.	Koye Jejeba	3,430	1,284	37.4	968	75.4	316	24.6
7.	Tute Koremta	3,427	1,561	45.6	1,272	81.5	289	18.5
8.	Berta Sami	3,310	1,536	46.4	1,249	81.3	287	18.7
9.	Gose Korke	3,269	1,610	49.3	1,292	80.2	318	19.8
10.	Welda Kalina	3,033	1,442	47.5	1,138	78.9	304	21.1
11.	Graba Korke Adi	2,994	1,990	66.5	1,718	86.3	272	13.7
12.	Menjikso Weje	2,969	947	31.9	695	73.4	252	26.6
13.	Beyimo Gasa	2,872	1,200	41.8	941	78.4	259	21.6
14.	Kiltu ombole	2,856	1,745	61.1	1,507	86.4	238	13.6
15.	Deyo Lemana	2,745	1,303	47.5	1,076	82.6	227	17.4
16.	Dedo Wedera	2,730	1,586	58.1	1,358	85.6	228	14.4
17.	Ealen	2,684	1,027	38.3	775	75.5	252	24.5
18.	Tuchi Deko	2,657	1,217	45.8	1,023	84.1	194	15.9
19.	Tube Suti	2,659	1,223	46.0	991	81.0	232	19.0
20.	Dalata Mati	2,658	792	29.8	612	77.3	180	22.7
21.	Koto Biliti	2,575	1,446	56.2	1,278	88.4	168	11.6
22.	Argo gadilala	2,553	626	24.5	471	75.2	155	24.8
23.	Korke Adama	2,404	1,237	51.5	1,013	81.9	224	18.1
24.	Hate Lemana	2,400	1,312	54.7	1,168	89.0	144	11.0
25.	Welda Hafa	2,380	1,160	48.7	993	85.6	167	14.4
26.	Karsa G	2,335	1,195	51.2	1,067	89.3	128	10.7
27.	Abumo Kumro	2,330	1,217	52.2	1,160	95.3	57	4.7
28.	Oda Boketa	2,327	1,254	53.9	995	79.3	259	20.7
29.	Seara Wekele	2,218	1,116	50.3	827	74.1	289	25.9
30.	Bekele Grisa	2,172	1,125	51.8	1,036	92.1	89	7.9
31.	Derara Dalicha	2,154	1,501	69.7	1,255	83.6	246	16.4
32.	Dedota Dembel	2,151	807	37.5	569	70.5	238	29.5
33.	Birbirsa Gale	2,115	1,057	50.0	768	72.7	289	27.3
34.	Dengoreta	2,114	1,002	47.4	699	69.8	303	30.2
35.	Mukuye 2	2,105	1,135	53.9	818	72.1	317	27.9
36.	Tuchi Sumeya	2,060	1,533	74.4	1,295	84.5	238	15.5
37.	Hafa Kemele	2,058	1,079	52.4	746	69.1	333	30.9
38.	Lafesa Germeji	2,049	913	44.6	624	68.3	289	31.7
39.	Koshi Huluka	2,044	1,080	52.8	770	71.3	310	28.7
40.	Jororaka	2,040	952	46.7	723	75.9	229	24.1
41.	Tuka Langano	2,039	808	39.6	680	84.2	128	15.8
42.	Burka Debrebea	2,036	1,633	80.2	1,376	84.3	257	15.7
43.	Biliti baleweld	2,031	1,012	49.8	754	74.5	258	25.5
44.	Adele Mirt Meteja	2,030	1,308	64.4	995	76.1	313	23.9
45.	Tepho Cherokee	2,026	1,610	79.5	1,339	83.2	271	16.8
46.	Jawe	2,007	1,082	53.9	968	89.5	114	10.5
47.	Shuki Gemu	1,990	1,437	72.2	1,385	96.4	52	3.6
48.	Tuchi Dembel	1,944	1,077	55.4	846	78.6	231	21.4
49.	Abuno Gebriel	1,904	841	44.2	586	69.7	255	30.3
50.	Weyo Gebriel	1,842	1,175	63.8	849	72.3	326	27.7
51.	Malima Terberi	1,796	1,172	65.3	1,042	88.9	130	11.1
52.	Gora Laman	1,739	534	30.7	182	34.1	352	65.9
53.	Welda Mekkela	1,735	1,493	86.1	1,305	87.4	188	12.6
54.	Ela Geredaleha	1,725	864	50.1	750	86.8	114	13.2
	Urban Areas/Water bodies	12,999						
	Total (ha)	146,800	67,828	46.2	54,857	80.9	12,971	19.1

Source: Dugda Bora Woreda Agriculture Bureau Office

Table III.1.7 Activities of Meki Tree Nursery

(1) Annual Nursery Activity in the Meki Nursery Center

1	Seed collection (during October)	9	Mulching
2	Nursery bed clearing from Oct.,)	10	Watering
3	Layout Design	11	Thinning
4	Soil, manure & sand collection	12	Preparation of shading materials
5	Sieving of the collected materials	13	Transplanting
6	Nursery Bed preparation	14	Construction of shade structure
7	Filling of plastic bag with soil	15	Hardening
8	Sowing on the temporary bed & plastic bag	16	Nursery distribution (up to July) -Planting seedlings -Management of planted seedlings in the field

Source: Dugda Bora District Agriculture Bureau Office

(2) Tree species nursed in the 1999/2000 Year

No	Scientific Name	Common name	Local Name	No of seedlings produced
1	<i>Eucalyptus cameldulus</i>	Eucalyptus	Baarnaaf	64,000
2	<i>Acacia saligna</i>	Acacia	n.a	48,000
3	<i>Shinus mole</i>	3 month tree	n.a	28,000
4	<i>Milia azandrica</i>	n.a	n.a	20,000
5	<i>Cordia Afrceana</i>	Cordia	Weedessa	5,000
6	<i>Leucaena leucocephala</i>	Leucaena	n.a	17,000
7	<i>n.a</i>	n.a	Koshime	19,000
8	<i>Molinga stenopetala</i>	n.a	n.a	10,000
9	<i>Spatadia nilotica</i>	Spotodis	n.a	7,000
10	<i>Jocalande minosfalia</i>	Jacalanda	n.a	11,000
11	<i>Gravilia robusta</i>	Gravilia	Jamnjazaf	1,000
12	<i>Casurina ekustifolia</i>	n.a	Shaiushaue	3,000
13				233,000

Source: Dugda Bora District Agriculture Bureau Office

Table III.2.1 Crop Production in Dugda Bora Wareda (1994/95 - 1999/2000)

(1) Cultivated Area

								(Unit : ha)
Crop	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000/1	Average/2	
Teff	16,000	16,700	15,000	15,200	16,000	15,000	15,700	(28.1)
Wheat	9,000	10,800	9,400	20,000	10,500	15,400	12,500	(22.4)
Maize	22,000	13,600	16,000	4,200	15,100	2,200	12,200	(21.8)
Haricot Bean	7,000	7,000	6,100	11,700	5,800	14,700	8,700	(15.6)
Barley	2,800	2,900	2,200	2,100	1,800	2,400	2,400	(4.3)
Sorghum	3,200	3,200	3,000	2,300	2,200	900	2,500	(4.5)
Field Peas	1,000	1,000	1,000	-	700	800	900	(1.6)
Lentil	100	200	200	200	200	200	200	(0.4)
Chick Peas	-	-	-	100	2,200	200	800	(1.4)
Total	61,100	55,400	52,900	55,800	54,500	51,800	55,900	(100.0)

(2) Unit Yield

								(Unit : ton/ha)
Crop	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000/1	Average	
Teff	0.85	0.58	1.00	0.36	0.90	0.70	0.73	
Wheat	1.29	1.00	1.80	0.97	1.60	2.20	1.48	
Maize	0.86	1.00	3.20	0.13	2.40	1.60	1.53	
Haricot Bean	0.80	0.40	0.60	0.32	1.20	1.00	0.72	
Barley	1.20	1.00	2.00	1.20	1.36	1.80	1.43	
Sorghum	0.61	0.80	1.60	0.29	1.40	1.20	0.98	
Field Peas	0.37	0.32	0.60	-	0.80	0.60	0.54	
Lentil	0.20	0.26	0.30	0.10	0.10	0.30	0.21	
Chick Peas	-	-	-	0.50	0.12	0.60	0.41	
Total Average	0.77	0.67	1.39	0.48	1.10	1.11	0.89	

(3) Crop Production

								(Unit : ton)
Crop	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000/1	Average/2	
Teff	13,600	9,700	15,000	5,500	14,400	10,500	11,500	(18.2)
Wheat	11,600	10,800	16,900	19,400	16,800	33,900	18,200	(28.8)
Maize	18,900	13,600	51,200	500	36,200	3,500	20,700	(32.8)
Haricot Bean	5,600	2,800	3,700	3,700	7,000	14,700	6,300	(10.0)
Barley	3,400	2,900	4,400	2,500	2,400	4,300	3,300	(5.2)
Sorghum	2,000	2,600	4,800	700	3,100	1,100	2,400	(3.8)
Field Peas	400	300	600	-	600	500	500	(0.8)
Lentil	0	100	100	0	0	100	100	(0.2)
Chick Peas	-	-	-	100	300	100	200	(0.3)
Total	55,500	42,800	96,700	32,400	80,800	68,700	63,200	(100.0)

Source : Zonal Agricultural Department, Nazareth 1999

Remarks /1: Hearing at OIDA Dugda Bora Wareda Office

/2: () indicating percentage in total area / production

Table III.2.2 Planted Area, Production and Yield of Teff (2000/01)

No	P/A name	Total Planted area (ha)	Teff			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	701	44.1	540	0.8
2	Gora Korkea	1,306	549	42.0	423	0.8
3	Jirme Bora	1,171	513	43.8	395	0.8
4	Birbirs Glsabule	1,749	794	45.4	611	0.8
5	Sore Doleasa	1,093	460	42.1	354	0.8
6	Koye Jejeba	968	149	15.4	115	0.8
7	Tute Koremta	1,272	596	46.9	457	0.8
8	Berta Sami	1,249	312	25.0	240	0.8
9	Gose Korke	1,292	410	31.7	316	0.8
10	Welda Kalina	1,138	67	5.9	52	0.8
11	Graba Korke Adi	1,718	329	19.2	253	0.8
12	Menjikso Weje	695	269	38.7	207	0.8
13	Beyimo Gasa	941	203	21.6	156	0.8
14	Kiltu ombole	1,507	567	37.6	437	0.8
15	Deyo Lemar	1,076	166	15.4	128	0.8
16	Dedo Wedera	1,358	165	12.2	127	0.8
17	Ealen	775	55	7.1	42	0.8
18	Tuchi Deko	1,023	447	43.7	344	0.8
19	Tube Suti	991	117	11.8	90	0.8
20	Dalata Mati	612	39	6.4	30	0.8
21	Koto Biliti	1,278	253	19.8	195	0.8
22	Argo gadilala	471	139	29.5	107	0.8
23	Korke Adama	1,013	462	45.6	356	0.8
24	Hate Lemar	1,168	427	36.6	329	0.8
25	Welda Hafa	993	179	18.0	138	0.8
26	Karsa G	1,067	696	65.2	536	0.8
27	Abumo Kumro	1,160	350	30.2	280	0.8
28	Oda Boketa	995	192	19.3	148	0.8
29	Seara Wekele	827	136	16.4	105	0.8
30	Bekele Grisa	1,036	134	12.9	103	0.8
31	Derara Dalicha	1,255	138	11.0	106	0.8
32	Dedota Dembel	569	151	26.5	60	0.4
33	Bribirs Gale	768	283	36.8	218	0.8
34	Dengoreta	699	138	19.7	106	0.8
35	Mukuye 2	818	220	26.9	169	0.8
36	Tuchi Sumeya	1,295	262	20.2	202	0.8
37	Hafa Kemele	746	189	25.3	146	0.8
38	Lafesa Germeji	624	123	19.7	95	0.8
39	Koshi Huluka	770	141	18.3	109	0.8
40	Jororaka	723	357	49.4	275	0.8
41	Tuka Langan	680	259	38.1	199	0.8
42	Burka Debrebea	1,376	242	17.6	186	0.8
43	Biliti baleweld	754	215	28.5	166	0.8
44	Adele Mirt Meteja	995	323	32.5	258	0.8
45	Tepho Cherokee	1,339	315	23.5	243	0.8
46	Jawe	968	265	27.4	204	0.8
47	Shuki Gemu	1,385	229	16.5	176	0.8
48	Tuchi Dembel	846	198	23.4	40	0.2
49	Abuno Gebriel	586	167	28.5	50	0.3
50	Weyo Gebrie	849	212	25.0	42	0.2
51	Malima Terberi	1,042	189	18.1	146	0.8
52	Gora Laman	182	0	0.0		
53	Welda Mekdela	1,305	131	10.0	101	0.8
54	Ela Geredaleha	750	435	58.0	335	0.8
District Total/Average		54,857	15,058	27.4	11,244	0.7

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.3 Planted Area, Production and Yield of Maize (2000/01)

No	P/A name	Total Planted area (ha)	Maize			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	142	8.9	408	2.9
2	Gora Korkea	1,306	192	14.7	548	2.9
3	Jirme Bora	1,171	92	7.9	264	2.9
4	Birbirs Glsabule	1,749	165	9.4	474	2.9
5	Sore Doleasa	1,093	19	1.7	54	2.9
6	Koye Jejeba	968	364	37.6	1,045	2.9
7	Tute Koremta	1,272	31	2.4	89	2.9
8	Berta Sami	1,249	85	6.8	244	2.9
9	Gose Korke	1,292	28	2.2	80	2.9
10	Welda Kalina	1,138	682	59.9	1,957	2.9
11	Graba Korke Adi	1,718	810	47.1	2,325	2.9
12	Menjikso Weje	695	16	2.3	46	2.9
13	Beyimo Gasa	941	400	42.5	1,148	2.9
14	Kiltu ombole	1,507	205	13.6	588	2.9
15	Deyo Lemar	1,076	366	34.0	1,050	2.9
16	Dedo Wedera	1,358	562	41.4	1,613	2.9
17	Ealen	775	442	57.0	1,269	2.9
18	Tuchi Deko	1,023	159	15.5	456	2.9
19	Tube Suti	991	37	3.7	106	2.9
20	Dalata Mati	612	149	24.3	428	2.9
21	Koto Biliti	1,278	298	23.3	855	2.9
22	Argo gadilala	471	81	17.2	232	2.9
23	Korke Adama	1,013	128	12.6	367	2.9
24	Hate Lemar	1,168	144	12.3	413	2.9
25	Welda Hafa	993	489	49.2	1,403	2.9
26	Karsa G	1,067	12	1.1	34	2.9
27	Abumo Kumro	1,160	136	11.7	163	1.2
28	Oda Boketa	995	309	31.1	887	2.9
29	Seara Wekele	827	390	47.2	1,119	2.9
30	Bekele Grisa	1,036	600	57.9	1,722	2.9
31	Derara Dalicha	1,255	745	59.4	2,138	2.9
32	Dedota Dembel	569	212	37.3	233	1.1
33	Bribirs Gale	768	75	9.8	215	2.9
34	Dengoreta	699	240	34.3	689	2.9
35	Mukuye 2	818	64	7.8	184	2.9
36	Tuchi Sumeya	1,295	454	35.1	1,303	2.9
37	Hafa Kemele	746	224	30.0	643	2.9
38	Lafesa Germeji	624	200	32.1	574	2.9
39	Koshi Huluka	770	239	31.0	686	2.9
40	Jororaka	723	59	8.2	169	2.9
41	Tuka Langan	680	20	2.9	57	2.9
42	Burka Debrebea	1,376	524	38.1	1,504	2.9
43	Biliti baleweld	754	46	6.1	132	2.9
44	Adele Mirt Meteja	995	132	13.3	158	1.2
45	Tepho Cherokee	1,339	503	37.6	1,444	2.9
46	Jawe	968	310	32.0	890	2.9
47	Shuki Gemu	1,385	607	43.8	1,742	2.9
48	Tuchi Dembel	846	374	44.2	262	0.7
49	Abuno Gebriel	586	205	35.0	164	0.8
50	Weyo Gebrie	849	331	39.0	298	0.9
51	Malima Terberi	1,042	570	54.7	1,636	2.9
52	Gora Laman	182	55	30.2	158	2.9
53	Welda Mekdela	1,305	1,067	81.8	3,062	2.9
54	Ela Geredaleha	750	63	8.4	181	2.9
District Total/Average		54,857	14,852	27.1	39,910	2.7

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.4 Planted Area, Production and Yield of Wheat (2000/01)

No	P/A name	Total Planted area (ha)	Wheat			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	487	30.6	1,023	2.1
2	Gora Korkea	1,306	335	25.7	704	2.1
3	Jirme Bora	1,171	331	28.3	695	2.1
4	Birbirs Glsabule	1,749	494	28.2	1,037	2.1
5	Sore Doleasa	1,093	357	32.7	750	2.1
6	Koye Jejeba	968	185	19.1	389	2.1
7	Tute Koremta	1,272	363	28.5	762	2.1
8	Berta Sami	1,249	515	41.2	1,082	2.1
9	Gose Korke	1,292	566	43.8	1,189	2.1
10	Welda Kalina	1,138	124	10.9	260	2.1
11	Graba Korke Adi	1,718	266	15.5	559	2.1
12	Menjikso Weje	695	198	28.5	416	2.1
13	Beyimo Gasa	941	140	14.9	294	2.1
14	Kiltu ombole	1,507	454	30.1	953	2.1
15	Deyo Lemar	1,076	205	19.1	431	2.1
16	Dedo Wedera	1,358	379	27.9	796	2.1
17	Ealen	775	152	19.6	319	2.1
18	Tuchi Deko	1,023	273	26.7	573	2.1
19	Tube Suti	991	539	54.4	1,132	2.1
20	Dalata Mati	612	274	44.8	575	2.1
21	Koto Biliti	1,278	639	50.0	1,342	2.1
22	Argo gadilala	471	227	48.2	477	2.1
23	Korke Adama	1,013	228	22.5	479	2.1
24	Hate Lemar	1,168	363	31.1	762	2.1
25	Welda Hafa	993	137	13.8	288	2.1
26	Karsa G	1,067	192	18.0	403	2.1
27	Abumo Kumro	1,160	248	21.4	546	2.2
28	Oda Boketa	995	115	11.6	242	2.1
29	Seara Wekele	827	113	13.7	237	2.1
30	Bekele Grisa	1,036	137	13.2	288	2.1
31	Derara Dalicha	1,255	133	10.6	279	2.1
32	Dedota Dembel	569	128	22.5	128	1.0
33	Bribirs Gale	768	280	36.5	588	2.1
34	Dengoreta	699	158	22.6	328	2.1
35	Mukuye 2	818	200	24.4	420	2.1
36	Tuchi Sumeya	1,295	285	22.0	599	2.1
37	Hafa Kemele	746	106	14.2	223	2.1
38	Lafesa Germeji	624	94	15.1	197	2.1
39	Koshi Huluka	770	171	22.2	359	2.1
40	Jororaka	723	189	26.1	397	2.1
41	Tuka Langan	680	223	32.8	468	2.1
42	Burka Debrebea	1,376	238	17.3	500	2.1
43	Biliti baleweld	754	410	54.4	861	2.1
44	Adele Mirt Meteja	995	241	24.2	530	2.2
45	Tepho Cherokee	1,339	231	17.3	485	2.1
46	Jawe	968	147	15.2	309	2.1
47	Shuki Gemu	1,385	177	12.8	372	2.1
48	Tuchi Dembel	846	165	19.5	116	0.7
49	Abuno Gebriel	586	132	22.5	92	0.7
50	Weyo Gebrie	849	178	21.0	142	0.8
51	Malima Terberi	1,042	172	16.5	361	2.1
52	Gora Laman	182	0	0.0	0	0.0
53	Welda Mekdela	1,305	0	0.0	0	0.0
54	Ela Geredaleha	750	167	22.3	351	2.1
District Total/Average		54,857	13,261	24.2	27,105	2.0

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.5 Planted Area, Production and Yield of Haricot Bean (2000/01)

No	P/A name	Total Planted area (ha)	Haricot Bean			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	119	7.5	95	0.8
2	Gora Korkea	1,306	0	0.0	0	
3	Jirme Bora	1,171	176	15.0	141	0.8
4	Birbirs Glsabule	1,749	0	0.0	0	
5	Sore Doleasa	1,093	125	11.4	100	0.8
6	Koye Jejeba	968	173	17.9	138	0.8
7	Tute Koremta	1,272	217	17.1	174	0.8
8	Berta Sami	1,249	278	22.3	222	0.8
9	Gose Korke	1,292	196	15.2	157	0.8
10	Welda Kalina	1,138	214	18.8	171	0.8
11	Graba Korke Adi	1,718	120	7.0	96	0.8
12	Menjikso Weje	695	152	21.9	0	
13	Beyimo Gasa	941	166	17.6	133	0.8
14	Kiltu ombole	1,507	172	11.4	138	0.8
15	Deyo Lemar	1,076	249	23.1	199	0.8
16	Dedo Wedera	1,358	232	17.1	186	0.8
17	Ealen	775	126	16.3	101	0.8
18	Tuchi Deko	1,023	126	12.3	101	0.8
19	Tube Suti	991	121	12.2	97	0.8
20	Dalata Mati	612	138	22.5	110	0.8
21	Koto Biliti	1,278	0	0.0	0	
22	Argo gadilala	471	0	0.0	0	
23	Korke Adama	1,013	0	0.0	0	
24	Hate Lemar	1,168	208	17.8	166	0.8
25	Welda Hafa	993	161	16.2	129	0.8
26	Karsa G	1,067	0	0.0	0	
27	Abumo Kumro	1,160	0	0.0	0	
28	Oda Boketa	995	132	13.3	166	1.3
29	Seara Wekele	827	136	16.4	170	1.2
30	Bekele Grisa	1,036	118	11.4	94	0.8
31	Derara Dalicha	1,255	215	17.1	172	0.8
32	Dedota Dembel	569	25	4.4	8	0.3
33	Bribirsa Gale	768	0	0.0	0	
34	Dengoreta	699	96	13.7	77	0.8
35	Mukuye 2	818	133	16.3	106	0.8
36	Tuchi Sumeya	1,295	213	16.4	170	0.8
37	Hafa Kemele	746	143	19.2	114	0.8
38	Lafesa Germeji	624	207	33.2	166	0.8
39	Koshi Huluka	770	219	28.4	175	0.8
40	Jororaka	723	0	0.0	0	
41	Tuka Langan	680	163	24.0	0	
42	Burka Debrebea	1,376	170	12.4	130	0.8
43	Biliti baleweld	754	0	0.0	136	0.0
44	Adele Mirt Meteja	995	0	0.0	0	
45	Tepho Cherokee	1,339	208	15.5	166	0.8
46	Jawe	968	200	20.7	160	0.8
47	Shuki Gemu	1,385	228	16.5	182	0.8
48	Tuchi Dembel	846	32	3.8	10	0.3
49	Abuno Gebriel	586	27	4.6	8	0.3
50	Weyo Gebrie	849	51	6.0	15	0.3
51	Malima Terberi	1,042	111	10.7	89	0.8
52	Gora Laman	182	127	69.8	102	0.8
53	Welda Mekdela	1,305	107	8.2	0	
54	Ela Geredaleha	750	0	0.0	0	
District Total/Average		54,857	6,530	11.9	5,071	0.8

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.6 Planted Area, Production and Yield of Barley (2000/01)

No	P/A name	Total Planted area (ha)	Barley			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	95	6.0	152	1.6
2	Gora Korkea	1,306	97	7.4	155	1.6
3	Jirme Bora	1,171	8	0.7	13	1.6
4	Birbirs Glsabule	1,749	130	7.4	208	1.6
5	Sore Doleasa	1,093	37	3.4	59	1.6
6	Koye Jejeba	968	40	4.1	64	1.6
7	Tute Koremta	1,272	62	4.9	99	1.6
8	Berta Sami	1,249	48	3.8	77	1.6
9	Gose Korke	1,292	57	4.4	91	1.6
10	Welda Kalina	1,138	27	2.4	43	1.6
11	Graba Korke Adi	1,718	32	1.9	51	1.6
12	Menjikso Weje	695	48	6.9	77	1.6
13	Beyimo Gasa	941	14	1.5	22	1.6
14	Kiltu ombole	1,507	62	4.1	99	1.6
15	Deyo Lemar	1,076	45	4.2	72	1.6
16	Dedo Wedera	1,358	0	0.0	0	
17	Ealen	775	0	0.0	0	
18	Tuchi Deko	1,023	14	1.4	22	1.6
19	Tube Suti	991	165	16.6	264	1.6
20	Dalata Mati	612	12	2.0	19	1.6
21	Koto Biliti	1,278	63	4.9	101	1.6
22	Argo gadilala	471	24	5.1	38	1.6
23	Korke Adama	1,013	76	7.5	122	1.6
24	Hate Leman	1,168	0	0.0	0	
25	Welda Hafa	993	22	2.2	35	1.6
26	Karsa G	1,067	22	2.1	35	1.6
27	Abumo Kumro	1,160	106	9.1	148	1.4
28	Oda Boketa	995	0	0.0	0	
29	Seara Wekele	827	9	1.1	14	1.6
30	Bekele Grisa	1,036	47	4.5	75	1.6
31	Derara Dalicha	1,255	17	1.4	27	1.6
32	Dedota Dembel	569	47	8.3	47	1.0
33	Bribirsa Gale	768	70	9.1	112	1.6
34	Dengoreta	699	29	4.1	46	1.6
35	Mukuye 2	818	129	15.8	206	1.6
36	Tuchi Sumeya	1,295	18	1.4	29	1.6
37	Hafa Kemele	746	32	4.3	51	1.6
38	Lafesa Germeji	624	0	0.0	0	
39	Koshi Huluka	770	0	0.0	0	
40	Jororaka	723	76	10.5	122	1.6
41	Tuka Langan	680	15	2.2	24	1.6
42	Burka Debrebea	1,376	14	1.0	22	1.6
43	Biliti baleweld	754	31	4.1	50	1.6
44	Adele Mirt Meteja	995	98	9.8	137	1.4
45	Tepho Cherokee	1,339	53	4.0	85	1.6
46	Jawe	968	23	2.4	0	
47	Shuki Gemu	1,385	65	4.7	104	1.6
48	Tuchi Dembel	846	72	8.5	72	1.0
49	Abuno Gebriel	586	51	8.7	51	1.0
50	Weyo Gebrie	849	72	8.5	72	1.0
51	Malima Terberi	1,042	0	0.0	0	
52	Gora Laman	182	0	0.0	0	
53	Welda Mekdela	1,305	0	0.0	0	
54	Ela Geredaleha	750	36	4.8	58	1.6
District Total/Average		54,857	2,310	4.2	3,473	1.5

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.7 Planted Area, Production and Yield of Sorghum (2000/01)

No	P/A name	Total Planted area (ha)	Sorghum			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	12	0.8	12	1.0
2	Gora Korkea	1,306	34	2.6	34	1.0
3	Jirme Bora	1,171	28	2.4	28	1.0
4	Birbirs Glsabule	1,749	28	1.6	28	1.0
5	Sore Doleasa	1,093	0	0.0	0	
6	Koye Jejeba	968	3	0.3	3	1.0
7	Tute Koremta	1,272	0	0.0	0	
8	Berta Sami	1,249	0	0.0	0	
9	Gose Korke	1,292	12	0.9	12	1.0
10	Welda Kalina	1,138	24	2.1	24	1.0
11	Graba Korke Adi	1,718	30	1.7	30	1.0
12	Menjikso Weje	695	0	0.0	0	
13	Beyimo Gasa	941	0	0.0	0	
14	Kiltu ombole	1,507	21	1.4	21	1.0
15	Deyo Lemar	1,076	5	0.5	5	1.0
16	Dedo Wedera	1,358	0	0.0	0	
17	Ealen	775	0	0.0	0	
18	Tuchi Deko	1,023	4	0.4	4	1.0
19	Tube Suti	991	0	0.0	0	
20	Dalata Mati	612	0	0.0	0	
21	Koto Biliti	1,278	0	0.0	0	
22	Argo gadilala	471	0	0.0	0	
23	Korke Adama	1,013	28	2.8	28	1.0
24	Hate Leman	1,168	0	0.0	0	
25	Welda Hafa	993	0	0.0	0	
26	Karsa G	1,067	20	1.9	20	1.0
27	Abumo Kumro	1,160	36	3.1	29	0.8
28	Oda Boketa	995	0	0.0	0	
29	Seara Wekele	827	0	0.0	0	
30	Bekele Grisa	1,036	0	0.0	0	
31	Derara Dalicha	1,255	0	0.0	0	
32	Dedota Dembel	569	3	0.5	2	0.5
33	Bribirsa Gale	768	0	0.0	0	
34	Dengoreta	699	0	0.0	0	
35	Mukuye 2	818	0	0.0	0	
36	Tuchi Sumeya	1,295	0	0.0	0	
37	Hafa Kemele	746	10	1.3	10	1.0
38	Lafesa Germeji	624	0	0.0	0	
39	Koshi Huluka	770	0	0.0	0	
40	Jororaka	723	0	0.0	0	
41	Tuka Langan	680	0	0.0	0	
42	Burka Debrebea	1,376	0	0.0	0	
43	Biliti baleweld	754	0	0.0	0	
44	Adele Mirt Meteja	995	38	3.8	30	0.8
45	Tepho Cherokee	1,339	0	0.0	0	
46	Jawe	968	0	0.0	0	
47	Shuki Gemu	1,385	0	0.0	0	
48	Tuchi Dembel	846	5	0.6	3	0.5
49	Abuno Gebriel	586	4	0.7	2	0.5
50	Weyo Gebrie	849	5	0.6	3	0.5
51	Malima Terberi	1,042	0	0.0	0	
52	Gora Laman	182	0	0.0	0	
53	Welda Mekdela	1,305	0	0.0	0	
54	Ela Geredaleha	750	0	0.0	0	
District Total/Average		54,857	350	0.6	327	0.9

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.8 Planted Area, Production and Yield of Horse Beans (2000/01)

No	P/A name	Total Planted area (ha)	Horse Beans			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	12	0.8	8	0.7
2	Gora Korkea	1,306	15	1.1	11	0.7
3	Jirme Bora	1,171	20	1.7	14	0.7
4	Birbirs Glsabule	1,749	42	2.4	29	0.7
5	Sore Doleasa	1,093	62	5.7	43	0.7
6	Koye Jejeba	968	28	2.9	20	0.7
7	Tute Koremta	1,272	0	0.0	0	
8	Berta Sami	1,249	6	0.5	4	0.7
9	Gose Korke	1,292	3	0.2	2	0.7
10	Welda Kalina	1,138	0	0.0	0	
11	Graba Korke Adi	1,718	120	7.0	10	0.1
12	Menjikso Weje	695	0	0.0	0	
13	Beyimo Gasa	941	6	0.6	4	0.7
14	Kiltu ombole	1,507	0	0.0	0	
15	Deyo Lemar	1,076	18	1.7	13	0.7
16	Dedo Wedera	1,358	20	1.5	14	0.7
17	Ealen	775	0	0.0	0	
18	Tuchi Deko	1,023	0	0.0	0	
19	Tube Suti	991	12	1.2	8	0.7
20	Dalata Mati	612	0	0.0	0	
21	Koto Biliti	1,278	8	0.6	6	0.7
22	Argo gadilala	471	0	0.0	0	
23	Korke Adama	1,013	28	2.8	20	0.7
24	Hate Leman	1,168	19	1.6	13	0.7
25	Welda Hafa	993	5	0.5	4	0.7
26	Karsa G	1,067	36	3.4	25	0.7
27	Abumo Kumro	1,160	34	2.9	0	
28	Oda Boketa	995	208	20.9	11	0.1
29	Seara Wekele	827	11	1.3	8	0.7
30	Bekele Grisa	1,036	0	0.0	0	
31	Derara Dalicha	1,255	0	0.0	0	
32	Dedota Dembel	569	3	0.5	0	
33	Bribirs Gale	768	23	3.0	16	0.7
34	Dengoreta	699	11	1.6	8	0.7
35	Mukuye 2	818	19	2.3	13	0.7
36	Tuchi Sumeya	1,295	30	2.3	21	0.7
37	Hafa Kemele	746	23	3.1	16	0.7
38	Lafesa Germeji	624	0	0.0	0	
39	Koshi Huluka	770	0	0.0	0	
40	Jororaka	723	32	4.4	22	0.7
41	Tuka Langan	680	0	0.0	0	
42	Burka Debrebea	1,376	170	12.4	130	0.8
43	Biliti baleweld	754	26	3.4	18	0.7
44	Adele Mirt Meteja	995	36	3.6	0	
45	Tepho Cherokee	1,339	21	1.6	17	0.8
46	Jawe	968	18	1.9	13	0.7
47	Shuki Gemu	1,385	26	1.9	18	0.7
48	Tuchi Dembel	846	0	0.0	0	
49	Abuno Gebriel	586	0	0.0	0	
50	Weyo Gebrie	849	0	0.0	0	
51	Malima Terberi	1,042	0	0.0	0	
52	Gora Laman	182	0	0.0	0	
53	Welda Mekdela	1,305	0	0.0	0	0.0
54	Ela Geredaleha	750	26	3.5	18	0.7
District Total/Average		54,857	1,177	2.1	577	0.5

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.9 Planted Area, Production and Yield of Field Peas (2000/01)

No	P/A name	Total Planted area (ha)	Field Peas			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	8	0.5	5	0.6
2	Gora Korkea	1,306	23	1.8	14	0.6
3	Jirme Bora	1,171	0	0.0	0	
4	Birbirsa Glsabule	1,749	43	2.5	26	0.6
5	Sore Doleasa	1,093	33	3.0	20	0.6
6	Koye Jejeba	968	17	1.8	10	0.6
7	Tute Koremta	1,272	0	0.0	0	
8	Berta Sami	1,249	5	0.4	4	0.7
9	Gose Korke	1,292	4	0.3	2	0.6
10	Welda Kalina	1,138	0	0.0	0	
11	Graba Korke Adi	1,718	11	0.6	7	0.6
12	Menjikso Weje	695	7	1.0	4	0.6
13	Beyimo Gasa	941	7	0.7	4	0.6
14	Kiltu ombole	1,507	0	0.0	0	
15	Deyo Lemar	1,076	15	1.4	9	0.6
16	Dedo Wedera	1,358	0	0.0	0	
17	Ealen	775	0	0.0	0	
18	Tuchi Deko	1,023	0	0.0	0	
19	Tube Suti	991	0	0.0	0	
20	Dalata Mati	612	0	0.0	0	
21	Koto Biliti	1,278	7	0.5	4	0.6
22	Argo gadilala	471	0	0.0	0	
23	Korke Adama	1,013	19	1.9	11	0.6
24	Hate Leman	1,168	7	0.6	4	0.6
25	Welda Hafa	993	0	0.0	0	
26	Karsa G	1,067	29	2.7	17	0.6
27	Abumo Kumro	1,160	95	8.2	0	
28	Oda Boketa	995	11	1.1	7	0.6
29	Seara Wekele	827	7	0.8	4	0.6
30	Bekele Grisa	1,036	0	0.0	0	
31	Derara Dalicha	1,255	7	0.6	4	0.6
32	Dedota Dembel	569	0	0.0	0	
33	Bribirsa Gale	768	13	1.7	8	0.6
34	Dengoreta	699	11	1.6	7	0.6
35	Mukuye 2	818	19	2.3	11	0.6
36	Tuchi Sumeya	1,295	33	2.5	20	0.6
37	Hafa Kemele	746	16	2.1	10	0.6
38	Lafesa Germeji	624	0	0.0	0	
39	Koshi Huluka	770	0	0.0	0	
40	Jororaka	723	10	1.4	6	0.6
41	Tuka Langanano	680	0	0.0	0	
42	Burka Debrebea	1,376	18	1.3	11	0.6
43	Biliti baleweld	754	18	2.4	11	0.6
44	Adele Mirt Meteja	995	106	10.7	0	
45	Tepho Cherokee	1,339	8	0.6	5	0.6
46	Jawe	968	5	0.5	3	0.6
47	Shuki Gemu	1,385	46	3.3	28	0.6
48	Tuchi Dembel	846	0	0.0	0	
49	Abuno Gebriel	586	0	0.0	0	
50	Weyo Gebrie	849	0	0.0	0	
51	Malima Terberi	1,042	0	0.0	0	
52	Gora Laman	182	0	0.0	0	
53	Welda Mekdela	1,305	0	0.0	0	
54	Ela Geredaleha	750	14	1.9	8	0.6
District Total/Average		54,857	672	1.2	283	0.6

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.10 Planted Area, Production and Yield of Chick Peas (2000/01)

No	P/A name	Total Planted area (ha)	Chick Peas			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	15	0.9	9	0.6
2	Gora Korkea	1,306	61	4.7	37	0.6
3	Jirme Bora	1,171	3	0.3	2	0.6
4	Birbirsa Glsabule	1,749	53	3.0	32	0.6
5	Sore Doleasa	1,093	0	0.0	0	
6	Koye Jejeba	968	9	0.9	5	0.6
7	Tute Koremta	1,272	3	0.2	0	
8	Berta Sami	1,249	0	0.0	0	
9	Gose Korke	1,292	13	1.0	8	0.6
10	Welda Kalina	1,138	0	0.0	0	
11	Graba Korke Adi	1,718	0	0.0	0	
12	Menjikso Weje	695	5	0.7	3	0.6
13	Beyimo Gasa	941	3	0.3	2	0.6
14	Kiltu ombole	1,507	15	1.0	9	0.6
15	Deyo Lemar	1,076	7	0.7	4	0.6
16	Dedo Wedera	1,358	0	0.0	0	
17	Ealen	775	0	0.0	0	
18	Tuchi Deko	1,023	0	0.0	0	
19	Tube Suti	991	0	0.0	0	
20	Dalata Mati	612	0	0.0	0	
21	Koto Biliti	1,278	4	0.3	2	0.6
22	Argo gadilala	471	0	0.0	0	
23	Korke Adama	1,013	26	2.6	16	0.6
24	Hate Leman	1,168	0	0.0	0	
25	Welda Hafa	993	0	0.0	0	
26	Karsa G	1,067	40	3.7	24	0.6
27	Abumo Kumro	1,160	145	12.5	87	0.6
28	Oda Boketa	995	6	0.6	4	0.6
29	Seara Wekele	827	4	0.5	2	0.6
30	Bekele Grisa	1,036	0	0.0	0	
31	Derara Dalicha	1,255	0	0.0	0	
32	Dedota Dembel	569	0	0.0	0	
33	Bribirsa Gale	768	24	3.1	14	0.6
34	Dengoreta	699	16	2.3	10	0.6
35	Mukuye 2	818	18	2.2	11	0.6
36	Tuchi Sumeya	1,295	0	0.0	0	
37	Hafa Kemele	746	3	0.4	2	0.6
38	Lafesa Germeji	624	0	0.0	0	
39	Koshi Huluka	770	0	0.0	0	
40	Jororaka	723	0	0.0	0	
41	Tuka Langanano	680	0	0.0	0	
42	Burka Debrebea	1,376	0	0.0	0	
43	Biliti baleweld	754	0	0.0	0	
44	Adele Mirt Meteja	995	10	1.0	6	0.6
45	Tepho Cherokee	1,339	0	0.0	0	
46	Jawe	968	0	0.0	0	
47	Shuki Gemu	1,385	0	0.0	0	
48	Tuchi Dembel	846	0	0.0	0	
49	Abuno Gebriel	586	0	0.0	0	
50	Weyo Gebrie	849	0	0.0	0	
51	Malima Terberi	1,042	0	0.0	0	
52	Gora Laman	182	0	0.0	0	
53	Welda Mekdela	1,305	0	0.0	0	
54	Ela Geredaleha	750	0	0.0	0	
District Total/Average		54,857	483	0.9	288	0.6

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.11 Planted Area, Production and Yield of Lentil (2000/01)

No	P/A name	Total Planted area (ha)	Lentil			
			Planted Area		Production (ton)	Yield (ton/ha)
			(ha)	(%)		
1	Makue 1	1,591	0	0.0	0	
2	Gora Korkea	1,306	0	0.0	0	
3	Jirme Bora	1,171	0	0.0	0	
4	Birbirs Glsabule	1,749	0	0.0	0	
5	Sore Doleasa	1,093	0	0.0	0	
6	Koye Jejeba	968	0	0.0	0	
7	Tute Koremta	1,272	0	0.0	0	
8	Berta Sami	1,249	0	0.0	0	
9	Gose Korke	1,292	3	0.2	2	0.6
10	Welda Kalina	1,138	0	0.0	0	
11	Graba Korke Adi	1,718	0	0.0	0	
12	Menjikso Weje	695	0	0.0	0	
13	Beyimo Gasa	941	2	0.2	1	0.6
14	Kiltu ombole	1,507	11	0.7	7	0.6
15	Deyo Lemar	1,076	0	0.0	0	
16	Dedo Wedera	1,358	0	0.0	0	
17	Ealen	775	0	0.0	0	
18	Tuchi Deko	1,023	0	0.0	0	
19	Tube Suti	991	0	0.0	0	
20	Dalata Mati	612	0	0.0	0	
21	Koto Biliti	1,278	6	0.5	4	0.6
22	Argo gadilala	471	0	0.0	0	
23	Korke Adama	1,013	18	1.8	11	0.6
24	Hate Leman	1,168	0	0.0	0	
25	Welda Hafa	993	0	0.0	0	
26	Karsa G	1,067	20	1.9	12	
27	Abumo Kumro	1,160	10	0.9	0	
28	Oda Boketa	995	22	2.2	13	0.6
29	Seara Wekele	827	21	2.5	13	0.6
30	Bekele Grisa	1,036	0	0.0	0	
31	Derara Dalicha	1,255	0	0.0	0	
32	Dedota Dembel	569	0	0.0	0	
33	Bribirsa Gale	768	0	0.0	0	
34	Dengoreta	699	0	0.0	0	
35	Mukuye 2	818	16	2.0	10	0.6
36	Tuchi Sumeya	1,295	0	0.0	0	
37	Hafa Kemele	746	0	0.0	0	
38	Lafesa Germeji	624	0	0.0	0	
39	Koshi Huluka	770	0	0.0	0	
40	Jororaka	723	0	0.0	0	
41	Tuka Langanano	680	0	0.0	0	
42	Burka Debrebea	1,376	0	0.0	0	
43	Biliti baleweld	754	8	1.1	5	0.6
44	Adele Mirt Meteja	995	11	1.1	0	
45	Tepho Cherokee	1,339	0	0.0	0	
46	Jawe	968	0	0.0	0	
47	Shuki Gemu	1,385	7	0.5	4	0.6
48	Tuchi Dembel	846	0	0.0	0	
49	Abuno Gebriel	586	0	0.0	0	
50	Weyo Gebrie	849	0	0.0	0	
51	Malima Terberi	1,042	0	0.0	0	
52	Gora Laman	182	0	0.0	0	
53	Welda Mekdela	1,305	0	0.0	0	
54	Ela Geredaleha	750	9	1.2	5	0.6
District Total/Average		54,857	164	0.3	86	0.6

Source: Dguda Bora Woreda Agriculture Bureau Office

Table III.2.12 Horticulture Crops Production in Dugda Bora (1999/2000)

No	P/A name	Total Land (ha)	Farm land (ha)	Planted Area per Horticultural Crop in 1999 - 2000																	Total Area				
				Vegetables											Fruits										
				Tomato	Onion	Hot pepper	S.Pepper	Cabbage	Ethiopian Cabbage	Garlic	Irish-potato	Carrot	Beet root	Water-melon	Egg-Plant	Cucumber	Mango	Avocado	Papaya	Sugar-cane		Orange			
1	Makue 1	3,854	1,942																					0	
2	Gora Korkea	3,680	1,652																						0
3	Jirne Bora	3,542	1,501																						0
4	Birbira Glsabule	3,532	2,081																						0
5	Sore Doleasa	3,472	1,396																						0
6	Koye Jejeba	3,430	1,284																						0
7	Tute Koremia	3,427	1,561																						0
8	Berta Sami	3,310	1,536																						0
9	Gose Korke	3,269	1,610																						0
10	Welda Kalina	3,033	1,442	50	40	40		80		1				1	3	1			14						230
11	Graba Korke Adi	2,994	1,990	18	12	8	2	2		1			1												45
12	Menjiso Weje	2,969	947																						0
13	Beyimo Gasa	2,872	1,200																						0
14	Kiflu ombole	2,836	1,745																						0
15	Deyo Leman	2,745	1,303																						0
16	Dedo Wedera	2,730	1,586	45	5	19								20	1	1		1	1	5	1				99
17	Ealen	2,684	1,027	30	20	8	2	6	4	2			1	1			20	1	1	28	8	40	3	18	171
18	Tuchi Deko	2,657	1,217																						0
19	Tube Suti	2,659	1,223																						0
20	Dalata Mati	2,658	792																						0
21	Koto Bilit	2,575	1,446																						0
22	Argo gadilala	2,553	626																						0
23	Korke Adama	2,404	1,237																						0
24	Hate Leman	2,400	1,312																						0
25	Welda Hala	2,380	1,160																						0
26	Karsa G/Gengelechii	2,335	1,195																						0
27	Abumo Kumro	2,330	1,217																						0
28	Oda Boketa	2,327	1,254	7	3	2		1	1																14
29	Seara Wekele	2,218	1,116																						0
30	Bekele Grisa	2,172	1,125	80	80	40	3	10		1				1	3	3	0.5	0.5	60		8				290
31	Derara Dalicha	2,154	1,501	10	5	50																			65
32	Dadota Dembel	2,151	807	18	12	8	2	2		1			1												45
33	Birbira Gale	2,115	1,057																						0
34	Dengoreta	2,114	1,002																						0
35	Mukuye 2	2,105	1,135																						0
36	Tuchi Sumeya	2,060	1,533																						0
37	Hala Kemele	2,058	1,079																						0
38	Lafesa Germeji	2,049	913	30		15																			45
39	Koshi Huluka	2,044	1,080																						0
40	Jororaka	2,040	952																						0
41	Tuka Langano	2,039	808																						0
42	Burka Debrebea	2,036	1,633	15	8	40	2	5																	70
43	Biliti balewelc	2,031	1,012																						0
44	Adele Mirt Meteja	2,030	1,308																						0
45	Tepho Cherokee	2,026	1,610	16	14	9	2	2		1			1												46
46	Jawe	2,007	1,082																						0
47	Shuki Gemu	1,990	1,437	70	70	60	2	10	4	1			1			4	2	0.5	0.5	50		18			293
48	Tuchi Dembel	1,944	1,077	10	6	6		3		1	1		1												29
49	Abuno Gebriel	1,904	841	18	12	8	2	2		1			1												45
50	Weyo Gebriel	1,842	1,175	20	8	8	2	4		1			1												45
51	Mafima Terberi	1,796	1,172	35	4	20	2	6	2				1												77
52	Gora Laman	1,739	534	49		20																			69
53	Welda Mekdela	1,735	1,493	60		60		3		1			1												126
54	Ela Geredaleha	1,725	864																						0
	Total		67,828	581	299	421	21	136	11	12	1	10	8	21	11	7	31	11	171	30	22				1,804
	Percentage in Total Horticultural Crops (%)			32.2	16.6	25.3	1.2	7.5	0.6	0.7	0.1	0.6	0.4	1.2	0.6	0.4	1.7	0.6	9.5	1.7	1.2				100.0

Source: Dugda bora District Agriculture Bureau Office, Nov., 2000

Note: The acreage for horticulture crop cultivation includes the private farmers (non-PA's member) production.

Table III.3.1 Farming Practice Prevailing in the Study Area (1/2)

Farming Practice	Teff		Wheat		Maize		Barley		Sorghum	
	Inputs	Quantity	Inputs	Quantity	Inputs	Quantity	Inputs	Quantity	kind of input	Quantity
Land clearing	bush knife and Hoe	Yes	bush knife and Hoe	Yes	bush knife and Hoe	Yes	bush knife and Hoe	Yes	bush knife and Hoe	Yes
Plowing	Pair of oxen and maresha	3 - 4 times	Pair of oxen and maresha	2 - 3 times	Pair of oxen and maresha	2-3 times	Pair of oxen and maresha	2-3 times	Pair of oxen and maresha	1-2 time
Sowing	Broad casting	25 -50 kg/ha Not covered	broadcasting	140-160 kg/ha	broad casting	40 -120 kg	broadcasting	100 - 125 kg	broadcasting	5 - 15 kg/ha
Fertilizer	w/ Fertilizer(DAP) No fertilizer	75% FH used 25% FH not use	Basal only DAP or Urea	Via EPP only	Basal only DAP or Urea	Via EPP	Basal only DAP or Urea	nil	Basal only DAP or Urea	Nil
Intertillage (Shilshalo)	Nothig Making drain ditch	No practice Yes	Nothing Making drain ditch	No practice Yes	Nothing Making drain ditch	<i>Shilshallo is practiced.</i>	Nothing Making drain ditch	No practice Yes	Nothing Making drain ditch	<i>Shilshallo is practiced</i>
Weeding	2,4 D & hand weeding	0.5 - 1.0 Lt 1 time	2,4 D and hand weeding	0.5-1.0 Lt/Ha	hand weeding	2 times	2,4 D and hand weeding	1.0 lt/ha	2,4 D and hand weeding	Nil
Harvesting	Cutting whole plant by sickle	do	Cutting whole plant by sickle	do	by hand	1-2 times	Cutting whole plant by sickle	do	Cutting head plant by sickle	do
Transportation	Donky cart to homestead	do	Donkey cart to homestead	do	Donky cart homested	do	Donkey cart to homestead	do	Donkey cart to homestead	do
Threshing	Animal trampling	do	animal trampling	do	Beating cobs by stick, thresher	25 % of FH use motor thresher	animal trampling	do	animal trampling	do
Storage	Gotara	do	Gotara	do	Gotara	do	Gotara	do	Gotara (storage bin)	do
Utilization	Milling in flour mill and make injera		Milling in flour mill and make injera + Talaa		Milling in flour and make injera + Talaa+ <i>Genfo</i>		Milling in flour milling and make Ganfo + Injera + Talaa		Milling in flour milling and make only Talaa	

Source: Dugda Bora District Agricultural Office

Note: EPP refers to Extension Package Program

Table III.3.1 Farming Practice Prevailing in the Study Area (2/2)

Farming Practice	Haricot bean		Field peas		Chickpea		Lentil	
	Inputs	Quantity	Inputs	Quantity	Inputs	Quantity	Inputs	Quantity
Land clearing	bush knife and Hoe	Yes	bush knife and Hoe	Yes	bush knife and Hoe	Yes	bush knife and Hoe	Yes
Plowing	Pair of oxen and maresha	1-2 time	Pair of oxen and maresha	1 time	Pair of oxen and maresha	1 time	Pair of oxen and maresha	1 time
Sowing	broadcasting	50 - 120 kg/ha	broadcasting	150 - 160 kg/ha	broadcasting	90 - 100 kg/ha	broadcasting	50 - 75 kg/ha
Fertilizer	Basal only DAP or Urea	Nil	Basal only DAP or Urea	Nil	Basal only DAP or Urea	Nil	Basal only DAP or Urea	nil
Intertillage (Shilshalo)	Nothing Making drain ditch	Nil	Nothing Making drain ditch	nil	Nothing Making drain ditch	Nil	Nothing Making drain ditch	nil
Weeding	2,4 D and hand weeding	Nil almost nil	2,4 D and hand weeding	nil almost nil	2,4 D and hand weeding	Nil almost nil	2,4 D and hand weeding	nil almost nil
Harvesting	Cutting whole plant by sickle	Pulling by hand	Cutting whole plant by sickle	Pulling out by hand	Cutting whole plant by sickle	Pulling out by hand	Cutting whole plant by sickle	pulling by hand
Transportation	Donkey cart to homestead	do	Donkey cart to homestead	do	Donkey cart to homestead	do	Donkey cart to homestead	do
Threshing	animal trampling	do	animal trampling	do	animal trampling	do	animal trampling	do
Storage	Gotara	do	Gotara	do	Gotara	dp	Gotara	do
Utilization	For sale as cash crop, and under study to proces into wot, soup, and bean cake by WID via R/Sector		Maiking wot for injera, soup (Shorba), and roasting.		Making wot and roasting it		Making wot, bean soup and roasting	

Source: Dugda Bora District Agricultural Office

Note: EPP refers to Extension Package Program

Table III.3.2 Farm Labour Balance for Average Farmer

Description	Cropped Area (ha)	Unit Labour Req't (md/ha)	Total Labour Req. (md/crop)	Abalable Labor (md/month)	Labour Balance					
					Feb/Apr	May/Jun	Jul	Aug/Sep	Oct	Nov
Teff	1.5	92	138.0		0.0	27.0	10.5	22.5	37.5	18.0
Wheat	0.8	81	64.8		0.0	17.6	5.6	9.6	16.0	8.0
Maize	1.5	62	93.0		21.0	28.5	0.0	15.0	22.5	15.0
Haricot Beans	1.0	54	54.0		0.0	21.0	6.0	6.0	10.0	0.0
Total	4.8			72.4	21.0	94.1	22.1	53.1	86.0	41.0
Family Labor Use (%)					29.0	130.0	30.5	73.3	118.8	56.6
Deficiency (man-day)					51.4	-21.7	50.3	19.3	-13.6	31.4

Table III.4.1 Crop Budget Analysis [I. Rainfed]

[Traditional Farming Level: Maize

Description	99-'00 year price variation			Unit	Amount	Remark	
Maize							
I. Gross Revenue	Mean	Min	Max				
(1) [9 qts] Yield/ ha				900 kg/ ha	900.00		
(2) Unit Sale Price	132	103	153	1.2 Birr/kg	1.20		
(3) Gross Revenue (2)x(1)				Birr	1080.00		
II Crop Production Cost							
(1) Seed ([50] kg /ha CV: local CV 132Birr/qt)				1.2 Brr/kg	60.00		
(2) Fertilizers							
(4) Labor cost							
Land clearing				20 MD	200.00		
1st plowing 2 oxen-day				15 Birr/oxenda	60.00		
2nd plowing 2 oxen-day				15 Birr/oxenda	60.00		
3rd plowing 2 oxen- day				15 Birr/oxenda	60.00		
Swoing operation				0.5 MD	5.00		
Shilshallo 0.5 Oxen day				15 Birr/oxenda	30.00		
1 st Weeding by hoe 4 MD				4 MD	40.00		
2 nd Weeding by hoe 4 MD				4 MD	40.00		
Harvesting (picking cobs and heaps)				8.5 MD	85.00		
Transportation from field to homestead (15 Birr/donky cart+ 3MD)				3 cart	45.00		
Threshing/shelling/winnowing				5 Qt	45.00		
Total Crop Production Cost II					730.00		
III Net Revenue (I-II)					Brr/ ha	350.0	
Break Even Price =Birr [81.1] per 100 kg							

Table III.4.2 Crop Budget Analysis [I. Rainfed]

[Traditional Farming Level : Haricot bean

Description	99-'00 year price variation			Unit	Amount	Remark	
Haricot bean							
I. Gross Revenue	Min	Max	Mean				
(1) [6 qts] Yield/ha				600 kg/ha	600.00		
(2) Unit Sale Price	174	190	183	170 Birr/qt	170.00		
(3) Gross Revenue (2)x(1)				Birr	1020.00		
II Crop Production Cost							
(1) Seed rate ([100-120] kg /ha CV: local				170 Brr/ha	170.00		
(3) Labor cost							
Land clearing				20 MD	200.00		
1st plowing 2 oxen-day				15 Birr/oxenda	60.00		
Swoing operation				0.5 MD	5.00		
Harvesting (uprooting and heaps)				9.6 MD	96.00		
Transportation from field to homestead (15 Birr/donky cart+ 3MD)				30 donky cart	30.00		
Threshing/shelling/winnowing							
4 oxen-day (4 x15 birr=60)				60 oxen day	60.00		
operators (4 MD x 10 birr/MD = 40 Birr)				4 MD	40.00		
Total Crop Production Cost II					661.00		
III Net Revenue (I-II)					Brr/ ha	359.00	
Break Even Price = Birr [110.2] per 100 kg							

Table III.4.3 Crop Budget Analysis [1. Rainfed]

[Traditional Farming Level: Wheat]

Description	Market price ('99-'00)			Unit	Amount	Remark
	Min	Max	Mean			
I. Gross Revenue						
Wheat						
(1) [10 qts]Yield/ha				10 qt/ ha	1000.00	
(2)Unit Sale Price	137	202	173	140 Birr/qt	140.00	
(3)Gross Revenue(2)x(1)				Birr	1400.00	
II Crop Production Cost						
(1)Seed([150]kg /ha CV: Pavon			140 Birr/Qt	140 Brr/ha	210.00	
(2)Fertilizers						
(3)Chemicals						
Herbicide 1[2,4-D] [1000cc]/ ha ,			50 Birr/Lt,	50 Brr/lt	50.00	
(4) Labor cost						
Land clearing				20 MD	200.00	
1st plowing 2 oxen-day				15 Birr/oxenda	60.00	
2nd plowing 2 oxen-day				15 Birr/oxenda	60.00	
3rd plowing 2 oxen- day				15 Birr/oxenda	60.00	
Swoing operation				0.5 MD	5.00	
1 st Weeding by hoe 16 MD				16 MD	160.00	
Herbicide application				1 MD	10.00	
Harvesting (cutting and heaps)				16 MD	160.00	
Transportation from field to homestead (15 Birr/donky cart+ 3MD)				45	45.00	
Threshing/shelling/winnowing						
4 oxen-day (4 x15 birr=60)				1 oxen day	60.00	
Winnowing and sacking				8 MD	80.00	
Total Crop Production Cost II					1160.00	
III Net Revenue (I-II)					240.00	
Break Even Price =Birr [116] per 100 kg						

Table III.4.4 Crop Budget Analysis [1. Rainfed]

[Traditional Farming Level: Teff]

Description	Market price ('99-'00)			Unit	Amount	Remark
	Min	Max	Mean			
I. Gross Revenue						
Teff						
(1) [7 qts]Yield/ha				7 Qt/ ha	7.00	
(2)Unit Sale Price	204	295	233	Birr/Qt	230.00	
(3)Gross Revenue(2)x(1)				Birr	1610.00	
II Crop Production Cost						
(1)Seed([50]kg /ha CV: Cross 37, 300 Birr/qt				230 Brr/ha	115.00	
(2)Fertilizers						
(3)Chemicals						
Herbicide 1[2,4-D] [1000cc]/ ha ,			50 Birr/Lt,	50 Brr/4 beds	50.00	
(4) Labor cost						
Land clearing				20 MD	200.00	
1st plowing 2 oxen-day				15 Birr/oxenda	60.00	
2nd plowing 2 oxen-day				15 Birr/oxenda	60.00	
3rd plowing 2 oxen- day				15 Birr/oxenda	60.00	
4th plowing 2 oxen day				15 Birr/oxenda	60.00	
Swoing operation				0.5 MD	5.00	
1 st Weeding by hoe 16 MD				16 MD	160.00	
Herbicide application				1 MD	10.00	
Harvesting (cutting and heaps)				20 MD	200.00	
Transportation from field to homestead (15 Birr/donky cart+ 3MD)				45	45.00	
Threshing/winnowing						
4 oxen-day (4 x15 birr=60)				1 oxen day	60.00	
Winnowing and sacking				8 MD	80.00	
Total Crop Production Cost II					1165.00	
III Net Revenue (I-II)					445.00	
Break Even Price =Birr [166.4] per 100 kg						

Table III.4.5 Crop Budget Analysis [1. Rainfed]

[EPP: Maize]

Description	99-'00 year price variation			Unit	Amount	Remark
I. Gross Revenue				Mean	Min	Max
Maize / EPP						
(1)Yield [18]qts/ ha				1800 kg/ ha	1800.00	
(2)Unit Sale Price	132	103	153	1.2 Birr/kg	1.20	
(3)Gross Revenue(2)x(1)				Birr	2160.00	
II Crop Production Cost						
(1)Seed([25]kg /ha CV: A 511 240 Birr/qt)				2.4 Brr/ha	60.00	
(2)Fertilizers						
1)DAP([100] kg/ ha, Birr 2.75/kg)				100 Brr/ha	275.00	
2)Urea([50] kg/ ha, 1.8 Birr /kg)				50 Brr/ha	90.00	
(4) Labor cost						
Land clearing				20 MD	200.00	
1st plowing 2 oxen-day				15 Birr/oxenda	60.00	
2nd plowing 2 oxen-day				15 Birr/oxenda	60.00	
3rd plowing 2 oxen- day				15 Birr/oxenda	60.00	
Sowing operation with fertilizer application(DAP)				6 MD	60.00	
Shilshallo 0.5 Oxen day				15 Birr/oxenda	30.00	
1 st Weeding by hoe 4 MD				16 MD	160.00	
2 nd Weeding by hoe 4 MD				16 MD	160.00	
Fertilizer application (urea)				1 MD	10.00	
Harvesting (picking cobs and heaps)				6 MD	60.00	
Transportation from field to homestead (15 Birr/donky cart+ 6MD)				15 Birr/cart	90.00	
Threshing/shelling/winnowing				5 Qt	90.00	
Total Crop Production Cost II					1465.00	
III Net Revenue (I-II)					Brr/ ha	695.00
Break Even Price =Birr [81.4] per 100 kg						

Table III.4.6 Crop Budget Analysis [1. Rainfed]

[EPP:Haricot bean]

Description	99-'00 year price variation			Unit	Amount	Remark
I. Gross Revenue				Mean	Min	Max
Haricot bean / EPP						
(1)[8-10 qts]Yield/ha				1000 kg/ha	1000.00	
(2)Unit Sale Price	183	174	190	170 Birr/qt	170.00	
(3)Gross Revenue(2)x(1)				Birr	1700.00	
II Crop Production Cost						
(1)Seed rate(100 kg /ha CV: Local 170 Birr/qt)				170 Brr/ha	170.00	
(2)Fertilizers						
1)DAP(50 kg/ ha, Birr 2.75/kg)				137.5 Brr/ha	137.50	
(3) Labor cost						
Land clearing				20 MD	200.00	
1st plowing 2 oxen-day				15 Birr/oxenda	60.00	
Swoing operation				0.5 MD	5.00	
Fertilizer application				0.5 MD	5.00	
1 st Weeding by hoe				16 MD	160.00	
Harvesting (uprooting and heaps)				16 MD	160.00	
Transportation from field to homestead (15 Birr/donky cart+ 3MD)				3 Cart	45.00	
Threshing/winnowing						
4 oxen-day (4 x15 birr=60)				1 oxen day	60.00	
(7 MD x 10 birr/MD = 40 Birr)				7 MD	70.00	
Total Crop Production Cost II					1072.50	
III Net Revenue (I-II)					Brr/ ha	627.50
Break Even Price = Birr [107.3] per 100 kg						

Table III.4.7 Crop Budget Analysis [L. Rainfed]

[EPP: Wheat]

Description	99-'00 year price variation			Unit	Amount	Remark
Wheat / EPP	Min	Max	Mean			
I. Gross Revenue						
Wheat						
(1)[19 qts]Yield/ha				19 qt/ ha	1900.00	
(2)Unit Sale Price	137	202	173	140 Birr/qt	140.00	
(3)Gross Revenue(2)x(1)				Birr	2660.00	
II Crop Production Cost						
(1)Seed([150]kg /ha CV: Pavon 76			210 Birr/qt	310 Brr/ha	310.00	
(2)Fertilizers						
1)DAP([100] kg/ ha, Birr 2.75/kg)				275 Brr/ha	275.00	
2)Urea([50] kg/ ha, 1.8 Birr /kg)				90 Brr/ha	90.00	
(3)Chemicals						
Herbicide 1[2,4-D] [1000cc]/ ha , 50 Birr/Lt,				50 Brr/lt	50.00	
(4) Labor cost						
Land Clearing				20 MD	200.00	
1st plowing 2 oxen-day				15 Birr/oxenda	60.00	
2nd plowing 2 oxen-day				15 Birr/oxenda	60.00	
3rd plowing 2 oxen- day				15 Birr/oxenda	60.00	
Swoing operation				0.5 MD	5.00	
1 st Weeding by hoe 16 MD				16 MD	160.00	
2 nd Weeding by hoe 16 MD				16 MD	160.00	
Herbicide application				1 MD	10.00	
Fertilizer Application (DAP & Urea)				2 MD	20.00	
Harvesting (cutting and heaps)				20 MD	200.00	
Transportation from field to homestead (15 Birr/donky cart+ 4MD)				15 cart	105.00	
Threshing/shelling/winnowing						
4 oxen-day (4 x15 birr=60)				2 oxen day	120.00	
Winnowing and sacking				10 MD	100.00	
Total Crop Production Cost II					1985.00	
IV. Net Revenue (I-II)				Brr/ ha	675.00	
Break Even Price (without depreciation)=Birr [104.5] per 100 kg						

Table III.4.8 Crop Budget Analysis [L. Rainfed]

[EPP: Teff]

Description	99-'00 year price variation			Unit	Amount	Remark
Teff / EPP	Min	Max	Mean			
I. Gross Revenue						
Teff / EPP						
(1)[10 qts]Yield/ha				10 Qt/ ha	10.00	
(2)Unit Sale Price	204	295	233	230 Birr/Qt	230.00	
(3)Gross Revenue(2)x(1)				Birr	2300.00	
II Crop Production Cost						
(1)Seed([30]kg /ha CV: Local variety			230 Birr/qt	69 Brr/ha	69.00	
(2)Fertilizers						
1)DAP([100] kg/ ha, Birr 2.75/kg)				275 Brr/ha	275.00	
2)Urea([50] kg/ ha, 1.8 Birr /kg)				90 Brr/0.25ha	90.00	
(3)Chemicals						
Herbicide 1[2,4-D] [1000cc]/ ha , 50 Birr/Lt,				50 Brr/4 beds	50.00	
(4) Labor cost						
Land clearing				20 MD	200.00	
1st plowing 2 oxen-day				15 Birr/oxenda	60.00	
2nd plowing 2 oxen-day				15 Birr/oxenda	60.00	
3rd plowing 2 oxen- day				15 Birr/oxenda	60.00	
4th plowing 2 oxen day				15 Birr/oxenda	60.00	
Swoing operation				0.5 MD	5.00	
1 st Weeding by hoe 16 MD				16 MD	160.00	
2 nd Weeding by hoe 16 MD				16 MD	160.00	
Herbicide application				1 MD	10.00	
FertilizerApplication (DAP & Urea)				2 MD	20.00	
Harvesting (cutting and heaps)				16 MD	160.00	
Transportation from field to homestead (15 Birr/donky cart+ 3MD)				15 cart	60.00	
Threshing/winnowing						
4 oxen-day (4 x15 birr=60)				1 oxen day	60.00	
Winnowing and sacking (12 MD x 10 birr/MD = 120 Birr)				10 MD	100.00	
Total Crop Production Cost II					1659.00	
III Net Revenue (I-II)				Brr/ ha	641.00	
Break Even Price =Birr [166] per 100 kg						

Table III.4.9 Crop Budget Analysis

Irrigation: Tomato

Description	Farm gate Price variation ('00-'01)			Unit	Amount	Remark
	Min	Mean	Max			
Tomato						
I. Gross Revenue						
(1) Yield [100 qts]/ ha				kg/ ha	8000.00	Marketable rate of produce is estimated to 80 %
(2) Unit Price	0.30	1.15	2.00	Birr/kg	0.45	
(3) Gross Revenue (2) x (1)				Birr	3600.00	
II Crop Production Cost						
(1) Seed (250 gms/ha)				Brr/ha	113.00	
Improved Variety (ex. Manglobe) Birr 450 /kg						
(2) Fertilizers						
1) Urea (100 kg/ ha, 1.8 Birr /kg)				1.8 Birr/ka	180.00	
2) DAP (100 kg/ ha, Birr 2.75/kg)				2.8 Birr/kg	275.00	
(3) Chemicals						
Menkozeb (Fungicide) 2.0 kg/ ha x 2 = 4 kg/ ha				74.0 Brr/kg	296.00	
74 Birr/kg						
Endsulphan (Pest) 3 Lt/ha x 2 = 6 Lt/ ha				55.0 Brr/Lt	330.00	
55 Birr/Lt						
(4) Labor cost						
Seed bed preparation (1-1.2 m width x 5-6 m length x 6 beds for 1 h)				2 MD	0.00	
Seeding/covering/mulching/watering				4 MD	0.00	
3 times weeding for nursery period : 9hrs				2.3 MD	0.00	
Watering for the nursery bed 10 times = 16 hrs				2 MD	0.00	
Translating:						
Land preparation: disc plowing by tractor (240 Birr + 20 Birr fo				260 Birr/0.5 ha	0.00	
1st Land clearing				16 MD	0.00	
1 st plowing by oxen 2 oxen day				15 Oxen-day	0.00	
2 nd plowing by oxen 2 oxen day				15 Oxen-day	0.00	
Ridging by one oxen				15 Oxen-day	0.00	
Leveling				14 MD	0.00	
Pre Irrigation by pump				4 MD	0.00	
Planting seedling into the main field:				18 MD	0.00	
					0.00	
Hoeing 1 32 MD/ ha				32 MD	0.00	
Hoeing 2 32 MD/ ha				32 MD	0.00	
Hoeing 3 32 MD/ ha				32 MD	0.00	
Supporting Plant by stick 80 MD/ ha- 72.4 MD (Family labor)=7.6				7.6 MD	60.80	
Spraying chemical for nursery: 2 MD x 4 times = 8 MD				8 MD	0.00	
Spraying chemicals for main filed 4 MD x 5 times = 20 MD				20 MD	0.00	
Spraying chemicals-2 (DDT) 2 MD x 1 time = 2 MD				2 MD	0.00	
Harvesting (16 MD x 8times = 128 MD/1.5 months, 85.3 MD/month)				13 MD	104.00	
(5) Irrigation						
2man x 1 hr/each x 8 times = 8 hrs = 2 MD (Nursery)				2 MD	0.00	
Irrigation (ManDay x 20 times/ every 7 days)						
10 man x 5 hrs/each x 20 times = 1000 hrs = 125 MD				125 MD	0.00	
(6) Diesel						
10 liters/day/ ha x 20 times = 200 Lts,				188.7 2.65 Birr/l	500.06	
Change Engine oil (5 lt x 4 times = 20 Lts) 19.8 birr/lt x 20 = 396				4.0 19.8 Birr/l	79.20	
(7) Stick for tomato plant						
Cost of stick to support Tomato plants						
100 cm x 30 cm spacing = 33333 plants/ ha						
No of sticks per ha = approx 6000 sticks Birr 0.25/stick						
6000 x 0.25 Birr/pc = 1500 Birr/ ha						
(8) Hand sprayer (MEC 16 Lt cap) Birr 520 /unit						
Total Crop Production Cost II					1938.06	
III Depreciation cost						
(1) Pump						
Birr 35000 /8 years/2 crops/5ha= Birr 437.5					437.50	
(2) Sprayer						
Birr 520 /6 years/2 crops/FH = Birr 43.3					43.30	
(3) Stick						
Birr 1500 /6 crops = Birr 250					250.00	
Total Depreciation cost					730.80	
IV. Net Revenue (I-II)				Brr/ha	1661.95	
V. Net Revenue (I-II-III)				Brr/ha	931.15	
Break Even price (without depreciation) = Birr 24.2 per 100 kg						
Break Even price (with depreciation) = Birr 33.4 per 100 kg						

Table III.4.10 Crop Budget Analysis

[Irrigation: Papaya]

Description		Farm gate Price variation			Unit	Amount	Remark
Papaya		Min	Mean	Max			
I.	Gross Revenue						
	(1)Yield [500 qts]/ ha				500 qts/ ha	50000.00	marketable rate is estimated to 70 %. Annual mean yield over 5 years is estimated 500 qts/year.
	(2)Unit Sale Price	0.15	0.8	1	0.15 Birr/kg	0.15	
	(3)Gross Revenue(2)x(1)				Birr/ha	5250.00	
II	Crop Production Cost						
	(1)Seed([]kg/ha :[] kg/ ha)				Brr/ha	0.00	
	local seed from matured fruits (no actual cost).						
	(2)Fertilizers						
	1)DAP([0] kg/ ha, Birr 2.75/kg)				Brr/ha	0.00	
	2)Urea([0] kg/ ha, 1.8 Birr /kg)				Brr/ha	0.00	
	No fertilizer is applied through the cropping years.						
	(3)Chemicals						
	No chemicals are sprayed through the cropping years.						
	(4) Labor cost						
	[Nursery]						
	Land clearing for shading				16.4 MD	0.00	
	Land preparation for nursery				16 MD	0.00	
	Sowing papaya seed on nursery				12 MD	0.00	
	Weeding 1				6 MD	0.00	
	Weeding 2				8 MD	0.00	
	Weeding 3				4 MD	0.00	
	[Main field]						
	Land Clearing				40 MD	0.00	
	1st plowing 2 oxen-day				15 Birr/oxenday	0.00	
	2nd plowing 2 oxen-day				15 Birr/oxenday	0.00	
	Transplanting (2 m x 2.0-2.3m)				40 MD	0.00	
	watering				8 MD	0.00	
	Replanting plant due to male/female tree				12 MD	0.00	
	Harvesting (8 MD x 25 times/year = 200 MD)				200 MD	0.00	
	(5) Irrigation						
	Irrigation (every 15 days during Oct-May amounted to 18 times)						
	12 MD/each x 18 =216 MD				216 MD	0.00	
	(6)Diesel						
	20 Lts/nursery	20Lts x 2.65 =53			20 Lt	53.00	
	8 Lts for transplanting	8Lts x 2.65 =21.2			8 Lt	21.20	
	Fuel cost 26 Lt/each irrigation						
	26 Lt x 18 times =468 Lt (2.65 468 x 2.65 =1240.2				468 Lt	1240.20	
	Oil consumption: changing oil every 45 days						
	3.5 Lt/each x 6 times = 21 Lts (19.8 Birr/Lt x 21Lts = 415.8/5				83 ha	83.00	
	Production cost total:					1397.40	
III	Depreciation of the pump						
	Pump cost Birr [35000] /8 years//5 ha = 875 Birr/yr/ha					875.00	
IV.	Net Revenue (I-II)				Brr/ha	3852.60	
V.	Net Revenue (I-II-III)				Brr/ha	2977.60	
	Break Even Price (without depreciation)=Birr [4] per 100 kg						
	Break Even Price (with depreciation) = Birr [6.5] per 100 kg						

Table III.4.11 Crop Budget Analysis

[Irrigation: Onion]

Description	Unit	Amount	Remark
Onion	Farm gate Price variation(Past 3 years)		
I. Gross Revenue	Min Max Mean		
(1)Yield [170 qts] /ha	kg/ha	15300.0	Marketable production is esti to 90 %.
(2)Unit Sale Price	0.3 Birr/kg	0.3	
(3)Gross Revenue(2)x(1)	Birr	4743.0	
II Crop Production Cost			
(1)Seed([4000]gm/ ha Improved Variety :Adama Red Birr [100] Birr/kg x 4 kg =400	100 Brr/kg	400.0	
(2)Fertilizers			
1)DAP([100] kg/ ha, Birr 2.75/kg)	Brr/0.5ha	275.0	
2)Urea([100] kg/ha, 1.8 Birr /kg)	Brr/0.5ha	180.0	
(3)Chemicals			
Fungicide [Mencozeb , 334] gm/10 beds x [6]times = [Nursery	Brr/ 5beds	140.0	
Fungicide [Mencozeb, 1000 gm]/ ha x [8]times = [8 kg]	75 Brr/kg	600.0	
Pest cide [Tiodan, 166 cc]/10 Beds x[6]times = [1000 cc]	30 Brr/5beds	60.0	
Pest cide [Tiodan, 1000 cc]/ha x[8]times = [8 Lt]	60 Brr/Lt	480.0	
(4) Labor cost			
Nursery:			
Seed bed preparation (1 m width x 5m length x 10 beds for ha)	4 MD	0.0	
Seeding/covering/mulching/watering	2 MD	0.0	
3 times weeding for nursery period(60 day:18 hrs	2.25 MD	0.0	
Watering for the nursery bed 5 times = 40 hrs	5 MD	0.0	
Main field			
Land preparation: disc plowing by tractor (240 Birr + 20 Birr for	260 Birr/ ha	0.0	
Oxen plowing (2 oxen-day x 2 times=4 oxen-day)	8 Oxen-day	0.0	
Ridging by oxen	2 Oxen-day	0.0	
Translating:(60 MD x 8 birr/day=480 Birr, Space: 15 cm x 5 cm)	60 MD	0.0	
Weeding 30 MD/ ha x 2 = 60 MD	60 MD	0.0	
Hoeing 40 MD/ ha x 3 times = 120 MD-72.4 MD(Family labor) = 47.	47.6 MD	380.8	
Spraying chemicals for nursery 2 MD x 6 times =12 MD	12 MD	0.0	
Spraying chemicals for main field: 4 man x ha x 8 times = 32 MD	32 MD	0.0	
Harvesting (100 MD - 72.4 MD)= 27.6 MD short	27.6 MD	220.8	
(5) Irrigation			
Pre irrigation before transplanting (6 MD x 8 Birr=48 Birr)	6 MD	0.0	
Irrigation on transplanting day (6 MD x 8 Birr = 48 Birr)	6 MD	0.0	
Irrigation (17 times/every 7 days)			
6 man x 4 hrs/each x 17 times = 408 hrs = 51 MD	51 MD	0.0	
(6)Diesel			
Fuel for pre-irrigation+ cropping = 10 Lts/each x 19 times x 2.65	188.7 Lt	500.1	
Oil 5 Lts x 5 times = 25Lts = 25 Lts x 19.8 Birr/Lt= 495/5 ha	5 Lt	99.0	
(Engine Oil is scheduled to be replaced on every 45 days operation)			
(7) Manual Sprayer			
Cap.: 15 Lt 520 Birr/unit			
Total Crop Production Cost II		3335.7	
III Depreciation cost			
Pump cost: Birr [35000] /8 years/ 2 crops/5ha= Birr/yr/ha		437.5	
Sprayer cost: Birr[520]/6 year/2 crops/FH = 43.3 Birr		43.3	
IV. Net Revenue (I-II)	Brr/ ha	1407.3	
V. Net Revenue (I-II-III)	Brr/ ha	926.5	
Break Even Price (without depreciation)=Birr [21.8] per 100 kg			
Break Even Price (with depreciation) = Birr [24.9] per 100 kg			

Table III.4.12 Crop Budget Analysis

[Irrigation: Cabbage

Description	Unit	Amount	Remark
Cabbage	Farm gate Price variation		
I. Gross Revenue	Min Max Mean		
(1)Yield [120 qts]/ ha	120 kg/ ha	10800.00	Marketable rate of t produce is estimated 90%.
(2)Unit Sale Price	Birr/kg	0.30	
(3)Gross Revenue(2)x(1)	Birr	3240.00	
II Crop Production Cost			
(1)Seed([700]gm/ ha, CV: Copenhagen Birr [220]/kg	154 Brr/ha	154.00	
(2)Fertilizers			
1)DAP([100] kg/ ha, Birr 2.75/kg)	2.75 Brr/kg	0.00	
2)Urea([50] kg/ ha, 1.8 Birr /kg)	1.8 Brr/kg	0.00	
(3)Chemicals			
Fungicide 1[Kocide, 166 gm]/8 Beds x [3]times = [500 gm]	33 Brr/4 beds	33.00	
Pesticide 2[Malatine, 150gm]/8 Beds x [3]times = [450 gm]	27 Brr/4 beds	27.00	
Fungicide [Mencozeb, 800 gm]/ ha x [5]times = [4 kg]	75 Brr/kg	300.00	
Fungicide [Kocide, 800 gm]/ ha x [5]times = [4 kg]	65 Brr/kg	260.00	
Pest cide 1[Tiodan, 166 cc]/6 Beds x[3]times = [500 cc]/6 Bed	30 Brr/3beds	30.00	
Pest cide [Tiodan, 800 cc]/ha x[5]times = [4 Lt]	60 Brr/Lt	240.00	
Pest cide [DDT, 1000 gm]/ha x[1]times = [1000gm]	40 Brr/Kg	40.00	
(4) Labor cost			
Nursery:			
Seed bed preparation (1-1.2 m width x 5 m length x 8 beds for ha)	2 MD	0.00	
Seeding/covering/mulching	4 MD	0.00	
3 times weeding for nursery period(45 days)2 hrs	1.5 MD	0.00	
Watering for the nursery bed 9 times = 18 hrs	2.3 MD	0.00	
Main field:			
Land preparation: disc plowing by tractor (240 Birr + 20 Birr fo	260 Birr/ ha	0.00	
Harrowing by hoe	10 MD	0.00	
Clearing plant residue	6 MD	0.00	
Plowing by oxen 2 oxen x 2 = 4 Oxen days	15 Oxen-day	0.00	
Operator 8 Birr/day	8 MD	0.00	
Ridging by one oxen day	15 Oxen-day	0.00	
+ operator one MD	2 MD	0.00	
Finalizing ridge by hoe	16 MD	0.00	
Pre Irrigation by pump (10 man x 5 hrs = 50 hrs)	6.3 MD	0.00	
Transplanting seedling into the main field:	20 MD	0.00	
Weeding - 1 6 MD/ ha	6 MD	0.00	
Hoeing 1 24 MD/ ha	24 MD	0.00	
Hoeing 2 24 MD/ ha	24 MD	0.00	
Hoeing 3 24 MD/ ha	24 MD	0.00	
Spraying chemicals-1 2 MD x 5 times =10 MD	10 MD	0.00	
Harvesting (4 times: 16 MD/each x 4 = 64 MD)	23.63 MD	189.04	
(5) Irrigation			
Irrigation (10 Man x 5 hrs x 12 times in every 7 days = 600 i	75 MD	0.00	
(6)Diesel			
Fuel for cropping season: 16 Lts/day x 12 times=192 Lts x 2.65 Birr	188.7 Lt	500.06	
Oil 3.5 Lts/each x 2 times x 19.80 Birr/Lt = 210/5ha	1.4 Lt	27.72	
(7) Manual Sprayer			
Cap.: 15 Lt 520 Birr/unit			
Total Crop Production Cost II		1800.82	
III Depreciation cost			
Pump cost: Birr [35000] /8 years/2 crops/5 ha=437.5/crop/ha		437.50	
Sprayer cost: Birr[520]/6 year/2 crops/FH = 43.3 Birr		43.30	
IV. Net Revenue (I-II)	Brr/ ha	1439.19	
V. Net Revenue (I-II-III)	Brr/ ha	958.39	
Break Even Price (without depreciation)=Birr [16.7] per 100 kg			
Break Even Price (with depreciation) = Birr [21.1] per 100 kg			

Table III.4.13 Crop Budget Analysis

[Irrigation: Chili]

Description		Farm gate Price variation(Past 3 years)			Unit	Amount	Remark	
I.	Gross Revenue	Min	Max	Mean				
	(1)Yield [62 qts]/ ha				kg/ ha	6200.0	Marketable rate of the product estimated to 80 %.	
	(2)Unit Sale Price	0.6	2.25	1.875	Birr/kg	0.7		
	(3)Gross Revenue(2)x(1)				Birr	3224.0		
II	Crop Production Cost							
	(1)Seed([1500]gm/ ha				18 Brr/ha	18.0		
	Improved Variety Birr[12] /kg							
	(2)Fertilizers							
	1)DAP([0] kg/ ha, Birr 2.75/kg)				Brr/ha			
	2)Urea([0] kg/ ha, 1.8 Birr /kg)				Brr/ha			
	(3)Chemicals							
	Fungicide 1[Mencozeb, 150 gm]/6 Beds x [3]times = Nursery				33.8 Brr/6 beds	33.8		
	Fungicide 2[Kocide, 150gm]/6 Beds x [3]times = [Nursery				29.2 Brr/6 beds	29.2		
	Fungicide [Mencozeb, 800 gm]/ ha x [4]times = [3.2 kg]				75 Brr/kg	240.0		
	Fungicide [Kocide, 800 gm]/ ha x [4]times = [3.2 kg]				65 Brr/kg	208.0		
	Pest cide 1[Tiodan, 166 cc]/6 Beds x[3]times = [500 cc]/6 Be				30 Brr/6beds	30.0		
	Pest cide [Tiodan, 800 cc]/ha x[4]times = [3.2 Lt]				120 Brr/Lt	384.0		
	Pest cide [DDT, 1000 gm]/ha x[1]times = [1000gm]				40 Brr/Kg	40.0		
	(4) Labor cost							
	Seed bed preparation (1-1.2 m width x 5-6 m length x 6 beds for h.				2 MD	0.0		
	Seeding/covering/mulching/watering				2 MD	0.0		
	3 times weeding for nursery period(45 day:18hrs				2.25 MD	0.0		
	Watering for the nursery bed 9-15 times = 24 hrs				3 MD	0.0		
	Translating:							
	Land preparation: disc plowing by tractor (240 Birr +210 Birr f				260 Birr/0.5 ha	0.0		
	1st Land clearing				16 MD	0.0		
	1 st plowing by oxen 2 oxen day				8 Oxen-day	0.0		
	2 nd plowing by oxen 2 oxen day				8 Oxen-day	0.0		
	Ridging by one oxen				4 Oxen-day	0.0		
	Leveling				14 MD	0.0		
	Pre Irrigation by pump				4 MD	0.0		
	Planting seedling into the main field:				18 MD	0.0		
	Weeding - 1 8 MD/ ha				8 MD	0.0		
	Weeding - 2 12 MD/ ha				12 MD	0.0		
	Hoeing 1 26 MD/ ha				26 MD	0.0		
	Hoeing 2 32 MD/ ha				32 MD	0.0		
	Hoeing 3 30 MD/ ha				30 MD	0.0		
	Spraying chemicals-1 2 MD x 5 times =10 ME				10 MD	0.0		
	Spraying chemicals-2 (DDT) 2 MD x1 time = 2 MD				2 MD	0.0		
	Harvesting				20 MD	160.0		
	(5) Irrigation							
	2man x 1 hr/each x 12 times = 24 hrs =3 MD (Nursery)				3 MD	0.0		
	Irrigation (ManDay x 16 times/every 7 days)							
	10 man x 5 hrs/each x 16 times = 800 hrs = 100 ME				100 MD	0.0		
	(6)Diesel							
	Fuel for cropping season: 24 Lts/day x 16 times=384 Lts x 2.65 Bi:				188.7 Lt	500.1		
	Oil 3.5 Lts x 4 times x 19.8 Birr/Lt = 277.2/5ha				2.8 Lt	55.4		
	(7) Manual Sprayer							
	Cap.: 15 Lt 520 Birr/unit							
	Total Crop Production Cost II						1698.5	
III	Depreciation cost							
	Pump cost: Birr [35000] /8 years/2 crops/ha = 437.5 Birr/crop/ha					437.50		
	Sprayer cost: Birr[520]/6 year/2 crops/FH = 43.3 Birr					43.30		
IV.	Net Revenue (I-II)					Brr/ ha	1525.5	
V.	Net Revenue (I-II-III)					Brr/ ha	1044.7	
	Break Even Price (without depreciation)=Birr [27.4] per 100 kg							
	Break Even Price (with depreciation) = Birr [35.1] per 100 kg							

Table III.5.1 Monthly Price of Major Food Grains in the Meki Area by EGTE

Major Food Grain Price in the Meki Area by EGTE (Year :1999-2000 Unit: Birr/qt)

	July			August			September			October			November			December			January		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	264	274	280	227	237	243	-	-	-	241	247	252	295	204	210	204	214	220	213	222	229
Mixed Teff	734	244	250	227	237	243	-	-	-	224	230	235	-	-	-	169	179	185	180	188	193
Brown Teff	222	232	238	222	231	240	-	-	-	213	221	226	152	162	168	154	164	169	167	175	180
White Wheat	202	212	217	192	202	207	-	-	-	190	198	203	137	144	148	144	153	158	143	148	153
Mixed Wheat	180	190	195	172	182	187	-	-	-	168	174	180	128	133	138	136	145	150	138	144	149
Maize	146	154	159	153	165	170	-	-	-	-	112	111	-	-	93	103	110	114	120	125	130
Haricot Bean	-	-	-	-	-	-	-	-	-	174	-	-	184	-	-	190	-	-	-	-	-

Note: Prd.= Producer Price, Whole = Whole seller price, Retailer = Retailer price

Major Food Grain Price in the Meki Area by EGTE (Year :1999-2000 Unit: Birr/qt)

	February			March			April			May			June			Average		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	-	-	-	-	-	-	240	250	255	240	245	250	246	251	257	233	242	247
Mixed Teff	-	-	-	-	-	-	219	226	231	-	220	229	225	230	235	211	219	225
Brown Teff	-	-	-	-	-	-	200	209	215	200	206	212	200	207	214	192	201	207
White Wheat	-	-	-	-	-	-	181	186	191	184	189	196	182	189	196	173	180	185
Mixed Wheat	-	-	-	-	-	-	171	179	184	170	176	182	171	176	181	179	187	193
Maize	-	-	-	-	-	-	138	147	152	130	136	142	132	137	142	132	135	135
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	183	-	-

Source: EGTE/Fiscal year Projection Report

Major Food Grain Price in the Meki Area by EGTE (Year :1998-1999 Unit: Birr/qt)

	July			August			September			October			November			December			January		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	240	250	255	-	-	-	250	259	263	238	249	256	191	204	209	176	186	191	187	197	203
Mixed Teff	225	236	241	-	-	-	222	230	235	228	237	245	166	178	184	159	169	175	167	178	183
Brown Teff	213	221	226	-	-	-	214	223	229	198	208	215	145	158	162	143	152	157	140	150	155
White Wheat	168	177	181	-	-	-	184	190	193	161	170	175	128	138	143	141	148	152	140	150	155
Mixed Wheat	136	144	149	-	-	-	163	171	176	137	146	151	114	124	129	128	134	139	127	137	142
Maize	-	96	101	-	-	-	-	90	102	-	80	87	-	86	89	74	77	82	75	79	84
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162	-	-	-	-	-

Major Food Grain Price in the Meki Area by EGTE (Year :1998-1999 Unit: Birr/qt)

	February			March			April			May			June			Average		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	199	208	213	171	227	232	221	231	236	252	265	272	275	275	280	221	232	237
Mixed Teff	176	186	192	190	200	205	190	197	202	229	240	248	242	252	258	299	209	215
Brown Teff	151	161	166	171	180	185	172	181	186	211	222	229	227	238	244	180	190	196
White Wheat	144	152	156	150	160	165	152	161	166	177	186	192	200	210	220	159	167	173
Mixed Wheat	133	140	145	135	145	150	140	146	151	160	167	174	180	190	199	141	149	155
Maize	98	103	108	100	105	110	109	114	118	134	145	151	152	158	163	100	104	109
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162	-	-

Source: EGTE/Fiscal year Projection Report

Major Food Grain Price in the Meki Area by EGTE (Year :1997-1998 Unit: Birr/qt)

	July			August			September			October			November			December			January		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	209	218	223	204	215	215	202	211	215	210	219	224	212	219	224	196	206	213	208	216	221
Mixed Teff	178	197	191	178	181	186	173	182	187	185	195	200	187	196	201	176	188	193	191	200	205
Brown Teff	155	164	169	157	164	169	160	169	172	166	175	179	161	171	177	160	170	175	160	169	174
White Wheat	-	137	145	150	134	141	146	145	155	161	166	177	133	142	146	158	168	171	157	165	170
Mixed Wheat	-	93	98	101	107	113	117	110	115	118	124	125	81	86	89	87	93	94	101	107	110
Maize	-	-	-	-	-	-	-	-	-	150	-	-	149	-	-	140	-	-	-	-	-
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Major Food Grain Price in the Meki Area by EGTE (Year :1997-1998 Unit: Birr/qt)

	February			March			April			May			June			Average		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	213	221	228	210	220	223	219	227	231	223	228	231	240	248	252	212	220	225
Mixed Teff	195	204	209	188	198	203	186	193	198	188	195	200	220	227	232	187	196	200
Brown Teff	169	178	182	165	173	179	168	178	181	168	174	178	203	213	218	166	175	179
White Wheat	159	168	172	159	166	168	158	165	169	150	155	159	170	172	182	159	167	170
Mixed Wheat	150	157	162	141	149	152	137	144	149	138	144	148	135	143	146	140	148	153
Maize	92	97	99	80	85	87	87	92	93	91	96	100	99	102	106	93	98	101
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146	-	-

Source: EGTE/Fiscal year Projection Report

Major Food Grain Price in the Meki Area by EGTE (Year :1996-1997 Unit: Birr/qt)

	July			August			September			October			November			December			January		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	229	235	240	231	239	243	225	229	234	215	222	227	169	175	180	157	166	168	150	158	162
Mixed Teff	203	209	214	201	208	213	205	211	216	191	198	204	148	155	160	136	145	148	129	137	141
Brown Teff	141	148	153	151	159	164	145	150	155	132	138	145	114	122	125	111	120	122	102	112	116
Mixed Wheat	114	119	124	115	120	125	115	120	125	112	120	125	77	84	88	88	100	97	84	91	95
Maize	70	75	80	80	85	90	79	84	88	59	64	68	49	54	59	45	50	51	51	56	58
Haricot Bean	-	-	-	-	-	-	-	-	-	147	-	-	101	-	-	83	-	-	-	-	-

Major Food Grain Price in the Meki Area by EGTE (Year :1996-1997 Unit: Birr/qt)

	February			March			April			May			June			Average of 12 Months		
	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer	Prod.	Whole	Retailer
White Teff	153	160	166	134	162	165	161	168	171	177	184	189	215	226	231	186	195	198
Mixed Teff	134	144	149	134	143	146	142	150	155	155	163	168	184	193	199	164	171	176
Brown Teff	98	105	111	92	101	106	100	110	115	118	128	133	155	163	170	121	129	135
Mixed Wheat	77	84	89	82	91	94	97	106	109	112	119	122	141	151	156	101	108	112
Maize	46	50	53	59	64	66	64	69	71	72	79	83	89	96	99	63	68	72
Haricot Bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	-	-

Table III.6.1 Proposed Cropping Plan in the Irrigation Scheme

Cropping Plan in the Diversion Canal Scheme

	Potential cropping area (ha)	Crop	Cropping Area (%)	Planting Date	Planting Period (days)	Harvesting Period	Potential irrigable area (ha)
Wet Season	2300	Maize	33	11 June	30	year around	759.0
		Wheat	35	1 July	30		805.0
		Puls crop	30	11 June	30		690.0
		Fruit	2	1-Jul	30		46.0
Dry Season		Wheat	2.5	1 Jan	30		57.5
		Vegetables	2.50	1 Jan	30		57.5
		Total	105.0				2415.0

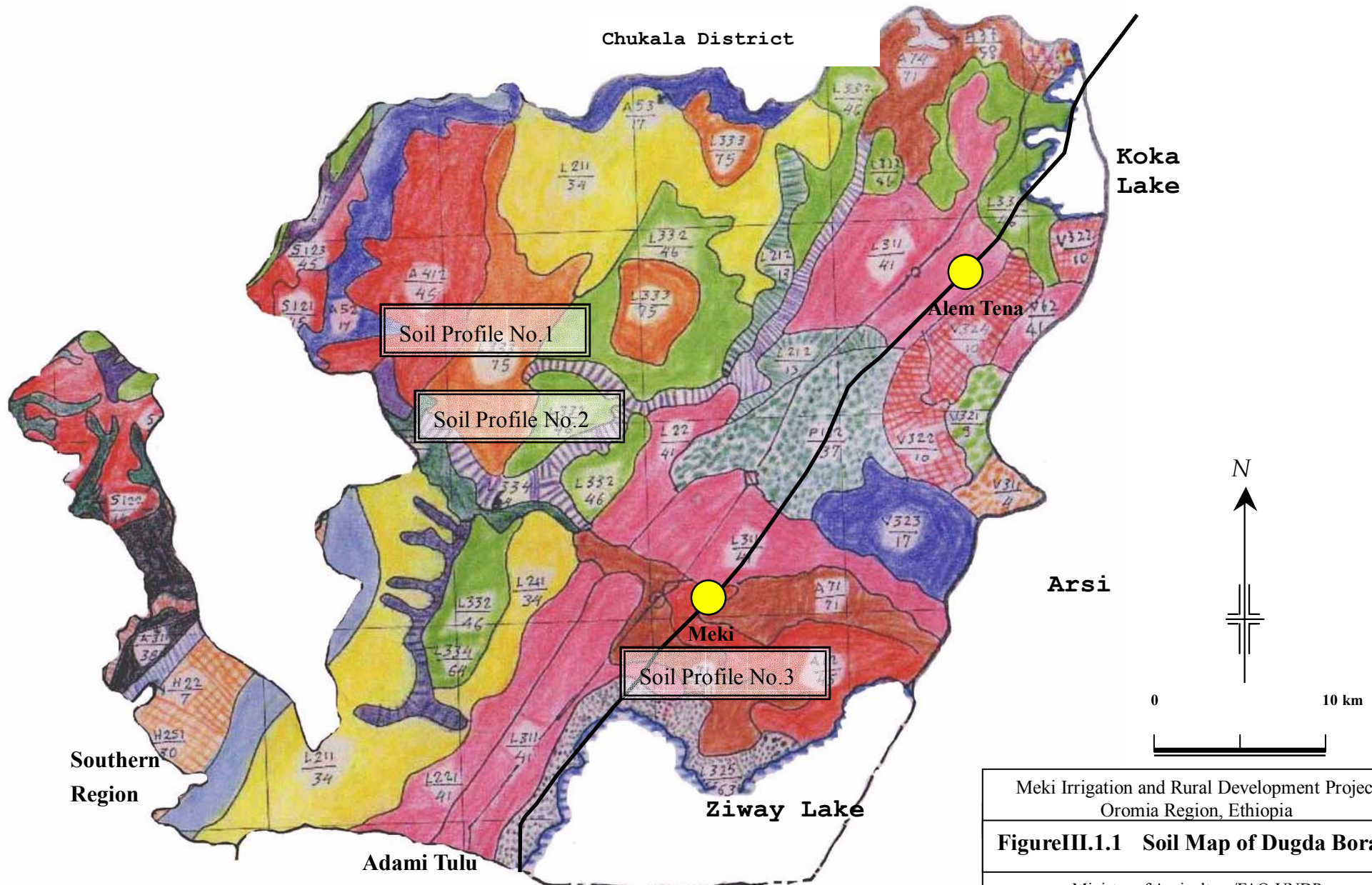
Cropping Plan in the Dam Scheme

Season	Potential cropping area (ha)	Crop	Cropping Area (%)	Planting Date	Planting Period (days)	Harvesting Period	Dam Height (m)	Potential irrigable area (ha)
Wet season	4700	Maize	30	11 June	30	Year around	30	1410
	8000		30				35	2400
	9400		30				40	2820
	4700	Wheat	35	1 July	30		30	1645
	8000		35				35	2800
	9400		35				40	3290
	4700	Pulse crop	30	11 June	30		30	1410
	8000		30				35	2400
	9400		30				40	2820
	4700	Fruit	5	1-Jul	30		30	235
	8000		5				35	400
	9400		5				40	470
Dry Season	4700	Maize	28.5	1 Jan	30	30	1339.5	
	8000		28.5			35	2280	
	9400		28.5			40	2679	
	4700	Vegetables	9.5	1 Jan	30	30	446.5	
	8000		9.5			35	760	
	9400		9.5			40	893	
	4700	Wheat	28.5	1 Jan	30	30	1339.5	
	8000		28.5			35	2280	
	9400		28.5			40	2679	
	4700	Puls crop	28.5	1-Jan	30	30	1339.5	
	8000		28.5			35	2280	
	9400		28.5			40	2679	
	4700	Total	195			30	9165	
	8000		195			35	15600	
	9400		195			40	18330	

Source: JICA Study Team

APPENDIX III
AGRICULTURE

Figures



Meki Irrigation and Rural Development Project
Oromia Region, Ethiopia
Figure III.1.1 Soil Map of Dugda Bora
Ministry of Agriculture/FAO-UNDP

Legend:

- 4 Less steep and with pockets of fine loamy to clayey Lubic Phaeozems, fine loamy humic Cambisols and dark reddish brown, clayey Naplic Nitisols
- 7 Very steep ridges and Faultcarps with 85 % or more, very shallow Lithic Leptosols and pocket of dark greyish brown Vertisols or Vertic Cambisols, dark brown, fine loamy to clayey Haplic Nitisols.
- 9 Felstic rockland with 80 % or more, very shallow Lithic Leptosols with pockets of coarse loamy over cindery Vitric Andosols
- 10 With 50 –75 % Lithic Leptosol in association with shallow Mollic Leptosols
- 13 With about 70 % Lithic Leptosols and about 30 % moderately deep, loamy Mollic Fluvisols
- 16 Strongly incised and eroded valleys
- 17 About 75 – 100 % Badlands and or Gullied land
- 18 About 50-70 % Badlands and with dark brown, clayey Haplic Nitisols
- 30 About 40 % deep, fine loamy to clayey Plani-Mollic Fluvisols, or deep, coarse loamy abruptly over clayey Luvic Phaeozems or with about 30 % gullied land and rockland
- 34 Moderately deep to deep well drained, very dark grayish brown, Mollic Andosols
- 37 Strongly alkaline Mollic Solonetz, predominantly fine loamy abruptly over clayey Fluvisols
- 38 About 80 % or more deep, moderately well drained, dark gray to dark grayish brown Plani-Mollic Fluvisols
- 41 About 75-100 % deep, coarse loamy(Fluvi) Vitric Andosols (Meki series, sodic phase) with Mollic Leptosols
- 45 Very deep, black, fine Pelli-calcic vertisols, partly sodic phase and partly inundic phase
- 46 About 40 –65 % Pelli Calcic Vertisols or including Calcic Vertisols, or vertic cambisols with 15-45 % badlands and rock land
- 58 Deep Mollic Fluvisols but non-sodic phase
- 63 Deep, black, poorly drained, fine loamy, clayi-Mollic Fluvisols with about 20 % rockland, or with 20 % Marshes and lakes and sodic phase
- 64 Deep, black, poorly drained, fine loamy, clayi-Mollic Fluvisols with about 20 % Rockland, or with 20 % Marshes and lakes and saline variant
- 71 30 % well drained Mollic Fluvisols and about 20 % imperfectly drained Vertisols or with about 25 % poorly drained gleyi Mollic Fluvisols and 25 % marshes
- 75 50 % imperfectly drained clayey kasem series , inundic phase