

Table C-1 Irrigated Area and the Ratio of Irrigated Area in Each Agro-Ecological Region in 1991. (Unit:ha)

Agro-Ecological Regions	Total		Irrigated		Non-Irrigated		Field Crops		Irrigated		Non-Irrigated		Ratio of Irrigated/Area
	Sown Area	Area	Area	Area	Area	Area	Sown Area	Area	Area	Area	Area	Area	
1-1 Marmara	1,559,682	227,919	1,331,764	14.6	1,318,531	126,691	1,191,842	9.6					
1-2 Aegen	2,431,715	664,499	1,767,217	27.3	1,706,657	430,862	1,275,772	25.2					
1-3 Mediterranean	1,376,954	543,686	833,270	39.5	1,118,256	364,377	753,881	32.6					
2 Black Sea	1,446,544	147,929	1,298,613	10.2	868,439	100,624	767,815	11.6					
3-1 Cent. North	2,978,812	384,081	2,594,733	12.9	2,723,726	260,553	2,463,173	9.6					
3-2 Cent. South	2,440,655	599,293	1,841,361	24.6	2,251,349	476,535	1,774,817	21.2					
3-3 Cent. East	713,832	185,214	528,619	25.9	655,552	132,265	523,286	20.2					
Study Area Total	12,948,194	2,752,621	10,195,577	21.3	10,642,510	1,891,907	8,750,586	17.8					
All Turkey Total	17,448,091	3,674,158	13,773,934	21.1	14,517,810	2,579,649	11,938,161	17.8					

Agro-Ecological Regions	Fruits & Perma- nent Crops Area		Irrigated		Non-Irrigated		Vegetables		Irrigated		Non-Irrigated		Ratio of Irrigated/Area
	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	
1-1 Marmara	175,580	47,592	127,990	27.1	65,569	53,638	11,932	81.8					
1-2 Aegen	607,376	134,360	473,015	22.1	117,685	99,276	18,409	84.4					
1-3 Mediterranean	170,431	96,921	73,511	56.9	88,267	82,389	5,879	95.3					
2 Black Sea	529,922	16,864	513,060	3.2	48,183	30,443	17,742	63.2					
3-1 Cent. North	162,025	62,745	99,281	38.7	93,062	60,782	32,280	65.3					
3-2 Cent. South	139,683	83,936	55,750	60.1	49,621	38,825	10,797	78.2					
3-3 Cent. East	42,058	37,102	4,956	88.2	16,223	15,846	376	97.7					
Study Area Total	1,827,075	479,520	1,347,563	26.2	478,610	381,199	97,415	79.6					
All Turkey Total	2,337,291	630,062	1,707,230	27.0	592,990	464,447	128,543	78.3					

Source : Statistical Yearbook of Turkey, 1995.

Table C-2 Number of Agricultural Holdings by Size in Seven Agro-Ecological Regions in 1991.

Agro-Ecological Regions	0~ 1.99		2.0~ 4.99		5.0~ 19.99		20.0~ 99.99		100.0 ~	
	No.	Area(ha)	No.	Area(ha)	No.	Area(ha)	No.	Area(ha)	No.	Area(ha)
1-1 Marmara	95,592	91,301	79,743	341,105	109,105	953,117	10,543	315,662	49	21,901
1-2 Aegean Sea	327,134	314,024	282,711	854,842	161,603	1,328,849	10,941	322,474	307	46,734
1-3 Mediterranean	157,855	137,082	108,400	323,475	72,937	598,063	9,769	317,412	478	88,687
2 Black Sea	340,236	337,462	240,093	697,570	87,066	672,032	4,872	121,895	235	38,661
3-1 Cent. North	104,915	103,620	149,645	468,328	179,172	1,649,318	42,114	1,282,149	557	112,004
3-2 Cent. South	101,621	90,994	105,230	325,864	157,157	1,482,021	37,710	1,126,936	827	216,218
3-3 Cent. East	43,794	46,565	61,420	191,167	50,352	428,355	7,804	232,404	28	15,306
SA No. & Area	1,171,147	1,121,048	1,027,242	3,202,351	817,392	7,111,755	123,753	3,718,932	2,481	539,511
Ratio	36.92	7.15	32.33	20.42	25.77	45.35	3.90	23.71	0.08	3.44

Table C-3 Percentage of Number of Agricultural Holdings by Size in Seven Agro-Ecological Regions in 1991.

Agro-Ecological Regions	0~ 1.99		2.0~ 4.99		5.0~ 19.99		20.0~ 99.99		100.0 ~	
	No.	Area(ha)	No.	Area(ha)	No.	Area(ha)	No.	Area(ha)	No.	Area(ha)
1-1 Marmara	8.16	8.14	7.76	10.65	13.35	13.40	8.52	8.49	1.98	4.06
1-2 Aegean Sea	27.93	28.01	27.52	26.69	19.77	18.69	8.84	8.67	12.37	8.66
1-3 Mediterranean	13.48	12.23	10.55	10.10	8.92	8.41	7.89	8.54	19.27	16.44
2 Black Sea	29.05	30.10	23.37	21.78	10.65	9.45	3.94	3.28	9.47	7.17
3-1 Cent. North	8.96	9.24	14.57	14.62	21.92	23.19	34.03	34.48	22.45	20.76
3-2 Cent. South	8.68	8.12	10.24	10.18	19.23	20.84	30.47	30.30	33.33	40.08
3-3 Cent. East	3.74	4.15	5.98	5.97	6.16	6.02	6.31	6.25	1.13	2.84
Ratio	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Statistical Yearbook of Turkey, 1995.

Table C-4 Amounts of Fertilizers Used by the each Province in the Study Area in 1994.

Regional No	Office No	Name of Province	Total ton	21%N ton	16-18%P ton	48-52%K, tc	Total Culti Area	21% N kg/ha	16 % P kg/ha	48%K kg/ha	Total kg/ha	
1	ANKARA	6 ANKARA	254,520	153,998	99,531	991	1,027,193	149.9	96.9	1.0	247.8	
		14 BOLU	60,122	41,415	17,638	1,069	203,745	203.3	86.6	5.2	295.1	
		18 CANKIRI	43,611	22,269	21,134	208	180,899	123.1	116.8	1.1	241.1	
		71 KIRIKKALE	69,383	37,877	31,401	105	218,830	173.1	143.5	0.5	317.1	
		SUM	427,636	255,559	169,704	2,373	1,630,667	156.7	104.1	1.5	262.2	
2	KONYA	42 KONYA	537,969	362,779	171,163	4,027	1,641,158	221.1	104.3	2.5	327.8	
		68 AKSARAY	96,913	56,502	39,134	1,277	288,731	195.7	135.5	4.4	335.7	
		70 KARAMAN	51,415	29,154	21,702	559	262,137	111.2	82.8	2.1	196.1	
		51 NIGDE	91,769	64,920	25,219	1,630	152,780	424.9	165.1	10.7	600.7	
		SUM	778,066	513,355	257,218	7,493	2,344,806	218.9	109.7	3.2	331.8	
3	ADANA	1 ADANA	583,083	418,515	157,006	7,562	688,906	607.5	227.9	11.0	846.4	
		33 ICEL	178,725	121,068	51,896	5,761	364,422	332.2	142.4	15.8	490.4	
		31 HATAY	145,552	106,885	37,012	1,655	246,205	434.1	150.3	6.7	591.2	
		80 OSMANIYE										
		SUM	907,360	646,468	245,914	14,978	1,299,533	497.5	189.2	11.5	698.2	
4	KAYSERI	38 KAYSERI	100,592	61,819	38,147	626	476,387	129.8	80.1	1.3	211.2	
		40 KIRSEHIR	103,916	63,131	40,113	672	257,945	244.7	155.5	2.6	402.9	
		50 NEVSEHIR	103,809	69,930	33,143	736	283,317	246.8	117.0	2.6	366.4	
		66 YOZGAT	181,102	112,425	67,806	871	652,533	172.3	103.9	1.3	277.5	
		SUM	489,419	307,305	179,209	2,905	1,670,182	184.0	107.3	1.7	293.0	
5	SIVAS	58 SIVAS	69,963	33,292	36,565	106	484,320	68.7	75.5	0.2	144.5	
		60 TOKAT	87,846	46,306	40,990	550	306,670	151.0	133.7	1.8	286.5	
		SUM	157,809	79,598	77,555	656	790,990	100.6	98.0	0.8	199.5	
11	TRABZON	61 TRABZON	38,007	30,643	6,433	931	108,414	282.6	59.3	8.6	350.6	
		8 ARIVIN	7,765	5,481	1,515	769	38,440	142.6	39.4	20.0	202.0	
		69 BAYBURT	9,240	5,156	4,010	74	40,117	128.5	100.0	1.8	230.3	
		28 GIRE SUN	48,131	33,261	14,260	610	158,166	210.3	90.2	3.9	304.3	
		29 GUMUSHAN	8,260	5,603	2,469	188	72,846	76.9	33.9	2.6	113.4	
		53 RIZE	32,577	22,161	6,714	3,702	55,081	402.3	121.9	67.2	591.4	
SUM	143,980	102,305	35,401	6,274	473,064	216.3	74.8	13.3	304.4			
12	SAMSUN	55 SAMSUN	155,928	100,392	54,906	630	387,616	259.0	141.7	1.6	402.3	
		5 AMASYA	76,290	40,845	35,246	199	209,648	194.8	168.1	0.9	363.9	
		19 CORUM	138,931	80,044	58,559	328	497,997	160.7	117.6	0.7	279.0	
		52 ORDU	110,296	83,306	25,485	1,505	278,684	298.9	91.4	5.4	395.8	
		SUM	481,445	304,587	174,196	2,662	1,373,945	221.7	126.8	1.9	350.4	

Table C-4 Amounts of Fertilizers Used by the each Province in the Study Area in 1994. (Continued)

Regional No Office	Name of No Province	Total ton	21%N ton	16-18%P ton	48-52% K, ton	Total Culti Area	21% N kg/ha	16 % P kg/ha	48%K kg/ha	Total kg/ha
13 KASTAMONU	37 KASTAMONU	50,606	30,206	19,879	521	235,997	128.0	84.2	2.2	214.4
	67 ZONGULDAK	32,614	21,250	11,149	215	134,669	157.8	82.8	1.6	242.2
	57 SINOP	23,976	11,229	12,637	110	84,819	132.4	149.0	1.3	282.7
	78 KARABUK									
	74 BARTIN	7,682	4,045	3,632	5	46,213	87.5	78.6	0.1	166.2
	SUM	114,878	66,730	47,297	851	501,698	133.0	94.3	1.7	229.0
14 ESKISEHIR	26 ESKISEHIR	136,111	70,625	64,104	1,382	381,838	185.0	167.9	3.6	356.5
	3 AFYON	108,456	62,717	44,466	1,273	481,179	130.3	92.4	2.6	225.4
	43 KUTAHYA	84,414	61,669	22,498	247	331,140	186.2	67.9	0.7	254.9
	64 USAK	61,676	38,397	23,168	111	205,061	187.2	113.0	0.5	300.8
	SUM	390,657	233,408	154,236	3,013	1,390,218	167.9	110.9	2.2	281.0
15 ANTALYA	7 ANTALYA	203,411	118,019	74,213	11,179	346,069	341.0	214.4	32.3	587.8
	15 BURDUR	51,334	28,284	22,453	597	176,933	159.9	126.9	3.4	290.1
	32 ISPARTA	50,186	27,420	21,588	1,178	166,261	164.9	129.8	7.1	301.9
	SUM	304,931	173,723	118,254	12,954	689,263	252.0	171.6	18.8	442.4
16 IZMIR	35 IZMIR	163,017	111,039	45,149	6,829	346,066	320.9	130.5	19.7	471.1
	9 AYDIN	172,900	110,944	56,010	5,946	355,358	312.2	157.6	16.7	486.6
	20 DENIZLI	115,041	67,064	45,632	2,345	341,526	196.4	133.6	6.9	336.8
	45 MANISA	189,150	109,876	71,574	7,700	394,854	278.3	181.3	19.5	479.0
	48 MUGLA	91,337	58,051	28,966	4,320	210,104	276.3	137.9	20.6	434.7
	SUM	731,445	456,974	247,331	27,140	1,647,908	277.3	150.1	16.5	443.9
17 BURSA	16 BURSA	211,554	129,722	73,720	8,112	336,974	385.0	218.8	24.1	627.8
	10 BALIKESIR	205,492	141,244	59,766	4,482	413,340	341.7	144.6	10.8	497.2
	11 BILECIK	31,088	18,160	12,698	230	93,788	193.6	135.4	2.5	331.5
	17 CANAKKALE	126,200	82,228	42,351	1,621	274,550	299.5	154.3	5.9	459.7
	77 YALOVA									
SUM	574,334	371,354	188,535	14,445	1,118,652	332.0	168.5	12.9	513.4	
18 ISTANBUL	34 ISTANBUL	67,301	47,006	19,516	779	105,729	444.6	184.6	7.4	636.5
	22 EDIRNE	211,835	148,612	61,568	1,655	366,473	405.5	168.0	4.5	578.0
	39 KIRKLARELI	164,594	118,758	44,862	974	260,958	455.1	171.9	3.7	630.7
	41 KOCAELI	43,420	29,481	13,541	398	139,532	211.3	97.0	2.9	311.2
	54 SAKARYA	168,825	105,020	58,808	4,997	200,052	525.0	294.0	25.0	843.9
	59 HEKIRDAG	276,991	192,009	83,052	1,930	397,188	483.4	209.1	4.9	697.4
SUM	932,966	640,886	281,347	10,733	1,469,932	436.0	191.4	7.3	634.7	
Study Area	Total	6,305,032	4,051,605	2,153,653	99,774	16,411,397	246.9	131.2	6.1	384.2
All Turkey	Total	7,515,512	4,792,281	2,610,637	112,594	21,686,689	221.0	120.4	5.2	346.5

Source: Agricultural Structure(Production, Price, Value) 1994. State Institute of Statistics.

(3-1)

Table C-5 Number of Farming Machines in the Seven Agro-Ecological Regions in 1994.

Agrc-Ecological Regions	Wooden Plow		Animal Plow		Moldboard Trac.Plow		Half Turn Trac.Plow		Furrow Op ener Plow		Disk Type Trac.Plow		DkTpTraPl (oneway)		Stubble Plow		Rotary Cultivator		Cultiva tor		Land Roller	
1-1 Marmara	3,946	32,452	132,438	8,179	5,648	8,683	6,085	3,056	5,911	45,436	5,584											
1-2 Aegean	34,199	117,392	167,079	2,696	18,372	12,279	1,491	2,171	5,739	48,865	12,588											
1-3 Mediterranean	41,521	30,213	62,657	1,210	4,995	8,534	1,722	2,817	2,100	35,867	1,861											
2 Black Sea	89,434	128,197	47,443	866	886	602	206	333	3,984	14,110	2,780											
3-1 Cent. North	19,352	58,273	126,283	1,171	1,199	7,049	3,500	2,184	784	70,566	6,946											
3-2 Cent. South	13,809	45,081	83,149	2,837	2,398	15,816	10,887	5,275	1,908	32,324	3,814											
3-3 Cent. East	12,056	8,692	33,846	1,538	1,218	4,413	655	1,376	123	23,019	2,841											
Study Area Totl	214,317	420,300	652,895	18,497	34,716	57,376	24,546	17,212	20,549	269,987	36,414											

Agrc-Ecological Regions	Disk & Ot herHarrow		Spike Too thHarrow		Harrow		Hay Rake		Animal Drawn Hoe		Tractor Drawn Hoe		Animal Seed Drill		Seed Drill		Combine Drill		Beet Drill		Universal Drill	
1-1 Marmara	33,288	98,622	2,454	5,987	661	8,047	52	8,294	29,762	847	13,180											
1-2 Aegean	54,564	84,076	3,224	2,821	2,644	46,707	98	3,410	6,742	699	37,830											
1-3 Mediterranean	20,180	974	1,059	2,770	1,017	23,311	36	4,320	1,475	39	16,342											
2 Black Sea	12,390	65,844	155	10,040	304	1,751	23	431	1,385	615	506											
3-1 Cent. North	17,890	42,342	2,483	7,194	1,413	3,049	2,603	13,920	40,744	2,272	347											
3-2 Cent. South	20,347	22,807	3,102	3,078	429	6,839	1,298	24,170	24,624	1,765	317											
3-3 Cent. East	3,201	13,633	1,188	3,514	429	1,872	4	1,902	2,908	791	112											
Study Area Totl	161,860	328,298	13,665	35,404	6,897	91,576	4,094	56,447	107,640	7,026	68,634											

Source : Agricultural Structure (Production, Price, Value) 1994.

Table C-5 Number of Farming Machines in the Seven Agro-Ecological Regions in 1994. (3-2)

Agr-Ecological Regions	Potato Planter	Manure Spreader	Fertilizer Distribut	Reaper	Binder	Baler	Thresher	Winnower	Threshing Sled	Domestic Thresher	Combine Harvester	Potato Harvester
	1-1 Marmara	289	50	40,899	591	1,420	3,616	3,677	983	1,416	308	2,829
1-2 Aegean	923	95	48,875	5,835	681	1,949	8,947	940	15,033	10,266	684	1,229
1-3 Mediterranean	13	20	22,451	1,063	74	109	7,471	331	1,262	984	1,092	58
2 Black Sea	94	2	1,147	13,068	337	491	16,882	25,870	70,835	5,208	159	91
3-1 Cent. North	367	145	36,755	7,282	159	717	36,836	1,841	16,710	20,117	5,288	182
3-2 Cent. South	694	96	41,975	12,305	152	355	30,460	1,973	21,748	9,023	2,626	5,050
3-3 Cent. East	42	30	2,555	1,669	385	165	15,295	4,144	6,236	2,738	252	95
Study Area Totl	2,422	438	194,657	41,813	3,208	7,402	119,568	36,082	133,240	48,644	10,930	6,741

Agr-Ecological Regions	Comb.Pota toHarvester	Beet Harvester	Comb.Beet Harvester	AnimalDra wn Mower	Tract.Dra Mower	Forage Harvester	CornForge Harvester	Groundnut Harvester	Cotton Picker	Groundnut Thresher	Hazelnut Thresher	Corn Sheller
	1-1 Marmara	6	225	27	7	1,969	179	196	0	0	0	302
1-2 Aegean	6	990	10	10	1,374	253	201	26	1	45	0	739
1-3 Mediterranean	1	10	40	7	52	25	14	5	3	11	0	79
2 Black Sea	0	486	46	3	5,030	15	18	0	0	12	3,496	1,175
3-1 Cent. North	13	1,187	248	20	2,015	34	22	0	0	0	309	1,589
3-2 Cent. South	8	1,029	895	48	1,498	21	10	0	0	0	0	6
3-3 Cent. East	37	235	38	1,974	193	23	1	0	0	0	0	75
Study Area Totl	71	4,162	1,304	2,069	12,131	550	462	31	4	68	4,107	5,595

(3-3)

Table C-5 Number of Farming Machines in the Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Corn		Seed		Feed		Stalk		Aircraft		Knapsack		Combine		PTO Driv		Duster		Atomizer		Centrifug	
	Harvester	Cleaner	Grinder	Cutter	Sprayer	Sprayer	Sprayer	Sprayer	Sprayer	Sprayer	Sprayer	Sprayer	Sprayer	enSprayr	venSprayr	Duster	Atomizer	Centrifug	icalPump			
1-1 Marmara	56	378	1,306	55	0	58,621	1,138	25,969	8,195	8,000	14,954	6,377										
1-2 Aegean	24	339	2,720	4,738	1	206,798	2,109	41,401	14,754	6,760	44,220	30,380										
1-3 Mediterranean	37	169	395	3,626	60	53,627	5,119	18,575	9,975	2,776	18,124	14,120										
2 Black Sea	22	197	599	10	0	47,346	382	655	4,880	20,746	13,547	2,872										
3-1 Cent. North	8	907	2,434	336	0	39,443	697	37,359	5,772	2,563	8,686	8,950										
3-2 Cent. South	3	520	1,715	24	0	44,973	1,830	21,677	5,938	785	2,335	12,243										
3-3 Cent. East	18	164	254	3	0	6,801	267	2,440	1,541	389	1,440	1,470										
Study Area Totl	168	2,674	9,423	8,792	61	457,609	11,542	148,076	51,055	42,019	103,306	76,412										

Agro-Ecological Regions	Elect Dri		EnginDri		DeepWell		Sprinkle		Cream		Incuba		Brood		Milking		MilkMacin		Trailer		Water Ta		Tractor	
	ven Pump	ven Pump	Pump	Pump	System	Separator	Tor	er	er	Machine*	(mobile)	er	er	er	er	er	er	er	er	er	er	er	er	er
1-1 Marmara	7,527	54,252	1,590	2,977	35,590	2,977	233	756	272	9,576	117,415	4,887	118,311											
1-2 Aegean	50,114	73,320	10,099	7,682	16,949	7,682	149	198	377	12,205	149,920	34,385	165,121											
1-3 Mediterranean	10,033	15,836	8,301	18,571	3,985	18,571	63	120	43	1,461	62,272	15,799	69,393											
2 Black Sea	6,706	8,468	1,877	58,195	621	58,195	155	219	51	265	45,583	7,843	50,253											
3-1 Cent. North	8,015	32,564	3,094	38,514	30,656	38,514	243	245	213	2,083	126,026	14,037	132,394											
3-2 Cent. South	16,941	19,392	13,169	64,123	31,762	64,123	83	81	186	1,686	99,762	5,326	99,532											
3-3 Cent. East	1,328	2,061	633	6,904	1,623	6,904	12	11	58	199	40,477	2,869	41,297											
Study Area Totl	100,664	205,893	38,763	121,186	196,966	938	1,630	1,200	27,475	85,146	676,301													

* stationary type

Table C-6 Sown Area of Each Field Crop in Seven Agro-Ecological Regions in 1994. (Unit:ha) (4-1)

Agro-Ecological Regions	Sown Area of Each Field Crop in Seven Agro-Ecological Regions in 1994. (Unit:ha) (4-1)										
	Total Area	Cereals Area	Wheat	Barley	Rye	Oats	Spelt	Maize	Millet	Rice	Canary Grass
1-1 Marmara	1,525,614	1,059,391	831,207	90,263	1,331	31,210		91,808		13,372	200
1-2 Aegean	1,860,997	1,106,498	804,318	223,729	5,953	24,781		43,653	1,155	2,839	
1-3 Mediterra.	1,352,336	1,000,906	801,958	103,580	961	9,676		68,889	105	1,057	
2 Black Sea	1,034,375	868,894	443,770	126,216	9,633	14,845	11,708	241,405		13,280	
3-1 Cent.North	3,742,766	3,035,471	2,186,477	775,857	25,148	18,648	392	22,275		6,674	
3-2 Cent.South	3,384,347	2,911,773	1,870,067	921,382	78,084	36,305		1,412			
3-3 cent.East	918,524	748,411	589,696	132,388	12,560	3,875		9,080		672	
STUDY AREA TOTAL	13,818,959	10,731,344	7,527,493	2,373,415	133,670	139,340	12,100	478,522	1,260	37,894	200
ALL TURKEY	18,365,810	14,144,550	9,800,000	3,500,000	146,000	140,000	12,100	485,000	3,000	40,500	200

Table C-7 Percentage of Sown Area of Each Field Crop in Seven Agro-Ecological Regions (4-1)

Agro-Ecological Regions	Percentage of Sown Area of Each Field Crop in Seven Agro-Ecological Regions (4-1)										
	Total Area	Cereals Area	Wheat	Barley	Rye	Oats	Spelt	Maize	Millet	Rice	Canary Grass
1-1 Marmara	100.00	69.44	54.48	5.92	0.09	2.05		6.02		0.88	0.01
1-2 Aegean	100.00	59.46	43.22	12.02	0.32	1.33		2.35	0.06	0.15	
1-3 Mediterra.	100.00	74.01	59.30	7.66	0.07	0.72		5.09	0.01	0.08	
2 Black Sea	100.00	84.00	42.90	12.20	0.93	1.44	1.13	23.34		1.28	
3-1 Cent.North	100.00	81.10	58.42	20.73	0.67	0.50	0.01	0.60		0.18	
3-2 Cent.South	100.00	86.04	55.26	27.22	2.31	1.07		0.04			
3-3 cent.East	100.00	81.48	64.20	14.41	1.37	0.42		0.99		0.07	
STUDY AREA %	100.00	77.66	54.47	17.18	0.97	1.01	0.09	3.46	0.01	0.27	0.00
ALL TURKEY %	100.00	77.02	53.36	19.06	0.79	0.76	0.07	2.64	0.02	0.22	0.00

Source: Agricultural Structure (Production, Price, Value)1994

Table C-6 Sown Area of Each Field Crop in Seven Agro-Ecological Regions in 1994. (Unit:ha) (4-2)

Agro-Ecological Regions	Mixed Grains	Pulses Area	Broad Beans	Peas	Chick Peas	Dry Beans	Lentil (green)	Lentil (Red)	Kidney Beans	Cow Vetches	Wild Vetches	Others
1-1 Marmara		28,437	874	567	4,100	7,916	259	150		14,541	30	
1-2 Aegean	70	182,265	25,463	436	107,268	16,261	2,261		1,773	26,673	1,923	207
1-3 Mediterra.	4,680	84,747	339	30	77,052	2,359	1,502	28	5	2,739	628	65
2 Black Sea	7,157	59,358	570	273	2,449	32,994	978	20		22,074		
3-1 Cent.North		458,660	1,499	190	184,482	20,481	118,810	108	598	128,970	2,052	1,548
3-2 Cent.South	4,523	225,363		4	133,946	42,581	31,641	2,509		12,463	1,914	505
3-3 cent.East	140	76,586	16		25,719	6,841	9,504	3		34,423	80	
STUDY AREA TOTAL	16,550	1,115,416	28,761	1,500	535,016	129,433	164,955	2,818	2,376	241,883	6,627	2,125
ALL TURKEY	17,750	1,881,498	28,850	1,500	760,000	163,000	165,000	481,000	2,300	265,000	9,600	5,248

Table C-7 Percentage of Sown Area of Each Field Crop in Seven Agro-Ecological Regions (4-2)

Agro-Ecological Regions	Mixed Grains	Pulses Area	Broad Beans	Peas	Chick Peas	Dry Beans	Lentil (green)	Lentil (Red)	Kidney Beans	Cow Vetches	Wild Vetches	Others
1-1 Marmara		1.86	0.06	0.04	0.27	0.52	0.02	0.01		0.95	0.00	
1-2 Aegean	0.00	9.79	1.37	0.02	5.76	0.87	0.12		0.10	1.43	0.10	0.01
1-3 Mediterra.	0.35	6.27	0.03	0.00	5.70	0.17	0.11	0.00	0.00	0.20	0.05	0.00
2 Black Sea	0.69	5.74	0.06	0.03	0.24	3.19	0.09	0.00	0.00	2.13		
3-1 Cent.North		12.25	0.04	0.01	4.93	0.55	3.17	0.00	0.02	3.45	0.05	0.04
3-2 Cent.South	0.13	6.66		0.00	3.96	1.26	0.93	0.07		0.37	0.06	0.01
3-3 cent.East	0.02	8.34	0.00		2.80	0.74	1.03	0.00		3.75	0.01	
STUDY AREA %	0.12	8.07	0.21	0.01	3.87	0.94	1.19	0.02	0.02	1.75	0.05	0.02
ALL TURKEY %	0.10	10.24	0.16	0.01	4.14	0.89	0.90	2.62	0.01	1.44	0.05	0.03

Agro-Ecological Regions	Industrial Crops	Tobacco	Sugar		Flax (fiber)	Hemp (fiber)	Poppy (Capsule)	Cotton (raw)	Anise	Others	Oil		Sesame
			Beet	Beet							Seeds	Seeds	
1-1 Marmara	43,436	4,654	36,612	505			1,200	340	125	364,063	1,145		
1-2 Aegean	448,006	149,215	21,645	100	6,726	235,396	30,998	3,926	94,166	19,197			
1-3 Mediterra.	189,949	9,231	2,850		171,653	5,800	415	64,061	12,169				
2 Black Sea	48,014	22,951	23,102	1	1,960			18,716					
3-1 Cent. North	121,785	7,636	93,322	376	10,103	36	10,312	77,011	1,275				
3-2 Cent. South	145,476		127,708		6,732	3,826	7,210	25,183	1,205				
3-3 cent. East	49,843	6,561	40,558	64	1,760			19,439					
STUDY AREA TOTAL	1,046,509	200,248	345,797	506	2,500	25,321	408,249	41,000	21,988	662,639	34,991		
ALL TURKEY	1,316,356	227,113	412,018	1,335	2,500	25,321	581,491	41,000	25,578	730,106	85,000		

Agro-Ecological Regions	Industrial Crops	Tobacco	Sugar		Flax (fiber)	Hemp (fiber)	Poppy (Capsule)	Cotton (raw)	Anise	Others	Oil		Sesame
			Beet	Beet							Seeds	Seeds	
1-1 Marmara	2.85	0.31	2.40	0.05			0.08	0.02	0.01	23.86	0.08		
1-2 Aegean	24.07	8.02	1.16	0.01	0.36	12.65	1.67	0.21	5.06	1.03			
1-3 Mediterra.	14.05	0.68	0.21		12.69	0.43	0.03	4.74	0.90				
2 Black Sea	4.64	2.22	2.23	0.00	0.19			1.81					
3-1 Cent. North	3.25	0.20	2.49	0.01	0.27	0.00	0.28	2.06	0.03				
3-2 Cent. South	4.30		3.77		0.20	0.11	0.21	0.74	0.04				
3-3 cent. East	5.43	0.71	4.42	0.01	0.19			2.12					
STUDY AREA %	7.57	1.45	2.50	0.00	0.18	2.95	0.30	4.80	0.25				
ALL TURKEY %	7.17	1.24	2.24	0.01	0.14	3.17	0.22	3.98	0.46				

Table C-6 Sown Area of Each Field Crop in Seven Agro-Ecological Regions in 1994. (Unit:ha) (4-4)

Agro-Ecological Regions	Sunflower	Groundnuts	Soybeans	Safflower	Tuber Crops	Dry Onions	Dry Garlic	Potatoes	Beet (fodder)	Alfalfa	Sainfoin
	1-1 Marmara	362,720		192		30,287	17,478	840	11,179	790	16,455
1-2 Aegean	71,854	2,115		100	30,962	9,918	2,446	18,186	412	25,218	1,755
1-3 Mediterra.	880	26,261	24,751		12,673	8,558	508	3,599	8	1,818	116
2 Black Sea	15,078		3,638		39,393	2,138	1,992	34,758	505	14,618	12,075
3-1 Cent.North	75,736				40,839	15,814	347	24,485	192	24,548	10,778
3-2 Cent.South	23,918	60			76,552	8,604	1,412	66,452	84	20,994	2,219
3-3 cent.East	19,439				25,145	13,983	127	11,035		9,816	4,788
STUDY AREA TOTAL	569,625	28,436	28,581	100	255,851	76,493	7,672	169,694	1,991	113,467	32,949
ALL TURKEY	586,000	30,000	29,000	100	293,300	92,000	9,200	190,000	2,100	194,801	79,984

Table C-7 Percentage of Sown Area of Each Field Crop in Seven Agro-Ecological Regions (4-4)

Agro-Ecological Regions	Sunflower	Groundnuts	Soybeans	Safflower	Tuber Crops	Dry Onions	Dry Garlic	Potatoes	Beet (fodder)	Alfalfa	Sainfoin
	1-1 Marmara	23.78		0.01		1.99	1.15	0.06	0.73	0.05	1.08
1-2 Aegean	3.86	0.11		0.01	1.66	0.53	0.13	0.98	0.02	1.36	0.09
1-3 Mediterra.	0.07	1.94	1.83		0.94	0.63	0.04	0.27	0.00	0.13	0.01
2 Black Sea	1.46		0.35		3.81	0.21	0.19	3.36	0.05	1.41	1.17
3-1 Cent.North	2.02				1.09	0.42	0.01	0.65	0.01	0.66	0.29
3-2 Cent. South	0.71	0.00			2.26	0.25	0.04	1.96	0.00	0.62	0.07
3-3 cent.East	2.12				2.74	1.52	0.01	1.20		1.07	0.52
STUDY AREA %	4.12	0.21	0.21	0.00	1.85	0.55	0.06	1.23	0.01	0.82	0.24
ALL TURKEY %	3.19	0.16	0.16	0.00	1.60	0.50	0.05	1.03	0.01	1.06	0.44

Table C-8 Average Yields of Field Crops in Seven Agro-Ecological Regions in 1994. (Unit:kg/ha) (2-1)

Agro-Ecological Regions	Average Yields of Field Crops in Seven Agro-Ecological Regions in 1994. (Unit:kg/ha)													Mixed Grains
	Total Producti	Cereals Average	Wheat	Barley	Rye	Oats	Spelt	Maize	Millet	Rice	Canary Grass			
1-1 Marmara	3,673	2,764	2,447	3,208	1,703	2,004		5,433		3,048	1,500			
1-2 Aegean Sea	2,831	2,459	2,367	2,395	1,574	2,011		4,819	1,076	3,546			1,486	
1-3 Mediterranean	3,001	3,010	2,803	2,152	1,564	2,452		7,382	886	2,374			1,241	
2 Black Sea	2,419	1,661	1,508	1,604	1,262	1,278		2,017		2,445			1,132	
3-1 Cent.North	2,639	1,847	1,703	2,168	1,823	1,690		4,426		3,988				
3-2 Cent.South	3,272	1,586	1,477	1,859	1,230	1,053		2,091					1,237	
3-3 Cent.East	2,807	1,334	1,297	1,432	976	1,188		2,788		3,077			995	
Study Area Ave.	2,964	1,988	1,874	2,037	1,343	1,647		3,828	1,060	3,022	1,500		1,129	
All Turkey Ave.	2,756	1,904	1,786	2,000	1,336	1,643		3,814	1,200	2,963	1,500		1,211	

Agro-Ecological Regions	Average Yields of Field Crops in Seven Agro-Ecological Regions in 1994. (Unit:kg/ha)													Industrial Crops Ave.
	Pulses Average	Broad Beans	Peas	Chick Peas	Dry Beans	Lentil (green)	Lentil (red)	Kidney Beans	Cow Vetches	Wild Vetches	Others			
1-1 Marmara	613	2,140	2,735	980	1,166	819	940		23	2,400			35,222	
1-2 Aegean Sea	1,052	1,795	2,940	1,012	1,327	739		883	349	954	986		2,696	
1-3 Mediterranean	736	1,979	1,535	700	1,073	1,123	929	1,400	855	1,586	2,400		1,655	
2 Black Sea	607	1,305	1,026	851	590	960	950		565				9,512	
3-1 Cent.North	749	1,907	4,416	844	1,108	573	500	754	689	1,039	1,242		24,536	
3-2 Cent.South	839		500	811	1,094	641	719		792	668	1,620		27,762	
3-3 Cent.East	889	938		906	947	905	667		861	613			20,348	
Study Area Ave.	814	1,803	2,667	853	993	615	726	852	632	960	1,306		11,032	
All Turkey Ave.	892	1,802	2,667	855	1,104	606	1,060	880	623	1,000	1,140		10,504	

Notes : Average yields were calculated dividing the total production in regions by total sown area of each region.

(2-2)

(Unit: kg/ha)

Table C-8 Average Yields of Field Crops in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Tobacco	Sugar Beets	Flax (fiber)	Hemp (fiber)	Poppy (capsule)	Cotton (raw)	Anise	Others	Oil Seeds	Sesame	Sunflower	Ground nuts
											wt	
1-1 Marmara	557	41,687	69			1,316	491	2,080	1,324	622	1,322	
1-2 Aegean Sea	728	37,274		900	553	2,739	640	1,215	5,023	525	1,358	2,280
1-3 Mediterranean	835	38,635				2,790	866	1,518	6,759	744	1,239	2,334
2 Black Sea	725	23,102		1,144			944		1,471		1,311	
3-1 Cent. North	1,091	31,815		1,064	488		944	529	976	592	906	
3-2 Cent. South		31,555			519		635	408	1,171	441	1,041	1,950
3-3 Cent. East	724	24,879		1,047	175				1,449		1,430	
Study Area Ave.	742	31,590	69	1,120	492	2,756	671	639	2,336	604	1,263	2,329
All Turkey Ave.	823	31,417	26	1,120	492	2,785	671	960	2,546	400	1,263	2,333

Agro-Ecological Regions	Soy Beans	Safflower	Tuber Crops	Dry Onions	Dry Garlic	Potatoes	Beet (fodder)	Alfalfa Green	Alfalfa Hay	Sainfoin Green	Sainfoin Hay
		wt									
1-1 Marmara	1,807		21,338	23,392	6,232	17,235	50,005	3,648	7,048	135	1,903
1-2 Aegean Sea		900	21,784	16,574	6,511	25,681	66,204	16,597	8,969	5,047	1,885
1-3 Mediterranean	2,465		18,949	18,901	7,632	20,600	47,125	9,384	2,735	7,440	6,009
2 Black Sea	2,133		13,680	8,390	6,994	14,098	33,669	981	5,845	217	3,116
3-1 Cent. North			21,087	21,303	6,620	20,981	43,047	16,917	8,034	2,532	2,792
3-2 Cent. South			28,718	15,003	7,152	30,910	62,524	11,877	7,401	6,136	2,418
3-3 Cent. East			18,671	18,946	8,465	18,440		1,858	9,488	17	6,475
Study Area Ave.	2,418	900	22,000	19,398	6,835	23,543	49,059	10,513	7,741	1,623	3,351
All Turkey Ave.	2,414	900	21,531	19,565	7,065	22,895	47,619	8,062	6,636	1,875	4,015

(4-1)

(Unit: tons)

Table C-9 Production of Vegetables in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Total Area(ha)	Total Production(ton)	Ave. Yield (ton/ha)	Vegetables							
				Leafy	Cabbage	Black Cabbage	Articho	Celery	Head Lettuce	Leaf Lettuce	Spinach
1-1 Marmara	88,037	2,511,511	28.53	241,613	98,376	14,139	3,905	2,570	4,663	9,605	31,224
1-2 Aegean	182,748	4,724,114	25.85	285,226	101,703	816	7,620	8,116	35,636	4,420	37,336
1-3 Mediterranean	120,901	4,110,539	34.00	230,149	44,595	1,495	68	280	84,529	15,253	24,537
2 Black Sea	50,072	1,275,151	25.47	309,748	161,078	80,449	7	34	1,802	4,510	15,664
3-1 Cent. North	110,852	1,818,673	16.41	142,309	33,437	6,451			8,416	29,635	28,971
3-2 Cent. South	38,440	856,998	22.29	147,166	94,489				3,376	536	17,772
3-3 Cent. East	24,552	521,583	21.24	45,347	24,980	495			280	522	9,967
Study Area Total	615,602	15,818,569	25.70	1,401,558	558,658	103,845	11,600	11,000	138,702	64,481	165,471
All Turkey Total	708,803	17,778,965	25.08	1,451,350	595,000	104,000	11,600	11,000	145,000	65,000	170,000

Table C-10 Percentage of Production of Each Vegetable in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Total Area (%)	Total Production (%)	Ave. Yield	Vegetables							
				Leafy	Cabbage	Black Cabbage	Articho	Celery	Head Lettuce	Leaf Lettuce	Spinach
1-1 Marmara	14.30	15.88	17.24	17.61	13.62	33.66	23.36	3.36	14.90	18.87	
1-2 Aegean	29.69	29.86	20.35	18.20	0.79	65.69	73.78	25.69	6.85	22.56	
1-3 Mediterranean	19.64	25.99	16.42	7.98	1.44	0.59	2.55	60.94	23.66	14.83	
2 Black Sea	8.13	8.06	22.10	28.83	77.47	0.06	0.31	1.30	6.99	9.47	
3-1 Cent. North	18.01	11.50	10.15	5.99	6.21			6.07	45.96	17.51	
3-2 Cent. South	6.24	5.42	10.50	16.91				2.45	0.83	10.74	
3-3 Cent. East	3.99	3.30	3.24	4.47	0.48			0.20	0.81	6.02	
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Agricultural Structure (Production, Price, Value) 1994.

(4-2)

Table C-9 Production of Vegetables in Seven Agro-Ecological Regions in 1994. (Unit: tons)

Agro-Ecological Regions	Orach							Rocket		Legume Vegetable		Fresh Beans		Broad Beans		Fresh Peas	
	Leeks	Garden	Purslane	Cress	Dill	Mint	Parsley	Rocket	Vegetable	Legume	Fresh Beans	Broad Beans	Fresh Peas				
1-1 Marmara	73,106	442	347	304	424	28	2,199	281	67,872	44,242	7,245	10,757					
1-2 Aegean	83,041		213	87	53	109	5,757	319	126,922	82,377	18,148	10,769					
1-3 Mediterranean	40,937	6,063	463	287	16	811	10,815		110,286	73,586	21,524	13,581					
2 Black Sea	44,787	808	291	27	7	28	256		117,033	104,618	1,321	1,173					
3-1 Cent. North	31,736	1,052	1,165	450		154	842		64,097	54,103	2,060	1,630					
3-2 Cent. South	27,972			115		158	1,748		36,794	33,840	38	30					
3-3 Cent. East	8,912					4	187		24,073	23,811	262						
Study Area Total	310,491	8,365	2,479	1,270	500	1,292	21,804	600	547,077	416,577	50,598	37,940					
All Turkey Total	310,000	8,000	25,000	1,350	500	2,800	24,000	600	567,700	435,000	51,000	38,000					

Table C-10 Percentage of Production of Each Vegetable in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Orach							Rocket		Legume Vegetable		Fresh Beans		Broad Beans		Fresh Peas	
	Leeks	Garden	Purslane	Cress	Dill	Mint	Parsley	Rocket	Vegetable	Legume	Fresh Beans	Broad Beans	Fresh Peas				
1-1 Marmara	23.55	5.28	14.00	23.94	84.80	2.17	10.09	46.83	12.41	10.62	14.32	28.35					
1-2 Aegean	26.75		8.59	6.85	10.60	8.44	26.40	53.17	23.20	19.77	35.87	28.38					
1-3 Mediterranean	13.18	72.48	18.68	22.60	3.20	62.77	49.60		20.16	17.66	42.54	35.80					
2 Black Sea	14.42	9.66	11.74	2.13	1.40	2.17	1.17		21.39	25.11	2.61	3.09					
3-1 Cent. North	10.22	12.58	46.99	35.43		11.92	3.86		11.72	12.99	4.07	4.30					
3-2 Cent. South	9.01			9.06		12.23	8.02		6.73	8.12	0.08	0.08					
3-3 Cent. East	2.87					0.31	0.86		4.40	5.72	0.52						
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					

(4-3)

(Unit:tons)

Table C-9 Production of Vegetables in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Fresh		Kidney Beans	Fruit Vegetables	Okra	Pumpkin	Melon	Water Melon	Squash	Cucumber	Egg plant	Tomatoes
	Calavence	Melion										
1-1 Marmara	5,728	2,170,384	2,892	18,132	85,847	436,441	19,583	61,634	89,835	1,270,154		
1-2 Aegean	10,474	4,142,962	14,872	7,376	491,507	1,065,877	62,753	191,284	246,352	1,848,202		
1-3 Mediterranean	1,060	3,601,188	3,091	481	104,657	869,984	131,665	472,887	234,599	1,509,147		
2 Black Sea	9,921	835,445	357	6,243	25,916	100,688	12,267	129,089	59,047	325,035		
3-1 Cent.North	6,284	1,451,804	1,019	15,597	559,334	271,118	19,624	78,850	18,017	430,257		
3-2 Cent.South	2,881	622,619	397	10,531	93,254	93,908	15,407	86,752	11,017	295,457		
3-3 Cent.East		445,093	1,858	1,165	13,130	100,667	9,354	33,355	3,163	272,927		
Study Area Total	36,348	13,269,495	24,486	59,525	1,373,645	2,938,683	270,653	1,053,851	662,030	5,949,159		
All Turkey Total	38,000	15,080,000	25,500	61,500	1,750,000	3,650,000	285,000	1,140,000	810,000	6,350,000		

Table C-10 Percentage of Production of Each Vegetable in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Fresh		Kidney Beans	Fruit Vegetables	Okra	Pumpkin	Melon	Water Melon	Squash	Cucumber	Egg plant	Tomatoes
	Calavence	Melion										
1-1 Marmara	15.76	16.36	11.81	30.46	6.25	14.85	7.24	5.85	13.57	21.35		
1-2 Aegean	28.82	31.22	60.74	12.39	35.78	36.27	23.19	18.15	37.21	31.07		
1-3 Mediterranean	2.92	27.14	12.62	0.81	7.62	29.60	48.65	44.87	35.44	25.37		
2 Black Sea	27.29	6.30	1.46	10.49	1.89	3.43	4.53	12.25	8.92	5.43		
3-1 Cent.North	17.29	10.94	4.16	26.20	40.72	9.23	7.25	7.48	2.72	7.23		
3-2 Cent.South	7.93	4.69	1.62	17.69	6.79	3.20	5.69	8.23	1.66	4.97		
3-3 Cent.East		3.35	7.59	1.96	0.96	3.43	3.46	3.17	0.48	4.59		
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		

(4-4)

Table C-9 Production of Vegetables in Seven Agro-Ecological Regions in 1994. (Unit: tons)

Agro-Ecological Regions	Stuff		Green		Root		Green		Carrots		Horse		Red		Jerus		Turnip		Cauli		Aspa-	
	Pepper	Green	Pepper	Garlic	Onion	Vegetables	Garlic	Onion	Carrots	Radish	Radish	Radish	Artichok	Artichok	Artichok	flower	flower	flower	flower	ragus	ragus	ragus
1-1 Marmara	83,800	102,086	24,192	1,597	12,857	5,047	3,510	1,185	7,450													
1-2 Aegean	59,012	155,727	117,582	5,170	43,880	60,207	6,685	1,640	15													
1-3 Mediterranean	72,736	201,941	151,014	4,062	36,864	7,028	260	101,800														
2 Black Sea	63,012	115,791	12,874	984	9,144	400	2,173	128	9	36	51											
3-1 Cent.North	24,981	33,007	159,773	1,506	43,303	111,478	2,482	591	84	319	690											
3-2 Cent.South	5,654	10,242	50,419	1,278	16,526	29,400	2,496	482	57	80												
3-3 Cent.East	5,590	3,884	7,070	199	4,451	1,779	581	60														
Study Area Total	314,785	622,678	522,924	14,796	167,025	215,339	18,187	105,886	150	435	77,500	15										
All Turkey Total	368,000	640,000	602,400	27,500	215,000	225,000	19,000	115,000	150	750	77,500	15										

Table C-10 Percentage of Production of Each Vegetable in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Stuff		Green		Root		Green		Carrots		Horse		Red		Jerus		Turnip		Cauli		Aspa-	
	Pepper	Green	Pepper	Garlic	Onion	Vegetables	Garlic	Onion	Carrots	Radish	Radish	Radish	Artichok	Artichok	Artichok	flower	flower	flower	flower	ragus	ragus	ragus
1-1 Marmara	26.62	16.39	4.63	10.79	7.70	2.34	19.30	1.12	9.61													
1-2 Aegean	18.75	25.01	22.49	34.94	26.27	27.96	36.76	1.55	66.33	100.00												
1-3 Mediterranean	23.11	32.43	28.88	27.45	22.07	3.26	1.43	96.14	23.10													
2 Black Sea	20.02	18.60	2.46	6.65	5.47	0.19	11.95	0.12	6.00	8.28	0.07											
3-1 Cent.North	7.94	5.50	30.55	10.18	25.93	51.77	13.65	0.56	56.00	73.35	0.89											
3-2 Cent.South	1.80	1.64	9.64	8.64	9.89	13.65	13.72	0.46	38.00	18.39												
3-3 Cent.East	1.78	0.62	1.35	1.34	2.66	0.83	3.19	0.06														0.00
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table C-11 Number of Fruits Bearing Trees in Seven Agro-Ecological Regions in 1994. (Unit: No.) (4-1)

Agro-Ecological Region	Total Number of Fruit Trees	Area in 1991 (ha)	Fruits						
			Pome	Pears	Quinces	Apples	Medlar	Loquats	Stone Fruits
1-1 Marmara	102,376,382	175,580	5,760,450	2,021,031	779,026	2,884,680	75,713	13,985,354	1,137,784
1-2 Aegean	185,435,341	607,376	8,767,543	2,545,326	659,440	5,464,218	87,944	69,415,693	1,533,390
1-3 Mediterranean	69,133,970	170,431	4,321,864	842,618	178,025	3,062,461	238,760	11,788,268	1,013,978
2 Black Sea	425,400,918	529,922	5,451,938	1,634,268	252,336	3,446,867	111,012	3,549,416	1,059,588
3-1 Cent. North	61,415,034	162,025	5,632,278	1,617,914	582,757	3,391,147	40,460	4,670,862	1,140,613
3-2 Cent. South	22,585,533	139,683	11,779,971	1,361,822	156,679	10,242,969	18,501	4,292,653	671,934
3-3 Cent. East	5,654,387	42,059	1,324,537	337,220	63,762	918,205	5,350	1,475,066	203,485
Study Area Total	872,001,565	1,827,076	43,038,581	10,360,199	2,672,025	29,410,547	338,980	109,177,292	6,560,772
All Turkey Total	952,955	2,337,291	46,685	11,656	2,840	31,587	345	121,741	7,267

Table C-12 Percentage of the Number of Each Fruits Bearing Trees in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Region	Total Number of Fruit Trees	Area in 1991 (ha)	Percentage of Fruits						
			Pome	Pears	Quinces	Apples	Medlar	Loquats	Stone Fruits
1-1 Marmara	11.74	9.61	13.38	19.51	29.15	9.81	22.34	12.81	17.34
1-2 Aegean	21.27	33.24	20.37	24.57	24.68	18.58	25.94	4.13	20.32
1-3 Mediterranean	7.93	9.33	10.04	8.13	6.66	10.41	92.96	10.80	15.46
2 Black Sea	48.78	29.00	12.67	15.77	9.44	11.72	32.75	2.90	16.15
3-1 Cent. North	7.04	8.87	13.09	15.62	21.81	11.53	11.94	4.28	17.39
3-2 Cent. South	2.59	7.65	27.37	13.14	5.86	34.83	5.46	3.93	10.24
3-3 Cent. East	0.65	2.30	3.08	3.25	2.39	3.12	1.58	1.35	3.10
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Agricultural Structure (Production, Price, Value) 1994. Notes : Number of fruit bearing trees in all Turkey should be multiplied 1,000.

(4-2)

Table C-11 Number of Fruits Bearing Trees in Seven Agro-Ecological Regions in 199. (Unit.No.)

Agro-Ecological Region	Apricots			Cherries			Cornel	Peaches	Sour Cherries	Olive	Citrus Fruits	Lemon
	Oleaster	Apricots	Wild Apricots	Cherries	Wild Apricots	Cherries						
1-1 Marmara	4,625	71,505	348,932	809,548	2,383,987	744,426	8,098,617	385,930	0			
1-2 Aegean	94,880	500,265	96,810	1,528,687	78,884	3,361,358	329,756	62,091,665	5,463,414	277,339		
1-3 Mediterranean	6,400	538,602	36,715	241,399	64,515	2,256,191	47,450	7,583,018	17,973,511	4,526,891		
2 Black Sea		47,791	21,069	810,969	553,742	537,309	190,691	328,257	345,075	18,770		
3-1 Cent. North	184,176	423,448	409,436	634,619	302,835	291,696	1,175,539	108,500	0			
3-2 Cent. South	152,969	794,744	809,881	578,338	6,950	246,939	927,858	103,020	0			
3-3 Cent. East	8,200	243,256	93,400	229,588	48,554	436,135	212,448		0			
Study Area Total	451,250	2,619,609	1,816,243	4,833,148	3,439,467	7,874,054	10,982,359	70,600,390	23,782,000	4,823,000		
All Turkey Total	474	8,680	2,395	5,545	1,213	10,435	3,540	82,192	23,782	4,823		

Table C-12 Percentage of the Number of Each Fruits Bearing Trees in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Region	Apricots			Cherries			Cornel	Peaches	Sour Cherries	Olive	Citrus Fruits	Lemon
	Oleaster	Apricots	Wild Apricots	Cherries	Wild Apricots	Cherries						
1-1 Marmara	1.02	2.75	19.21	16.75	69.31	9.45	73.74	0.55	0.00			
1-2 Aegean	21.03	19.10	5.33	31.63	2.29	42.69	3.00	87.95	22.97	5.75		
1-3 Mediterranean	1.42	20.56	2.02	4.99	1.88	28.65	0.43	10.74	75.58	93.86		
2 Black Sea		1.82	1.16	16.78	16.10	6.82	1.74	0.46	1.45	0.59		
3-1 Cent. North	40.81	16.16	22.54	13.13	8.80	3.70	10.70	0.15	0.00			
3-2 Cent. South	33.90	30.34	44.59	11.97	0.20	3.14	8.45	0.15	0.00			
3-3 Cent. East	1.82	9.29	5.14	4.75	1.41	5.54	1.95		0.00			
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		

Notes : Number of fruit bearing trees in all Turkey should be multiplied 1,000.

Table C-11 Number of Fruits Bearing Trees in Seven Agro-Ecological Regions in (Unit:No.) (4-3)

Agro-Ecological Region	Oranges	Mandarins	Sour Orange:	Grape Fruits	Nuts	Pistachios	Walnuts	Almonds	Hazelnut	Chestnuts
1-1 Marmara					33,793,873	3,955	278,809	98,684	33,236,995	175,430
1-2 Aegean	1,274,190	3,882,815	12,350	16,720	4,706,251	1,458,343	537,279	1,753,650	19,129	937,850
1-3 Mediterranean	9,576,539	3,390,151	77,650	402,280	712,184	127,895	150,412	427,117	6,060	700
2 Black Sea	59,271	267,034			205,131,468	16,330	649,192	15,700	203,670,656	779,590
3-1 Cent. North					22,639,674	106,940	384,749	284,225	21,789,660	74,100
3-2 Cent. South					842,553	121,135	262,434	457,084	1,600	300
3-3 Cent. East					577,843	13,480	126,783	54,050	383,400	130
Study Area Total	10,910,000	7,540,000	90,000	419,000	268,403,846	1,848,078	2,389,658	3,090,510	259,107,500	1,968,100
All Turkey Total	10,910	7,540	90	419	291,861	23,340	3,446	3,906	259,200	1,969

Table C-12 Percentage of the Number of Each Fruits Bearing Trees in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Region	Oranges	Mandarins	Sour Orange:	Grape Fruits	Nuts	Pistachios	Walnuts	Almonds	Hazelnut	Chestnuts
1-1 Marmara					12.59	0.21	11.67	3.19	12.83	8.91
1-2 Aegean	11.68	51.50	13.72	3.99	1.75	78.91	22.48	56.74	0.01	47.65
1-3 Mediterranean	87.78	44.96	86.28	96.01	0.27	6.92	6.29	13.82	0.00	0.04
2 Black Sea	0.54	3.54			76.43	0.88	27.17	0.51	78.60	39.61
3-1 Cent. North					8.43	5.79	16.10	9.20	8.41	3.77
3-2 Cent. South					0.31	6.55	10.98	14.79	0.00	0.02
3-3 Cent. East					0.22	0.73	5.31	1.75	0.15	0.01
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Notes : Number of fruit bearing trees in all Turkey should be multiplied 1,000.

(4-4)

Table C-11 Number of Fruits Bearing Trees in Seven Agro-Ecological Regions in (Unit:No.)

Agro-Ecological Region	Grape like	Strawber	Mulberry	Figs	Carobs	Bananas	Pomegranates	Persimmons	Grapes	Kiwi
	Fruits (ha)*	ries (ha)*				(ha)*			(ha)*	
1-1 Marmara	528,739	3,967	190,067	272,248			20,760	12,195	29,502	
1-2 Aegean	8,748,541	396	231,198	7,609,500	32,550		713,357	2,635	158,705	200
1-3 Mediterranean	1,932,090	1,562	127,970	639,313	286,435	1,200	599,740	243,120	32,559	391
2 Black Sea	948,531	397	474,018	386,887			32,450	50,845	3,475	459
3-1 Cent. North	580,842	240	383,751	47,880			98,365	2,600	48,006	
3-2 Cent. South	267,595	290	105,635	22,710	15		42,495		96,450	
3-3 Cent. East	112,016	30	96,469	4,130			1,410		9,977	
Study Area Total	13,118,354	6,882	1,609,108	8,982,668	319,000	1,200	1,508,577	311,395	378,474	1,050
All Turkey Total	15,751	7	2,740	9,525	319	1	2,258	333	567	1

Table C-12 Percentage of the Number of Each Fruits Bearing Trees in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Region	Grape like	Straw-berries	Mulberry	Figs	Carobs	Bananas	Pomegranates	Persimmons	Grapes	Kiwi
	Fruits									
1-1 Marmara	4.03	57.64	11.81	3.03			1.38	3.92	7.79	
1-2 Aegean	66.69	5.75	14.37	84.71	10.20		47.29	0.85	41.93	19.05
1-3 Mediterranean	14.73	22.70	7.95	7.12	89.79	100.00	39.76	78.07	8.55	37.24
2 Black Sea	7.23	5.77	29.46	4.31			2.15	16.33	0.92	45.71
3-1 Cent. North	4.43	3.49	23.85	0.53			6.52	0.83	12.68	
3-2 Cent. South	2.04	4.21	6.56	0.25	0.00		2.82		25.48	
3-3 Cent. East	0.85	0.44	6.00	0.05			0.09		2.64	
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Notes : The unit of Strawberries, Bananas and Grapes are hectare(which is not included in the total).

(4-1)

Table C-13 Production of Fruits in Seven Agro-Ecological Regions in 1994. (Unit: tons)

Agr. Ecological Regions	Total Production	Area in 1991 (ha)	Pome Fruits							Total
			Pears	Quinces	Apples	Medlar	Loquats	Stone Fruits	Plums	
1-1 Marmara	917,081	175,580	86,531	23,701	170,936	1,302	0	263,758	34,391	
1-2 Aegean Sea	3,932,239	607,376	62,668	14,981	491,478	1,506	221	1,379,329	38,153	
1-3 Mediterranean	2,670,686	170,431	50,025	7,047	282,900	0	11,695	302,704	36,279	
2 Black Sea	1,347,214	529,922	51,504	6,165	107,941	1,206	81	74,103	22,844	
3-1 Cent. North	640,411	162,025	55,024	19,825	149,620	711	0	118,857	28,953	
3-2 Cent. South	1,479,383	139,683	56,519	3,723	749,844	450	0	133,328	21,208	
3-3 Cent. East	158,137	42,059	10,375	2,892	48,853	92	0	46,611	6,423	
Study Area Total	11,145,151	1,827,076	372,646	78,334	2,001,572	5,267	11,997	2,318,690	188,251	
All Turkey Total	12,601,307	2,337,291	410,000	82,000	2,095,000	5,400	12,000	2,707,700	204,000	

Table C-14 Percentage of the Amounts of Production of Each Fruit in Seven Agro-Ecological Regions in 1994.

Agr. Ecological Regions	Total Production	Area in 1991 (ha)	Pome Fruits							Total
			Pears	Quinces	Apples	Medlar	Loquats	Stone Fruits	Plums	
1-1 Marmara	8.23	9.61	23.22	30.26	8.54	24.72	0.00	11.38	18.27	
1-2 Aegean Sea	35.28	33.24	16.82	19.12	24.55	28.59	1.84	59.49	20.27	
1-3 Mediterranean	23.96	9.33	13.42	9.00	14.13	0.00	97.48	15.05	19.27	
2 Black Sea	12.09	29.00	13.82	7.87	5.39	22.90	0.68	3.20	12.15	
3-1 Cent. North	5.75	8.87	14.77	25.51	7.48	13.50	0.00	5.13	15.38	
3-2 Cent. South	13.27	7.65	15.17	4.75	37.46	8.54	0.00	5.75	11.27	
3-3 Cent. East	1.42	2.30	2.78	3.69	2.44	1.75	0.00	2.01	3.41	
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

Source: Agricultural Structure (Production, Price, Value) 1994.

(4-2)

Production of Fruits in Seven Agro-Ecological Regions in 1994. (Unit: tons)

Agro -Ecological Regions	Oleaster	Apricots			Wild	Cherries	Cornel	Peaches	Cherries			Olive	Citrus Fruits Total	Lemons
		Apricots	Wild	Cherries					Sour	Peaches	Olive			
1-1 Marmara	34	1,831	368	34,782	461	104,492	4,803	82,596	0	0	0	0	0	
1-2 Aegean Sea	1,214	14,333	2,248	36,375	1,308	120,744	8,303	1,156,651	213,530	11,267	0	0	11,267	
1-3 Mediterranean	86	41,080	1,157	8,109	749	101,358	1,303	112,583	1,659,696	458,671	0	0	458,671	
2 Black Sea	0	1,066	442	22,077	7,125	14,545	4,077	1,927	4,847	62	0	0	62	
3-1 Cent. North	2,234	17,763	12,275	19,217	2,586	6,703	27,756	1,370	0	0	0	0	0	
3-2 Cent. South	1,821	31,441	19,035	21,450	141	5,344	30,018	2,870	0	0	0	0	0	
3-3 Cent. East	123	9,285	2,101	8,419	691	13,650	5,919	0	0	0	0	0	0	
Study Area Total	5,512	116,799	37,626	150,429	13,061	366,836	82,179	1,357,997	1,877,873	470,000	0	0	470,000	
All Turkey Total	5,700	400,000	59,000	160,000	14,000	375,000	90,000	1,400,000	1,877,900	470,000	0	0	470,000	

Percentage of the Amounts of Production of Each Fruit in Seven Agro-Ecological Regions in 1994.

Agro -Ecological Regions	Oleaster	Apricots			Wild	Cherries	Cornel	Peaches	Cherries			Olive	Citrus Fruits	Lemons
		Apricots	Wild	Cherries					Sour	Peaches	Olive			
1-1 Marmara	0.62	1.57	0.98	23.12	3.53	28.48	5.84	6.08	0.00	0.00	0.00	0.00	0.00	
1-2 Aegean Sea	22.02	12.27	5.97	24.18	10.01	32.91	10.10	85.17	11.36	2.40	0.00	0.00	2.40	
1-3 Mediterranean	1.56	35.17	3.08	5.39	5.73	27.63	1.59	8.29	88.38	97.59	0.00	0.00	97.59	
2 Black Sea	0.00	0.91	1.17	14.68	54.55	3.96	4.96	0.14	0.26	0.01	0.00	0.00	0.01	
3-1 Cent. North	40.53	15.21	32.62	12.77	19.80	1.83	33.78	0.10	0.00	0.00	0.00	0.00	0.00	
3-2 Cent. South	33.04	26.92	50.59	14.26	1.08	1.46	36.53	0.21	0.00	0.00	0.00	0.00	0.00	
3-3 Cent. East	2.23	7.95	5.58	5.60	5.29	3.72	7.20	0.00	0.00	0.00	0.00	0.00	0.00	
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

(4-3)

(Unit:tons)

Table C-13 Production of Fruits in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Oranges	Mandarins	Sour Oranges	Grape Fruits	Nuts Total	Pistachios	Walnuts	Almonds	Hazelnuts	Chestnuts
1-1 Marmara	0	0	0	0	91,535	24	10,168	1,367	75,179	4,797
1-2 Aegean Sea	53,870	146,773	442	978	82,172	2,307	18,280	14,215	62	47,308
1-3 Mediterranean	865,206	279,339	3,458	53,022	14,192	214	5,422	8,466	40	50
2 Black Sea	924	3,888	0	0	402,503	46	21,479	255	359,697	21,026
3-1 Cent. North	0	0	0	0	75,141	287	13,092	4,700	54,256	2,806
3-2 Cent. South	0	0	0	0	16,265	132	10,233	5,891	1	8
3-3 Cent. East	0	0	0	0	6,160	15	5,291	575	278	1
Study Area Total	920,000	430,000	3,900	54,000	687,968	3,025	83,965	35,469	489,513	75,996
All Turkey Total	920,000	430,000	3,900	54,000	773,000	40,000	120,000	47,000	490,000	76,000

Table C-14 Percentage of the Amounts of Production of Each Fruit in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Oranges	Mandarins	Sour Oranges	Grape Fruits	Nuts	Pistachios	Walnuts	Almonds	Hazelnuts	Chestnuts
1-1 Marmara	0.00	0.00	0.00	0.00	13.31	0.79	12.11	3.85	15.36	6.31
1-2 Aegean Sea	5.86	34.13	11.35	1.81	11.94	76.26	21.77	40.08	0.01	62.25
1-3 Mediterranean	94.04	64.96	88.67	98.19	2.06	7.07	6.46	23.87	0.01	0.07
2 Black Sea	0.10	0.90	0.00	0.00	58.51	1.52	25.58	0.72	73.48	27.67
3-1 Cent. North	0.00	0.00	0.00	0.00	10.92	9.49	15.59	13.25	11.08	3.69
3-2 Cent. South	0.00	0.00	0.00	0.00	2.36	4.36	12.19	16.61	0.00	0.01
3-3 Cent. East	0.00	0.00	0.00	0.00	0.90	0.50	6.30	1.62	0.06	0.00
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(4-4)

Table C-13 Production of Fruits in Seven Agro-Ecological Regions in 1994. (Unit:tons)

Agro- Ecological Regions	Grape like	Straw	Mulberries	Figs	Carobs	Bananas	Pomegra	Persimmons	Grapes	Kiwi
	Fruits Total	berries					nates			
1-1 Marmara	279,318	27,935	3,231	6,527	0	0	246	432	240,947	0
1-2 Aegean Sea	1,686,554	5,326	3,837	232,818	654	0	17,410	72	1,426,436	1
1-3 Mediterranean	341,427	25,623	2,296	17,756	14,345	30,000	17,159	6,883	227,361	4
2 Black Sea	44,857	2,074	15,936	10,454	0	0	535	1,365	14,471	2
3-1 Cent. North	221,232	1,738	13,983	1,497	0	0	7,346	27	196,641	0
3-2 Cent. South	519,254	1,572	2,683	431	1	0	1,582	0	513,185	0
3-3 Cent. East	43,154	168	2,022	95	0	0	16	0	40,853	0
Study Area Total	3,135,776	64,436	43,988	269,578	15,000	30,000	44,094	8,779	2,659,894	7
All Turkey Total	3,984,307	65,000	78,000	279,000	15,000	30,000	58,000	9,300	3,450,000	7

Table C-14 Percentage of the Amounts of Production of Each Fruit in Seven Agro-Ecological Regions in 1994.

Agro- Ecological Regions	Grape like	Straw	Mulberries	Figs	Carobs	Bananas	Pomegra	Persimmons	Grapes	Kiwi
	Fruits	berries					nates			
1-1 Marmara	8.91	43.35	7.35	2.42	0.00	0.00	0.56	4.92	9.06	0.00
1-2 Aegean Sea	53.78	8.27	8.72	86.36	4.36	0.00	39.48	0.82	53.65	14.29
1-3 Mediterranean	10.89	39.77	5.22	6.59	95.63	100.00	38.91	78.40	8.55	57.14
2 Black Sea	1.43	3.22	36.23	3.88	0.00	0.00	1.21	15.55	0.54	28.57
3-1 Cent. North	7.06	2.70	31.79	0.56	0.00	0.00	16.66	0.31	7.39	0.00
3-2 Cent. South	16.56	2.44	6.10	0.16	0.01	0.00	3.13	0.00	19.29	0.00
3-3 Cent. East	1.38	0.26	4.60	0.04	0.00	0.00	0.04	0.00	1.54	0.00
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table C-15 Supply of Main Agricultural Products to the Nation.

Year	1990	1991	1992	1993	1994
Population (*1,000)	56,098	57,326	58,584	59,869	61,183
Wheat Product. (ton)	20,000,000	20,400,000	19,300,000	21,000,000	17,500,000
Supply (kg/person)	356.52	355.86	329.44	350.77	286.03
Pulses (ton)	1,916,000	1,709,000	1,570,000	1,675,000	1,440,000
Supply (kg/person)	34.15	29.81	26.80	27.98	23.54
Potato & Onion (ton)	5,850,000	6,200,000	6,300,000	6,300,000	6,150,000
Supply (kg/person)	104.28	108.15	107.54	105.23	100.52
Leafy & Edible Stem Vegetables (ton)	1,419,700	1,394,000	1,419,638	1,433,670	1,451,350
Supply (kg/person)	25.31	24.32	24.23	23.95	23.72
Fruit Vegetables (ton)	13,958,000	14,931,000	14,864,000	14,160,000	15,080,000
Supply (kg/person)	248.81	260.46	253.72	236.52	246.47
Nuts (ton)	630,000	628,000	801,000	598,000	773,000
Supply (kg/person)	11.23	10.95	13.67	9.99	12.63
Pome Fruits (ton)	2,407,300	2,397,200	2,616,000	2,594,400	2,604,400
Supply (kg/person)	43	42	45	43	43
Citrus(Lem.Man.Ora.etc)	1,474,000	1,695,500	1,674,000	1,737,100	1,877,900
Supply (kg/person)	26.28	29.58	28.57	29.02	30.69
Milked Animal (*1,000)	35,793	35,389	34,237	33,175	31,902
Milk Produced (ton)	9,617,415	10,240,105	10,279,245	10,406,020	10,560,920
Supply (kg/person)	171.44	178.63	175.46	173.81	172.61
Egg Poultry (*1,000heads)	96,676	139,206	152,530	178,260	183,684
Egg(Hen,Turkey,*1,000)	7,698,637	7,667,990	8,215,016	10,006,269	9,845,407
Supply No./person)	137.24	133.76	140.23	167.14	160.92
No. of Slaughtered Animals	13,767,000	11,350,000	10,647,000	9,965,000	10,863,000
Meat Produced (ton)	506,995	466,840	448,925	432,180	466,190
Supply (kg/person)	9.04	8.14	7.66	7.22	7.62

Source : Agricultural Productions in each year are quoted from Statistical Indicators, 1923-1955.

Population in 1991-94 are estimation by State Institute of Statistics.

(Source: Statistical Indicators, 1923-1995.

Table C-16 Number of Livestock in Seven Agro-Ecological Regions in 1994. (Unit: heads) (2-1)

Agro-Ecological Regions	Sheep	Ordinal Goats	Angora Goats		Total Cattle	in which Dairy Cows		Buffalo	Horse
			Goats	Goats		Dairy Cows	Dairy Cows		
1-1 Marmara	1,329,690	286,130	60	951,600	465,870	20,490	24,360		
1-2 Aegean	3,372,380	1,735,040	5,130	1,404,880	532,830	1,880	72,910		
1-3 Mediterranean	1,196,750	1,847,730	30	671,460	353,040	1,260	31,200		
2 Black Sea	1,751,580	151,940	50,470	2,045,500	1,082,970	90,090	42,730		
3-1 Cent. North	4,022,080	375,340	499,180	1,588,800	765,280	55,100	28,330		
3-2 Cent. South	5,303,900	548,000	171,500	1,012,110	524,970	17,760	36,250		
3-3 Cent. East	1,840,600	113,270	280	894,140	456,430	64,940	14,980		
Study Area Total	18,816,980	5,057,450	726,650	8,568,490	4,181,390	251,520	250,760		
All Turkey Total	35,646,000	8,767,100	797,000	11,901,000	5,713,340	305,000	437,000		

Table C-17 Percentage of Each Livestock in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Sheep	Ordinal Goats	Angora Goats		Total Cattle	in which Dairy Cows		Buffalo	Horse
			Goats	Goats		Dairy Cows	Dairy Cows		
1-1 Marmara	7.07	5.66	0.01	11.11	11.14	8.15	9.71		
1-2 Aegean	17.92	34.31	0.71	16.40	12.74	0.75	29.08		
1-3 Mediterranean	6.36	36.53	0.00	7.84	8.44	0.50	12.44		
2 Black Sea	9.31	3.00	6.95	23.87	25.90	35.82	17.04		
3-1 Cent. North	21.37	7.42	68.70	18.54	18.30	21.91	11.30		
3-2 Cent. South	28.19	10.84	23.60	11.81	12.55	7.06	14.46		
3-3 Cent. East	9.78	2.24	0.04	10.44	10.92	25.82	5.97		
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00		

Source : Agricultural Structure (Production, Price, Value) 1994.

Table C-16 Number of Livestock in Seven Agro-Ecological Regions in 1994. (Unit: heads) (2-2)

Agro-Ecological Regions	Mule	Donkey	Broiler hens	Egg hens	Turkey	Ducks	Goose
1-1 Marmara	2,950	23,620	9,971,746	7,078,906	306,288	162,358	102,263
1-2 Aegean	20,580	143,530	13,201,196	15,370,050	202,137	86,255	40,745
1-3 Mediterranean	17,490	57,400	17,725,500	3,150,982	55,674	29,962	26,030
2 Black Sea	33,290	74,670	3,244,804	4,922,574	279,393	134,139	96,871
3-1 Cent. North	11,760	119,800	70,198,552	8,176,819	620,568	248,696	329,982
3-2 Cent. South	11,600	113,130	7,884,424	9,838,058	528,618	106,457	145,995
3-3 Cent. East	4,170	55,020	241,900	1,742,089	152,590	71,985	96,295
Study Area Total	101,840	587,170	122,468,122	50,279,478	2,145,268	839,852	838,181
All Turkey Total	169,000	809,000	125,842,269	57,553,537	3,443,996	1,186,893	1,719,833

Table C-17 Percentage of Each Livestock in Seven Agro-Ecological Regions in 1994.

Agro-Ecological Regions	Mule	Donkey	Broiler hens	Egg hens	Turkey	Ducks	Goose
1-1 Marmara	2.90	4.02	8.14	14.08	14.28	19.33	12.20
1-2 Aegean	20.21	24.44	10.78	30.57	9.42	10.27	4.86
1-3 Mediterranean	17.17	9.78	14.47	6.27	2.60	3.57	3.11
2 Black Sea	32.69	12.72	2.65	9.79	13.02	15.97	11.56
3-1 Cent. North	11.55	20.40	57.32	16.26	28.93	29.61	39.37
3-2 Cent. South	11.39	19.27	6.44	19.57	24.64	12.68	17.42
3-3 Cent. East	4.09	9.37	0.20	3.46	7.11	8.57	11.49
Study Area Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table C-18 Fundamentals of Farming Plans in the Seven Agro-Ecological Area

Regions	Main Crops and Fundamental Direction of Farming Plans
1-1 Marmara	<p>Main Crops : Wheat, Barley, Maize, Sunflower, Sugar beet, Fruits, Direction : •Selection of crops and varieties for higher benefit</p> <ul style="list-style-type: none"> •Development of double cropping system •Diffusion of water-saved irrigation system •Crop diversification under irrigated conditions
1-2 Aegean	<p>Main Crops : Wheat, Cotton, Sugar beet, Vegetables, Fruits(Grape, Olive, Orange etc.) Direction : •Utilization of rainfall water in summer season</p> <ul style="list-style-type: none"> •Selection of crops and varieties for higher benefit •Double cropping system of vegetables. •Diffusion of water-saved irrigation system
1-3 Mediterranean	<p>Main Crops : Wheat, Maize, Cotton, Vegetables(Fruits vegetables in green house) , Fruits (Orange, Lemon, Mandarin etc.) Direction : •Utilization of rainfall water in summer season</p> <ul style="list-style-type: none"> •Selection of crops and varieties for higher benefit •Double cropping system of vegetables. •Classification of vegetables and fruits by quality. •Crop diversification under irrigated conditions.
2 Black Sea	<p>Main Crops : Wheat, Rice, Maize, Sugar beet, Potatoes, Fruits(Nuts etc.), Direction : •Utilization of rainfall water in summer season.</p> <ul style="list-style-type: none"> •Development of double cropping by vegetables and fodder crops. •Improvement of crop yield by fertilization. •Control of soil erosion.
3-1 Cent. North.	<p>Main Crops : Wheat, Chick pea, Cow vetches, Sunflower, Potatoes, Direction : •Improvement of soil fertility by leguminous crops.</p> <ul style="list-style-type: none"> •Control of salinization of soil under irrigated condition •Reduction of fallow by introducing the pulses. •Crop diversification under irrigated condition.
3-2 Cent. South.	<p>Main Crops : Wheat, Barley, Pulses, Sugar beet, Vegetables, Fruits, Direction: • Improvement soil fertility by leguminous crops.</p> <ul style="list-style-type: none"> •Development of sustainable agriculture. •Mechanization of farming system.
3-3 Cent. East	<p>Main Crops : Wheat, Barley, Pulses, Sugar beet, Vegetables, Fruits(Peach, Apple etc.), Direction : •Control of soil erosion & improvement of soil fertility.</p> <ul style="list-style-type: none"> •Development of matter cycle farming between animal and crops •Introduction of leguminous crops to improve the soil fertility •Control of salinization of soil under irrigated condition

Table C-19 Existed Sown Area, Planned Irrigation Area and Proposed Irrigation Area. (7-1)

1-1 Marmara Sea Coast Region

Crop Name (Unit)	Sown Area in 1994 (ha)	% to Totl Agricultur Area (%)	Total Production (tons)	Average Yield (kg/ha)	Irrigated Area199 (ha)	Planned Irrigatio Area (ha)	Proposed Irrigation Area(ha)	Target Yield under Irriga (kg/ha)
Total Agric Area	1,844,836	100.00			227,921	3,126	3,126	
Total Crops	1,525,614	82.70	5,603,539	3,673	126,691		2,650	
Wheat	831,207	45.06	2,033,778	2,447			200	4,300
Barley	90,263	4.89	289,565	3,208				4,300
Maize	91,808	4.98	498,807	5,433			250	6,000
Rice	13,372	0.72	40,756	3,048			100	5,000
Chick Pea	4,100	0.22	4,019	980			550	1,300
Dry Bean	7,916	0.43	9,228	1,166				2,000
Sugar Beet	36,612	1.98	1,526,259	41,687			1,000	60,000
Sun Flower	362,720	19.66	479,644	1,322			550	2,500
Dry Onion	17,478	0.95	408,850	23,392				30,000
Potatoes	11,179	0.61	192,665	17,235				25,000
Alfalfa	16,455	0.89						25,000
Vegetables	88,037	4.77	2,511,511	28,528	53,638		150	
Tomatoes			1,270,134				100	45,000
Water Melon			436,441				50	28,000
GreenPepper			102,086					12,000
Cabbage			98,376					33,000
Egg Plant			89,935					22,000
Melon			85,847					15,000
Fruit trees	175,580	9.52	917,081		47,592		326	
Grape	29,502		240,947					
Hazel nuts	33,236,995 *		75,179					
Olive	8,326,030 *		82,596					
Peach	2,964,976 *		104,492				166	
Apples	2,884,680 *		170,936				160	
Pears	2,021,031 *		86,531					
	2,010							
Fallow	37,140	2.01						

Notes : * shows the summed number of fruit bearing trees in the region.

Planned Irrigation Area is based on the Long List Projects. (Same in all regions)

Source of Area, Production, Yield and No. of trees are *Agricultural Structure(Production, Price, Value).

Table C-19 Existed Sown Area, Planned Irrigation Area and Proposed Irrigation Area. (7-2)

1-2 Aegean Sea Coast Region

Crop Name (Unit)	Sown Area in 1994 (ha)	% to Totl Agricultur Area (%)	Total Production (tons)	Average Yield (kg/ha)	Irrigated Area 199 (ha)	Planned Irrigatio Area (ha)	Proposed Irrigation Area (ha)	Target Yield under Iriga (kg/ha)
Total Agric Area	2,813,021	100.00			664,499	16,783	16,783	
Total Crops	1,860,997	66.16	5,268,005	2,831	430,862		7,683	
Wheat	804,318	28.59	1,904,197	2,367			2,500	4,300
Barley	223,729	7.95	535,823	2,395				4,300
Maize	43,653	2.37	210,385	4,819			500	6,000
Rice	2,839	0.10	10,066	3,546				5,000
Chick Pea	107,268	3.81	108,508	1,012			583	1,300
Dry Bean	16,261	0.88	21,585	1,327				2,000
Sugar Beet	21,645	0.77	806,785	37,274			2,500	60,000
Tobacco	149,215	8.09	108,624	728				1,100
Cotton	235,396	8.37	644,663	2,739			1,500	3,500
Sun Flower	71,854	2.55	97,570	1,358			100	2,000
Sesame	19,197	1.04	10,078	525				1,000
Dry Onion	9,918	0.35	164,382	16,574				25,000
Potatoes	18,186	0.65	467,040	25,681				33,000
Alfalfa	25,218	0.90						25,000
Vegetables	182,748	6.50	4,724,114	25,850	99,276		3,900	
Tomato			1,848,202				2,000	45,000
Water Melon			1,065,877				1,400	28,000
Melon			491,507				500	15,000
Egg Plant			246,352					22,000
Cucumber			191,248					25,000
Green Pepper			155,727					12,000
Fruit trees	607,376	21.59	3,932,239		134,360		5,200	
Grape	158,705		1,426,436				2,000	
Olives	62,091,665 *		1,156,651					
Figs	7,609,500 *		232,818					
Apples	5,464,218 *		491,478				2,000	
Mandarin	3,882,815 *		146,773				1,200	
Peaches	3,361,358 *		120,744					
Others	2,165							
Fallow	134,517	4.78						

Notes : * shows the summed number of fruit bearing trees in the region.

Source of Area, Production, Yield and No. of trees are "Agricultural Structure(Production, Price, Value)

Table C-19 Existed Sown Area, Planned Irrigation Area and Proposed Irrigation Area. (7-3)

1-3 Mediterranean Sea Coast Region

Crop Name (Unit)	Sown Area in 1994 (ha)	% to Total Agricultur Area (%)	Total Production (tons)	Average Yield (kg/ha)	Irrigated Area 199 (ha)	Planned Irrigatio Area (ha)	Proposed Irrigation Area (ha)	Target Yield under Irriga (kg/ha)
Total Agric Area	1,814,127	100.00			543,686	15,096	15,096	
Total Crops	1,352,336	74.54	4,058,455	3,001	364,377		10,320	
Wheat	801,958	44.21	2,247,642	2,803			1,000	4,300
Barley	103,580	5.71	222,879	2,152				4,300
Maize	68,889	3.80	508,563	7,382			2,500	7,500
Rice	1,057	0.06	2,509	2,374				4,000
Chick Pea	77,052	4.25	53,950	700			720	1,200
Dry Bean	2,359	0.13	2,531	1,073				2,000
Sugar Beet	2,850	0.16	110,111	38,635			100	60,000
Tobacco	9,231	0.51	7,708	835				1,100
Cotton	171,653	9.46	478,897	2,790			5,500	3,500
Sesame	12,169	0.67	9,057	744				1,000
Ground nut	26,261	1.45	61,298	2,334			500	3,000
Dry Onion	8,558	0.47	161,754	18,901				25,000
Potatoes	3,599	0.20	74,138	20,600				30,000
Alfalfa	1,818	0.10						25,000
Vegetables	120,901	6.66	4,110,539	33,999	82,389		1,726	
Tomato			1,509,147				1,000	45,000
Water Melon			869,984				500	26,000
Cucumber			472,887				226	25,000
Egg Plant			234,599					20,000
Green Pepper			201,941					12,000
Squash			131,665					13,000
Fruit trees	170,431	9.39	2,670,686		96,921		3,050	
Oranges	9,576,539 *		865,206				1,000	
Olive	7,583,018 *		112,583				800	
Lemons	4,526,891 *		458,671				600	
Mandarin	3,390,151 *		279,339				650	
Apples	3,062,461 *		282,900					
Peaches	2,256,191 *		101,358					
Others	124							
Fallow	168,517	9.29						

Notes : * shows the summed number of fruit bearing trees in the region.

Source of Area, Production, Yield and No. of trees are "Agricultural Structure(Production, Price, Value).

Table C-19 Existed Sown Area, Planned Irrigation Area and Proposed Irrigation Area. (7-4)

2 Black Sea Region

Crop Name (Unit)	Sown Area in 1994 (ha)	% to Total Agricultur Area (%)	Total Production (tons)	Average Yield (kg/ha)	Irrigated Area 199 (ha)	Planned Irrigatio Area (ha)	Proposed Irrigation Area (ha)	Target Yield under Iriga (kg/ha)
Total Agric Area	1,787,542	100.00			147,931	17,525	17,525	
Total Crops	1,034,375	57.87	2,502,174	2,419	100,624		12,500	
Wheat	443,770	24.83	669,386	1,508			1,700	3,500
Barley	126,216	7.06	202,394	1,604			600	3,700
Spelt Wheat	11,708	0.65	13,561	1,158				3,500
Maize	241,405	13.50	486,007	2,013			4,500	4,500
Rice	13,280	0.74	32,483	2,446			700	4,000
Chick Pea	2,449	0.14	2,083	851				1,300
Dry Bean	32,994	1.85	19,464	590			1,000	1,600
Sugar Beet	23,102	1.29	437,816	18,951			2,000	60,000
Tobacco	22,951	1.28	16,646	725				1,100
Sun Flower	15,078	0.84	19,774	1,311			2,000	1,800
Soy Bean	3,638	0.20	7,759	2,133				3,000
Dry Onion	2,138	0.12	17,938	8,390				25,000
Potatoes	34,758	1.94	490,018	14,098				25,000
Alfalfa	14,618	0.82						25,000
Vegetables	50,072	2.80	1,275,151	25,466	30,443		4,770	
Tomato			323,035				2,000	35,000
Cabbage			161,078					30,000
Cucumber			129,089				1,400	20,000
Green Pepper			115,791				1,370	10,000
Fresh Beans			104,618					5,500
Water Melon			100,688					24,000
Egg Plant			59,047					18,000
Fruit trees	529,922	29.65	1,347,214		16,864		255	
Hazel Nuts	203,670,656 *		359,679					
Apples	3,446,867 *		107,941				255	
Pears	1,634,268 *		51,504					
Plums	1,059,588 *		22,844					
Cherries	810,969 *		22,077					
Others	12,580							
Fallow	145,975	8.17						

Notes : * shows the summed number of fruit bearing trees in the region.

Source of Area, Production, Yield and No. of trees are "Agricultural Structure(Production, Price, Value)"

Table C-19 Existed Sown Area, Planned Irrigation Area and Proposed Irrigation Area. (7-5)

3-1 Central North Region

Crop Name (Unit)	Sown Area in 1994 (ha)	% to Total Agricultur Area (%)	Total Production (tons)	Average Yield (kg/ha)	Irrigated Area 199 (ha)	Planned Irrigatio Area (ha)	Proposed Irrigation Area (ha)	Target Yield under Irriga (kg/ha)
Total Agric Area	5,032,266	100.00			384,081	17,961	17,961	
Total Crops	3,742,766	74.38	9,878,182	2,639	260,553		11,261	
Wheat	2,186,477	43.45	3,722,845	1,703			5,000	3,500
Barley	775,857	15.42	1,682,115	2,168				3,700
Maize	22,275	0.44	98,593	4,426				5,000
Rice	6,674	0.13	26,615	3,988			130	4,500
Chick Pea	184,482	3.67	155,750	844			1,200	1,300
Dry Bean	20,481	0.41	22,689	1,108				2,000
Lentil	118,918	2.36	68,189	573				1,300
Cow Vetch	128,970	2.56	88,915	689				1,300
Sugar Beet	93,322	1.85	2,969,000	31,815			4,200	50,000
Poppy	10,103	0.20	4,932	488				800
Sun Flower	75,736	1.51	68,580	906			731	1,500
Dry Onion	15,814	0.31	336,887	21,303				25,000
Potatoes	24,485	0.49	513,709	20,981				30,000
Alfalfa	24,548	0.49						20,000
Vegetables	110,852	2.20	1,818,673	16,406	60,782		6,200	
Melon			559,334				2,500	15,000
Tomato			430,257				2,000	40,000
Water Melon			271,118				1,700	20,000
Carrot			111,478					22,000
Cucumber			78,850					25,000
Fruit trees	162,025	3.22	640,411		62,745		500	
Hazel Nut	21,789,660 *		54,256					
Apples	3,391,147 *		149,620				300	
Pears	1,617,914 *		55,024				200	
Sour Cherries	1,175,539 *		27,756					
Plums	1,140,613 *		28,953					
Others	10,970							
Fallow	981,105	19.50						

Notes : * shows the summed number of fruit bearing trees in the region.

Source of Area, Production, Yield and No. of trees are "Agricultural Structure(Production, Price, Value)

Table C-19 Existed Sown Area, Planned Irrigation Area and Proposed Irrigation Area. (7-6)

3-2 Central South Region

Crop Name (Unit)	Sown Area in 1994 (ha)	% to Total Agricultur Area (%)	Total Production (tons)	Average Yield (kg/ha)	Irrigated Area 199 (ha)	Planned Irrigatio Area (ha)	Proposed Irrigation Area(ha)	Target Yield under Iniga (kg/ha)
Total Agric Area	4,450,515	100.00			599,296	38,336	38,336	
Total Crops	3,384,347	76.04	11,072,912	3,272	476,535		25,336	
Wheat	1,870,067	42.02	2,761,472	1,477			8,000	3,500
Barley	921,382	20.70	1,713,061	1,859			700	3,700
Rye	78,084	1.75	96,046	1,230				3,000
Chick Pea	133,946	3.01	108,678	811			4,400	1,300
Dry Bean	42,581	0.96	46,572	1,094				2,000
Lentil	34,150	0.77	22,076	646				1,300
Sugar Beet	127,708	2.87	4,029,781	31,555			12,000	50,000
Poppy	6,732	0.15	3,493	519				800
Sun Flower	23,918	0.54	24,899	1,041			236	1,800
Dry Onion	8,604	0.19	129,085	15,003				25,000
Potatoes	66,452	1.49	2,054,001	30,910				40,000
Alfalfa	20,994	0.47						20,000
Vegetables	38,440	0.86	856,998	22,294	38,825		5,600	
Tomato			295,457				2,600	40,000
Water Melon			93,908				1,500	20,000
Melon			93,254				1,500	15,000
Cabbage			94,489					30,000
Cucumber			86,752					25,000
Fresh Beans			33,840					5,500
Fruit trees	139,683	3.14	1,479,383		83,936		7,400	
Apples	10,242,969 *		749,844				3,000	
Grape	96,450		513,185				2,400	
Pears	1,361,822 *		56,519				1,000	
Sour Cherry	927,858 *		30,018				1,000	
Apricot	794,744 *		31,441					
Cherries	578,338 *		21,450					
Others	2,303							
Fallow	864,748	19.43						

Notes : * shows the summed number of fruit bearing trees in the region.

Source of Area, Production, Yield and No. of trees are "Agricultural Structure(Production, Price, Value)

Table C-19 Existed Sown Area, Planned Irrigation Area and Proposed Irrigation Area. (7-7)

3-3 Central East Region

Crop Name (Unit)	Sown Area in 1994 (ha)	% to Totl Agricultur Area (%)	Total Production (tons)	Average Yield (kg/ha)	Irrigated Area199 (ha)	Planned Irrigatio Area (ha)	Proposed Irrigation Area(ha)	Target Yield under Iniga (kg/ha)
Total Agric Area	1,276,342	100.00			185,214	15,020	15,020	
Total Crops	918,524	71.97	2,578,680	2,807	132,265		10,320	
Wheat	589,696	46.20	764,734	1,297			3,520	3,500
Barley	132,388	10.37	189,645	1,432			300	3,700
Maize	9,080	0.71	25,317	2,788				4,500
Chick Pea	25,719	2.02	23,292	906			3,200	1,300
Dry Bean	6,841	0.54	6,478	947				2,000
Cow Vetch	34,423	2.70	29,647	861				1,300
Sugar Beet	40,558	3.18	1,009,062	24,879			3,200	60,000
Tobacco	6,561	0.51	4,749	724				1,100
Sun Flower	19,439	1.52	27,797	1,430			100	1,800
Dry Onion	13,983	1.10	264,922	18,946				25,000
Potatoes	11,035	0.86	203,484	18,440				30,000
Alfalfa	9,816	0.77						20,000
Vegetables	24,552	1.92	521,583	21,244	15,846		3,500	
Tomato			272,927				2,000	40,000
Water Melon			100,667				1,000	20,000
Cucumber			33,355				500	22,000
Cabbage			24,980					30,000
Fresh Beans			23,811					5,500
Fruit trees	42,059	3.30	158,137		37,102		500	
Apple	918,205 *		48,853				300	
Peach	436,135 *		13,650				200	
Hazel nut	383,400 *		278					
Pears	337,220 *		10,375					
Apricot	243,256 *		9,285					
Others	4,788							
Fallow	276,603	21.67						

Notes : * shows the summed number of fruit bearing trees in the region.

Source of Area, Production, Yield and No. of trees are "Agricultural Structure(Production, Price, Value)

Crops	Existing Average Yields and Target Yields of Main Crops in Seven Agro-Ecological Regions. (Unit:kg/ha)									
	1990-94 Ave. Yield	1994Turkey Ave. Yield	1994StudyA Ave. Yield	1-1 Marmara	1-2 Aegean Sea	1-3 Mediterrane	2 Black Sea	3-1 Cent. North	3-2 Cent. South	3-3 Cent. East
Wheat (EY) (TY)	2,035	1,786	1,874	2,447	2,367	2,803	1,508	1,703	1,477	1,297
Barley (EY) (TY)	2,119	2,000	2,037	3,208	2,395	2,152	1,604	2,168	1,859	1,432
Maize (EY) (TY)	4,177	3,814	3,828	5,433	4,819	7,382	2,017	4,426	2,091	2,788
Rice (EY) (TY)	2,909	2,963	3,022	3,048	3,546	2,374	2,445	3,988	4,500	3,077
Chick pea (EY) (TY)	919	855	853	980	1,012	700	851	844	811	906
Dry beans (EY) (TY)	1,211	1,104	993	1,166	1,327	1,073	590	1,108	1,094	947
Lentil(green)(EY) (TY)	905	606	615	819	739	1,123	960	573	641	905
Cow vetch (EY) (TY)	641	623	632	1,300	1,500	1,500	1,400	1,300	1,300	1,400
Sugar beet (EY) (TY)	36,297	31,417	31,590	41,687	37,274	38,635	23,102	31,815	31,555	24,879
Tobacco (EY) (TY)	922	823	742	557	728	835	725	1,091	1,300	724
Cotton(raw)(EY) (TY)		2,785	2,756	1,316	2,739	2,790	1,100	1,300	1,300	1,100
Sunflower (EY) (TY)	1,358	1,263	1,263	2,500	3,500	3,500	1,311	906	1,041	1,430
Soy bean (EY) (TY)	2,249	2,414	2,418	1,807	2,000	2,465	1,800	1,500	1,800	1,800
				3,000	3,000	3,000	2,133	3,000	3,000	3,000

Notes: Average Yield in recent 5 years is quoted from "Statistical Yearbook of Turkey 19 Others are quoted from "Agricultural Production, 1994.
(EY) means existing yields (Average yield in each regions in 1994). (TY) means the target yields.

Table C-20 Existing Average Yields and Target Yields of Main Crops in Seven Agro-Ecological Regions. (Unit:kg/ha) (2-2)

Crops	1990-94 Ave. Yield	1994Turkey Ave. Yield	1994StudyA Ave. Yield	1-1 1-2 1-3 2 3-1 3-2 3-3							
				Marmara	Aegean Set	Mediterrane	Black Set	Cent. Nord.	Cent. South	Cent. East	
Ground nuts (EY) (TY)	2,345	2,333	2,329		2,280	2,334			1,950	2,600	
Sesame (EY) (TY)	420	400	604	622	525	744		592	441	900	
Dry onion (EY) (TY)	18,779	19,565	19,398	23,392	16,574	18,901	8,390	21,303	15,003	25,000	18,946
Potatoes (EY) (TY)	23,211	22,895	23,543	17,235	25,681	20,600	14,098	20,981	30,910	40,000	18,440
Alfalfa (EY) (Fresh Yield,TY)		8,062	10,513	25,000	25,000	25,000	25,000	20,000	20,000	20,000	20,000
Tomato (EY) (TY)				45,000	45,000	45,000	35,000	40,000	40,000	40,000	40,000
Cucumber (EY) (TY)				25,000	25,000	25,000	20,000	25,000	25,000	25,000	22,000
Egg plant (EY) (TY)				22,000	22,000	20,000	18,000	17,000	17,000	17,000	17,000
Watermelon (EY) (TY)				28,000	28,000	26,000	24,000	20,000	20,000	20,000	20,000
Melon (EY) (TY)				15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Freshbean (EY) (TY)							5,000	5,500	5,500	5,500	5,500
Greenpepper(EY) (TY)				12,000	12,000	12,000	10,000				
Cabbage (EY) (TY)				33,000	33,000	33,000	30,000	30,000	30,000	30,000	30,000
Carrot (TY)								22,000			
Squash (TY)							13,000				

Notes: Average Yield in recent 5 years is quoted from "Statistical Yearbook of Turkey 19 Others are quoted from "Agricultural Production, 1994.

(EY) means existing yields (Average yield in each regions in 1994), (TY) means the target yields.

Table C-21

Some examples of existing cropping order in the ten study area

ProjectName	Province	Ex.	1st year	2nd year	3rd year	4th year
Hacilar	KIRIKKALE	1	Wheat	Sunflower	Lentil	
		2	Wheat	Water melon	Chick pea	
		3	Wheat	Sunflower	Wheat	
Urunlu	KONYA	1	Wheat	Dry bean	Water melon	Sugar beet
		2	Dry bean	Wheat	Water melon	Sugar beet
		3	Water melon	Dry bean	Wheat	Sugar beet
		4	Sugar beet	Water melon	Wheat	Dry bean
Kalesekisi	ADANA	1	Wheat	Wheat	Vegetables	
Camlibel	TOKAT	1	Sugar beet	Wheat	Cow vetch	
		2	Wheat	Cow vetch	Sugar beet	
		3	Wheat	Sugar beet	Barley	
Kozluk	SAMSUN	1	Maize	Vegetables	Maize	
		2	Rice	Rice	Rice	
		3	Vegetables	Maize	Maize	
Kuskara	KASTAMONU	1	Sugar beet	Wheat	Garlic	
		2	Sugar beet	Oats	Vegetables	
		3	Wheat	Vegetables	Garlic	
Ozdenk	ESKISEHIR	1	Wheat	Barley	Sugar beet	
		2	Barley	Sugar beet	Wheat	
		3	Sugar beet	Barley	Wheat	
Aslanlar	IZMIR	1	Wheat	Water melon	Tomates	
		2	Tomates	Wheat	Water melon	
		3	Wheat	Wheat	Tomates	
Ilyaskoy	YALOVA	1	Wheat	Oats	Sunflower	
		2	Barley	Wheat	Sunflower	
		3	Oats	Sunflower	Wheat	
K.Karistiran	KIRKLARELI	1	Wheat	Sunflower	Wheat	
		2	Wheat	Sugar beet	Wheat	
		3	Sugar beet	Sunflower	Wheat	

Notes : By the hearing survey in villages.

Table C-22 Amounts of Fertilizers and Ingredients used for Crops

Provinces	Project Name	Crops	fertiliz	N (%)	P (%)	K (%)	Amoun kg/dec	N kg/dec	P kg/dec	K kg/dec		
KIRIKKAL	Hacilar	Wheat	AN	26			10	2.6	0.0	0.0		
			DAP	18	46		20	3.6	9.2	0.0		
		Total						6.2	9.2	0.0		
		Chik pea	No-fertilization				0	0.0	0.0	0.0		
		Lentil	No-fertilization				0	0.0	0.0	0.0		
		Sunflower	AN	26			25	6.5	0.0	0.0		
		Water Melon	AN	26			25	6.5	0.0	0.0		
KONYA	Urunlu	Wheat	Urea	46			20	9.2	0.0	0.0		
			Comp.	15	15	15	20	3.0	3.0	3.0		
		Total						12.2	3.0	3.0		
		Fresh bean	AN	26				20	5.2	0.0	0.0	
			Comp.	15	15	15		40	6.0	6.0	6.0	
		Total						11.2	6.0	6.0		
		Sugar beet(1)	AN	26				40	10.4	0.0	0.0	
			Comp.	15	15	15		75	11.3	11.3	11.3	
		Total							21.7	11.3	11.3	
Sugar beet(2)	DAP	18	46			50	9.0	23.0	0.0			
	Urea	46				50	23.0	0.0	0.0			
	AN	26				50	13.0	0.0	0.0			
Total							45.0	23.0	0.0			
Water melon	AN	26				20	5.2	0.0	0.0			
	Comp.	15	15	15		40	6.0	6.0	6.0			
Total							11.2	6.0	6.0			
Melon	AN	26				20	5.2	0.0	0.0			
	Comp.	15	15	15		40	6.0	6.0	6.0			
Total							11.2	6.0	6.0			
ADANA	Kalesekisi	Grape	Comp.	20	20		20	4.0	4.0	0.0		
			Comp.	15	15	15	30	4.5	4.5	4.5		
		Total						8.5	8.5	4.5		
Cherry (1)	DAP	18	46			18.75	3.4	8.6	0.0			
Cherry (2)	DAP	18	46			35	6.3	16.1	0.0			
TOKAT	Camlibel	Wheat	AN	26			10	2.6	0.0	0.0		
			DAP	18	46		10	1.8	4.6	0.0		
		Total						4.4	4.6	0.0		
		Barley	AN	26				10	2.6	0.0	0.0	
			DAP	18	46			10	1.8	4.6	0.0	
		Total						4.4	4.6	0.0		
		Oats	AN	26 (if necessary)				8	2.1	0.0	0.0	
		Cow Vetch	AN	26 (if necessary)				7	1.8	0.0	0.0	
Sugar beet	Urea	46				17	7.8	0.0	0.0			
	AN	26				20	5.2	0.0	0.0			
	DAP	18	46			50	9.0	23.0	0.0			
Total							22.0	23.0	0.0			
Alfalfa	AN	26				20	5.2	0.0	0.0			

Notes,AN:Ammonium Nitrate, DAP:DiAmmonium Phosphate, TSP:Triple Super Phosphate, Comp.:Compound Fertilizers.

SAMSUN Kozluk	Rice	AN	26		50	13.0	0.0	0.0
	Maize (1)	AN	26		30	7.8	0.0	0.0
		DAP	18	46	20	3.6	9.2	0.0
		Total				11.4	9.2	0.0
	Maize (2)	AN	26		25	6.5	0.0	0.0
		DAP	18	46	20	3.6	9.2	0.0
		Total				10.1	9.2	0.0
	Maize (3)	AN	26		25	6.5	0.0	0.0
		DAP	18	46	50	9.0	23.0	0.0
		Total				15.5	23.0	0.0
	Vegetables	Animal Manure		2ton				
		AN	26		20	5.2	0.0	0.0
	Hazelnuts(1)	AN	26		40	10.4	0.0	0.0
		DAP	18	46	12	2.2	5.5	0.0
	Total				12.6	5.5	0.0	
Hazelnuts(2)	AN	26		50	13.0	0.0	0.0	
	DAP	18	46	15	2.7	6.9	0.0	
	Total				15.7	6.9	0.0	
Hazelnuts(3)	AN	26		20	5.2	0.0	0.0	
	DAP	18	46	30	5.4	13.8	0.0	
	Total				10.6	13.8	0.0	
KASTAMO Kuskara	Wheat	AN	26		15	3.9	0.0	0.0
		DAP	18	46	20	3.6	9.2	0.0
		Total				7.5	9.2	0.0
	Maize	AN	26		25	6.5	0.0	0.0
		DAP	18	46	60	10.8	27.6	0.0
		Total				17.3	27.6	0.0
	Sugar beet	AN	26		50	13.0	0.0	0.0
		DAP	18	46	50	9.0	23.0	0.0
		Total				22.0	23.0	0.0
	Garlic	AN	26		10	2.6	0.0	0.0
		DAP	18	46	30	5.4	13.8	0.0
		Total				8.0	13.8	0.0
	Vegetables	Animal Manure		2ton				
	Wheat (1)	AN	26		20	5.2	0.0	0.0
DAP		18	46	20	3.6	9.2	0.0	
	Total				8.8	9.2	0.0	
Wheat (2)	AN	26		15	3.9	0.0	0.0	
	DAP	18	46	15	2.7	6.9	0.0	
	Total				6.6	6.9	0.0	
Barley	AN	26		18	4.7	0.0	0.0	
	DAP	18	46	18	3.2	8.3	0.0	
	Total				7.9	8.3	0.0	
Sugar beet	Urea	46		40	18.4	0.0	0.0	
	DAP	18	46	75	13.5	34.5	0.0	
	Total				31.9	34.5	0.0	
Dry bean	No-fertilization				0.0	0.0	0.0	
Alfalfa	DAP	18	46	20	3.6	9.2	0.0	
IZMIR Aslanlar	Wheat	AN	26		30	7.8	0.0	0.0
		DAP	18	46	30	5.4	13.8	0.0
		Total				13.2	13.8	0.0
	Barley	AN	26		30	7.8	0.0	0.0
DAP		18	46	30	5.4	13.8	0.0	
	Total				13.2	13.8	0.0	

Notes, AN: Ammonium Nitrate, DAP: DiAmmonium Phosphate, TSP: Triple Super Phosphate, Comp.: Compound Fertilizers.

IZMIR	Aslanlar	Cotton	AN	26			35	9.1	0.0	0.0
			Comp	15	15	15	35	5.3	5.3	5.3
							Total	14.4	5.3	5.3
		Water Melon	AN	26			35	9.1	0.0	0.0
			Comp	15	15	15	50	7.5	7.5	7.5
							Total	16.6	7.5	7.5
		Tomatoes	AN	26			30	7.8	0.0	0.0
			Comp	15	15	15	70	10.5	10.5	10.5
							Total	18.3	10.5	10.5
		Egg Plant	AN	26			50	13.0	0.0	0.0
			Comp	15	15	15	50	7.5	7.5	7.5
							Total	20.5	7.5	7.5
		Green Pepper	AN	26			40	10.4	0.0	0.0
			Comp	15	15	15	50	7.5	7.5	7.5
					Total	17.9	7.5	7.5		
					Total	7.5	7.5	7.5		
YALOVA	Ilyaskoy	Wheat	AN	26			11	2.9	0.0	0.0
			DAP	18	46		12	2.2	5.5	0.0
							Total	5.0	5.5	0.0
		Barley	AN	26			11	2.9	0.0	0.0
			DAP	18	46		11	2.0	5.1	0.0
							Total	4.8	5.1	0.0
		Oats	AN	26			11	2.9	0.0	0.0
			DAP	18	46		12	2.2	5.5	0.0
							Total	5.0	5.5	0.0
		Sunflower	AN	26			4.5	1.2	0.0	0.0
			DAP	18	46		11.5	2.1	5.3	0.0
							Total	3.2	5.3	0.0
							Total	0.6	0.6	0.6
							Total	0.6	0.6	0.6
KIRIKLARI	K.Karisti.	Wheat	AN	26			5	1.3	0.0	0.0
			Urea	46			15	6.9	0.0	0.0
							Total	8.2	0.0	0.0
		Maize	AN	26			6	1.6	0.0	0.0
			Comp	20	20	0	11	2.2	2.2	0.0
							Total	3.8	2.2	0.0
		Dry Bean	AN	26			10	2.6	0.0	0.0
			DAP	18	46	0	10	1.8	4.6	0.0
							Total	4.4	4.6	0.0
		Sugar beet	AN	26			19	4.9	0.0	0.0
			Comp	8	24	0	16	1.3	3.8	0.0
							Total	6.2	3.8	0.0
		Sunflower	AN	26			5	1.3	0.0	0.0
			Comp	20	20	0	9	1.8	1.8	0.0
					Total	3.1	1.8	0.0		
Potatoes	AN	26			10	2.6	0.0	0.0		
	DAP	18	46	0	10	1.8	4.6	0.0		
					Total	4.4	4.6	0.0		
					Total	0.0	21.0	0.0		
Tomatoes	AN	26			10	2.6	0.0	0.0		
	TSP	0	42	0	10	0.0	4.2	0.0		
					Total	2.6	4.2	0.0		

Notes,AN:Ammonium Nitrate, DAP:DiAmmonium Phosphate, TSP:Triple Super Phosphate,
Comp.:Compound Fertilizers.
dec. : unit of area, 10 are.

Table C-23 Existing use of Herbicides, Insecticides and Fungicides to Crops in the Study Area.

Project Name	Hacilar	Urumlu	Kalesekisi	Camlibel	Kozluk	Kuskara	Ozdenk	Aslanlar	Ilyaskoy	K.Karstiran
Province	KIRIKKALE	KONYA	ADANA	TOKAT	SAMSUN	KASTAMONI	ESKISEHIR	IZMIR	YALOVA	KIRKLARELI
Wheat	weed 150g lt	W,I,F 1t		W. 150g		W. 1 time	W. 125g	W. 50g	W. 200g	W. 150g (24D)
Barley	Weed 200cc			no-use	no-use	no-use	I. 100g W. 125g I. 100g		(Agrodiamin) I. 100g W. 200g (Agrodiamin)	I. 100g W. 170g (24D)
Oats				no-use					200g	
Maize					no-use	W. 100g				Hektarfermin W. 100cc
Rice					W. 1 time					
Dry bean		W,I,1t					no-use			W.Decis100g I.Karate100g
Lentil	no-use									
Chick pea	no-use									
Cow vetch				no-use						
Sugar beet		W,I,F 1t weed 200cc		I. Karate 150-200g		W. 60-100g I. 100g F. 200-250g				Karathanedecis I. 100cc
Sunflower	no-use					no-use			no-use	W. Triflin 150g
Cotton										I.250g,F100g
Potatoes										W.Decis100g I.Karate150g

Notes ; W : Herbicides, I : Insecticides, F : Fungicides. I t : one time Karate : Name of Chemicals

Table C-23 Existing use of Herbicides, Insecticides and Fungicides to Crops in the Study Area. (Continued)

Project Name	Hacilar	Urunlu	Kalesekisi	Camlibel	Kozluk	Kuskara	Ozdenk	Aslanlar	Ilyaskoy	K.Kanistiran
Province	KIRIKKALE	KONYA	ADANA	TOKAT	SAMSUN	KASTAMONI	ESKISEHIR	IZMIR	YALOVA	KIRKLARELI
Alfalfa				no-use			no-use			W.Decis100g
Vegetables				I. 1 time	W. 1 time					I. Keep 400g
Water Melon	I. 500g	1tim	W.I. 1time					W. 200g		
Melon		W.I. 1time								
Tomatoes								W. 330g		W.Decis100g
Egg Plant								I. 150g		I.Karate150g
Garlic						W.300-600g				
						I. 500-650g				
						F. 250-350g				
Pepper								W. 250g/d		
Hazelnuts					I. 2.5 kg					
Cherry		W,I,F, 1time	W. 60g	W. 45 liter						
			I. 500g	2tim	I. 34 liter					
			F. 1t	200cc	F. 38 liter					
Grape			F 1330g	2t				I. 1kg/d		
Apple			(Grape fungi)						I. 200g	
			Trimito	500g					F. 1,000g	
Peach									I. 1 lit. F.500g	

Notes ; W : Herbicides, I : Insecticides, F : Fungicides.

Table C-24 Existing Irrigation times and methods to crops in the ten Project area

Project Name	Hacilar	Urulu	Kalesekisi	Camibel	Kozluk	Kuskara	Ozdenk	Aslanlar	Ilyaskoy	K.Kanistran
Province	KIRIKKALE	KONYA	ADANA	TOKAT	SAMSUN	KASTAMONU	ESKISEHIR	IZMIR	YALOVA	KIRKLARELI
Wheat	No-irrigation Mar...Apr(fu)	Ma.Ap.My.(sp) Oct.....My.	No-irrigation	My...Jn(sp,bs)			Ap...My (sp1) Mar...Apr	No-irrigation	No-irrigation	My...Jn (sp1-2)
Barley				My (sp,bs)	No-irrigation		Apr...My		No-irrigation	No-irrigation
Oats				Jn.15th(bs)		My...Jn(bs2)			Jn...Aug(fu4)	Jn...Jl (fu2)
Maize					Jn...Aug(fu2)	Jn...Aug (fu3)				
					No-irrigation					
Rice					Apr...Sp (bs)					My...Jl(sp4)
Dry bean		Jn...Aug(sp7)				June (fu 3)	My...Jn.(sp6)			
Lentil	No-irrigation									
Chick pea	No-irrigation									
Cow vetch				My...Jn (bs)						Jn--Sep(sp4-5)
Sugar beet		Apr...Oct(sp)		Jn...Oct(sp,bs)		Jn...Jl (fu 2)	Apr--Aug(sp6)			
		My...Oct(sp10)				Jl...Aug(fu2)			No-irrigation	Jl...Aug (sp2)
Sunflower	No-irrigation							Jn...Aug(fu5)		
Cotton										
Potatoes				No-irrigation		Jn...Jl (fu 2)			Apr--My(fu3)	
Alfalfa				Jl...Aug(sp,bs)			My...Sep (sp5)			My...Sep(sp10)
Vegetables				Jn...Aug(sp,fu)				My...Aug(fu3)		
Water Melon	Jn...Aug(fu5-6)	My...Sp.(sp6)								
Melon	Jn...Aug(fu5-6)	My...Sp.(sp6)						Apr--Sep(fu15)	My...Aug(fu6)	Jl...Aug(fu5)
Tomatoes	Jn...Aug(fu5-6)				Jn...Aug(fu2)	Jn...Jl (fu 3)		Apr--Sep(fu15)		
Egg Plant								My...Jn(fu)	My...Ocy(fu8)	
Pepper	Jn...Aug(fu5-6)				Jl...Aug(fu3)					
Garlic						Jn (sp, fu 3)				My...Jl (sp3)
Dry Onion										
Hazelnuts				Jn...Jl (bs2)						
				My...Jl (bs3)						
Cherry			My...Jn(bs)					Mar--Jl(sp,bs6)		
Grape	Jn...Aug(bs5)		No-irrigation							Jn...Aug(bs2)
Apple							Apr--Jl(bs)			Jn...Aug(bs2)
Peach										

Notes ; bs...Basin Irrigation, sp...Sprinkler Irrigation, fu...Furrow Irrigation. Number is irrigation time: Apr..... Oct ; Monthes.

Table C-25 Existing crop yields under rainfed and partly irrigated condition in ten study area. (Unit: ks/ha)

Project Name	Hacilar	Urunlu	Kalesetisi	Camlibel	Kozluk	Kuskara	Ozdenk	Aslanlar	Ilyaskoy	K.Kamistaran
Province	KIRIKKALE	KONYA	ADANA	TOKAT	SAMSUN	KASTAMONU	ESKISEHIR	IZMIR	YALOVA	KIRKLARELI
Wheat (NI)	2,000	3,000		2,800		2,700	2,800	2,900	2,700	
Wheat (I)		4,300		4,500					3,000	4,300
Barley (NI)				3,700			3,000		3,000	
Oats (NI)				2,500						
Maize (NI)				2,500		3,000				4,000
Maize (I)										
Rice (I)					3,750					
Chick pea (NI)	1,600									1,500
Dry bean (I)		1,300					1,200			50,000
SugarBeet(I)		50,000		60,000		45,000	35,000		1,200	1,200
Sunflower(NI)	500							2,000		
Cotton (I)										34,000
Potatoes (I)										35,000
Alfalfa(fresh I)				30,000			30,000			
Cow vetch (NI)				10,000						
Garlic (I)						7,000				
Water Melon(I)	35,000	30,000						35,000		
Melon (I)		15,000						25,000		
Egg plant (I)								25,000		
Tomatoes (I)								40,000		
Pepper (I)								12,000		
Strawberry(I)			4,000							
Grape (NI)			5,000							
Cherry (NI)			2,700							
Cherry (I)			4,500							
Hazelnuts(I)					950					
Apple (I)							10,000		11,000	
Peaches (I)									7,000	

Notes: (I).....Partly irrigated condition, (NI).....Non-irrigated condition.

Table C-26 Average yields of field crops in the ten study provinces in 1994 by agricultural statistics. (kg/ha)

Name of Province	Wheat	Barley	Rye	Oats	Spelt	Maize	Rice	Mixed Grains	Broad Beans	Peas	Chick Peas	Dry Beans	Lentil (Green)	Lentil (Red)
KIRIKKALE	1,731	2,356									782	831	756	
KONYA	1,463	1,778	1,301	1,050		1,506		1,672		929	1,408	1,408	540	975
ADANA	3,118	2,053	2,273	2,134		7,192	2,320	1,261		743	923	923	1,500	905
TOKAT	1,933	2,013	1,604	1,317		2,833	2,934		933	1,011	1,099	1,099	1,056	
SAMSUN	2,145	2,260	1,040	1,137	1,055	2,560	2,799		917	626	372	372	1,000	
KASTAMONU	1,261	1,545	1,025	1,022	1,138	2,555	2,280	1,167	1,634	1,444	1,910	1,910	804	444
ESKISEHIR	1,910	2,043	1,635	1,659		1,787	2,259			781	1,024	1,024	530	
IZMIR	3,246	2,595	2,332	2,269		5,426		2,610	2,118	1,262	2,127	2,127	600	
YALOVA	2,341	2,276	1,187	1,888		4,696	3,319	2,169	2,805	985	1,371	1,371	769	940
KIRKLARELI	1,458	2,538	1,640	1,955		4,049	2,260			775	792	792	600	
Study Area	1,942	2,153	1,469	1,691	1,102	3,527	2,826	1,206	1,675	2,012	958	1,178	794	690
All Turkey	1,797	2,010	1,342	1,681	1,157	3,818	3,053	1,211	1,821	2,676	860	1,105	606	1,061

Name of Province	Cow Vetches	Wild Vetches	Tobacco	Sugar Beet	Hemp (fiber)	Poppy (capsule)	Cotton (raw)	Sesame	Sunflower	Soy Beans	Dry Onions	Dry Garlic	Potatoes	Alfalfa (green)
KIRIKKALE	855			32,733					751		18,123		14,867	24,770
KONYA	859	775		34,259		516		246	854		16,962	5,276	19,288	76,680
ADANA	609	850	1,480	31,965			2,653	415	1,228	2,483	17,272	6,781	19,411	50,000
TOKAT	1,151		741	24,682		286			1,621		22,971	7,617	16,396	30,000
SAMSUN	664		698	23,570	799				1,310	2,153	11,987	6,682	19,331	58,000
KASTAMONU	860			16,646	1,234						7,162	7,229	7,073	23,000
ESKISEHIR	675	769		37,462					1,111		21,521	7,250	21,533	81,600
IZMIR	559	1,993	610	45,631			2,771	709	1,756		18,129	6,048	27,944	71,000
YALOVA	21	2,400	784	49,079			1,316	571	1,247		29,250	5,178	17,354	51,000
KIRKLARELI			941	53,927					787		16,802	6,246	17,867	49,000
Study Area	629	996	916	31,955	988	433	2,581	574	1,185	2,065	15,956	6,359	18,825	51,510
All Turkey	624	1,001	823	31,921	1,120	492	2,785	401	1,263	2,414	19,565	7,065	22,919	48,300

Notes: Yalova had no data in 1994. So, crop yield were quoted from BURSA. Sources: Agricultural Structure (Production, Price, Value) 1994.

Table C-27

Crop Management Sheet

(23-1)

Project Name	Urunlu Ground Water Project							
Crop	Wheat							
Province	Konya	District		Village Urunlu				
Processing for Cultivation	Date & Times for Manage	Power(hrs /dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	August	0.33	0.33			2	lt/dec	Plow
2nd Tillage	Sept.	0.33	0.33			1.5	lt/dec	Disk
3rd Tillage	October	0.33	0.33	(preparation)		1.2	lt/dec	Harrow
Nursery				(for sowing)				
Sowing / Planting	October	0.33	0.33			0.6	lt/dec	Driller
After sowing Care	October	0.33	0.33			0.8	lt/dec	Harrow
Total								
2.Managements								
Fertilizer	October					(same time with sowing)		
Fertilization (2)	March	2	1			0.4	lt/dec	Spreader
Fertilization (3)	April	2	1			0.4	lt/dec	Spreader
Weed control	April	2	1			0.3	lt/dec	Holder
Insect Control	April	2	1			0.3	lt/dec	Holder
Disease Control								
Irrigation	March-April-M	4						Sprinkler
Other Works								
Total								
3.Harvesting								
Harvesting (1)	July	3	1			1.2	lt/dec	Harvester
Harvesting (2)								
Packing	August	3						
Threshing	July	3	3					
Transporting	August	2				0.8	lt/dec	Trailer
Total								
4.Materials								
Seed				25-30	kg/dec			
N Fertilizer			Urea	20	kg/dec			
P2O5 Fertilizer			DAP	20	kg/dec			
K2O Fertilizer								
Herbicides				125	g/dec			
Insecticides				100	g/dec			
Fungicides								
Other Materials								
5.Yield								
Main Products		300	kg/dec					
Straw etc.		300	kg/dec					
6.Total								

Table C-27

Crop Management Sheet

(23-2)

Project Name	Camlibel Land Consolidation Project							
Crop	Barley							
Province	TOKAT	District	Merkez	Village	Guzelce			
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	Nov.	0.33	0.33			2	lt/dec	Plow
2nd Tillage	Dec.	0.33	0.33			1.5	lt/dec	Disk
3rd Tillage	March	0.33	0.33			1.2	lt/dec	Harrow
Nursery								
Sowing / Planting	March	0.33	0.33			0.6	lt/dec	Driller
After sowing Care	March	0.33	0.33			0.8	lt/dec	Harrow
Total								
2.Managements								
Fertilizer						(same time with sowing)		
Fertilization (2)	May	2	1			0.4	lt/dec	Spreader
Fertilization (3)								
Weed control								
Insect Control								
Disease Control								
Irrigation	May	4						Sprinkler
Other Works								
Total								
3.Harvesting								
Harvesting (1)	Early in Jul	1	1			1	lt/dec	Harvester
Harvesting (2)								
Packing	July	2	1			0.8	lt/dec	Baler
Threshing								
Transporting	July	2	1			0.8	lt/dec	Trailer
Total								
4.Materials								
Seed					25	kg/dec		
N Fertilizer			AN		10	kg/dec		
P2O5 Fertilizer			DAP		10	kg/dec		
K2O Fertilizer								
Herbicides								
Insecticides								
Fungicides								
Other Materials								
5.Yield								
Main Products			370	kg/dec				
Straw etc.			350	kg/dec				
6.Total								

Table C-27

Crop Management Sheet

(23-3)

Project Name	Camlibel Land Consolidation Project							
Crop	Oats							
Province	TOKAT District Merkez Village Guzelee							
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	Nov.	0.33	0.33			2	lt/dec	Plow
2nd Tillage	Dec.	0.33	0.33			1.5	lt/dec	Harrow
3rd Tillage	preparation for sowing					1.2	lt/dec	Harrow
Nursery								
Sowing / Planting	April	0.33	0.33			0.6	lt/dec	Driller
After sowing Care	April	0.33	0.33			0.8	lt/dec	Harrow
Total								
2.Managements								
Fertilizer	April					(same time with sowing)		
Fertilization (2)								
Fertilization (3)								
Weed control								
Insect Control								
Disease Control								
Irrigation	Mid.of Jun	4						Basin
Other Works								
Total								
3.Harvesting								
Harvesting (1)	Mid.of July	1	1			1	lt/dec	Harvester
Harvesting (2)								
Packing	July	1	1			0.8	lt/dec	Baler
Threshing								
Transporting	August	1	1			0.8	lt/dec	Trailer
Total								
4.Materials								
Seed					25	kg/dec		
N Fertilizer			AN		8	kg/dec		
P2O5 Fertilizer								
K2O Fertilizer								
Herbicides								
Insecticides								
Fungicides								
Other Materials								
5.Yield								
Main Products		250	kg/dec					
Straw etc.		350	kg/dec					
6.Total								

Table C-27

Crop Management Sheet

(23-4)

Project Name	Kozluk River Water Project							
Crop	Rice							
Province	Samsun	District Terme		Village Akçay				
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	March	0.33	0.33			2	lt/dec	Plow
2nd Tillage	April	0.33	0.33			1.5	lt/dec	Harrow
3rd Tillage	April	0.33	0.33			1.2	lt/dec	leveler
Nursery		15						
Sowing / Planting	April 25	6						by hand
After sowing Care								
Total								
2.Managements								
Fertilization (1)	May-15	2						by hand
Fertilization (2)	June 15	2	1			0.4	lt/dec	Spreader
Fertilization (3)								
Weed control	May-10	3						by hand
Insect Control								
Disease Control								
Irrigation	Always	10						Basin
Other Works (Cutting)								
Total								
3.Harvesting								
Harvesting (1)	September 30	3						by hand
Harvesting (2)								
Packing								
Threshing	October 10	3	3			0.8	lt/dec	Tresher
Transporting	October	1	1			0.8	lt/dec	Trailer
Total								
4.Materials								
Seed				4-5	kg/dec			
N Fertilizer			AN	40	kg/dec			
P2O5 Fertilizer			DAP	10	kg/dec			
K2O Fertilizer								
Herbicides								
Insecticides								
Fungicides								
Other Materials								
5.Yield								
Main Products		375	kg/dec					
Straw etc.		350	kg/dec					
6.Total								

Table C-27

Crop Management Sheet

(23-5)

Project Name	Kozluk River Water Project							
Crop	Maize							
Province	Samsun	District Terme		Village Akçay				
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	April 15-30	0.33	0.33			2	lt/dec	Plow
2nd Tillage	Late of Apr.	0.33	0.33			1.5	lt/dec	Harrow
3rd Tillage		0.33	0.33			1.2	lt/dec	Harrow
Nursery (Cutting)(Tilling the soil)								
Sowing / Planting	April 30	2	1			0.8	lt/dec	Driller
After sowing Care	April 30	1						
Total								
2.Managements								
Fertilization (1)	April 30	2	1			0.8	lt/dec	Driller
Fertilization (2)	July 1	2	1			0.4	lt/dec	Spreader
Fertilization (3)								
Weed control								
Insect Control(2 times)								
Disease Control								
Irrigation								
Other Works	June-July	6						2 times
Total								
3.Harvesting								
Harvesting (1)	September 30	5						by hand
Harvesting (2)								
Packing								
Threshing	October 1	10						by hand
Transporting		1	1			0.8	lt/dec	Trailer
Total								
4.Materials								
Seed					3	kg/dec		
N Fertilizer			AN		20	kg/dec		
P2O5 Fertilizer			DAP		30	kg/dec		
K2O Fertilizer								
Herbicides								
Insecticides								
Fungicides								
Other Materials								
5.Yield								
Main Products	Grain	250	kg/dec					
Straw etc.		250	kg/dec					
6.Total								

Table C-27

Crop Management Sheet

(23-6)

Project Name	Urunlu Ground Water Project							
Crop	Dry Bean							
Province	KONYA	District Cumra		Village Urunlu				
Processing for Cultivation	Date & Times for Manage	Power(hrs /dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	October	0.5	0.5			1.5	lt/dec	Plow
2nd Tillage	April	0.5	0.5			1.5	lt/dec	Harrow
3rd Tillage	May	0.5	0.5			1	lt/dec	Harrow
Nursery								
Sowing	May	2	1			1	lt/dec	Tractor
After sowing Care								
Total								
2.Managements								
Fertilization (2)	May	(same time with sowing)						
Fertilization (2)	June	1						by hand
Fertilization (3)	July	1						by hand
Weed control	April	3						by hand
Insect Control	June	1	1			0.8	lt/dec	Sprayer
Disease Control								
Irrigation	Jun.-Sep.	25-30	(every 10 days)					Sprinkler
Other Works								
Total								
3.Harvesting								
Harvesting (1)	September	25-30						by hand
Harvesting (2)	October							
Packing								
Threshing	Sep.	3	1			2.5	lt/dec	
Transporting	October	1	1			0.8	lt/dec	Trailer
Total								
4.Materials								
Seed					10	kg/dec		
N Fertilizer			AN		20	kg/dec		
P Fertilizer			DAP		40	kg/dec		
K2O Fertilizer								
Herbicides								
Insecticides					100	cc/dec		
Fungicides								
Other Materials								
5.Yield								
Main Products		130		kg/dec				
By Products		150		kg/dec				
6.Total								

Table C-27

Crop Management Sheet

(23-7)

Project Name	Hacilar Dam Water Project							
Crop	Chick Pea							
Province	KIRIKKALE District Keski Village Hacilar							
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	March	0.5	0.5			2	lt/dec	Plow
2nd Tillage	April	0.5	0.5			1.5	lt/dec	Harrow
3rd Tillage		0.5	0.5			1.2	lt/dec	Harrow
Nursery								
Sowing	April	5						by hand
After sowing Care								
Total								
2. Managements								
Fertilization (1)								
Fertilization (2)								
Fertilization (3)								
Weed control								
Insect Control								
Disease Control								
Irrigation								
Other Works								
Total								
3. Harvesting								
Harvesting (1)	July-Aug.	4						by hand
Harvesting (2)								
Packing								
Threshing	Augst	3						
Transporting	Augst	1	1			0.5	lt/dec	Trailer
Total								
4. Materials								
Seed					6	kg/dec		
N Fertilizer								
P Fertilizer								
K2O Fertilizer								
Herbicides								
Insecticides								
Fungicides								
Other Materials								
5. Yield								
Main Products		160	kg/dec					
By Products		50	kg/dec					
6. Total								

Table C-27

Crop Management Sheet

(23-8)

Project Name	Kuskara Ground Water Project								
Crop	Sugarbeet								
Province	Kastamonu District Merkez Village Kuşkara								
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description	
		Men	Machin	Materials	Units	Fuel	Units		
1. Tillage & Sowing									
Deep Tillage	November	0.3	0.3			2	lt/dec	Plow	
2nd Tillage	December	0.3	0.3			1.3	lt/dec	Harrow	
3rd Tillage	March	0.3	0.3			1.3	lt/dec	Harrow	
Nursery									
Sowing / Planting	March 20	2						by hand	
After sowing Care									
Total									
2. Managements									
Fertilization (1)	March 20	1	1			0.5	lt/dec	Spreader	
Fertilization (2)	May-10	2						by hand	
Fertilization (3)	July	2						by hand	
Weed control	March 20	2						by hand	
Insect Control	May-10	1	1			0.5	lt/dec	Sprayer	
Disease Control	June 10	1	1			0.5	lt/dec	Sprayer	
Irrigation	May-Sep.	20						Sprinkler	
Other Works	May-Jul	50						Hoeing	
Total								by hand	
3. Harvesting									
Harvesting (1)	Sep-Nov.	25						by hand	
Harvesting (2)									
Packing									
Threshing						1	lt/dec	Tractor	
Transporting	Go to sugarbeet factory at the same time with harvest.								
Total									
4. Materials									
Seed					300	g/dec			
N Fertilizer		AN			100	kg/dec			
P2O5 Fertilizer		DAP			50	kg/dec			
K2O Fertilizer									
Herbicides					60-100	g/dec			
Insecticides			Karate		100	g/dec			
Fungicides					200-250	g/dec			
Other Materials									
5. Yield									
Main Products		4,000-5,000			kg/dec				
By Products			500		kg/dec				
6. Total									

Table C-27

Crop Management Sheet

(23-9)

Project Name	Hacilar Dam Water Project							
Crop	Sunflower							
Province	KIRIKKALE District Keski Village Hacilar							
Processing for Cultivation	Date & Times for Manage	Power(hrs /dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	Oct	0.5	0.5			1.5	lt/dec	Plow
2nd Tillage	May	0.5	0.5			1.25	lt/dec	Harrow
3rd Tillage	April	0.5	0.5			1.25	lt/dec	Harrow
Nursery								
Sowing / Planting	April	2						by hand
After sowing Care								
Total								
2.Managements								
Fertilization (1)	April	1 (sowing time)						by hand
Fertilization (2)								
Fertilization (3)								
Weed control	May 10-June							by hand
Insect Control								
Disease Control								
Irrigation								
Other Works	June-July	50 (2 times)						Hoeing
Total								
3.Harvesting								
Harvesting (1)	August	32 (4 person)				1	lt/dec	Tractor
Harvesting (2)		(2 person cutting)						
Packing		2 person loading)						
Threshing		24						3 days
Transporting		2				1	lt/dec	
Total								
4.Materials								
Seed					3	kg/dec		
N Fertilizer			AN		25	kg/dec		
P2O5 Fertilizer								
K2O Fertilizer								
Herbicides								
Insecticides								
Fungicides								
Other Materials								
5.Yield								
Main Products		50 kg/dec						
By Products		used as bamboo (suporting)						
6.Total								

Table C-27

Crop Management Sheet

(23-10)

Project Name	Aslanlar Ground Water Project							
Crop	Cotton							
Province	IZMIR	District Torbali		Village Aslanlar				
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	End of October	0.25	0.25			2	lt/dec	Plow
2nd Tillage	March	0.2	0.2			1.5	lt/dec	Disk
3rd Tillage	March	0.2	0.2			1.5	lt/dec	Harrow
4th Tillage	Apr.	0.45	0.45			1.5	lt/dec	Harrow
Sowing / Planting	Apr-May	0.15	0.15			1.2	lt/dec	Driller
After sowing Care		0.05	0.05					
Total								
2.Managements								
Fertilization (1)	March	0.14	0.14			0.5	lt/dec	Spreader
Fertilization (2)	June	0.14	0.14			0.5	lt/dec	Spreader
Fertilization (3)								
Weed control	Apr.	0.05	0.05					Cultivator
Insect Control	Jul-Aug	2	2			0.5	lt/dec	Sprayer
Disease Control	Jul-Aug	2	2			0.5	lt/dec	Sprayer
Irrigation	Jun-Aug(5)	12.5	0.1					Furrow
Other Works	May-Jul	4						Hocing
Total								
3.Harvesting								
Harvesting (1)	October	32						by hand
Harvesting (2)	October	2						by hand
Packing								
Threshing								
Transporting	End of Oct.	2	2			1	lt/dec	Trailer
Total								
4.Materials								
Seed					8	kg/dec		
N Fertilizer			AN	35-40	kg/dec			
P2O5 Fertilizer		15-15-15	15	35	kg/dec			
K2O Fertilizer								
Herbicides				250	g/dec			
Insecticides				100	g/dec			
Fungicides								
Other Materials								
5.Yield								
Main Products		200	kg/dec					
By Products								
6.Total								

Table C-27

Crop Management Sheet

(23-11)

Project Name	K.Karistiran Ground Water Project							
Crop	Potatoes							
Province	KIRKLARELI District			Village K.Karistiran				
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	Oct.	0.3	0.3			2	lt/dec	Tractor
2nd Tillage	Nov.-Dec.	0.3	0.3			1.5	lt/dec	Disk
3rd Tillage	Feb.-Mar.	0.3	0.3			1	lt/dec	Harrow
Nursery								
Planting	Mar.	2						by hand
After sowing Care		1						
Total								
2. Managements								
Fertilization (1)	Mar.	1						by hand
Fertilization (2)	Apr.	2						by hand
Fertilization (3)								
Weed control	June	2						Hoeing
Insect Control	June	1				0.5	Knapsack	Sprayer
Disease Control	June	1				0.5	lt/dec	
Irrigation	Apr.-May	9			each 3 hrs /dec			Furrow
Other Works								
Total								
3. Harvesting								
Harvesting (1)	Aug.	3						by hand
Harvesting (2)								
Packing								
Threshing								
Transporting		1	1			1	lt/dec	Trailer
Total								
4. Materials								
Seed					30	kg/dec		
N Fertilizer			AN		10	kg/dec		
P2O5 Fertilizer			DAP		10	kg/dec		
K2O Fertilizer								
Herbicides								
Insecticides		Decis	Karate		100	g/dec		
Fungicides					150	g/dec		
Other Materials								
5. Yield								
Main Products		3,400	kg/dec					
By Products								
6. Total								

Table C-27

Crop Management Sheet

(23-12)

Project Name	Ozdenk River Water Project							
Crop	Alfalfa							
Province	ESKISEHIR	District		Village Ozdenk				
Processing for Cultivation	Date & Times for Manage	Power(hrs./dec)		Amount o Material		Fuel for Machin		Description
		Men	Machin	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	Aug.	0.3	0.3			1.5	lt/dec	Plow
2nd Tillage	Aug.	0.3	0.3			1.2	lt/dec	Disk
3rd Tillage	Sep.	0.3	0.3			1	lt/dec	Harrow
Nursery								
Sowing / Planting	Sep.	0.5						by hand
After sowing Care	Sep.	0.5	0.5			1	lt/dec	Harrow
Total								
2. Managements								
Fertilization (1)	Sep.	0.5						by hand
Fertilization (2)	May	1						by hand
Fertilization (3)								
Weed control								
Insect Control								
Disease Control								
Irrigation	May-Sep.	5 times	1 tmes 5 hors. by sprinkler					
Other Works								
Total								
3. Harvesting								
Harvesting (1)	Jun. -Sep.	5 times	1st year	3 times				by hand
Harvesting (2)		3 hrs. by hand						
Packing		2.5	2.5	(5 times)		1.5	lt/dec	Baler
Threshing								
Transporting		2.5	2.5	(5 times)		0.8	lt/dec	Tractor
Total								
4. Materials								
Seed					6	kg/dec		
N Fertilizer			AN	20	kg/dec			
P2O5 Fertilizer			DAP	20	kg/dec			
K2O Fertilizer								
Herbicides								
Insecticides								
Fungicides								
Other Materials								
5. Yield								
Main Products		500 kg Dry hay /dec.			(3,000kg/dec fresh matter)			
6. Total								

Table C-27

Crop Management

(23-13)

Project Name	Aslanlar Ground Water Project							
Crop	Water Melon							
Province	IZMIR District Torbali Village Aslanlar							
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage	Oct.	0.25	0.25			2	lt/dec	Plow
2nd Tillage	Mar-Apr.	0.25	0.25			1.5	lt/dec	Disk
3rd Tillage	Mar-Apr(4)	0.4	0.4			1.5	lt/dec	Harrow
4th Tillage	Mar-Apr (2)	0.32	0.32			1.2	lt/dec	Harrow
Sowing / Planting	End of Apr.	8						by hand
After sowing Care								
Total								
2.Managements								
Fertilization (1)	End of Apr.	2						by hand
Fertilization (2)	End of July	2						by hand
Fertilization (3)								
Weed control	July	0.6				0.5	lt/dec	Sprayer
Insect Control								
Disease Control								
Irrigation	June-Aug.	12	(3 times)					Furrow
Other Works	June-Aug.							
Total								
3.Harvesting								
Harvesting (1)	Aug.-Sep.	50						by hand
Harvesting (2)								
Packing								
Threshing								
Transporting	Aug.-Sep.	18	18			3	lt/dec	Trailer
Total								
4.Materials								
Seed					250	g/dec		
N Fertilizer			AN		35	kg/dec		
P2O5 Fertilizer		15-15-15	15		50	kg/dec		
K2O Fertilizer								
Herbicides					200	g/dec		Knapsack
Insecticides								Sprayer
Fungicides								
Other Materials								
5.Yield								
Main Products		3,500	kg/dec					
Straw etc.								
6.Total								

Table C-27

Crop Management

(23-14)

Project Name	Aslanlar Ground Water Project							
Crop	Melon							
Province	IZMIR District Torbali Village Aslanlar							
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	Oct.	0.25	0.25			2	lt/dec	Plow
2nd Tillage	Mar-Apr.	0.25	0.25			1.5	lt/dec	Disk
3rd Tillage	Mar-Apr(4)	0.4	0.4			1.2	lt/dec	Harrow
4th Tillage	Mar-Apr (2)	0.32	0.32			1.2	lt/dec	Harrow
Sowing / Planting	End of Apr.	6						by hand
After sowing Care								
Total								
2. Managements								
Fertilization (1)	End of Apr.	2						by hand
Fertilization (2)	End of July	2						by hand
Fertilization (3)								
Weed control	July	0.6	0.6			0.5	lt/dec	Sprayer
Insect Control								
Disease Control								
Irrigation	June-Aug.	12	(3 times)					Furrow
Other Works								
Total								
3. Harvesting								
Harvesting (1)		50						by hand
Harvesting (2)								
Packing								
Threshing								
Transporting		18	18			3	lt/dec	Trailer
Total								
4. Materials								
Seed					250	g/dec		
N Fertilizer			AN		35	kg/dec		
P2O5 Fertilizer		15-15-15			50	kg/dec		
K2O Fertilizer								
Herbicides					200	g/dec		Knapsack
Insecticides								Sprayer
Fungicides								
Other Materials								
5. Yield								
Main Products		2,000	kg/dec					
Straw etc.								
6. Total								

Table C-27

Crop Management

(23-15)

Project Name		Aslanlar Ground Water Project						
Crop		Tomatoes						
Province		IZMIR District Torbali Village Aslanlar						
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	Oct.	0.25	0.25			2	lt/dec	Plow
2nd Tillage	Feb.	0.25	0.25			1.5	lt/dec	Disk
3rd Tillage	Apr.	0.25	0.25			1.5	lt/dec	Harrow
Nursery	Apr.	0.16	0.16			1.2	lt/dec	Harrow
Planting	April	2	0.45			1.2	lt/dec	Trailer
After sowing Care								
Total								
2. Managements								
Fertilization (1)	April	2	0.45			(same time with sowing)		
Fertilization (2)	May	0.33	0.33					Spreader
Fertilization (3)	June	0.3	0.3					Spreader
Weed control	April	2						Hoeing
Insect Control	Apr. Aug.	1.4	1.4			0.5	lt/dec	Sprayer
Disease Control								
Irrigation								
Other Works	End of Apr.	1.7	1.7					by hand
Total								
3. Harvesting								
Harvesting (1)	Aug. (3)	56						by hand
Harvesting (2)								
Packing								
Threshing								
Transporting	Aug.	24	24			3	lt/dec	Trailer
Total								
4. Materials								
Seed					50	g/dec		
N Fertilizer	AN				30	kg/dec		
P2O5 Fertilizer	15-15-15				70	kg/dec		
K2O Fertilizer								
Herbicides								
Insecticides					330	g/dec		Sprayer
Fungicides								
Other Materials								
5. Yield								
Main Products		4,000	kg/dec					
Straw etc.								
6. Total								

Table C-27

Crop Management

(23-16)

Project Name		Aslanlar Ground Water Project						
Crop		Egg Plant						
Province		IZMIR District Torbali Village Aslanlar						
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	Early in Apr	0.7	0.7			2	lt/dec	Plow
2nd Tillage	Mid. of Apr	0.5	0.5			1.5	lt/dec	Disk
3rd Tillage	Apr(3)	0.75	0.75			1.5	lt/dec	Harrow
4th Tillage	Apr. (2)	0.5	0.5			1.2	lt/dec	Harrow
Sowing / Planting	April	8	0.33			1.2	lt/dec	Trailer
After sowing Care	April							by hand
Total (HOE)								
2. Managements								
Fertilization (1)	April	5	5					Trailer
Fertilization (2)	June	8						by hand
Fertilization (3)								
Weed control	June	0.25	0.25			0.5	lt/dec	Sprayer
Insect Control	June	0.5	0.5			0.5	lt/dec	Sprayer
Disease Control								
Irrigation	June-Sep.	24	(6 times)					Furrow
Other works	May-June	24						Hoeing
Total								
3. Harvesting								
Harvesting (1)	End of June	40						by hand
Harvesting (2)	till Oct.							
Packing								
Threshing								
Transporting	July-Sep	15				2	lt/dec	Trailer
Total								
4. Materials								
Seed				1,300	plant/dec			
N Fertilizer	AN			50	kg/dec			
P2O5 Fertilizer	15-15-15			50	kg/dec			
K2O Fertilizer								
Herbicides				500	g/dec			
Insecticides			karate	150	g/dec			
Fungicides								
Other Materials								
5. Yield								
Main Products		2,500	kg/dec					
Straw etc.								
6. Total								

Table C-27

Crop Management

(23-17)

Project Name	Aslanlar Ground Water Project							
Crop	Pepper							
Province	IZMIR	District Torbali		Village Aslanlar				
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	March	1	1			1.5	lt/dec	Plow
2nd Tillage	March	1	1			1.5	lt/dec	Plow
3rd Tillage	April	0.5	0.5			1.5	lt/dec	Disk
4th Tillage	April	0.75	0.75			1.2	lt/dec	Harrow
Sowing / Planting	April	10						by hand
After sowing Care								
Total								
2. Managements								
Fertilization (1)	April	2						by hand
Fertilization (2)	End of May	2	1			0.6	lt/dec	Spreader
Fertilization (3)								
Weed control	June	2						by hand
Insect Control	May-June	2	2			0.4	lt/dec	Sprayer
Disease Control								
Irrigation	Jun-Aug	15	(5 times)					Furrow
Other Works	May-July	15	(hocing for intertillage)					Hoeing
Total								
3. Harvesting								
Harvesting (1)	Aug-Sept.	15						bu hand
Harvesting (2)								
Packing								
Threshing								
Transporting		10				2	lt/dec	Trailer
Total								
4. Materials								
Seed				150	g/dec			
N Fertilizer	AN			40	kg/dec			
P2O5 Fertilizer	Copm. 15-15-15			30	kg/dec			
K2O Fertilizer								
Herbicides								
Insecticides			kaate	250	g/dec			
Fungicides								
Other Materials								
5. Yield								
Main Products		1,200	kg/dec					
Straw etc.								
6. Total								

Table C-27

Crop Management

(23-18)

Project Name	Kuskara Ground Water Project							
Crop	Garlic							
Province	Kastamonu District Merkez Village Kuskara							
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage	September 10	0.3	0.3			1.5	lt/dec	Plow
2nd Tillage	September 15	0.3	0.3			1.3	lt/dec	Disk
3rd Tillage	November 5	0.3	0.3			1.2	lt/dec	Harrow
Nursery								
Planting	March 15	4						by hand
After sowing Care								
Total (HOE)								
2. Managements								
Fertilization (1)	March 15	0.5	0.5			1	lt/dec	Spreader
Fertilization (2)	May-07	0.5	0.5			1	lt/dec	Spreader
Fertilization (3)								
Weed control	May-15	2	2			0.7	lt/dec	Sprayer
Insect Control(2 times)	May-15	2	2			0.7	lt/dec	Sprayer
Disease Control	May	2					(if necessary)	
Irrigation	May-June	4	Sprinkler or Border					
Other works								
Total								
3. Harvesting								
Harvesting (1)	June 15	6						by hand
Harvesting (2)								
Drying	June 25	3						by hand
Threshing								
Transporting	June 30	1.5	1.5			1	lt/dec	Trailer
Total								
4. Materials								
Seed					150	g/dec		
N Fertilizer				AN	30	kg/dec		
P2O5 Fertilizer				DAP	30	kg/dec		
K2O Fertilizer								
Herbicides					300	g/dec		
Insecticides					50	g/dec	(not every year)	
Fungicides					250	g/dec		
Other Materials								
5. Yield								
Main Products			700	kg/dec				
Straw etc.								
6. Total								

Table C-27

Crop Management

(23-19)

Project Name	Kozluk River Water Project							
Crop	Hazelnut (fruits bearing trees)							
Province	Samsun	District	Terne	Village	Kozluk			
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage								
2nd Tillage								
3rd Tillage								
Nursery								
Planting								
After sowing Care		2	2	(intertillage)		1	lt/dec	Harrow
Total (HOE)								
2.Managements								
Fertilization (1)	October 1-20	3						by hand
Fertilization (2)	April 1-May 15	3						by hand
Fertilization (3)								
Weed control								
Insect Control	Starts from May 20,every 15 days 3 times					2	lt/dec	Sprayer
Disease Control								
Irrigation	May-July	12	(4 times)					Basin
Other Works	Sep.	4	(cutting long branch)					by hand
Total								
3.Harvesting								
Harvesting (1)	Aug.10-15	20						by hand
Harvesting (2)								
Packing								
Threshing	August 25	15						by hand
Transporting	Sep	1				0.5	lt/dec	Trailer
Total								
4.Materials								
Seed		interval :	5x5m	(40 plants/dec)				
N Fertilizer			AN	20	kg/dec			
P2O5 Fertilizer			DAP	20	kg/dec	(500g/tree)		
K2O Fertilizer			Lime	2.5	kg/tree			
Herbicides								
Insecticides				2.5	kg/dec			
Fungicides								
Other Materials			manure	10	kg/tree			
5.Yield								
Main Products	Hazelnut		90-120	kg/dec				
Straw etc.	Husk		90-120	kg/dec				
6.Total								

Table C-27

Crop Management

(23-20)

Project Name	Ilyaskoy River Water Irrigation Project							
Crop	Apple (fruits bearing trees)							
Province	Yalova	District		Village Ilyaskoy				
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1.Tillage & Sowing								
Deep Tillage								
2nd Tillage								
3rd Tillage								
Nursery								
Sowing / Planting								
Total (HOE)								
2.Managements								
Fertilization (1)	Jan.	4	4			1	lt/dec	Manu. Spr
Fertilization (2)	Mar.	4						Shovel hoe
Fertilization (3)								
Weed control								
Insect Control	Apr.15-Sep.15	15	15	(10 times)		12	lt/dec	Knapsack
Disease Control	Apr.15-June15	3	3	(2 times)		2.4	lt/dec	Sprayer
Irrigation	July-Aug.	3	(1-2 times)					Basin
Other Works	Apr.-May	1.5	1.5			1.2	lt/dec	Plowing
Hoeing	Apr.-May	1.5	1.5			1	lt/dec	Harrowing
Cutting branch	Feb-Mar.	3						by hand
3.Harvesting								
Harvesting (1)	Sep.15-Sep.30	8						by hand
Harvesting (2)								
Packing	Sep.15-Sep.30	2						Bucket
Threshing								
Transporting	Sep.15-Sep.30	1	1			1	lt/dec	Trailer
Total								
4.Materials								
Seed		(Interval :		8x8 m	15.6 plants/dec			
N Fertilizer	15-15-15	0.6kg/	plant	ingredient				4kg/plant Fert.
P2O5 Fertilizer				62.5	kg/dec			
K2O Fertilizer								
Herbicides								
Insecticides					5 lt/dec			
Fungicides					1 lt/dec			
Other Materials			manure	3		kg/tree		
5.Yield								
Main Products		1,100		kg/dec				
Straw etc.								
6.Total								

Table C-27

Crop Management

(23-21)

Project Name	Ilyaskoy River Water Irrigation Project							
Crop	Peach (fruits bearing trees)							
Province	Yalova	District		Village Ilyaskoy				
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage								
2nd Tillage								
3rd Tillage								
Nursery								
Sowing / Planting								
Total								
2. Managements								
Fertilization (1)	Jan.	4	4			1	lt/dec	ManureSp.
Fertilization (2)	Mar.	4						Shovel hoe
Fertilization (3)								
Weed control								
Insect Control	Feb.-Mar.	15	15	(10 times)		12	lt/dec	Knapsack
Disease Control	May-June	3	3	(2 times)		2.4	lt/dec	Sprayer
Irrigation	Aug.	3						Basin
Other Works	Plowing Apr.-M	1.5	1.5			1.2	lt/dec	Plowing
Hoeing	Hoeing Apr.-M	1.5	1.5			1	lt/dec	Harrowing
Cutting branch	Feb-Mar.	3						by hand
3. Harvesting								
Harvesting (1)	June-Aug.	8						by hand
Harvesting (2)								
Packing	June-Aug.	3						Bucket
Threshing								
Transporting	June-Aug.	1	1			1	lt/dec	Trailer
Total								
4. Materials								
Seed		(tree distance : 6x6 m)				27.8 trees /dec		
N Fertilizer	15-15-15	0.6 kg/plant	plant	ingredient		4kg/plant Fert.		
P2O5 Fertilizer				111	kg/dec			
K2O Fertilizer								
Herbicides								
Insecticides		(pulverizaor)		1,000	cc/dec			
Fungicides				500	cc/dec			
Other Materials			manure	100	kg/dec			
5. Yield								
Main Products		700	kg/dec					
Straw etc.								
6. Total								

Table C-27

Crop Management

(23-22)

Project Name	Kalesekisi River Water Project							
Crop	Cherry(Fruit bearing trees)							
Province	Adana District Saimbey Village Kalesekisi							
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage								
2nd Tillage								
Nursery								
Planting	March	4						Shovel
After sowing Care		4						irrigat.
Total								
2. Managements								
Fertilization (1)	Feb.-Mar.	5	(digging soil)					by shovel
Fertilization (2)								
Fertilization (3)								
Weed control		2	2			1 l/dec		Harrowing
Insect Control(2 times)	May-June	3				1 l/dec		Sprayer
Disease Control	May-June	3				1 l/dec		Sprayer
Irrigation								
Other Works	Feb.-Mar.	4	(scissors)					by hand
Total								
3. Harvesting								
Harvesting (1)	June 15	35		2 days				by hand
Harvesting (2)								
Packing	June	15		2 days				Boxing
Threshing								by hand
Transporting	June	Buyer comes with his own car.						
Total								
4. Materials								
Seed		(tree distance : 4x5 m				50 plants/dec		
N Fertilizer		15-15-15		100	kg/dec			
P2O5 Fertilizer								
K2O Fertilizer								
Herbicides				100	g/dec			
Insecticides				500	g/dec			
Fungicides				500	g/dec			
Other Materials								
5. Yield								
Main Products		270		kg/dec				
Straw etc.								
6. Total								

Table C-27

Crop Management

(23-23)

Project Name	Kalesekisi River Water Project							
Crop	Grape (fruit bearing trees)							
Province	Adana District Saimbey Village Kalesekisi							
Processing for Cultivation	Date & Times for Manage	Power(hrs/dec)		Amount of Material		Fuel for Machin		Description
		Men	Machine	Materials	Units	Fuel	Units	
1. Tillage & Sowing								
Deep Tillage								
2nd Tillage								
3rd Tillage								
Nursery								
Planting	April	40	(5 days)					by hand
After sowing Care								
Total								
2. Managements								
Fertilization (1)	April	6		1 day				by hand
Fertilization (2)								
Fertilization (3)								
Weed control	May -June	4	(2 times tillage)			2	lt/dec	Harrowing
Insect Control	May-June	8	(2 times)			2	lt/dec	Sprayer
Disease Control								
Irrigation								
Other Works	Oct.	6			(cutting)			by hand
Total								
3. Harvesting								
Harvesting (1)	Sep15-Oct15	40		2-3 hrs everydays				by hand
Harvesting (2)								
Packing	Sept-Oct	20		2-3 hrs everydays				by hand
Threshing								
Transporting	Sept-Oct	10		every few days		3	lt/dec	Trailer
Total								
4. Materials								
Seed								
N Fertilizer	Compozer	20-20-20			50	kg/dec		
P2O5 Fertilizer								
K2O Fertilizer								
Herbicides								
Insecticides					1.33	kg/dec		
Fungicides								
Other Materials								
5. Yield								
Main Products		500	kg/dec					
Straw etc.								
6. Total								

Table C-28 Number of livestock and livestock breeding farm households in ten study area.

Project Name	Hacilar KIRIKKALE	Urunlu KONYA	Kaleskasi ADANA	Camlibel TOKAT	Kozluk SAMSUN	Kuskara KASTAMONU	Ozdenk ESKISEHIR	Aslanlar IZMIR	Ilyaskoy YALOVA	K. Karisirai KIRKLARELI	TOTAL
Number of livestock (heads)											
Sheep	1,500	1,500		3,000	500		2,000	1,200	350	1,350	11,400
Goat	300	10					500		60		870
Cattle	600	200			300	350	15		100	45	1,610
Milk Cow	500	100	20	200	300	200	235	250	250	455	2,510
Hen	3,000	9,000	250	300	1,700	350	600	3,500	1,500	2,100	22,300
Geese, Duck						50	100			600	750
Number of farm households which are breeding the livestock											
Sheep	20	100		40	5	0	60	11	7	7	250
Goat	20	3				0	10		1	6	40
Cattle	300	100			175	35	10		50	12	682
Milk Cow	100	100	20	80	175	35	110	120	120	180	1,040
Hen	300	100	100	70	170	35	110	120	120	190	1,315
Geese, Duck						5	7			150	162
Average number of livestock per farm households which are breeding the livestock. (heads/household)											
Sheep	75.0	15.0		75.0	100.0		33.3	109.1	50.0	192.9	45.6
Goat	15.0	3.3					50.0		60.0	0.0	21.8
Cattle	2.0	2.0			1.7	10.0	1.5		2.0	3.8	2.4
Milk Cow	5.0	1.0	1.0	2.5	1.7	5.7	2.1	2.1	2.1	2.5	2.4
Hen	10.0	90.0	2.5	4.3	10.0	10.0	5.5	29.2	12.5	11.1	17.0
Geese, Duck						10.0	14.3			4.0	4.6
Milk production (kg/head/year)											
Improved Varieties	4,000	3,500	4,000	1,500	3,000	1,000	4,200	3,300	3,150	4,200	
Domestic Varieties											1,000

Table C-29 The cultivated area and production of forage crops which stem, leaves and seed can be used for animal feed.

Project Name	Hacilar	Urunlu	Kalesekişi	Camlibel	Kozluk	Kuskara	Ozdenk	Aslanlar	Ilyastoy	K.Karistaran	TOTAL
Province	KIRIKKALE	KONYA	ADANA	TOKAT	SAMSUN	KASTAMONU	ESKISEHIR	IZMIR	YALOVA	KIRKLARELI	
NetBene.Area	522	465	210	1.366	550	117	170	250	138	120	3.908
Cultivated Area (Unit : ha)											
Wheat	200	284	10	570	1	38	55	120	95	55	1,428
Barley				273		12	75		25	7	592
Oats & Rye				93	20	2					115
Maize					100	12			3		115
Rice					9						9
Cow vetch				70		29	20			8	70
Sugar beet		142		280		0	5			2	479
Alfalfa				29							34
Total	200	426	10	1,315	130	93	153	120	123	72	2,642
Yield of stem(st), leaves(le) and seed(sc) of each crop. (Unit : kg/ha)											
Wheat (st,le)	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
Barley (st,le,sc)				5,000		5,000	5,000		5,000	5,000	
Oats & Rye(")				5,000		5,000					
Maize (st, le)					4,000	4,000			4,000		
Rice (st,le)					4,000						
Cow Vetch (")				1,500							
Sugar Beet (le)		2,000		2,000			2,000			2,000	
Alfalfa (st,le)				8,000			8,000			8,000	
Production of stem, leaves and seed of each crop. (unit : kg)											
Wheat	400,000	568,000	20,000	1,140,000	2,000	76,000	110,000	240,000	190,000	110,000	2,856,000
Barley				1,365,000		60,000	375,000		125,000	35,000	1,960,000
Oats & Rye				465,000	100,000	10,000					575,000
Maize					400,000	48,000			12,000		460,000
Rice					36,000						36,000
Cow vetch				105,000		58,000	40,000			16,000	105,000
Sugar beet		284,000		560,000		0	24,000			16,000	958,000
Alfalfa				232,000							272,000
Total	400,000	852,000	20,000	3,867,000	538,000	252,000	549,000	240,000	327,000	177,000	7,222,000

Table C-30 Nitrogen based on the organic matter in soil (N kg/dec.)

No.	Name of Crops	Cotions	Organic matter Contents in Soil			
			0.0~ 1.0	1.1~ 2.0	2.1~ 3.0	3.1~ 4.0
1	Wheat	Irrigated	14	13	12	10
2	Wheat	Rainfed	10	8	7	6
3	Barley	Rainfed	7	6	5	5
4	Rye	Rainfed	7	6	5	5
5	Oats	Rainfed	7	6	5	5
6	Maize	Irrigated	19	17	15	13
7	Celtik	Irrigated	12	10	9	6
8	Sugae Beet	Irrigated	28	26	24	20
9	Sugar Beet	Rainfed	11	10	9	8
10	Potatoes	Irrigated	14	12	11	10
11	Dry Onion	Irrigated	13	11	10	9
12	Sunflower	Irrigated	12	10	9	7
13	Sunflower	Rainfed	11	10	9	8
14	Alfalfa	Irrigated	4	4	3	3
15	Cow vetch	Rainfed	3	3	2	2
16	Sainfoin	Rainfed	3	3	2	2
17	Dry Bean	Irrigated	4	4	3	3
18	Chick Pea	Rainfed	3	3	2	2
19	Lentil	Rainfed	3	3	2	2
20	Soy Bean	Irrigated	4	4	3	3
21	Vegetables	Irrigated	14	12	11	9
22	Melon	Irrigated	8	8	5	4
23	Melon	Rainfed	8	8	5	4
24	Fruits	Irrigated	9	8	7	6
25	Orchard	Rainfed	14	12	11	10
26	Orchard	Irrigated	10	8	7	7
27	Tobacco	Rainfed	6	5	4	4
28	Poppy	Rainfed	8	7	6	5
29	Sera top	Irrigated				

Notes : Enstitutmuz Calisma Bolgesine Gilen illerde (Tokat, Amasya, Sivas, Yozgat) Toprak Analiz

Sonularina Gore Cesitli Bitkilere Verilmesi Gerckli Fosforlu Gubre Miktarlari.

Table C-31 Fertilized phosphate based on the phosphate contents in soil (P2O5 kg/dec.)

No.	Name of Crops	Cotions	P2O5 contents in soil								
			0.0~ 1.0	1.1~ 2.0	2.1~ 3.0	3.1~ 4.0	4.1~ 5.0	5.1~ 6.0	6.1~ 7.0	7.1~ 8.0	8.1~ 9.0
1	Wheat	Irrigated	14	12	9	7	6	5	4	3	
2	Wheat	Rainfed	12	10	9	7	5	3	1		
3	Barley	Rainfed	10	9	8	7	6	5	4	3	
4	Rye	Rainfed	8	7	6	5	4	3	2		
5	Oats	Rainfed	8	7	6	5	4	3	2		
6	Maize	Irrigated	9	8	7	6	5	4	3		
7	Celik	Irrigated	10	9	7	6	5	4	4	3	
8	Sugae Beet	Irrigated	14	12	10	9	8	7	6	5	
9	Sugar Beet	Rainfed	10	9	7	6	5	4	3	2	
10	Potatoes	Irrigated	13	12	10	9	8	7	5	4	3
11	Dry Onion	Irrigated	21	16	15	11	8	5	2		
12	Sunflower	Irrigated	11	10	9	8	7	6	4	3	
13	Sunflower	Rainfed	9	8	7	6	4	3			
14	Alfalfa	Irrigated	25	23	20	17	14	10	7	4	
15	Cow vetch	Rainfed	8	7	5	4	4	3	2		
16	Sainfoin	Rainfed	8	7	5	4	4	3	2		
17	Dry Bean	Irrigated	10	9	8	7	6	5	4		
18	Chick Pea	Rainfed	8	7	5	4	4	3	2		
19	Lentil	Rainfed	9	9	8	6	5	4	3		
20	Soy Bean	Irrigated	10	9	8	7	6	5	4	3	
21	Vegetables	Irrigated	14	12	10	9	7	6	4		
22	Melon	Irrigated	9	8	7	6	5	4	3		
23	Melon	Rainfed	7	6	5	4	3	3	2		
24	Fruits	Irrigated	12	10	8	7	6	5	4	3	
25	Orchard	Rainfed	8	7	6	5	4	3	2		
26	Orchard	Irrigated	12	10	8	7	6	5	4	3	
27	Tobacco	Rainfed	8	7	6	5	4	3			
28	Poppy	Rainfed	4	4	4	3	3				
29	Sera top	Irrigated									

Notes : Enstitumuz Calisma Bolgesine Gilen Illerde (Tokat, Amasya, Sivas, Yozgat) Toprak Analiz

Sonuclarina Gore Cesitli Bitkilere Verilmesi Gerekli Fosforlu Gubre Miktarlari