3. GREEN PROJECT AND AGRICULTURE

Green project, agricultural data, and agricultural census (1997-2005) are the main topics of this chapter.

Green project

Green Project undertook several agricultural works in Lebanon.

Table 3.1 – Green *Project* activities in 2008

Percentages	Farmers	Number of villages where work was done	Reworked area (dounams)	Support walls (sq. meters)	Irrigation Channels (meters)	Concrete tanks (CM)	Vine columns	Tank perforation (CM)	Fruitful saplings	Fence in meters	Modern irrigation (dounams)	Paid amounts in thousand LBP
Nabatiyeh	9.9	12.4	7.3	15.5	0.0	7.3	0.0	0.0	0.0	9.0	0.0	8.8
South Lebanon	10.8	11.6	9.7	9.2	10.6	8.9	5.4	0.0	1.3	10.1	0.0	9.2
South Bekaa	22.4	16.9	29.7	13.7	0.0	0.6	56.5	4.6	25.5	39.8	46.2	20.3
North Bekaa	17.4	17.7	26.9	0.2	0.0	21.6	21.7	35.4	46.8	17.3	26.8	19.6
North Lebanon 1	10.7	10.5	10.3	11.8	0.0	13.8	0.0	23.5	0.0	1.6	0.0	11.3
North Lebanon 2	13.4	13.0	7.1	22.9	0.0	22.3	16.3	36.5	24.5	6.9	6.3	15.5
Mount-Lebanon 1	5.2	8.3	1.4	11.0	0.0	9.5	0.0	0.0	1.6	1.8	9.5	4.6
Mount-Lebanon 2	10.1	9.7	7.8	15.7	89.4	15.9	0.0	0.0	0.2	13.5	11.2	10.8
Total (in number)	655	362	2,573	67,651	2,350	13,616	3,680	86,139	18,981	19,264	63	3,445,088

1 Dounam = 1000 m^2

Table made by CAS based on Green Project data (2008)

Green Project spends 3,445 million LBP in 2008 to help 655 farmers and to undertake agricultural activities in 362 villages such as 2,573 dounams of reworked area, 67,651 square meters of support walls, 2,350 meters of irrigation channels, 13,616 CM of concrete tanks, 3,680 vine colums, 86,139 cubic meters of tank perforation, 18,981 fruitful saplings, 12,264 meters of fence and 63 dounams of modern irrigation.

South Bekaa benefit the most of these paid amounts (20.3%) spent on farmers (22.4%), dounams of reworked area (29.7%), vine columns (56.5%), meters of fence (39.8%) and dounams of modern irrigation (46.2%).

It is followed by North Bekaa which benefited of 19.6% of total paid amounts by Green Project to be spent in 17.7% of the villages in order to plant 46.8% of fruitful saplings.

So, Bekaa benefits of 39.9% of total paid amounts by Green Project in 2008, North Lebanon of 26.8%, South Lebanon and Nabatiyeh of 18.0% and Mount-Lebanon of 15.4%.

Anyway and in 2008, peaks of farmers (22.4%)

are registered in South Bekaa, of number of villages where work was done (17.7%) in North Bekaa, of dounams of reworked areas (29.7%) in South Bekaa, of square meters of support walls (22.9%) in North Lebanon 1, of meters of irrigation channels (89.4%) in Mount-Lebanon, of cubic meters of concrete tanks (22.3%) in North-Lebanon 2, of vine columns (56.5%) in South Bekaa, of cubic meters of tank perforation (36.5%) in North Lebanon 2, of fruitful saplings (46.8%) in Bekaa, of meters of fence (39.8%) in South Bekaa and of dounams of modern irrigation (46.2%) in South Bekaa.

Agriculture

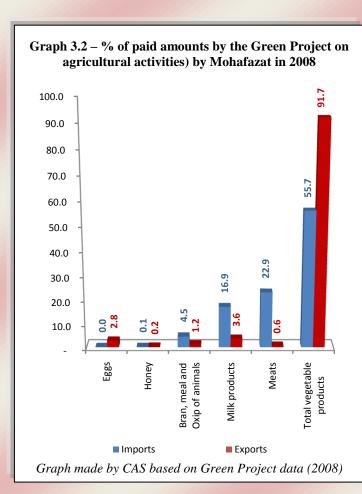
Lebanese foreign trade of agricultural products consists of imports and exports of vegetable products, meats, bran, meal and oxip of animal, milk products, eggs and honey.

Table 3.2 – Agricultural foreign trade in 2008

	T	Value in <mark>mill</mark> i	ion LBP	Quantity in tons		
Type of product	Imports	Exports	Trade balance	Imports	Exports	
Total vegetable products	1,118,487	219,782	-898,705	1,173,411	619,489	
Meats	459,022	1,455	-457,567	103,282	1,131	
Bran, meal and Oxip of animals	89,583	2,816	-86,767	128,424	13,864	
Milk products	338,923	8,537	-330,386	53,375	1,111	
Eggs	620	6,597	5,977	87	10,377	
Honey	1,642	406	-1,236	162	21	
Total products	2,008,277	239,593	-1,768,684	1,458,741	645,993	

Table made by CAS based on Ministry of Agriculture (2008) data

Based on the Ministry of Agriculture data, agricultural foreign trade balance (1,786,684 million LBP) is negative in general and for most items except for eggs (5,977).



In million LBP, total vegetable products are the most exported (91.7%) and imported (55.7%). These products are gramineous, corneas, vegetables with foliage, vegetables with fruits, flowers and roses, oil seeds, trees with nucleus, plants with tubers and herbs with roots, fruit trees and tobacco.

Table 3.3 – % of vegetable products foreign trade (million LBP) in 2008

Type of product	Imports	Exports
Vegetables with foliage	0.8	5.5
Flowers and roses	1.8	1.7
Vegetables with fruits	2.5	2.6
Fruit trees	3.8	39.8
Corneas	6.0	2.7
Trees with nucleus	8.0	2.0
Plants with tubers and herbs with roots	8.6	11.9
Oil seeds	8.9	1.8
Total Tobacco	22.1	23.2
Gramineous	37.5	8.7
Total vegetable products	2,008,277	239,593

Table made by CAS based on Ministry of Agriculture (2008)

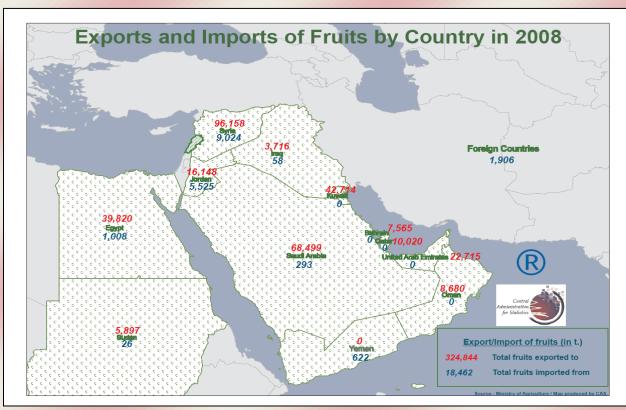
Gramineous (37.5%) are the peak of imports of vegetable products with a total value of 418,897 million LBP. In this category, wheat (57.9%) is the peak of imports with a total value of 242,463 million LBP. Fruit trees (39.8%) are the peak of exports of vegetable products with a total value of 19,083 million LBP. In this category, apple (22.6%) are the peak of exports with a total value of 19,771 million LBP.

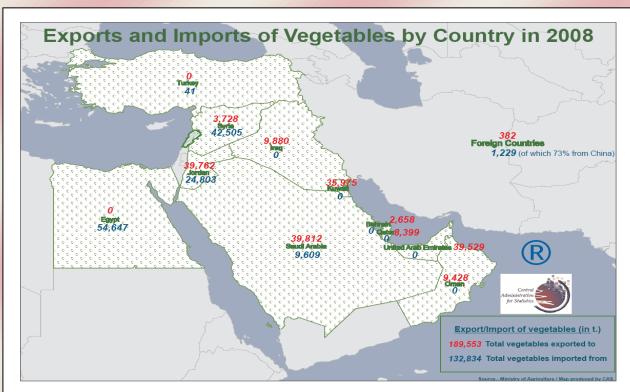
Finally, Lebanon exports 324,844 tons and imports 18,462 tons of fruits in 2008. It also exports 189,553 tons and imports 132,834 tons of vegetables in 2008.

Table 3.4 – Foreign trade of fruits and vegetables in tons in 2008

Fruits pe	aks	Vegetables peaks					
Imports	Exports	Imports	Exports				
18,462 tons	324,844 tons	132,834 tons	189,553 tons				
March (18.6%)	March (12.7%)	March (30.4%)	September (21.6%)				
Syria (48.9%)	Syria (29.6%)	Egypt (41.1%)	Saudi Arabia (21.0%)				
Water melon (53.4%)	Orange (27.7%)	Potato (42.7%)	Potato (75.5%)				

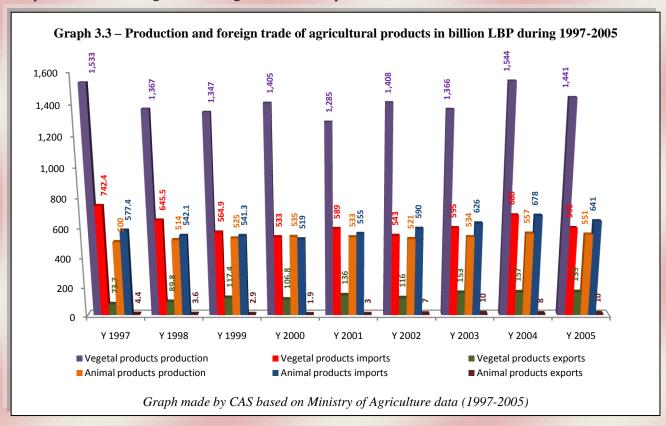
Table made by CAS based on Ministry of Agriculture (2008) data





Agricultural census 1997-2005 - Selected indicators

The Ministry of Agriculture conducted the Agricultural census for the years 1997-2005. Its results display the production and foreign trade of vegetal and animal products.



Regarding vegetal products, their production decreased of 6.0%, imports decreased of 19.8% and exports increased of 114.9% during 1997-2005. As for animal products, their production increased of 10.2%, imports increased of 11.1% and exports increased of 150.0% during 1997-2005.

Agricultural census 1997-2005 – Vegetal products

Products which witnessed an increase in production in billion LBP during 1997-2005 are: gramineous (+173.5%), fruit trees (+8.6%) and others (+1.8%). While products which witnessed a decrease in production during 1997-2005 are: corneas (-48.8%), vegetables (-16.3%), agro-food (-33.5%) and olives (-19.9%).

Table 3.5 – Vegetal products production in billion LBP during 1997-2005

Production (billion LBP)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gramineous	34	40	37	57	68	66	65	90	93
Corneas	43	44	39	48	44	35	29	27	22
Vegetables	504	425	388	363	376	340	373	403	422
Agro-food	155	154	148	143	125	97	101	117	103
Fruit trees	581	553	538	456	477	570	647	644	631
Olives	141	47	101	266	119	265	110	212	113
Nuts			42	38	40				
Young trees, flowers, seeds and ornamental plants			7	7	6				
Plantations Agayp	67	58							
Others	56	47	48	28	30	35	42	52	57
Total	1,581	1,367	1,348	1,406	1,285	1,408	1,366	1,544	1,441

Table made by CAS based on Ministry of Agriculture (1997-2005) data

Vegetal products which witnessed an increase in imports in million LBP during 1997-2005 are: oliy seeds (+44.5%), fruit trees (+740.7%) and olives (+7,261.5%). While vegetal products which witnessed decrease in imports in million LBP during 1997-2005 are: gramineous (-6.6%), corneas (-40.8%), bran, meal and fertilizer (-38.1%), flowers and roses (+64.0%) and coffee, tea and spices (-18.6%).

Table 3.6 – Vegetal products imports in million LBP during 1997-2005

Imports (million LBP)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gramineous	215,303	180,980	177,693	169,670	163,063	166,237	207,460	249,703	201,067
Corneas	55,207	34,166	34,042	37,667	42,630	32,867	29,394	30,944	32,690
Bran, meal and fertilizer	54,650	46,330	35,941	46,185	50,253	35,507	20,998	27,204	33,836
Vegetables	109,404	125,919	71,817	68,821	70,847	65,187	60,300	79,161	84,289
Oily seeds	54,984	46,188	60,149	49,542	59,086	62,735	99,464	106,306	79,434
Fruit trees	9,946	8,261	7,748	10,231	11,659	99,449	100,156	106,136	83,615
Olives	39	2	15	22	0	86	427	1,784	2,871
Nuts	124,975	86,118	81,145	76,869	99,308				
Flowers and roses	39,275	24,981	29,078	14,398	18,487	23,779	26,083	14,938	14,123
Coffee, tea and spices	75,056	88,902	60,812	56,673	67,246	40,386	41,645	54,114	61,079
Tobacco			6,433	3,237	6,186	12,978	9,374	9,959	2,254
Total	738,839	1,206,720	564,873	533,315	588,765	539,211	595,301	680,249	595,258

Table made by CAS based on Ministry of Agriculture (1997-2005) data

Vegetal products which witnessed an increase in exports in million LBP during 1997-2005 are: geamineous (+337.2%), corneas (+160.4%), bran, meal and fertilizer (+166.1%), vegetables (+51.7%), oily seeds (+18.9%), fruit trees (35.0%), flowers and roses (+186.9%) and coffee, tea and spices (+147.2%). While olives (-73.3%) only witnessed a decrease in exports in million LBP during 1997-2005.

Table 3.7 – Vegetal products exports in million LBP during 1997-2005

Exports (million LBP)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gramineous	443	327	1,383	1,186	356	2,906	5,637	5,446	1,937
Corneas	846	1,966	1,171	1,272	1,672	2,523	98	2,191	2,203
Bran and meal and fertilizer	313	3,293	3,039	3,850	4,453	9,590	11,032	10,353	833
Vegetables	20,933	23,263	25,672	19,937	19,784	28,176	25,293	34,560	31,747
Oily seeds	1,805	1,113	1,376	1,170	2,107	2,178	1,897	2,667	2,146
Fruit trees	43,738	53,514	42,223	44,562	43,194	42,281	49,419	60,492	59,052
Olives	146	79	21	60	87	40	27	167	39
Nuts	893	967	890	556	1,097	0	0	0	0
Flowers and roses	421	540	248	206	493	451	436	1,212	1,208
Coffee, tea and spices	4,243	4,645	4,918	3,623	5,770	7,153	8,696	8,915	10,488
Tobacco			37,211	30,471	56,752	20,335	50,298	31,056	49,054
Total	73,781	89,707	118,152	106,893	135,765	115,633	152,833	157,059	158,707

Table made by CAS based on Ministry of Agriculture (1997-2005) data

Agricultural census 1997-2005 - Animal products

All animal products witnessed an increase in production in billion LBP during 1997-2005: milk (+2.7%), red meat (+21.7%), poultry (+1.4%), eggs (+26.4%), honey (+25.0%) and fish (+27.1%).

Table 3.6 – Animal products production in billion LBP during 1997-2005

Production (billion LBP)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Milk	135	129	136	129	124	123	138	130	139
Red meat	72	71	71	60	58	68	77	85	88
Poultry	183	196	202	211	219	204	189	205	186
Eggs	45	48	49	52	53	49	56	62	57
Honey	20	31	30	24	19	17	20	22	25
Fish	45	39	38	59	59	60	55	53	57
Total	500	514	526	535	533	521	534	557	551

Table made by CAS based on Ministry of Agriculture (1997-2005) data

Animal products which witnessed an increase in imports in million LBP during 1997-2005 are: milk and derivative (+4.1%), red and white meat meat (+13.5%) and eggs (+16.3%). While animal products which witnessed a decrease in imports in million LBP during 1997-2005 are: honey (-63.4%) and fresh fish (-7.6%).

Table 3.7 – Animal products imports in million LBP during 1997-2005

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Imports (million LBP)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Milk and derivatives	257,988	240,909	240,800	224,500	218,500	231,900	231,000	269,800	268,600
Red and white Meat	276,812	258,437	231,900	231,800	257,200	291,200	348,200	353,200	314,100
Eggs	86		2	0	100	100	100	100	100
Honey	2,183	1,958	1,900	800	700	700	700	1,000	800
Fresh fish	62,200	66,700	66,700	62,200	78,900	66,300	46,300	53,600	57,500
Canned fish							20,200	26,600	25,300
Total	599,269	568,004	541,302	519,300	555,400	590,200	646,500	704,300	666,400

Table made by CAS based on Ministry of Agriculture (1997-2005) data

Animal products which witnessed an increase in exports in million LBP during 1997-2005 are: milk and derivative (+114.8%), red and white meat (+147.5%), eggs (+60.6%) and fresh fish (+216.6%). While animal products which witnessed a decrease in imports in million LBP during 1997-2005 are honey (-74.4%).

Table 3.8 – Animal products exports in million LBP during 1997-2005

Exports (million LBP)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Milk and derivatives	2,235	1,493	1,291	800	2,600	2,900	3,600	3,900	4,800
Red and white meat	808	1,109	900	300	300	1,700	3,500	1,900	2,000
Eggs	1,245	737	374	600	100	1,800	1,800	1,700	2,000
Honey	39	71	52	10	100	100	100	100	10
Fresh fish	338	309	310	200	100	400	700	500	1,070
Canned fish							400	400	400
Total	4,665	3,719	2,927	1,910	3,200	6,900	10,100	8,500	10,280

Table made by CAS based on Ministry of Agriculture (1997-2005) data