

**Annual report  
2005**

**Greece**

**Agri.Med**

**Agriculture, fishery, food  
and sustainable rural development  
in the Mediterranean region**

**Annual report  
2005**

**Greece**

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## **1 Trends in agri-food production and trade**

### **1.1 - Agricultural production**

#### **Contribution to GDP**

In 2003 the contribution of agriculture to the national GDP fell to less than 6% (in constant prices) as opposed to almost 7,7% in 1998 (Table 1). Still, the Gross Value Added (GVA) of agriculture exceeded 8,5 million €, increased by 3,5% since 2002. In the same time however, the national GDP increased (in constant prices of the previous year) by around 8%.

**Table 1 - Gross Value Added of agriculture to the GDP, 1998-2003**

	Current prices			Constant prices (of the previous year)		
	Agriculture**	GDP		Agriculture**	GDP	
	Million €	Million €		Million €	Million €	
1998	7 919	105 773	7,49	7 731	100 505	7,69
1999	8 047	112 686	7,14	8 196	109 391	7,49
2000	8 030	121 668	6,60	7 752	117 700	6,59
2001*	8 321	131 024	6,35	7 728	126 584	6,11
2002*	8 984	141 334	6,36	8 226	136 082	6,04
2003*	9 252	152 572	6,06	8 520	147 387	5,78

\* Provisional data

\*\* Including hunting and forestry; fishing and operation of fish hatcheries and fish farms

Source: National Statistical Service of Greece, NSSG

#### **Production volumes**

Cultivated agricultural area in Greece was around 3,43 million ha in 2003, representing 88,4% of the total agricultural area; the rest (0,45 million ha) being fallow land. Cultivated area exhibited a sharp decline during 2003, by almost 30 000 ha compared to 2002 and 42 000 ha compared to 2001. This reduction is mainly attributed to decreases in cotton (378 000 ha in 2003 compared to 403 000 in 2001) and in tobacco (58 000 and 61 000 ha in 2003 and 2001 respectively).

The most important crops in terms of areas are cereals (37,5% of total), tree plantations (29,2%) and industrial crops (14,2% - of which cotton represents more than 11%). In terms of output, for most commodities there has been a slight decrease in production volumes: cereals production fell by more than 10%, fibre crops by 6% and oilcrops by 4,4%. On the other hand, fruit production increased by 7,7%, vegetables by 3,6% and citrus by 2,5% (Table 2).

**Table 2 - Areas and production volumes of major agricultural products, Greece (Areas: Ha; Production: MT)**

	2001	2002	2003
<b>Cereals, total</b>			
Area harv	1 285 340	1 295 807	1 282 500
Production	4 661 824	4 797 931	4 286 200
<b>Citrus fruit, total</b>			
Area harv	61 000	61 050	61 050
Production	1 316 614	1 446 795	1 482 500
<b>Coarse grain, total</b>			
Area harv	395 549	397 005	409 200
Production	2 426 955	2 553 390	2 479 500
<b>Fibre crops primary</b>			
Area harv	403 140	388 339	350 000
Production	455 600	355 000	333 122
<b>Fruit excl melons, total</b>			
Area harv	312 647	319 685	323 680
Production	4 165 906	3 833 349	4 123 600
<b>Oilcrops primary</b>			
Area harv	1 192 237	1 174 932	1 136 510
Production	619 084	690 532	660 289
<b>Pulses, total</b>			
Area harv	24 147	24 112	24 200
Production	42 012	40 593	41 600
<b>Roots and tubers, total</b>			
Area harv	45 709	47 506	48 100
Production	938 703	883 871	902 000
<b>Treenuts, total</b>			
Area harv	69 663	69 660	69 660
Production	99 194	80 041	83 000
<b>Vegetables &amp; melons, total</b>			
Area harv	138 252	135 795	136 300
Production	4 021 508	3 727 500	3 861 500

Source: FAOSTAT.

Altogether, agricultural production in Greece exhibits an apparent decreasing trend over the last few years. In 2003, total agricultural production was lower than in the previous year, as were all individual sub-categories (cereals, crops, livestock, food and non-food production) (Table 3).

**Table 3 - Agricultural Production Indexes 1998-2003  
(Net PIN base 99-01)**

	Agriculture	Cereals	Crops	Food	Livestocks	Non Food
1998	95,1	93,1	92,9	95,5	103,4	92,4
1999	99,1	98,4	98,2	100,1	102,8	93,3
2000	101,3	102,4	101,6	101,2	99,6	102,3
2001	99,6	99,2	100,2	98,8	97,6	104,4
2002	95,9	102,5	95,5	97,5	100,1	85,9
2003	94,4	90,1	94,4	96,6	97,2	81,1

NET Production Number(PIN): Net production quantities of each commodity are weighted by 1989-91 average international commodity price and summed for each year.

Source: FAOSTAT.

The livestock sector in Greece represents roughly one third of the total value of agricultural production. Production in 2003 fell slightly compared to the previous year, but in general one can notice a stable pattern over the last few years. Meat production fell by 9,000 t mainly due to a decrease in the output of the chicken sector, whereas the other sectors (beef, goat etc) have either retained or increased production levels. Milk production was also lower in 2003, primarily due to lower volumes of sheep milk (Table 4).

**Table 4 - Livestock products output. Greece 2000-2003 (MT)**

	2001	2002	2003
Meat, total	482 773	492 573	483 573
Beef and veal	59 900	62 000	62 000
Mutton and lamb	79 400	81 500	82 000
Goat meat	42 800	44 600	44 500
Pigmeat	136 600	139 400	140 000
Chicken meat	152 000	153 000	143 000
Eggs primary	106 353	107 073	104 060
Milk, total	1 942 045	1 990 545	1 940 045
Cow milk	815 000	830 500	820 000
Sheep milk	670 000	710 000	670 000
Goat milk	457 000	450 000	450 000

Source: FAOSTAT.

**Producer prices**

Producer prices in 2003 increased sharply, well above the national inflation rate (around 3,5%). The overall index increased by more than 8%, 11% for the crop sector and a mere 1,3% for the livestock sector (Table 5). Fruits and vegetables exhibited the highest increase in producer prices ranging from 30 to almost 70%, followed by cotton and potatoes. On the other hand, producer prices for grapes, cabbage and durum wheat were lower than in 2002. In livestock production price variations are much smoother; only pork prices continue to fall (6% compared to 2002 and 19,5% compared to 2001), whereas lamb and goat meat producer prices increased by more than 4%.

**Table 5 - Producer price indices of selected agricultural products  
(1995 = 100)\***

	2001	2002	2003	2003/2002
Overall	120,3	127,2	137,6	8,18
Crop production	119,8	130,6	145	11,03
Livestock production	121,6	119,4	120,9	1,26
Wheat, soft	114,4	107,7	109,3	1,49
Wheat, durum	120,8	116,4	116	-0,34
Maize	109,1	111,2	114,1	2,61
Rice	114,4	122,8	118	-3,91
Cabbage	113	197,7	146,2	-26,05
Potatoes	138	130,7	153,9	17,75
Tomatoes	157,8	173,6	182,4	5,07
Peaches	127,8	161,1	271,9	68,78
Watermelons	148	126	194,3	54,21
Melons	158,4	138,6	183,3	32,25
Table grapes	143,8	219,1	169,3	-22,73
Oranges	128,9	143,9	146	1,46
Lemons	102	138,5	142,8	3,10
Almonds	123,5	138,5	149,9	8,23
Olive oil	90,8	102,5	108,3	5,66
Cotton	93,4	92,1	112	21,61
Sheep milk	106,5	109,1	110,3	1,10
Goat milk	110,3	109,7	109,6	-0,09
Cow milk	113,6	117,1	118,4	1,11
Eggs	134,5	139	142,6	2,59
Veal	113,6	112,6	114,9	2,04
Lamb	133,1	128,7	136,1	5,75
Goats	134,2	129,6	134,9	4,09
Pork	144,7	123,8	116,5	-5,90
Poultry meat	117,9	110,7	109	-1,54

\*excluding subsidies

Source: NSSG.



Input prices in agriculture increased in 2003 at a higher extent than in 2002. The overall input index increased by 3,86% (compared to 2,84% in 2002/01), an increase largely associated to the higher consumables index (4% in 2003/02 and 2,5% in 2002/01), whereas the capital formation index increased to a lesser degree compared to the period 2002/01 (3,1 and 4% respectively).

**Table 6 - Input price indices in agriculture & livestock (1995 = 100)**

	2001	2002	2003	2003/2002
Consumables	122,6	125,7	130,8	4,06
Capital formation	127	132,2	136,3	3,10
Agric. machinery	125,5	130,9	135	3,13
Agric. buildings	132,1	136,4	140,4	2,93
Overall index	123,4	126,9	131,8	3,86

Source: NSSG.

### ***Agricultural population & employment***

As indicated in the previous years' reports, agricultural population in Greece is the highest among the EU15 Member States. Around 676 000 persons were employed in the aggregate agricultural sector (including agriculture, livestock, forestry and fishery) in 2003, i.e. 16,6% of total employment in Greece (Table 7). This percentage is almost identical to the one in 2002, but still, compared to 1999 there are almost 80 000 fewer persons employed in agriculture.

**Table 7 - Employment (in thousands) in agriculture and in the other economic sectors**

	1999		2000		2001		2002		2003	
	No.	%	No.	%	No.	%	No.	%	No.	%
Primary sector	756,5	19,1	735,3	18,5	680,7	17,3	668,0	16,7	676,4	16,6
Agriculture	743,2		722,4		667,4		654,7		663,7	
Fishing	13,2		12,8		13,4		13,3		12,7	
Secondary sector	895,4	22,6	893,6	22,5	895,3	22,7	907,3	22,7	916,4	22,4
Tertiary sector	2 316,3	58,4	2 350,7	59,1	2 365,4	60,0	2 430,3	60,7	2 490,9	61,0
Total	3 968,2	100	3 979,5	100	3 941,4	100	4 005,6	100	4 083,7	100

\*Averages of 4-trimester data.

Source: Compiled from data from NSSG, Labour Force Survey.

Employment in agriculture has an exceptional pattern, not directly comparable with the other economic activity sectors: The highest percentage (60%) are actually farm owners who manage the farm by themselves (own-account workers) and another 30% are unpaid family members, whereas only 4,6% are salaried employees. By contrast, in the aggregate economy, salaried employees represent around 60% of total employment and own-account workers stand for less than 25% (Table 8).

**Table 8 - Breakdown of employment according to occupational status**

	2001			2002			2003		
	Aggr. econ.	Agric.	Fishing	Aggr. econ.	Agric.	Fishing	Aggr. econ.	Agric.	Fishing
Employers	325,5	53,3	2,3	302,5	46,0	2,4	299,0	42,6	1,0
Own-account workers	955,6	388,7	6,2	991,3	390,5	5,5	1 007,3	397,2	7,2
Salaried employees	2 320,9	26,2	3,4	2 378,7	27,4	3,3	2 429,4	30,8	3,2
Unpaid family workers	339,4	199,1	1,4	333,2	190,8	2,2	348,1	193,1	1,3
Total	3 941,4	667,4	13,4	4 005,6	654,7	13,3	4 083,7	663,7	12,7

\* Averages of 4-trimester data

Source: Compiled from data from NSSG, Labour Force Survey.

Another feature that differentiates agricultural employment from the other sectors is the level of salaries. The monthly labour cost in agriculture is 1019 €, which represents only 75% of the - considerably higher - national average (1361 €). Female labour is paid less than male labour, and this variation is larger than the average in all sectors: in agriculture, female wages represent 79,3% of male wages, whereas they account for 84,5% in all economic sectors (Table 9).

## 1.2 - Food industries

The manufacturing sector in 2003 had a mixed performance. The volume of production was lower for the first time after eight consecutive years of growth, operational profits were down by 6,7%, but still, net profits increased sharply by 27,4%<sup>1</sup>. This contradicting fact should be attributed to the substantial increase of non-operational profits, which, to a great extent, more than counterbalanced the lower operational profits. Therefore, it could be argued that the overall picture is not very promising, as the increase in profits is not accompanied with larger production and sales volumes. Out of the 26 sub-sectors, only 12 actually managed to increase their operational profits and the EBITDA (timber, drinks, clothing, plastics, chemicals, petroleum, machinery etc).

<sup>1</sup> All facts and figures in this section are based on data from the medium and large size industries (1807 in total) which represent the largest share of domestic production.

**Table 9 - Average Monthly labour cost by activity sector & sex (in €)**

		1999	2000	2001	2002
<b>Males</b>					
	Primary sect.	946,25	987,25	1010	1066,5
	All sectors	1299,25	1329,75	1378,75	1452
	%	72,8	74,2	73,3	73,5
<b>Females</b>					
	Primary sect.	755	756,75	804,25	845,5
	All sectors	1091,5	1132	1144,5	1226,25
	%	69,2	66,9	70,3	69,0
<b>Both sexes</b>					
	Primary sect.	897	927	957,25	1019,25
	All sectors	1221,75	1264,5	1285	1361,25
	%	73,4	73,3	74,5	74,9

\*Averages of 4-trimester data.

Source: NSSG, Labour Force Survey & data from administrative sources.

The largest processing sub-sector in Greece is the food and drinks industry. It is considered to be the most dynamic sector, but 2003 has been a poor year. Especially regarding the food processing industry, net profits reached 157 467 thousand €, down by 26,7% compared to 2002. Operational profits were down by 11% (at 298 739 thousand €) and EBITDA by 3,6% (845 148 thousand €). It is interesting to notice that profits were down, despite the fact that depreciations were significantly lower than the previous year. The overall poor performance of the food industry can be explained by two main factors: Firstly, the considerable reduction in agricultural production during the last two years due to adverse weather conditions and secondly, the fact that a number of industries that were profitable in the previous years, exhibited high losses in 2003. Overall, the volume of production of food and drinks was down by 3,2% in 2003.

The beverages industry on the other hand performed significantly better. EBITDA was practically unchanged (335 240 thousand €, or 0,4%), but operational profits increased by 4,8% (177 820 thousand €) and net profits by 32,4% (149 957 thousand €). The tobacco industry had a very bad year, as EBITDA fell by 46% at 33 374 thousand € and net losses reached almost two million €. Similarly negative is the picture for the textile industry: Despite the fact that net profits reached almost six million €, EBITDA fell by 18,8% (at 118 659 thousand €) and there were operational losses of almost 14 million €. The once thriving sector that is of crucial importance to the domestic economy is faced today with adverse circumstances due to the increased competition from third countries (mainly from Far-East countries) and the sharp decline in world prices, and its future does not seem prosperous.

Accounting for a more in-depth analysis of the Greek food industry, it is worth mentioning the results of the 346 largest companies in 2003. Total net profits dropped 15% from 345 million € in 2002 to 293.6 million € in 2003, whereas total sales increased slightly by 3%, reaching 7,2 billion € (Table 10). It is evident that the domestic food industry can be separated into two categories: despite the fact that in 10 out of 19 sub-groups profits were down, the 272 profitable companies increased their profits by an average 13,1% to 427 million €, whereas the remaining non-profitable ones, increased their losses by a greater extent (312%) to almost 134 million €.

**Table 10 - Economic results of the Greek food processing industry  
(2002-03)**

Sub-sector	Sales			Net profits			Net profit marg.
	2002	2003	2002/ 2003	2002	2003	2002/ 2003	
	Million €	Million €	%	Million €	Million €	%	%
Catering	307,18	323,90	5,44	18,97	32,06	69,02	9,90
Snacks	232,44	220,34	-5,21	17,09	13,48	-21,08	6,12
Agricultural products	32, 60	33,42	2,52	0,008	1,011	1644,60	3,03
Fish catches	144,34	149,79	3,77	-0,54	2,45		1,64
Bread and products	682,98	685,43	0,36	16,50	18,91	14,59	2,76
Dairy	1 423,30	1 533,28	7,73	43,44	40,11	-7,67	2,62
Various	234,48	231,78	-1,15	9,25	11,33	22,43	4,89
Sweets	689,55	699,08	1,38	44,21	32,92	-25,55	4,71
Pasta	110,63	120,28	8,72	10,43	10,42	-0,08	8,67
Animal food	297,63	302,29	1,56	8,75	6,72	-23,19	2,22
Aquaculture	232,47	262,23	12,80	10,64	-5,25	-149,33	-2,00
Coffee	378,45	390,89	3,29	78,40	82,75	5,55	21,17
Meat	583,28	592,67	1,61	27,06	-4,02	-114,86	-0,68
Oils and fats	828,39	871,08	5,15	37,10	43,55	17,40	5,00
Spices	43,079	44,79	3,98	2,87	2,39	-16,73	5,34
Nuts	92,08	97,51	5,90	5,98	6,75	12,86	6,92
Poultry	276,14	304,89	10,41	3,17	-0,10	-103,24	-0,03
Health food	6,98	7,08	1,48	0,05	0,18	237,44	2,59
Fruit and vegetables	644,08	606,52	-5,83	11, 71	-2,13	-118,22	-0,35
Total	7 240,15	7 477,32	3,28	345,16	293,58	-14,94	3,93

Source: STAT BANK.

### 1.3 - Food consumption

In last year's report it was mentioned that around 16,5% of total consumption expenditure is directed to food products, 0,5% to drinks and beverages and 4,5% to alcoholic beverages and tobacco. This means that around 18 000 million € is spent annually in food, a figure that reaches more than 23 300 million € when drinks and tobacco expenditures are also accounted for.

In 2003, consumer prices of food products continue to ascend at an extent significantly higher than the overall Consumer Price Index (CPI); CPI increased by 3,5%, whereas the food index increased by more than 5% and the drinks index increased by 4% (Table 11).

**Table 11 - National Consumer price index 2001 – 2003 (1999 = 100)**

	2001	2002	2003
Food & non alcoholic beverages	107,4	113,1	118,8
Alcoholic beverages and tobacco	110,6	118,6	123,5
Overall index	102,9	110,2	114,1

Source: NSSG.

It was emphasised also in last year's report that the increase in food prices has become a matter of national concern. In the course of 2003, officials intensified the efforts to reduce price increases in major consumer products, including food products; not always with the same success. Although food prices in 2003 did not increase as much as in 2002, the cumulative increase during the last three years is believed to have changed dramatically the way Greek consumers purchase food products: Own-label products in retail chains are gaining market shares rapidly at the expense of well-known, manufacture products, as the former are sold at a considerable discount.

In the course of 2003, the highest increase in prices for major food products was for potatoes (19,2%), poultry meat (7,3%), fresh fish (5,3%), sweets/confectionaries (4,8%), olive oil (4,3%), juices (3,8) and fruits and dairy products (3%).

Per capita consumption of fruit and vegetables in Greece is among the highest in the European Union. On the other hand, consumption of meat (around 90 kg) is well below the EU average, with the possible exception of poultry meat. Sheep and goat meat consumption is around 13 kg, while the self-sufficiency rate is around 90%. Per capita consumption for beef and pork is considerably higher (22 and 26 kg respectively), but self-sufficiency rates are very low (27 and 48%).

### 1.4 - Foreign trade

Agricultural trade deficit in 2002 showed a surprising increase (around 75%, or more than 500 million \$). Imports increased sharply, mainly due to the fact that the adverse weather conditions had a considerably negative effect on the domestic production of most agricultural commodities. It is indicative, that although exports of agricultural products increased by 4,3%, imports rose by as much as 20,4%. Similarly, imports for food products rose a little less than five times more than exports (Table 12).

**Table 12 - External Trade balance of agricultural products and food, 2000-2002 (million \$)**

	Agricultural Products			Food excl. fish			Total Merchandise Trade		
	Imports	Exports	Balance	Imports	Exports	Balance	Imports	Exports	Balance
2000	3 193	2 577	-616	2 268	1 647	-621	29 463	10 872	-18 591
2001	3 135	2 414	-721	2 252	1 654	-597	28 230	10 239	-17 992
2002	3 775	2 517	-1 257	2 778	1 742	-1 036	31 279	10 355	-20 925

Source: FAOSTAT.

The trade balance for some of the most important agricultural products and commodities is depicted in Table 13. The value of fruit and vegetables exports exceeds one billion \$, but the trade surplus was less than in the previous year, because of the increased levels of import quantities. Cotton exports were down by almost 32 million \$ but were still considerably high (more than 200 million \$) and imports remained negligible. Tobacco exports increased both in volume as well as in value, but so did also the imports and (especially regarding the value) at a higher degree than exports. Olive oil exports in 2002 plunged to less than half of the quantities, reaching less than 90 000 t. Still, the value of olive oil exports was more than 186 million \$ and as imports are always only a fraction of domestic produce, there was a surplus of around 175 million \$.

For most other agricultural products there is a large trade deficit, especially when it comes to meat and dairy products: Meat imports in 2002 exceeded 700 million \$ and exports were worth less than 15 million, thus resulting to a trade deficit of around 700 million \$. It is worth noticing though, that both imports and exports were less in volume than in the previous year. The trade deficit for milk was around 62 million \$, as Greece exports a little more than 100 tonnes of fresh milk. Meat imports represent roughly 19% and 26% of the value of agricultural products' and food imports respectively, and altogether, around 70% of the Greek food trade deficit.

**Table 13 - Trade balance for most important agricultural & food commodities  
2001-2002**

	1000 \$			MT		
	Imports	Exports	Balance	Imports	Exports	Balance
<b>Beverages</b>						
2001	281 732	100 347	-181 385	170 513	195 764	25 251
2002	335 480	113 153	-222 327	191 437	156 871	-34 566
<b>Cereals</b>						
2001	216 626	82 390	-134 236	1 519 279	503 884	-1 015 395
2002	309 756	114 066	-195 690	2 246 199	711 628	-1 534 571
<b>Cotton Lint</b>						
2001	3 398	235 291	231 893	2 377	290 616	288 239
2002	3 138	203 956	200 818	1 938	223 900	221 962
<b>Feedingstuffs -08</b>						
2001	149 590	23 374	-126 216	424 464	117 656	-306 808
2002	157 393	28 377	-129 016	382 022	120 269	-261 753
<b>Fruit + Vegetables -05</b>						
2001	354 310	1 040 891	686 581			
2002	481 101	1 058 409	577 308			
<b>Milk Fresh</b>						
2001	57 677	182	-57 495	86 210	200	-86 010
2002	62 319	135	-62 184	99 850	109	-99 741
<b>Olive Oil, Total</b>						
2001	7 302	220 778	213 476	6 956	198 433	191 477
2002	11 690	186 412	174 722	6 782	86 979	80 197
<b>Pulses</b>						
2001	16 703	976	-15 727	28 403	1 377	-27 026
2002	27 821	896	-26 925	41 373	1 414	-39 959
<b>Rice</b>						
2001	10 192	10 400	208	13 003	29 285	16 282
2002	12 838	12 252	-586	17 292	30 098	12 806
<b>Sugar and Honey -06</b>						
2001	38 670	24 215	-14 455	52 157	78 138	25 981
2002	43 208	23 364	-19 844	36 462	64 622	28 160
<b>Tobacco</b>						
2001	219 299	323 824	104 525	34 358	97 111	62 753
2002	269 818	360 092	90 274	40 417	105 521	65 104
<b>Meat, Total</b>						
2001	605 022	12 533	-592 489	540 474	9 072	-531 402
2002	717 538	14 260	-703 278	377 294	7 006	-370 288
<b>Wine etc.</b>						
2001	19 750	45 456	25 706	10 254	56 401	46 147
2002	45 562	47 999	2 437	12 499	29 199	16 700

Source: FAOSTAT.





## **2 Fisheries**

### **2.1 - Infrastructures**

The fishery sector, despite its small share in the Gross Agricultural Product (GAP) and the GDP (around 4% and 0,3% respectively) remains a sector of crucial importance for the national economy regarding rural development aspects and economic viability in remote areas of the country. With a four thousand-kilometre coastline around the mainland and another eleven thousand along the islands, Greece has a competitive advantage in fisheries operations: Not only are there more than 250 marine creatures available in the seas, but also, part of the fishery sector is aquaculture, an export-oriented industry that has developed rapidly in Greece over the last two decades.

Employment in the fishery sector represents 1,9% and 0,3% of employment in the primary sector and in the whole economy respectively. In 2003, 12 700 persons were employed in the fishery sector, indicating a loss of around 500 jobs compared to 2002 (Table 7). 60% of the people employed in the sector are own-account workers, 24% are employees and 11% are unpaid family workers.

In last year's report it was stated that the two main sub-sectors (fishing and aquaculture) have followed different growth paths during the last decades: Aquaculture has grown rapidly in the last two decades but is faced today with a number of serious problems that may jeopardise its future, whereas fishing - seriously affected by the Common Fishing Policy (CFP) and the attempt to reduce fishing fleets in the EU - has been declining.

### **2.2 - Fishing fleets, harbours and fishes**

Not much has changed for the fishery sector during 2003. Due to the CFP, Greece had to reduce its fishing capacity on aggregate by 1357 vessels, 53 469 GRT reduction (capacity), i.e. 33%, and 65 683 KW reduction, i.e. 10%. By 1999, Greece had achieved all targets, including the ones referring to trawlers that were met later than the other targets. The number of professional fishing vessels today is shown in Table 14 but it should be emphasised that Greece will have to further reduce its fleet by around 15% until 2006.

Production of captured fish is declining over the last few years as a direct consequence of the provisions of the CFP and the overall side-effect of overexploitation during the previous decades.

**Table 14 - Number of professional motor propelled fishing vessels**

	2000			2001		
	No	HP	KOX GRT	No	HP	KOX GRT
Overseas fishery <sup>1</sup>	35	27 456	6930	30	23 352	5294
Open sea fishery	701	221 103	34 398	695	218 795	33 779
<i>Trawlers</i>	326	129 294	19 887	323	127 448	19 306
<i>Purse seines</i>	372	91 100	14 399	371	91 149	14 457
<i>Mixed</i>	3	709	112	1	198	16
Inshore fishery	6891	439 470	-	6980	447 436	-
<i>Seiners</i>	413	36 647		411	36 410	-
<i>Other<sup>2</sup></i>	6478	402 823	-	6569	411 026	-
Total	7627	688 029	41 328	7705	689 583	39 073

<sup>1</sup> Vessels fishing in the Atlantic Ocean.

<sup>2</sup> Excluding vessels of 19 HP or less.

Source: NSSG

With respect to the existing twelve fishing ports - i.e. harbours that include fish-wharves – (in Piraeus, Thessaloniki, Alexandroupoli, Kavala, Chalkida, Patra, Messologgi, Preveza, Kalymnos, Chios, Chania and Volos) referred to in 2003 report, it should be stressed that under the OPF 2000-2006 provisions have been made in order to improve their facilities. Today, out of the scheduled budget of 16 million € for the modernization of fishing port facilities more than three quarters have already been allocated to such specific actions.

### **2.3 - Aquaculture fish farms and industries**

Aquaculture in Greece, after an impressive boom in the mid 80s that resulted to a rapidly growing sector (more than 300 firms compared to only 3 in the beginning) by the end of 1990s, is facing today serious problems. It is believed that most of the problems arise from the fact that the sector was growing so fast that no production planning was possible as competition became increasingly tougher. Evidently, since 1995 production (mainly sea bass and sea bream) has been increasing at a 27% annual rate, whereas prices have been declining 7% annually. Consequently, a large number of firms were driven out of business reducing the number of operating firms to 166 and mergers are the main characteristic of the sector today: 14 large firms own 39,7% of the market and 27 control more than 60%.

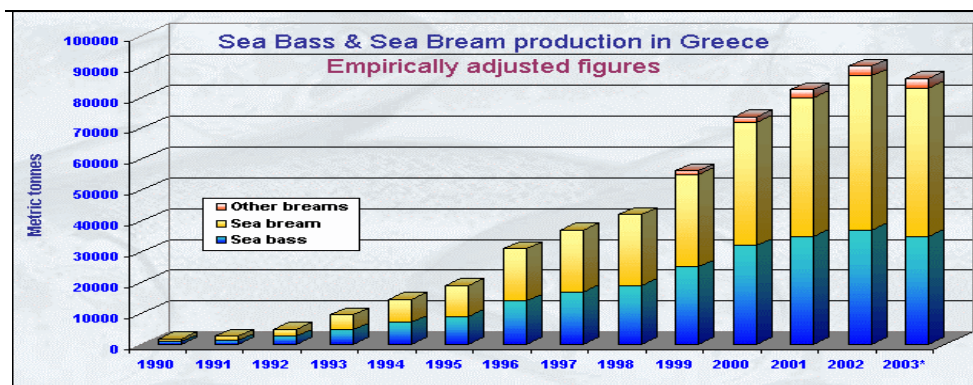
It is estimated that aquaculture provides direct or indirect employment to around 10 000 full or part-time employees and professionals (i.e. labourers, technicians, scientists, consultants etc). Sea bass and sea bream are the main products of domestic aquaculture (Figure 1). However, new species are being slowly introduced into the market (pandora, sharp-snout bream and white sea bream). Today,

production has exceeded 70-80 000 tonnes and Greece has become the largest producer in the EU (52% of bream production and 46% of bass production).

**Table 15 - Commodity balance of fish and fishery products (MT)  
(1999-2001)**

	Production	Imports	Exports	Food (apparent consumption)
<b>Total Fish Catch</b>				
1999	203 045	17 984	56 849	117 853
2000	194 698	27 358	68 429	115 345
2001	192 190	23 069	66 251	112 038
<b>Total Marine Fish</b>				
1999	144 829	14 434	35 427	82 561
2000	150 429	23 204	47 549	90 790
2001	145 211	18 876	50 638	80 533
<b>Pelagic Marine Fish Fresh</b>				
1999	45 111	955	1 598	22 012
2000	41 213	942	1 021	23 500
2001	38 872	892	1 130	23 296
<b>Demersal Marine Fish Fresh</b>				
1999	88 071	5 138	26 015	49 054
2000	94 779	4 716	40 137	42 238
2001	93 510	4 182	41 916	38 316
<b>Cephalopods Fresh</b>				
1999	7 757	222	201	6 389
2000	6 319	210	45	6 255
2001	6 264	260	76	5 689
<b>Molluscs, other</b>				
1999	38 893	257	18 255	20 895
2000	26 618	497	19 286	7 829
2001	28 513	506	13 753	15 266
<b>Crustaceans Fresh</b>				
1999	3 480	138	365	843
2000	3 653	104	334	1 223
2001	3 431	110	362	759

Source: FAOSTAT.

**Figure 1 - Sea Bass and Sea Bream production in Greece**

Source: Federation of the European Aquaculture Producers – FEAP, VetCare website, P. Varvarigos.

Exports represent roughly two thirds of total aquaculture production, while more than 80% of sea bass production is exported. Main destinations are Italy and Spain, followed by France, Germany and the UK.

As mentioned earlier, the most serious problem fish farms are facing is the continuous decline of fish prices. In less than eight years prices have dropped around 40% reaching the critical values of 3.5 €/kg for sea bream and 3.9 €/kg for sea bass. In some cases farms were forced to sell even below this level, which actually means that they sell below the production costs level.

In an attempt to overcome the crisis, the Federation of Greek Maricultures has proposed a plan of specific measures to the Ministry of Agriculture that can be summarised to the following (To Vima, 22 Nov. 2003).

- Increased control of the market in order to eliminate licence exceedings. It is estimated that today exceedings for spawns production is more than 1900% and 550% for the production of fish.
- The discontinuing of any further licences for the creation of hatcheries stations, as today sea bass and sea bream spawn production is around 262 million and for the other fish around 182 million.
- State grants for the enhancement of the production of different species, other than sea bass and sea bream. Some companies have commenced small-scaled production of high-valued products such as tuna, lobster, crab, salmon and eel, while aquaculture researchers argue that they have successfully cultivated grouper, common dentex, red porgy and spavid, and that such products should be the focus of future efforts.

## 2.4 - Capture fisheries

Total fish catch in Greece was around 190 000 t in 2001. In volume terms, anchovy, Mediterranean mussels and sardines are the main species landing in Greece, each with around 15-18 000 tonnes. The remainder of the catch consists of a broad range of marine fishes, while around 20 000 t are freshwater catches.

Around 90% of the catches are caught in the Aegean Sea, mainly sardine, anchovy, seabream, seabass, and Mediterranean mussels. From the Ionian Sea (west of Greece) the main caught species are European anchovies, pilchards and picarels, whereas from other seas (mainly Mediterranean and Black Sea) the most important species are swordfish, long-finned tuna (albacore) and frigate tuna.

## 2.5 - Consumption and external trade of fish and fishery products

The Greek trade balance for fish and seafood products is negative. This is largely due to imports of frozen fish and other processed products, preserves and canned products. Frozen fillets are imported from Africa (mainly Tanzania, Uganda and Kenya), frozen hake (*Merluccius hubbsi*) from Argentina and cephalopods from New Zealand, India and the USA.

Average per capita consumption of fish in Greece is quite high, around 27 kg, a fact that explains why own catches are not sufficient to cover domestic demand. Greek consumers were until recently quite suspicious over fish farm products, but consumption of such products has increased during the last five years, partly due to an EU-funded promotional campaign launched in 1997.

Greece mainly exports fresh fish and seafood and fewer chilled and processed products. Mussels are the main exporting commodity (live, with or without shell, fresh or chilled), followed by sea bream (fresh or chilled) and sea bass (fresh or chilled). Mussels are destined mainly to France and Spain, whereas the other two species to Italy, France and Spain. Fish canning products (mainly mussels and molluscs) are exported primarily to France, Albania and Germany), while frozen fish exports (mainly sardines) are directed towards (Italy, Serbia and Romania). Finally, in the category 'dried, salted, in brine or smoked seafood' Greece exports primarily anchovies, almost exclusively to Italy.



### **3    *Agricultural and food policy developments***

#### **3.1 - Trend of agricultural and food policy**

The last two years have been very important in terms of agricultural and food policy: In 2003 the Mid-term Review of the CAP (finally agreed on June 26<sup>th</sup>) was adopted, while the following year the European Council agreed on the new CMOs for the Mediterranean products that are of crucial importance to the Greek agriculture and the EU concluded the first phase of its enlargement process, with the accession in May 1<sup>st</sup> of ten new Member States.

The mid-term review of the CAP was generally not very much discussed in Greece, not only because the final agreement was recognised as compromising (compared to the initial proposal) especially regarding the disassociation of output and subsidies (decoupling) and cuts in cereals prices, but mainly due to the fact that the major domestically grown products were not included in its provisions: For fruits and vegetables a reformed CMO is still awaited, while for olive oil, cotton and tobacco, all major actors were anticipating the new CMOs, finally agreed in 2004. It is indicative that subsidies for these three commodities sum up to two thirds of all subsidies granted to Greek agriculture (1 650 out of 2 500 million €)

Although most involved actors have been generally favourable towards the new CMOs, recognising more positive than negative points, still some scepticism is evident, regarding the fear that the new CMOs will lead to a gradual abandonment of farms and countryside, while the remaining farmers will be less involved in their business and with smaller incomes because of the reduced subsidies.

Another major event that affects the agricultural policy in Greece was the change of political power in the spring of 2004. The conservative party won the elections and this – despite the fact that within the EU national authorities have to comply with EU provisions – will have an impact at least in the agricultural sector. As a first step, the Ministry of Agriculture was renamed Ministry of Agricultural Development and Food, a fact that is perceived as an emphasis on a new agricultural strategy by the government aiming more at structural and rural development policies.

As mentioned in last year's report, three major EU-funded programmes are the most critical aspects that characterise and drive the agricultural sector in Greece.

- The National Programme for Agricultural Development and the Restructuring of Rural Areas (NPAD) 2000-2006, with a total budget of 3,2 billion € and the accompanying Agricultural Development Scheme (Guarantee section) with a budget of 2,7 billion € (early retirement, compensations for less favoured and mountainous areas etc)

- The Operational Programme of the Fisheries' Sector (OPF) 2000-2006, with a budget of 499 million € which commenced in 2001
- The Operational Programme of Community Initiative Leader+, with a budget of 370 million € which commenced in 2002

### 3.2 - Structural and rural development policies

Rural development policies are characterised by the 3<sup>rd</sup> Community Support Framework (CSF) 2000-2006, in which the above-mentioned programmes NPAD, OPF and Leader+ are included.

Regarding NPAD, in the course of 2003, the absorbance of funds increased from 13.7% to around 25% of the initial budget. Despite this increase, the absorbance rate is still considered very low and it is afraid that the stipulatory obligation of meeting the n+2 rule may not be achieved at the end of 2004, which will mean that Greece will not be granted additional Community funds. Altogether, this a problem for the whole CSF 2000-06, as the average absorbance rate in all Operational Programmes is today 25% and officials are trying to step up the process so that the absorbance rate increases to 35-37% in order to secure EU funding until 2008. In June 2004, Greece submitted a revised plan for the 3<sup>rd</sup> CSF to the EU, taking into account these new priorities.

Regarding the Operational Programme of the Fisheries' Sector (OPF) 2000-2006 considerable progress was made during 2003 and the first half of 2004. By the end of May 2004 100% of public spending had been activated, 72,63% (234 million €) had been allocated to accepted programs and 26,13% (84 million €) had been paid. Table 16 provides a detailed presentation of the allocation of funds and the progress in each of the six axes of the program.

### 3.3 - Price and subsidies policies

As was mentioned earlier, during the two last years (2003 & 2004) considerable changes were made in the EU price and subsidies policies, as the Mid-term Review of the CAP provided for a new environment for European agriculture, while the new CMO for olive oil, tobacco and cotton changed drastically the way farmers are going to be supported by the EU.

The **olive oil sector**, is an important sector for Greece, as around 500 000 farmers are involved in the cultivation. EU subsidies is also a crucial matter, given that Greece receives annually from the EU around 600 million € for olive oil. It should also be stressed that 17% of the farms are small (with an output less than 100 kg and subsidy up to 50 €), 70% (or 350 000 farmers) are medium-sized (up to 0,3 ha and subsidy up to 5 000 €) and 13% are large (subsidy more than 5 000 €).



**Table 16 - Progress report of OPF. June 2004 (in thousand €)**

	Total		Accepted programs		Payments
	Total Cost	Public spending	Total Cost	Public spending	
Axis 1: Adjustment of fishing efforts	79 112,00	79 112,00	85 752,02	85 752,02	46 345,58
Meas. 1.1 Scrapping	75 883,02	75 883,02	83 575,54	83 575,54	45 699,74
1.2. Transfer to other country	1 500,00	1 500,00	1 676,03	1 676,03	645,84
1.3. Joint enterprises	1 728,98	1 728,98	500,45	500,45	
Axis 2: Fleet renewal	62 252,21	24 900,88	17 559,68	7 023,87	2 699,02
2.1. Construction of new fishing vessels	18 837,05	7 534,82	3 904,95	1 561,98	464,52
2.2. Modernisation of existing	43 415,16	17 366,06	13 654,73	5 461,89	2 234,50
Axis 3: Protection of resources - aquaculture-harbours	244 028,04	123 423,09	159 688,12	84 203,81	23 921,99
3.1. Protection	2 834,58	2 834,58	2 775,32	2 775,32	75,53
3.2. Aquaculture	108 173,07	46 670,65	64 189,03	28 885,06	10 995,44
3.3. Fishing port facilities	16 092,26	15 264,87	12 312,66	12 224,50	76,50
3.4. Processing & marketing	115 038,84	57 519,42	80 204,11	40 194,73	12 774,52
3.5. Inland fishing	1 889,29	1 133,57	207,00	124,20	
4.1. Small scale coastal fishing	615,40	615,40	410,20	410,20	
4.2. Socio-economic measures	24 564,20	24 564,20	4 604,05	4 604,05	185,61
4.3. Promotion	16 523,17	15 118,70	12 082,00	12 054,00	
4.4. Operations by the members of trade	6 774,67	5 664,80			
4.5. Temporary activity cessation	858,10	858,10			
4.6. Innovative measures	6 438,80	5 688,80			
Axis 5: Technical assistance	8 132,00	8 132,00	6 142,17	6 142,17	4 646,73
Axis 6: Operations funded by other structural funds	33 994,34	33 994,34	33 729,62	33 729,62	6 346,03
Total	483 292,93	322 072,31	319 967,86	233 919,74	84 144,96
			66,21% of Total Cost	72,63% of public spending	26,13% of public spending

Source: OPF Managing authority.

The main provisions of the new CMO can be summarised to the following: Complete decoupling until 2006 of all subsidies for medium-sized farms (up to 0.3 ha) and granting of an income subsidy based on the average sums of 2002-03, regardless of the output volumes, while subsidies to very small producers are terminated. For large producers, receiving more than 5 000 € subsidies, 60% will be granted as an income subsidy and the remaining 40% will be allocated to the development and restructuring of rural areas. All subsidies will be given subject to the compliance to environmental practices, while the new system will commence in 2006 and will be terminated in 2013. Finally, each country is also permitted to declare up to five categories of olive oil farms that will be eligible for higher income subsidy per hectare.

The most critical issues that need to be addressed in Greece are the exact percentage of decoupling that is to be followed (60-40 or 80-20), the way that quality production will be enhanced and promoted and the creation of the olive oil producers record. It should be also mentioned that under the new regime, Greece – unlike France and Portugal – did not receive permits for new olive oil plantations.

The new CMO for **cotton** is of great importance to more than 71,000 agricultural farms in Greece. The new CMO provides for a 65% decoupling and 35% subsidy per hectare. The latter will be granted for a maximum cultivating area of 370 000 hectares. For Greece, subsidy is set to 594,1 €/per hectare for the first 300 000 hectares, but is reduced to 342,8 €/per hectare for the remaining 70 000. Small producers (less than 5 000 €) will be given an income subsidy based on the 2000-02 average, while larger producers will follow the 65-35% rule. This will have a negative impact on those farmers that have high yields (more than four tones per hectare). At the end of 2009 the EU will re-evaluate the new CMO, in accordance with the figures regarding cotton production in S. Africa.

The new CMO is considered to have more positive than negative points regarding cotton producers in Greece, the most important being the securing of the current cultivated area (i.e. original proposals referred to a reduction of around 40,000 hectares). However, it is feared that the high percentage of decoupling (65%) will actually serve as an incentive for producers to abandon the production, a fact that may have a severe impact on the domestic cotton producing industry. Producer organizations also ask for the prohibition of the cultivation and imports of genetically modified cotton and the continuation of a certain degree of community preferential regime.

Finally, the new CMO for **tobacco**, is perhaps the one with the most strict provisions compared to the previous regime. Greece received annually 339 million € for tobacco subsidies, but under the new CMO 40% will be completely decoupled from production volumes until 2006, while the rest will remain coupled with output volumes until 2010. However, the coupled subsidy will only be granted to quality varieties (Basba, Katerinis, Coulak and Virginia). After 2010, decoupling

will occur for all subsidies, 50% will be given as an income subsidy and the rest for structural measures.

In Greece, although the new CMO is thought as being less harsh than the original Commission's proposals, it is feared that it will lead to a gradual abandonment of the production, in areas that are remote, mountainous, or less favoured and where alternative cultivations are scarce. Additionally, as producers will be receiving subsidies regardless of their volume of production until 2010, production volumes will decrease and the domestic industry will face severe problems.

### **3.4 - Agriculture and the environment**

In Greece the efforts to enhance and promote agricultural practises that are environment-friendly, sustain the nature of rural areas and achieve quality and hygiene products are part of the national policy for rural development.

Given that in Greece organic farming is below EU average levels, national authorities are striving to increase environment-friendly agricultural practices and introduce legislative measures that protect the environment and the countryside. The basic means for agri-environmental measures are included in the NPAD 2000-06. More specifically, Axis 3 includes all the agri-environmental measures, described in the previous reports. At the beginning of 2004, the progress in each specific measure had as follows (Ministry of Agriculture, 2004):

Measure 3.1 (Organic Agriculture). This measure is already in force, while in 2002 an amendment cancelled all restrictions and since then all areas became eligible. Additionally, since 2004, farmers are allowed to re-apply after successfully completing one five-year period.

Measure 3.2 (Organic Animal Production). This measure was initiated at the end of 2001 and was amended in 2002 in order to simplify procedures. It involves sheep and goat farming (*outdoors*), cattle farming (*both stabled and outdoors*) and pig farming.

Measure 3.3 (Long-term set-aside). This measure is no longer valid.

Measure 3.4 (Livestock production). This measure aims mainly at the preservation of the biodiversity of agricultural eco-systems and agricultural landscape and subsidises farmers in order a) to reduce their herd size in islands with animal over-population, and b) to increase the areas of animal feeding in mainland areas that face erosion problems.

Measure 3.5 (Reduction of nitro-pollution deriving from agricultural practices). This measure is already in force in two prefectures (Thessaly and Fthiotida) in Central Greece and will be enlarged during 2004 to include other nearby areas.

Additionally, during 2003 and 2004, eight new measures were introduced covering various agri-environmental issues:

Measure 3.6: Protection of Pambotida Lake.

Measure 3.7: Preservation of endangered domestic agricultural animal races.

Measure 3.8: Preservation of endangered domestic plant species.

Measure 3.9: Sustainable management of Lakes and Lagoons in Thrace (part of Natura 2000).

Measure 3.10: Sustainable management of Lakes Volvi and Koronia in Central Macedonia (part of Natura 2000).

Measure 3.11: Preservation and restoration of *fytofraktes*. This measure is applied to specific areas of high ecologic interest in the prefectures of Evros and Ioannina.

Measure 3.12: Preservation and restoration of inclining cultivations in specific areas so as to protect ground erosion.

Measure 3.13: Preservation of agricultural areas for wildlife protection. This program aims at compensating farmers that are damaged by wild animals (mainly wolves and bears) and will be implemented in specific NATURA areas of the country.