Chapter 2

Development of the EU organic sector and the world market in organic products

2.1 The EU organic production

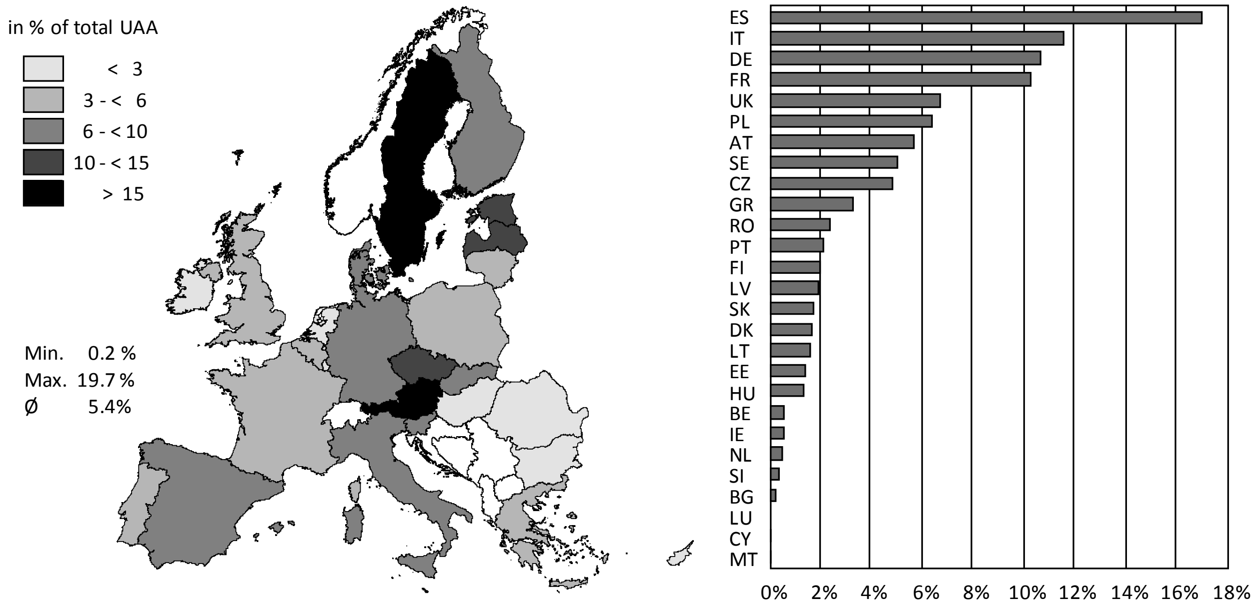
Organic production in the EU

In 2011, more than 9.5 million hectares were managed organically on nearly 240 000 farms in the European Union. This corresponds to an average share of 5.4 % of the total agricultural area. As indicated in Figure 2.1 (right), the largest organic area is located in Spain with a share of 17.0 % of EU-27 total organic area, followed by Italy (11.5 %) and Germany (10.7 %). In relation to the share of organic area in the total agricultural area of a Member States (Figure 2.1, left), Austria is the leading country within the EU with a share of nearly 20 % in 2011. A relatively high share was also observed in Sweden (15.4 %), Estonia (14.8 %) and the Czech Republic (10.8 %). On the other hand, the relative importance is rather low in Malta, Bulgaria, Ireland, Romania, the Netherlands, Cyprus, Luxembourg and Hungary with a share of less than 3 % in the total UAA.

Corresponding to the distribution of the organic area in the EU, most organic producers are located in the two Mediterranean EU countries Italy (approximately 42 000 holdings) and Spain (approximately 32 200 holdings). Countries each with more than 20 000 organic farms are Poland, France, Germany, Austria and Greece. Approximately 80 % of all organic farms in the EU are located in these seven Member States.

An average share of 5.4 % of the organic area in the total UAA illustrates that the overall size of the organic farming industry is still rather small at EU level. However, what makes the sector very interesting is the dynamic development in the last decade. In all 27 Member States as a whole the organic area has more than doubled between 2000 and 2011 and expanded by 53 % between 2005 and 2011, i.e. after the accession of the Central and Eastern European countries (see Table 2.1). The number of organic holdings increased in these two periods on average by 75 % (2000 – 2011) and 45 % (2005 – 2011), respectively. The average farm size of the EU-27 Member States increased from 31 ha to 40 ha between 2000 and 2011.

Figure 2.1: Share of organic area in the total utilised agricultural area (left) and share of EU-27 total organic area (right) in different Member States in 2011



Source: Own presentation based on data from the OrganicDataNetwork Survey.[1]

Although there has been a common regulatory framework for organic producers and a single market for organic products, the development of organic farming differs substantially between Member States. The organic land area grew particularly in Spain (+1 240 978 ha) as well as in Poland (+587 412 ha), France (+605 208 ha) and Germany (+469 603 ha). In relative terms, highest growths rates were observed particularly in Greece and some of the EU-12 countries (Cyprus, Bulgaria, Latvia, Lithuania, Poland, Estonia and Romania), albeit - apart from Poland – from a very low absolute level. On the other hand, the organic land area grew only moderately in Denmark and Italy. It seems that both countries have reached a certain plateau with only limited potential for further growth if framework conditions are not changed. In the case of Cyprus, Bulgaria, Lithuania, Poland, Estonia and Romania, high growth rates were also observed in the period 2005 to 2011.[2] This is also true for Spain, Belgium and Sweden, where the organic area has more than doubled. Very low or negative growth rates were achieved in this period in Portugal, Hungary, the Netherlands, Italy and the United Kingdom.[3] Such national figures hide considerable differences in uptake between specific regions within the country.

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[1] The EU-funded project ’Data network for better European organic market information’ (OrganicDataNetwork) aims to increase the transparency of the European organic food market through better availability of market intelligence about the sector to meet the needs of policy makers and actors involved in organic markets. Data collection of publically available organic market data was carried out for the year 2011 and some of this data is made available for this report.

[2] In the case of Cyprus, the period refers to 2005 to 2010.

[3] In the case of Portugal, the period refers to 2005 to 2010.

This data makes it clear that the expansion of the organic area took mainly place in the EU-15. In total, 61 % of the growth between 2000 and 2011 was observed in these countries (39 % in the EU-12). The differences in growth between the EU-15 and the EU-12 can also be observed for the period 2005 to 2011 and 2010 to 2011. It is however worthwhile noting that a substantial part of the recent growth in the EU-15 is mainly due to farm conversions in Spain. Indeed, about one-third of the area expansion in the EU between 2005 and 2011 was in Spain.

Table 2.1: Development of the organic area in EU Member States between 2000 and 2011

	Organic area (ha)							
	2000	2005	2010	2011[a]	Difference 2005 to 2011 ha	Difference 2005 to 2011 %	Difference 2000 to 2011 ha	Difference 2000 to 2011 %
Austria	429 167	479 817	543 605	542 553	62 736	*13*	113 386	*26*
Belgium	20 667	22 996	49 005	59 220	36 224	*158*	38 553	*187*
Bulgaria	500	2 432	25 648	25 022	22 590	*929*	24 522	*4 904*
Cyprus	52	1 698	3 575	3 575	1 877	*110*	3 523	*6 775*
Czech Republic	165 699	254 982	448 202	460 498	205 516	*81*	294 799	*178*
Denmark	157 676	134 129	162 903	162 173	28 044	*21*	4 497	*3*
Estonia	9 872	59 742	112 972	133 779	74 037	*124*	123 907	*1 255*
Finland	147 423	147 587	169 168	188 189	40 602	*28*	40 766	*28*
France	369 933	550 488	845 442	975 141	424 653	*77*	605 208	*164*
Germany	546 023	807 406	990 702	1 015 626	208 220	*26*	469 603	*86*
Greece	26 707	288 737	309 823	309 823	21 086	*7*	283 116	*1 060*
Hungary	47 221	128 576	127 605	124 402	- 4 174	*- 3*	77 181	*163*
Ireland	27 231	35 266	47 864	54 122	18 856	*53*	26 891	*99*
Italy	1 040 377	1 069 462	1 113 742	1 096 889	27 427	*3*	56 512	*5*
Latvia	4 400	104 235	166 320	184 096	79 861	*77*	179 696	*4 084*
Lithuania	4 709	64 544	143 644	152 305	87 761	*136*	147 596	*3 134*
Luxembourg	1 068	3 243	3 720	3 720	477	*15*	2 652	*248*
Malta	0	14	24	23	9	*64*	23	-
Netherlands	32 331	48 765	46 233	47 205	- 1 560	*- 3*	14 874	*46*
Poland	22 000	159 709	521 970	609 412	449 703	*282*	587 412	*2 670*
Portugal	50 001	211 501	201 054	200 151	- 11 350	*- 5*	150 150	*300*
Romania	17 388	92 770	182 706	229 946	137 176	*148*	212 558	*1 222*
Slovakia	60 000	90 206	174 471	166 700	76 494	*85*	106 700	*178*
Slovenia	5 200	23 499	30 696	32 149	8 650	*37*	26 949	*518*
Spain	380 920	622 762	1 456 672	1 621 898	999 136	*160*	1 240 978	*326*
Sweden	174 227	222 738	438 693	480 185	257 447	*116*	305 958	*176*
United Kingdom	527 323	612 996	699 638	638 528	25 532	*4*	111 205	*21*
Total	4 268 115	6 240 301	9 016 097	9 518 233	3 277 932	*53*	5 250 118	*123*

[a] In the case of CY, GR and LU data from 2010 has been carried forward to 2011.

Source: Own calculation based on Eurostat data, national data provided by FiBL-AMI and the OrganicDataNetwork Survey.[4]

[4] Structural data of the FiBL-AMI survey is in most cases based on Eurostat data. However, the Eurostat data base does not include all data available from all countries (e.g. crop and livestock data from Germany) and therefore national sources are used too. Furthermore, national figures are used by FiBL and AMI as soon as then are available, which is often before data is entered into the Eurostat database. However, in principle, the data should be the same. Data for the year 2011 have been collected in the framework of the OrganicDataNetwork-project.

Detailed data on organic land use is available for all EU Member States for the period 2007 to 2011. In 2011, 39 % of the EU-27 organic area was used for arable cropping and 48 % for permanent grassland. The remaining area was used for permanent crops or other/non-classified land use activities. Between 2007 and 2011, the organic arable area and permanent pasture grew by 0.75 million and 1.3 million hectares, respectively. The arable area expanded particularly in France, Poland, Spain and Sweden, whereas a remarkable decrease of about 167 000 ha was observed in Italy (Table 2.2), which was probably due to a decrease of organic support payments (see Zanoli et al., 2010). Organic grassland increased mainly in Spain but also in France, the Czech Republic, Poland and Germany.

Table 2.2: Changes of the organic area per land use category in EU Member States between 2007 and 2011

	Arable crops			Permanent crops			Permanent grassland		
	in ha								
	2007	2011[a]	Difference 2007 to 2011	2007	2011[a]	Difference 2007 to 2011	2007	2011[a]	Difference 2007 to 2011
Austria	147 250	185 439	*38 189*	4 063	6 045	*1 982*	323 938	340 837	*16 899*
Belgium	11 692	12 476	*784*	457	576	*119*	20 212	35 381	*15 169*
Bulgaria	5 500	12 576	*7 076*	3 864	6 442	*2 578*	861	4 491	*3 630*
Cyprus	894	1 771	*877*	1 391	1 441	*50*	37	-	-
Czech Republic	24 931	57 436	*32 505*	1 356	7 287	*5 931*	243 866	394 441	*150 574*
Denmark	99 450	138 754	*39 304*	247	530	*283*	18 081	22 427	*4 346*
Estonia	65 153	55 618	*- 9 535*	1 202	1 379	*177*	11 441	76 805	*65 364*
Finland	111 457	130 788	*19 331*	568	560	*- 8*	1 035	3 615	*2 580*
France	250 258	475 255	*224 997*	33 954	83 900	*49 946*	216 921	372 160	*155 239*
Germany	379 585	411 830	*32 245*	13 291	13 880	*589*	461 500	580 416	*118 916*
Greece	90 300	60 039	*- 30 261*	61 097	67 111	*6 014*	127 777	152 215	*24 438*
Hungary	47 995	50 770	*2 775*	2 966	5 285	*2 319*	63 634	68 335	*4 701*
Ireland	1 460	1 994	*534*	-	29	-	39 662	52 071	*12 409*
Italy	675 071	507 685	*- 167 386*	224 165	274 940	*50 775*	219 438	275 591	*56 153*
Latvia	103 516	96 430	*- 7 086*	1 126	918	*- 208*	36 748	81 132	*44 384*
Lithuania	87 906	108 314	*20 408*	5 572	5 018	*- 554*	24 729	35 527	*10 798*
Luxembourg	-	1 556	-	-	122	-	-	1 923	-
Malta	-	10	-	-	12	-	-	-	-
Netherlands	12 809	18 203	*5 394*	486	439	*- 47*	31 664	28 416	*- 3 248*
Poland	93 483	301 808	*208 325*	50 162	75 536	*25 374*	82 083	231 323	*149 240*
Portugal	51 433	25 510	*- 25 923*	27 220	32 840	*5 620*	148 569	131 526	*- 17 043*
Romania	59 023	137 821	*78 798*	650	4 166	*3 516*	57 600	78 198	*20 598*
Slovakia	34 560	28 407	*- 6 153*	773	1 031	*258*	81 375	136 496	*55 121*
Slovenia	2 636	3 382	*746*	874	1 234	*360*	25 796	27 531	*1 735*
Spain	146 738	291 133	*144 395*	169 067	361 925	*192 857*	429 134	869 427	*440 293*
Sweden	222 569	360 528	*137 959*	378	465	*87*	72 512	107 193	*34 681*
United Kingdom	197 141	197 679	*538*	5 250	5 824	*574*	452 734	435 025	*- 17 709*

a) In the case of BE, CY, GR and LU data from 2010 has been carried forward to 2011.

Source: Own calculation based on Eurostat data, national data provided by FiBL-AMI and the OrganicDataNetwork Survey.

Changes in organic livestock production between 2007 and 2011 are shown in Table 2.3. The number of bovine animals increased particularly in France (+ 368 000), Sweden (+ 143 000), and Denmark (+ 117 000). The Danish and French organic farming sector experienced also the biggest increase in organic pig production. A substantial expansion in the organic poultry sector was observed in France, Germany, Italy and Denmark. In contrast, the number of organic bovine animals decreased particularly in Italy. For pig and poultry this is true for Greece and the United Kingdom, respectively.

Table 2.3: Changes in organic livestock production in EU Member States between 2007 and 2010 [a]

	Bovine animals			Pigs			Poultry		
	in 1 000 Heads								
	2007	2011	Difference 2007 to 2011	2007	2011	Difference 2007 to 2011	2007	2011	Difference 2007 to 2011
Austria	342	382	*40*	69	70	*0*	1 100	1 600	*500*
Belgium	38	70	*32*	11	15	*3*	1 055	1 633	*577*
Bulgaria	< 1	< 1	< 1	-	< 1	-	-	-	-
Cyprus	-	-	-	-	-	-	-	11	-
Czech Republic	137	175	*37*	2	2	*0*	7	37	*30*
Denmark	53	170	*117*	0	171	*171*	0	1 337	*1 337*
Estonia	14	22	*9*	0	1	*1*	4	11	*6*
Finland	26	42	*17*	2	3	*1*	74	115	*41*
France	120	488	*368*	5	170	*165*	6 172	10 951	*4 779*
Germany	228	273	*45*	105	138	*33*	2 772	4 716	*1 944*
Greece	25	23	*- 2*	196	29	*- 168*	159	330	*171*
Hungary	17	25	*7*	6	4	*- 2*	32	139	*108*
Ireland	29	31	*2*	1	1	*0*	108	86	*- 22*
Italy	244	194	*- 50*	27	32	*6*	1 339	2 814	*1 474*
Latvia	51	52	*2*	6	8	*2*	16	34	*18*
Lithuania	20	23	*3*	< 1	< 1	< 1	1	3	*2*
Luxembourg	-	3	-	-	< 1	-	-	22	-
Malta	-	-	-	-	-	-	-	-	-
Netherlands	40	49	*9*	56	57	*1*	1 137	1 833	*696*
Poland	33	40	*7*	27	14	*- 13*	180	205	*25*
Portugal	69	66	*- 3*	8	4	*- 4*	45	57	*12*
Romania	7	7	*0*	1	< 1	< 1	4	47	*42*
Slovakia	27	27	*0*	< 1	< 1	< 1	< 1	7	*7*
Slovenia	17	23	*5*	2	2	*0*	19	30	*11*
Spain	86	176	*90*	15	7	*- 9*	95	221	*125*
Sweden	110	253	*143*	24	43	*19*	458	923	*465*
UK	250	335	*84*	50	53	*2*	4 441	2 838	*- 1 603*

[a)] In the case of CY, LI, LU and PT data from 2010 has been carried forward to 2011.

Source: Own calculation based on Eurostat data, national data provided by FiBL-AMI and the OrganicDataNetwork Survey.

The EU organic production in a global context

In a global context, the EU is one of the main producers of organic food. Worldwide about 37 million hectares were under organic agricultural management in 2011 (Willer et al., 2013). As indicated in Table 2.4, most of the organic area is in Oceania (12.2 million hectares) and Europe (10.6 million hectares, from which more than 9.5 million hectares are in the EU), followed by Latin America (6.9 million hectares), Asia (3.7 million hectares), Northern America (2.6 million hectares) and Africa (1.0 million hectares). Thus, 26 % of the global organic area is in the EU. Only Oceania has a higher share with 33 %, most of which is extensive grassland with a relative low market output. Almost 60 % of the 6.3 million hectares organic arable land worldwide is located in the EU; it should be noted though that a breakdown by land use is not available for all countries. This is about three times as much as in the United States and 20-times as much as in Latin America. The EU also has a second leading role in the production of organic permanent crops with a share of 37 % in the global permanent cropland area, followed by Latin America (29 %) and Africa (16 %).

Between 2000 and 2011, the organically managed area increased globally by approximately 21 million hectares. In the same period, the organic area expanded by about 5 million hectares in the EU. Thus, roughly speaking, one-quarter of the global growth is due to the expansion in the EU.

Table 2.4: Key data on organic farming in different global regions in 2011

	Africa	Asia	EU-27	Other European countries	Latin America	North America	Oceania
Land use (in 1 000 ha)							
Arable crops	153	260	3 673	722	182	1 311	37
Permanent crops	408	256	956	99	755	65	59
Permanent grazing	62	601	4 552	286	4 834	1 134	11 756
Other UAA / Not classif.	450	2 589	337	11	1 087	121	333
Organic area							
Total (in 1 000 ha)	1 074	3 706	9 518	1 119	6 858	2 630	12 186
Share of global organic area	3%	10%	26%	3%	18%	7%	33%
Share of total agricultural area	0.1%	0.3%	5.4%	0.6%	1.1%	0.7%	2.9%
Producers							
Total (in 1 000 N)	540 988	619 439	236 803	54 648	315 889	16 659	14 138
Farm size							
Average farm size (in ha)	2	6	40	20	22	158	862

Source: Own calculation based on Willer et al. (2013).

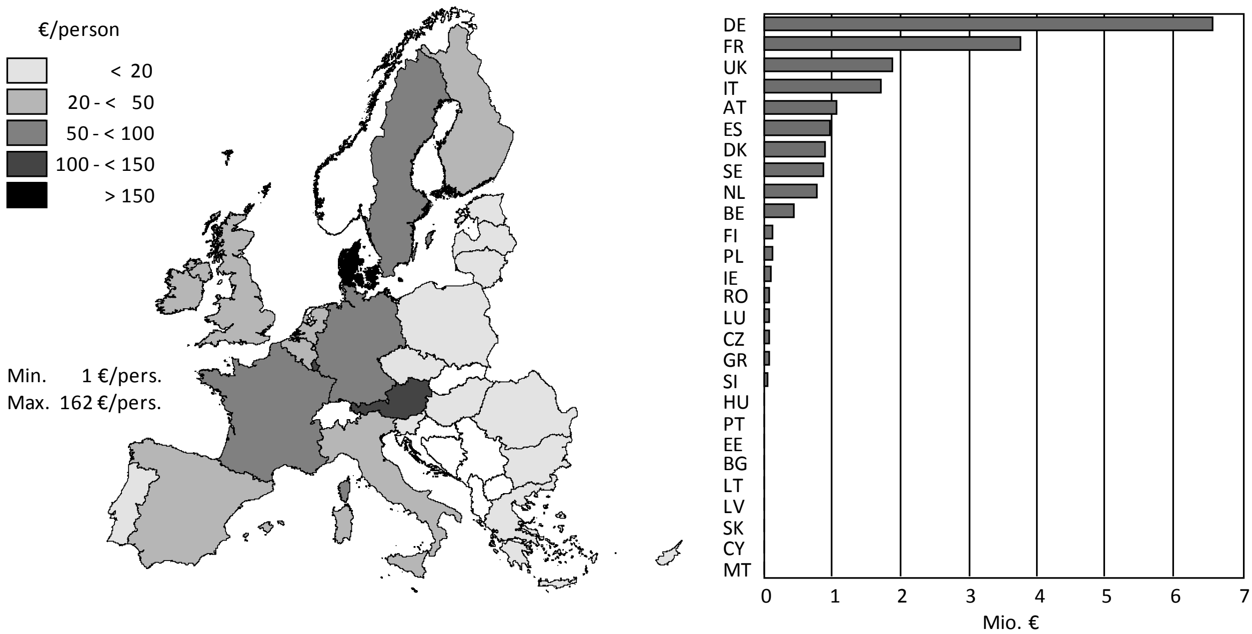
According to the recent FiBL-IFOAM survey on global organic agriculture, almost 1.8 million farms were managed globally organically (Willer et al., 2013). More than three-quarters of the organic producers are in Asia, Africa and Latin America, while 13 % are located in the EU. Not surprisingly, the average organic farm size varies substantially between individual global regions ranging from 2 ha in Africa to 862 ha in Oceania.

2.2 The EU market for organic food

The market for organic food in the EU

The total value of the EU-27 organic market was approximately 19.7 billion EUR in 2011 (Schaack et al., 2013). As indicated in Figure 2.2 (right), by far the largest organic market in the EU was Germany with 6.6 billion EUR followed by France (3.6 billion EUR), the United Kingdom (1.9 billion EUR) and Italy (1.7 billion EUR). Sales per capita were particularly high in Denmark (162 EUR), Luxembourg (134 EUR) and Austria (127 EUR). Not surprisingly, relatively low market values and per capita consumption can be observed in EU-12 countries (see Figure 2.2, left).

Figure 2.2: Organic sales per capita (left) and total organic sales (right) in EU Member States in 2011



Source: Own presentation based on data from the OrganicDataNetwork Survey.

While the organic land area increased by 38 % between 2006 and 2011, the organic market grew by 56 % in this period. Even if both growth figures cannot be directly compared, they indicate that both supply and demand have developed in the same dimension at EU level. The highest market growth was observed in France (+ 2 055 million EUR) and Germany (+ 1 990 million EUR) – thus in the two countries with the largest organic market (Table 2.5). The United Kingdom is the only country in the EU where the organic food sales declined between 2006 and 2011 (- 675 million EUR). The reasons for this are not fully understood, but shorter periods of stagnation or even decline have also been observed in other countries. Among the EU-12 countries, the organic market grew particularly strongly in Romania (+70 million EUR), Poland (+ 70 million EUR), Slovenia (+ 34 million EUR) and the Czech Republic (+ 32 million EUR).

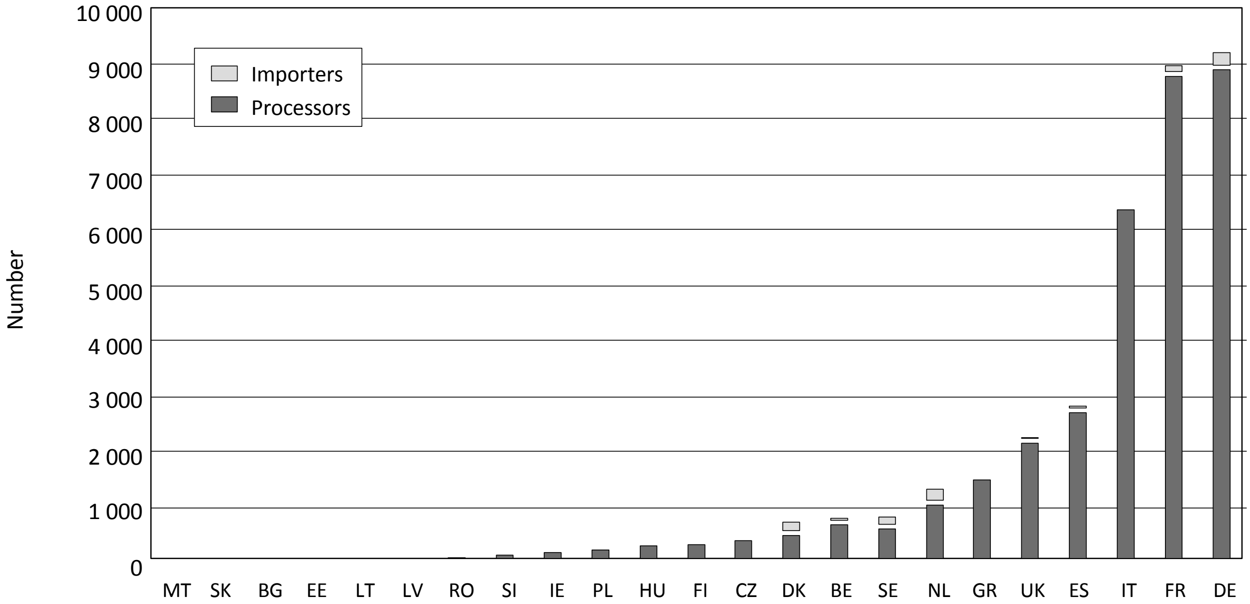
Table 2.5: Changes in organic sales per capita (left) and total sales in EU Member States between 2007 and 2011

	Organic sales per capita (€/person)				**Total organic sales** (Mio €)			
	2006	2011	Difference €	Difference %	2006	2011	Difference Mio €	Difference %
Austria	64	127	63	*98*	496	1 065	569	*115*
Belgium	23	40	17	*72*	258	435	178	*69*
Bulgaria	0	1	1	*900*	1	7	6	*775*
Cyprus	2	2	1	*33*	2	2	1	*33*
Czech Republic	3	7	4	*104*	27	59	32	*109*
Denmark	80	162	82	*103*	434	901	467	*108*
Estonia	-	-	-	-	-	-	-	-
Finland	11	22	11	*105*	57	120	63	*112*
France	26	58	32	*120*	1 700	3 756	2 056	*121*
Germany	56	81	25	*45*	4 600	6 590	1 990	*43*
Greece	5	5	0	*0*	55	58	3	*5*
Hungary	2	3	1	*67*	20	25	5	*25*
Ireland	16	22	6	*40*	57	99	42	*72*
Italy	19	28	9	*46*	1 130	1 720	590	*52*
Latvia	-	2	-	-	-	4	-	-
Lithuania	-	2	-	-	-	6	-	-
Luxembourg	85	134	50	*59*	41	68	27	*66*
Netherlands	28	46	18	*64*	458	761	303	*66*
Poland	1	3	2	*131*	50	120	70	*140*
Portugal	-	2	-	-		21	-	-
Romania	1	4	4	*700*	10	80	70	*700*
Slovakia	1	1	0	*0*	4	4	0	*- 7*
Slovenia	5	19	14	*280*	4	38	34	*850*
Spain	2	21	19	*1 213*	270	965	695	*257*
Sweden	42	94	52	*124*	379	885	506	*134*
United Kingdom	42	30	- 12	*- 16*	2 557	1 882	- 675	*- 16*

Source: Own calculation based on national data provided by FiBL-AMI and the OrganicDataNetwork Survey.

The current organic supply and demand situation in EU Member States is also reflected in the numbers of processors and importers. In 2011, there were more than 35 000 organic processing companies and 1 600 importers of organic products in the EU. As shown in Figure 2.3, many processors are located either in countries characterised by a large organic market, a large organic area or both (Germany, France, Italy, Spain and the United Kingdom). Interestingly, the number of processing companies is also relatively high in Greece. Presumably, this is mainly due to small processing plants for organic olive oils. Furthermore, many import companies are located in Germany, the Netherlands, Denmark, Sweden and France. In total, only about 1 500 processors and less than 100 importers were located in EU-12 countries in 2011. These figures show clearly that the processing infrastructure in the EU-12 is still underdeveloped, but data do not exist for all countries. The lack of processing facilities entails that organic processed food products consumed in the EU-12 are quite often imported from the EU-15 Member States.

Figure 2.3: Number of organic importers and processors in 2011 [a]



	MT	SK	BG	EE	LT	LV	RO	SI	IE	PL	HU	FI	CZ	DK	BE	SE	NL	GR	UK	ES	IT	FR	DE
Processors	1	41	43	58	70	69	106	150	192	260	320	352	422	517	691	633	1 066	1 506	2 177	2 729	6 375	8 785	8 905
Importers	1	5	3	3	-	2	2	-	28	17	3	27	9	231	121	203	285	5	95	101	63	179	297

[a] No data on processors and importers for AT, CY, LU, PT and on importers for LT and SI. Data for IE, LT and UK from 2010.

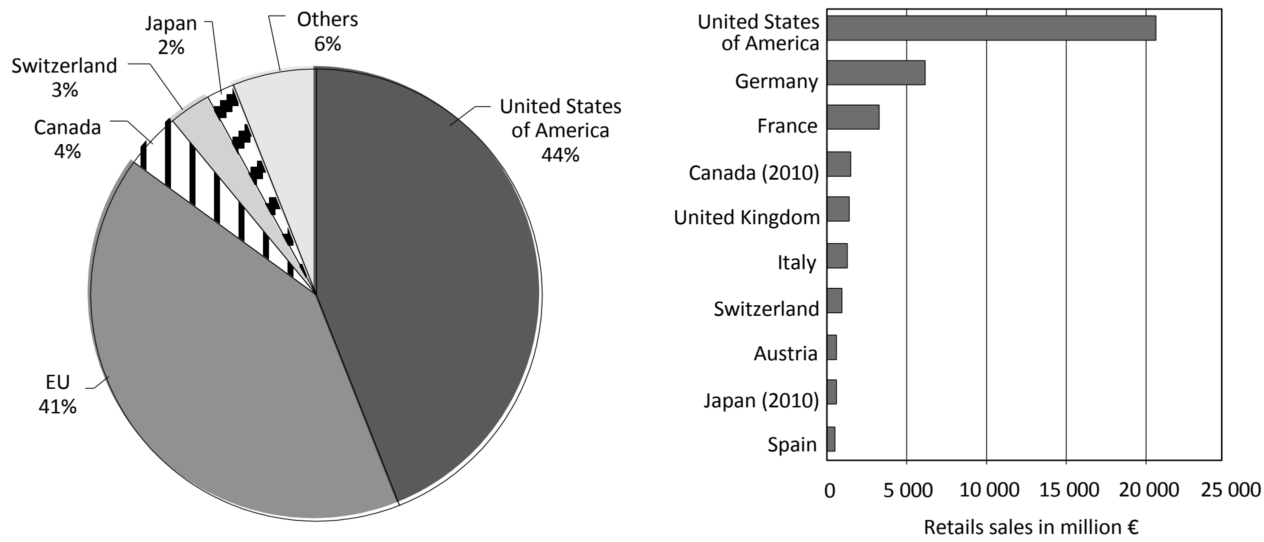
Source: EUROSTAT.

The EU market for organic food in a global context

While some data exists for the EU organic food market, there is much less market information at a global level. According to Sahota (2013) global sales of organic food and drink reached 62.8 billion US dollars in 2011. According to data compiled by FiBL and AMI the two biggest single markets are the United States (share of 44 % in global sales) and the European Union (share of 41 % in global sales, see Figure 2.4). Even if 9 % of the total organic arable area and 55 % of the total organic permanent crop area is located in Asia, Africa and Latin America, the market share of these three regions in the global sales organic food and drink is much less than 10 %. The high degree of sales concentration highlights that most organic food production in these regions is export-geared as a result of limited domestic market opportunities.

It is interesting to note, that in the United States half of the turnover is made up of fresh fruit and vegetables, but animal products are increasing in importance. Fruit and vegetables were also the pioneer organic products in EU countries and they now have market shares between one third and one fifth of many national markets. Animal products, especially milk and dairy products but also eggs, are achieving higher market shares in the EU than in the USA. Also dry products and bread have a higher importance in many EU countries.

Figure 2.4: Distribution of organic food sales by single market in 2011 and the ten countries with the largest markets for organic food 2011



Source: OrganicDataNetwork Survey.

According to the European Commission (2010), there is evidence that the growth of demand for organic products in the EU outpaces the growth of organic food supply. More recently, Sahota (2013) reported however that there is an oversupply in certain sectors of the EU organic food industry since the demand is not keeping pace with supply. A certain degree of imbalance between domestic supply and demand is a quite typical characteristic of the organic market, since a conversion period of usually up to two years allows only a medium-term response of the supply-side to changes of the demand-side.

Intra-EU trade and imports from third countries represent an important part of domestically consumed organic products in most Member States as shown in a recent study (Ecozept, 2008). In view of the growing demand for organic food, it can be assumed that trade between EU Member States and imports from third countries have increased in the last years.[5]

[5] As mentioned earlier, reliable information on imports and exports are still rare. A comprehensive study on the German situation has been published recently. Accordingly, the share of imported organic products that could also be produced in the country varies from 2 to 95 % (Schaack et al., 2011). Very high import rates were e.g. observed for tomatoes (80 %) and peppers (90 %), mainly due to the all year round demand for products that can be grown in Germany only seasonally, or linseed (95 %). The importance of (global) organic trade is also becoming clear through data from France. Approximately 30 % of consumed organic food products (in value) are imported in France (European Commission, 2010). In 2008, one-third of all organic imports were tropical products; another third were products for which France has no clear comparative advantage (e.g. aquaculture, soya, Mediterranean products, etc.) and a final third were products for which France is competitive but where domestic supply was too low compared to domestic demand (e.g. cereals, milk, meat, fruit and vegetables).