

## Organic Farming and Market Development in Europe and the European Union

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This chapter is an update of the article “Growth trends in European organic food and farming”, published by IFOAM EU and the Research Institute of Organic Agriculture FiBL in the volume “Organic in Europe, 2016” (Willer et al. 2016). Therefore, the structure of this chapter is different from the other regional statistics chapters in this book. The article focuses on Europe as a whole<sup>4</sup> and the 28 member states of the European Union (EU-28).<sup>5</sup>

Data collection in Europe, like in the rest of the world, is carried out using multiple information sources. We would, however, like to point out that Eurostat, the statistical office of the European Union, is constantly expanding its data collection effort in the field of organic agriculture, and most of the data on organic areas, livestock, and operators was taken from Eurostat. The Eurostat organic farming statistics are available at

- [ec.europa.eu/eurostat/web/agriculture](http://ec.europa.eu/eurostat/web/agriculture) > Database > Organic farming
- [ec.europa.eu/eurostat/statistics-explained/index.php/Organic\\_farming\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Organic_farming_statistics)

For market data, data from the private sector, market research companies, or statistical offices are used.

The development of the European and the European Union’s organic sector in 2016 was characterized by two trends. On the one hand, the market showed a double-digit growth rate again (11.4 percent in Europe; 12 percent in the European Union). On the other hand, organic farmland growth continued to be slower than that of the market, but it was considerably faster than in the previous years, increasing by 6.7 percent in Europe and 8.2 percent in the European Union. The trend of the market growing at a faster rate than the area (Figure 68) has been occurring for several years, showing that production is still not keeping pace with consumer demand.

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<sup>4</sup> Europe consists of the 28 countries of the European Union, the EU Candidate and Potential Candidate countries (CPC: Albania, Bosnia-Herzegovina, Kosovo, Macedonia FYROM, Montenegro, Serbia, Turkey), the members of the European Free Trade Association (EFTA: Iceland, Norway, Liechtenstein, Switzerland), as well as other European countries: Andorra, Belarus, Moldova, Russian Federation, San Marino and Ukraine.

<sup>5</sup> The 28 member states of the European Union consist of the EU-13 countries, which became members of the European Union in or after May 2004, and of the EU-15 countries, who were member countries of the European Union prior to the accession of ten candidate countries on May 1, 2004.

## I Production and market highlights

- In Europe, **13.5 million hectares were organic in 2016** (European Union: 12.1 million hectares). With more than 2 million hectares, Spain continues to be the country with the largest organic area in Europe, followed by Italy (1.8 million hectares) and France (1.5 million hectares).
- The organic land increased by almost one million hectares in Europe and in the European Union, representing **an increase of 6.7 percent in Europe** and 8.2 percent in the European Union. Growth was higher than in 2015 and substantially higher than in the first years of the current decade. In the decade 2007-2016, organic agricultural land increased by two thirds.
- **Organic farmland in Europe constitutes 2.7 percent of the total agricultural land** and 6.7 percent in the European Union. In Europe (and globally), Liechtenstein has the highest organic share of all farmland (37.7 percent) followed by Austria, the country in the European Union with the highest organic share of agricultural land (21.9 percent).
- There were more than **370'000 organic producers in Europe** (European Union: almost 300'000), and the largest numbers were in Turkey (almost 68'000) and Italy (more than 64'000). While the number of producers grew by 7 percent in Europe (10 percent in the European Union) in 2016, growth was 76 percent in Europe and 58 percent in the European Union during 2007-2016.
- There were **almost 66'000 organic processors in Europe** and almost 63'000 in the European Union. Almost 4'700 importers were counted in Europe and almost 4'000 in the European Union. Particularly strong growth was noted for importers, which increased by double digits in both Europe and the European Union. The country with the largest number of processors was Italy (almost 17'000), while Germany had the most importers (almost 1'600).
- **Organic retail sales in Europe were valued at 33.5 billion euros** (30.7 billion euros in the European Union). The European Union represents the second largest single market for organic products in the world after the United States.
- **The European organic market recorded a growth rate of 11.4 percent** (European Union: 12 percent), which is the second time retail sales have shown a double-digit growth rate since the financial crisis. Among the key markets, the highest growth was observed in France (22 percent). In the decade 2007-2016, the value of European and European Union markets has more than doubled.
- **European consumers spent 41 euros on organic food per person** (European Union: 61 euros). Per capita consumer spending on organic food has doubled in the last decade. The Swiss spent the most money on organic food (274 euros per capita).
- Globally, European countries account for the highest shares of organic food sales as a percentage of their respective food markets. **Denmark has the highest organic market share (9.7 percent).**

## 2 Organic agricultural land

**Table 53: Europe: Organic agricultural land in Europe and the European Union**

|                       | Organic area<br>[million<br>ha] | Organic<br>share<br>[%] | Increase<br>2015-2016<br>[%] | Increase<br>2015-2016<br>[million<br>ha] | Increase<br>2007-2016<br>[%] | Increase<br>2007-2016<br>[million<br>ha] |
|-----------------------|---------------------------------|-------------------------|------------------------------|--|------------------------------|--|
| <b>European Union</b> | 12.1                            | 6.7%                    | 8.2%                         | 0.91                                     | 68%                          | 4.9                                      |
| <b>Europe</b>         | 13.5                            | 2.7%                    | 6.7%                         | 0.85                                     | 68%                          | 5.7                                      |

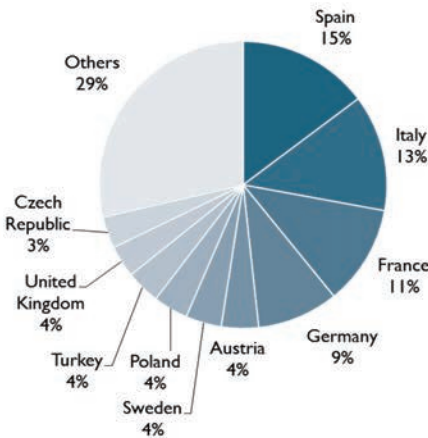
Source: FiBL-AMI survey based on Eurostat and national data sources. For country details, see Table 60.

### 2.1 Organic agricultural land

In 2016, 13.5 million hectares were farmed organically in Europe and almost 12.1 million hectares in the European Union (Table 53). Almost 90 percent of Europe’s organic farmland is in the European Union. The countries with the largest areas of organic land are Spain, Italy, France, Germany, and Poland; half of Europe’s organic farmland is in these countries (Figure 69, Figure 70). Almost one-quarter of the world’s organic farmland is in Europe.

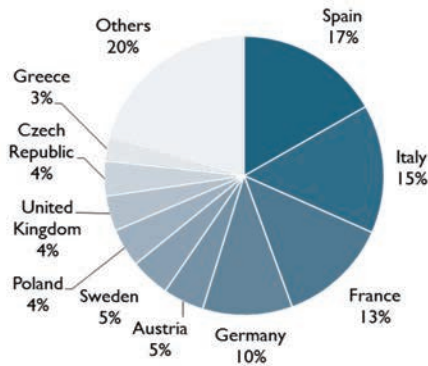
**Europe: Distribution of organic farmland by country 2016**

Source: FiBL-AMI survey 2018



**European Union: Distribution of organic farmland by country 2016**

Source: FiBL-AMI survey 2018

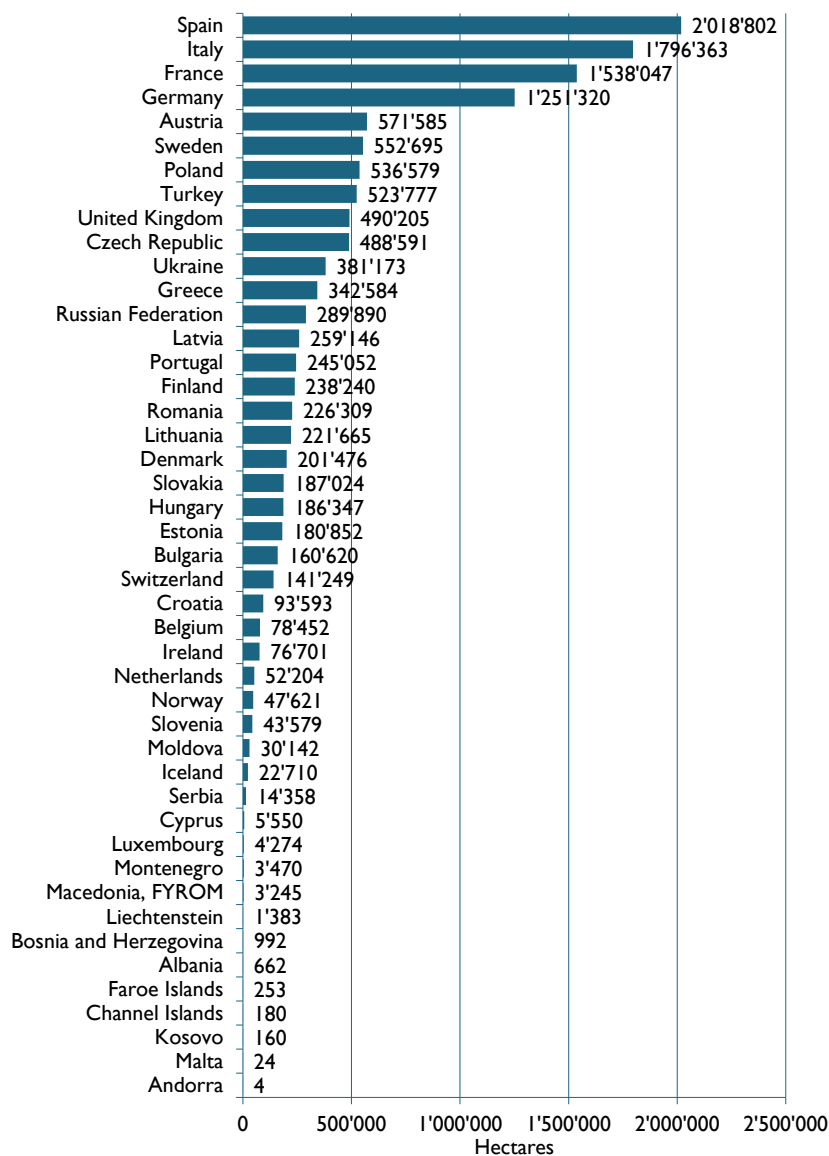


**Figure 69: Europe: Distribution of organic farmland by country 2016**

Source: FiBL-AMI survey 2018 based on national data sources and Eurostat  
For detailed data sources see annex, page 330.

## Europe: Organic agricultural land by country 2016

Source: FiBL-AMI survey 2018



**Figure 70: Europe: Organic agricultural land by country 2016**

Source: FiBL-AMI survey 2018 based on Eurostat national data sources.

For detailed data sources see annex.

## **2.2 Organic shares of total agricultural land**

In Europe, 2.7 percent of the agricultural land is organic and in the European Union, 6.7 percent (Table 53). In nine countries (European Union: seven), ten percent or more of the agricultural land is managed organically (Figure 71). The countries with the highest organic shares are Liechtenstein (37.7 percent), Austria (21.9 percent), Estonia (18.9 percent), and Sweden (18.0 percent). Liechtenstein is the country with the highest share of organic area in the world.

## **2.3 Growth of organic agricultural land**

In 2016, the organic agricultural land in Europe increased by 845'232 hectares (EU: 912'746 hectares) or 6.7 percent (EU 8.2 percent). Growth was therefore comparable with that of 2015 and considerably faster than between 2011 and 2014 (Figure 72, Figure 73). In Europe, the absolute growth was less than in the European Union, due to a major decrease of organic farmland in the Russian Federation reported by one international certifier.

The countries that contributed the most to the growth were Italy and France with more than 500'000 hectares together (Figure 74), whereas the highest relative increases were in Iceland, Bosnia & Herzegovina, and Macedonia FYROM, which showed a growth rate of at least 50 percent. However, there were also countries that showed stagnation or only a small increase of organic land such as Luxembourg and the Czech Republic. In some countries, the organic area decreased, such as the Greece, Poland, Romania, and the Russian Federation (Table 60).

## Europe: Organic share of total agricultural land by country 2016

Source: FiBL-AMI survey 2018

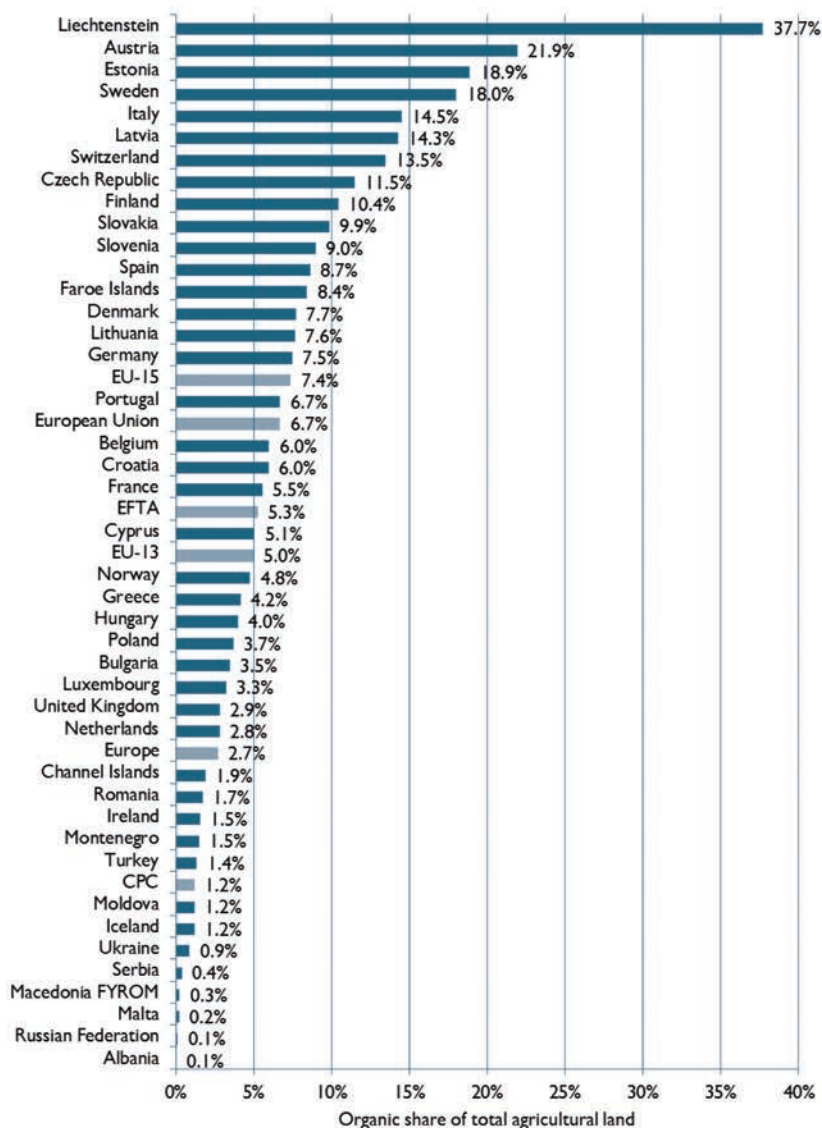
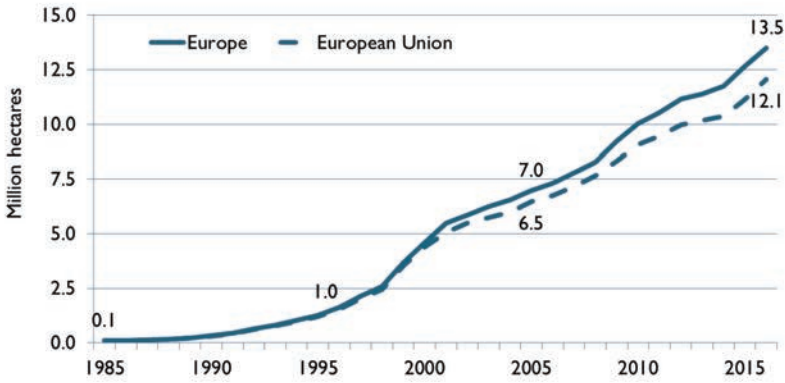


Figure 71: Europe: Organic shares of total agricultural land 2016

Source: FiBL-AMI survey 2018 based on national data sources and Eurostat  
For detailed data sources see annex of this book.

### Europe and European Union: Development of organic agricultural land 1985-2016

Source: FiBL-AMI survey 2018, based on national data sources and Eurostat

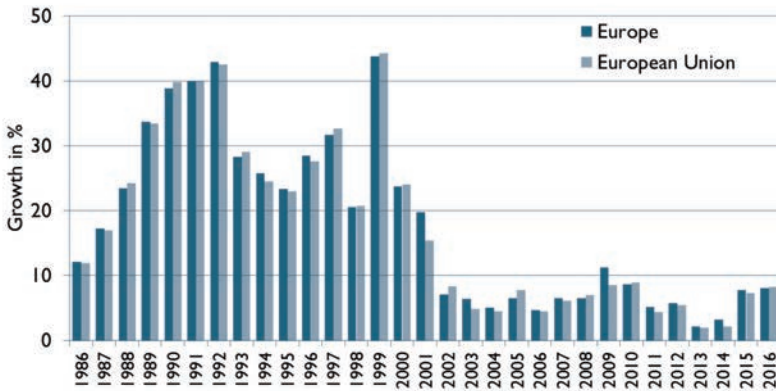


**Figure 72: Europe and the European Union: Development of organic agricultural land 1985-2016**

Source: FiBL-AMI Surveys 2006-2018 based on national data sources and Eurostat. Data from before 2000 based on surveys from Nic Lampkin. The data for the European Union cover all countries that were members of the European Union in 2016.

### Europe and European Union: Growth rates of organic agricultural land 1985-2016

Source: FiBL-AMI survey 2018, based on national data sources and Eurostat

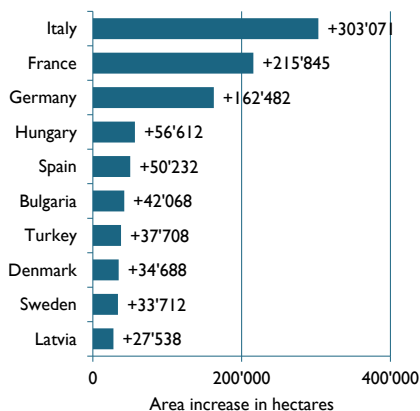


**Figure 73: Europe: Growth rates for organic agricultural land in Europe and the European Union 1985-2016**

Source: FiBL-AMI Surveys 2006-2018 based on national data sources and Eurostat. Data from before 2000 based on surveys from Nic Lampkin. For detailed data sources see annex.

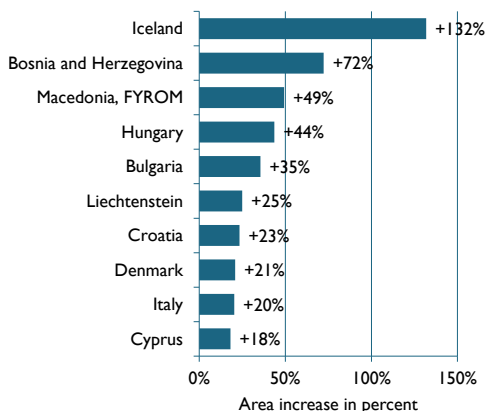
**Europe: The 10 countries with the highest growth of organic farmland in 2016 (hectares)**

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources



**Europe: The 10 countries with the highest relative growth of organic agricultural land in 2016 (%)**

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources



**Figure 74: Europe: The ten countries with the highest growth of organic agricultural land in hectares and percentage in 2016**

Source: FiBL-AMI survey 2018 based on national data sources and Eurostat  
For detailed data sources see annex.

**2.4 Conversion status of organic farmland**

Most, but not all, countries provided data on their fully converted and under-conversion areas, but such details are not available for all countries – for instance, for Austria, Germany, and Switzerland (Table 61).

In Europe, of the 13.5 million hectares of organic agricultural land, 8.1 million hectares were fully converted (7.3 million in the European Union), and 3.2 million hectares were under conversion (2.9 million in the European Union). This reflects the fact that in the near future an increase in the supply of organic products can be expected (Figure 75).

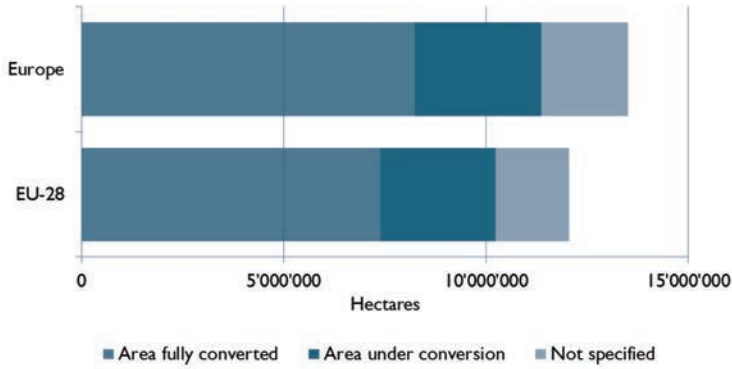
This trend is confirmed by the fact that the in-conversion area increased by one third in Europe and the European Union. By country, the largest in-conversion areas are in the major European supplying countries, notably Spain (619'069 hectares), Italy (594'522 hectares), France (483'058 hectares), and Turkey (144'735 hectares).

Among arable and permanent crops, a major supply of cereals (approximately 500'000 hectares under conversion), olives (150'000 hectares), and dry pulses (almost 100'000 hectares) may be expected. For more information, see the crop chapters in this book, page 91.



### Europe and EU: Conversion status of organic farmland 2016

Source: FiBL-AMI survey 2018



**Figure 75: Europe and the European Union: Conversion status of organic land in Europe and the European Union 2016**

Source: FiBL-AMI survey 2018 based on national data sources and Eurostat  
For detailed data sources see annex.

### 3 Land use and crops grown in organic agriculture

#### 3.1 Land use

For all countries in Europe, land use and crop details are available. In this respect, Europe differs substantially from other parts of the world, for which such data is often not available. The area for all land use types<sup>1</sup> has grown steadily since 2004.

**Table 54: Europe and the European Union: Land use 2016**

| Crop group          | Europe<br>[ha]    | European Union<br>[ha] | Change                     | Change                     |
|---------------------|-------------------|------------------------|----------------------------|----------------------------|
|                     |                   |                        | 2015-2016<br>Europe/EU [%] | 2007-2016<br>Europe/EU [%] |
| Arable land         | 6'036'893         | 5'236'049              | 7% / 11%                   | 77% / 69%                  |
| Permanent grassland | 5'648'692         | 5'453'914              | 5% / 6%                    | 69% / 70%                  |
| Permanent crops     | 1'508'016         | 1'280'678              | 9% / 6%                    | 117% / 112%                |
| <b>Total</b>        | <b>13'509'146</b> | <b>12'047'878</b>      | <b>7% / 8%</b>             | <b>73% / 68%</b>           |

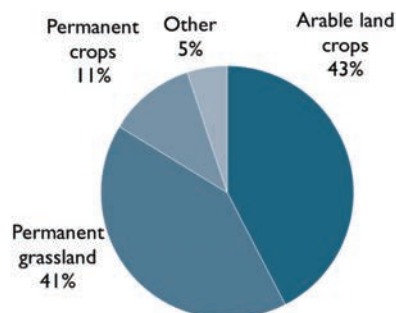
Source: FiBL-AMI survey 2018 based on national data sources Eurostat. For country details see [Statistics.FiBL.org](https://www.fibl.org)

Note: Total includes other agricultural land and correction values for double-cropped areas.

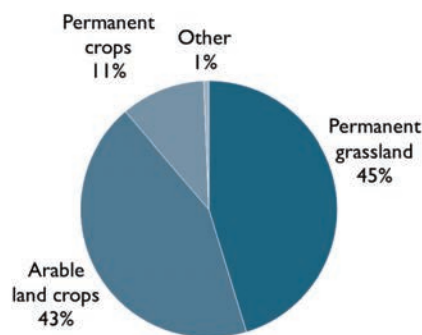
#### Europe and European Union: Land use in organic agriculture 2016

Source: FiBL-AMI survey 2018

##### Europe



##### European Union



**Figure 76: Europe: Distribution of land use in organic agriculture 2016**

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources

Table 54 and Figure 76 show that arable land constitutes a large part of the organic farmland, with 6 million hectares in Europe and 5.2 million hectares in the European

<sup>1</sup> The main land use types are: arable land crops (mainly cereals, fresh vegetables, green fodder and dry pulses and oilseeds), permanent grassland (pastures and meadows), and permanent crops (fruit trees and berries, olive groves and vineyards).

Union (44 and 43 percent of the organic farmland, respectively). Permanent grassland accounted for 5.6 million hectares in Europe and 5.5 million hectares in the European Union. Permanent crops constituted 11 percent of the organic farmland with 1.5 and 1.3 million hectares in Europe and the EU, respectively.

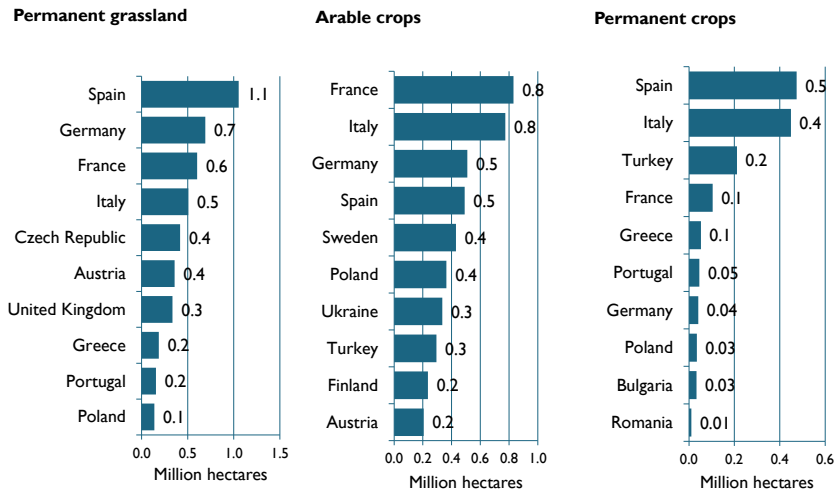
The largest increase in 2015-2016 was in permanent crops (9 percent in Europe and 6 percent the European Union), whereas arable land increased by 7 percent in Europe and by 11 percent in the European Union (Table 54, Figure 78; Figure 79).

Also, over the 2007-2016 decade, permanent crops more than doubled and thus showed a greater increase than arable land and permanent grassland, each of which grew by about two thirds (Table 54, Figure 78; Figure 79).

By country, the largest permanent grassland or grazing areas are in Spain with more than one million hectares, followed by Germany and France (Figure 77). The largest cropland areas (i.e., arable and permanent crops together) are in Italy (1.2 million hectares), Spain (1.0 million hectares), and France (0.9 million hectares) (Figure 77).

### Europe: Land use in organic agriculture 2016

Source: FiBL-AMI survey 2018

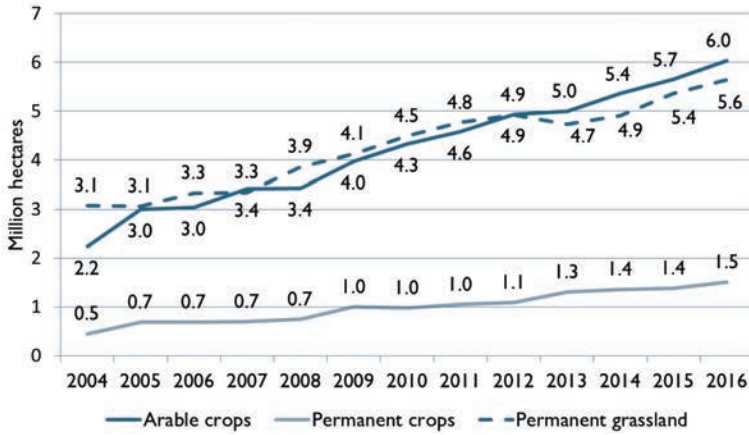


**Figure 77: Europe: Land use in organic agriculture by top 10 countries 2016**

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources

**Europe: Growth of area by land use type 2004-2016**

Source: FiBL-AMI surveys 2006-2018

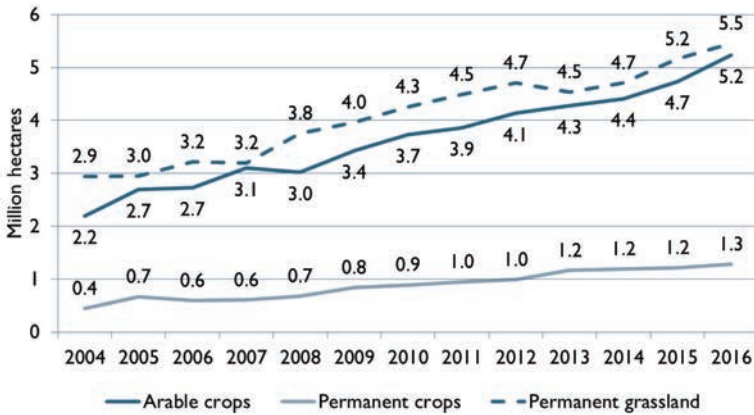


**Figure 78: Europe: Growth of organic agricultural land by land use type 2004-2016**

Source: FiBL-AMI Surveys 2006-2018 based on national data sources and Eurostat

**European Union: Growth area by land use type 2004-2016**

Source: FiBL-AMI surveys 2006-2018



**Figure 79: European Union: Growth of organic agricultural land by land use type 2004-2016**

Source: FiBL-AMI Surveys 2006-2018 based on national data sources and Eurostat

### 3.2 Crops grown in organic agriculture

Most of the key arable and permanent crops and crop groups showed growth in Europe and the European Union.

**Table 55: Europe and the European Union: Key crops/crop group 2016**

| Crop group        |                     | Europe (ha) | European Union (ha) | Organic share (%) Europe/EU | Change 2015-2016 Europe/EU | Change 2007-2016 Europe/EU |
|-------------------|---------------------|-------------|---------------------|-----------------------------|----------------------------|----------------------------|
| Arable land crops | Cereals             | 2'279'155   | 1'889'408           | 1.7%/3.3%                   | 2%/12%                     | 71%/59%                    |
|                   | Dry pulses          | 418'520     | 381'887             | 8.2%/17.9%                  | 15%/14%                    | 312%/323%                  |
|                   | Oilseeds            | 339'630     | 224'193             | 1.0%/1.9%                   | 14%/6%                     | 214%/152%                  |
|                   | Green fodder        | 2'255'059   | 2'066'861           | n/a                         | 9%/11%                     | 68%/61%                    |
|                   | Root crops          | 41'901      | 33'401              | 0.5%/1.0%                   | 4%/9%                      | 41%/32%                    |
|                   | Vegetables          | 148'088     | 135'684             | 2.9%/5.8%                   | 19%/24%                    | 41%/38%                    |
|                   | Berries             | 35'135      | 32'507              | 12.3%/19.8%                 | 11%/9%                     | 360%/341%                  |
| Permanent crops   | Citrus fruit        | 48'967      | 48'486              | 6.7%/8.1%                   | 15%/15%                    | 116%/136%                  |
|                   | Temperate fruit     | 127'749     | 105'296             | 4.6%/8.1%                   | 1%/1%                      | 63%/71%                    |
|                   | (Sub)Tropical fruit | 30'433      | 11'980              | 13.4%/7.6%                  | 15%/30%                    | 4700%/1822%                |
|                   | Grapes              | 328'492     | 313'642             | 8.4%/10%                    | 12%/12%                    | 225%/246%                  |
|                   | Nuts                | 267'080     | 233'344             | 15.7%/24%                   | 22%/23%                    | 134%/144%                  |
|                   | Olives              | 574'826     | 493'568             | 9.7%/9.8%                   | 8%/9%                      | 90%/79%                    |

Source: FiBL-AMI survey 2018 based on national data sources and Eurostat

Note: For crop details by country, please check crop chapter in this book from page 92.

#### Arable land

A large proportion of the organic arable land (6 million hectares in Europe and 5.5 million in the European Union) is used for the production of cereals and green fodder from arable land, which, together, account for more a large part of the organic arable land. Regarding the organic share, dry pulses are the most successful crop; in the European Union, they account for almost one-fifth of the total dry pulses area. Together with vegetables, they had the highest increase in land area, thus reflecting that European organic farmers are meeting the increasing market demand for vegetables and feedstuffs. Over the decade 2007-2016, the largest growth was noted for dry pulses, which more than quadrupled (Figure 80).

**Cereals** were the largest crop group in Europe and accounted for 2.3 million hectares or 1.7 percent in Europe, and in the European Union, they were the second largest group, accounting for 1.9 million hectares or 3.3 percent of the total cereal area. Wheat is the most important cereal (900'000 hectares), covering almost half of the cereal area. Italy (approx. 300'000 hectares, including large areas of durum wheat), Germany (approx. 242'000 hectares), and France (approx. 217'000 hectares) have the largest cereal areas. The highest organic shares of the total cereals area are in Austria (13.5 percent), Sweden (10.5 percent) and Estonia (9.8 percent). Outside the European Union, Ukraine, Turkey, and the Russian Federation are major cereal producers (see also the chapter on cereals in this volume, page 92).

In the European Union, the arable crop group with the largest area was **plants harvested green** (green fodder from arable land) with 2.1 million hectares (Europe: 2.3 million hectares). Clover, green maize, and grass on arable land were the main crop types.

In 2016, organic **vegetables**<sup>1</sup> were grown on almost 150'000 hectares of land in Europe, and more than 135'000 hectares in the European Union, covering 2.9 percent and 5.8 percent of the vegetable area respectively. While vegetables had the largest growth in 2016, compared to the other crop groups, they did not grow as fast in the decade 2007-2016. This is because vegetables are one of the pioneer crops of organic agriculture and strong growth already occurred in the previous decades. The largest areas were in Italy (43'648 hectares), France (18'064 hectares), and Spain (17'013 hectares). High organic shares of all vegetables are found in Denmark (28 percent) and Austria (20 percent) (See also the chapter on vegetables in this volume, page 122).

With 420'000 hectares in Europe and 380'000 hectares in the European Union, organic **dry pulses** accounted for a large share of all dry pulses (8.2 percent in Europe; 17.9 percent in the European Union). One reason is that the conventional crop area has been decreasing for many years due to the availability of cheap protein like soybeans on the world market for both animal feed and human consumption. The strong growth of dry pulses and their high organic shares also reflects the efforts of European organic farmers to improve soil fertility and to become less dependent on imports of protein crops. The countries with the largest areas for dry pulses were France (85'827), Poland (55'968), and Italy (43'986). The highest organic shares were found in Austria (58 percent), Italy (44 percent), and Denmark (40 percent) (see also the chapter on dry pulses in this volume, page 103).

### *Permanent crops*

A large part of the permanent cropland (1.5 million hectares in Europe and 1.3 million hectares in the European Union) is used for olives, grapes, and nuts. Olives cover one-third of the permanent crop area, and grapes one fifth. Over the decade 2007-2016, the largest growth was noted for grapes, which more than tripled (Figure 80). The organic shares for most permanent crops were higher than those for the arable crops; however, it should be noted that particularly for nuts and berries, the FAO data, with which the organic data is compared, do not include all berries or nut types grown in organic agriculture. Thus a direct comparison is not possible in all cases.

Olives (0.57 million hectares) and grapes (0.33 million hectares) cover half of the permanent cropland. Both reach an organic share of almost ten percent of their respective totals. Spain and Italy have an organic grape area of more than 100'000 hectares each, and they reach the highest organic shares (except some minor organic grape producers that reach even higher shares, such as the UK or Belgium). In Italy 15.5 percent of the grape area is organic and 11.6 percent in Spain (for details see also

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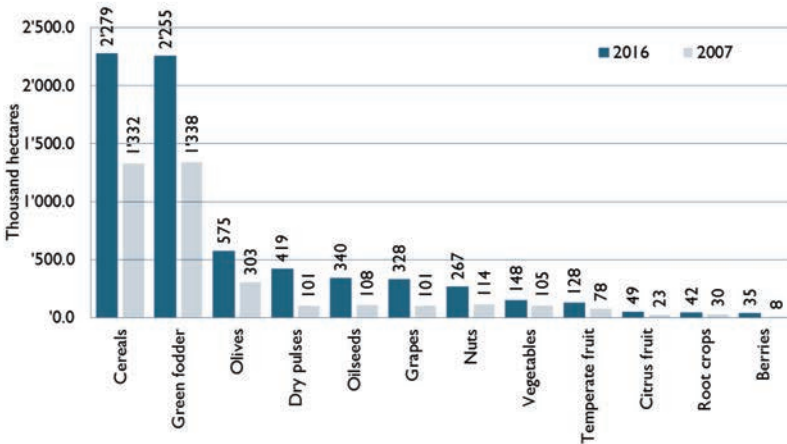
<sup>1</sup> It should be noted that for some countries, potatoes are included in the vegetable category.

chapter on organic grapes, page 114). Also for **olives**, Italy and Spain have the lead (222'453 hectares and 196'567 hectares, respectively). France has the highest organic share with 27 percent. The largest growth occurred in Italy, where the organic olive area increased by more than 40'000 hectares in 2016. (See also the chapter on olives in this volume, page 119).

Temperate fruits are grown on 127'749 hectares (European Union 105'296 hectares), and they cover 4.6 percent of the total temperate fruit area (8.1 percent in the European Union). The countries in the European Union have a considerable amount of land dedicated to temperate fruit (e.g., apples in Poland and berries in the Baltic countries). The most important fruits were apples (45'880 hectares), plums (12'882 hectares), and cherries (10'227 hectares). Both Polish apples (mainly for concentrate) and berries from the Baltic countries can be found in juices or yogurts all over Europe. The largest temperate fruit producers are Italy (22'378 hectares) and Poland (18'616 hectares); the highest organic area shares are found in Austria (53 percent) and Latvia (39.2 percent)<sup>1</sup>. (See also the chapter on temperate fruits in this volume, page 106).

**Development of selected crop groups 2007-2016**

Source: FiBL-AMI surveys 2008-2018, OrganicDataNetwork Surveys 2013-2015



**Figure 80: Europe: Growth of selected arable and permanent crop groups in Europe 2007 to 2016**

Source: FiBL-AMI survey 2018

<sup>1</sup> With these high organic proportions of the total temperate fruit area, it should be borne in mind that the certified organic area is not necessarily comparable to the FAO total data, which show the area harvested and exclude, for instance, new plantations.

### 3.3 Further organic areas

In addition to the agricultural land, there are further organic areas. Large parts of these are wild collection areas constituting 16.7 million hectares (European Union: 14.3 million hectares). The largest wild collection area in Europe (and in the world) is in Finland with 11.6 million hectares (mainly berries). For country details on wild collection areas, see Table 63.

### 4 Organic livestock

Statistics on the number of organic animals are incomplete and do not currently allow for a complete picture of the sector. However, taking into account all currently available information, the organic animal sector is developing at a fast pace in European countries. Table 56 provides a European overview of organic livestock in 2016. In many countries, organic animal husbandry began with beef, lamb, and milk production. In Europe, 3.9 million bovine animals, 4.6 million sheep, 1 million pigs, and 46 million poultry were kept. (For European Union data, see Table 56).

**Table 56: Europe and the European Union: Organic livestock 2016**

|                | Europe          |                            |                      |                      | European Union  |                            |
|----------------|-----------------|----------------------------|----------------------|----------------------|-----------------|----------------------------|
|                | Animals [heads] | Organic share of total [%] | Change 2015-2016 [%] | Change 2007-2016 [%] | Animals [heads] | Organic share of total [%] |
| Bovine animals | 3'857'782       | 3.0%                       | 6%                   | 68%                  | 3'642'372       | 4.5%                       |
| Sheep          | 4'591'943       | 3.0%                       | -1%                  | 34%                  | 4'365'188       | 4.5%                       |
| Pigs*          | 992'752         | 0.6%                       | 6%                   | 55%                  | 963'221         | 0.7%                       |
| Poultry**      | 45'639'898      | 1.8%                       | 11%                  | 131%                 | 43'262'652      | 3.1%                       |

Source: FiBL-AMI Survey 2018 based on Eurostat and national data sources.

#### Notes

Data for the calculation of organic shares are based on Eurostat and FAOSTAT. The numbers for the organic shares of all livestock are based on FAOSTAT data. FAOSTAT only provides totals for bovine animals, sheep, pigs, and poultry, without further specifications. Please note that growth rates 2007-2016 were similar for Europe and the European Union and are hence not included in the table.

\* Please note there is no consistent reporting in the official statistics, no clear distinction is made between the number of animals slaughtered, the places or average numbers of stock. Therefore, the data should be treated with caution. According to the Agricultural Market Information Company AMI, the average stock of fattening pigs was 454'247 in Europe, and 426'946 in the European Union.

\*\* As for pigs (see note above), there is no consistent reporting for poultry. According to the Agricultural Market Information Company AMI, the average stock was 41'569'199 in Europe, and 39'136'927 in the European Union.

#### Organic shares of all animals

The organic share of all livestock remains small – depending on the animal species (between 0.5 percent and 5.7 percent, Table 56). Monogastric animals (pigs and poultry) account for the lowest shares, partly because of the difficulties posed by the insufficient local supply of organic feeds, the difficulties in the provision of traceable certified feed imports, the high investment in pig barns and pens, and the high price



premiums consumers have to pay. The highest organic shares are for organic sheep and cattle as conversion of these rather extensive production schemes is easier.

### *Increase in numbers*

Between 2007 and 2016 (and also 2015 and 2016), the greatest increase was in poultry (+131 percent), which can be partly attributed to the high demand for eggs (see the chapter on the organic market in Europe, Table 59). However, beef and dairy cattle also grew substantially in that decade (+68 percent), as did pigs (+55 percent) and sheep (+34 percent) (Table 56).

### *Organic livestock by livestock group*

- For bovine animals (3.9 million heads in Europe), the largest numbers are found in France (573'623 heads), Germany (410'500 heads), and Austria (404'648 heads). The highest organic shares are in Liechtenstein (26 percent), Latvia (24 percent), Austria (21 percent), and Sweden (20 percent).
- For sheep (4.6 million heads in total), the largest numbers are in the United Kingdom (841'110 heads) and Italy (785'170 heads). The highest organic shares are in Estonia (47 percent) and the Czech Republic (46 percent).
- Looking at the available data for pig stocks (992'752 heads), Germany (118'000 heads), Denmark (66'000 heads) and France (63'000 heads) have the highest numbers (country data: average stock of fattening pigs only).
- For poultry, we assume that country-level data is not comparable, due to different definitions (see explanation below).

### *Pigs and poultry: Data remain a challenge*

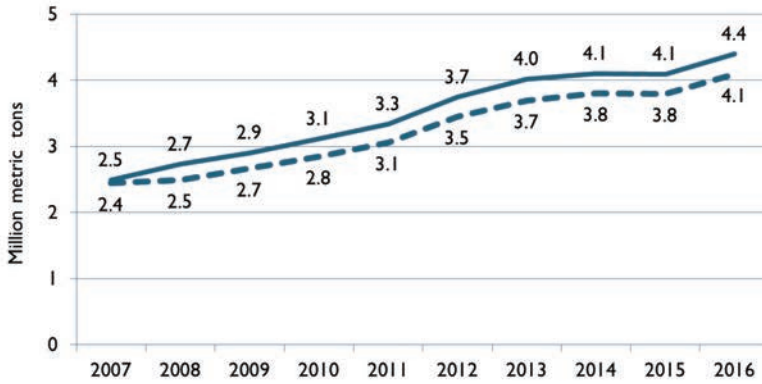
In the case of pigs and poultry, in the official statistics, no clear distinction is made between the number of animals slaughtered and the places or average numbers of stock over the year, and it is not always clear which of these is given when “livestock numbers” are quoted. Adding up the data for pigs and poultry over all countries, therefore, is not completely reliable and country data are not necessarily comparable. The data that are presented here should, therefore, be treated with caution and are only an approximation of the overall picture.

### *Organic cows' milk*

Organic cow's milk production is one of the production-related indicators with good coverage across all European countries. Organic cows' milk has almost doubled since 2007 to meet rising demand for milk and dairy products. Organic cows' milk production now stands at 4.4 million metric tons (European Union: 4.1 million), constituting more than 2.8 percent of the European Union's milk production from dairy cows in 2016. Some of this growth, however, can be attributed to improved data availability (Figure 81).

### Europe and European Union: Development of organic cows' milk production, 2007-2016

Source: FiBL-AMI surveys 2009-2018



**Figure 81: Europe and the European Union: Development of organic cows' milk production 2007-2016<sup>1</sup>**

Source: FiBL-AMI survey 2009-2018

<sup>1</sup> Please note that due to data revisions, the data presented here are not comparable to those published in the 2017 edition of "The World of Organic Agriculture".

## 5 Producers, processors, importers, and exporters

While data on organic producers are available for almost all countries, this is not the case of processors and importers and even less for exporters. While data availability is improving, it is still not possible to draw a clear picture for the latter groups over the years; hence, in the table below, a ten-year development is only shown for the number of producers.

**Table 57: Europe: Organic operators by country group 2016**

|               | Producers |                  |                   | Processors |                  | Importers |                  | Exporters |                  |
|---------------|-----------|------------------|-------------------|------------|------------------|-----------|------------------|-----------|------------------|
|               | No.       | Growth<br>1 year | Growth<br>10 year | No.        | Growth<br>1 year | No.       | Growth<br>1 year | No.       | Growth<br>1 year |
| <b>EU</b>     | 295'123   | 10%              | 58%               | 62'652     | 8%               | 3'968     | 13%              | 2'050     | 5%               |
| <b>Europe</b> | 373'240   | 7%               | 76%               | 65'889     | 10%              | 4'657     | 25%              | 2'235     | 6%               |

Source: FiBL-AMI survey 2018 based on national data sources and Eurostat. For a breakdown by country, see Table 64. For detailed data sources see annex.

### 5.1 Organic producers

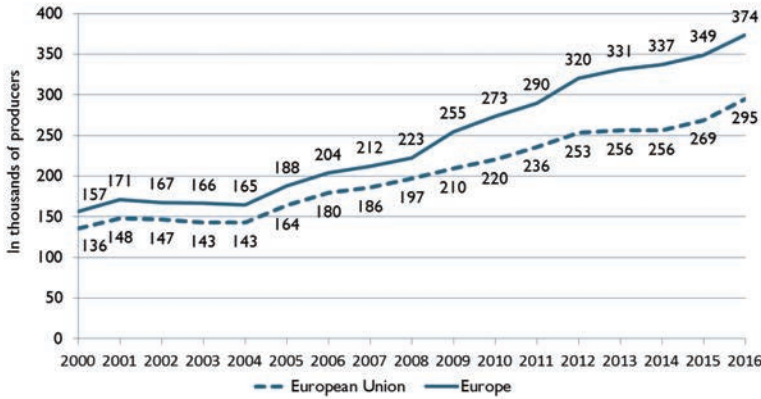
In 2016, there were more than 370'000 organic producers in Europe and almost 300'000 in the European Union (Table 57 and Table 64). In the European Union, the country with the largest number of producers is Italy (more than 64'000); in Europe, it is Turkey (almost 68'000) (Figure 84). Compared to the growth in 2015, the increase in numbers of producers was higher (+7 percent in Europe; +10 percent in the European Union). Over the decade 2007-2016, the number of producers in Europe increased by 76 percent (EU +58 percent). Fourteen percent of the world's organic farmers are in Europe (Figure 82).

### 5.2 Organic processors and importers

The number of processors and importers increased in almost all European countries in 2016 (Table 57). In Europe, there were almost 66'000 processors (European Union: almost 63'000 in Europe) and almost 4'700 importers (European Union: almost 4'000 in Europe). The largest increase was noted for importers. The country with the largest number of processors is Italy (almost 15'000), and the country with the most importers is Germany (1'500) (Table 57, Figure 83).

### Europe and European Union: Development of organic producers 2000-2016

Source: FiBL-AMI surveys 2006-2018 based on national data sources and Eurostat

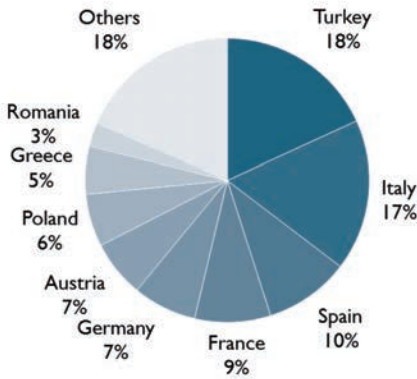


**Figure 82: Europe and the European Union: Development of organic producers in 2000-2016**

Source: FiBL-AMI surveys 2006-2018 based on national data sources and Eurostat

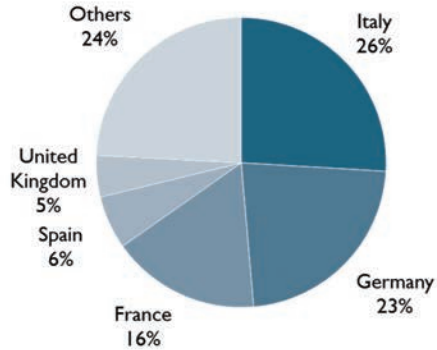
### Europe: Distribution of organic producers 2016

Source: FiBL-AMI survey 2018



### Europe: Distribution of organic processors 2016

Source: FiBL-AMI survey 2018

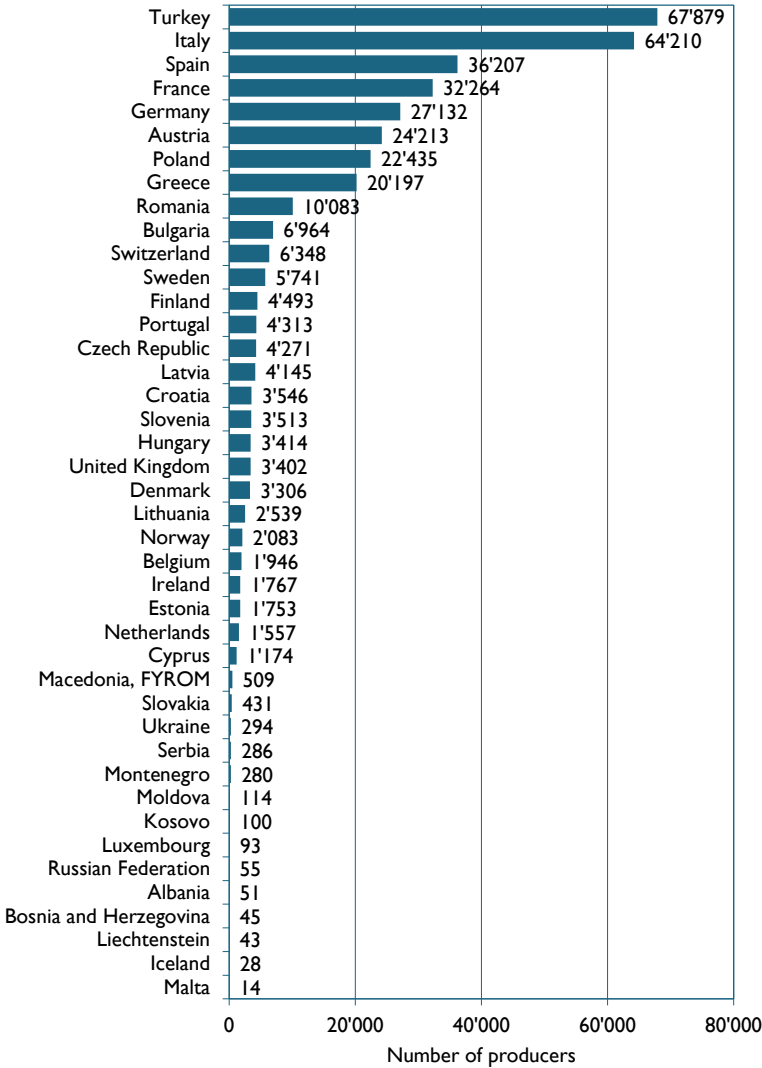


**Figure 83: Europe: Distribution of organic producers and processors by country 2016**

Source: FiBL-AMI survey 2018, based on national data sources and Eurostat.

**Europe: Organic producers by country 2016**

Source: FiBL-AMI survey 2018



**Figure 84: Europe: Numbers of organic producers by country 2016**

Source: FiBL-AMI survey 2018 based on national data sources and Eurostat. For detailed data sources see annex.

## 6 Organic retail sales

In 2016, the organic market in Europe grew to 33.5 billion euros (European Union: 30.7 billion euros). Unfortunately, not all countries provide data on their domestic markets on a regular basis (Table 65), and it may, therefore, be assumed that the market is larger than indicated by the figures in Table 58 and Table 13.

**Table 58: Europe and the European Union: Organic retail sales 2016: Key data**

|                | Retail sales<br>[Million €] | Per capita<br>consumption [€] | Growth<br>2015-2016 [%] | Growth<br>2007-2016 [%] |
|----------------|-----------------------------|-------------------------------|-------------------------|-------------------------|
| European Union | 30'682                      | 60.5                          | 12.0%                   | 111.6%                  |
| Europe         | 33'526                      | 40.8                          | 11.4%                   | 117.4%                  |

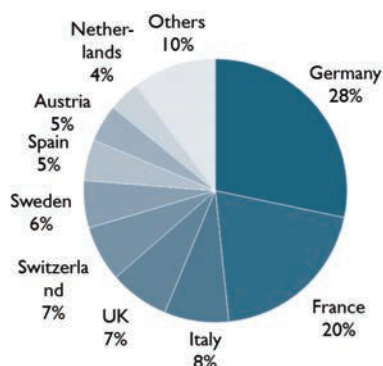
Source: FiBL-AMI survey 2018 based on national data sources. For country details, see Table 65.

### 6.1 Size of the organic market

Germany continues to be the largest market in Europe (9.5 billion euros) (Figure 86), and, after the United States, it is the second biggest organic market in the world. France holds second place in Europe with 6.7 billion euros. Comparing organic markets worldwide by single market, the United States has the lead: 47 percent of global retail sales of organic products are in the United States (38.9 billion euros), followed by the sales in the European Union (30.7 billion euros; 37 percent of global retail sales).

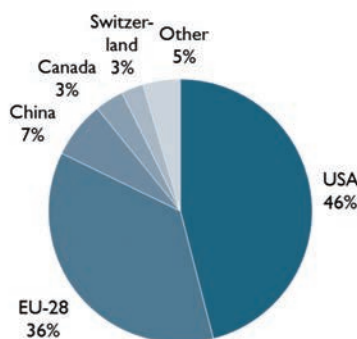
**Europe: Distribution of retail sales by country 2016**

Source: FiBL-AMI survey 2018



**World: distribution of retail sales by single market 2016**

Source: FiBL-AMI survey 2018



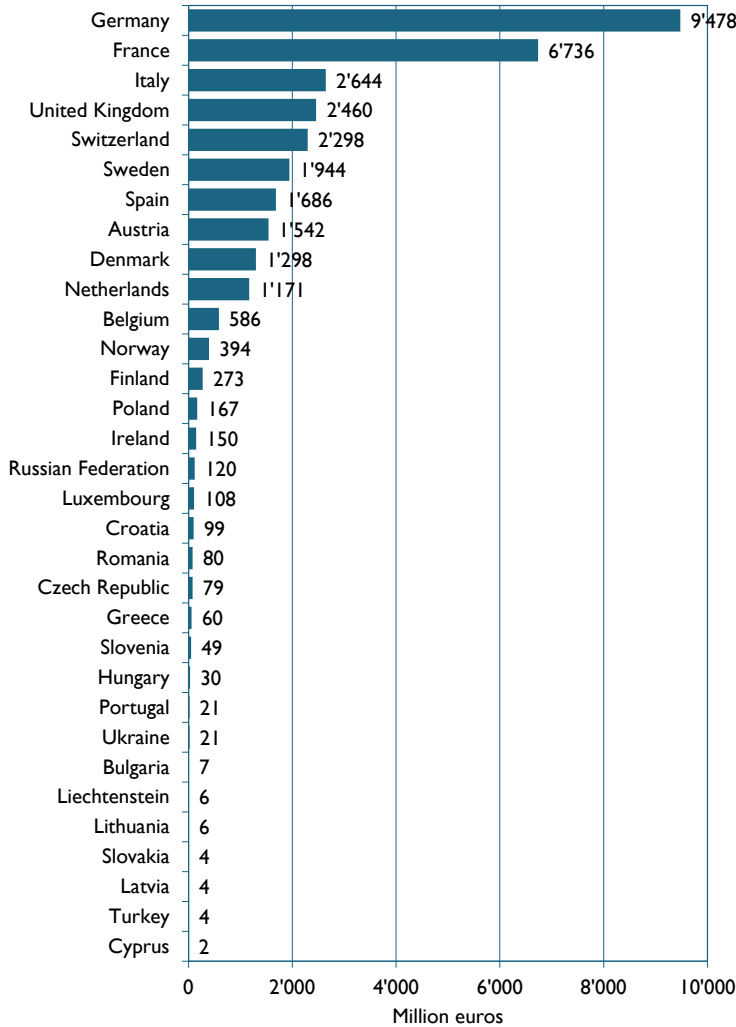
**Figure 85: Europe: Distribution of retail sales by country and by single market worldwide 2016**

Source: FiBL-AMI survey 2018 based on national data sources

Comparing retail sales by continent, North America is the largest market (41.9 billion euros) (Figure 12). Please note that there has been a major shift in the relative importance of single markets/continents compared to the 2014 data due to fluctuating exchange rates.

**Europe: Organic retail sales value by country 2016**

Source: FiBL-AMI survey 2018



**Figure 86: Europe: Retail sales by country 2016**

Source: FiBL-AMI survey 2018 based on national data sources (only countries with a turnover of more than one million euros). Please note, that 2016 data were not available for all countries. For detailed data sources see annex.

## 6.2 Growth of the organic market

The organic market grew by approximately 11.4 percent in Europe and 12 percent in the European Union in 2016. It is the second time since the financial crisis in 2008 that double-digit growth occurred in Europe. In the decade 2007 to 2016, the organic market more than doubled in size (Figure 87).

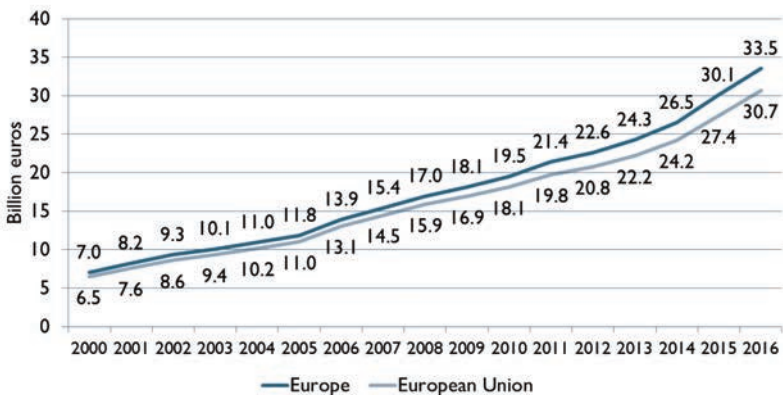
All countries for which new data was available showed growth, many double-digit, with France (the second-largest market in Europe) and Ireland leading with more than 20 percent (Figure 88). Germany, the largest market in Europe, again showed strong growth, increasing by 10 percent. Scandinavian countries also showed strong growth, with Denmark and Norway leading with a 20 percent increase (Table 65).

In the United Kingdom, where retail sales had been decreasing for several years, growth was noted (7.1 percent in 2016) for the fifth consecutive year.<sup>1</sup>

In 2017, in many European countries, the market often experienced further double-digit growth: figures are expected to be available at the beginning of 2018.

### Europe and European Union: Development of retail sales 2000-2016

Source: FiBL-AMI Surveys 2006-2018, OrganicDataNetwork Surveys 2013-2015



**Figure 87: Europe: Growth of organic retail sales in Europe and the European Union, 2000-2016**

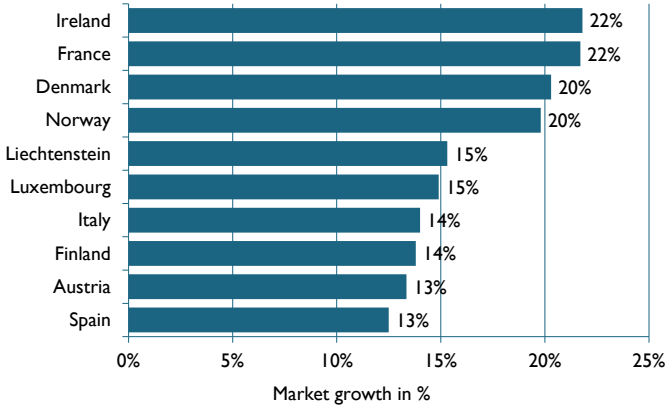
Source: FiBL-AMI surveys 2004-2018, and OrganicDataNetwork Surveys 2013-2015

<sup>1</sup> Note: Although the UK market grew by nearly eight percent in the national currency in 2016, if converted into Euro there has been a drop, due to the exchange rate loss of the British pound after the Brexit vote.



**Europe: The countries with the highest growth of the organic market 2015-2016**

Source: FiBL-AMI survey 2018



**Figure 88: Europe: The countries with the highest organic market growth 2016**

Source: FiBL-AMI surveys 2018

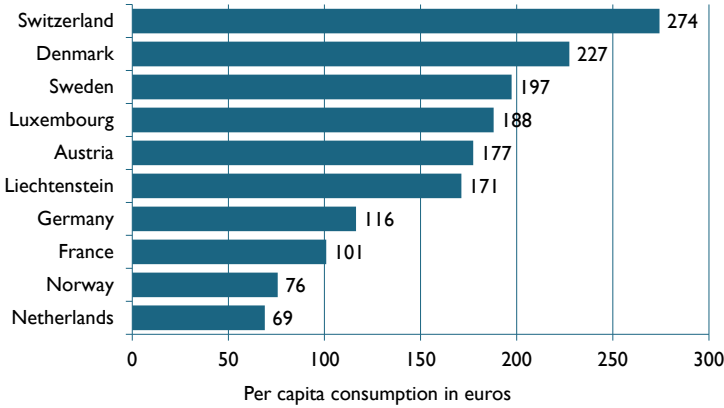
**6.3 Per capita consumption of organic food**

Like in the previous years, the highest per capita consumption of organic food in 2016 was in Switzerland (274 euros), followed by Denmark (227 euros), Sweden (197 euros), and Luxembourg (188 euros) (Figure 89). Eight countries had a per capita consumption of more than 100 euros in 2016 (Table 65).

The continual growth in consumer interest is well documented by the growth of per capita consumption, with specific notable growth in 2016 (Figure 90). The per capita consumption in Europe has risen to just over 40 euros per year per European citizen and to more than 60 euros in the European Union.

**Europe: The countries with the highest per capita consumption of organic food 2016**

Source: FiBL-AMI survey 2018

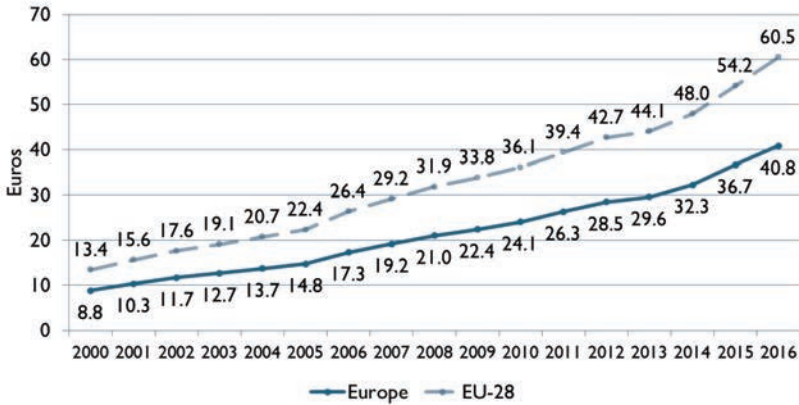


**Figure 89: Europe: The countries with the highest per capita consumption 2016**

Source: FiBL-AMI survey 2019 based on national data sources. For detailed data sources see annex.

**Europe and European Union: Growth of the per capita consumption 2000-2016**

Source: FiBL-AMI surveys 2006-2018, OrganicDataNetwork Surveys 2013-2015



**Figure 90: Europe: Growth of the per capita consumption 2000-2016**

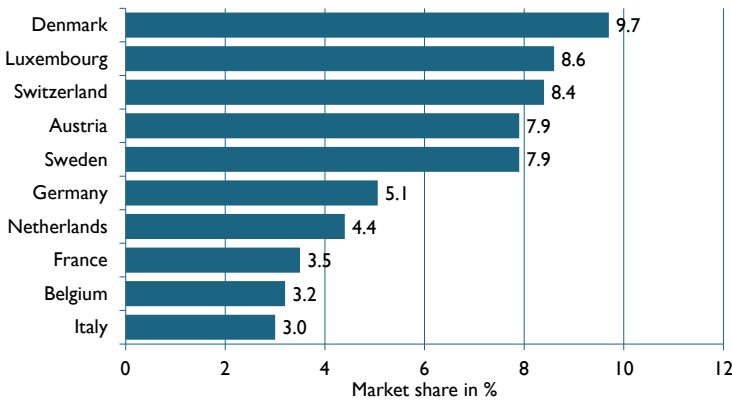
Source: FiBL-AMI survey 2018 based on national data sources. Calculation based on Eurostat population data. For detailed data sources see annex.

### 6.4 Organic market shares

The organic share of overall retail sales shows the importance that the organic market has in a given country. As in the past, the highest market shares were reached in Denmark (9.7 percent), Luxembourg (8.6 percent), and Switzerland (8.4 percent) (Figure 91, Table 65). The fact that in many countries the total food market is not growing and that in many cases food prices are decreasing makes organic shares grow even faster. Market shares of individual products can be far higher; these data are provided in Table 59. As there are no retail sales data for Europe or the European Union as a whole, it is not possible to calculate overall organic market shares.

#### Europe: The countries with the highest organic shares of the total market 2016

Source: FiBL-AMI survey 2018



**Figure 91: Europe: The countries with the highest shares of the total retail sales 2016**

Source: FiBL-AMI survey 2018 based on national data sources for detailed data sources see annex.

### 6.5 Comparison of organic products and product groups with the total market

While the organic share of the total market is an important indicator, it is also important to look at the organic market shares that individual products can have.

In many countries, organic eggs are one of the success stories within the total retail market. Table 59 shows that Switzerland, Sweden, and France reach market shares (in value) of over 20 percent.

Organic fruit and vegetables continue to be highly popular purchases among European organic consumers. Organic vegetables have the highest market shares after eggs, representing 10 percent or more of the sales value of all vegetables sold in countries such as Switzerland, Austria, Sweden, and Germany. For example, fresh carrots or fresh pumpkins alone have a nearly 30 percent market share in Germany.

In Sweden and Switzerland, organic dairy products are reaching organic market shares of 10 percent and higher.

Individual products can reach much higher market shares. Organic baby food (over 40 percent in Germany) or organic meat substitutes (46 percent in Germany) are good examples.

On the other hand, products like organic beverages (except wine) and meat (especially poultry), have low market shares in many countries. Often, these products are highly processed and very cheap on the conventional market. Another factor is that many organic consumers tend to eat little or no meat.

## 6.6 Marketing channels in organic agriculture

Some countries are in a position to break down their retail sales data by marketing channel. Some are even able to provide a breakdown by product and marketing channel. Some countries have data for catering sales, and some countries provide data for direct marketing and box schemes. Wherever possible, the figure for the catering sales was deducted from the figure for the total organic market (Table 65).

Figure 92 shows that the importance of the various marketing channels differs from country to country. In the past, countries with strong involvement by general retailers showed steady organic market growth (e.g., Austria, Denmark, Sweden, Switzerland, and the United Kingdom). However, the financial crisis showed the danger of a strong dependence on supermarkets. In those years, the market decreased in the UK, and in Germany, stagnation was noted for general retail sales, whereas the market continued to grow in specialized channels. France and Italy are good examples of countries with strong market growth, where specialized retailers play a very important role, even though their importance is decreasing.

In Germany, the market has entered into a transition period. Supermarkets have become the driving force in the market, whereas specialised retailers are facing more and more competition. While in 2014, 33 percent of all organic products were sold in organic food shops, this number decreased to 30 percent in 2016. In 2016, 58 percent of the organic food was sold by general retailers.

**Table 59: Organic shares for retail sales values (euros) for selected products 2016**

|                           | Austria           | Belgium<br>(2015) | Czech<br>Republic<br>(2015) | Finland           | France<br>(2016) | Germany | Ireland | Nether-<br>lands  | Norway            | Sweden            | Switzer-<br>land  | UK   |
|---------------------------|-------------------|-------------------|-----------------------------|-------------------|------------------|---------|---------|-------------------|-------------------|-------------------|-------------------|------|
| Beverages                 |                   |                   | 0.3%                        |                   | 4.2%             |         |         |                   | 0.3%              | 5.5% <sup>1</sup> | 3.2%              |      |
| Bread and bakery products |                   | 1.9%              | 0.4%                        | 1.0%              | 2.9%             | 7.7%    |         | 1.6%              | 1.5%              | 3.7%              | 20.7%             | 0.4% |
| Eggs                      | 20.1%             |                   |                             | 15.4%             | 27.0%            | 19.4%   | 5.2%    | 14.1%             | 8.1%              |                   | 25.5%             | 6.8% |
| Fish and fish products    |                   |                   |                             |                   | 2.3%             |         |         | 1.4%              | 0.5%              |                   |                   | 0.7% |
| Fresh vegetables          | 14.4%             | 6.0%              |                             | 3.9% <sup>2</sup> | 5.4%             | 9.7%    | 23.0%   | 4.1% <sup>3</sup> | 4.3%              | 12.2%             | 21.2%             | 4.3% |
| Fruit                     | 10.6%             | 3.9%              | 0.7%                        |                   | 6.6%             | 7.8%    |         |                   | 2.3% <sup>4</sup> | 19.6%             | 12.9%             | 2.8% |
| Meat and meat products    | 3.5% <sup>5</sup> | 1.8%              | 0.2%                        | 1.10%             | 2.0%             | 2.5%    | 8.0%    |                   | 0.4%              | 3.2%              | 5.3% <sup>5</sup> | 1.4% |
| Milk and dairy products   | 10.4%             | 2.7%              | 1.0%                        |                   | 4.0%             |         |         | 4.1%              | 1.9%              | 11.0%             | 12.6%             | 3.8% |
| - Butter                  | 9.3%              | 4.1%              |                             |                   | 6.3%             | 4.7%    |         |                   | 3.1%              |                   |                   | 2.0% |
| - Cheese                  | 8.9%              | 1.0%              |                             | 1.5%              | 1.5%             | 4.4%    |         |                   | 0.6%              |                   | 6.5%              | 1.1% |
| - Milk                    | 17.9%             | 3.0%              |                             | 4.1%              | 12.5%            | 12.1%   | 4.3%    |                   | 4.3%              |                   |                   | 5.9% |
| Yoghurt                   |                   | 7.2%              |                             | 1.9%              | 4.8%             | 7.7%    | 18.3%   |                   | 0.4%              |                   |                   | 8.2% |

Sources: FiBL-AMI survey 2018, based on data from: Austria: RollAMA based on GfK; Belgium: LV based on GfK; Czech Republic: UZEI; Finland: Pro Luomu; France: Agence Bio; Germany: Agricultural Market Information Company based on GfK; Netherlands: Bionext; Norway: Nielsen Norway; Sweden: Statistics Sweden; Switzerland: Bio Suisse; UK: Soil Association.

Note: Due to classifications and nomenclature differing from country to country, it is not possible to supply data for all product groups, even if data for individual products may be available. Not all countries have data on the market shares of organic products. Please note that groups are not complete; the products shown in the table above are a selection.

<sup>1</sup> Excludes alcoholic beverages.

<sup>2</sup> Includes fruit

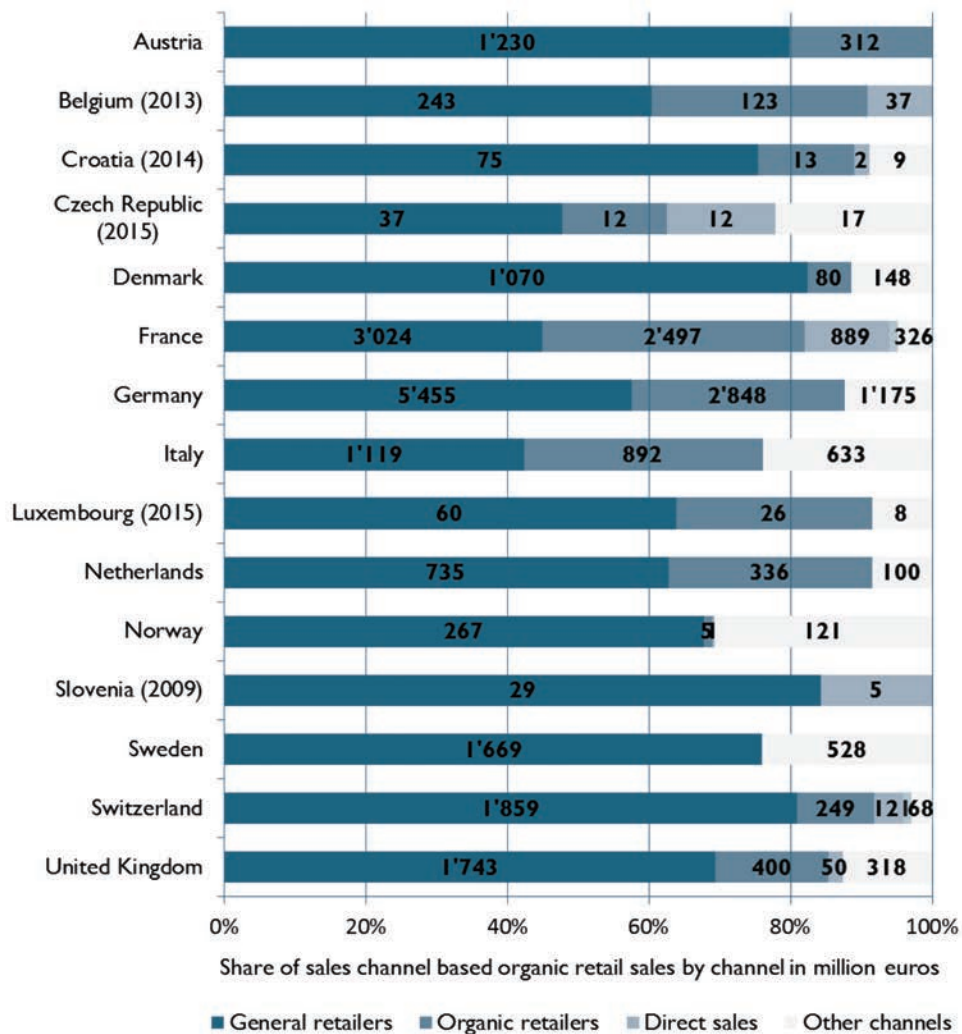
<sup>3</sup> Includes fruit.

<sup>4</sup> Please note that the category "fruit" also includes berries and nuts.

<sup>5</sup> Meat only: 4%

**Retail sales by channel in selected European countries  
2016, based on retail sales value  
(million euros)**

Source: FiBL-AMI survey 2018



**Figure 92: Europe: Marketing channels for organic products in selected countries 2016**

Source: FiBL-AMI survey 2018 based on national data sources

For detailed data sources see annex.

## 7 Conclusion

Currently available data on organic farming and the global and European market shows that, in an international context, the European organic sector is well developed. Relatively high shares of agricultural land, continual growth of the area and number of operators, as well as a fast-growing market, show the exceptional dynamics that the European organic market and sector has.

For many countries, the organic market is growing faster than production, and domestic supply cannot meet demand. Therefore, many organic organisations or market actors are calling for more farmers to convert to organic.

The data analysis provided in this report shows that there are still large discrepancies among European countries. Even though organic agricultural land in some countries in Central and Eastern Europe account for large shares of the overall agricultural land, consumer spending, although growing, remains low as a proportion of total spending on food in these countries.

Another issue that needs to be solved is data availability and quality. For instance, imports and exports play a very important role in trade within the European Union and with external partners, but almost no relevant data exists. Denmark is the only European country that consistently supplies international trade data with a breakdown by country of origin/destination and product. In order to increase the transparency of the organic market, the availability of export and import values could play an important role. Currently, it is not possible to compare production data versus international trade data, which could give important hints on potential fraud cases.

Furthermore, while the availability of domestic market data is improving, it is collected with a wide range of methods and, strictly speaking, is not accurately comparable. Diverging methods and availability remain a challenge. For many countries, particular in Central and Eastern Europe, retail sales data are not collected on a continual basis, and thus, little is known about the importance of organic product sales.

Therefore, we recommend that data availability and accessibility are increased, that classifications, nomenclature, and definitions, in particular for organic market data, are harmonized, and that data quality is improved (Willer and Schaack 2014).

## 8 Acknowledgements

The data compiled for this article builds on the collection activities of the OrganicDataNetwork project, which was funded by the European Union (EU) under its seventh framework programme for research, demonstration and technological

development, which ended in 2014.<sup>1</sup> Under this project, for the first time, detailed organic market data for all European countries was collected<sup>2</sup> and stored in one single database, which is available online.<sup>3</sup> To present these data, the statistical report for Europe is more comprehensive than for the other continents. The authors would like to thank all of those who have provided data and information for this report, in particular, the partners of the OrganicDataNetwork project.

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<sup>1</sup> The project “Data network for better European organic market information” (OrganicDataNetwork) has received funding from the European Union’s Seventh Framework Programme for Research, Technological Development and Demonstration under grant agreement no 289376.

<sup>2</sup> The data was collected by the Research Institute of Organic Agriculture (FiBL), Switzerland, and the Agricultural Market Information Company (AMI), Germany, which are among the partners of the OrganicDataNetwork. In addition, further data sources were used.

<sup>3</sup> This database is available at <http://www.organicdatanetwork.net/odn-statistics.html>



## Organic Agriculture in Europe: Tables

Table 60: Europe: Organic agricultural land by country 2016

| Country               | Organic area [ha] | Organic share [%]    | Increase 2015-2016 [%] | Increase 2007-2016 [%] | Increase 2015-2016 [ha] |
|-----------------------|-------------------|----------------------|------------------------|------------------------|-------------------------|
| Albania               | 662               | 0.1%                 | -                      | +244.7%                | -                       |
| Andorra               | 4                 | 0.02%                | +100.0%                | -                      | +2                      |
| Austria               | 571'585           | 21.9%                | +3.3%                  | +19.3%                 | +18'015                 |
| Belarus               |                   | Wild collection only |                        |                        |                         |
| Belgium               | 78'452            | 6.0%                 | +14.0%                 | +152.7%                | +9'634                  |
| Bosnia & Herzegovina  | 992               | 0.05%                | +72.3%                 | +42.6%                 | +416                    |
| Bulgaria              | 160'620           | 3.5%                 | +35.5%                 | +672.1%                | +42'068                 |
| Channel Islands       | 180               | 1.9%                 | -                      | -                      | -                       |
| Croatia               | 93'593            | 6.0%                 | +23.3%                 | +846.2%                | +17'710                 |
| Cyprus                | 5'550             | 5.1%                 | +18.1%                 | +219.2%                | +851                    |
| Czech Republic        | 488'591           | 11.5%                | +2.2%                  | +56.2%                 | +10'558                 |
| Denmark               | 201'476           | 7.7%                 | +20.8%                 | +40.9%                 | +34'688                 |
| Estonia               | 180'852           | 18.9%                | +16.1%                 | +117.1%                | +25'046                 |
| Faroe Islands         | 253               | 8.4%                 | -                      | +2009.2%               | -                       |
| Finland               | 238'240           | 10.4%                | +5.8%                  | +60.8%                 | +13'005                 |
| France                | 1'538'047         | 5.5%                 | +16.3%                 | +174.1%                | +215'845                |
| Germany               | 1'251'320         | 7.5%                 | +14.9%                 | +46.5%                 | +162'482                |
| Greece                | 342'584           | 4.2%                 | -15.8%                 | +24.0%                 | -64'485                 |
| Hungary               | 186'347           | 4.0%                 | +43.6%                 | +38.4%                 | +56'612                 |
| Iceland               | 22'710            | 1.2%                 | +131.8%                | +344.2%                | +12'913                 |
| Ireland               | 76'701            | 1.5%                 | +5.0%                  | +55.7%                 | +3'664                  |
| Italy                 | 1'796'363         | 14.5%                | +20.4%                 | +60.5%                 | +303'784                |
| Kosovo                | 160               | 0.04%                | -                      | -                      | -                       |
| Latvia                | 259'146           | 14.3%                | +11.9%                 | +74.4%                 | +27'538                 |
| Liechtenstein         | 1'383             | 37.7%                | +24.9%                 | +34.6%                 | +276                    |
| Lithuania             | 221'665           | 7.6%                 | +3.8%                  | +71.2%                 | +8'086                  |
| Luxembourg            | 4'274             | 3.3%                 | +1.4%                  | +26.3%                 | +58                     |
| Macedonia' FYROM      | 3'245             | 0.3%                 | +49.3%                 | +107.4%                | +1'071                  |
| Malta                 | 24                | 0.2%                 | -20.0%                 | +100.0%                | -6                      |
| Moldova               | 30'142            | 1.2%                 | +4.9%                  | +160.6%                | +1'413                  |
| Montenegro            | 3'470             | 1.5%                 | +8.0%                  | -69.1%                 | +257                    |
| Netherlands           | 52'204            | 2.8%                 | +5.9%                  | +15.0%                 | +2'931                  |
| Norway                | 47'621            | 4.8%                 | -                      | +1.3%                  | -19                     |
| Poland                | 536'579           | 3.7%                 | -7.6%                  | +101.6%                | -44'152                 |
| Portugal              | 245'052           | 6.7%                 | +1.5%                  | +0.1%                  | +3'677                  |
| Romania               | 226'309           | 1.7%                 | -8.0%                  | +79.7%                 | -19'615                 |
| Russian Federation    | 289'890           | 0.1%                 | -24.7%                 | +748.7%                | -95'250                 |
| San Marino            |                   | Processing only      |                        |                        |                         |
| Serbia                | 14'358            | 0.4%                 | -6.1%                  | +2393.8%               | -940                    |
| Slovakia              | 187'024           | 9.9%                 | +2.8%                  | +62.1%                 | +5'142                  |
| Slovenia              | 43'579            | 9.0%                 | +3.3%                  | +49.5%                 | +1'391                  |
| Spain                 | 2'018'802         | 8.7%                 | +2.6%                  | +168.0%                | +50'232                 |
| Sweden                | 552'695           | 18.0%                | +6.5%                  | +82.3%                 | +33'712                 |
| Switzerland           | 141'249           | 13.5%                | +2.9%                  | +22.3%                 | +4'015                  |
| Turkey                | 523'777           | 1.4%                 | +7.8%                  | +175.2%                | +37'708                 |
| Ukraine               | 381'173           | 0.9%                 | -7.2%                  | +47.4%                 | -29'377                 |
| United Kingdom        | 490'205           | 2.9%                 | -1.2%                  | -23.4%                 | -5'724                  |
| <b>Europe</b>         | <b>13'509'146</b> | <b>2.7%</b>          | <b>+6.7%</b>           | <b>+68.5%</b>          | <b>+845'232</b>         |
| <b>European Union</b> | <b>12'047'878</b> | <b>6.7%</b>          | <b>+8.2%</b>           | <b>+69.1%</b>          | <b>+912'746</b>         |

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources. For data sources see annex.

**Table 61: Europe: Conversion status of organic agricultural land 2016**

| Country                | Area [ha]         | Area fully converted [ha] | Area under conversion [ha] |
|------------------------|-------------------|---------------------------|----------------------------|
| Albania                | 662               |                           |                            |
| Andorra                | 4                 | 4                         |                            |
| Austria                | 571'585           |                           |                            |
| Belarus                |                   | Wild collection           |                            |
| Belgium                | 78'452            | 56'055                    | 22'397                     |
| Bosnia and Herzegovina | 992               | 880                       | 111                        |
| Bulgaria               | 160'620           | 36'275                    | 124'345                    |
| Channel Islands        | 180               | 180                       |                            |
| Croatia                | 93'593            | 29'172                    | 64'421                     |
| Cyprus                 | 5'550             | 3'083                     | 2'467                      |
| Czech Republic         | 488'591           | 427'331                   | 61'260                     |
| Denmark                | 201'476           | 158'796                   | 42'680                     |
| Estonia                | 180'852           | 150'442                   | 30'411                     |
| Faroe Islands          | 253               | 253                       |                            |
| Finland                | 238'240           | 198'202                   | 40'035                     |
| France                 | 1'538'047         | 1'054'877                 | 483'170                    |
| Germany                | 1'251'320         |                           |                            |
| Greece                 | 342'584           | 308'279                   | 34'305                     |
| Hungary                | 186'347           | 91'301                    | 95'045                     |
| Iceland                | 22'710            | 22'594                    | 116                        |
| Ireland                | 76'701            | 46'517                    | 30'185                     |
| Italy                  | 1'796'363         | 1'201'476                 | 594'888                    |
| Kosovo                 | 160               | 160                       |                            |
| Latvia                 | 259'146           | 166'551                   | 92'596                     |
| Liechtenstein          | 1'383             | 1'111                     | 272                        |
| Lithuania              | 221'665           | 134'266                   | 87'399                     |
| Luxembourg             | 4'274             | 3'746                     | 528                        |
| Macedonia' FYROM       | 3'245             | 2'047                     | 1'199                      |
| Malta                  | 24                | 21                        | 3                          |
| Moldova                | 30'142            | 21'394                    | 8'747                      |
| Montenegro             | 3'470             | 3'049                     | 421                        |
| Netherlands            | 52'204            | 46'669                    | 5'534                      |
| Norway                 | 47'621            | 44'681                    | 2'940                      |
| Poland                 | 536'579           | 430'896                   | 105'683                    |
| Portugal               | 245'052           | 73'308                    | 171'743                    |
| Romania                | 226'309           | 149'613                   | 76'696                     |
| Russian Federation     | 289'890           | 69'042                    | 31'237                     |
| Serbia                 | 14'358            | 7'391                     | 6'967                      |
| Slovakia               | 187'024           | 140'531                   | 46'493                     |
| Slovenia               | 43'579            | 36'353                    | 7'226                      |
| Spain                  | 2'018'802         | 1'399'734                 | 619'069                    |
| Sweden                 | 552'695           | 472'237                   | 80'458                     |
| Switzerland            | 141'249           |                           |                            |
| Turkey                 | 523'777           | 379'042                   | 144'735                    |
| Ukraine                | 381'173           | 289'551                   | 91'622                     |
| United Kingdom         | 490'205           | 466'041                   | 24'164                     |
| <b>Europe</b>          | <b>13'509'146</b> | <b>8'123'150</b>          | <b>3'231'568</b>           |
| <b>European Union</b>  | <b>12'047'878</b> | <b>7'281'771</b>          | <b>2'943'201</b>           |

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources. For data sources see annex.

**Table 62: Europe: Land use in organic agriculture by country 2016**

| Country                | Arable land crops [ha] | Permanent crops [ha] | Permanent grassland [ha] | Total [ha]        |
|------------------------|------------------------|----------------------|--------------------------|-------------------|
| Albania                | 93                     | 420                  |                          | 662               |
| Andorra                |                        | 4                    |                          | 4                 |
| Austria                | 205'610                | 8'777                | 357'037                  | 571'585           |
| Belarus                |                        |                      |                          |                   |
| Belgium                | 26'437                 | 807                  | 51'208                   | 78'452            |
| Bosnia and Herzegovina | 408                    | 68                   |                          | 992               |
| Bulgaria               | 89'472                 | 33'108               | 38'736                   | 160'620           |
| Channel Islands        |                        |                      |                          | 180               |
| Croatia                | 44'186                 | 10'316               | 39'089                   | 93'593            |
| Cyprus                 | 2'909                  | 2'556                | 85                       | 5'550             |
| Czech Republic         | 64'995                 | 5'608                | 417'987                  | 488'591           |
| Denmark                | 167'990                | 687                  | 32'798                   | 201'476           |
| Estonia                | 84'023                 | 2'007                | 94'821                   | 180'852           |
| Faroe Islands          | 1                      |                      | 252                      | 253               |
| Finland                | 235'929                | 445                  | 1'863                    | 238'240           |
| France                 | 830'870                | 104'504              | 601'974                  | 1'538'047         |
| Germany                | 510'000                | 19'000               | 712'000                  | 1'251'320         |
| Greece                 | 104'529                | 52'692               | 185'363                  | 342'584           |
| Hungary                | 73'252                 | 8'226                | 104'869                  | 186'347           |
| Iceland                | 697                    | 280                  | 8'227                    | 22'710            |
| Ireland                | 6'114                  | 50                   | 70'551                   | 76'701            |
| Italy                  | 774'449                | 449'004              | 506'152                  | 1'796'363         |
| Kosovo                 | 160                    |                      |                          | 160               |
| Latvia                 | 138'247                | 1'919                | 118'979                  | 259'146           |
| Liechtenstein          | 308                    | 7                    | 1'069                    | 1'383             |
| Lithuania              | 144'485                | 6'218                | 70'961                   | 221'665           |
| Luxembourg             | 1'804                  | 76                   | 2'393                    | 4'274             |
| Macedonia' FYROM       | 2'815                  | 430                  |                          | 3'245             |
| Malta                  | 9                      | 15                   |                          | 24                |
| Moldova                | 25'982                 | 4'160                |                          | 30'142            |
| Montenegro             | 263                    | 408                  | 2'799                    | 3'470             |
| Netherlands            | 21'888                 | 577                  | 29'738                   | 52'204            |
| Norway                 | 38'383                 | 282                  | 8'956                    | 47'621            |
| Poland                 | 364'440                | 34'642               | 137'497                  | 536'579           |
| Portugal               | 47'310                 | 45'395               | 152'351                  | 245'052           |
| Romania                | 158'009                | 10'689               | 57'612                   | 226'309           |
| Russian Federation     | 92'303                 | 84                   | 725                      | 289'890           |
| Serbia                 | 9'592                  | 3'339                | 1'429                    | 14'358            |
| Slovakia               | 60'263                 | 1'577                | 125'184                  | 187'024           |
| Slovenia               | 5'700                  | 2'384                | 35'494                   | 43'579            |
| Spain                  | 491'786                | 474'635              | 1'052'381                | 2'018'802         |
| Sweden                 | 430'361                | 543                  | 121'790                  | 552'695           |
| Switzerland            | 28'695                 | 1'730                | 110'823                  | 141'249           |
| Turkey                 | 294'146                | 211'127              | 15'499                   | 523'777           |
| Ukraine                | 307'000                | 5'000                | 45'000                   | 381'173           |
| United Kingdom         | 150'982                | 4'221                | 335'001                  | 490'205           |
| <b>Europe</b>          | <b>6'036'893</b>       | <b>1'508'016</b>     | <b>5'648'692</b>         | <b>13'509'146</b> |
| <b>European Union</b>  | <b>5'236'049</b>       | <b>1'280'678</b>     | <b>5'453'914</b>         | <b>12'047'878</b> |

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources. For data sources see annex. Total includes other agricultural areas for which no land use details were available.

**Table 63: Europe: Organic agricultural land and wild collection areas by country 2016**

| Country                | Agricultural land<br>[ha] | Wild collection<br>[ha] | Total<br>[ha]     |
|------------------------|---------------------------|-------------------------|-------------------|
| Albania                | 662                       | 467'783                 | 468'445           |
| Andorra                | 4                         |                         | 4                 |
| Austria                | 571'585                   |                         | 571'585           |
| Belarus                |                           | 2'742                   | 2'742             |
| Belgium                | 78'452                    | 3                       | 78'454            |
| Bosnia and Herzegovina | 992                       | 69'310                  | 70'302            |
| Bulgaria               | 160'620                   | 307'020                 | 467'640           |
| Channel Islands        | 180                       |                         | 180               |
| Croatia                | 93'593                    | 8                       | 93'601            |
| Cyprus                 | 5'550                     |                         | 5'550             |
| Czech Republic         | 488'591                   |                         | 488'591           |
| Denmark                | 201'476                   | 2'648                   | 204'124           |
| Estonia                | 180'852                   | 40'579                  | 221'431           |
| Faroe Islands          | 253                       |                         | 253               |
| Finland                | 238'240                   | 11'628'576              | 11'866'816        |
| France                 | 1'538'047                 |                         | 1'538'047         |
| Germany                | 1'251'320                 |                         | 1'251'320         |
| Greece                 | 342'584                   | 317'053                 | 659'637           |
| Greenland              |                           |                         |                   |
| Hungary                | 186'347                   |                         | 186'347           |
| Iceland                | 22'710                    | 212'468                 | 235'178           |
| Ireland                | 76'701                    |                         | 76'701            |
| Italy                  | 1'796'363                 | 176'628                 | 1'972'991         |
| Kosovo                 | 160                       | 179'580                 | 179'740           |
| Latvia                 | 259'146                   |                         | 259'146           |
| Liechtenstein          | 1'383                     |                         | 1'383             |
| Lithuania              | 221'665                   |                         | 221'665           |
| Luxembourg             | 4'274                     |                         | 4'274             |
| Macedonia' FYROM       | 3'245                     | 556'600                 | 559'845           |
| Malta                  | 24                        |                         | 24                |
| Moldova                | 30'142                    |                         | 30'142            |
| Montenegro             | 3'470                     | 143'410                 | 146'880           |
| Netherlands            | 52'204                    |                         | 52'204            |
| Norway                 | 47'621                    |                         | 47'621            |
| Poland                 | 536'579                   |                         | 536'579           |
| Portugal               | 245'052                   | 40'000                  | 285'052           |
| Romania                | 226'309                   | 1'787'548               | 2'013'857         |
| Russian Federation     | 289'890                   | 30'921                  | 320'811           |
| San Marino             |                           |                         |                   |
| Serbia                 | 14'358                    | 1'550                   | 15'908            |
| Slovakia               | 187'024                   |                         | 187'024           |
| Slovenia               | 43'579                    | 13'238                  | 56'817            |
| Spain                  | 2'018'802                 |                         | 2'018'802         |
| Sweden                 | 552'695                   |                         | 552'695           |
| Switzerland            | 141'249                   |                         | 141'249           |
| Turkey                 | 523'777                   | 137'433                 | 661'210           |
| Ukraine                | 381'173                   | 550'000                 | 931'173           |
| United Kingdom         | 490'205                   |                         | 490'205           |
| <b>Europe</b>          | <b>13'509'146</b>         | <b>16'665'097</b>       | <b>30'174'243</b> |
| <b>European Union</b>  | <b>12'047'878</b>         | <b>14'313'300</b>       | <b>26'361'178</b> |

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources. For data sources see annex.

**Table 64: Europe: Organic producers' processors and importers by country 2016**

| Country                | Producers      | Processors    | Importers    | Exporters    |
|------------------------|----------------|---------------|--------------|--------------|
| Albania                | 51             | 22            | 4            | 25           |
| Andorra                | 1              | 3             | 1            |              |
| Austria                | 24'213         | 1'683         | 57           | 10           |
| Belarus                |                | 1             |              | 1            |
| Belgium                | 1'946          | 1'116         | 183          | 84           |
| Bosnia and Herzegovina | 45             | 17            |              | 13           |
| Bulgaria               | 6'964          | 175           | 13           | 9            |
| Croatia                | 3'546          | 312           | 8            | 0            |
| Cyprus                 | 1'174          | 57            | 4            | 4            |
| Czech Republic         | 4'271          | 616           | 190          | 96           |
| Denmark                | 3'306          | 972           | 78           | 80           |
| Estonia                | 1'753          | 135           | 26           | 2            |
| Faroe Islands          | 1              | 1             |              |              |
| Finland                | 4'493          | 535           | 80           | 11           |
| France                 | 32'264         | 12'826        | 223          |              |
| Germany                | 27'132         | 14'501        | 1'598        | 787          |
| Greece                 | 20'197         | 1'495         | 20           | 69           |
| Hungary                | 3'414          | 442           | 34           |              |
| Iceland                | 28             | 30            | 2            | 2            |
| Ireland                | 1'767          | 277           | 24           |              |
| Italy                  | 64'210         | 16'578        | 363          | 518          |
| Kosovo                 | 100            | 5             |              | 2            |
| Latvia                 | 4'145          | 48            | 9            | 1            |
| Liechtenstein          | 43             |               |              |              |
| Lithuania              | 2'539          | 65            | 11           | 2            |
| Luxembourg             | 93             | 82            | 4            |              |
| Macedonia, FYROM       | 509            | 17            | 1            | 6            |
| Malta                  | 14             | 7             | 13           |              |
| Moldova                | 114            | 2             | 1            | 72           |
| Monaco                 |                | 1             |              |              |
| Montenegro             | 280            | 12            |              |              |
| Netherlands            | 1'557          | 990           | 364          | 81           |
| Norway                 | 2'083          | 399           | 79           | 1            |
| Poland                 | 22'435         | 705           | 120          | 180          |
| Portugal               | 4'313          | 616           | 9            | 7            |
| Romania                | 10'083         | 150           | 5            | 5            |
| Russian Federation     | 55             | 35            |              | 9            |
| San Marino             |                | 2             |              |              |
| Serbia                 | 286            | 44            | 39           | 8            |
| Slovakia               | 431            | 36            | 13           | 2            |
| Slovenia               | 3'513          | 310           | 14           |              |
| Spain                  | 36'207         | 3'810         | 205          | 92           |
| Sweden                 | 5'741          | 1'144         | 165          | 10           |
| Switzerland            | 6'348          | 1'224         | 501          |              |
| Turkey                 | 67'879         | 1'422         | 61           | 46           |
| Ukraine                | 294            |               |              |              |
| United Kingdom         | 3'402          | 2'969         | 135          |              |
| <b>Europe</b>          | <b>373'240</b> | <b>65'889</b> | <b>4'657</b> | <b>2'235</b> |
| <b>European Union</b>  | <b>295'123</b> | <b>62'652</b> | <b>3'968</b> | <b>2'050</b> |

Source: FiBL-AMI survey 2018 based on Eurostat and national data sources. For data sources see annex.

**Table 65: Europe: The organic food market 2016**

| Country                   | Retail sales<br>[Million €] | €/person<br>[€] | One year<br>growth [%] | Organic<br>share [%] | Exports<br>[Million €] | Catering<br>[Million €] |
|---------------------------|-----------------------------|-----------------|------------------------|----------------------|------------------------|-------------------------|
| Austria                   | 1'542                       | 177             | 13%                    | 7.9%                 | 80 (2011)              | 98                      |
| Belgium                   | 586                         | 52              | 12%                    | 3.2%                 |                        |                         |
| Bosnia and<br>Herzegovina | 0.4                         | 0.1             |                        |                      | 2                      |                         |
| Bulgaria                  | 7 (2010)                    | 1 (2010)        |                        |                      |                        |                         |
| Croatia                   | 99 (2014)                   | 24 (2014)       |                        | 2.2% (2014)          | 3 (2011)               |                         |
| Cyprus                    | 2 (2006)                    | 2 (2006)        |                        |                      |                        |                         |
| Czech Rep.                | 79 (2015)                   | 7 (2015)        |                        | 0.8% (2015)          | 53 (2015)              | 3                       |
| Denmark                   | 1'298                       | 227             | 20%                    | 9.7%                 | 329                    | 271                     |
| Finland                   | 273                         | 50              | 14%                    | 2.0%                 | 10 (2014)              |                         |
| France                    | 6'736                       | 101             | 22%                    | 3.5%                 | 629                    | 411                     |
| Germany                   | 9'478                       | 116             | 10%                    | 5.1%                 |                        |                         |
| Greece                    | 60 (2010)                   | 5 (2010)        |                        |                      |                        |                         |
| Hungary                   | 30 (2015)                   | 3 (2015)        |                        |                      | 20 (2009)              |                         |
| Ireland                   | 150                         | 32              | 22%                    | 0.7% (2011)          |                        |                         |
| Italy                     | 2'644                       | 44              | 14%                    | 3.0%                 | 1'915                  | 377                     |
| Kosovo                    |                             |                 |                        |                      | 6                      |                         |
| Latvia                    | 4 (2011)                    | 2 (2011)        |                        | 0.2%(2011)           |                        |                         |
| Liechtenstein             | 6                           | 171             | 15%                    |                      |                        |                         |
| Lithuania                 | 6 (2011)                    | 2 (2011)        |                        | 0.2% (2011)          |                        |                         |
| Luxembourg                | 108                         | 188             | 15%                    | 8.6%                 |                        |                         |
| Moldova                   |                             |                 |                        |                      | 15                     |                         |
| Montenegro                | 0.1                         | 0.2             |                        |                      |                        |                         |
| Netherlands               | 1'171                       | 69              | 9%                     | 4.4%                 | 1'200                  | 230                     |
| Norway                    | 394                         | 76              | 20%                    | 1.7%                 |                        | 25                      |
| Poland                    | 167 (2015)                  | 4 (2015)        |                        |                      |                        |                         |
| Portugal                  | 21 (2011)                   | 2 (2011)        |                        | 0.2%                 |                        |                         |
| Romania                   | 80 (2011)                   | 4 (2011)        |                        | 0.7%(2011)           | 200 (2011)             |                         |
| Russia                    | 120 (2009)                  | 1               |                        |                      |                        |                         |
| Serbia                    |                             |                 |                        |                      | 19                     |                         |
| Slovakia                  | 4                           | 1               |                        | 0.2%                 |                        |                         |
| Slovenia                  | 49 (2013)                   | 27 (2013)       |                        | 1.8%(2013)           | 0                      | 0                       |
| Spain                     | 1'686                       | 36              | 13%                    | 1.7%                 | 891                    |                         |
| Sweden                    | 1'944                       | 197             | 12%                    | 7.9%                 | 84                     | 475                     |
| Switzerland               | 2'298                       | 274             | 8%                     | 8.4%                 |                        |                         |
| Turkey                    | 4                           | 0.05            |                        |                      | 78                     |                         |
| Ukraine                   | 21                          | 0.5             |                        |                      | 59                     |                         |
| UK                        | 2'460                       | 38              | 7%                     | 1.5%                 |                        | 93                      |
| <b>Europe</b>             | <b>33'526</b>               | <b>60</b>       | <b>11%</b>             |                      |                        |                         |
| <b>European Union</b>     | <b>30'682</b>               | <b>40</b>       | <b>12%</b>             |                      |                        |                         |

Source: FiBL-AMI survey 2018. For details on data sources see annex.

Note on table: Where no published data exists, best estimates from experts have been used, but new data were not available for all countries. Therefore, in some cases earlier estimates are shown. Values published in national currencies were converted to euros using the 2016 average exchange rates according to the Central European bank. Please note that due to fluctuating exchange rates it is not possible to make a year-to-year comparison for countries that do not have the Euro as their currency.