This article describes the situation of organic farming in the European Union (EU). Wherever possible, a comparison with agriculture as a whole is made.

Key messages

- Organic farming covered 12.6 million hectares of agricultural land in the EU-28 in 2017. This corresponds to 7% of the total utilised agricultural area of the EU-28.

- The countries with the highest shares of organic land were Austria, Sweden and Estonia. In each of these countries the organic share was above 19% of the total agricultural land.

- Latvia had the largest shares of both organic population of "sheep and goats" (34.1% of Latvia’s total sheep and goat population was organic) and of organic bovines population (23.6%).

- Around 2% of the agricultural holdings in the EU-28 were fully organic (i.e. had only organic agricultural land) in 2016, up with 30% since 2013.
Total organic area

Total organic area continued to increase in the EU

The total organic area in the EU-28 was 12.6 million hectares (ha) in 2017 and is still expected to grow in the coming years. The increase in organic area between 2012 and 2017 was 25% (see Table 1). The total organic area is the sum of the "area under conversion" and the "certified area". Before an area can be certified as "organic", it must undergo a conversion process, which may take 2-3 years depending on the crop.\(^1\)

| Total organic area (fully converted and under conversion), by country, 2012 and 2017 |
|------------------------------------------|------------------------------------------|
| **Organic area (ha)** | **2012** | **2017** | **2012-17** |
| **EU-28** | 10,047,886 | 12,560,191 | 25.0 |
| Belgium | 69,718 | 82,509 | 29.8 |
| Bulgaria | 39,138 | 136,618 | 249.1 |
| Czechia | 498,470 | 496,277 | 5.9 |
| Denmark | 194,706 | 226,307 | 16.2 |
| Germany | 959,632 | 1,138,272 | 18.6 |
| Estonia | 142,965 | 195,441 | 38.3 |
| Ireland | 72,408 | 74,336 | 4.9 |
| Greece | 458,138 | 410,910 | -11.3 |
| Spain | 1,755,548 | 2,082,173 | 18.3 |
| France | 1,030,981 | 1,744,420 | 72.2 |
| Croatia | 31,904 | 95,618 | 202.0 |
| Italy | 1,673,562 | 1,908,570 | 13.5 |
| Cyprus | 5,623 | 5,616 | 1.4 |
| Latvia | 195,658 | 268,870 | 37.4 |
| Lithuania | 156,336 | 234,134 | 49.6 |
| Luxembourg | 4,310 | 5,444 | 29.8 |
| Hungary | 130,607 | 199,683 | 52.9 |
| Malta | 37 | 30 | 8.1 |
| Netherlands | 48,088 | 56,203 | 17.5 |
| Austria | 533,250 | 520,656 | -1.6 |
| Poland | 655,492 | 494,978 | -24.5 |
| Portugal | 266,833 | 253,786 | -4.9 |
| Romania | 288,251 | 258,471 | -10.3 |
| Slovenia | 35,101 | 46,222 | 31.7 |
| Slovakia | 164,350 | 189,148 | 15.1 |
| Finland | 197,751 | 258,672 | 30.8 |
| Sweden | 477,664 | 576,645 | 20.9 |
| United Kingdom | 590,013 | 497,742 | -15.5 |
| Iceland | 6,683 |  |  |
| Norway | 55,261 | 47,942 | -14.9 |
| Switzerland | 121,013 | 150,491 | 24.4 |
| Montenegro | 2,297 |  |  |
| Norway |  | 13,423 |  |
| Turkey | 567,936 |  |  |

Note: (1) data not available

Table 1: Total organic area (fully converted and under conversion), by country, 2012 and 2017

Source: Eurostat (online data code: org_crop)

Between 2012 and 2017, Bulgaria and Croatia recorded growth in the total organic area of over 100%. However, four EU Member States reported reductions in the organic area: Romania (-10.3%), Greece (-11.3%), the United Kingdom (-15.6%) and Poland (-24.5%). As shown in Figure 1a, Spain, Italy and France had the three highest total organic areas in terms of hectares (ha) both in 2012 and 2017. Figure 1b illustrates the countries with smaller organic crop areas, below 100,000 ha in 2017.

\(^1\)For plants and plant products to be certified organic, the production rules must have been applied on the parcels of land during a conversion period of at least two years before sowing, or, in the case of grassland or perennial forage, at least two years before its use as feed from organic farming, or, in the case of perennial crops other than forage, at least three years before the first harvest of organic products.
The size of the organic area differs considerably from one EU Member State to another. Four Member States accounted for more than half of all organically farmed land in 2017: Spain (16.6 %), Italy (15.2 %) France (13.9 %) and Germany (9.1 %), together making up 54.7 % of the total EU-28 organic area (see Figure 2). In 2016, these four countries represented a similar share, 54.4 %.
Total organic area made up 7 % of total EU-28 UAA in 2017

From 2012 to 2017, the share of total organic area in the total utilised agricultural area (UAA) within the EU rose from 5.6 % to 7 %\(^2\).

Figure 3 shows the organic crop area as a percentage of the total UAA by country for 2017. In Austria, Sweden and Estonia, the share of organic area was over 19 %, while in Italy, Czechia, Latvia and Finland it was over 10 % of the UAA. In the remaining EU Member States, the share of organic area ranged from 0.4 % in Malta to 9.9 % in Slovakia.

\(^2\)Total UAA (main area) from the annual crop statistics is used as denominator.
Organic production comes from fully converted areas. The area under conversion as a percentage of the total organic area can give an indication of the potential growth in the organic sector in the years to come. In 2017\(^4\), Malta, Czechia, Slovakia and the United Kingdom had a share of less than 10 % under conversion, while eleven EU Member States had shares between 10 % and 20 % and eleven exceeded 20 % (see Figure 4).

\(^4\)Data not available for Germany and Austria.
Figure 4: Share of area under conversion, by country, 2017 (% of total organic area — fully converted and under conversion)Source: Eurostat (org_cropar)

The largest shares of area under conversion in the total organic area were recorded for Bulgaria (64.5%), Croatia (56.2%) and Hungary (47.7%) (see Map 1). Bulgaria and Hungary have still only a small share of agricultural land under organic management, below 4% (Figure 3). Croatia however is close to the EU average with 6.46% of land under organic management and still shows a positive growth. Two more countries had more than 40% of their organic land under conversion; Romania (42.3%) and Serbia (44%)
Organic production

Arable land represented 44.5 % of the EU-28 total organic crop area in 2017

Agricultural production area is divided into three main types of use: arable land crops (mainly cereals, root crops, fresh vegetables, green fodder and industrial crops), permanent grassland (pastures and meadows), and permanent crops (fruit trees and berries, olive groves and vineyards).

Organic arable land exceeded 5.5 million ha, which represented 44.5 % of the EU-28 total organic agricultural area. Pastures and meadows (mostly used for grazing organic livestock) followed closely with 44.4 %, while permanent crops made up the smallest share (11.0 %).

In 11 EU Member States, arable land crops accounted for more than 50 % of the organic area, while in 13 Member States pastures and meadows covered > 50 % of the organic area. Arable crops were highly predominant in Finland, Denmark and Sweden with shares of 99.2 %, 81.0 %, and 77.9 % respectively. Ireland (95.0 %), Czechia (85.5 %) and Slovenia (81.4 %) were ahead in terms of pastures and meadows (see Figure 5).
In most EU Member States, permanent crops accounted for the lowest share of these three main land use categories in the organic area (in 16 EU Member States it was less than 5 % of the organic area). In 2017, permanent crops accounted for between 10 % and 20 % in Croatia and Greece, while in Spain, Italy, Bulgaria and Portugal the share was over 20 %. Malta and Cyprus had the highest shares, with 48.8 % and 46.7 % respectively. Olive trees dominated in these two countries.

More than 4.3 million organic bovine animals

The 2017 figures for organic livestock as a share of all livestock showed that, with respect to bovines, pigs and sheep, in some EU Member States remarkably large shares of animals were reared using organic methods — bovines and sheep being the most popular species. For the first time, the number of organic bovine animals counted more than 4 million heads; with in total 4.3 million organic bovines in the EU out of the 88.4 million reported in 2017.

Latvia, Austria and Sweden have the highest shares of organic bovines, dairy cows and "sheep and goats" (Figure 6). Latvia had the largest shares of both the organic population for "sheep and goats" (34.1 % of total sheep and goat population) and for the organic bovine population (23.6 %) (see Figure 6). Austria had the second highest share of organically reared bovines (21.7 %), followed by Sweden (21.2 %). Concerning the shares of organic dairy cows, Austria (21.2 %) had the highest followed by Sweden (16.4 %) and Latvia (12.7 %). For most EU Member States organically reared pigs accounted for only a small share of the total pig population, with the highest share in Denmark at almost 3 %.
Figure 6: Share of organic livestock in all livestock, by countries with the highest shares, 2017 (% of number of heads)
Source: Eurostat (org_lstspec), (apro_mt_lscatl), (apro_mt_lspig), (apro_mt_lsgoat) and (apro_mt_lssheep)

Fully organic farms
Agricultural land managed by fully organic farms

The annual statistics presented above do not specify on which type of holding the organic area is located. Ideally, the entire holding shall be managed in compliance with the requirements that apply to organic production\(^4\). The reality is different, and there are a significant number of farms with mixed organic and non-organic\(^5\) production in the EU. Data from the Farm Structure Survey can be used to further describe the situation. The latest available reference year is 2016.

The share of UAA managed in 2016 by farms with only organic area was 3.8 % (see Figure 7). Farms with some organic area (i.e. farms with both non-organic and organic area) managed 3.3 % of the total UAA, while farms with non-organic area managed the remaining 92.9 %.

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\(^4\)Article 9.2 of Regulation (EU) No 2018/848 on organic production and labelling of organic products

\(^5\)“non-organic” means not coming from or not related to a production in accordance with organic production rules
The number of fully organic farms is increasing

Table 2 shows the number of farms with only organic area, some organic area and non-organic area in 2013 and 2016 for the EU countries, as well as the total UAA and annual work units (AWU) of each of these categories.

Table 2: Distribution of farms, utilised agricultural area (UAA) and farm labour force (AWU) by farm type, EU-28, 2013 and 2016

At EU level, the number of farms with organic land increased from 2013 to 2016 (Table 2), both for holdings with some organic area by 0.08 percentage points (p.p.) and even more for holdings with only organic land, by 0.4 p.p. The latter represented 2 % of all farms in 2016 and grew by 30 % between 2013 and 2016. It indicates that there is an ongoing process to create fully organic farms. Moreover, the non-organic farms’ share of total farms decreased by 0.5 p.p. from 2013 to 2016. The same trend is present in shares of the UAA managed by non-organic farms which decreased by 1.3 p.p., while the UAA of holdings with only organic area increased with 0.9 p.p. This varied between countries, see further below.

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*Without kitchen gardens.*
The majority of organic farms were fully organic in 15 EU countries

Figure 8 shows the farms, which have all their UAA under organic management as a share of all farms with any organic area, per EU Member State\(^7\). The share of farms that have only organic area ranges from 98.3 % in Czechia to 7.6 % in Ireland. The share of fully organic farms is above 50 % of farms with any organic area in Czechia, Germany, Austria, Estonia, Italy, Slovenia, Slovakia, France, Finland, Netherlands, Sweden, Belgium, Denmark, Spain and Bulgaria.

![Figure 8: Share of holdings with ONLY and SOME organic area, EU-28, 2016](source)

On the farms that have both organic land and other land, the average share of organic area in the total farm area varies from 88.5 % in Denmark to 22.8 % in Bulgaria (Figure 9). In 13 countries, the average organic area share on these farms was above 50 %.

\(^7\)Excluding Malta and Luxembourg to protect confidentiality due to the low number of farms.
Labour force increased on fully organic farms

The labour force, measured as annual work units (AWU), employed on fully organic farms increased by almost 30% between 2013 and 2016, from around 189,000 to almost 239,000 (Table 2). It should however be noted that AWU is reported in bands and not in exact figures/hours. It means that on small farms, the AWU may be skewed towards a too high allocation.

At EU level (see Table 2), the average size of the labour force per farm was 0.9 annual work units for the non-organic farms, and 1.5 for the fully organic farms. However, the average size of utilised agricultural area of a non-organic holding was 16 hectares, while the average of a fully organic holding was 40 hectares. This size difference has a large influence and it is not possible to compare the average number of hectares managed per annual work unit in this sample. To analyse a possible impact of "organic" on the annual work units or other aspects it is necessary to further analyse a comparable sample.

Source data for tables and graphs

- Organic farming statistics

Data sources

The statistical information presented in this publication is drawn from the Eurostat database, available at the Eurostat website. Data used in this article includes unpublished data.

Organic farming statistics

Annual data collection. Data are provided by the EU Member States and Iceland, Norway, Switzerland, Turkey, the former Yugoslav Republic of Macedonia, Montenegro and Serbia on the basis of a harmonised questionnaire. Data in this annual collection originate from the administrative data of national entities in charge of the certification of operators involved in the organic sector. Up to reference year 2007, data provision was voluntary. From reference year 2008 onwards, data have to be delivered following Commission Regulation (EC) No 889/2008, implementing Council Regulation (EC) No 834/2007.

Statistics on the structure of agricultural holdings (FSS)
The Farm structure survey (FSS) is conducted every 10 years (full-scope Agricultural Census) and intermediate surveys (sample-based) in between. Availability of data by year and country can be found here. The statistical unit is the agricultural holding. In the FSS organic data have been collected since the 2000 Census.

Terminology used in this article

- Fully organic farm/farm with only organic area: a farm with agricultural land that is exclusively "certified organic" or "under conversion to organic".

- Partially organic farm/farm with some organic area: a farm with agricultural land certified and/or under conversion to organic, and conventional agricultural land on same holding.


Livestock statistics

The Livestock survey data are used for comparing the organic livestock data with the data on total livestock production. It is an annual data collection. The statistical unit is agricultural holding, in the case of the data used in this article, the reference period is a given day in the month of December.

Crop statistics

The annual crop statistics data are used for comparing the organic crop area with the total utilised agriculture area, "main area" which corresponds to the area of the land parcels. The statistical unit is parcel cultivated for the production of a crop. The reference period used for this article is the final data for 2017.

Other articles

- Agri-environmental indicators

Publications

- Agriculture, forestry and fishery statistics - 2018 edition

Database

- Organic farming, see:
  
  Organic operators by status of the registration process (from 2012 onwards) (org_coptyp)
  Organic crop area by agricultural production methods and crops (from 2012 onwards) (org_cropar)
  Organic crop production by crops (from 2012 onwards) (org_croppro)
  Organic livestock of animals (from 2012 onwards) (org_lstspec)
  Organic production of animal products (from 2012 onwards) (org_aprod)
  Organic production of aquaculture products (from 2012 onwards) (org_aqtspec)
  Processors of organic products by NACE Rev. 2 activity (C) (from 2012 onwards) (org_cpreact)

- Agriculture, see:
  
  Main farm indicators by NUTS 2 regions (ef_mainfarm)
  Farm Structure - 2008 legislation (from 2005 onwards) (ef_main)
Agricultural production (apro)

Crop production (apro_cp)

Crop production in EU standard humidity (from 2000 onwards) (apro_cpsh)

Crop production in EU standard humidity (apro_cpsh1)

Livestock and meat (apro_mt)

Livestock (apro_mt_ls)

Bovine population – annual data (apro_mt_lscatl)

Goats population – annual data (apro_mt_lsgoat)

Sheep population – annual data (apro_mt_lssheep)

Pig population – annual data (apro_mt_lspig)

Dedicated section

- Agriculture

Methodology

- Organic farming (ESMS metadata file — org_esms)

Questionnaires used for data collection

- Table 1
- Table 2
- Table 3
- Table 4

- Farm structure survey (ESMS metadata file — ef_esms)

- Crop statistics (ESMS metadata file — apro_cp_esms)

- Livestock and meat (ESMS metadata file — apro_anip_esms)

Legislation


External links

- DG Agriculture and Rural Development — Organic farming

- Research Institute of Organic Agriculture (FiBL)

- FAO Organic Agriculture Programme