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 13.4 million hectares of agricultural land in the EU-28 in 2018. This corresponds to 7.5% of the total utilised agricultural area of the EU-28.

- The countries with the highest shares of organic land were Austria, Estonia and Sweden. In each of these countries the organic share was above 20% of the total agricultural land.

- Latvia had the largest share of organic population of ‘sheep and goats’ (35.2% of Latvia’s total sheep and goat population was organic) and second highest share of organic bovines population (24.4%). The highest share of organic bovine animals was reported in Greece (25.5%).

- Around 2% of the agricultural holdings in the EU-28 were fully organic (i.e. had only organic agricultural land) in 2016, up by 31% since 2013.
Total organic area

Total organic area continued to increase in the EU

The total organic area in the EU-28 was 13.4 million hectares (ha) in 2018 and is still expected to grow in the coming years. The increase in organic area between 2012 and 2018 was 34 % (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.\(^1\)

Table 1: Total organic area (fully converted and under conversion), by country, 2012 and 2018

<table>
<thead>
<tr>
<th>Country</th>
<th>2012</th>
<th>2018</th>
<th>2012-18 (% change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-28</td>
<td>13.438.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>10.718</td>
<td>89.625</td>
<td>49.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>50.138</td>
<td>529.839</td>
<td>929.2</td>
</tr>
<tr>
<td>Czechia</td>
<td>466.070</td>
<td>519.916</td>
<td>10.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>164.796</td>
<td>255.111</td>
<td>55.4</td>
</tr>
<tr>
<td>Germany</td>
<td>956.632</td>
<td>1.231.163</td>
<td>27.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>142.955</td>
<td>200.940</td>
<td>40.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>52.752</td>
<td>110.690</td>
<td>109.4</td>
</tr>
<tr>
<td>Greece</td>
<td>462.016</td>
<td>482.027</td>
<td>4.5</td>
</tr>
<tr>
<td>Spain</td>
<td>1.795.940</td>
<td>2.249.475</td>
<td>27.9</td>
</tr>
<tr>
<td>France</td>
<td>1.030.991</td>
<td>2.034.116</td>
<td>97.3</td>
</tr>
<tr>
<td>Croatia</td>
<td>31.904</td>
<td>193.166</td>
<td>503.4</td>
</tr>
<tr>
<td>Italy</td>
<td>1.157.662</td>
<td>1.927.837</td>
<td>67.7</td>
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<td>Cyprus</td>
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<td>5.622</td>
<td>5.1</td>
</tr>
<tr>
<td>Latvia</td>
<td>166.606</td>
<td>280.243</td>
<td>68.0</td>
</tr>
<tr>
<td>Lithuania</td>
<td>155.530</td>
<td>230.601</td>
<td>48.8</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>4.130</td>
<td>5.782</td>
<td>40.9</td>
</tr>
<tr>
<td>Malta</td>
<td>37</td>
<td>47</td>
<td>27.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>40.039</td>
<td>57.554</td>
<td>42.5</td>
</tr>
<tr>
<td>Austria</td>
<td>533.240</td>
<td>539.897</td>
<td>1.3</td>
</tr>
<tr>
<td>Poland</td>
<td>557.699</td>
<td>484.076</td>
<td>-15.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>253.833</td>
<td>251.118</td>
<td>1.3</td>
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<td>Romania</td>
<td>260.261</td>
<td>302.208</td>
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<tr>
<td>Slovenia</td>
<td>32.101</td>
<td>47.840</td>
<td>50.6</td>
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<tr>
<td>Slovakia</td>
<td>104.360</td>
<td>105.680</td>
<td>1.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>107.751</td>
<td>297.442</td>
<td>180.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>477.604</td>
<td>939.754</td>
<td>97.4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>559.011</td>
<td>857.276</td>
<td>54.5</td>
</tr>
<tr>
<td>Norway</td>
<td>52.200</td>
<td>40.377</td>
<td>-11.1</td>
</tr>
<tr>
<td>San Marino</td>
<td>321.013</td>
<td>333.116</td>
<td>3.7</td>
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<td>North Macedonia</td>
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<tr>
<td>Serbia</td>
<td>10.255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>545.251</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: C = data not available

Source: Eurostat online data code: org_cropar

Between 2012 and 2018, Bulgaria, Croatia and Ireland recorded growth in the total organic area of over 100 %. However, two EU Member States reported reductions in the organic area: the United Kingdom (-22.5 %) and Poland (-26.1 %). As shown in Figure 1a, Spain, France and Italy had the three highest total organic areas in terms of hectares (ha) both in 2012 and 2018. Figure 1b illustrates the countries with smaller organic crop areas, below 100 000 ha in 2018.

\(^1\)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 2018: Spain (16.7 %), France (15.1 %), Italy (14.6 %) and Germany (9.1 %), together making up 55.5 % of the total EU-28 organic area (see Figure 2). In 2017, these four countries represented a similar share, 54.7 %.
Total organic area made up 7.5 % of total EU-28 UAA in 2018

From 2012 to 2018, the share of total organic area in the total utilised agricultural area (UAA) within the EU rose from 5.6 % to 7.5 %\(^2\).

Figure 3 shows the organic crop area as a percentage of the total UAA by country for 2018. In Austria, Estonia and Sweden, the share of organic area was over 20 %, while in Italy, Czechia, Latvia, Finland and Slovenia 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
Figure 3: Share of total organic area (fully converted and under conversion) in total utilised agricultural area (UAA), by country, 2018(%)Source: Eurostat (org_cropar)

Organic farming in the EU regions

The extent of organic farming varies considerably across EU regions (see Map 1). EU regions data from the Farm structure survey can be used to further describe the situation. The latest reference year for which regional data are available is 2016.

The highest share of organic farming was reported in the Salzburg region of Austria, where about one half (52 %) of the total utilised agricultural area was used for organic farming in 2016. There were a further seven regions where organic farming accounted for upwards of one quarter of total utilised agricultural area: Severozápad in Czechia (30 %), Norra Mellansverige in Sweden (29 %), Calabria in Italy (29 %), Mellersta Norrland in Sweden (28 %), Burgenland in Austria (27 %), Sicilia in Italy (26 %) and Moravskoslezsko in Czechia (25 %).
Map 1: Share of organic area in utilised agricultural area (UAA), by NUTS 2 regions, 2016 (% of total UAA)

Source: Eurostat (Farm structure survey, 2016)

Compared with 2013, the largest increase in share of organic farming was observed in Calabria in Italy and Salzburg in Austria (each +11 percentage points (p.p.)), closely followed by Sicilia in Italy and Région de Bruxelles-Capitale in Belgium (each +9 p.p.), as well as Åland in Finland (+8 p.p.).

The potential for organic production continued to rise in 2018

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 2018, the Czechia, Portugal, the Netherlands, Slovakia and the United Kingdom had a share of less than 10 % under conversion, while nine EU Member States had shares between 10 % and 20 % and twelve exceeded 20 % (see Figure 4).

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3Data not available for Germany and Austria
The largest shares of area under conversion in the total organic area were recorded for Romania (47.4%), Croatia (44.5%) and Ireland (39.9%). Romania and Ireland have still only a small share of agricultural land under organic management, below 3% (Figure 3). Croatia however is close to the EU average with 6.9% of land under organic management and still shows a positive growth.

**Organic production**

Arable land represented 45% of the EU-28 total organic crop area in 2018

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 6 million ha, which represented 45.2% of the EU-28 total organic agricultural area. Pastures and meadows (mostly used for grazing organic livestock) followed with 43.9%, while permanent crops made up the smallest share (10.8%).

In 11 EU Member States, arable land crops accounted for more than 50% of the organic area, while in 14 Member States pastures and meadows covered more than 50% of the organic area. Arable crops were highly predominant in Finland, with shares of 99.2%, Denmark (81.8%) and Sweden (77.7%). Ireland (96.2%), Czechia (84.2%) and Slovenia (80.9%) had the highest shares of 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 15 EU Member States it was less than 5 % of the organic area). In 2018, permanent crops accounted for between 10 % and 20 % in Croatia and Greece, while in Spain, Italy, Bulgaria and Portugal the share was over 20 %. Cyprus and Malta had the highest shares, with 49.2 % and 38.3 % respectively. Olive trees dominated in these two countries.

More than 4.6 million organic bovine animals

The 2018 figures for organic livestock as a share in 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. There were more than 4.6 million organic bovines in the EU out of the 87.4 million bovine animals reported in 2018.

Greece, Latvia, Austria and Sweden had the highest shares of organic bovines, dairy cows and 'sheep and goats' (Figure 6) in all livestock. Greece had the highest share of organic bovine animals (25.5 %) and third highest share of organic dairy cows (15.1 %). Latvia had the largest share of 'sheep and goats' (35.2 % in their total sheep and goat population) and second largest share of the organic bovine population (24.4 %). Austria had the highest share of organic dairy cows (21.7 %) followed by Sweden (18.8 %). For most EU Member States organically reared pigs accounted for only a small share in the total pig population, with the highest share in Denmark at just under 4 %.
Figure 6: Share of organic livestock in all livestock, by countries with the highest shares, 2018(% 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 should be managed in compliance with the requirements that apply to organic production⁴. The reality is different, and there are a significant number of farms with mixed organic and non-organic⁵ 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 %.

⁴Article 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 Member States, as well as the total UAA and annual work units (AWU) of each of these categories.

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

Source: Eurostat (Farm structure survey, 2013 and 2016)

Note: Kitchen gardens are excluded from the UAA. Malta and Luxembourg are excluded to protect confidentiality due to the low number of organic farms.

Source: Eurostat (Farm Structure Survey, 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 0.06 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 31% 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 1 p.p. This varied between EU Member States, see further below.

The majority of organic farms were fully organic in 15 EU Member States

Figure 8 shows the farms that have all their UAA under organic management as a share of all farms with any organic area, per EU Member State7. The share of farms that have only organic area ranges from 98.3% in Czechia to 10.8% in Ireland. The share of fully organic farms is above 50% of farms with any organic area in Czechia, Austria, Germany, Estonia, Italy, Slovenia, Slovakia, France, Finland, Sweden, the Netherlands, Belgium, Denmark, Spain and Bulgaria.

Figure 8: Share of holdings with ONLY and SOME organic area, EU-28, 2016(% of total holdings with organic area)

On the farms that have both organic land and other land, the average share of organic area in the total farm area varies from 86.8% in Finland to 22.0% in Bulgaria (Figure 9). In 15 EU Member States, the average organic area share on these farms was above 50%.

7Excluding Malta and Luxembourg to protect confidentiality due to the low number of organic farms

Organic farming statistics 11
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 193,000 to more than 248,000 (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: tables and figures

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, Iceland, Norway, Switzerland, Turkey, North 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 2018.

Other articles

- Agri-environmental indicators – fact sheets

Publications


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 (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:
Farm structure (ef)
- Main farm indicators by NUTS 2 regions (ef_mainfarm)
- Farm structure – 2008 legislation (from 2005 onwards) (ef_main)

Agricultural production (apro)
- Crops (apro_crop)
  - Crop production (apro_cp)
    - Crop production in EU standard humidity (from 2000 onwards) (apro_cpsh)
    - Crop production in EU standard humidity (apro_cpsh1)
- Animal production (apro_anip)
  - 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
- Agri-environmental indicators

Methodology
- Organic farming statistics (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 production statistics (ESMS metadata file – apro_cp_esms)
- Animal production statistics (ESMS metadata file – apro_anip_esms)

Legislation
- Summaries of EU Legislation: Production and labelling of organic products

External links
- DG Agriculture and Rural Development – Organic farming
- Research Institute of Organic Agriculture (FiBL)
- FAO Organic Agriculture Programme