Crops can be broadly categorised into two groups, those that are non-perennial and those that are perennial. Non-perennial crops are those that do not last more than two growing seasons and typically only one. Perennial crops last for more than two growing seasons, either dying back after each season or growing continuously; these are also termed permanent crops.

Crop production is particularly sensitive to prevailing weather conditions at key times of the year. For example, depending on a crop’s stage of development, heavy spring frosts can damage the growth of cereals and destroy fruit blossoms. Likewise, summer droughts can cause crops to wither or to scorch and strong winds and heavy rain can flatten crops, making them hard to harvest.

Meteorological and hydrological conditions therefore play an important role in levels of crop production but they also have a knock-on effect on prices through the causal effect of supply and demand. This is true for the EU, as it is across the globe. It is for this reason that production levels and prices are brought together in this chapter.

Of course, with the European Union covering such a large area and including such diverse climates, adverse weather conditions in one region are often offset by optimum conditions in another. However, where the production of certain crops is concentrated in a few regions, EU production levels will be particularly susceptible to weather conditions as well as to pest attacks. Where known adverse weather conditions have impacted on crop levels this is mentioned.

The statistics on crop production in this article are shown at an aggregated level and have been selected from over 100 different crop products for which official statistics are collected.

**Cereals**

Cereal harvest in the EU higher in 2017 despite drought conditions in many areas of central and southern Europe and reduction in cultivated area

The harvested production of cereals (including rice) in the EU was 309.9 million tonnes in 2017 (see Figure 1), about 11.9 % of global production. This represented a rebound of +2.7 % or 8.2 million tonnes more than in 2016, despite drought conditions in many areas of central and southern Europe and a reduction in cultivated areas of 1.6 million hectares. To put this in some context, the EU’s harvested production of cereals in 2017 remained some 23 million tonnes lower than the record harvest of 332.6 million tonnes recorded in 2014 (see Figure 2).
France harvested 68.5 million tonnes of cereals in 2017, a little more than one fifth (22.0 %) of the EU’s total production. Germany harvested 45.6 million tonnes (14.7 % of the EU total) and Poland harvested 31.9 million tonnes (10.3 %).

The overall increase in harvested production at EU level was driven by the strong rebound (+26.4 %) in France, as well as in Poland (+7.0 %) but also Romania (+24.7 %). The higher production levels in France and Romania resulted from much higher yields, as the cultivated areas in both were lower in 2017 than in 2016 (-2.1 % and -5.4 % respectively). Higher production levels in some Member States offset, at EU level, the lower harvested production levels in drought-hit Spain (-30.9 % on 2016, with cultivated areas only -3.6 % lower), Hungary (15.8 %, with cultivated areas -6.4 % lower in 2017), Italy (-11.1 %, with cultivated areas down -3.3 %) and smaller cereal-producing countries like Slovakia (-28.1 %), Croatia (-23.8 %), Greece (20.9 %), Austria (14.5 %), Slovenia (14.3 %) and Czechia (-13.3 %).
Cereal harvest higher mainly due to sharp rise in wheat production but also grain maize

The EU harvested 142.6 million tonnes of common wheat and spelt in 2017, representing 46.0 % of all cereal grains harvested. This was 7.9 million tonnes more than in 2016, an increase of +5.9 %, despite cultivated areas being -3.6 % lower. The harvested production of grain maize and corn-cob-mix (CCM) in the EU was 64.7 million tonnes in 2017, up 1.9 million tonnes (or +3.0 %) on 2016, despite the cultivated area also being -3.4 % lower.

The harvested production of oats and spring cereal mixtures was 11.3 million tonnes across the EU in 2017, an increase of +4.0 %, reflecting a similar rate of increase in cultivated area. Most of this rise was due to higher yields for spring cereal mixtures, as the harvested production of oats remained broadly unchanged (+0.4 %) despite an increase of +2.5 % in the cultivated area.

To complete the picture, the harvested production of barley in 2017 was -2.3 % lower than in 2016 at 58.7 million tonnes.

With the average apparent barley yield across the EU being similar in 2017 to that in 2016, the lower harvested production reflected the reduced cultivated area. The production of rye and winter cereal mixtures (-0.4 %) remained similar to the level in 2016 (see Figure 2).
Picardie and Centre – Val de Loire most important regions for wheat production, Bavaria for barley

At a more detailed level, the EU regions with the largest production of wheat in 2017 were the two French regions of Centre – Val de Loire (3.3 % of the EU total) and Picardie (3.2 %). Other regions with considerable wheat production were the German regions of Bayern (2.7 %) and Niedersachsen (2.4 %), as well as the Lithuanian region Vidurio ir vakaru Lietuvos regionas (central and west Lithuania) (2.6 %). The German region of Bayern (Bavaria), renowned for its beer production, was the EU region with the highest barley production in 2017 (3.9 % of the EU total). Other important regions for barley production were Centre - Val de Loire (3.4 %) and Champagne-Ardenne (3.1 %) in France and Castilla-la Mancha (3.2 %) in Spain.
Map 1: Harvested production of cereals (including seed) and most commonly grown cereals, by NUTS 2 regions, 2015-2017 (million tonnes)

Source: Eurostat (apro_cpshr)
Prices for wheat, barley and rye bounced higher in 2017 but were still about 30% lower than the recent 2012 peak

The average price of cereals in 2017 bucked the downward trend of the previous four years, rising by +3.0% in real terms. There were price rises for wheat (an average +4.5% in real terms), barley (+5.6%) and rye (+6.4%). In contrast there were further declines, albeit moderate, for grain maize (-1.7%) and oats (-0.5%). However, for all types of cereal, real terms prices remained about 30% lower than the recent peak price levels of 2012 (see Figure 4). The downward pressure on cereal prices resulted from a series of successive global record harvests.

**Figure 4: Deflated price indices for cereals, 2010–2017**
(index 2010 = 100)

Source: Eurostat (online data code: aprl_pi10_outa)

**Potatoes and sugar beet**

Two main root crops are grown in the EU; these are sugar beet, grown on 1.8 million hectares across the EU in 2017, and potatoes, grown on 1.7 million hectares. Other root crops like fodder beet, fodder kale, rutabaga, fodder carrot and turnips are specialist crops grown on a combined total of only 0.1 million hectares.

The EU is the world’s leading producer of sugar beet, accounting for about one half of global production.

However, only 20% of the world’s sugar production comes from sugar beet, the other 80% being produced from sugar cane¹.

The EU sugar market was regulated by production quotas until September 2017. The European Commission’s DG for Agriculture and Rural development has set up a Sugar Market Observatory in order to provide the EU sugar sector with more transparency by means of disseminating market data and short-term analysis in a timely manner.

¹European Commission’s Directorate- General of Agriculture and Rural Development: [http://ec.europa.eu/agriculture/sugar/index_en.htm](http://ec.europa.eu/agriculture/sugar/index_en.htm)
With the end of quotas, EU production of sugar beet jumped by one quarter in 2017

Following the decision to end production quotas, the EU sugar sector - supported by the CAP - underwent a series of deep reforms to prepare it more effectively for the new challenges and opportunities this would bring. EU farmers made the decision to sow more sugar beet, the cultivated area in 2017 being +17.2 % higher than in 2016. In 2017, the EU-28 produced 143.1 million tonnes of sugar beet (see Figure 5), a year-on-year increase of 30.7 million tonnes (or +27.3 %). More than one half of the EU’s sugar beet production in 2017 came from France (32.4 %) and Germany (23.8 %), where production levels rose by one third (+33.6 % in each country, with cultivated areas each about one fifth higher) compared to 2016. Poland (11.0 %) and the United Kingdom (6.2 %) were the next largest producers and, here too, production levels rose sharply (+16.3 % and +56.8 % respectively). Indeed, production levels rose considerably in a majority of Member States, notable exceptions being in Slovakia (-18.3 %) and Austria (-15.3 %).

Figure 5: Production of sugar beet by main producing EU Member States, 2007–2017 (million tonnes)

The EU produced 62.0 million tonnes of potatoes in 2017, some 6.1 million tonnes more than in 2016 (an increase of +10.8 %). All of the main potato producing Member States had higher harvests, in large part due to favourable weather conditions: the 11.7 million tonnes produced by Germany in 2017 represented a year-on-year increase of +8.8 %; the 8.5 million tonnes in France, a jump of +22.8 %; the 9.0 million tonnes produced in Poland, a rise of +3.9 %; the 7.4 million tonnes in the Netherlands, a rise of +13.1 %; and there were also much higher harvested production levels in countries like the United Kingdom and Belgium.
Higher production in 2017 and lower real terms prices for sugar beet and potatoes

The strong rises in production volumes of sugar beet and potatoes put downward pressure on prices in 2017; the price of sugar beet fell by an average -5.4 % in real terms compared to that in 2016, with the average price of potatoes declining by -13.8 % in real terms (see Figure 7). The price decline for sugar beet continued the downward path noted since 2013, as the market anticipated the end of production quotas and alignment with the global market. The sharp fluctuations in potato prices reflect closely the annual fluctuations in harvested production levels, with poor harvests triggering price rises and vice versa.
Oilseeds

Increased output of all three main oilseed crops in 2017

The EU cultivates three main types of oilseed crop; these are rape and turnip rape, sunflower and soya. The EU produced 35.1 million tonnes of oilseeds in 2017, which was close to the decade peak recorded in 2014. Oilseed production in 2017 was 3.8 million tonnes more than the level harvested in 2016, an increase of +12.0 %. There was a higher level of production of each of the three main types of oilseed (see Figure 8).

The harvested production of rape and turnip rape seeds in the EU was 21.9 million tonnes in 2017, bouncing back +9.5 % from the level in 2016. Production of sunflower seeds in 2017 reached a new peak of 10.4 million tonnes, a jump of +19.1 % on the previous year. Likewise, the production of soya reached a new high of 2.7 million tonnes in 2017, representing a year-on-year increase of +7.8 %.
Higher real terms prices for rape and turnip rape seeds and soya in 2017, but further falls for sunflower seeds

From a peak in 2012, the prices of the different oilseed crops fell substantially through 2013 and 2014 and in the case of soya also in 2015. The bottoming out of those price falls for rape and turnip rape seeds and for soya was confirmed by increases in 2017: the average real terms price of rape and turnip rape seeds rose by +0.8 % compared to 2016 and that of soya increased by +3.4 %. The downward pressure on the price of sunflower seeds resumed in 2017; the average price in the EU declined by -9.2 % in real terms.
Fruit

The EU supports the fruit and vegetable sector through its market-management scheme, which has four broad goals:

- a more competitive and market-oriented sector;
- fewer crisis-related fluctuations in producers’ income;
- greater consumption of fruit and vegetables in the EU; and
- increased use of eco-friendly cultivation and production techniques.

The EU produced around 32.6 million tonnes of fruit in 2017

Total fruit production (excluding nuts and berries) in the EU was 32.6 million tonnes in 2017. Of this total, citrus fruit production was 10.7 million tonnes. Spain and Italy remained the main EU producers of fruit; Spain accounted for one third (32.9 %) of total EU fruit production and Italy one fifth (22.7 %). Nevertheless, for particular fruit other Member States were key producers.

One quarter of EU apple production in Poland; one half of all EU oranges from Spain

Thanks to its varied climate, the EU produces a wide variety of fruit. In terms of weight, the main fruits harvested in the EU are apples, oranges and peaches. The EU had a harvested production of 10.0 million tonnes of apples in 2017, 6.2 million tonnes of oranges and 2.9 million tonnes of peaches.
There are thousands of varieties of apple grown worldwide, many of which have been created and selected to grow in varied climates. This has enabled commercial apple production to take place in almost all Member States. One quarter (24.4 %) of the EU’s apple production came from Poland in 2017, the other main producing Member States being Italy (19.1 %) and France (17.2 %). In contrast, orange production and peach production are much more restricted by climatic conditions (see Figure 10); one half of the EU’s 2017 orange production came from Spain (54.1 %), a further one quarter coming from Italy (24.7 %) and about 90 % of all peach production came from Spain (37.2 %), Italy (27.1 %) and Greece (26.9 %).

Vegetables

Spain and Italy produced over 60 % of the EU’s tomatoes in 2017, the Netherlands and Spain almost half of onions
The EU’s harvested production of fresh vegetables (including melons) was 64.8 million tonnes in 2017, a very similar level to that in 2016, of which 17.4 million tonnes were tomatoes, 6.7 million tonnes were onions and 5.8 million tonnes were carrots.

Figure 11: Production of vegetables by type of vegetable, 2017 (thousand tonnes)

Note: Former Yugoslav Republic of Macedonia: data not available.
(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.
Source: Eurostat (online data code: apro_cph1h1)

Italy produced 5.6 million tonnes of tomatoes in 2017, and Spain a further 5.2 million tonnes, the two Member States accounting for 61.6 % of the EU total. Harvested production levels in 2017, however, were lower than...
2016 with falls in Italy (-7.0 %, in part as a result of another decline in area cultivated) and Spain (-1.4 %) only partially offset by the increases in Portugal (+3.2 % to 1.7 million tonnes), Poland and the Netherlands (+2.1 % and +2.2 % respectively to 0.9 million tonnes).

The United Kingdom was the largest carrot producer in the EU, with a harvested production of 0.9 million tonnes in 2017 (15.3 % of the EU total). Other key producer countries were Poland (14.3 % of the total), Germany (12.7 %) the Netherlands (10.8 %) and France (9.8 %).

The Netherlands and Spain were the EU’s main onion producing Member States, together accounting for 46.0 % of EU-28 output in 2017.

Grapes

The EU is a big player on the world’s wine market; it accounted for 56 % of production by volume in 2017, 54 % of global consumption and 75 % of exports in global terms, having 44 % of wine-growing areas in the world.

**Harvested production in the main grape-producing countries was sharply lower in 2017**

The total production of grapes in the EU was 21.2 million tonnes in 2017. This represented a sharp reduction (-9.3 %) on the harvested production level recorded in 2016. Lower grape harvests were recorded in each of the three main grape-producing Member States: harvested production in Italy fell -10.4 % to 6.4 million tonnes, in Spain by -12.0 % to 5.1 million tonnes and France by -16.4 % to 5.0 million tonnes in 2017. Of the smaller grape-producing countries, some higher production levels in 2017 were recorded, particularly in Romania (+46.2 %) and Portugal (+12.3 %).
The EU is the largest producer of olive oil in the world, accounting for around two-thirds of global production. Most of the world’s production comes from southern Europe, North Africa and the Near East, as 95% of the olive trees in the world are cultivated in the Mediterranean region. With production concentrated in a relatively small area, the effects of a disease outbreak can have significant implications. For this reason, swift steps have been taken as precautionary measures against the spread of the Xylella fastidiosa bacterium which arrived in Italy in 2013.

Spain by far the largest producer of olives for olive oil in the EU in 2017

Olives often follow a two-year cycle, with a large crop followed by a smaller one. Sometimes the weather can make these cycles more pronounced. As individual countries can have cycles that run counter to one another, the overall crop at EU level is somewhat balanced. The total production of olives for olive oil in the EU was 10.3 million tonnes in 2017, an increase of +2.1% on the level in 2016. Spain is by far the biggest olive producer in the EU, providing a majority (59.0%) of total EU olive production. It produced 6.0 million tonnes of olives, but this was -8.2% lower than in 2016. In contrast, there was a sharp upturn (+30.4%) in the level of production in Italy to 2.5 million tonnes in 2017. Nevertheless, olive production in Italy remains below pre-2014 levels.
Most of the rest of the EU’s production of olives for olive oil comes from Portugal and Greece (see Figure 13). The biennial production cycle in Portugal is particularly pronounced; there was a sharp increase (+80.3 %) in production to 0.9 million tonnes in 2017, which represents a relative high. In contrast, there was a further fall (-22.6 %) in the harvested production in Greece, confirming the pronounced downward trend noted since a harvest of 1.8 million tonnes was produced in 2012.

Source data for tables and graphs

- crops: tables and figures

Data sources

Crops statistics  Statistics on crop products are collected under Regulation (EC) No 543/2009 and obtained by sample surveys, supplemented by administrative data and estimates based on expert observations. The sources vary from one EU Member State to another because of national conditions and statistical practices. National Statistical Institutes or Ministries of Agriculture are responsible for data collection in accordance with EU Regulations. The finalised data sent to Eurostat are as harmonised as possible. Eurostat is responsible for establishing EU aggregates.

The statistics that are collected on agricultural products relate to more than 100 individual crop products.
Information is collected for the area under cultivation (expressed in 1,000 hectares), the quantity harvested (expressed in 1,000 tonnes) and the yield (expressed in tonnes per hectare). For some products, data at a national level may be supplemented by regional statistics at NUTS 1 or 2 level.

**Agricultural price statistics** EU agricultural price statistics (APS) are based on voluntary agreements between Eurostat and the Member States.

The National Statistical Institutes or Ministries of Agriculture are responsible for collecting absolute prices and calculating corresponding average prices for their country, as well as for calculating price indices and periodically updating the weights.

Price indices are reported quarterly and annually. Absolute prices are reported annually. The agricultural prices expressed in national currency are converted into EURO by Eurostat using the fixed exchange rates or financial market exchange rates, in order to allow comparisons between the Member States. Eurostat is responsible for calculating indices for the EU.

**Context**

There is a diverse range of natural environments, climates and farming practices across the European Union (EU), reflected in the broad array of food and drink products that are made available for human consumption and animal feed, as well as a range of inputs for non-food processes. Indeed, agricultural products form a major part of the cultural identity of the EU’s people and its regions.

Statistics on agricultural products may be used to analyse developments within agricultural markets in order to help distinguish between cycles and changing production patterns; they can also be used to study how markets respond to policy actions. Agricultural product data also provide supply-side information, furthering understanding as regards price developments which are of particular interest to agricultural commodity traders and policy analysts.

**Other articles**

- [Agri-environmental indicator - cropping patterns](#)
- [Agricultural production - livestock and meat](#)
- [Agricultural production - orchards](#)
- [The fruit and vegetable sector in the EU - a statistical overview](#)

**Tables**

- [Agriculture (t_agri)](#, see:

Agricultural production (t_apro)

Crops products (t_apro_cp)
Database

- **Agriculture (agri)**, see:

  Agricultural production (apro)
  - Crops products (apro_cp)
    - Crop statistics (area, production and yield) (apro_acs)
    - Crop statistics (from 2000 onwards) (apro_acs_a)

Dedicated section

- **Agriculture**

Publications

- **Agriculture, forestry and fishery statistics — 2018 edition** (Statistical book)
- **Food: from farm to fork statistics — 2011 edition** (Pocketbook)

Methodology

- **Agricultural production data: methodological notes**
- **Crop production** (ESMS metadata file — apro_cp_esms)
- **Crops products: supply balance sheets** (ESMS metadata file — apro_cpb_esms)

Legislation


Visualisations

- **Eurostat Statistical Atlas (Chapter 11: Agriculture)**
- **Regional Statistics Illustrated - Agriculture**
- **Statistics Illustrated - Agriculture**

External links

- **DG Agriculture and rural development**