Agriculture, forestry and fishery statistics

2019 edition

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Foreword

The EU is fully committed to implementing the 2030 Agenda for Sustainable Development and its policies on agriculture and rural development are an important part of its contribution.

At the core of the Agenda are the sustainable development goals (SDGs) which are globally agreed objectives to be achieved by 2030.

The Common Agricultural Policy (CAP) contributes by guaranteeing the availability of safe, nutritious and sustainably produced food for all Europeans and EU food exports contribute to food security in third countries, while granting favourable terms of trade to developing regions.

EU rural and agricultural policies also have an important role in reducing poverty, offering decent work and economic growth, ensuring responsible production and consumption and enhancing life on land.

This year's edition of the statistical book on agriculture, forestry and fishery statistics looks to push analysis beyond traditional primary agricultural production to look at some of these wider issues. It includes some new elements that will be expanded upon in years to come: it incorporates some key agri-environmental data by looking at organic farming and resource efficiency; it analyses the downstream food and beverages industry and the transport of agricultural goods, foods and beverages across the EU; it looks at the external trade in agricultural and food products; and, mindful that extreme weather events may play an ever-increasing role in the EU's food production, it also includes a summary weather overview based on data from the Joint Research Centre (JRC). Complete with a redraft of the chapters on forestry and fisheries activities, this new edition of the statistical book aims build on the changes introduced last year.

In each chapter key messages are provided, backed up by InfoGraphics and selected graphics. This is done to help readers follow the analysis and to help them build a picture of the latest changes in the sector.

This publication can also be found online both as a whole and as separate articles in Eurostat's Statistics Explained pages. The most recent data can be freely downloaded from Eurostat's dissemination database.

Please enjoy reading this year's publication.

Christine Wirtz

Acting Director, Sectoral and Regional Statistics

Abstract

This *Agriculture, forestry and fishery statistics* statistical book provides a selection of topical data. Information is presented for the European Union (EU) and its Member States, and is supplemented (when available) with data for EFTA members and for candidate and potential candidate countries to the EU. This publication aims to cover some of the most popular data within the domain of agriculture, forestry and fishery statistics as well as some of the wider food chain. It may be viewed as an introduction to European statistics in this area and provides a starting point for those who wish to explore the wide range of data that is freely available on Eurostat's website: https://ec.europa.eu/eurostat

Eurostat is the statistical office of the EU, situated in Luxembourg. Its mission is to provide high quality statistics for Europe, which enable comparisons between countries and regions.

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Data extraction period

The data presented in this statistical book were extracted in either October or November 2019, with the exception of trade data that was extracted in April 2019. The accompanying text was drafted in November 2019.

Contents

Introduction

The statistical book *'Agriculture, forestry and fisheries in the EU: key messages'* presents a selection of data on a wide range of agricultural, forestry and fishery topics for the European Union (EU-28 aggregates when available) and its Member States, as well as EFTA countries and the potential candidate countries. The data presented refer to the most recent reference years available at the time of preparing this publication, for the most part being either 2018 or 2017.

As the statistical authority of the European Union, Eurostat works in partnership with the national statistical institutes (NSIs) and other national authorities in each Member State for the development, production and dissemination of European statistics. The partnership for agricultural statistics has been going since the early 1950s under umbrella of the European Agricultural Statistics System (EASS). More than 50 data sets are transmitted to the European Commission (Eurostat) by NSIs or other statistical authorities. Agricultural statistics support decision-making and policy design, implementation, monitoring and evaluation in areas related to agriculture, such as the Common Agricultural Policy (CAP) and climate change policies.

The official statistics in this publication are aimed at both specialists (including policymakers at EU and Member State level, enterprises, farms, producers' and consumers' associations, consultancy bodies and trade unions) and generalists who have an interest in the subject. Statistics are also required to support dialogue with the EU Member States and other partners.

On 1st June 2018, the European Commission presented legislative proposals on the CAP beyond 2020. These proposals refine the current objectives by making the CAP more responsive to current and future challenges. The nine objectives outlined in the future CAP are: (i) to ensure a fair income to farmers; (ii) to increase competitiveness; (iii) to rebalance the power in the food chain; (iv) climate change action; (v) environmental care; (vi) to preserve landscapes and biodiversity; (vii) to support generational renewal; (viii) vibrant rural areas; and (ix) to protect food and health quality. The implementation of the new CAP will be measured against a set of indicators that covers all policy areas and provides information at various levels.

The EU has no common forestry policy, but rather an EU Forest Action Plan and EU forest strategy. Statistics are available to help support and inform discussion about forestry activities, particularly regarding the need to improve the long-term competitiveness of the EU's forest sector.

The EU's Common Fisheries Policy (CFP) sets catch limits, restricts the size of the fishing fleet that sets to sea, and lays down technical measures such as those relating to fishing gear. In addition, the CFP aims to help producers get a fair price for their produce and to ensure that consumers can trust the seafood that they eat. A reform of the CFP in January 2014 focused on the environmental, economic and social sustainability of fishing. Statistics on aquaculture, catches, landings and the fishing fleet are presented in this publication.

The agricultural statistics collected by Eurostat cover the following domains: farm structures; economic accounts for agriculture, agricultural prices and price indices; agricultural production (crop and animal production); organic farming; orchards and vineyards; and agriculture and environment. The data are collected from a variety of sources (surveys at farm level, administrative sources, expert estimates etc.).

The 2019 edition of *Agriculture, forestry and fishery statistics* is divided into nine chapters:

- Chapter 1: *'Agriculture, forestry and fisheries in the EU: key messages'* is an executive summary of the main messages in the publication.
- Chapter 2: *'Agriculture: the factors of production'* summarises key messages on types of farm, the people working in agriculture, and on agricultural capital. It presents an overview of farms according to their size and the nature of their activity; on those working in agriculture, especially farmers according to characteristics such as age, gender and level of education; and on investments in agriculture, agricultural land prices and rents. A new section has been added on organic farming.
- Chapter 3: *'Farm production'* presents the most recent data on many of the EU's agricultural products, both in terms of output and prices. This is done for crops, livestock and meat, as well as milk.
- Chapter 4: *'Performance of the agricultural sector'* covers the economic developments within the agricultural industry and presents data on output and input values. A new section on the resource performance of the agricultural sector has been added.
- Chapter 5, *'Forestry activities',* provides data on the EU's forest area, forest ownership and timber resources, as well as economic and employment figures for the forestry sector.
- Chapter 6, *'Fisheries activities',* gives a statistical overview of total fishery production, catches, aquaculture, landings of fishery products (product weight and value) and the EU's fishing fleet by number of vessels, total gross tonnage and engine power.
- Chapter 7: *'Food and beverages processing'* looks at the wider food chain. It analyses the businesses and persons employed in food and beverages manufacturing in the EU. It then looks at the transport of those agricultural and food products within the EU, by road and by inland waterways.
- Chapter 8: *'Trade in agricultural goods'* looks at the EU's international trade in groups of agricultural products and the EU's main trading partners.
- Chapter 9, *'Agriculture, forestry and fisheries at a glance'* provides a summary statistical overview of the agricultural, forestry and fisheries industries in each Member State and the EU as a whole, and a selection of country-pertinent key messages regarding agricultural developments.

This publication presents only a relatively small proportion of the statistics that are collected on the agricultural, forestry and fishery industries. More detailed data as well as methodological information both for these topics and a much broader range of economic, social and environmental themes can be found on the Eurostat website at: https://ec.europa.eu/eurostat.

The Eurostat website offers free access to Eurostat's databases, predefined tables, methodological documents and publications, including this one which is available within the Statistics Explained section of the website.

1 Agriculture, forestry and fisheries in the EU: key messages

Key messages

The factors of production (Chapter 2):

- There were 10.5 million agricultural holdings in the EU in 2016 but farm numbers have been in steep decline for many years.
- Most of the EU's farms are small in nature; two thirds were less than 5 ha in size in 2016.
- EU farms used 173 million hectares of land for agricultural production in 2016, which is about 39 % of the EU's total land area.
- About 246 000 farms had some organic area in 2016. This number was about one fifth higher than in 2013.
- Organic farming covered 12.6 million hectares of agricultural land in 2017.
- One quarter (25.1 %) of all the EU's farms were specialist livestock farms in 2016 and just over one half (52.5 %) were specialist crop farms.
- Farming remains a predominantly family activity.
- About 9.7 million people worked in agriculture in the EU in 2016.
- Farmers are typically male and relatively old; 71.5 % of farmers were male in 2016 and only one in ten (10.6 %) were under the age of 40 years old in 2016.
- EUR 59.0 billion was invested in agricultural capital in the EU in 2018, which was an estimated EUR 2.3 billion more than in 2017.
- There are considerable variations in agricultural land prices and rents between and within Member States.

Farm production (Chapter 3):

- There were widespread drought conditions in central and northern Europe during the spring and summer of 2018. In contrast, many parts of southern Europe recorded a wetter than usual spring and summer.
- The EU produced 295.1 million tonnes of cereal grains in 2018. This was 14.9 million tonnes less than in 2017, which reflected widespread drought conditions. The total cultivated area of cereals was broadly unchanged (-0.3%) in 2018 from the level in 2017. The harvested production of wheat was 129.0 million tonnes, of barley was 56.6 million tonnes and of grain maize and CCM was 69.1 million tonnes.
- The EU produced 47.8 million tonnes of meat in 2018, one half of which (23.8 million tonnes) was from pigs. It also produced 172.2 million tonnes of raw milk.
- Whereas output volumes for most cereals were markedly lower in 2018 than 2017, they were higher for most meats. There was a -4.8 % decline in the EU's cereal output, with wheat down -9.5% and barley down -3.5%, but grain maize and CCM up +6.7%. The output volume of pig meat was +2.1% higher, with bovine meats (+1.7%), poultry meats (+4.8%) also higher than in 2017, with almost no change in sheep and goats meat output (+0.1%). The volume of raw milk produced in the EU was +0.9% higher in 2018 than in 2017.
- Real terms (deflated) prices for cereals were higher in 2018: wheat prices were up +7.9% on average, barley was +14.0% higher and grain maize and CCM was also up +1.6%. In contrast, pig prices tumbled an average -13.0%, milk was -3.7% lower and cattle prices slipped -1.7%. Average prices for poultry remained unchanged (+0.1%) and rose moderately for sheep and goats (+2.1%).

Performance of the agricultural sector (Chapter 4):

- Agriculture contributed 1.1 % to the EU's GDP in 2018.
- The EU's agricultural industry created (gross) value added of EUR 181.7 billion in 2018
- Agricultural income per AWU, expressed as an index, was -4.6 % lower for the EU-28 in 2018 than the level in 2017.
- Agricultural income per AWU, expressed as an index, for the EU-28 remained one-fifth higher (+19.7%) in 2018 than the level in 2010.

Forestry activities (Chapter 5):

- There are about 182 million hectares of forests and other wooded land in the EU, and the area has been expanding through natural growth and afforestation.
- Half a million people were employed in forestry and logging activities in the EU in 2016
- Forestry and logging activities in the EU generated gross value added of EUR 26.5 billion in 2016.
- Three quarters of roundwood production in the EU went to supply wood-based industries in 2017; the remaining one quarter went to fuelwood.
- Wood-based industries in the EU generated gross value added of EUR 142.7 billion in 2016; pulp and paper production accounted for one third of this.
- 3.3 million people were employed in wood-based industries, accounting for 11 % of the total employment in the manufacturing sector in 2017.

Fisheries activities (Chapter 6):

- The EU's fishing fleet is getting smaller in number, capacity and power…
- …but the EU catches still totalled 5.3 million tonnes in 2018
- 1.4 million tonnes of aquatic organisms were produced in the EU in 2017.
- The fisheries industry in the EU employed about 180 000 people in 2017.

Food and beverages processing (Chapter 7):

- In 2016, there were about 300 000 enterprises involved in food and beverages production in the EU, employing 4.7 million people.
- 95% of food and beverages enterprises are small, employing less than 50 people
- The value of food and beverages produced in the EU was EUR 954 billion in 2018
- A combined 3.1 billion tonnes of primary agricultural, forestry and fisheries products, food products, beverages and tobacco were transported by road on EU registered trucks in 2017…
- …over a payload distance of 540 billion kilometres.

Trade in agricultural goods (Chapter 8):

- The EU's trade in agricultural goods doubled in 15 years to EUR 275 billion in 2018.
- The value of trade in agricultural goods accounted for 7.0 % of total EU international trade in goods in 2018.
- The USA was the EU's main trading partner in agricultural products in 2018; trade with the USA was worth EUR 34.6 billion.
- The USA was the main recipient of EU exports (16.2 %) of agricultural products in 2018 and was the main origin of EU imports (9.0%).

2 Agriculture: the factors of production

Introduction

Farming is an activity that is about growing crops and raising livestock. It is the business of providing key primary ingredients for the food that we eat and much of what we drink. Farming draws on a set of resources to produce these agricultural goods, as well as agricultural services. These resources or 'factors of production' can be broadly categorised as land, labour, knowledge, capital and entrepreneurship.

Within the EU, the farming sector operates under the Common Agricultural Policy (CAP). Just as agriculture needs to keep pace with scientific and technological advances, so the CAP needs to respond to developing challenges. The CAP has been reformed a number of times over the years and on 1st June 2018, the European Commission presented proposals for further changes beyond 2020. The proposed nine objectives of this future CAP ([1]) highlight the central role of farms and farmers in meeting challenges to do with climate change, with creating vibrant rural areas, with preserving rural landscapes, with environmental care and with protecting food and health quality.

These economic ([2]), environmental and climate-related ([3]) and socio-economic challenges ([4]) require that farmers be at the heart of Europe's rural communities. This helps explain why support for the generational succession of farms and encouragement of a new generation of farmers is also a key part of the new CAP proposal.

Understanding how much of these factors of production are available and how they are changing over time provides a key insight into how agriculture in the EU will meet these various challenges. This chapter analyses EU statistics on farms and farmers as well as agricultural capital and land values. Entrepreneurship is looked at within Chapter 4 on 'Performance of the agricultural sector'.

([1]) See https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-cap_en

([2]) See https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/key_policies/documents/eco_background_final_en.pdf

([3]) See https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/key_policies/documents/env_background_final_en.pdf

([4]) See https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/key_policies/documents/soc_background_final_en.pdf

Did you know ...

173 million hectares of land in the EU were used for agricultural production in 2016...

... this is about **39 %** of the EU's total land area

12.6 million hectares were used for organic farming in 2017

There were **10.5 million farms** in the EU in 2016

≈ 250 000 holdings in the EU have some organic area and this number is increasing

Two-thirds of the EU's farms are **less than 5 ha** in size

71.5 % of the total were men in 2016

28.4 % of the total were women in 2016

Farming is a **male dominated** profession with relatively few female farmers

There are few young farmers; only about **one in ten EU farm managers (11 %)** were under the age of 40 years old in 2016

2.1 Farms and farmland in the European Union (EU)

The collection of data under the Farm Structure Survey (FSS) is carried out on a regular rather than annual basis. In part, this reflects the reality that changes in structural developments are difficult to identify on a year-to-year basis. In part, it also reflects the challenge of the time and expense required to establish and carry out surveys and censuses. The pragmatic approach adopted is to carry out decennial censuses and surveys every three or so years in-between. No new FSS has been carried out since the last Statistical Book in 2018. This year's chapter on farms and farmland in the EU reviews the main messages previously provided and adds some complimentary analyses on organic farms.

Key messages from the 2018 edition of the Statistical Book:

- ***There were 10.5 million agricultural holdings in the European Union (EU) in 2016***

  One third (32.7 %) of the EU's agricultural holdings (termed 'farms') were located in Romania.

- ***The vast majority of the EU's farms are family farms***

  The overwhelming majority (96.0 % in 2016) of the EU's farms are classed as being family farms ([5]).

- ***Most of the EU's farms are small in nature***

  Two thirds of the EU's farms were less than 5 hectares (ha) in size in 2016. Although the average mean size of an agricultural holding in the EU was 16.6 ha in 2016, only about 15 % of farms were this size or larger.

- ***EU farms can be broadly characterised as either (i) semi-subsistence (ii) small and medium-sized farms or (iii) large agricultural enterprises***

  Of the EU's 10.5 million farms, 4.0 million had an economic size in terms of standard output below EUR 2 000 per year and were responsible for only 1 % of the EU's total agricultural economic output. These very small farms are at the (semi-)subsistence end of the farming scale; about three-quarters of such farms in the EU consumed more than one-half of their own production.

  A further 3.0 million farms had an economic output within the range of EUR 2 000 - EUR 8 000 per year. Together these very small and small farms accounted for two-thirds (67.6 %) of all farms in the EU in 2016.

  In contrast, 304 000 farms (2.9 % of the EU total) each produced a standard output of EUR 250 000 per year or more in 2016 and were responsible for a majority (55.6 %) of the EU's total agricultural economic output; these farms can be characterised as being large agricultural enterprises ([6]). Two in every five of these large farms had a legal or group holding form.

  A majority (55.1 %) of the standard output generated by agriculture across the EU was from farms in France (16.9 %), Italy (14.2 %), Germany (13.5 %), and Spain (10.5 %) in 2016. Although Romania accounted for about one third of the EU's farms, it accounted for only 3.3 % of the EU's standard output.

([5]) The term 'family farm' refers to any farm under family management where 50 % or more of the regular agricultural labour force is provided by family members.

([6]) For more details, see the Statistics Explained article on small and large farms in the EU.

- ***EU farms remain diverse in terms of what they grow or rear***

  About one half (52.5 %) of all farms in 2016 could be categorised as being crop specialist farms; just under one third (31.6 %) of all farms were specialised in field cropping, about one fifth (18.9 %) were specialised in permanent crops, with remainder (1.8 %) being specialist horticultural farms.

  Another one quarter (25.1 %) of the EU's farms were specialist livestock farms, with sheep, goats and other grazing livestock farms (6.2 %) and specialist dairy farms (5.4 %) the most numerous within this group. Mixed farms made up most of the rest (21.1 %), with a small percentage of farms not being classifiable.

- ***EU farms used 173 million hectares (ha) of land for agricultural production in 2016***

  Almost three quarters (71.5 %) of the utilised agricultural area of the EU was based in just seven Member States; France used 27.8 million ha for agricultural purposes in 2016, Spain 23.2 million ha, the United Kingdom and Germany both 16.7 million ha, Poland used 14.4 million ha, Italy a further 12.6 million ha and Romania 12.5 million ha.

- ***Farms managed just under one half (47.1 %) of the total land area of the EU in 2016***

  Farms in the EU managed two-fifths (38.8 %) of the total land area of the EU as UAA, as well as wooded areas (6.2 %) and other farm land not used for agriculture (2.1 %).

  A map of types of land cover in the EU (see Map 2.1.1) shows the strong correlation between cover-type and physical characteristics like mountains. Generally, the Member States with lower shares of agricultural cover area had higher shares of forested areas.

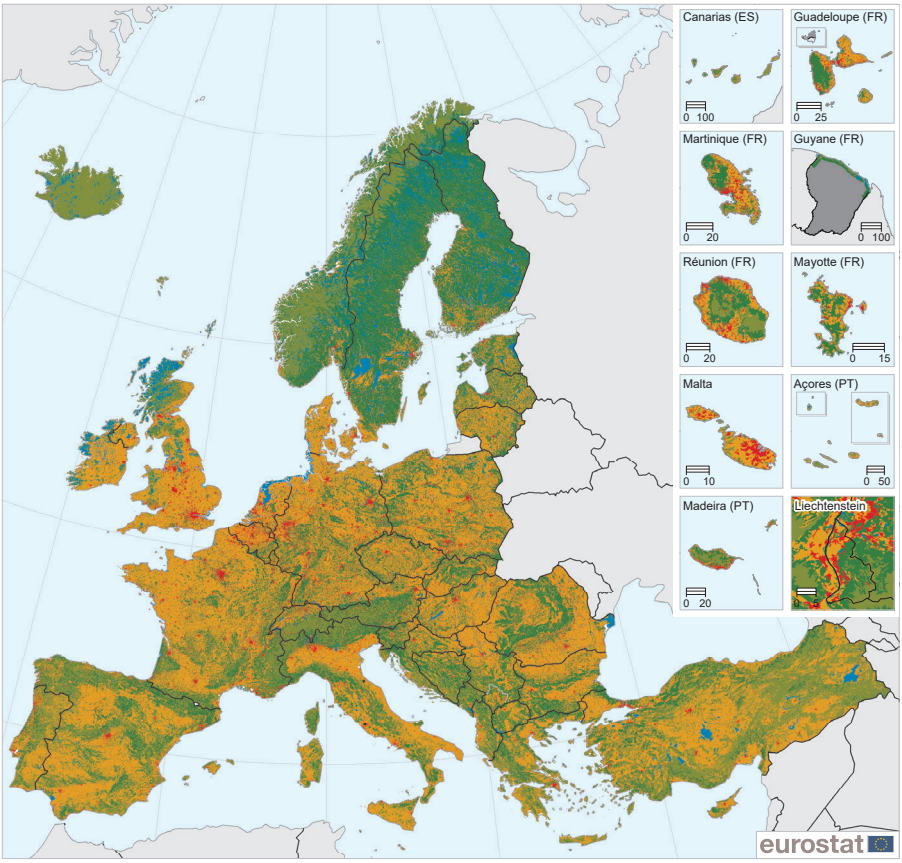
- ***The number of farms in the EU has been in steep decline***

  Bearing in mind some methodological precautions, the number of farms in the EU decreased by about one quarter in the relatively short period between 2005 and 2016. This suggests losses of up to 4.2 million farms across the Member States, the vast majority of which (about 85 %) were small farms of a size under 5 ha. During this period, the largest reductions in farm numbers were recorded in Poland (an indicative loss of 1.1 million farms, or 43 %), Romania (an indicative decline of 0.8 million farms, or 20 %) and Italy (an indicative 0.6 million farms, or 34 %).

- ***The amount of land used in the EU for agricultural production has remained steady***

  The consolidation in the amount of agricultural land used in the EU reflects the growth in the number of the largest holdings and the land that they used for agricultural purposes.

Map 2.1.1: Land cover, EU-28, 2015



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat — GISCO, 11/2019

Source: Corine Land Cover 2018, European Environment Agency

Organic farming

Organic farming is an agricultural method that aims to produce food using natural substances and processes. This means that organic farming tends to have a limited environmental impact as it encourages, inter alia: the responsible use of energy and natural resources; the maintenance of biodiversity; preservation of regional ecological balances; enhancement of soil fertility; maintenance of water quality; a high standard of animal welfare which requires farmers to meet the specific behavioural needs of animals. This type of farming looks to use many of the factors of production to produce agricultural goods in a more sustainable way than conventional farming.

European Union (EU) regulations on organic farming are designed to provide a clear structure for the production of organic goods across the whole of the EU. This is to satisfy consumer demand for trustworthy organic products whilst providing a fair marketplace for producers, distributors and marketers ([7]).

About one quarter of a million holdings in the EU have some organic area; this number is increasing

There were slightly more than 246 000 agricultural holdings (here termed 'farms') in the EU that had some organic area in 2016. This number was about one-fifth (21.9 %) higher or 44 000 farms more than in 2013.

A two-thirds (66.4 %) majority of farms in the EU with some organic area were fully organic in 2016, the remaining one third having a mixture of organic and non-organic production. Among Member States, the share of farms that had only organic areas was particularly high in Czechia (98.3 %), Germany (97.2 %), Austria (95.7 %) and Estonia (89.8 %).

The strongest growth in the number of farms with some organic area between 2013 and 2016 was for farms that were fully organic. Fully organic farms accounted for 2 % of all farms across the EU in 2016.

Organic farming covered 12.6 million hectares of agricultural land in the EU in 2017, up sharply

The total organic area across the EU in 2017 was 12.6 million hectares, corresponding to 7.0 % of the total utilised agricultural area. 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 ([8]).

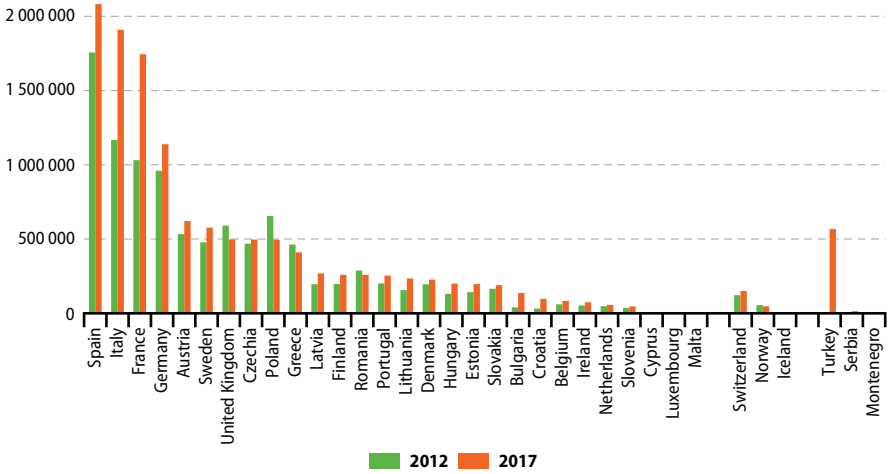
A small majority of the EU's total organic area was located in just four Member States: Spain (16.6 % in 2017), Italy (15.2 %), France (13.9 %) and Germany (9.1 %). This was a higher collective proportion (54.7 %) than their share (46.4 % in 2016) of total utilised agricultural area.

The total organic area in the EU increased by one quarter (25.0 %) between 2012 and 2017. This upward development was noted in a majority of Member States (see Figure 2.1.1), with some notable exceptions. The increase in the EU as a whole was driven by the above-average growth in the total organic area in France (+69.2 % between 2012 and 2017) and in Italy (+63.5 %) but also Germany (+18.6 %) and Spain (+18.5 %). This development was further supported by the trebling of organic area between 2012 and 2017 in Bulgaria (where about 100 000 ha were added) and Croatia. The overall growth at the level of the EU as a whole was tempered by declines in the total organic areas in Romania (-10.3 %), Greece (-11.3 %), the United Kingdom (-15.6 %) and Poland (-24.5 %).

([7]) See https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organics-glance_en.

([8]) For more details, see the Statistics Explained article on Organic farming statistics.

Figure 2.1.1: Total organic area (fully converted and under conversion), 2012 and 2017
(ha)



Note: No data available for Iceland (2012), Montenegro (2012), Serbia (2012) and Turkey (2012). Preliminary data for Italy (2017) and Montenegro (2017).

Source: Eurostat (online data code: org_cropar)

Organic farming is 'mainstream' in some Member States

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 7.0 %. There were some Member States where this share was much higher, most particularly Austria (23.4 %), Estonia (19.6 %) and Sweden (19.2 %). In contrast, were Member States for whom the share of total organic area in the total utilised agricultural area was below, and sometimes well below, the EU average (see Figure 2.1.2); these included, inter alia, France (6.0 %), Poland (3.4 %), the Netherlands (3.1 %), the United Kingdom (2.9 %) and Romania (1.9 %).

The potential for organic production can also be indicated by the area under conversion as a percentage of the total organic area. The highest shares of area under conversion in the total organic area in 2017 were Bulgaria (64.5 %), Croatia (56.2 %), Hungary (47.7 %) and Romania (42.3 %). Each of these four Member States had a lower share of land under organic management than the EU average in 2017.

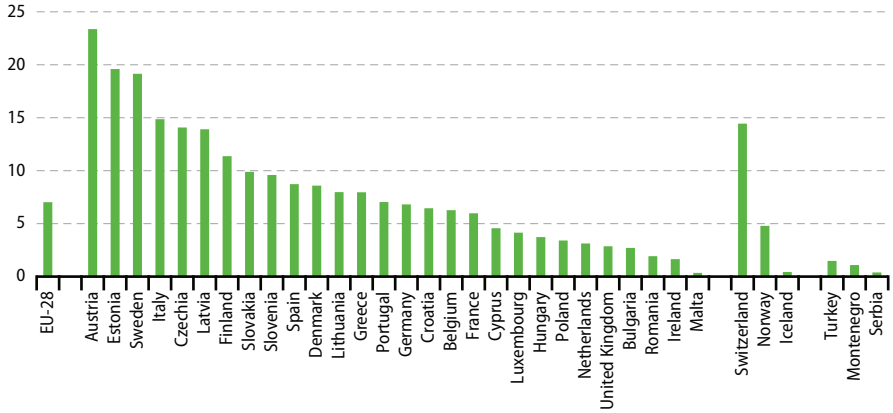
Arable land and permanent grassland account for vast majority of EU's total organic crop area

Agricultural production area is divided into three main types of use: arable 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 covered 5.6 million ha across the

EU in 2017 and organic pastures and meadows (mostly used for grazing organic livestock) a further 5.6 million ha; together these two types of land use accounted for about 90 % of the EU's total organic crop area.

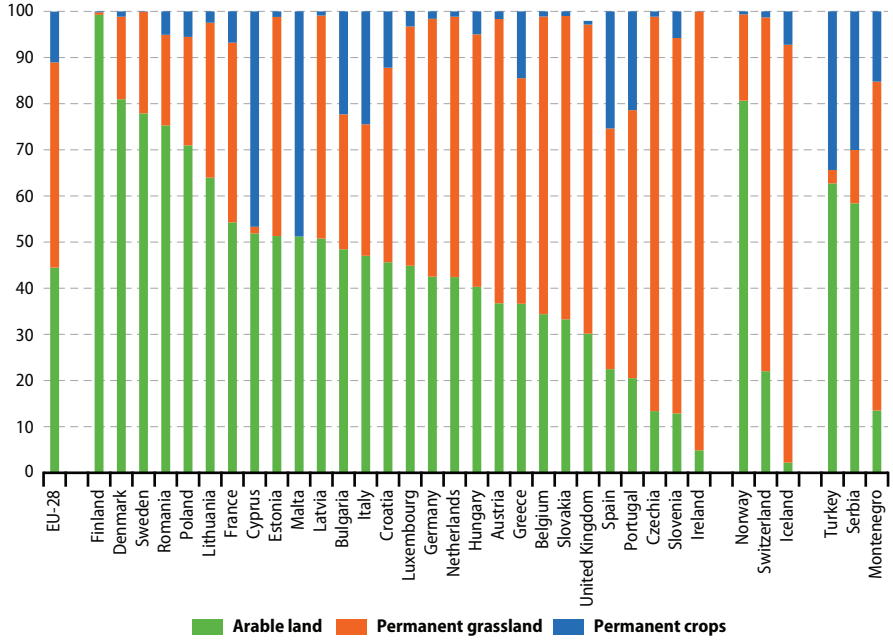
Among the four Member States that accounted for a small majority of the EU's total organic area, a little over one half (52.1 %) of the total organic area in Spain was accounted for by permanent grassland, as was the case in Germany (55.9 %) and about one half (47.0 %) by arable land in Italy, as in France (54.3 %). Among other Member States, organic arable land dominated the total organic areas of Finland, Denmark and Sweden, with organic permanent grassland dominating in Ireland, Czechia and Slovenia (see Figure 2.1.3).

Figure 2.1.2: Share of total organic area (fully converted and under conversion) in total utilised agricultural area (UAA), 2017
(%)



Note: Estimated data for EU-28, Italy, United Kingdom, Norway and Turkey. Preliminary data for Montenegro.
Source: Eurostat (online data code: org_cropar)

Figure 2.1.3: Organic arable land crops, permanent grassland and permanent crops, 2017
(% of total organic area, both fully converted and under conversion)



Note: Preliminary data for EU-28, Italy, and Montenegro.

Source: Eurostat (online data code: org_cropar)

2.2 Farmers and the agricultural labour force

Key messages from the 2018 edition of the Statistical Book:

- ***Agriculture remains a big employer within the EU; 9.7 million people worked in agriculture in 2016***

  People working in agriculture accounted for 4.2 % of total employment in the EU in 2016, corresponding to 9.7 million persons. Agriculture is a particularly big employer in Romania, accounting for just less than one in every four persons (23.0 %).

- ***Farming remains a predominantly family activity***

  Nine in every ten (89.5 %) people who worked regularly in agriculture in the EU were the sole holder (farmer) or members of his/her family in 2016 ([9]).

- ***Farms managers are typically male and relatively old***

  Seven in every ten (71.5 %) farm managers on the EU's 10.5 million holdings were male and a majority (57.9 %) were 55 years of age or more. Only about one in every ten (10.6 %) farm managers was a young farmer under the age of 40 years. This top heavy age structure underlines the policy interest in farm succession and the need to encourage a new generation of farmers.

  The gender imbalance among farmers is particularly strong in the Netherlands; only one in every twenty farmers (5.2 %) was female in 2016. Female farmers were also particularly uncommon in Malta (6.0 % of all farmers), Denmark (7.7 %) and Germany (9.6 %).

- ***Elderly farm managers tend to work on the smallest farms (measured in economic terms)***

  Four-fifths (81.7 %) of the EU's farm managers that were 65 years of age or older worked on subsistence farms and very small farms in 2016.

- ***Very few farm managers in the EU have full agricultural training***

  Most farm managers in the EU only have practical experience; this was the case for seven in every ten (68.3 %) of them in 2016. Less than one in ten (9.1 %) farm managers had full agricultural training, and the rest (22.6 %) had basic agricultural training.

- ***Fewer farms, fewer farmers***

  As the number of farms in the EU has declined, so has the number of farmers and those employed in agriculture; the share of people employed in agriculture fell from 5.7 % of total EU employment in 2005 to 4.4 % in 2016. The volume of work carried out by the EU's labour force in agricultural activities declined by 3.3 million AWUs between 2005 and 2016, a decline of one quarter (-25.7 %). Just shy of three quarters (71.1 %) of these full-time equivalent job losses occurred in the Member States that joined the EU after May 2004. The biggest losses were in Romania (1.0 million AWUs), Poland (0.6 million AWUs) and Bulgaria (0.4 million AWUs, which represented a 60 % decline).

- ***Young farmers getting scarcer but female farmers holding steady***

  Young farmers are getting scarcer; in 2005, 6.9 % of farm managers in the EU were very young (to enable comparisons, under the age of 35 years old) but this share had fallen to 5.1 % in 2016. The share of farm managers that are women, however, increased slightly (from 26.3 % in 2005 to 28.4 % in 2016).

([9]) For more details on similar analyses, see the Statistics Explained article on family farming in the EU.

2.3 Agricultural capital and land values

Agricultural capital: an estimated EUR 59.0 billion invested in 2018

As a factor of production in agriculture, capital can be thought of as the tools, machinery and equipment, farm buildings and plantations that are required to help produce crops or animal products.

Gross Fixed Capital Formation (GFCF) refers to the change in physical assets within a defined time period. It does not include depreciation of land nor land purchases. GFCF measures how much of the value added created by agriculture is invested rather than consumed and is, therefore, a key element for understanding future competitiveness in the agricultural sector.

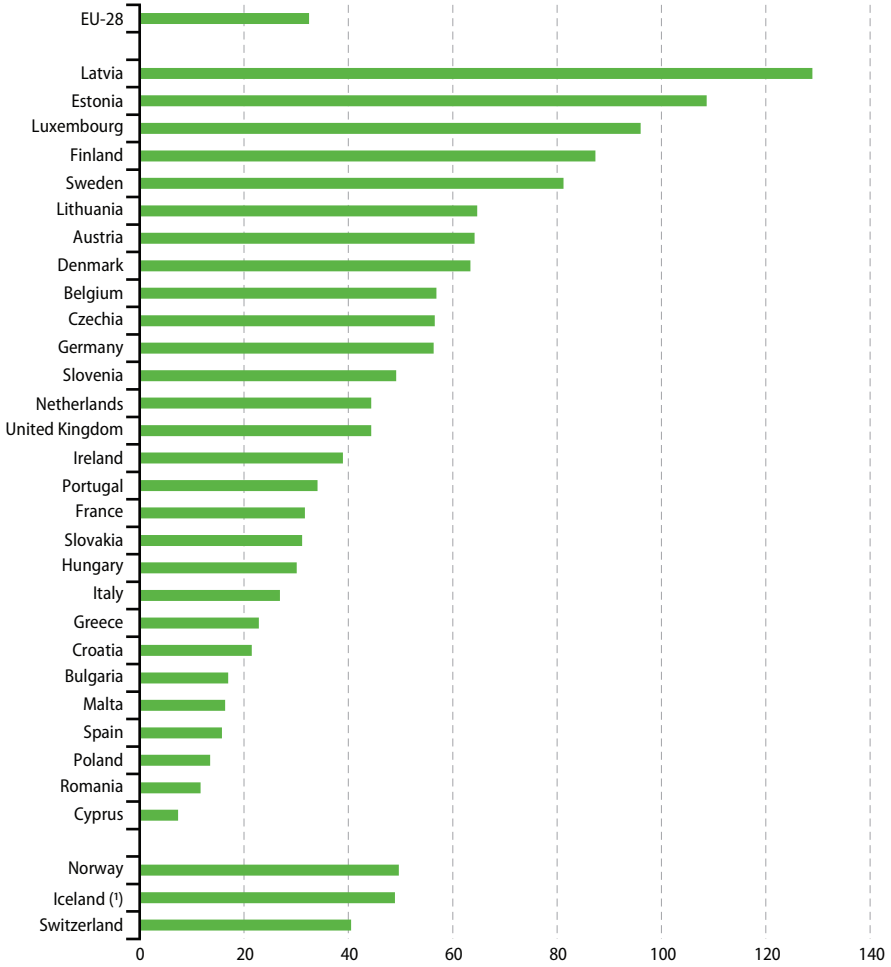
The agricultural sector in the EU invested an estimated EUR 59.0 billion in 2018, accounting for 32.5 % of Gross Value Added (GVA). Almost three-quarters of this investment was made in only six Member States: France (17.7 % of the EU total), Germany (15.7 %), Italy (14.8 %), the Netherlands (8.0 %), the United Kingdom (7.9 %) and Spain (7.7 %). Relative to the size of their respective agricultural sectors and the value added generated, however, GFCF was highest in Latvia, and then Estonia, Luxembourg, Finland and Sweden (see Figure 2.3.1).

The level of investment in EU agriculture was an estimated EUR 2.3 billion higher in 2018 than in 2017

The level of investment in EU agriculture in 2018 was an estimated EUR 2.3 billion more than in 2017 and EUR 4.6 billion more than in 2016. Although there have been some strong annual fluctuations at the level of the EU since a relative low in 2005 to a relative high in 2008, there have been some clear trends at Member State level.

Among the Member States, there was particularly strong investment growth in Lithuania (an average annual growth rate of +6.6 %), in Bulgaria (an average annual growth rate of +5.8 %) and in Czechia (an annual average growth rate of +5.5 % per year) between 2005 and 2018 (see Figure 2.3.2). In the case of Lithuania, this growth came in the period from 2010 onwards and in Czechia from 2011 onwards. In contrast, there were strong investment contractions in Croatia (an average -4.6 % per year) over the same period, as well as Cyprus (an average -3.1 % per year).

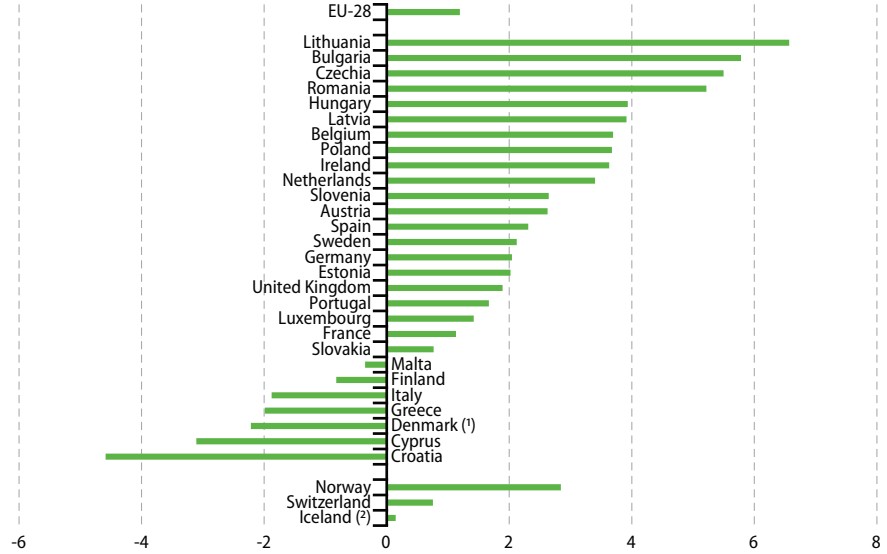
Figure 2.3.1: Gross Fixed Capital Formation in agriculture, 2018
(% of GVA)



(1) 2017 data for GFCF in agriculture.

Source: Eurostat (online data code: aact_eaa01)

Figure 2.3.2: Gross Fixed Capital Formation in agriculture, 2005-2018
(annual average growth rates, %)



(1) Estimate, 2018.
(2) 2007-2017.

Source: Eurostat (online data code: aact_eaa01)

Agricultural land prices and rents: huge variation between and within Member States

Each factor of production used in agriculture typically earns a type of income; labour receives a wage, entrepreneurs profit, capital an interest and land a rent. Understanding land prices and rents is also a key element for understanding future perspectives for agriculture.

The level of land prices depends on a number of factors, whether they be national (laws), regional (climate, proximity to networks) and localised productivity factors (soil quality, slope, drainage etc.) as well as the market forces of supply and demand (including the influence of foreign ownership rules). Competition for land comes not only from farmers but also from others planning to use land for purposes other than agriculture.

As such, it is interesting to see prices at a point in time and note the developments in prices for regions over time.

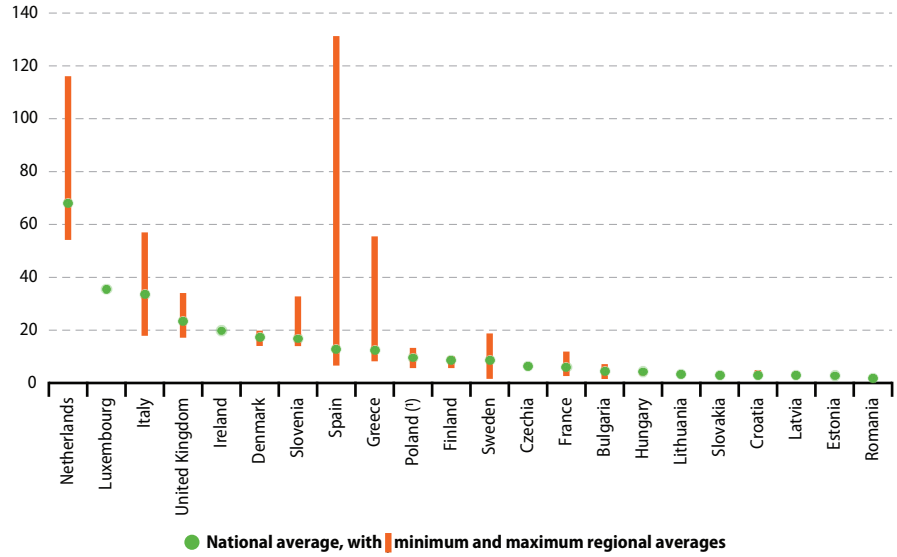
On average, the Netherlands recorded the most expensive purchase price of one hectare of arable land in the EU in 2017 (EUR 68 197). Indeed, the price of arable land in every region of the Netherlands was above all other available national averages in the EU (see Figure 2.3.3). However, among the EU regions for which data are available, the most expensive prices for arable land were in the *Canarias* region of Spain (an average EUR 131 263 per hectare). Arable land was cheapest in Romania, with a hectare costing an average EUR 2 085 in 2017. At the regional level, a hectare of arable land cost least in the *Yugozapaden* region of Bulgaria (an average EUR 1 549).

From the data available, the strongest growth between 2011 and 2017 was in Czechia (a three-and-a-half fold increase), Lithuania (about a three-fold increase), Estonia and Hungary (between a two and three- fold increase). Prices rose in other Member States too, albeit at much lower rates. The notable exceptions were Italy and Greece where the average price of arable land declined (by about -2 % and -18 % respectively overall in the reference period).

In almost all regions, buying arable land was more expensive than buying permanent grassland (as much as 20 times more expensive on the Greek islands of *Voreio Aigaio*). Likewise, buying irrigable arable land was more expensive than non-irrigable arable land (as much as six times more expensive in the Spanish *Región de Murcia*).

Not all land is owned by the farmer working the land. Many farmers rent their land, as either a short- or long-term business decision. The cost of renting land is another factor that farmers have to absorb in their business. Mirroring the variation in arable land prices, annual rental prices of one hectare of agricultural land (arable or permanent grassland) also vary starkly between countries and regions within countries.

Figure 2.3.3: National and regional prices of arable land, 2017
(EUR 1 000 per hectare)



Note: data for Belgium, Germany, Cyprus, Malta, Austria and Portugal are not available. Regions are shown at the NUTS 2 level, with the exception of the Estonia, Latvia, Lithuania and Luxembourg (NUTS 1).

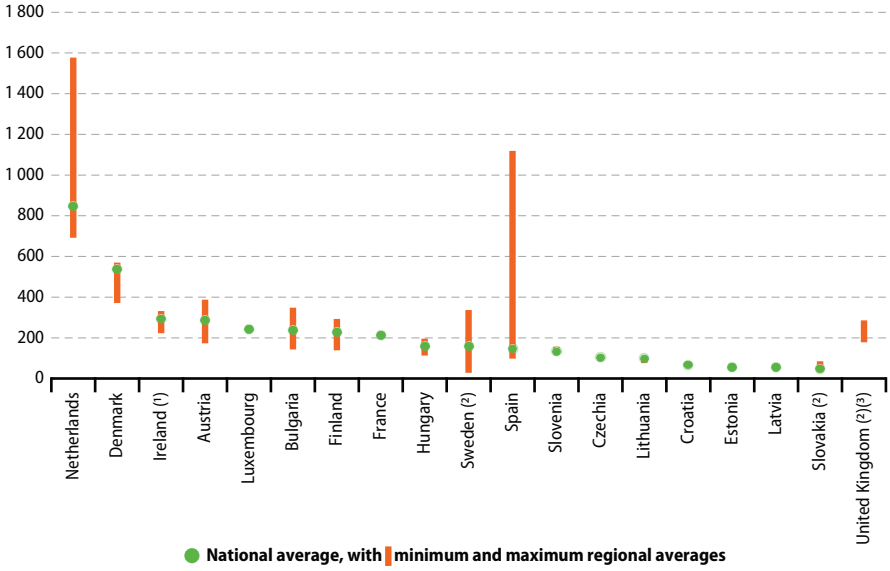
(1) Estimate.

Source: Eurostat (online data code: apri_lprc)

Renting one hectare of agricultural land was most expensive in the Netherlands (an average EUR 847 for the year in 2017), with the highest regional average in *Flevoland* (NL) being almost twice the national average (EUR 1 577 for the year). Renting agricultural land was cheapest on average in Slovakia (EUR 50 per hectare for the year in 2016), although the cheapest regions in the EU for renting were *Mellersta Norrland* and *Övre Norrland* in Sweden (both EUR 28 per hectare per year in 2016) — see Figure 2.3.4.

As with land prices, renting permanent grassland was cheaper than renting arable land.

Figure 2.3.4: National and regional agricultural land rent prices, 2017
(EUR per hectare)



Note: data for Belgium, Germany, Greece, Italy, Cyprus, Malta, Poland, Portugal and Romania are not available. Regions are shown at the NUTS 2 level, with the exception of the Estonia, France ,Latvia, Lithuania and Luxembourg (NUTS 1).

(1) Estimate.
(2) 2016.
(3) No national average.

Source: Eurostat (online data code: apri_lprc)

Data sources and availability

Farm Structure Survey

Almost all of the statistics for farms and farmers were drawn from the Farm Structure Survey for 2016. The Farm Structure Survey (FSS) provides a wide range of information on agricultural holdings, including detailed data on farm labour force characteristics. The FSS is carried out in the form of an agricultural census every 10 years and as a sample survey every 3-4 years.

Organic farming

Data are collected annually and provided by the EU Member States and 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 until the reference year 2007, data provision was voluntary. From reference year 2008 onwards, data have had to be delivered following Commission Regulation (EC) No 889/2008, implementing Council Regulation (EC) No 834/2007.

Agricultural capital

Gross Fixed Capital Formation (GFCF) in agriculture is an indicator (a so-called 'Context indicator') that reflects a trend that is likely to have an influence on the implementation, achievements and performance of the CAP. The data on agricultural capital are taken from the Economic Accounts for Agriculture (EAA). GFCF excludes deductible VAT and is taken in basic price terms.

Agricultural land prices and rents

Agricultural land prices and rents are now being collected on an annual basis and a common methodology has been developed as a basis for comparable statistics. These data sets were made available publically in 2018.

Agricultural land prices refer to the price of one hectare of free agricultural land during the reference period (a calendar year). Depending on the Member State, these prices can be collected from the owner of the agricultural land who is selling (selling prices) or from the physical person/legal person/legal entity who is purchasing the land for agricultural purposes (purchase prices).

Agricultural land rents refer to the price of renting one hectare of agricultural land during the reference period (a calendar year). The renting price should be collected from the agricultural holdings renting the land for agricultural purposes (renting price paid).

The prices and rents expressed in national currency are converted into Euro by using the corresponding annual exchange rate, to allow comparisons among Member States.

3 Farm production

Introduction

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.

This chapter presents statistics on crop production, livestock and meat production, milk and milk products in the European Union (EU), as well as data on agricultural prices available for single commodities and for larger aggregates in the form of price indices.

Did you know ...

In 2018 the EU produced...

295.1 million tonnes
of cereal grains

129.0 million tonnes
of wheat

69.1 million tonnes
of green maize and CCM

56.6 million tonnes
of barley

47.8 million tonnes
of meat, about half of which came from pigs
23.8 million tonnes

172.2 million tonnes
of raw milk

	CEREALS	WHEAT	PIGS	CATTLE	POULTRY	SHEEP AND GOATS	MILK
Output volumes (2018/17)	-4.8 %	-9.5%	+2.1 %	+1.7 %	+4.8%	+0.1%	+0.9 %
Deflated prices (2018/17)	+7.9 %	+7.9 %	-13.0%	-1.7%	+0.1%	+2.1%	-3.7%

Prices still 20 % lower than in 2012

3.1 Crops

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 plant's stage of development, heavy spring frosts can damage the growth of cereals and destroy fruit blossoms. Likewise, spring-to-summer droughts and heat waves can cause significant yield losses, while strong winds and heavy rainfall can make harvesting difficult and compromise quality.

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. 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 and extremes 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.

Weather review

Drought conditions in central and northern Europe: wet conditions in southern Europe

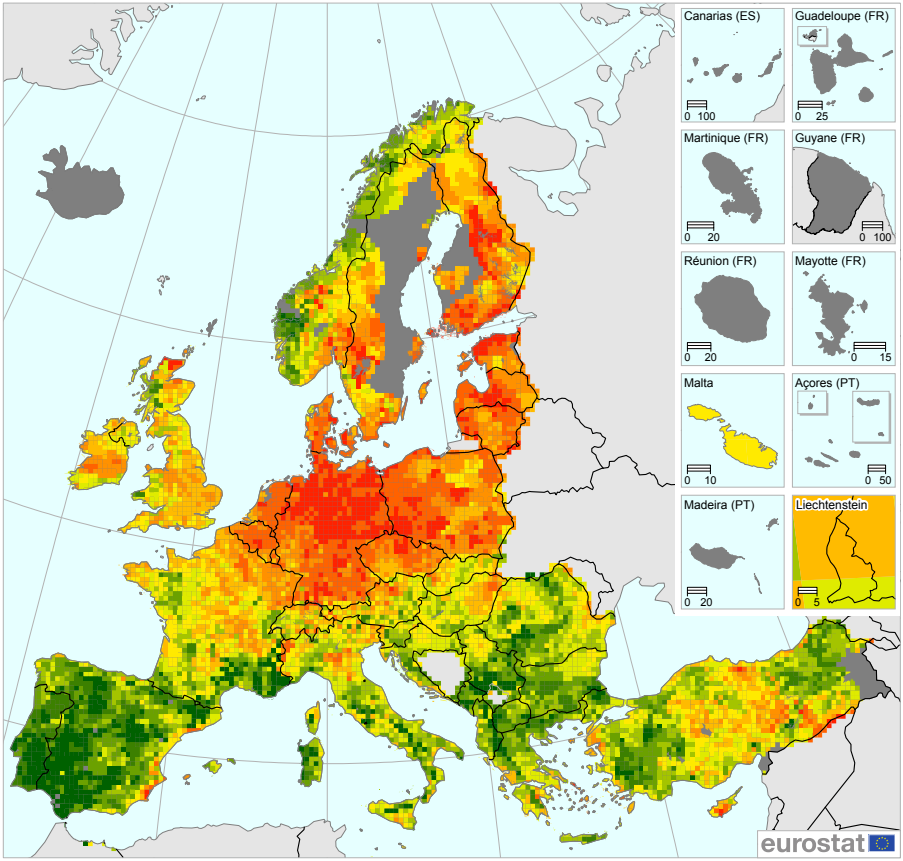
Plants need sunlight, water, healthy soils, air and heat to grow. Among the meteorological factors, temperature and precipitation are of particular significance for yields and production levels. The 2018 crop year in the EU experienced extreme weather events in terms of both temperatures and rainfall ([10]).

Winter 2017-2018: the hardening of winter-sown cereals, which puts them into dormancy to withstand freezing conditions, was delayed due to widespread above-seasonal temperatures. As a result, frost-kill damage was limited. Large parts of the EU experienced a severe cold spell at the end of February to mid-March, which delayed spring sowing and hampered the growth and development of winter crops. High precipitation in the central belt running from France in the West through to Bulgaria in the East, further delayed spring and summer crop sowing.

Spring-Summer 2018: there was a clear distinction between the prevailing conditions in central and northern Europe and southern Europe. Central and northern Europe experienced severe drought conditions, a combination of exceptionally warm temperatures and low precipitation. Indeed, many Member States in these areas recorded one of their three hottest summers and driest summers. The Standardised Precipitation-Evapotranspiration Index (SPEI) rated the drought in central and northern Europe as 'severe to extreme' both for the 3-month (June-August) and 6-month (March to August) periods (see Map 3.1.1). In contrast, southern Europe and particularly the Iberian Peninsula recorded a wetter than usual spring and summer, marking the end of the 2016-2017 drought in the area.

([10]) The Joint Research Centre (JRC) produces a series of monthly bulletins on weather events for crop monitoring in Europe, from which much of this analysis is drawn. The analysis is conducted at the EU and Member State levels. Concerning the 2018 drought, the JRC also produced a research article published in Earth's Future.

Map 3.1.1: Drought conditions in central and northern EU Member States, March – August 2018
(SPEI-6)



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat — GISCO, 12/2019

Legend

- < -2
- -2 - <-1.5
- -1.5- <-1
- -1 - <-0.5
- -0.5 - < 0
- 0 - < 0.5
- 0.5 - < 1
- 1 - < 1.5
- 1.5 - < 2
- ≥ 2
- Data not available

0 200 400 600 800 km

Note: This map shows the Standardised Precipitation Evapotranspiration Index (SPEI) used to estimate drought conditions affecting Europe in spring-summer (March-August 2018. Colours are associated with values of the SPEI.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Source: JRC

Cereals

Cereal harvest in the EU sharply lower due to widespread drought conditions in central and northern Member States

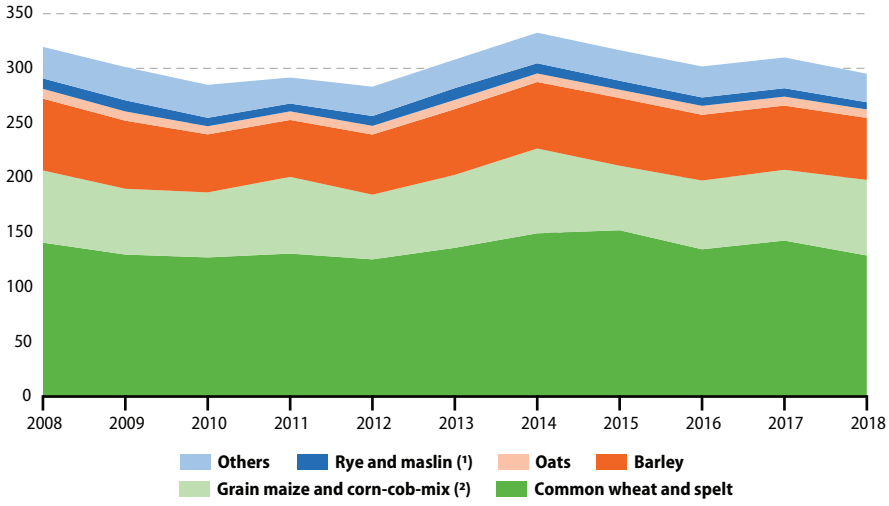
The harvested production of cereals (including rice) in the EU was 295.1 million tonnes in 2018, about 11.3 % of global production. This was 14.9 million tonnes less than in 2017, representing a sharp fall of -4.8 %. This decline reflects the drought conditions that prevailed in many areas of central and northern Europe, the cultivated areas of cereals being broadly unchanged (-0.3 %). To put this in some further context, the EU's harvested production of cereals in 2018 was 37.5 million tonnes lower than the record harvest of 332.6 million tonnes in 2014 (see Figure 3.1.1).

France harvested 62.6 million tonnes of cereals in 2018, a little more than one fifth (21.2 %) of the EU's total production. Germany harvested 38.0 million tonnes (12.9 % of the EU total), Romania a further 31.5 million tonnes of cereals (10.7 % of the EU total) and Poland harvested 26.8 million tonnes (9.1 % of the EU total).

The drought in central and northern Europe led to lower production levels in many Member States. Among the main cereal producing Member States, production of cereals as a whole was lower in France (-8.7 %), Germany (-16.7 %) and Poland (-16.1 %), although the sharpest rates of decline were in the Baltic and Scandinavian Member States (for the most part between -20 % and -30 %, but with an even greater decline of -45.3 % in Sweden).

In contrast, production in southern Europe was boosted by the wetter than average spring and summer. Among the bigger cereal producing countries, production was considerably higher in Romania (+16.3 %) and Spain (+47.0 %).

Figure 3.1.1: Production of main cereals, EU-28, 2008–2018
(million tonnes)

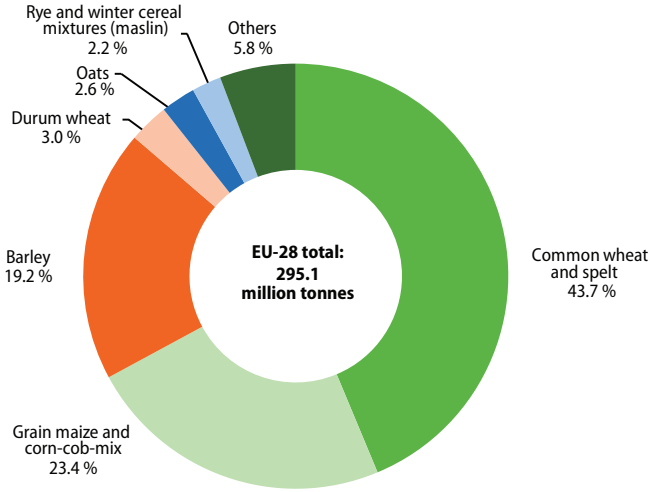


Note: 'Rye and maslin' includes mixture of rye with other winter sown cereals. 'Others' includes rice, triticale and sorghum.

(1) Includes estimate for Italy 2013.
(2) Includes estimates for Denmark 2008-2009 and Sweden 2008.

Source: Eurostat (online data code: apro_cpnh1)

Figure 3.1.2: Share of main cereals, EU-28, 2018
(% of EU-28 total cereals production)



Note: 'Total cereals' includes cereals for the production of grain (including seed). 'Others' includes rice, spring cereal mixtures, triticale, sorghum and buckwheat, millet, canary seed, etc.)

Source: Eurostat (online data code: apro_cpnh1)

Lower harvests for most cereals, with the exception of grain maize

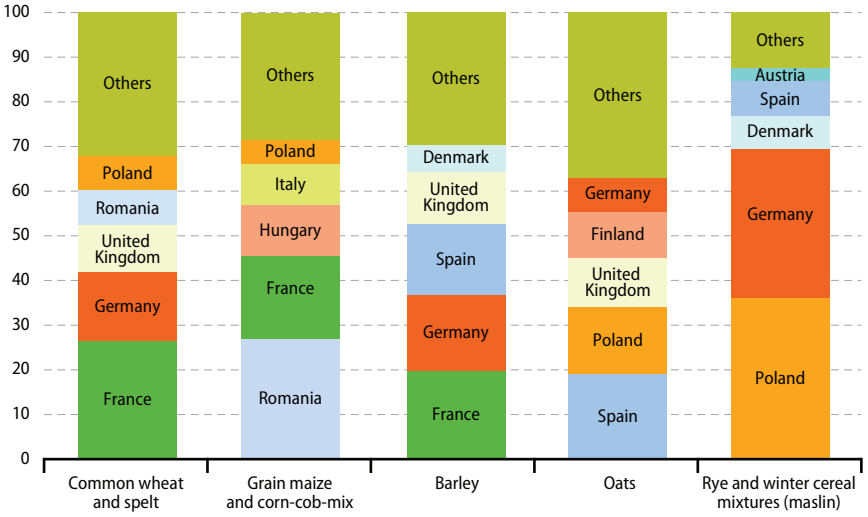
The EU harvested 129.0 million tonnes of common wheat and spelt in 2018, representing 43.7 % of all cereal grains harvested (see Figure 3.1.2). This was 13.6 million tonnes less than in 2017, a decline of -9.5 %. The main reason for this decline was the drought in central and northern Europe, although the cultivated area of common wheat and spelt was also slightly lower (-1.6 %) than in 2017. In contrast, the harvested production of grain maize and corn-cob-mix (CCM) in the EU was 4.4 million tonnes higher in 2018 at 69.1 million tonnes, with much of that increase coming from much higher production levels in Romania (+30.3 %) and Hungary (+18.4 %).

The EU's harvested production of barley in 2018 was -3.5 % lower than in 2017 at 56.6 million tonnes, despite a 2.0 % rise in cultivated area. The impact of the drought was reflected in lower harvested production levels in many Member States including France (-7.6 %), Germany (-11.7 %) and the United Kingdom (-9.2 %). These lower levels were only partly countered by the impact of more favourable weather conditions on the Iberian Peninsula, with harvested production of barley in Spain rebounding strongly from a low in 2017 (+57.8 %).

It was a similar scenario for oats, the production of which across the EU was -4.9 % lower in 2018 than in 2017. Production levels were down in a number of key producer countries like Poland (-20.4 %), Finland (-19.3 %), France (-20.3 %) and Sweden (-46.3 %) but substantially higher in Spain (+76.3 %).

The EU's harvested production of rye and maslin in 2018 was sharply lower (-13.9 %), the total cultivated area of 2.1 million hectares being unchanged. Germany and Poland together account for two thirds of the EU's production of rye and maslin and each recorded declines of nearly one fifth in harvested production levels.

Figure 3.1.3: Production of cereals by main producing EU Member States, 2018
(% of EU-28 total cereals production)

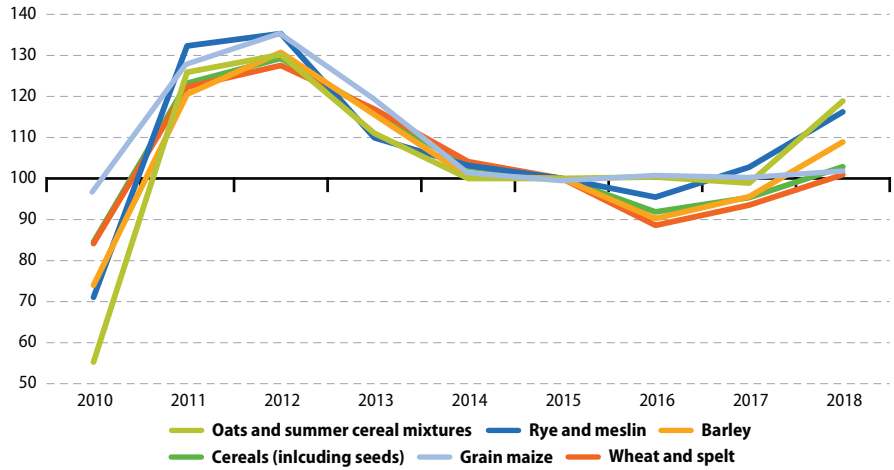


Source: Eurostat (online data code: apro_cpnh1)

Centre – Val de Loire and Picardie most important regions for wheat production, Castilla y Léon for barley

At more a detailed level, the EU regions with the largest production of wheat in 2018 were the two French regions of Centre – Val de Loire (3.4 % of the EU total) and Picardie (3.3 %). Other regions with considerable wheat production included the Spanish region of Castilla y Léon (2.8 % of the EU total), the German regions of Bayern (2.7 %) and Niedersachsen (2.0 %), the French regions of Champagne-Ardenne (2.4 %) and Nord-Pas-de-Calais (2.0 %), as well as the Romanian region of Sud – Muntenia (2.2 %) and the Lithuanian region Vidurio ir vakaru Lietuvos regionas (Central and West Lithuania) (2.1 %). The Spanish regions of Castilla y Léon and Castilla-la Mancha were the EU regions with the highest barley production in 2018 (5.3 % and 4.3 % respectively of the EU total). The German region of Bayern (Bavaria), renowned for its beer production, was another (3.4 %) along with the French regions of Centre - Val de Loire (3.3 %) and Champagne-Ardenne (3.3 %).

Figure 3.1.4: Deflated price indices for cereals, EU-28, 2010–2018
(2015=100)



Note: Two series of indices 2010 to 2014 (base 2010=100) and 2015 to 2018 (base 2015=100) have been connected, but their full comparability cannot be ensured due to possible changes in the panel and in the weighting system.

Source: Eurostat (online data code: apri_pi15_outa and apri_pi10_outa)

Prices for all cereals higher in 2018 but were still down markedly on recent 2012 peak

The average price of cereals in the EU for 2018 rose by +7.9 % in real terms, in part driven by the supply-side issues caused by the widespread drought. Prices for all the categories of cereal were higher; there were sharp increases for wheat (an average +7.9 % in real terms), for rye and meslin (+13.1 %), barley (+14.0 %) and oats (+20.2 %) and a small rise for grain maize (+1.6 %).

However, for all types of cereal, real terms prices remained between about 10-25 % lower than the recent peak price levels of 2012 (see Figure 3.1.4). The downward pressure on cereal prices in the intervening years was a result of a series of successive global record harvests.

Potatoes and sugar beet

Two main root crops are grown in the EU; these are sugar beet, grown on 1.7 million hectares across the EU in 2018, and potatoes, also grown on 1.7 million hectares. Other root crops like fodder beet, fodder kale, rutabaga, fodder carrot, turnips are specialist crops grown on a combined total of only an estimated 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 cane ([11]).

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.

([11]) European Commission's Directorate- General of Agriculture and Rural Development: http://ec.europa.eu/agriculture/sugar/index_en.htm

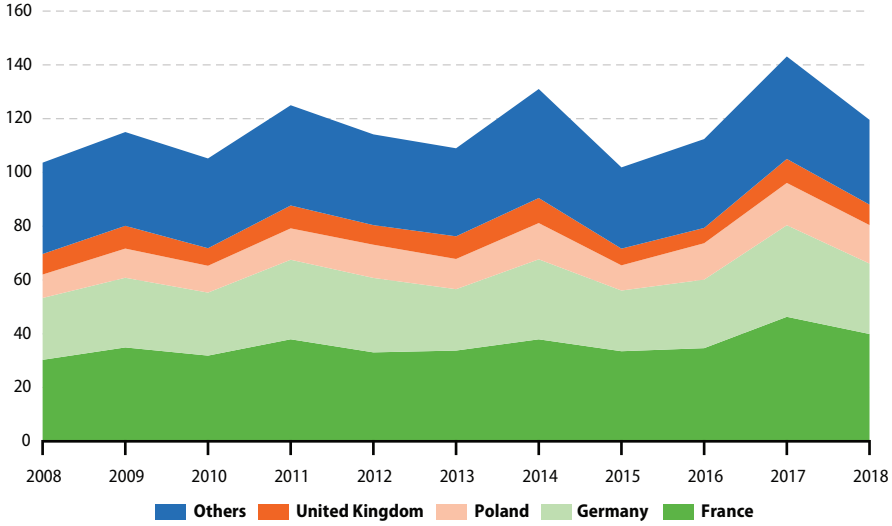
Sugar beet production down sharply from post-quota high in 2017. Potato production also down sharply

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. In 2017, EU farmers responded by sowing more sugar beet (the cultivated area being 17.2 % higher than in 2016). One year on, the area sown was slightly lower (-1.2 %). Droughts conditions in 2018, however, reduced yields considerably and the harvested production of sugar beet for the EU-28 fell sharply (-16.5 %).

In 2018, the EU produced 119.6 million tonnes of sugar beet (see Figure 3.1.5), a year-on-year fall of 23.6 million tonnes. More than one half of the EU's sugar beet production in 2018 came from France (33.4 %) and Germany (21.9 %), where production levels also fell sharply (-13.8 % and -23.1 % respectively). This was due to much lower yields with an unchanged cultivated area of sugar beet in France (-0.1 %) and even a small rise (+1.8 %) in area cultivated in Germany. With other key producer Member States in drought affected areas, there were also lower harvested production levels in the Poland (-9.1 %), the United Kingdom (-14.6 %), the Netherlands (-18.3 %) and Belgium (-12.6 %).

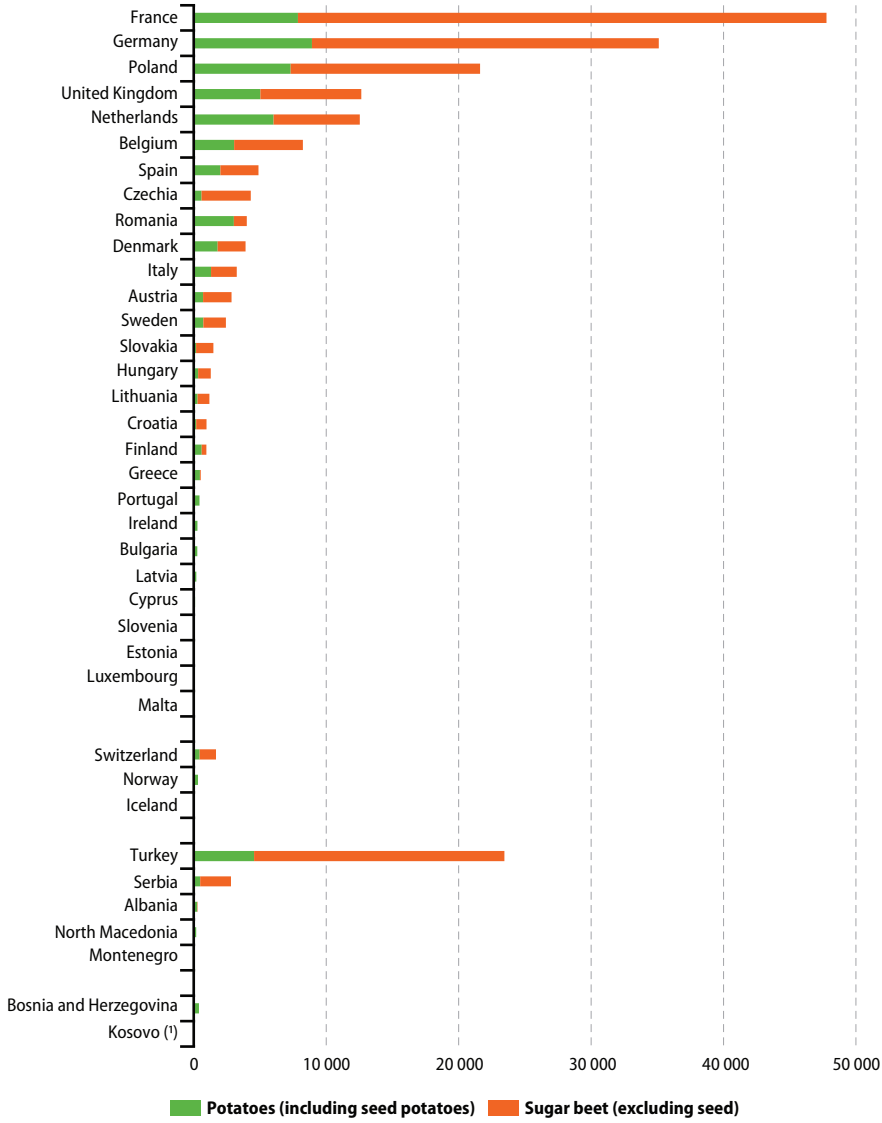
The EU produced 51.8 million tonnes of potatoes in 2018, which was 10.2 million tonnes less than in 2017 (a decrease of -16.4 %). All of the main potato producing Member States had lower harvests as they were in drought affected areas: the 8.9 million tonnes produced by Germany in 2018 represented a year-on-year decrease of -23.9 %; the 7.9 million tonnes in France, a decline of -8.0 %; the 7.3 million tonnes produced in Poland a fall of -18.4 %; the 6.0 million tonnes in the Netherlands a decline of -18.5 %; and there were also much lower harvested production levels in countries like the United Kingdom (-19.1 %) and Belgium (-31.0 %).

Figure 3.1.5: Production of sugar beet by main producing EU Member States, 2008–2018
(million tonnes)



Source: Eurostat (online data code: apro_cpnh1)

Figure 3.1.6: Production of potatoes and sugar beet, 2018
(thousand tonnes)



(1) 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.

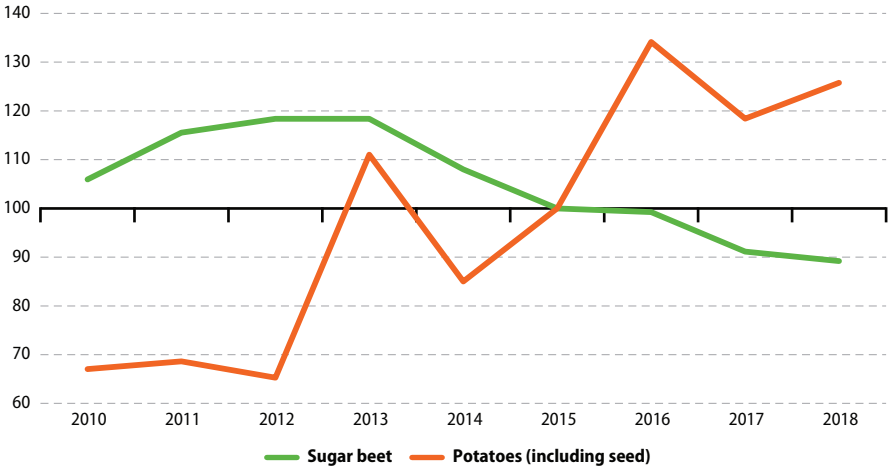
Source: Eurostat (online data code: apro_cpnh1)

Lower real-terms price for sugar beet, despite much lower harvested production, but higher for potatoes

Despite the strong declines in harvested production volumes, there were differing price movements for sugar beet and potatoes; the price of sugar beet continued to decline (a provisional -2.2 % in real terms on average), whereas the upward swing in the average price of potatoes continued (+6.2 % in real terms).

The price decline for sugar beet continued the downward path noted since 2013 (see Figure 3.1.7), as the market anticipated the end of production quotas and alignment with the global market. Within the recent upward trend in potato prices, there are sharp fluctuations that closely reflect annual fluctuations in harvested production levels.

Figure 3.1.7: Deflated price indices for potatoes and sugar beet, EU-28, 2010–2018
(2015=100)



Note: Two series of indices 2010 to 2014 (base 2010=100) and 2015 to 2018 (base 2015=100) have been connected, but their full comparability cannot be ensured due to possible changes in the panel and in the weighting system.

Source: Eurostat (online data code: apri_pi15_outa and apri_pi10_outa)

Oilseeds

Sharp fall in rape and turnip rape production in 2018 drives overall decline in oilseeds production

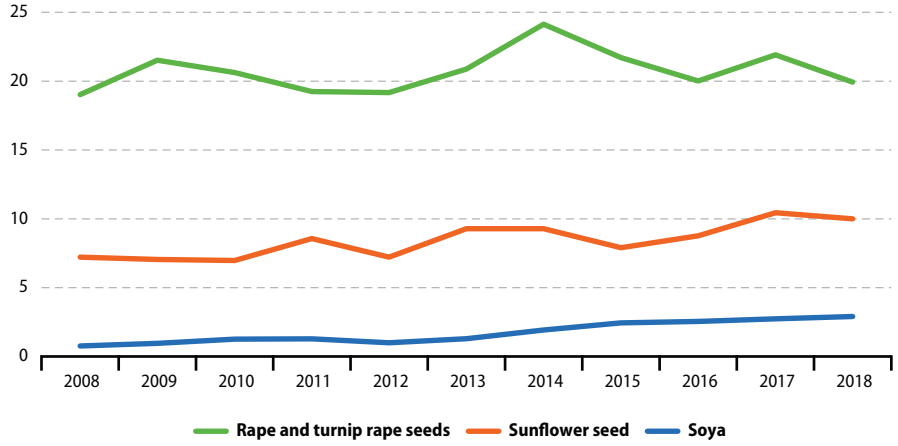
The EU cultivates three types of oilseed crop; the main two are rape and turnip rape, and sunflower but soya is increasingly grown. The EU produced 32.8 million tonnes of oilseeds as a whole in 2018, which was 2.3 million tonnes less than in 2017, a decline of -6.4 % (see Figure 3.1.8).

The harvested production of rape and turnip rape seeds in the EU was 19.9 million tonnes in 2018, a similar quantity to that harvested in 2016 but some 2 million tonnes less than in 2017. The production of sunflower seeds across the EU in 2018 was 10.0 million tonnes, which was only slightly down on the record 10.4 million tonnes harvested in 2017. The lower level of sunflower production in large part reflected a smaller area cultivated, which was about 0.3 million hectares less (or -6.6 %) than in 2017. In contrast to the other two types of oilseeds, the production of soya in the EU continued to climb; the harvest production of soya was 2.9 million tonnes in 2018, up from 2.7 million tonnes in 2017 and from the 0.8 million tonnes harvested in 2008.

Real terms prices for oilseed crops all fell sharply in 2018

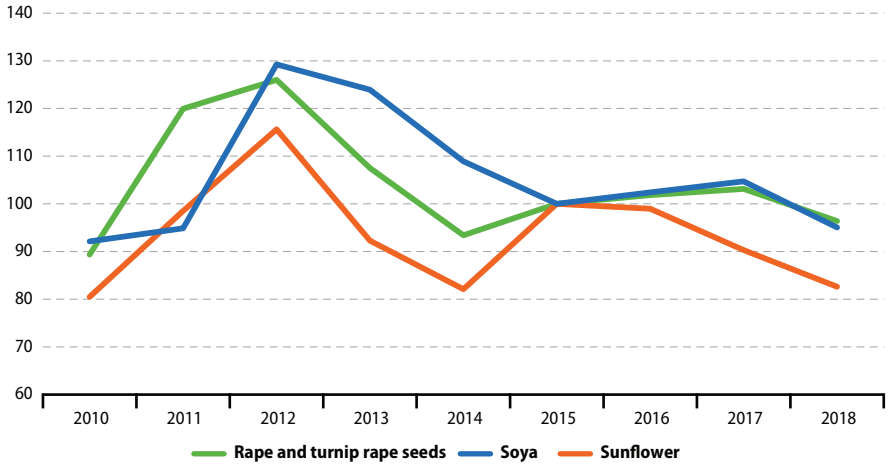
The real terms price of each of the three different oilseeds categories fell sharply in 2018, renewing the downward trend from the peak of 2012 (see Figure 3.1.9). The average real terms price of rape and turnip rape in the EU was -6.6 % lower in 2018 than in 2017, that of sunflower seeds was -8.5 % lower and that of soya was -9.2 % lower than in 2017, bring the cumulative declines from the peak in 2012 to about one quarter for each.

Figure 3.1.8: Production of rape and turnip rape seed, sunflower seeds and soya, EU-28, 2008–2018
(million tonnes)



Source: Eurostat (online data code: apro_cpnh1)

Figure 3.1.9: Deflated price indices for oil seeds, EU-28, 2010–2018
(2015=100)



Note: Two series of indices 2010 to 2014 (base 2010=100) and 2015 to 2018 (base 2015=100) have been connected, but their full comparability cannot be ensured due to possible changes in the panel and in the weighting system.

Source: Eurostat (online data code: apri_pi15_outa and apri_pi10_outa)

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 37.4 million tonnes of fruit in 2018

Total fruit production (excluding grapes and strawberries, olives, berries and nuts) in the EU was an estimated 37.4 million tonnes in 2018, of which citrus fruit production accounted for an estimated 11.1 million tonnes. Total fruit production across the EU was about 4.5 million tonnes higher in 2018 than in 2017, which was driven by the higher production of apples. An estimated 0.7 million tonnes of berries and 1.1 million tonnes of nuts were also produced in 2018.

Spain and Italy remained the main EU producers of fruit; Spain accounted for a little under 30 % of total EU fruit production and Italy a little over one fifth. Nevertheless, for particular fruit other Member States were key producers.

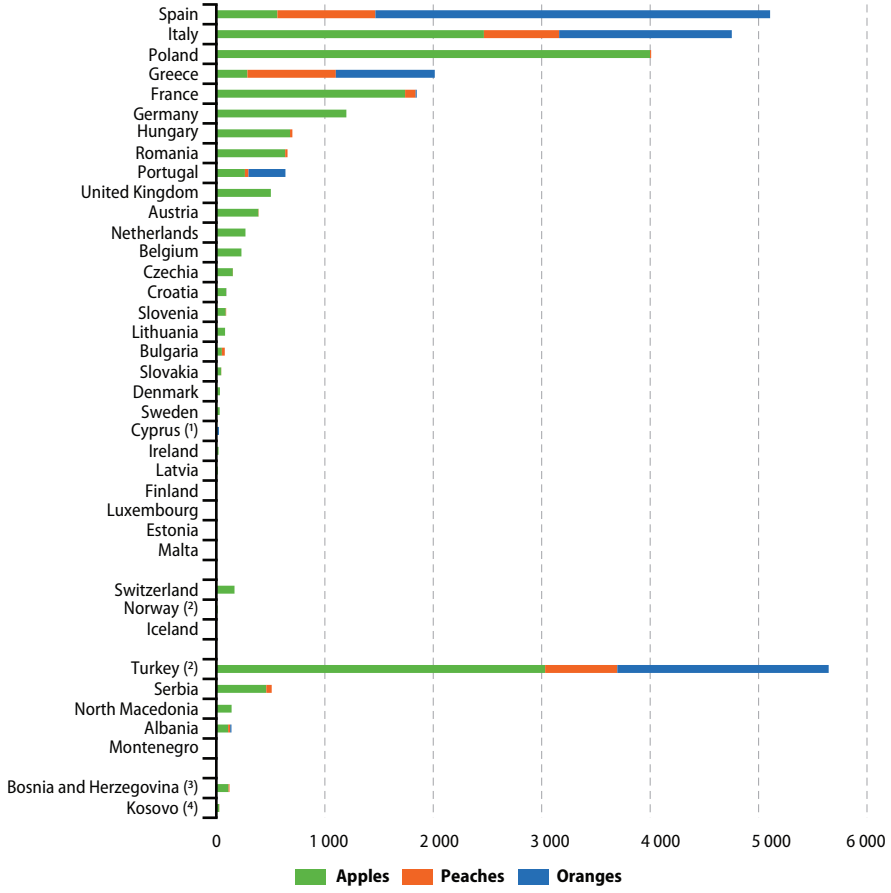
Over one quarter of EU apple production in Poland. Over one half of all EU oranges from Spain

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 13.8 million tonnes of apples in 2018, 6.5 million tonnes of oranges and 2.6 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. Over one

quarter (28.9 %) of the EU's apple production came from Poland in 2018, the other main producing Member States being Italy (17.8 %) and France (12.6 %). In contrast, orange production and peach production are much more restricted by climatic conditions (see Figure 3.1.10); over onehalf of the EU's 2018 orange production came from Spain (55.8 %), with most of the remainder coming from Italy (24.4 %) and Greece (14.0 %). Similarly, a little over 90 % of all peach production also came from Spain (34.2 %), Greece (30.9 %) and Italy (26.3 %).

Figure 3.1.10: Production of fruit by type of fruit, 2018
(thousand tonnes)



(1) Provisional.
(2) 2017 data.
(3) Estimated data for apples and peaches.
(4) 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_cpnh1)

Vegetables

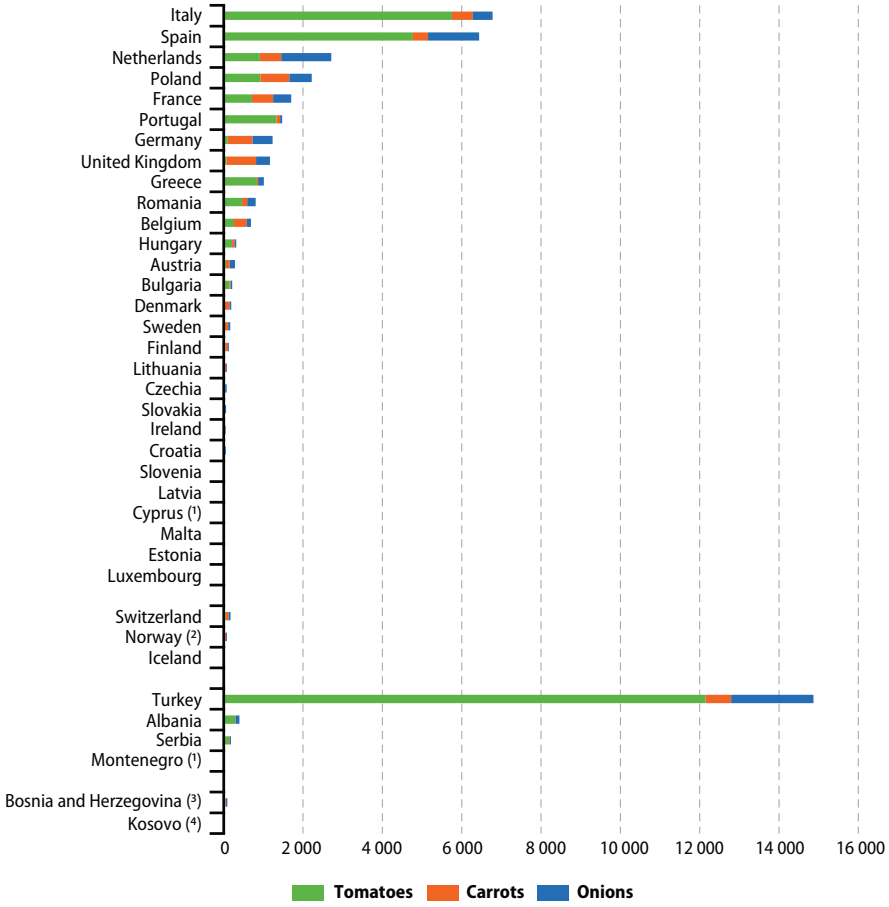
Spain and Italy produced just under two thirds of the EU's tomatoes in 2018, with the Spain and the Netherlands producing a little over two fifths of onions

The EU's harvested production of fresh vegetables (including melons) was an estimated 62.3 million tonnes in 2018, about 2.7 million tonnes less than that in 2017. Within the group of fresh vegetables, the harvested production of tomatoes was 16.7 million tonnes, of onions was an estimated 5.9 million tonnes and of carrots an estimated 5.3 million tonnes.

Italy produced 5.8 million tonnes of tomatoes in 2018 and Spain a further 4.8 million tonnes, the two Member States together accounting for a little under two thirds (62.9 %) of the EU total. Harvested production levels in Italy for 2018 were about 0.2 million tonnes more (or +3.2 % higher) than in 2017, in contrast to Spain where production was down 0.4 million tonnes (or -7.6 %). The harvested production of tomatoes in Portugal was also down markedly in 2018 (-23.9 %, or 0.4 million tonnes) although this was almost entirely due to a reduced area of production.

The main carrot producing Member States include the United Kingdom and Poland, both with a harvested production of 0.7 million tonnes in 2018 (a combined 27.8 % of the EU total), Germany (11.8 %) the Netherlands (10.1 %) and France (10.1 %). Spain and the Netherlands are the EU's main onion producing Member States, together accounting for 43.2 % of EU-28 output in 2018.

Figure 3.1.11: Production of vegetables, by type of vegetable, 2018
(thousand tonnes)



(1) Provisional.
(2) 2017 data.
(3) Estimate.
(4) 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_cpnh1)

Grapes

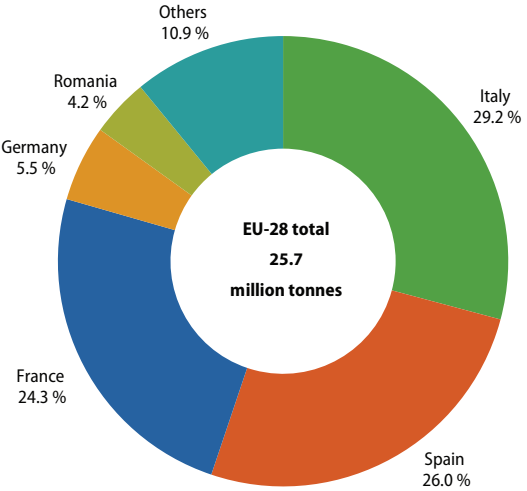
The EU is big player on the world's wine market; between 2014 and 2018 it accounted for 65 % of global production, 60 % of consumption and 70 % of exports, with 45 % of the wine-growing areas in the world ([12]).

Harvested production in the main grape-producing countries was up sharply in 2018

The total production of grapes in the EU was an estimated 25.7 million tonnes in 2018, one fifth higher (20.3 %) than the harvested production of 21.3 million tonnes recorded in 2017. There were markedly higher 2018 grape harvests in Italy (+16.2 %), Spain (+30.4 %), France (+25.3 %), Germany (+38.4 %) and Romania (+5.3 %) as well as a number of smaller grape-producing Member States.

([12]) For further information, see the overview of the wine market from the European Commission's Directorate- General of Agriculture and Rural Development.

Figure 3.1.12: Production of grapes for wine, 2018
(% of EU-28 total harvested production)



Source: Eurostat (online data code: apro_cpnh1)

Olives

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, steps are being taken as a precautionary measure against the spread of the Xylella fastidiosa bacterium ([13]) which arrived in Italy in 2013.

Spain was by far the largest producer of olives for olive oil in the EU in 2018

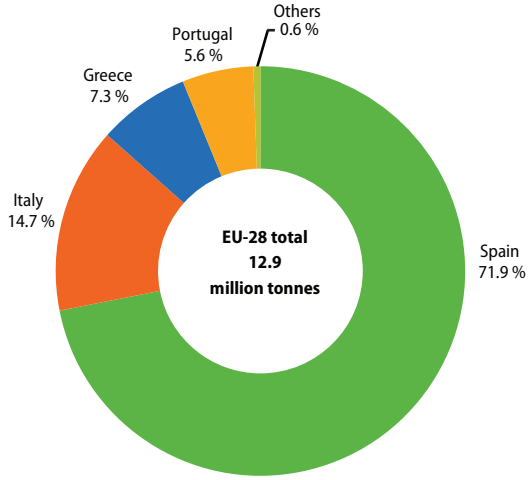
Olives often follow a two-year cycle, with a large crop followed by a smaller one. Sometimes the weather can make these cycles more pronounced. Individual countries can have cycles that run counter to one another.

([13]) For further information see the plant health and biosecurity products pages of the European Commission: https://ec.europa.eu/food/plant/plant_health_biosecurity/legislation/emergency_measures/xylella-fastidiosa/latest-developments_en

The total production of olives for olive oil in the EU was 12.9 million tonnes in 2018. This was 2.6 million tonnes more than the production level in 2017, and is almost entirely accounted for by the rise in the harvested production in Spain which accounts for a little over 70 % of all EU production. The production of olives for olive oil in Spain was 9.3 million tonnes in 2018, some 3.2 million tonnes higher than in 2017.

The spread of disease and adverse weather affected the crop in Italy, with production in 2018 down one quarter (-25.6 %) to 1.9 million tonnes. Most of the rest of the EU's production of olives for olive oil comes from Portugal and Greece (see Figure 3.1.13). The biennial production cycle in Portugal is particularly pronounced; there was a notable fall (-15.5 %) in production to 0.7 million tonnes in 2018 from the relative high in 2017. In contrast, there was a rebound (+26.2%) in the harvested production in Greece to 0.9 million tonnes, bucking the pronounced downward trend noted since a harvest of 1.8 million tonnes was produced in 2012.

Figure 3.1.13: Production of olives for olive oil, 2018
(% of EU-28 total harvested production)



Source: Eurostat (online data code: apro_cpnh1)

3.2 Livestock and meat

Statistics on livestock and meat production (based on the slaughter of animals fit for human consumption) give some indication of supply-side developments and adjustments, which are important for monitoring the Common Agricultural Policy (CAP).

One of the objectives of the first CAP was to secure the availability of food supplies for the people of the then European Economic Community. Today's CAP has evolved, requiring more agricultural market transparency for all actors and EU citizens. Statistics for livestock and meat, as with other agricultural products, help provide feedback on market signals.

In order to limit uncertainty, EU institutions in charge of market support interpret the market signals using livestock numbers for their forecasts. The number of breeders (for dairy or meat production) as well as animal stocks being grown and fattened, contribute to preparing measures that ensure a more stable — or at least more secure — market, which aims to benefit both EU consumers and farmers.

The European Commission has been active in harmonising animal health measures and systems of disease surveillance, diagnosis and control; it has also developed a legal framework for trade in live animals and animal products. Ensuring the high quality of food is one of the various challenges to be met in order to secure this food supply.

Livestock population

The livestock population at any given moment describes the production system through the stocks of animals being farmed. The duration of a production cycle indicates how long is needed so that animals are ready to slaughter for meat, whilst others are being reared, or to give birth and in the case of cows, some sheep and goats can be milked.

The typical life-span of each of these groups in the cycle varies. For example, veal calves will typically be slaughtered within eight months, beef cattle within the first two and a half years and dairy cows within five years.

Detailed figures on the age, sex, category and type of animals in production cycles are collected at a regional and national level. This is done through livestock surveys that are either carried out once or twice a year.

In this publication only aggregated data for national livestock herds are analysed. More detailed figures for analysis are available in the free, online database.

Majority of livestock populations concentrated in just a few countries

The EU has a substantial population of livestock: there were 148 million pigs, 87 million bovine animals and 98 million sheep and goats in 2018.

The majority of livestock are kept in just a few Member States (see Figure 3.2.1).

Three quarters of the EU's 2018 bovine population was kept in France (21.2 %), Germany (13.7 %), the United Kingdom (11.0 %), Ireland (7.5 %), Spain (7.4 %), Italy (7.2 %) and Poland (7.1 %).

Almost three quarters of the EU's pigs were found in Spain (20.8 %), Germany (17.8 %), France (9.3 %), Denmark (8.5 %), the Netherlands (8.1 %) and Poland (7.4 %).

Two thirds of sheep were in the United Kingdom (26.3 %), Spain (18.5 %), Romania (11.9 %) and Greece (9.9 %). Two thirds of the EU's goats were found in Greece, Spain and Romania.

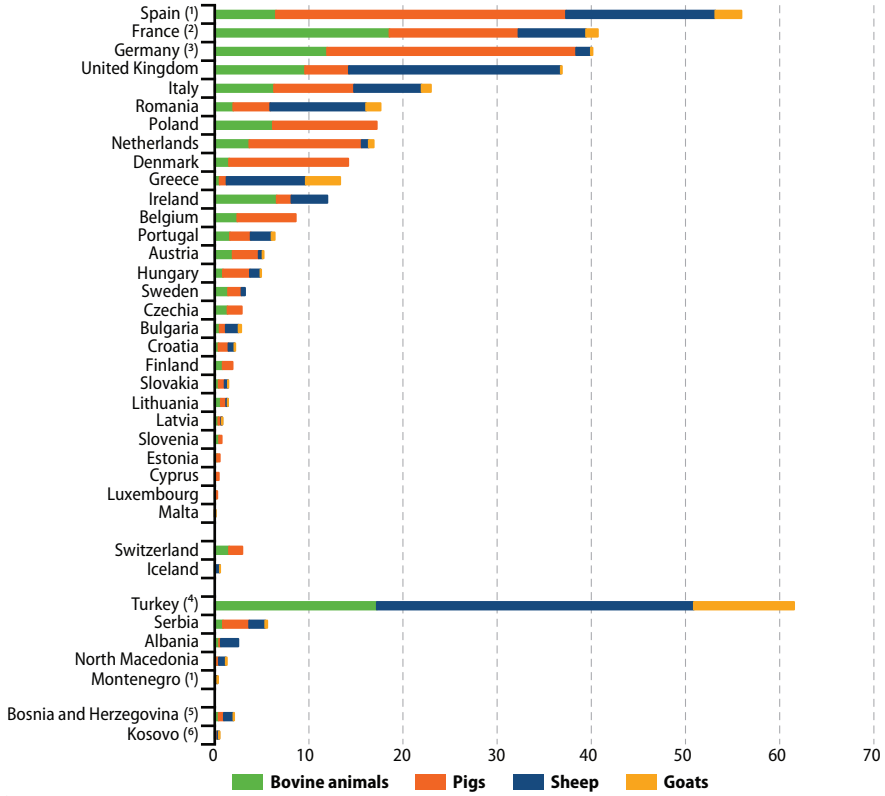
Reduced EU livestock populations in 2018

Populations of the four main categories of livestock in the EU were all lower in 2018 than in 2017 (see Figure 3.2.2). This reflected various

phenomena. In the case of pigs, the decline was from a relative high in 2017, in part explained by the strong rebound in exports of live pigs. In the case of bovine animals, sheep and goats, the declines accelerated after the peaks in 2016 (phasing out of milk quotas in 2015).

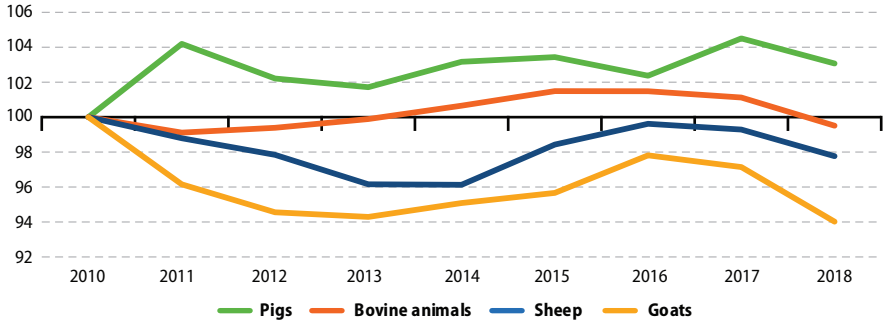
Some of these changes have been within an overall downward trend. For example, the population of sheep has been in steep decline since at least the turn of the Millenium, with there being 8.5 million less head in Spain and 5 million less head of sheep in the United Kingdom in 2018 than in 2000. Improvements in production efficiency have also played a part in this trend.

Figure 3.2.1: Livestock population, 2018
(million heads)



(1) Provisional.
(2) Bovine animals, provisional.
(3) Goats, estimate.
(4) Sheep and goats, 2017.
(5) Pigs, sheep and goats,estimate.
(6) 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 codes: apro_mt_lscatl, apro_mt_lspig, apro_mt_lssheep, apro_mt_lsgoat)

Figure 3.2.2: Livestock population, EU-28, 2010-2018
(index 2010=100 based on heads)



Note: The EU-28 aggregates for goats correspond to the sum of the available data from Member States, which covers all the Member States with a significant number of goats.

Source: Eurostat (online data codes: apro_mt_lscatl, apro_mt_lspig, apro_mt_lssheep, apro_mt_lsgoat)

Meat production

Veal and beef

Beef is the meat from the slaughter of bovine animals of at least one year old. Certain cattle breeds are reared specifically for their beef, although beef can also come from dairy cattle. In this publication veal is considered as the meat from bovine animals younger than one year (usually male calves and young cattle). Male calves from dairy cows are of no use for producing milk and their growth potential for producing beef meat is not optimal.

Further rise in production of bovine meat in 2018...

The EU produced 7.9 million tonnes of bovine meat (beef and veal) in 2018, a moderate increase (+1.7 %) on the level in 2017. This latest increase should be seen in the context of the end of milk quotas on 31 March 2015, as it has led directly to increased cow slaughter, with some of the smallest farms abandoning dairy production. Before then, there had been a downward trend in bovine meat production through to 2013.

Just under one half of the EU's beef (see Figure 3.2.4) was produced in three Member States; these were France (18.3 %), Germany (15.2 %) and the United Kingdom (13.2 %).

Likewise, two thirds of veal meat was produced in three Member States; these were the Netherlands (25.7 %), Spain (24.8 %) and France (18.9 %).

…with moderate decline in real-terms price

For the EU as a whole, the real-terms price for cattle was -1.7 % lower on average in 2018 than in 2017. This continued the decline from the relative highs of 2012 and 2013 (see Figure 3.2.5).

Pig meat

Pig meat production in 2018 reached a new relative peak…

The EU produced 23.8 million tonnes of pig meat in 2018, an increase of +2.1 % on the level in 2017. This represented a new relative peak, pushing production 1.5 million tonnes above the level in 2010.

The two main pig meat producing Member States are Germany (5.3 million tonnes in 2018) and Spain (4.5 million tonnes). Whereas production in Germany was lower in 2018 (down -2.1 %), it rose sharply in Spain (+5.4 %).

There was also a sharp rise in production in the Netherlands (+5.5 %).

…but the real-terms price of pigs tumbled

The average real-terms price of pigs in the EU tumbled -13.0 % in 2018, back down to levels similar to the previous lows of 2010 and 2015.

Sheep and goat meat

Unchanged sheep and goat meat production…

The EU produced an estimated 0.8 million tonnes of sheep and goat meat in 2018, which was the same level as in 2017. Sheep meat accounted for the vast majority (about 90 %) of the combined total output.

The main sheep meat producing Member States are the United Kingdom (about 40 % of the total) and Spain (about 16 % of the total). The decline in the production of sheep meat in the United Kingdom (-3.6 %) was offset by rising production elsewhere, particularly in Spain (+3.9 %).

The main goat meat producing Member States are Greece and Spain, where production levels in 2018 were unchanged.

…but a moderate rise in real terms price

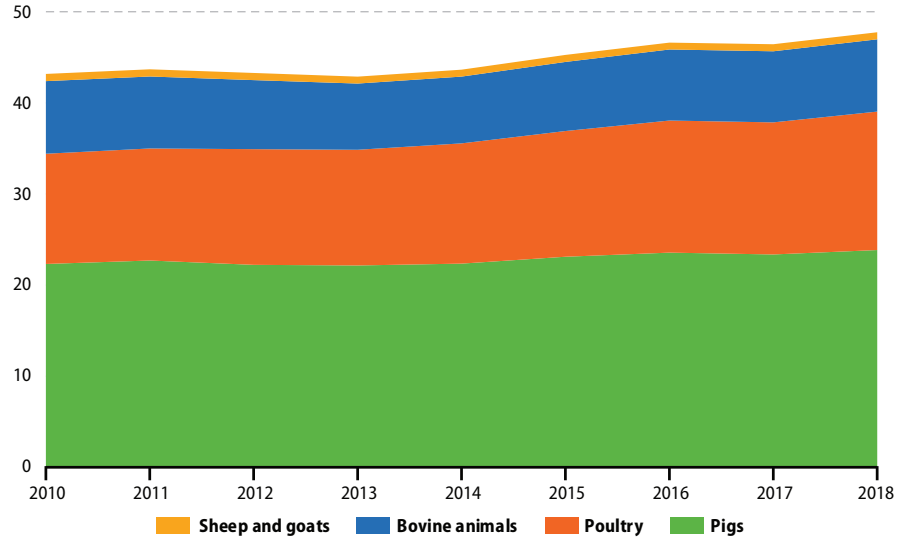
The average real-terms price for sheep and goats across the EU in 2018 was +2.1% higher than in 2017. This development returned prices to the average recorded for the period between 2010 and 2018.

Poultry

Poultry production in EU at new high in 2018…

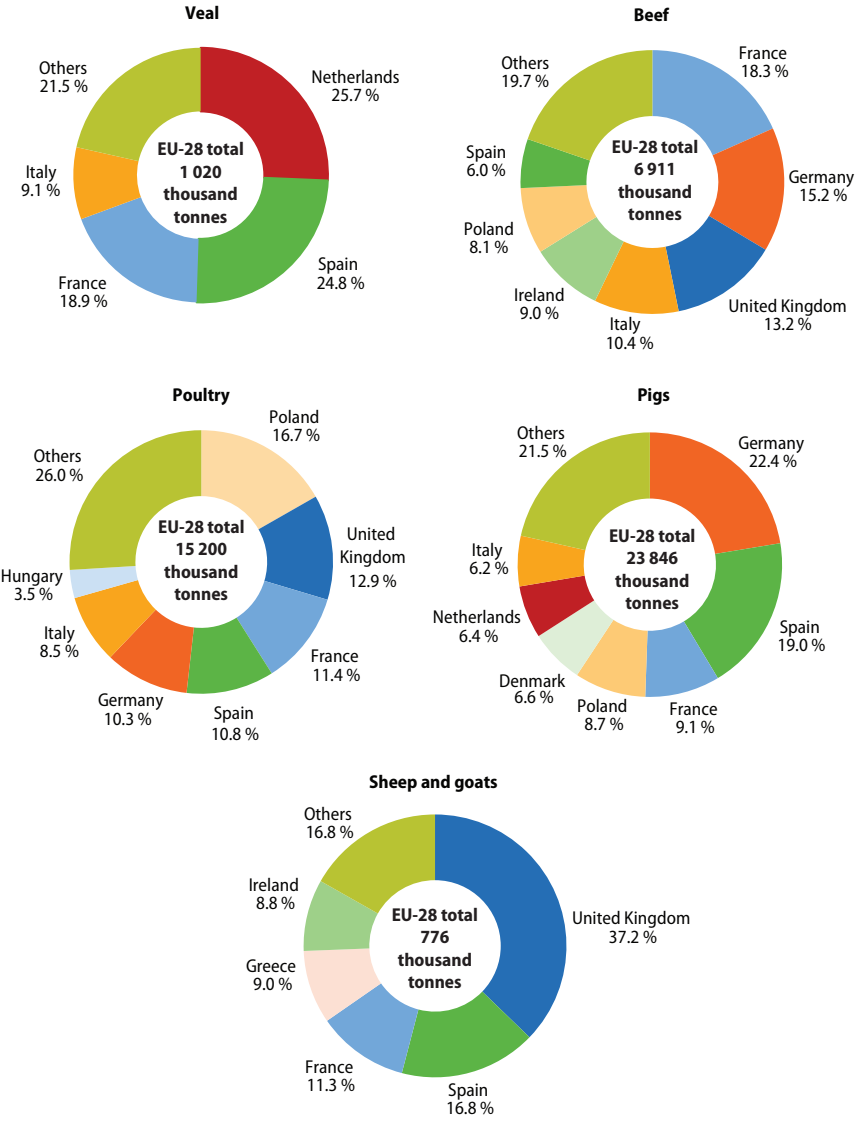
The EU produced an estimated 15.2 million tonnes of poultry meat in 2018, a new high. Against the backdrop of an upward trend, this represented a sharp increase (+4.8 %) in production. It pushed EU-level production 3.2 million tonnes above the level in 2010, a cumulative rise of about 25 %.

Figure 3.2.3: Production of meat, by species, EU-28, 2010-2018
(million tonnes of carcass weight)



Source: Eurostat (online data codes: apro_mt_lscatl, apro_mt_lspig, apro_mt_lssheep, apro_mt_lsgoat)

Figure 3.2.4: Production of meat, 2018
(% share of EU-28 total, based on tonnes of carcass weight)



Note: EU-28 estimates for veal, poultry meat, sheep and goats meat.

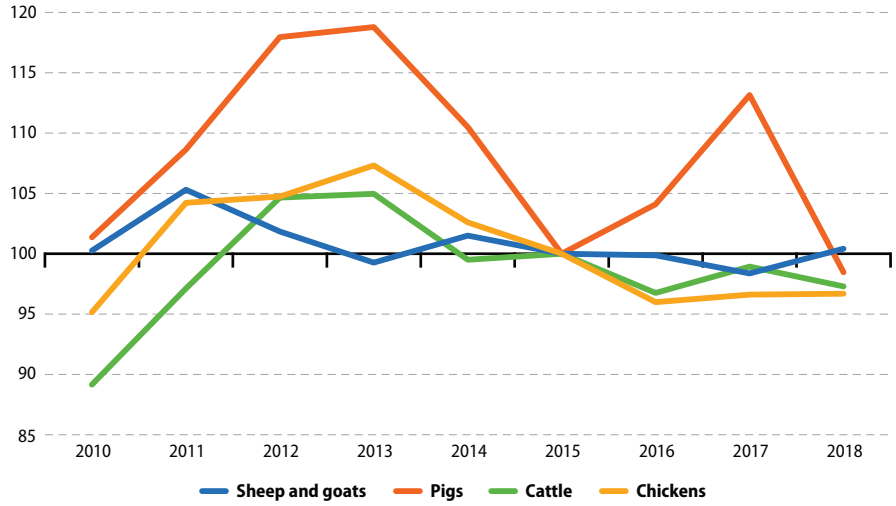
Source: Eurostat (online data code: apro_mt_pann)

The main poultry meat producers in the EU include Poland (2.5 million tonnes), the United Kingdom (2.0 million tonnes), France (1.7 million tonnes), Spain (1.6 million tonnes), Germany (1.6 million tonnes) and Italy (1.3 million tonnes). Production levels in 2018 rose even more sharply than the EU average in all of these key producer Member States, with the exception of Italy (down -3.2 %). It rose particularly sharply in Poland (+8.6 %) and the United Kingdom (+8.1 %).

…but average real-terms price for chickens remained stable

When feed prices were particularly low in the period between 2013 and 2016, and with poultry meat production continuing to expand, the real-terms price for chickens decreased. However, this downward price pressure eased in 2017 and did so again in 2018 (+0.1 % in real terms).

Figure 3.2.5: Deflated price indices for selected animal outputs, EU-28, 2010–2018
(index 2015=100)



Note: Two series of indices 2010 to 2014 (base 2010=100) and 2015 to 2018 (base 2015=100) have been connected, but their full comparability cannot be ensured due to possible changes in the panel and in the weighting system.

Source: Eurostat (online data code: apri_pi15_outa and apri_pi10_outa)

3.3 Milk

Until 1st April 2015, the EU dairy sector had operated within a framework of milk quotas that were introduced in 1984 to address the problem of surplus production. The abolition of quotas resulted in a restructuring and further modernisation of the sector, including a re-orientation towards the most productive herds.

There is no 'typical' European dairy cow breed, though the Friesian-Holstein is the most prevalent.

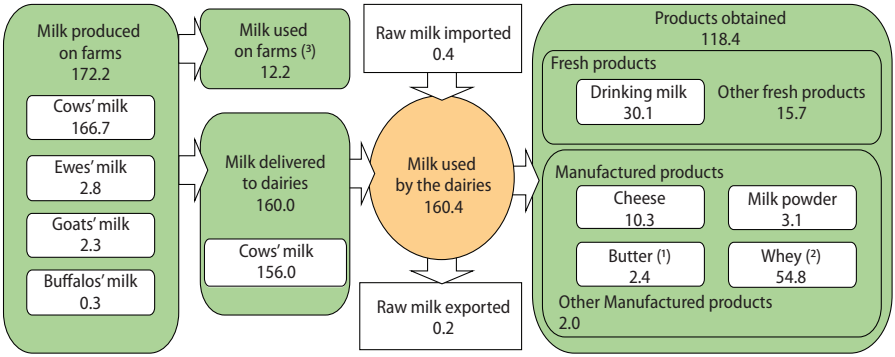
Milk production

Another rise in raw milk production to 172.2 million tonnes in 2018, 97% of which was cows' milk

The production of raw milk on the EU's farms was a provisional 172.2 million tonnes in 2018, which represents a year-on-year increase of 1.6 million tonnes. This higher level of production can be put in some context by looking at production levels in the run-up to the abolition of quotas; EU farms produced 164.8 million tonnes of raw milk in 2014 and 159.0 million tonnes in 2013.

The vast majority of raw milk is delivered to dairies; only 12.2 million tonnes was used on farms, either being consumed by the farmer and his family, sold directly to consumers, used as feed or processed directly. Of the 160.0 million tonnes of milk delivered to dairies, 156.0 million tonnes was cows' milk, the rest being a combination of ewes' milk, goats' milk and buffalos' milk (see Figure 3.3.1).

Figure 3.3.1: Production and use of milk, EU-28, 2018
(million tonnes)



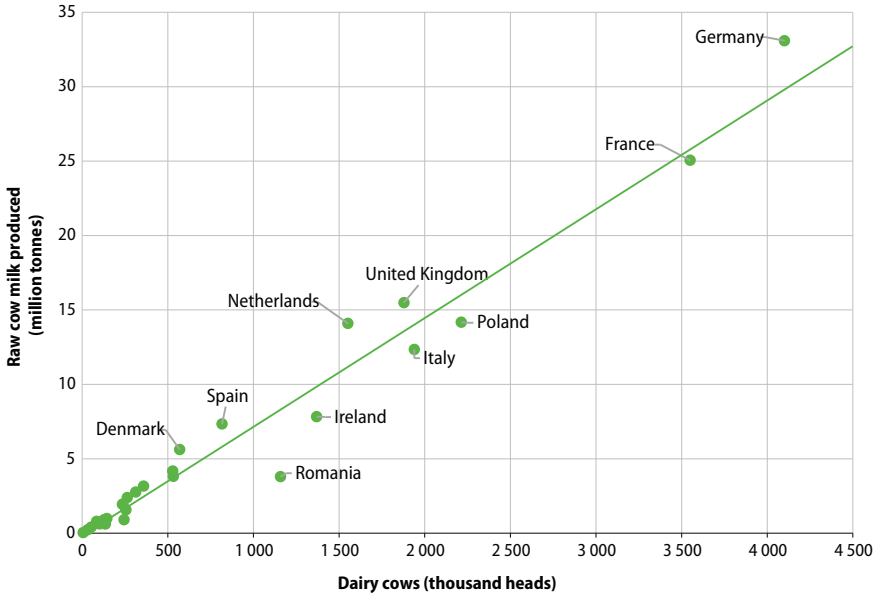
(1) Includes other yellow fat dairy products; expressed in butter equivalent.
(2) In liquid whey equivalent.
(3) In whole milk equivalent.

Source: Eurostat (online data codes: apro_mk_pobta and apro_mk_farm)

The average apparent milk yield per cow across the EU still rising

There are a number of factors that can affect individual milk yields but the apparent milk yield results from the structure of the dairy herd. In the EU, the apparent milk yield continued to rise in 2018, reaching 7 280 kg per dairy cow. As a national average, apparent yields were highest in Denmark (9 851 kg per cow), Estonia (9 353 kg per cow) and Finland (9 095 kg per cow) and lowest in Romania (3 279 kg per cow) and Bulgaria (3 678 kg per cow). Among the main cows' milk producing Member States, apparent yields were well-above the EU average in Germany, the United Kingdom and the Netherlands (see Figure 3.3.2) but below average in France, Poland and Italy.

Figure 3.3.2: Dairy cows, milk production and the apparent milk yield, 2018
(dairy cow numbers; raw cows' milk tonnes)



Note: The line represents the average apparent milk yield across the EU, which was 7 280 kg per cow. Countries above the line had a higher apparent yield per cow than the EU average, and vice-versa.

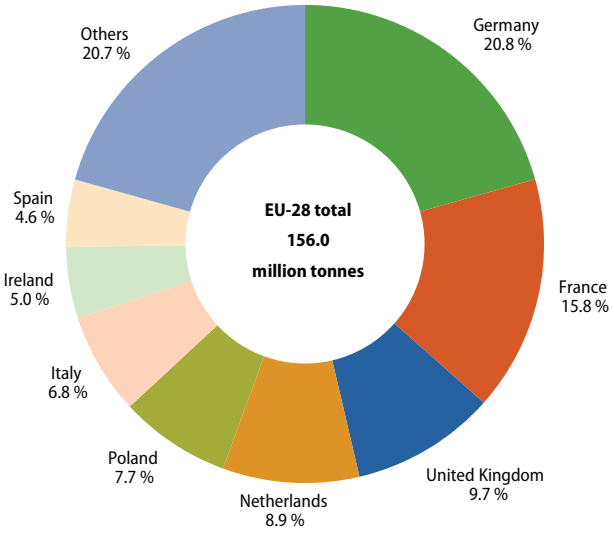
Source: Eurostat (online data codes: apro_mk_farm and apro_mt_lscatl)

One fifth of the EU's cows' milk was collected by dairies in Germany

Traditionally, hygiene rules have required that the collection of milk has been frequent and moved over a short distance between farms and dairies. The development of cooling tanks on farms and of bigger milk tankers have made this sanitary issue less critical. Meanwhile, the removal of national milk quotas has contributed to cross-border milk flows between farms and between dairies. Nevertheless, this is relatively limited.

In 2018, one-fifth of the EU's cows' milk was produced by farms in Germany and a similar proportion (20.8 %) was processed by German dairies. Indeed, just as Germany, France, the United Kingdom, the Netherlands, Poland and Italy together provided a little over two-thirds (68.5 %) of the raw cows' milk produced, so they also accounted for a little over two-thirds (69.7 %) of cows' milk collected by dairies (see Figure 3.3.3).

Figure 3.3.3: Collection of cows' milk by dairies, 2018
(% share of EU-28 total, tonnes)

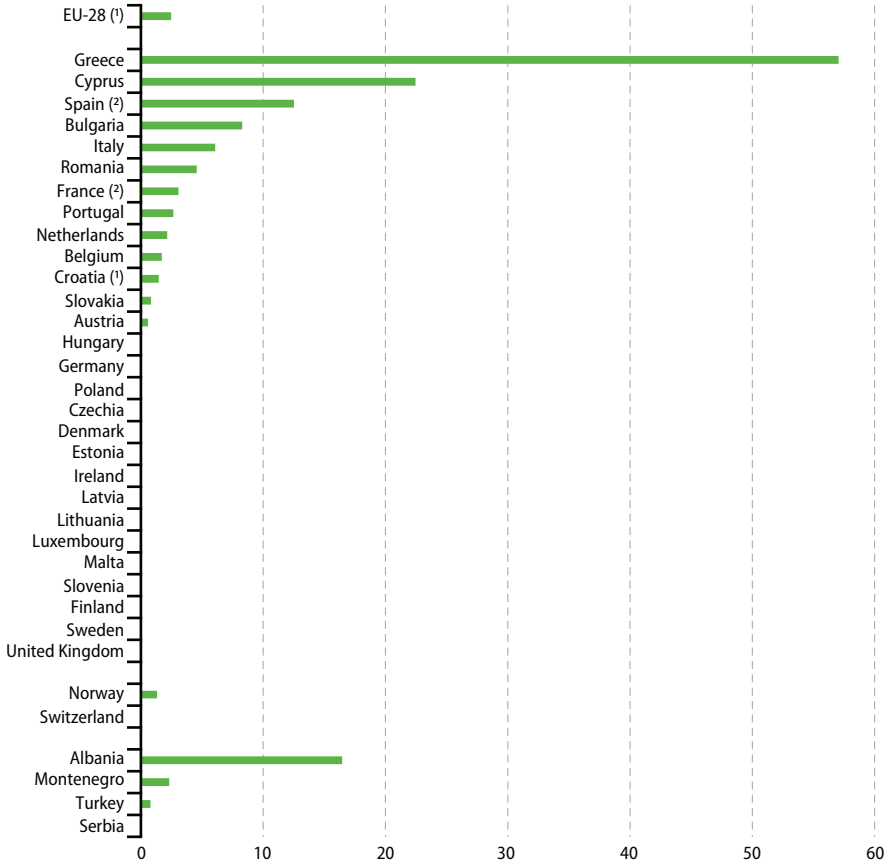


Source: Eurostat (online data code: apro_mk_pobta)

Whilst cows' milk is the major milk used by EU dairies, in several Member States other milks contribute significantly to milk production. In 2018, Spain produced 1.0 million tonnes of milk from ewes and goats, with Greece and France both producing 0.8 million tonnes. Italy also produced 0.7 million tonnes of milk from animals other than cows and this included almost all of the EU's production of milk from buffaloes.

Whereas the collection of these other milks was dwarfed by that from cows in most countries, there were some exceptions. A majority (57.1 %) of the milk delivered to dairies in Greece came from ewes and goats in 2018 (see Figure 3.3.4). A little over one fifth (22.5 %) of milk delivered to dairies in Cyprus also came from ewes and goats.

Figure 3.3.4: Milk from animals other than cows, 2018
(% share of total milk delivered to dairies)



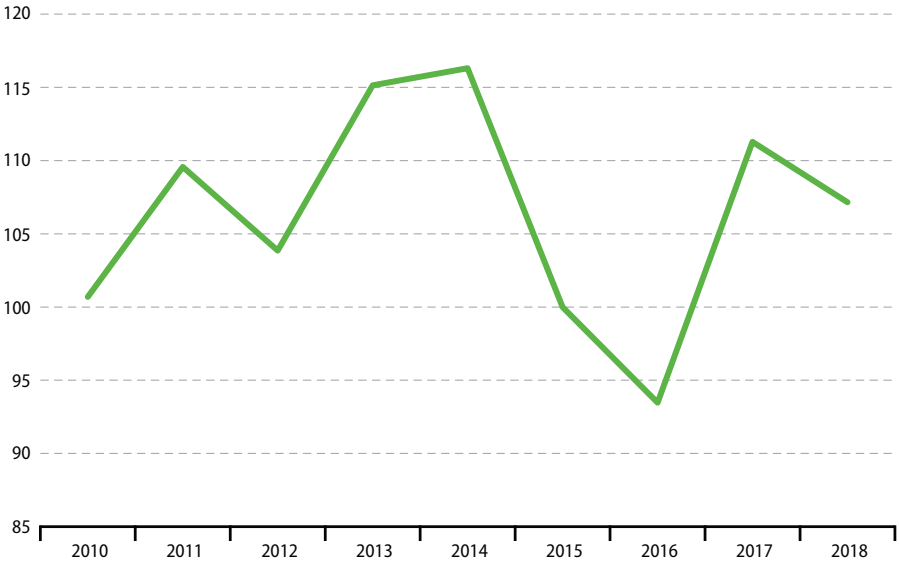
(1) Estimate.
(2) Provisional.
Source: Eurostat (online data code: apro_mk_pobta)

Moderate decline in real-terms price of milk after strong rebound in 2017

The average real-terms price of milk has fluctuated sharply in recent years (see Figure 3.3.5); strong declines in 2015 and 2016 were followed by a strong rebound in 2017. Relative to these changes, the decline in the real-terms price in 2018 was moderate (-3.7 % on average).

Among the principal milk-producing Member States, there were notably stronger than average declines in the real-terms price of milk in 2018 in Germany (-6.3 %), the Netherlands (-7.8 %) and Ireland (-6.6 %) but lower than average declines in France (-1.1 %), the United Kingdom (-0.4 %) and Italy (-1.8 %).

Figure 3.3.5: Deflated price indices for milk, EU-28, 2010-2018
(2015=100)



Note: Although there are some methodological issues with chaining indices with different base years, in this case 2010=100 for the period 2010 to 2014 and 2015=100 for the period 2015 to 2018, they give a clear overview of price trends.

Source: Eurostat (online data code: apri_pi15_outa and apri_pi10_outa)

Milk products

Two thirds of all EU's milk delivered to dairies used to make cheese and butter

The milk delivered to dairies is processed into a number of fresh and manufactured products. Dairy products are recorded in terms of their weight. It is thus difficult to compare the quantities of various products (for example, tonnes of fresh milk and of milk powder). The volume of whole or skimmed milk used in dairy processes provides more comparable figures ([14]).

In 2018, 156.8 million tonnes (98.9 %) of the whole milk available to the EU's dairy sector was processed. This was 0.2 million tonnes less than in 2017.

The production of 2.4 million tonnes of butter and so-called 'yellow products' in 2018 required 46.1 million tonnes of whole milk (see Table 3.3.1). The production of butter and yellow products also generated 43.0 million tonnes of skimmed milk. Together with the 15.4 million tonnes generated through the fabrication of cream, this skimmed milk was used for the processing of other dairy products.

([14]) These two dimensions (quantities of whole and skimmed milk used) reflect the material balance of the valuable milk components, especially fat (in whole milk only) and protein (in total milk used).

Indeed, 17.0 million tonnes of skimmed milk together with 59.1 million tonnes of whole milk were used to produce 10.3 million tonnes of cheese in 2018. Together, the production of cheese and butter used two-thirds (67.1 %) of all the whole milk available to dairies (see Figure 3.3.6).

The EU also produced 30.1 million tonnes of drinking milk, 12.6 million tonnes of which was from skimmed milk and a further 17.3 million tonnes of which was from whole milk. Drinking milk accounted for about one-tenth (11.0 %) of all the whole milk used by dairies in 2018.

A further 21.3 million tonnes of raw milk were dried into 3.0 million tonnes of dairy powders.

The United Kingdom produced 6.8 million tonnes of drinking milk in 2018, by far the largest quantity among Member States, accounting for a little over one fifth (22.5 %) of the EU total. Germany produced the most cheese among Member States (2.2 million tonnes, 21.8 % of the EU total), closely followed by France (a provisional 1.9 million tonnes, 18.5 % of the EU total), with Italy the next highest (1.3 million tonnes, 12.7 % of the EU total).

Table 3.3.1: Utilisation of milk and dairy products obtained, EU-28, 2018
(million tonnes)

	Utilisation of milk		Product obtained
	Skimmed milk	Whole milk	
Total	2.0	156.8	-
Sub-total of processes generating skimmed milk	-58.4	64.8	-
Butter and yellow products	-43.0	46.1	2.4
Cream	-15.4	18.7	2.7
Sub-total of processes consuming skimmed milk	60.4	92.0	
Drinking milk	12.6	17.3	30.1
Powder products	21.3	4.6	3.0
Concentrated milk	1.1	1.6	1.1
Acidified milk	1.4	6.8	8.2
Buttermilk	0.5	0.0	0.5
Cheese	17.0	59.1	10.3
Milk based drinks	1.0	0.6	1.8
Caseins	5.9	0.0	0.2
Other fresh products	-0.2	1.9	2.4

Source: Eurostat (online data codes: apro_mk_pobta and apro_mk_farm)

What is the milk in the EU used for?

Fabrication of:

Cheese	37.7 %
Butter	29.4 %
Cream	11.9 %
Drinking milk	11.0 %
Acidified milk	4.3 %
Powder products	2.9 %
Other products	2.7 %

Milk refers to whole milk is processed (98.1 % of the available milk). The remains (1.9 %) is non-processed milk, which is delivered to the national non-dairy industry (agri-food, feedstuff industries etc.), returned to farms or lost.

Data for 2018.

ec.europa.eu/**eurostat**

Data sources and availability

Crop 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.

Livestock and meat statistics

Livestock and meat statistics are collected by EU Member States under Regulation (EC) No 1165/2008, which covers bovine, pig, sheep and goat livestock; slaughtering statistics on bovine animals, pigs, sheep, goats and poultry; and production forecasts for beef, veal, pig meat, sheep meat and goat meat. Livestock surveys cover sufficient agricultural holdings to account for at least 95 % of the national livestock population, as determined by the last survey on the structure of agricultural holdings.

Bovine and pig livestock statistics are produced twice a year, with reference to a given day in May/ June and a given day in November/ December. Those EU Member States whose bovine animal populations are below 1.5 million head or whose pig populations are below 3.0 million head may produce these statistics only once a year, with reference to a given day in November/ December. The November/ December results are available for all EU Member States and are used in this article. Sheep livestock statistics are only produced once a year, with reference to a given day in November/December, by those EU Member States whose sheep populations are 500 000 head or above; the same criteria and thresholds apply for statistics on goat populations.

Milk and milk product statistics

Milk and milk product statistics are collected under Decision 1997/80/EC and implementing Directive 1996/16/EC. They cover farm production and the utilisation of milk, as well as the description (structure), collection and production activity of dairies. Due to the small number of dairy enterprises, national data are often subject to statistical confidentiality. Thus, providing EU totals in this context is a challenge and some of the information presented in the analysis is based on partial data for the Member States (which may exclude several countries). On the one hand, statistics from these few enterprises provide early estimates on trends. On the other, a complete overview of the dairy sector requires detailed information from farms and this means that the final figures on milk production are only available at an EU level about one year after the reference year. Dairy products are recorded in terms of weight. It is thus difficult to compare the various products (for example, fresh milk and milk powder). The volume of whole or skimmed milk used in the dairy processes provides more comparable figures.

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.

4 Performance of the agricultural sector

Introduction

The performance of the agricultural sector has traditionally been about how successful farming is in delivering primary agricultural products and services. However, it is increasingly taking on a green aspect, recognising the impact of agriculture on water, air and soil quality, land use diversity, ecologies, wildlife and climate change.

Assessing the performance of the agricultural sector matters for a number of reasons:

- farming is a cornerstone of the rural community, one on which a number of 'upstream' sectors (such as machinery, animal healthcare and input businesses) and 'downstream' sectors (such as food processing, packaging and transport businesses) depend;
- farming is about providing a stable supply of safe, quality food;
- farming has a key role to play in preserving landscapes and biodiversity;
- farming has a key role to play in climate change action, and;
- to support this, there is a need to ensure a fair income to farmers.

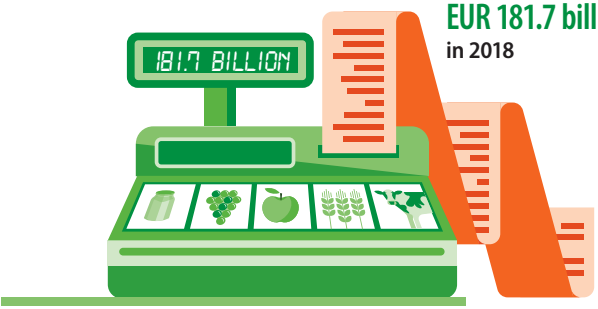
Economic impacts on farmers therefore not only influence future farming business decisions but also wider ecological and environmental business decisions and behaviour.

The performance of the agricultural sector as a whole can be conducted by bringing the information about the volume and price changes for agricultural goods and services under the umbrella of an accounting structure. To this end, the Economic Accounts for Agriculture (EAA) provide a set of comparable data that provide an insight into:

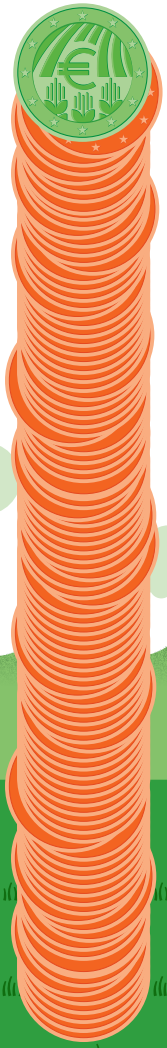
- the economic viability of agriculture;
- the income generated by farmers;
- the structure and composition of agricultural production and the inputs used in that production, and;
- the relationships between prices and quantities of both outputs and inputs.

Did you know ...

The EU's agricultural industry created (gross) value added of **EUR 181.7 billion** in 2018



Agriculture contributed **1.1 %** to the EU's GDP in 2018



Agricultural income per AWU for the EU-28, expressed as an index, slipped -4.6 % in 2018 but remained one-fifth (+19.7 %) higher than the level in 2010

4.1 Value of agricultural output

Agriculture is an activity that falls within the primary sector of the economy, which is concerned with the extraction or harvesting of products from the earth. In an accounting context, an industry is a branch of economic activity. The term 'agricultural industry' is used to describe the branch of agricultural production but it should not be understood as inferring that agriculture is industrialised or that it is about the processing of raw materials. Indeed, the food and beverages processing industry is analysed in Chapter 7.

In this Chapter, the term 'agricultural industry' is used only where precise accounting terms are required, with 'agricultural sector' being used elsewhere.

Agriculture contributed 1.1 % to the EU's GDP in 2018

Agricultural production in the EU by the millions of predominantly small farms adds up to being big business, even without considering its importance as the key building block for the downstream food and beverages processing industry. The agricultural sector contributed EUR 176.9 billion towards the EU's overall GDP in 2018. To put this in some context, the contribution of agriculture to the EU's economy was only slightly less than the GDP of Greece in 2018, the seventeenth largest economy among the Member States.

This contribution is the difference between the value of agricultural output and the value of various input costs built up in the production process, adjusted for taxes and subsidies on products. It is therefore interesting to look at the structure and composition of the value of this agricultural production and the various inputs used.

The agricultural industry created an estimated added value of EUR 181.7 billion in 2018

The gross value added by the EU's agricultural industry, which is the difference between the value of everything that the EU's primary agricultural sector produced in 2018 and the costs of the services and goods used in the production process, was an estimated EUR 181.7 billion in 2018. One way of looking at this is that for every 1 euro spent on the cost of goods and services used in the production process (known as intermediate consumption), the agricultural industry created added value of EUR 0.72. Whilst this relative value added was lower than the EUR 0.77 in 2017, it was still higher than all the other years since 2008.

The value of the output produced by the EU's agricultural industry was an estimated EUR 434.3 billion in 2018

The value of everything that the EU's agricultural industry produced in 2018 was an estimated EUR 434.3 billion; this includes the value of crops, of animals, of agricultural services as well as of some goods and services that were not strictly agricultural but which could not be separately measured.

About one half (51.8 %) of the value of the total output of the EU's agricultural industry in 2018 came from crops (EUR 224.9 billion), within which vegetables and horticultural plants and cereals were the most valuable (see Figure 4.1.1). A further two fifths (39.6 %) came from animals and animal products (EUR 172.0 billion), a majority coming from just milk and pigs. Agricultural services (EUR 20.8 billion) and inseparable non-agricultural activities (EUR 16.6 billion) contributed the rest (8.6 %).

Contributions from Member States varied significantly, reflecting differences in volumes produced, prices received as well as the mix of crops grown, animals reared, animal products collected and services offered. More than one half (55.0 %) of the total output value of the EU's agricultural industry came from the 'big four' of France (EUR 77.2 billion), Italy (EUR 56.9 billion), Germany (EUR 52.7 billion) and Spain (EUR 52.2 billion). About another one quarter (23.4 %) came from the combined

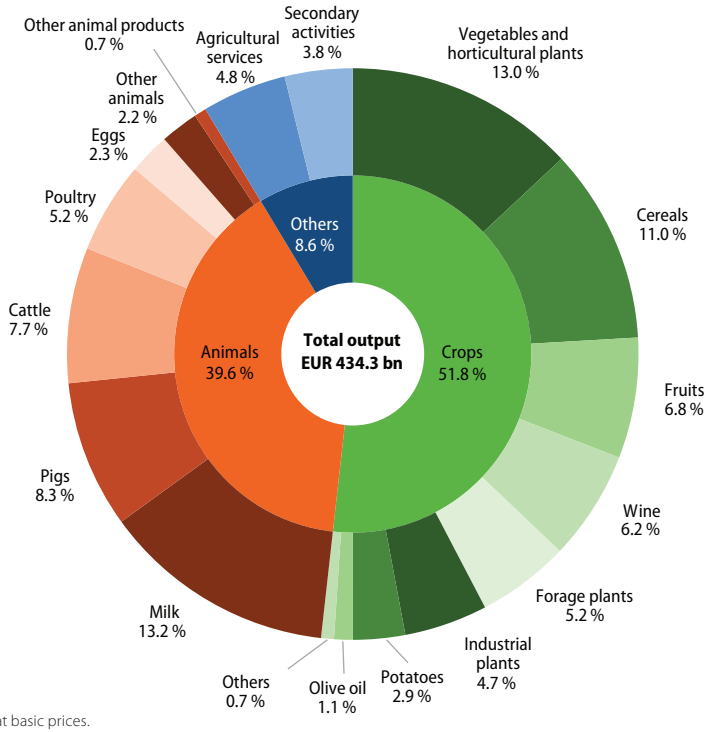
output of the United Kingdom (EUR 29.8 billion), the Netherlands (EUR 28.2 billion), Poland (EUR 25.0 billion) and Romania (EUR 18.6 billion). Three-quarters (78.4 %) of the total value of EU's agricultural industry in 2018 came from these eight Member States.

Intermediate consumption costs for the EU's agricultural industry were an estimated EUR 252.6 billion in 2018

Producing all this output incurred costs. Farmers had to make purchases of goods and services to be used as inputs in the production process; they bought things like seeds, fertilisers, animal feedingstuffs and fuel for their tractors as well as veterinary services, among other things. These input costs are termed 'intermediate consumption' in an accounting context. Intermediate consumption costs for the agricultural industry came to a total of EUR 252.6 billion for the EU as a whole in 2018.

Some costs are associated with the farming of animals; they required feed, which accounted for over one third (37.3 %) of total intermediate consumption costs, and veterinary services (a further 2.6 %). Likewise, some costs are associated with crop farming; farmers required seeds and plants (5.1 % of total costs), many used plant protection products, such as herbicides, insecticides and pesticides (4.9 %) and fertilisers and soil improvers (6.6 %). Other costs are common to all types of farm, independent of whether specialist or mixed-type.

Figure 4.1.1: Output of the agricultural industry, EU-28, 2018
(% of total output)



Note: values at basic prices.

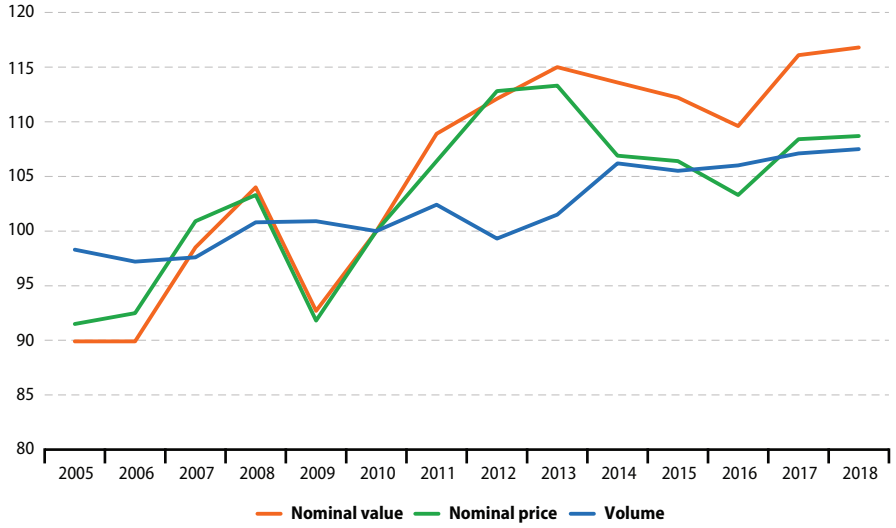
Source: Eurostat (online data code: aact_eaa01)

The value of the output produced by the EU's agricultural industry in 2018 upheld the 2017 peak

The estimated value of agricultural output in 2018 inched higher (a year-on-year rise of +0.6 % in nominal terms), maintaining the rebound recorded in 2017 (see Figure 4.1.2). This change in nominal value reflected slight rises in both the nominal price for agricultural goods and services as a whole (an estimated +0.3 %) as well as in the volume of output (also an estimated +0.3 %).

This further small rise in the value of the EU's agricultural industry was particularly driven by the developments in the values recorded in Romania (+8.0 %), France (+5.6 %), Italy (+3.0 %) and Spain (+3.0 %). It should be noted that the highest proportional increase was in Slovenia (+17.9 %). In contrast, there were declines in the values of the agricultural industries in a number of countries, including Denmark (-8.9 %), Sweden (-8.8 %), Germany (-6.3 %) and Poland (-2.4 %).

Figure 4.1.2: Indices of value, volume and price of output produced by the agricultural industry, EU-28, 2005–2018
(2010=100)



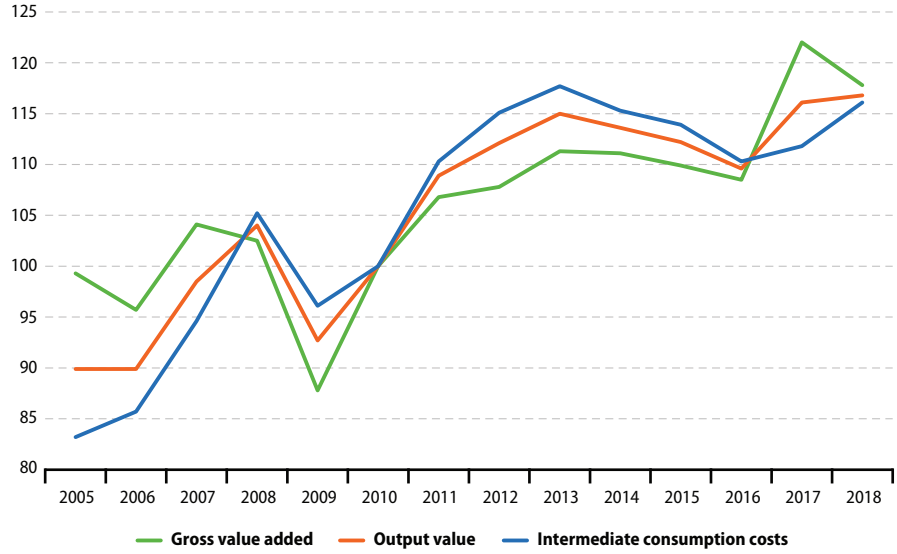
Note: values at basic prices.

Source: Eurostat (online data code: aact_eaa05)

The gross value added generated by the EU's agricultural industry fell back from its 2017 peak

Although the value of agricultural output in 2018 was slightly higher (+0.6 %) than in 2017, the cost of the intermediate goods and services used increased at a faster rate (an estimated +3.8 %), resulting in an estimated decline (-3.5 %) in the gross value added generated by the agricultural industry from its peak level in 2017.

Figure 4.1.3: Indices of the value of output, intermediate consumption costs and value added generated by the agricultural industry, EU-28, 2005–2018
(2010=100)



Note: values at basic prices.

Source: Eurostat (online data code: aact_eaa05)

4.2 Agricultural labour productivity

The performance of the agricultural industry can be measured in terms of net value added at factor cost, which is gross value added adjusted for the consumption of fixed capital, and subsidies and taxes on production. It is also known as factor income, as it is the remuneration available for all the factors of production.

Factor income in the EAA can be expressed per full-time labour equivalent. As such, it is considered a partial labour productivity measure; it is a measure of the net value added by the equivalent of each full-time worker in the agricultural industry. This indicator of performance is measured in real terms (adjusted for inflation) and expressed as an index. It should not be confused with total income of farming households or the income of a person working in agriculture.

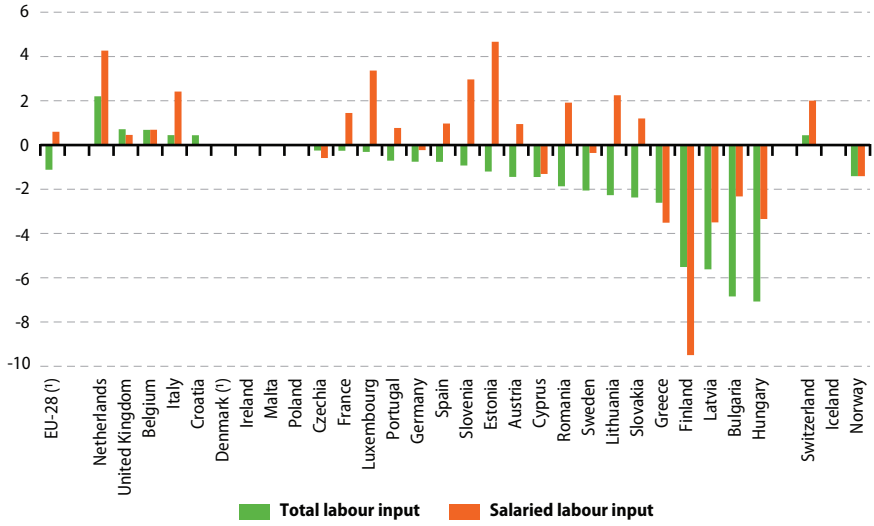
To understand the development of this agricultural income measure, it is first necessary to understand the development of the agricultural labour amongst which this remuneration is notionally shared. With so much part-time, seasonal and unsalaried labour input in agriculture, the amount of work actually carried out in farming activities is best described when using a unit called the Annual Work Unit (AWU). This unit expresses the volume of work done in full-time work equivalents.

Downward trend in the volume of agricultural labour in the EU continued in 2018

Agricultural labour input in the EU was the equivalent of an estimated 9.3 million full-time workers in 2018. These are the notional workers that are remunerated with agricultural income.

A majority of total agricultural labour input is non-salaried labour; it was the equivalent of an estimated 6.8 million full-time workers in 2018.

Figure 4.2.1: Change in agricultural labour input, 2018/2017
(% change)



(1) Estimated.

Source: Eurostat (online data code: aact_ali02)

Salaried labour was the equivalent of 2.5 million full-time workers in 2018. In many Member States, more salaried agricultural labour was used in 2018 than in 2017 (see Figure 4.2.1). This was often in contrast to the overall decline in the total amount of agricultural labour used, reflecting hiring requirements at seasonal peaks.

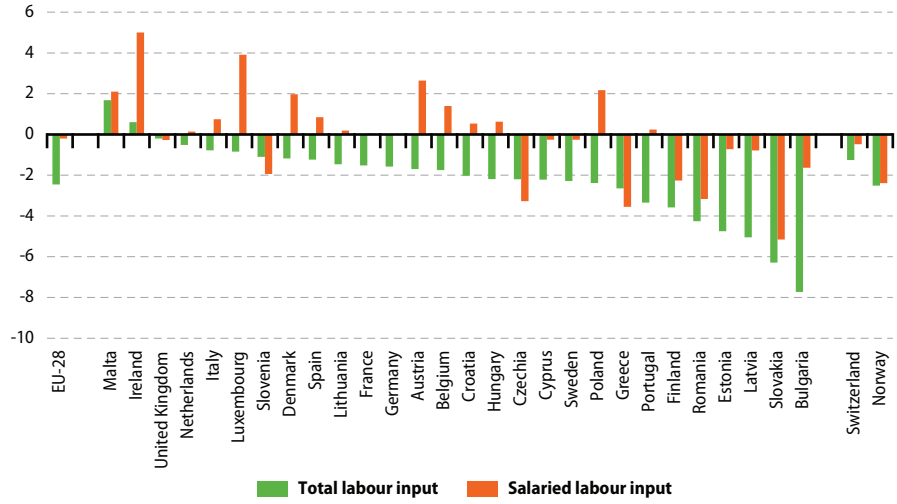
There has been a long-established downward trend in the number of people working in the EU's agricultural sector; during the period between 2005 and 2018, the average rate of decline in the volume of agricultural labour used across the EU as a whole was -2.5 % per year. Although the downward trend continued in 2018, the rate of decline (-1.1 %) was slower than the trend average.

Among Member States, there were considerable differences; compared to 2017, the volume of labour used in the Netherlands rose most sharply (+2.2 %) in 2018, with other increases recorded including the United Kingdom (+0.7 %) and Belgium (+0.7 %), which contrasted with further sharp declines in Finland (-5.5 %), Latvia (-5.6 %), Bulgaria (-6.9 %) and Hungary (-7.1 %).

Over the long-term, the volume of agricultural labour has been in steep and steady decline

The volume of total agricultural labour declined sharply in almost all Member States during the period between 2005 and 2018 (see Figure 4.2.2); the sharpest declines were in Bulgaria (an average -7.7 % per year), Slovakia (-6.3 % per year), and Latvia (-5.0 % per year). This contraction in the agricultural labour force reflected both push and pull factors; there have been great strides in mechanisation and efficiency on the one hand and, on the other, a wider choice of attractive job opportunities in other sectors of the economy. The main exceptions to this general trend were Malta (an increase of +1.0 % per year on average) and Ireland (+0.6 % per year on average).

Figure 4.2.2: Change in agricultural labour input, 2005–2018
(average annual growth rate, % change)



Source: Eurostat (online data code: aact_ali02)

The reduction in the work input from non-salaried labour was more pronounced than for salaried labour at the level of the EU as a whole (-3.1 % per year on average compared with -0.2 % per year). There were higher levels of salaried labour input in Ireland (+5.0 % per year on average), Luxembourg (+3.9 % per year on average), Austria (+2.6 % per year on average) and Poland (+2.2 % per year on average) among others, but sharp declines in Slovakia (-5.2 % per year on average), Greece (-3.6 % per year on average), Czechia (-3.3 % per year on average) and Romania (-3.2 % per year on average).

Agricultural income as defined by real factor income per AWU declined for the EU-28 in 2018 (-4.6 %)

Agricultural income, as defined by deflated (real) factor income per Annual Work Unit and expressed as an index (called Indicator A), for the EU as a whole was an estimated -4.6 % less in 2018 than it was in 2017. This reflected a slightly stronger rate of decline (-5.7 %) in factor income that was notionally shared amongst a smaller agricultural labour input (-1.1 %).

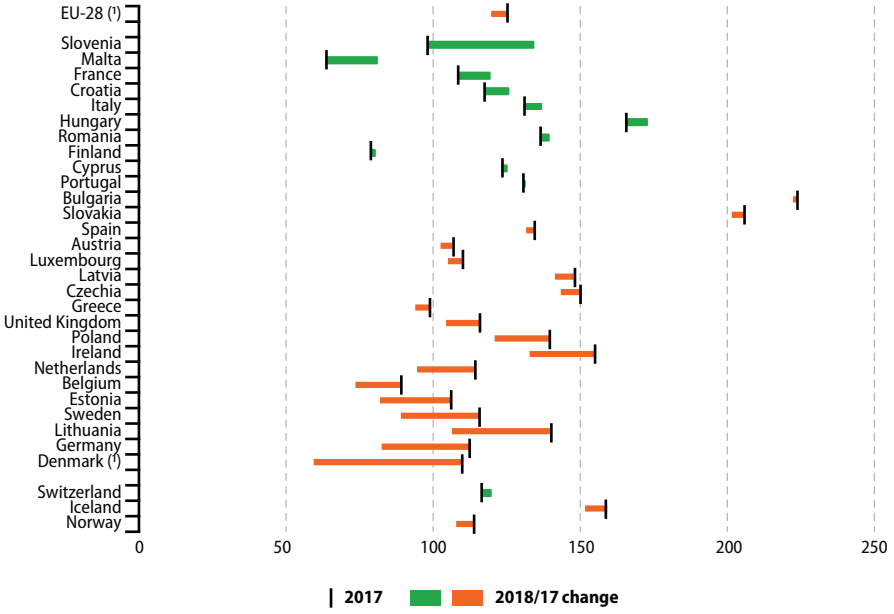
A majority of Member States recorded declines in this index of agricultural income in 2018 (see Figure 4.2.3) and almost all of these were sharp falls of over -4.0 %. The sharpest rates of decline were recorded in Denmark (an estimated -45.9 %), Germany (-26.9 %), Lithuania (-23.8 %), Sweden (-23.1 %), Estonia (-23.0 %), Belgium (-17.5 %) and the Netherlands (-17.0 %). In the case of Denmark, Sweden and Belgium these falls returned the average level of agricultural income back towards other lows in the period since 2005 or set new lows.

The more moderate decline in agricultural income per AWU at the level of the EU as a whole reflected higher agricultural incomes in two of the 'big four' agricultural producer-Member States; France recorded a sharp increase (+9.6 %), with a more moderate rises in Italy (+4.2 %). The sharpest rate of increase was recorded for Slovenia (+35.9 %), agricultural income reaching a new high after rebounding from falls in the previous two years.

The upward trend in the index of agricultural income for the EU-28 faltered in 2018

Agricultural income per AWU for the EU as a whole in 2018 fell back from the high recorded in 2017. This mirrored the development in factor income, with the shrink in agricultural labour input continuing. Nevertheless, it remained about one fifth higher (+19.7 %) than the level in 2010.

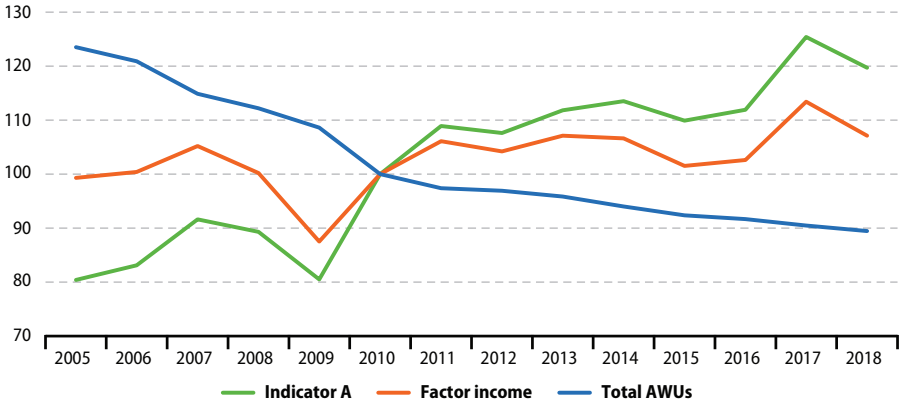
Figure 4.2.3: Agricultural income per annual work unit (Indicator A), 2017–2018
(2010=100)



(1) Estimate.

Source: Eurostat (online data code: aact_eaa06)

Figure 4.2.4: Agricultural income per annual work unit (indicator A) and key components, EU-28, 2005–2018
(2010=100)



Source: Eurostat (online data code: aact_eaa06; aact_eaa05; aact_ali02)

4.3 Resource performance of the agricultural sector

There is increasing interest in the efficiency with which resources are used ([15]). In order to become more sustainable, an economy would need to decouple economic growth from resource use and its environmental impact.

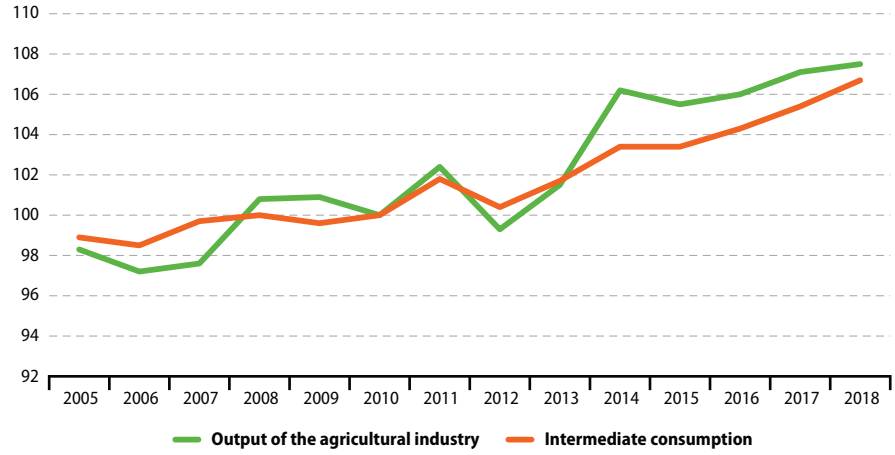
One area of focus is the links between farming activities and the environment; there is scrutiny of the impact of agricultural activity on water, air and soil quality, land use diversity, ecologies and wildlife. Indicators to monitor many of these impacts are being developed as part of the Sustainable Development Goals (SDGs). It is proposed that the future common agricultural policy (CAP) specifically includes objectives on climate change action, environmental care and the preservation of landscapes and biodiversity.

Another area of interest is addressing prices that reflect the real costs of resource use. The social and environmental outputs of farming activities are rarely priced; indeed so-called 'green accounts' for agriculture are far from being completed nor the green efficiency indicators that could result from them. Likewise, total factor productivity indicators for agriculture that look at a measure of agricultural output against a combined measure of the input from intermediate consumption, land, labour and capital are also not yet available.

Some indication of the resource performance of agriculture, however, can be derived from the EAA by looking at trends in the 'volumes' of outputs generated and of the goods and services used up or 'consumed' as inputs in the production process can be derived. These volumes come from a decomposition of the values into price and volume components. These implicit volumes are not quantities; they are not measured in terms of kg or tonnes.

([15]) The EU has produced a Roadmap to a Resource Efficient Europe (COM(2011) 571) that outlines how the European economy can be transformed into a sustainable one by 2050.

Figure 4.3.1: Indices of the volume of agricultural output and of intermediate consumption, EU-28, 2005-2018
(2010=100)



Source: Eurostat (online data code: aact_eaa05)

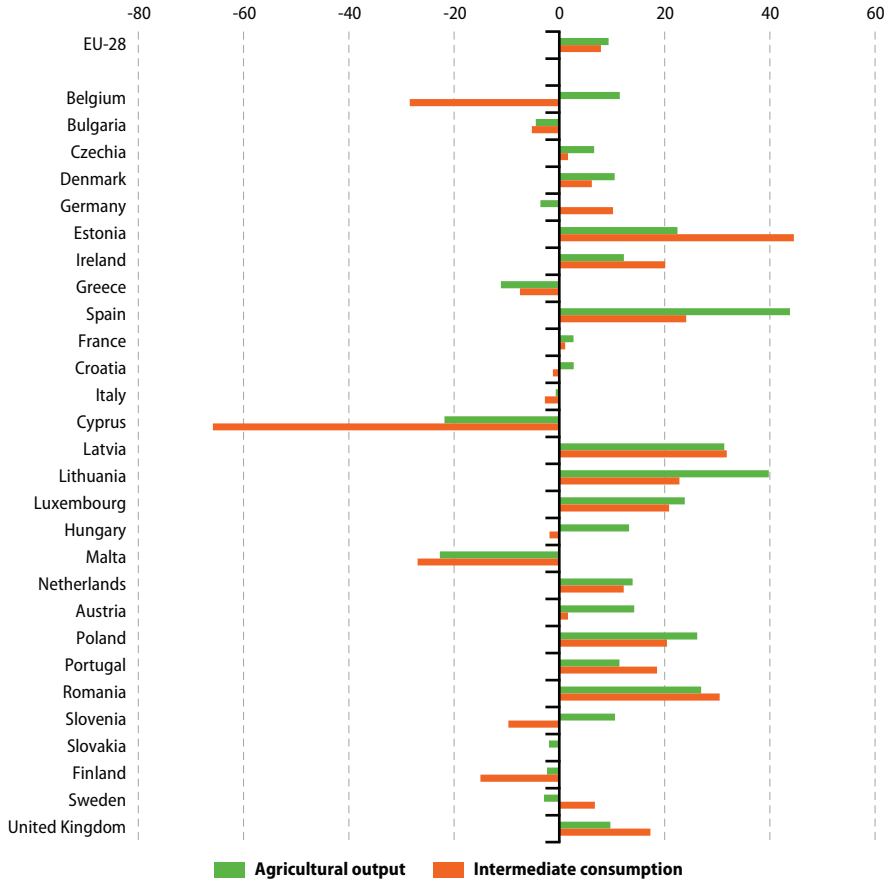
They are termed 'volumes' because they capture not only changes related to quantity but also to quality as well as composition, which is important to bear in mind. As indices, they provide an overview of the trends in the volumes of inputs and outputs, which can be used for some productivity and performance measures.

Rising output volume of agricultural industry mirrored by rising volume of input goods and services as a whole

Over the reference period between 2005 and 2018, there was a relatively steady upward trend in the output volume of the EU's agricultural industry (a total +9.4 %). To a large extent, higher output volumes were mirrored by the greater volume (+7.9 %) of input goods and services consumed (see Figure 4.3.1). As such, intermediate consumption growth has largely been in line with overall agricultural output growth in the EU. This suggests that there is yet to be any decoupling of output growth from resource use at the EU level.

Among Member States there was also little suggestion of an apparent decoupling of agricultural output growth from intermediate consumption resource growth, with a couple of notable exceptions. Over the period between 2005 and 2018, agricultural industry output in Belgium grew by a little over one-tenth (+11.5 %) at the same time reducing by one-quarter (-28.4 %) the volume of intermediate consumption goods and services consumed. Likewise, Slovenia also recorded a rise in agricultural output over the same period (+10.6 %) at the same time as a reducing by one-tenth (-9.7 %) its consumption of intermediate consumption goods and services. It should be borne in mind that these changes may in part reflect changes within the structure of the agricultural industries in these Member States as well as improved resource efficiency.

Figure 4.3.2: Volume of agricultural output and of intermediate consumption, 2005-2018
(% change)



Source: Eurostat (online data code: aact_eaa05)

Data sources and availability

The economic accounts for agriculture (EAA) are a satellite account of the European system of accounts (ESA 2010). They cover the agricultural products and services produced over the accounting period sold by agricultural units, held in stocks on farms, or used for further processing by agricultural producers. The concepts of the EAA are adapted to the particular nature of the agricultural industry: for example, the EAA includes not only the production of grapes and olives but also the production of wine and olive oil by agricultural producers, if produced from own grapes and olives. It includes information on intra-unit consumption of crop products used in animal feed, as well as output accounted for by own account production of fixed capital goods and own final consumption of agricultural units.

The EAA comprises a production account, a generation of income account, an entrepreneurial income account and some elements of a capital account. For the production items, EU Member States transmit to Eurostat values at basic prices, as well as their components (values at producer prices, subsidies on products, and taxes on products).

The output of agricultural activity includes output sold (including trade in agricultural goods and services between agricultural units), changes in stocks, output for own final use (own final consumption and own-account gross fixed capital formation), output produced for further processing by agricultural producers, as well as intra-unit consumption of livestock feed products. The output of the agricultural sector is made up of the sum of the output of agricultural products and of the goods and services produced in inseparable non-agricultural secondary activities; animal and crop output are the main product categories of agricultural output.

Three indicators are computed in relation to agricultural income:

- an index of real income of factors in agricultural activity per AWU (indicator A);
- an index of real net agricultural entrepreneurial income, per unpaid AWU (indicator B);
- and the net entrepreneurial income of agriculture (indicator C).

The information presented on agricultural income relates to indicator A (the real income of factors in agriculture per AWU). This indicator corresponds to the real (deflated) net value added at factor cost of agriculture per AWU and is expressed as an index. Net value added at factor cost is calculated by subtracting from the value of agricultural output at basic prices the value of intermediate consumption, the consumption of fixed capital, and adding the value of (other) subsidies less taxes on production.

Agricultural price statistics provide information on the development of producer (output) prices for agricultural products and purchaser prices for the means of agricultural production (the intermediate consumption of goods and services within the production process). Data on prices are available for single commodities and for larger aggregates in the form of absolute prices and price indices.

The index of producer prices for agricultural products is based on sales of agricultural products, while the input index (for intermediate goods and services) is based on purchases of the means of agricultural production. Prices should be recorded at points which are as close as possible to those of the transactions which the farmer actually undertakes. This means that product prices should be recorded at the first marketing stage so as to best indicate the actual producer prices received by farmers.

Similarly the prices paid by farmers for their means of production should be recorded at the last marketing stage, that at which the items arrive on the farm, so as to best indicate the purchase prices paid by farmers. It is assumed, by convention, that the fertilisers and feeding stuffs purchased are used in the same production period and that there are no stocks on farm.

As regards spatial comparisons, the structure of the weights with respect to products and means of production reflect the value of the sales and purchases in each country during the base year (currently 2010=100); the weights therefore differ from one country to another.

5 Forestry activities

Introduction

Forests are one of Europe's most important renewable resources, providing a wide range of benefits to society.

Forests capture and store large quantities of carbon, playing an important role in the efforts to mitigate climate change. They impact positively on air and water quality, and are also a major source of biodiversity. By binding soil, they limit soil erosion, thus benefitting agriculture and protecting settlements and infrastructure from mudslides.

Forests are also an important factor for employment and economic development, in particular in rural areas. The vast majority of the EU's forests are managed. This makes forestry, along with farming, an important land use activity. It thus forms a basis for economic diversification in rural areas. In addition to the forestry and logging activities, the processing of wood and industries using wood as an input are vital to economic development in many regions.

Rural development policy is part of the EU's Common Agricultural Policy (CAP). The CAP provides financial support for implementation of forestry measures in rural areas through the European Agricultural Fund for Rural Development, reflecting the importance of forestry to rural development. EU countries can choose to fund forestry measures through their national rural development programmes. These measures are aimed at protecting the forests, making them more resilient to climate change, and safeguarding their provision of environmental services. In so doing, the measures support investment, innovation and training, to the benefit of the rural economy.

The EU also plays a role in helping Member States coordinate their approaches. The EU forest strategy for 2014-2020 was developed to provide a coherent framework for both EU forest-related policies and the national forestry policies of the individual EU countries, and to coordinate initiatives. The strategy promotes the concept of sustainable forest management, which aims to achieve a balanced development of the different functions of forests and an efficient use of resources.

An array of further EU policies and initiatives with a bearing on forests have been implemented. The most recent of these is the so-called "LULUCF Regulation" on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry([16]).

This chapter provides data on the EU's forest area and timber resources as well as economic and employment figures for the forestry sector. Additionally, it presents indicators combining the physical and the economic data, on the volume of roundwood([17]) and sawnwood([18]) production as well as on the performance of and employment within the EU's wood-based industries.

([16]) Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU.

([17]) Roundwood production (the term is also used as a synonym for removals in the context of forestry) comprises all quantities of wood removed from the forest and other wooded land, or other tree felling site during a defined period of time.

([18]) Sawnwood is wood that has been produced either by sawing lengthways or by a profile-chipping process and, with a few exceptions, is greater than 6 millimetres (mm) in thickness.

Did you know ...

There were about 182 million hectares of forests and other wooded land in the EU.

¾ of Finland and Sweden are covered by forests. With 30.5 million hectares, Sweden has the largest wooded area in the EU

¾ of roundwood production in the EU went to supply wood-based industries, the remaining ¼ went to fuelwood.

Forestry and logging activities in the EU generated gross value added of EUR 26.5 billion in 2016

Forests and other wooded land have been expanding through natural growth and afforestation

Wood-based industries in the EU generated gross value added of EUR 142.7 billion in 2016; pulp and paper production accounted for ⅓ of this

Employment in wood-based industries made up 11 % of the total employment in the manufacturing sector in 2017

5.1 Forests and other wooded land

In many rural areas of the EU, forests are an important source of employment. They provide a basis for diversified economic development through forestry and logging activities and wood-based industries, as well as through tourism and hunting.

But what is a forest?

The Food and Agriculture Organisation of the United Nations (FAO) defines a forest as "land with tree crown cover (or equivalent stocking level) of more than 10 % and an area of more than 0.5 hectares."

Across the EU, there is a wide variety of forests, reflecting the diversity in climatic conditions, soil type, topography and altitude. They range from boreal forests with conifers, in the cold north and at high altitudes, via broadleaf forests and mixed forests to regions with transitional woodland and shrubs.

The share of the land area covered by forests varies among Member States from around 75 % in Nordic countries to under 20 % in countries with large, flat coastal landscapes or characterised by dense urban conglomerates.

Map 5.1.1 provides a detailed portrait of the diversity of forest types across Europe, as well as the density of forests across the European landscape.

EU forests cover 182 million hectares

There are about 182 million hectares of forests and other wooded land in the EU, corresponding to around 5 % of the forested area of the world. Forests cover 43 % of the EU's land area (excluding lakes and large rivers; see Figure 5.1.1), a slightly higher proportion than the area of land used for agriculture.

Through natural growth of existing forests and afforestation, i.e. creation of forests through planting of trees and sowing tree seeds, the forested area in the EU has increased slowly over the past few decades. From 1990 to 2010, the area covered by forests had increased by around 11 million hectares.

However, climate change poses serious threats to Europe's forests. While changes in climate affect the forests' rate of growth, their land coverage and the range of species, higher average temperatures also create opportunities for invasive parasites and cause serious damage to the forests. In addition, climate change is influencing the frequency and intensity of extreme weather events such as storms and droughts, with more frequent fires resulting from the drier conditions.

Three quarters of Finland and Sweden are covered by forests

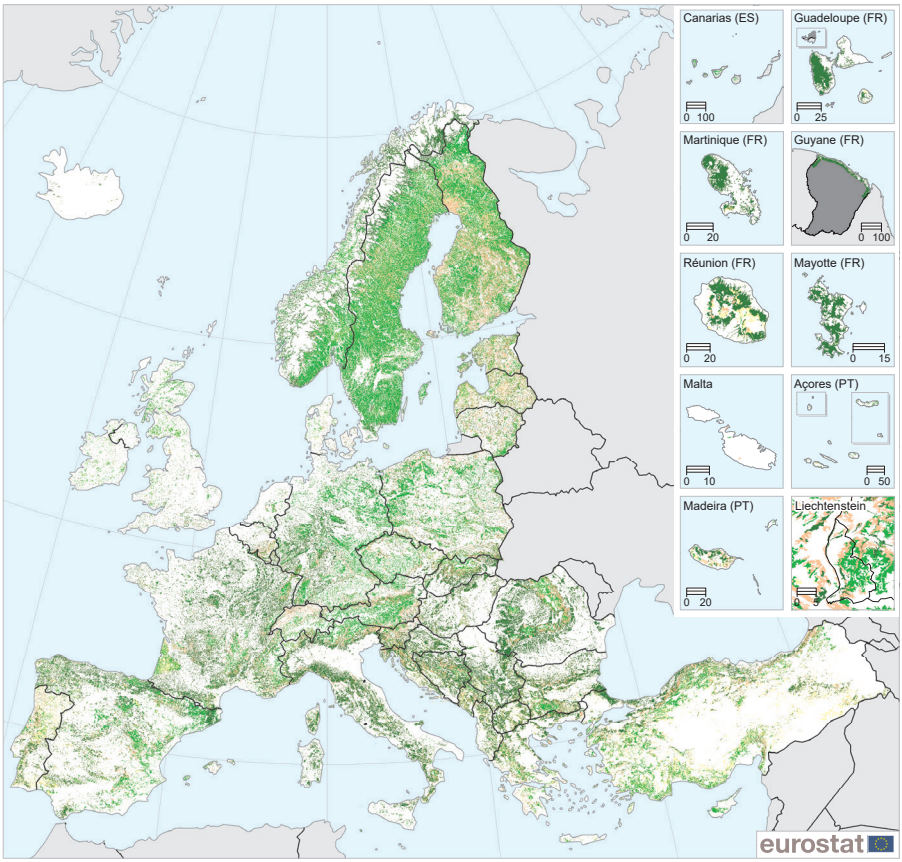
Among Member States, Sweden had the largest area of forests in the EU in 2015, at about 30.5 million hectares. Forests in Spain covered an almost as large area (27.6 million hectares).

Together, the area of forest in these two Member States, along with those in Finland, France, Germany and Italy, accounted for two thirds of the EU's total forested areas in 2015.

Forests and woodland accounted for at least one half of the land areas of eight Member States in 2015. About three quarters of the land areas of Finland and Sweden were forested. Just less than two thirds of the land area of Slovenia was covered by forests. Between 50-60 % of the land areas of Estonia, Latvia, Spain, Portugal and Greece, were also forested.

In stark contrast, forest coverage was only 11 % in the Netherlands, 12 % in Ireland and 13 % in the United Kingdom, with Denmark slightly higher at 15 %. By far the lowest share of forest and woodland cover was in Malta, at 1.1 %.

Map 5.1.1: Forest cover, EU Member States, EFTA countries, and candidate and potential candidate countries, 2018



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat — GISCO, 11/2019

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.
Source: Corine Land Cover 2018, European Environment Agency

Germany has more timber resources than any other Member State

The timber resources available in forests not only reflect the area covered, but also the height and volume of the trees growing there and the density of the forest. To which extent these timber resources can be exploited also depends on other factors, such as the topography of the forested landscape.

The growing stock of timber in forests and other wooded land in the EU in 2015 totalled an estimated 26.7 billion m³, including the bark (see Figure 5.1.2). With almost 3.7 billion m³ or 13.7 % of the EU total, the largest proportion of the EU's growing timber stock stood in Germany. There were also substantial timber resources in Sweden (3.0 billion m³ or 11.2 % of the EU total), France (2.6 billion m³ or 9.7 %), Poland (2.5 billion m³ or 9.5 %) and Finland (2.3 billion m³ or 8.7 %).

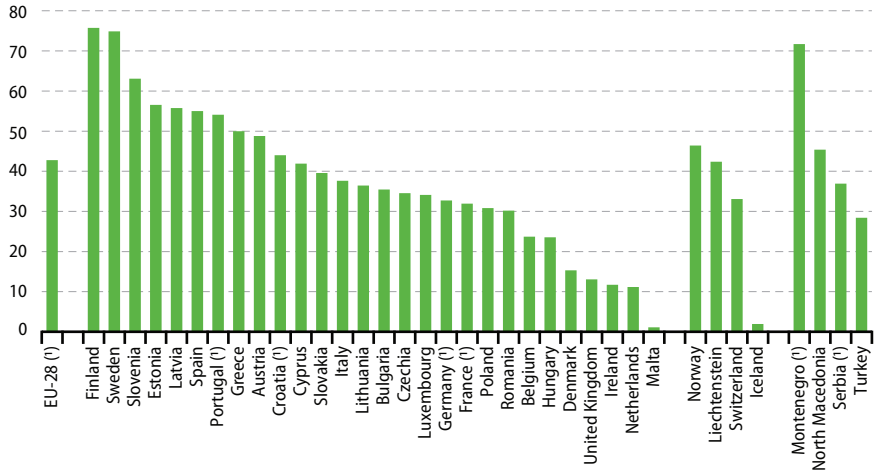
Nine in every ten farms in Finland and Slovenia own forest areas

Ownership of EU forests varies from small family holdings to publicly owned forests and large estates owned by investors. The largest proportion of forested land is privately owned (around 60 %).

Many European farm holdings also own forested areas in addition to their agricultural areas, providing economic diversification that combines agricultural activities with forestry and logging.

Forest ownership on farm holdings is most widespread in countries with large forested areas (see Figure 5.1.3). In Finland and Slovenia, about nine in every ten farm holdings also contained forested areas. The proportion of farm areas covered by forest and woodland was highest in Sweden (52 % of the area owned by farm holdings), and then Finland (48 %) and Slovenia (43 %).

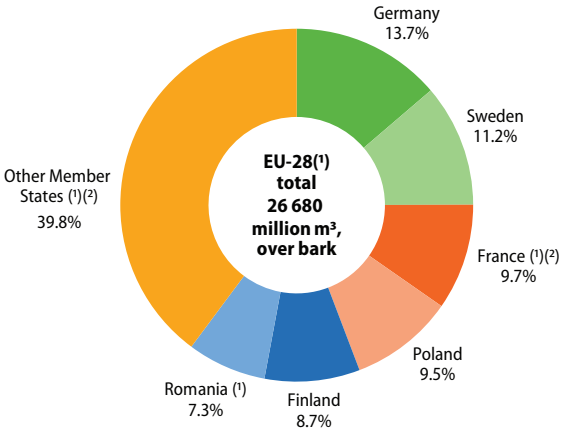
Figure 5.1.1: Forest and other wooded land, 2015
(% share of total land area)



(1) Estimated.

Source: Eurostat (online data codes: demo_r_d3area and for_area); Food and Agriculture Organization of the United Nations:
— Global Forest Resources Assessment, 2015
— Forest Europe 2015, as published in the UNECE database (http://w3.unece.org/PXWeb2015/pxweb/en/STAT/STAT__26-TMSTAT1/)

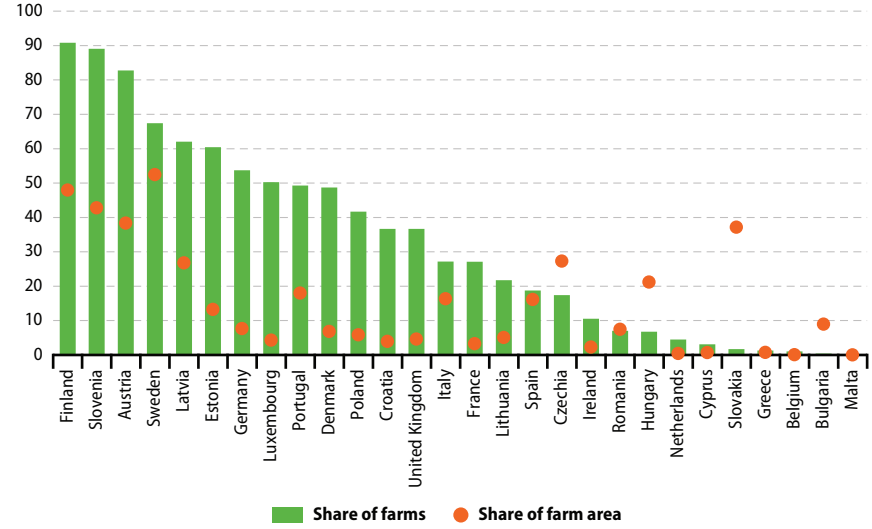
Figure 5.1.2: Growing stock of wood in forests and other wooded land, 2015
(share in total EU growing stock)



(1) Estimated: Belgium, Ireland, Greece, France, Cyprus, Luxembourg and Romania.
(2) 2010 data instead of 2015: Belgium, Ireland, Greece, France, Italy, Cyprus, Luxembourg, Hungary, Malta, Portugal and the United Kingdom.

Source: Eurostat (online data code: for_vol); Food and Agriculture Organization of the United Nations:
— Global Forest Resources Assessment, 2015

Figure 5.1.3: Farms with woodland, 2016
(% share of all farms; share of total farm area)



Note: ranked on the share of farms with woodland.

Source: Eurostat (online data code: ef_lus_main)

5.2 Forestry and logging: economic indicators and employment

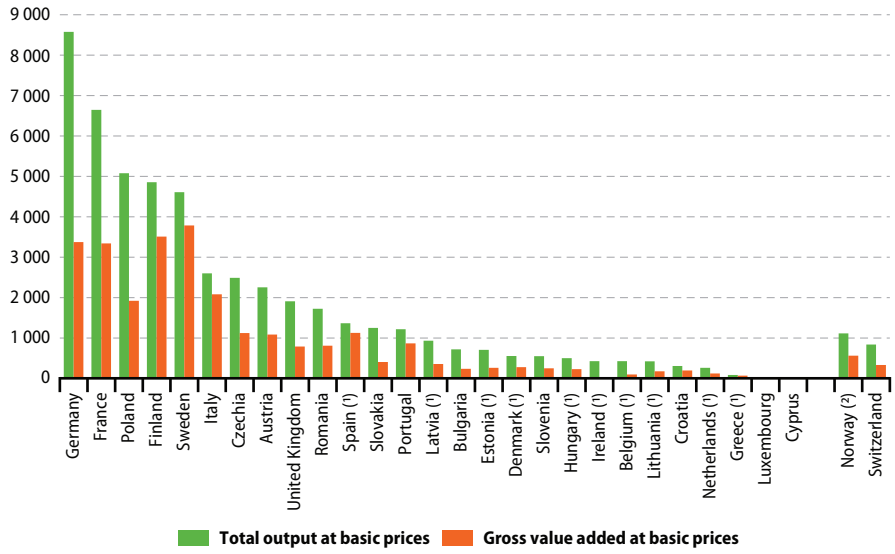
Forestry and logging play an important role in employment and economic development in many rural regions across the EU. In addition to the economic yields generated directly from forestry and logging activities, wood is also a vital input to wood-based industries and as an energy source.

Total output from forestry and logging was valued at EUR 50.5 billion in 2016

The total output from forestry and logging in the EU was valued in basic prices at EUR 50.5 billion in 2016 (see Figure 5.2.1). This was somewhat lower (-1.6 %) than the valuation in 2015.

Member States with the most timber resources tended to produce the highest output values. In Germany, the total output value from forestry and logging was EUR 8.6 billion (17.0 % of EU output). In France it was EUR 6.6 billion (or 13.2 % of the EU total), followed by Poland (EUR 5.1 billion, or 10.1 %), Finland (EUR 4.9 billion, or 9.6 %) and Sweden (EUR 4.6 billion, or 9.1 %).

Figure 5.2.1: Economic indicators for forestry and logging, 2016
(EUR million)



Note: ranked on total output at basic prices. Data not available for Malta.

(1) Estimated.
(2) 2015 data used instead of 2016.

Source: Eurostat (online data code: for_eco_cp)

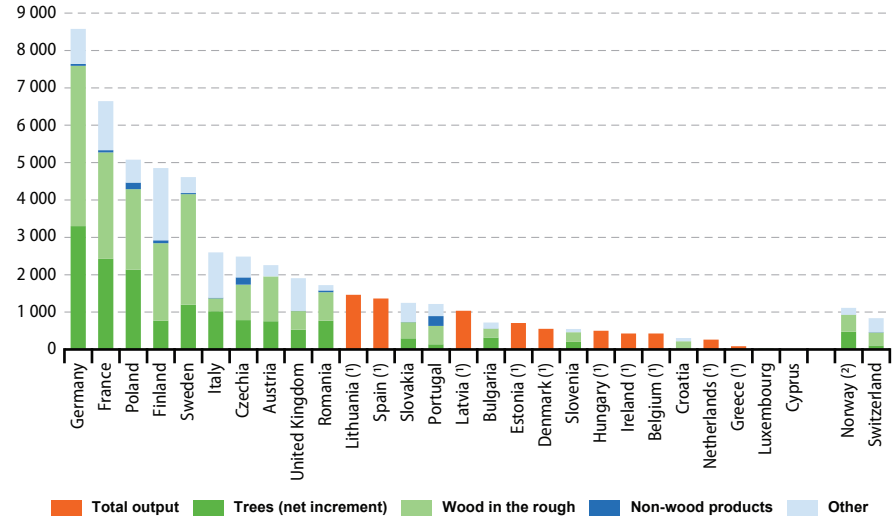
Trees growing in managed forests and removal of logs are main contributors to output from forestry and logging

The main elements of the output from forestry and logging activities are the net increment of forest trees in managed forests, wood in the rough (logs), non-wood products (e.g. cork), and other output (services, secondary activities and other products). In EU forests, trees growing in managed forests and the removal of logs are the main contributors to output from the sector.

In Germany, the output value of wood in the rough (logs) was EUR 4.3 billion in 2016, one half of total output, with the net increment of forest trees in managed forests contributing another 40 % (EUR 3.3 billion) (see Figure 5.2.2). France, Poland and Finland each produced wood in the rough with an output value of between EUR 2.1 billion and EUR 2.8 billion in 2016.

Portugal is the main producer of cork in the EU; the output value of its non-wood products was EUR 261 million in 2016, one fifth (21.4 %) of its total forestry and logging output value.

Figure 5.2.2: Output of forestry and logging by type, 2016
(EUR million, current basic prices)



Note: sorted on total output. Malta: not applicable.

(1) Estimated.
(2) 2015 data used instead of 2016.

Source: Eurostat (online data code: for_sup_cp)

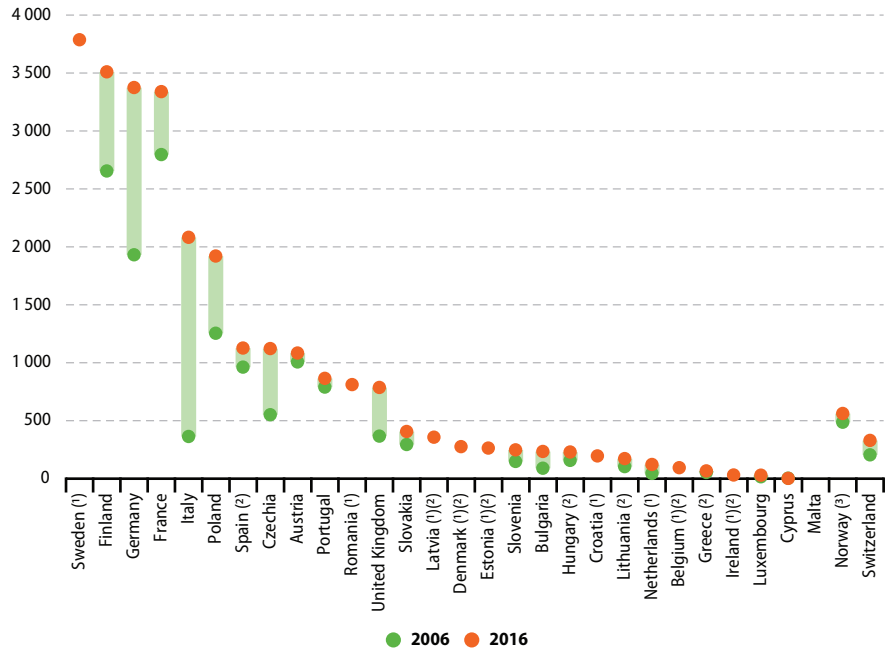
Gross value added from forestry and logging was EUR 26.5 billion in 2016

Gross value added is defined as the value of output (at basic prices) minus the cost of the intermediate consumption goods and services (at purchaser prices) used to generate that output.

The gross value added from forestry and logging in the EU was EUR 26.5 billion in 2016, slightly down -0.2 % on the level in 2015. Just over one half of this value added came from just four Member States; Sweden, Finland, Germany and France each produced value added from forestry and logging in the range of EUR 3.3 billion to EUR 3.8 billion (see Figure 5.2.3).

Over the period from 2006 to 2016, the value added from forestry and logging activities increased in all Member States for which data are available, with the exception of Cyprus (down from EUR 2.8 million to EUR 2.4 million). Among others, the rise was particularly notable in Italy and Germany.

Figure 5.2.3: Forestry and logging gross value added, 2006 and 2016
(EUR million, current basic prices)



Note: ranked on 2016. Malta: not applicable.

(1) 2006 data not available.
(2) 2016 data estimated.
(3) 2015 data instead of 2016.

Source: Eurostat (online data code: for_eco_cp)

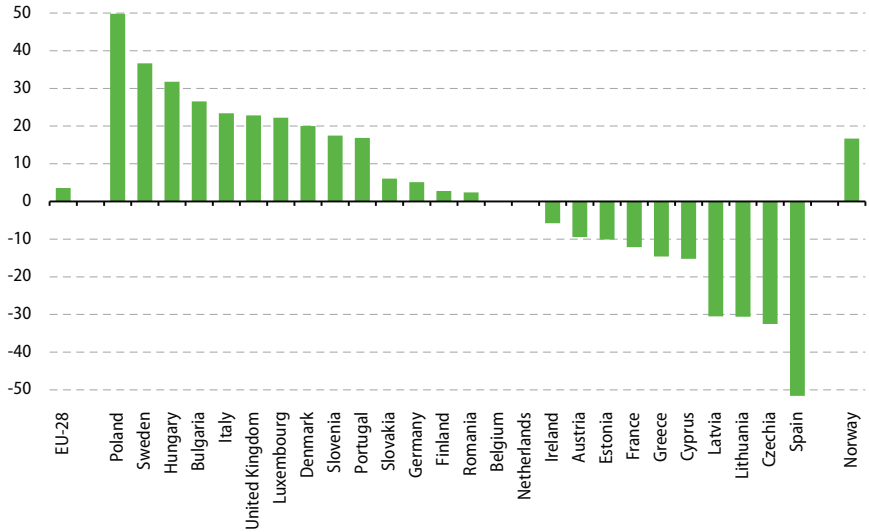
Half a million people were employed in forestry and logging activities in the EU in 2016

The labour intensity of forestry and logging activities varies extensively between countries. A vital factor in this context is how efficiently forest machinery can be applied. This reflects the structure and characteristics of the forest, including the density of the growing stock, the tree species and the topography of the forested landscape.

In total, about 535 800 persons worked in the forestry and logging sector in the EU in 2016. The largest workforces, measured according to national employment concepts in National Accounts, were recorded in Poland (76 700 persons employed), and then Romania (47 200 persons), Germany and Sweden (each with 41 000 persons).

Employment numbers in forestry and logging activities across the EU as a whole rose slightly (+3.6 %) between 2006 and 2016 (see Figure 5.2.4). This reflected strong employment growth in some Member States, particularly Poland (up one half, with an additional 25 500 persons employed) and Sweden (one third higher, with 11 000 added persons employed) but sharp cutbacks in others like Spain (a reduction of 17 800 persons) and Czechia (a reduction of 10 400 persons).

Figure 5.2.4: Employment growth in forestry and logging, 2006-2016
(% change in persons employed, national employment concept)



Note: 2006 data not available for Croatia. Malta: not applicable.

Source: Eurostat (online data code: nama_10_a64_e)

5.3 Primary wood products

The primary products from forestry and logging are industrial roundwood and fuelwood. Industrial roundwood is an important resource for wood-based industries, being the basis for sawnwood and veneers as well as for pulp and paper production. Fuelwood is one of the most important renewable energy sources in the EU.

Roundwood production in the EU an estimated 470 million m³ in 2017

Total roundwood production in the EU was an estimated 470.3 million m³ in 2017. This was slightly higher (+1.6 %) than in 2016.

Sweden produced 72.9 million m³ of total roundwood in 2017. This represented a year-on-year decline of -2.6 %, almost entirely due to a fall in the production of industrial roundwood.

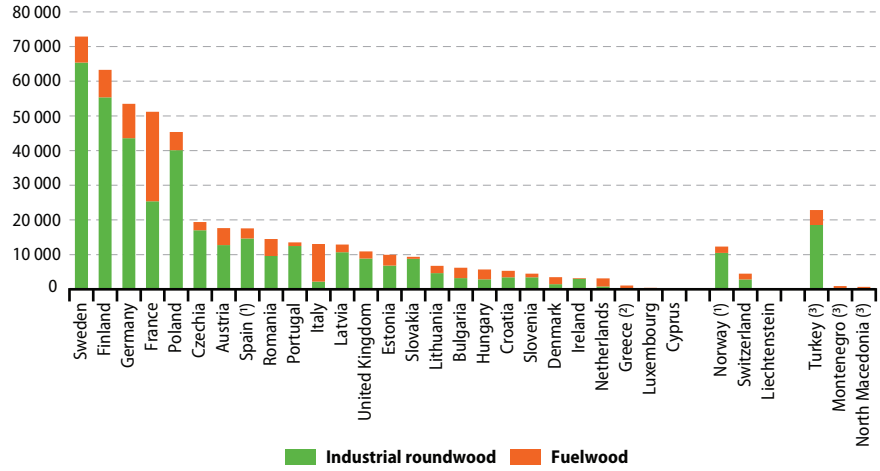
Sweden, Finland (63.3 million m³), Germany (53.5 million m³), France (51.2 million m³) and Poland (45.3 million m³) accounted for 60.8 % of total EU roundwood production in 2017 (see Figure 5.3.1).

Three quarters of the EU's roundwood production is industrial roundwood

Roundwood production in the EU was three quarters industrial roundwood and one quarter fuelwood.

In most Member States, the majority of the roundwood production goes for further processing. There were some exceptions, even amongst main producers. In France, industrial roundwood and fuelwood were produced in equal shares and in Italy about four fifths of its roundwood production was provided as fuelwood.

Figure 5.3.1: Roundwood production, 2017
(thousand m³ over bark)

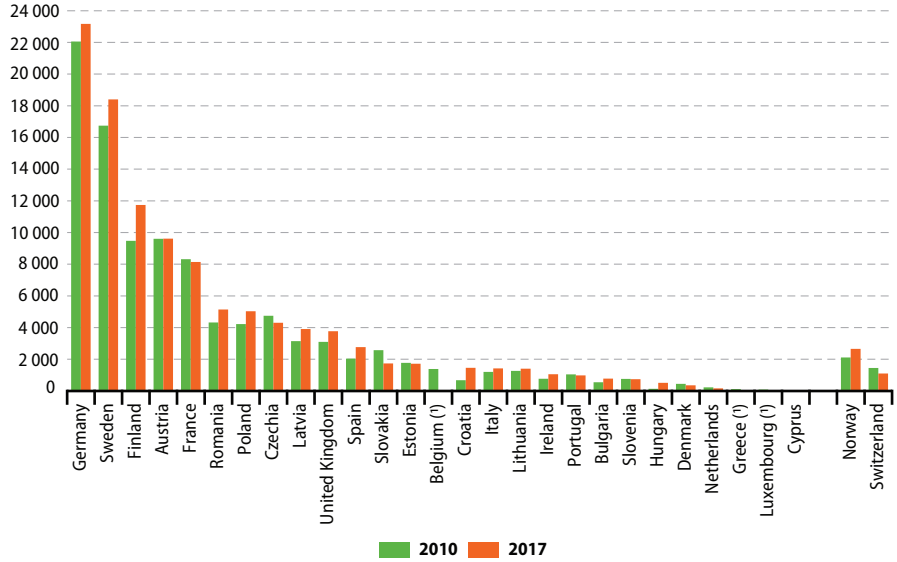


Note: sorted on total roundwood production. Data for Belgium not available; Malta not applicable.

(1) Fuelwood estimated.
(2) 2013 data used instead of 2017.
(3) 2014 data used instead of 2017.

Source: Eurostat (online data code: for_remov)

Figure 5.3.2: Sawnwood production, 2010 and 2017
(thousand m³)



(1) 2017 data not available. Malta: not applicable.

Source: Eurostat (online data code: for_swpan)

It should be noted that in several Member States no estimates of fuelwood consumption by households are included in the numbers reported in the Joint Forest Sector Questionnaire (JFSQ)([19]).

Germany and Sweden are the leading sawnwood producers in the EU

The total output of sawnwood across the EU was almost 110 million m³ in 2017, up +3.3 % compared to 2016. This was a level of production for the EU that was last achieved before the economic crisis of 2009.

Germany and Sweden remained the EU's leading sawnwood producers, accounting for around 21.1 % and 16.8 % of the EU total respectively. The increase in sawnwood production at the level of the EU in 2017 was driven by higher production in Spain (up 1 million m³ or +57.7 %) and Germany (also up 1 million m³ or +4.4 %).

([19]) See the Statistics explained article Wood as a source of energy.

5.4 Wood-based industries

Wood-based industries in the EU are a key part of the manufacturing sector; they generated EUR 142.7 billion of gross value added in 2016, corresponding to 7.5 % of the value added of the manufacturing sector as a whole.

Pulp and paper production accounted for one third of the gross value added from wood-based industries as a whole

The EU's wood-based industries cover a range of downstream activities that are categorised within four groups: pulp, paper and paper products manufacturing, wood and wood product manufacturing, manufacture of furniture, and printing and related services.

Of these four wood-based industries, the gross value added from pulp, paper and paper products manufacturing was EUR 46.0 billion in 2016, one third of the total for wood-based industries as a whole (see Figure 5.4.1). The other three manufacturing sectors within the industry generated similar amounts of gross value added (between EUR 29.9 billion and EUR 33.9 billion).

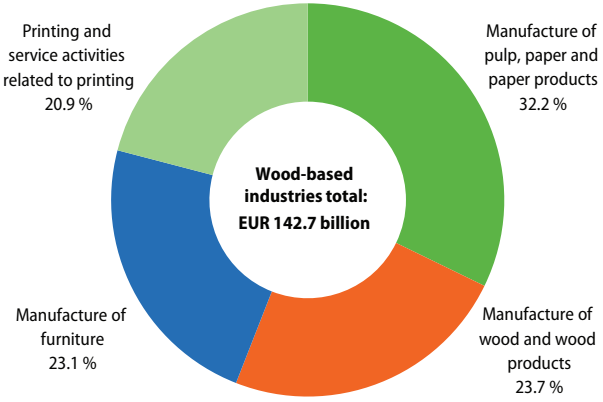
Small and medium-sized enterprises dominate in wood-based industries

An estimated 429 130 enterprises were active in wood-based industries across the EU in 2017 (see Figure 5.4.2); they represented roughly one in five (20.2 %) manufacturing enterprises in the EU.

Small and medium sized enterprises, defined as having less than 250 persons employed, dominated the wood-based industry as a whole. Whilst this was typically the case for wood and wood products manufacturing enterprises, furniture manufacturers and printers, it was not the case of pulp and paper manufacturing enterprises, which are characterised by large units in order to benefit from economies of scale.

Enterprises in wood and wood products accounted for 40 % of all the enterprises in the wood-based industries, manufacturers of furniture 30 % and printing and related service enterprises 25 %, with the larger enterprises manufacturing pulp and paper making up less than 5 % of the total number.

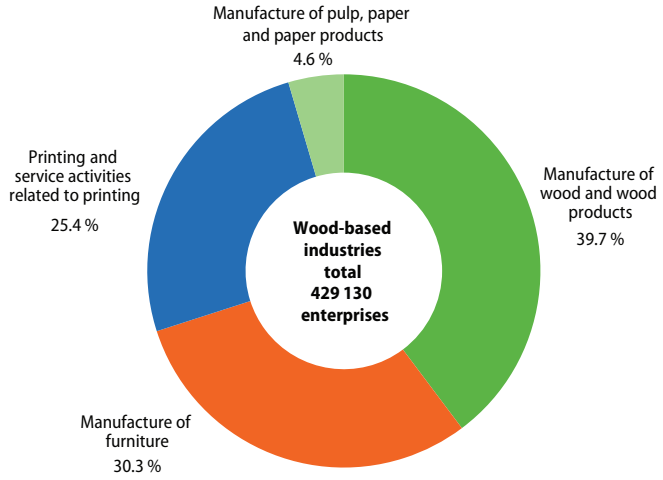
Figure 5.4.1: Gross value added for wood-based industries, by activity, EU-28, 2016
(share of total EU-28 gross value added at factor cost for wood-based industries)



Note: activity classes according to NACE Rev.2: Manufacture of wood and wood products (16); Manufacture of pulp, paper and paper products (17); Printing and service activities related to printing (18.1); Manufacture of furniture (31)

Source: Eurostat (online data code: sbs_na_ind_r2)

Figure 5.4.2: Enterprises in wood-based industries, by activity, EU-28, 2017
(share of EU-28 enterprises in wood-based industries)



Note: activity classes according to NACE Rev.2: Manufacture of wood and wood products (16); Manufacture of pulp, paper and paper products (17); Printing and service activities related to printing (18.1); Manufacture of furniture (31)

Source: Eurostat (online data code: sbs_na_ind_r2)

Employment in wood-based industries was 11 % of total employment in manufacturing in 2017

The wood-based industries employed a provisional 3.3 million persons across the EU in 2017, which was 10.8 % of total manufacturing employment. There were a provisional 1.0 million persons employed by furniture manufacturing enterprises and a further provisional 1.0 million in wood and wood products manufacturing enterprises, with the remainder being equally split between pulp, paper and paper products manufacturing enterprises and printing and service activities enterprises.

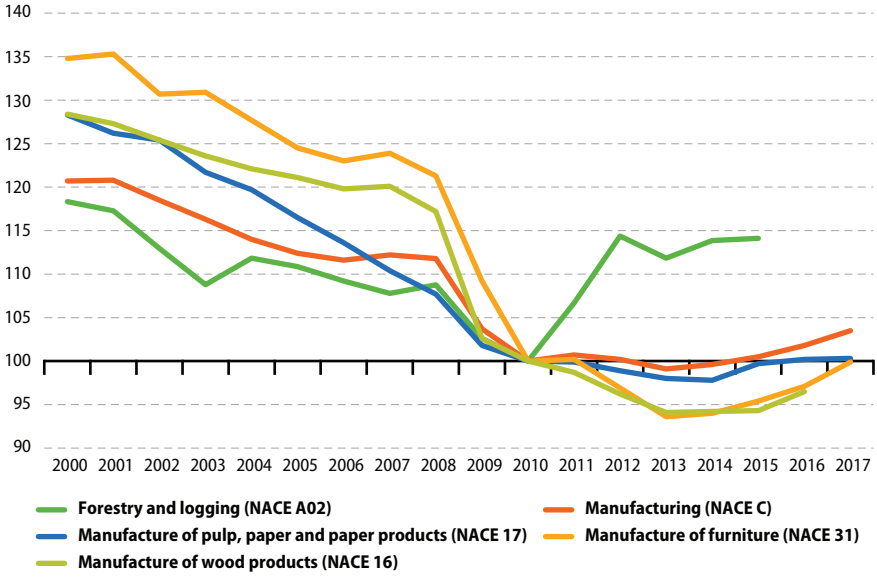
Employment in wood-based manufacturing has fallen strongly since 2000, while employment in forestry and logging has recovered and stabilised

Longer time series for employment are available for three of these wood-based industries.

Across the EU, manufacturing employment fell by -14.3 % over the period between 2000 and 2017. There were stronger rates of decline for the three wood-based industries for which data are available (see Figure 5.4.3); the number of persons employed in furniture manufacturing fell by one quarter (-25.9 %), in the manufacture of wood products also by one quarter (-24.8 % between 2000 and 2016) and in the manufacture of pulp, paper and paper products by one fifth (-21.8 %).

In contrast, employment in the forestry and logging industry, which had fallen sharply between 2000 and 2010 (-15.5 %), rebounded sharply before stabilising through to 2015. This may be explained by increasing demand for roundwood and the continuous need to manage the forests. Over the period as a whole, employment in forestry and logging across the EU was only -3.6 % less in 2015 than in 2000.

Figure 5.4.3: Employment in wood-based industries compared with total manufacturing, EU-28, 2000-2017
(2010=100)



Note: data not available for 2016 and 2017 for forestry and logging and not for 2017 for manufacture of wood products.

Source: Eurostat (online data codes: sts_inlb_a and nama_10_a64_e)

Data sources and availability

Eurostat, the Timber Committee of the United Nations Economic Commission for Europe (UNECE), the Forestry Section of the United Nations Food and Agriculture Organisation (FAO) and the International Tropical Timber Organisation (ITTO) collect and collate statistics on the production and trade of wood through their Joint Forest Sector Questionnaire (JFSQ). Each partner collects data from a different part of the world; Eurostat is responsible for the data collection exercise pertaining to the EU Member States and EFTA countries.

Eurostat produces annual data on forestry using two questionnaires:

- The Joint Forest Sector Questionnaire (JFSQ) on production and trade in wood and wood products;
- European Forest Accounts (EFA), forming part of an environmental satellite accounts initiative that started in the late 1990s.

The JFSQ provides data for supply balances of timber used for wood products and for energy, and for estimating the carbon contained in harvested wood products.

The collection of forest accounts re-started in 2008 after a break of several years, as in the 1990s, it was known as Integrated Environmental and Economic Accounting for Forests (IEEAF). In 2016, the questionnaire was reviewed and adapted to new needs, such as timber from all sources for material use, energy and the bio-economy, while continuing the time series on the economic viability of forestry and employment. The questionnaire was re-named European Forest Accounts (EFA).

Note that the monetary values concern current basic prices (in other words, the analysis of time series is not adjusted for inflation).

6 Fisheries activities

Introduction

Fish are a renewable and mobile natural resource. Aside from aquaculture farming, fish are generally not owned until they have been caught. As such, fish stocks continue to be regarded as a common resource which needs to be managed collectively. This has led to a range of policies that regulate the amount of fishing at the EU level and more widely at sea basin level, as well as the types of fishing techniques and gear that can be used in fish capture.

The current common fisheries policy (CFP) of the EU ([20]) aims at an environmentally, economically and socially sustainable use of the common resource including aquaculture production. The CFP is a set of rules for managing EU fishing fleets and for conserving fish stocks. Designed to manage a common resource, it gives all EU fishing fleets equal access to EU waters and fishing grounds and allows fishermen to compete fairly. The current policy stipulates that between 2015 and 2020 catch limits should be set that are sustainable and maintain fish stocks in the long term. Based on EU legislation, Eurostat produces statistics on catches and landings of fishery products, aquaculture and the EU fishing fleet.

([20]) https://ec.europa.eu/fisheries/cfp/index_en.htm

Did you know ...

The EU's fishing fleet is getting smaller in number, capacity and power

EU produced **6.7 million tonnes** of fisheries products in 2017

... but EU catches still totalled **5.3 million tonnes** in 2018

1.4 million tonnes of aquatic organisms produced in 2017

180 000 people were employed in fisheries industry in 2017

6.1 Fisheries: the factors of production

The EU's fishing industry is managed. There is regulation on the amount of fishing at EU level and at sea basin level under the common fisheries policy. To better monitor and advise on this policy, there is interest in understanding the factors of production and how they are changing over time. These factors include the seas, fishing fleets and the labour force working in the fishing industry.

Seas and catch limits

EU Statistical Regulations on catching fish cover seven marine areas ([21]); these are the north-east Atlantic; north-west Atlantic; Mediterranean and Black Sea; eastern-central Atlantic: south-east Atlantic; south-west Atlantic; and, western Indian Ocean, within each of which are a number of seas. For example, within the north-east Atlantic region are, inter alia, the Barents Sea, the Norwegian Sea, the Baltic Sea, the North Sea, Iceland and Faroes Grounds, Rockall, West of Scotland, Irish Sea, Bay of Biscay, Portuguese Waters, Azores Grounds and East Greenland.

As a general rule, fishing vessels registered in the EU fishing fleet register have equal access to all the EU waters and resources that are managed under the CFP. Access to fisheries is normally authorised through a fishing license. The seas resources for most commercial fish species are, however, limited through total allowable catches (TACs) that are set annually for various sea regions based on the scientific advice provided by advisory bodies like the International Council for the Exploration of the Sea (ICES) and the Scientific, Technical and Economic Committee for Fisheries (STECF) ([22]). For 2018, the European Council agreed to increase or maintain the previous year's catch limits for 53 stocks and reduce them for 25 stocks.

Proximity of ports to sea often determines the focus of fishing activities. For example, many Member States, including the larger fishing industry Member States of the United Kingdom and Denmark, focus on the north-east Atlantic. One exception is Spain, for whom fishing activities are spread out across the different regions of the Atlantic and Indian Ocean for which EU data are collected as well as other seas around the world. This spread of fishing grounds reflects the search for fish that have coldwater, coolwater or warmwater requirements.

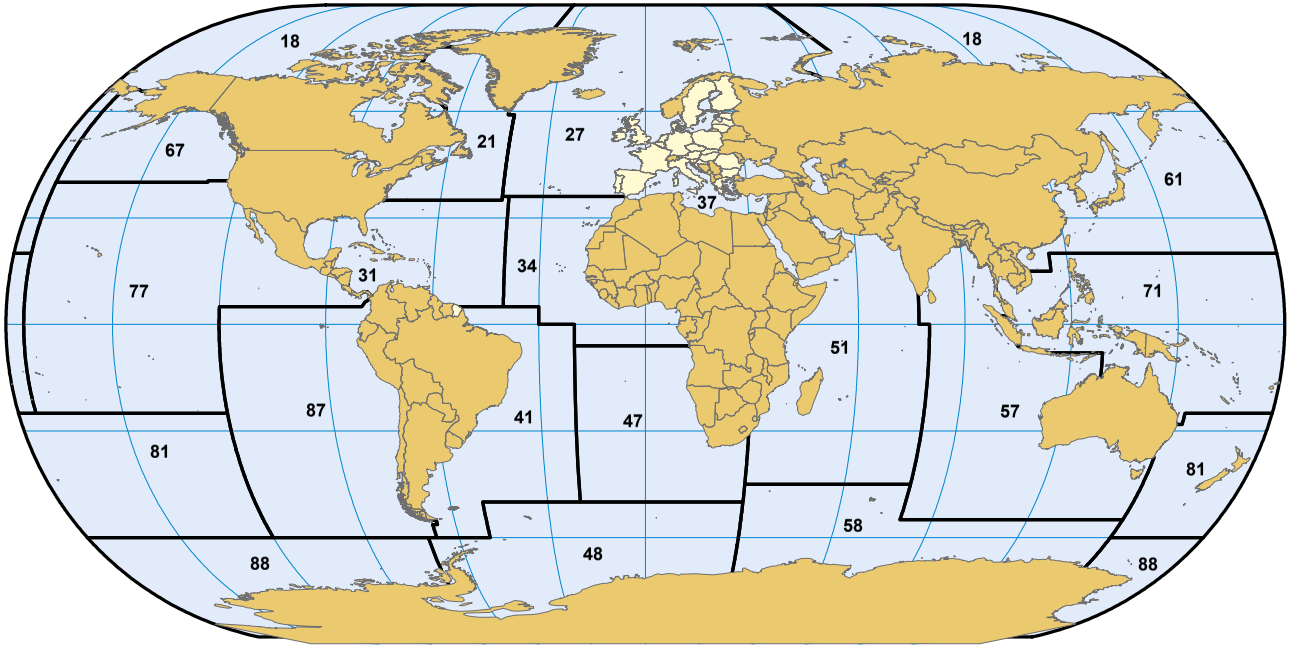
The EU fishing fleet is getting smaller in number, capacity and power

Reducing the fleet capacity is an essential tool for achieving a sustainable exploitation of fisheries resources under the Common Fisheries Policy (CFP). The EU fishing fleet has declined steadily since the early 1990's, in terms of both tonnage (an indicator of fish-holding capacity) and engine power (an indicator of the power available for fishing gear).

([21]) Food and Agriculture Organization of the United Nations (FAO) major areas 21, 27, 34, 37, 41, 47, 51 (see Map 6.1.1).

([22]) For further information see the European Commission's Common Fisheries Policy (CFP) website.

Map 6.1.1: Fishing areas of the world



Area 18: Artic Sea; **Area 21: Atlantic, Northwest; Area 27: Atlantic, Northeast;** Area 31: Atlantic, Western Central; **Area 34: Atlantic, Eastern Central; Area 37: Mediterranean and Black Sea; Area 41: Atlantic, Southwest; Area 47: Atlantic, Southeast;** Area 48: Atlantic, Antarctic; **Area 51: Indian Ocean, Western;** Area 57: Indian Ocean, Eastern; Area 58: Indian Ocean, Antarctic and Southern; Area 61: Pacific, Northwest; Area 67: Pacific, Northeast; Area 71: Pacific, Western Central; Area 77: Pacific, Eastern Central; Area 81: Pacific, Southwest; Area 87: Pacific, Southeast; Area 88: Pacific, Antarctic.

Source: UNFAO, VLIZ, DG MARE

The EU fishing fleet continues to shrink. The number of active vessels registered in 2018 was 81 860, which had a combined capacity of 1.5 million gross tonnes and a total engine power of 6.2 million kilowatts. Compared to 2008, the number of vessels was down -4.2 %, the overall gross tonnage was down -17.2 % and engine power was down -9.9 %.

The EU fishing fleet is diverse; Spain has the highest gross tonnage, France most power and Greece most vessels

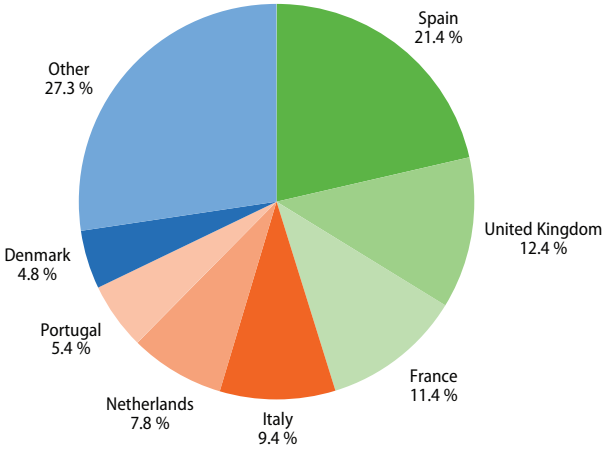
The EU fleet is very diverse, with the vast majority of boats being no more than 10 metres long, and a small number of vessels exceeding 40 metres in length. The average size of an EU fishing boat in 2018 was 19 gross tonnes and the average engine power was 75.1 kw.

When measured by gross tonnage, Spain had by far the largest fishing fleet among Member States (21.4 % of the EU total). The fleets of the United Kingdom and France, the next largest, were almost half the size of that in Spain (see Figure 6.1.1). When measured by engine power, however, the largest fleet was that in France (15.7 % of the EU total), followed by Italy (15.1 %) and Spain (12.7 %).

When measured by the number of vessels, the largest fleet in the EU was in Greece (18.2 % of all vessels), followed by Italy (14.7 %) and Spain (11.0 %). Greek vessels were small on average, however, with an average size of 4.8 gross tonnes, and an average engine power of 28.6 kilowatts in 2018.

By way of comparison, the overall holding capacity of the Norwegian fishing fleet was the largest in Europe (0.4 million tonnes in 2018). It was also considerably more powerful than that of any EU Member State. In the case of Iceland, despite having a much smaller fleet (1 600 vessels in 2018) than France and Italy, the overall holding capacity (gross tonnage) was very similar.

Figure 6.1.1: EU fishing fleet capacity, 2018
(% of EU-28 total gross tonnage)



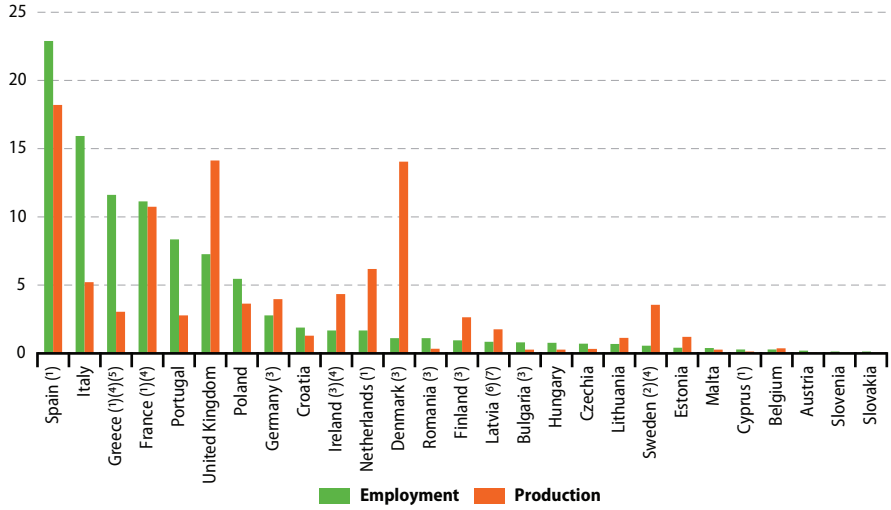
Source: Eurostat (online data code: fish_fleet_alt)

The fisheries industry provided jobs in the EU for about 179 600 people in 2017

A provisional 179 600 people were employed in the EU's primary fisheries industry in 2017, of which about one third were employed in the aquaculture sub-sector. About 41 000 people in Spain worked in the fishing industry in 2017, with a further 29 000 people in Italy, 21 000 people in Greece and 20 000 people in France.

Although Italy, Greece and Portugal only produced about a combined one tenth (11.0 %) of EU fisheries production in 2017, they accounted for just over one-third (35.9 %) of employment (see Figure 6.1.2). In contrast, Denmark, the Netherlands and the United Kingdom accounted for much higher shares of EU fisheries production than shares of employment in the fisheries industry. These contrasts highlight the differences between the fishing industries of some countries with a relatively large number of small vessels and others with a relatively small number of large vessels.

Figure 6.1.2: Employment in the EU fisheries industry and fisheries production, 2017
(% share of EU-28 totals)



(1) Provisional employment figures.
(2) Employment figures, 2016.
(3) Catches data, provisional or estimated.
(4) Aquaculture data, provisional or estimated.
(5) Catch data for Atlantic, East Central, 2015.
(6) Catch data for Atlantic, East Central, 2016.
(7) Aquaculture data, 2016.
(8) Luxembourg, no production.

Source: Eurostat (online data code: nama_10_a64_e, fish_ca_main, fish_aq_q and fish_aq2a)

6.2 Fisheries production: catches and aquaculture

The monitoring of catches and aquaculture production is an essential tool for securing fish stocks and sustaining the common resources available in Europe's large and rich fishing areas.

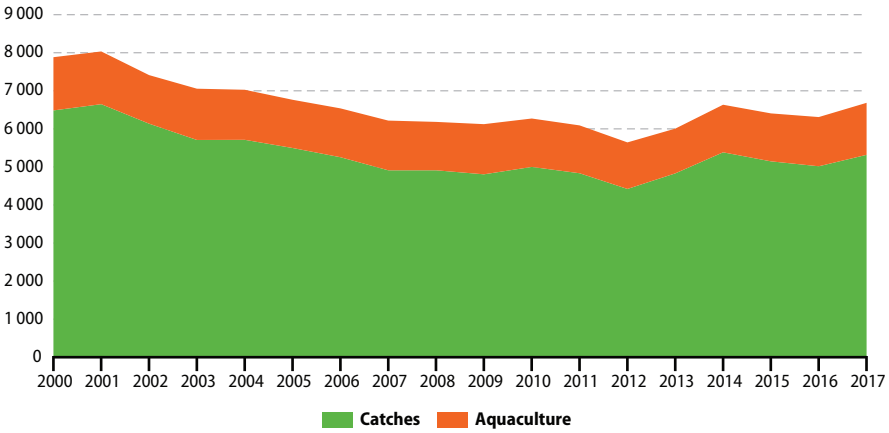
EU production of fishery products from catches and aquaculture estimated at 6.7 million tonnes in 2017

The EU's ([23]) total production of fishery products in 2017 was estimated to be about 6.7 million tonnes of live weight equivalent (the mass or weight when removed from water).

([23]) Catches and landings figures for the EU exclude the EU's landlocked countries (Czechia, Luxembourg, Hungary, Austria and Slovakia). Luxembourg does not collect aquaculture statistics.

Total production in 2017 was up sharply (+5.9 %) on the level in 2016 and an overall 0.9 million tonnes more than the relative low in 2012. Nevertheless, total production of fishery products in 2017 remained much lower (-15.2 %) than the corresponding level in 2000 (see Figure 6.2.1). The downward trend to 2012 and subsequent upturn to 2017 reflect parallel trends for catches, which account for four-fifths of total fisheries production, as the production of farmed aquatic organisms remained relatively stable.

Figure 6.2.1: Total production of fishery products, EU-28, 2000-2017
(1 000 tonnes of live weight)



Note: the estimated total catches data for Greece for the years 2016 and 2017 includes 2015 data for the eastern-central Atlantic area. 2017 catches data for Latvia include 2016 data for the eastern-central Atlantic area; substitute years have been used where there are a limited number of confidential data for aquaculture.

Source: Eurostat (online data code: fish_ca_main, fish_aq_q and fish_aq2a)

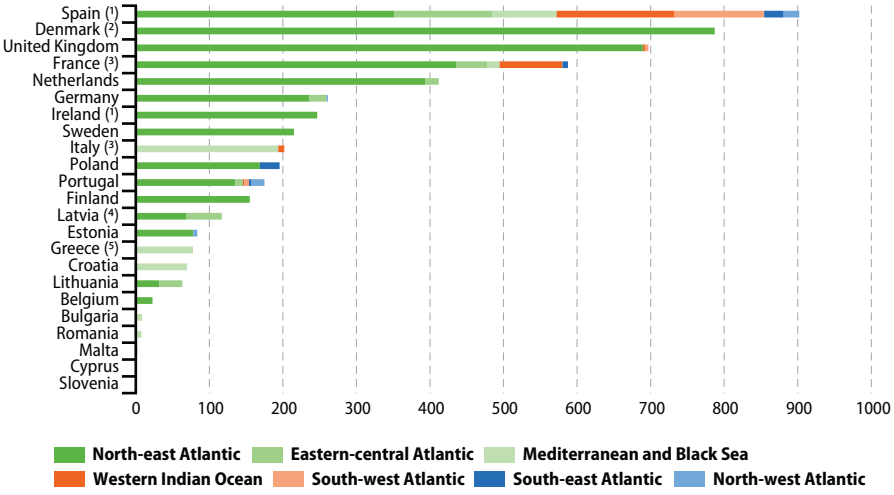
A majority (57.1 %) of all EU fisheries production from catches and aquaculture came from just four Member States in 2017; these were Spain (18.2 %), the United Kingdom (14.1 %), Denmark (14.0 %) and France (10.7 %). The overall rise in EU production in 2017, principally reflected a bounce-back in production in Denmark (up +33.2 %) and strong growth in Spain (+6.1 %) and the United Kingdom (+5.7 %). In contrast, the volatile production levels in Lithuania, as a result of the variable catch in the eastern-central Atlantic, were once again highlighted with a fall of one third (-31.2 %) between 2016 and 2017.

By way of comparison, it is interesting to note that total fisheries production in Norway (3.5 million tonnes of live weight in 2017) was about one-half of that of the EU as a whole. Total production in Iceland (1.2 million tonnes in 2017) was almost as big as in Spain, the EU's biggest fisheries producer.

EU catches in 2018 estimated at 5.3 million tonnes of live weight

Fish catches cover fish, molluscs, crustaceans and other aquatic animals, residues and aquatic plants that are taken for all purposes, by all types and class of vessel, gear and fishermen, operated in all the seven marine areas legally covered by EU Statistical Regulations. They cover catches in high-sea fishing areas, offshore, inshore or brackish water areas. The production from aquaculture and catches in fresh water is excluded. Although figures for the total production of fishery products are only available for 2017, statistics on catches are available for 2018.

Figure 6.2.2: Catches by fishing area, 2018
(1 000 tonnes live weight)



(1) 2017 data.
(2) Estimate using 2017 data for the north-west Atlantic area.
(3) Provisional.
(4) 2017 data for the North East Atlantic area and 2016 data for the Eastern Central Atlantic area.
(5) 2015 data for the Eastern Central Atlantic area.

Source: Eurostat (online data code: fish_ca_main)

The total EU catch in 2018 was an estimated 5.3 million tonnes live weight, a similar level to that in 2017. However, it remained much lower than that at the turn of the Millennium (1.3 million tonnes less than the catch in 2001), although 0.9 million tonnes higher than the low point in 2012.

Although total catches in 2018 and 2017 were similar at the level of the EU, there were contrasts among Member States; among others, there were higher catch levels in France (a provisional +11.0 %), the Netherlands (+13.9 %) and Germany (+13.9 %) but lower levels in the United Kingdom (-3.6 %) and Denmark (an estimated -12.7 %).

The fishing fleets of Spain (0.9 million tonnes of live weight in 2017), Denmark (0.8 million tonnes in 2018), the United Kingdom (0.7 million tonnes), France (0.6 million tonnes) and the Netherlands (0.4 million tonnes) caught about two thirds of all aquatic organisms in the EU in 2018 (see Figure 6.2.2). Spain and Portugal were the only Member States that took catches in all of the seven fishing areas covered by the EU catch statistics.

The vast majority of the EU catch is made in the north-east Atlantic

Although the European fishing fleet operates worldwide, three-quarters of all EU catches were taken in the north-east Atlantic (see Figure 6.2.3 and Map 6.1.1 for an overview of fishing areas). The key species caught in north-east Atlantic were Atlantic herring (21.8 % of the live weight caught in this region), Atlantic mackerel (12.5 %), European sprat (11.2 %) and Blue whiting (10.7 %).

About one fifth of the total live-weight catch in the north-east Atlantic made by the EU fishing fleet was by Denmark, which was followed closely by United Kingdom and then the fleets of France and the Netherlands which both accounted for a further one tenth of the EU total.

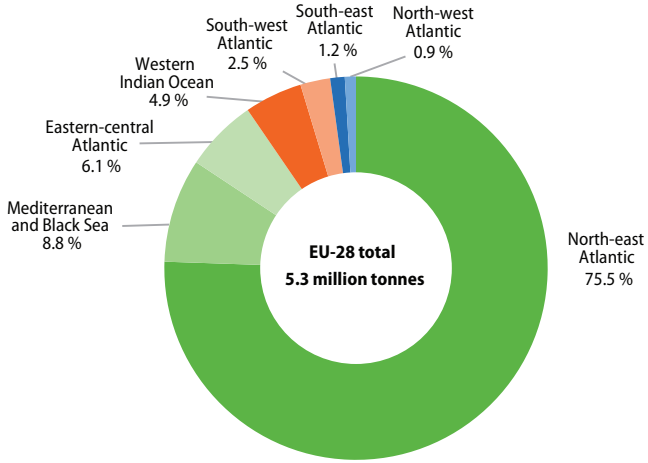
In the Mediterranean and Black Sea about one fifth of the total live-weight caught by the EU fishing fleet was sardines (22.5 %), with another one fifth being anchovies. Two-fifths of the total EU catch in this region was by Italy, with Spain (18.7 %, based on 2017 data), Greece (16.6 %) and Croatia (15.1 %) accounting for the vast majority of the rest.

In the eastern-central Atlantic, the main catches were skipjack and yellowfin tuna, sardines and mackerel. Two fifths of the total live-weight caught by the EU fishing fleet in this region was by Spain (2017 data), the other main player in this region being Latvia.

In the western Indian Ocean, the main catch was tuna, whether skipjack, yellowfin or bigeye. A little less than two thirds of the EU total was caught by Spain (2017 data) and one third by the fishing fleet of France.

To complete the overview of species by region, the main species caught in the south-west Atlantic were hake, other groundfish and squid, in the south-east Atlantic they were mackerel and skipjack tuna, and in the north-west Atlantic they were redfish, halibut and cod.

Figure 6.2.3: Catches by fishing area, EU-28, 2018
(% of total catches, thousand tonnes of live weight)



Note: EU-28, estimate; Spain and Ireland, 2017 data.

Source: Eurostat (online data code: fish_ca_main)

Aquaculture: 1.4 million tonnes of aquatic organisms produced in EU in 2017, worth EUR 5.1 billion

Aquaculture is the production of fish and other aquatic organisms like molluscs and crustaceans under controlled conditions; it is an alternative to catching wild fish and takes place both inland and in marine areas. Aquaculture is a key component of both the Common Fisheries Policy (CFP) and the Blue Growth ([24]) Agenda to support sustainable growth in the sector.

The EU produced an estimated 1.4 million tonnes of aquatic organisms in 2017, corresponding to one fifth of the output of European fisheries as a whole. In terms of output, the EU's aquaculture sector was the eighth largest worldwide, with a 1.6 % share of the volume of global output in 2016 ([25]). The value of the EU's aquaculture production was an estimated EUR 5.1 billion in 2017, about two fifths of the total value of the EU's total production of fishery products.

([24]) For more information see the Maritime Affairs of the European Commission.

([25]) The state of world fisheries and aquaculture, 2018 – FAO at http://www.fao.org/3/I9540EN/i9540en.pdf (p27), where it is noted that China dominates world aquaculture production (61.5 % of the total in 2016).

Five Member States produced about three-quarters of the EU's aquaculture output volume and value

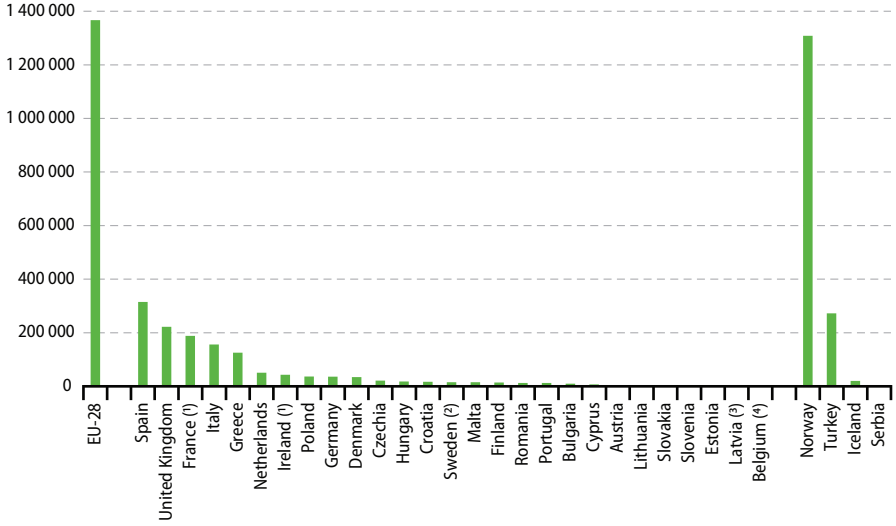
Five Member States were responsible for about three-quarters of the EU's total output of aquatic organisms in 2017 (see Figure 6.2.4); Spain provided just over one fifth of the total (23.0 %), followed by the United Kingdom (16.3 %), France (13.8 %), Italy (11.4 %) and Greece (9.2 %).

The different aquatic organisms fetch different prices. For instance, average first sale prices for salmon and seabass are around 6 EUR/Kg, gilthead seabream around 5 EUR/Kg, while average prices for mussels are below 1 EUR/Kg. Among Member States, the United Kingdom had the highest value of aquaculture output in 2017 (an estimated EUR 1.3 billion), representing one quarter of the EU total. The value of output was next highest in France (an estimated EUR 764 million, or 15 % of the EU total), and then in Spain (EUR 578 million, 11 %), Greece (a provisional EUR 546 million, 11 %) and Italy (EUR 543 million, 11 %).

To put the EU's aquaculture industry in some perspective, the value of aquaculture output in Norway exceeded that of the whole of the EU; Norway produced 1.3 million tonnes of aquatic organisms (almost exclusively salmon), worth EUR 7 billion in 2017. Norway was the world's seventh largest producer in farmed fisheries in 2016, with a 1.7 % global share. It was also the world's second largest exporter of aquatic organisms, after China.

All fisheries production in the EU's landlocked countries (the Czech Republic, Hungary, Austria and Slovakia) comes from aquaculture

Figure 6.2.4: Aquaculture production, 2017
(tonnes of live weight)



Note: Luxembourg does not produce aquaculture statistics.

(1) Estimate.
(2) Eurostat estimate.
(3) Aquaculture, 2016.
(4) Not significant.

Source: Eurostat (online data code: fish_aq2a)

(Luxembourg not collecting such data). In the other Member States it ranges from 93.3 % of total fisheries production in Slovenia to less than 1 % in Belgium and Latvia. In general, aquaculture plays a major role in the countries around the Mediterranean Sea and the Black Sea, where sea-fishing is generally carried out using small-scale vessels with an average capacity lower than the EU average. This helps explain why aquaculture activity plays a relatively large role in the respective fisheries industries of Malta (87.6 % of total fisheries production), Cyprus (80.7 %), Greece (about two-thirds), Romania (57.3 %), Bulgaria (53.5 %) and Italy (44.9 %).

EU aquaculture production focussed on finfish species and molluscs

Finfish (particularly, salmon, trout, seabass, carp and tuna) and molluscs (particularly, mussels, oysters and clams) together accounted for almost all of aquaculture production by weight in the EU in 2017 (see Figure 6.2.5).

The aquafarming production of Atlantic salmon in the EU was the most valuable commercial species in 2017, accounting for about one quarter of the value of total aquaculture output. The value of trout output was the next highest, about one eighth of the total value, followed European seabass, seabream and oysters (about 10 % each).

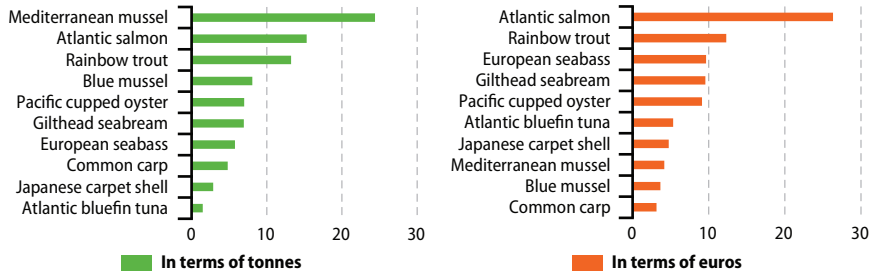
A high degree of country specialisation within EU

Within the EU, the aquaculture sector is highly specialised at country level. The United Kingdom was responsible for just over 90 % of farmed salmon in the EU in 2017. At world level, Atlantic salmon (*Salmo salar*) was the 9th most produced finfish species and the EU contributed 8.1 % to global production in 2016.

Spain produced seven in every ten tonnes of farmed Mediterranean mussel (*Mytilus galloprovincialis*), largely due to its rafts in the estuaries of Northern Spain using the 'off bottom' method. Blue mussels (*Mytilus edulis*) were farmed in the North East Atlantic by France (about 36 % of the EU total in 2017) the Netherlands (about 35 %), and Ireland (an estimated 13 %). Both 'off bottom' (preferred in Ireland) and 'on-bottom' methods (preferred in the Netherlands) were used.

Greece produced a little over one half of the EU's production of gilthead seabream (*Sparus aurata*) and European seabass (*Dicentrarchus labrax*) in 2017. Czechia and Poland were the leading EU producers of common carp (*Cyprinus carpio*), each producing about one quarter of the EU total. At world level, common carp was the third most farmed finfish species.

Figure 6.2.5: Main species in aquaculture production, EU-28, 2017
(% of total aquaculture production)



Source: Eurostat (online data code: fish_aq2a)

Within the EU, pacific cupped oysters (*Crassostrea gigas*) were produced mainly in France (about 88 % in 2017). Worldwide, one-third of all molluscs produced in 2016 were cupped oysters. The Japanese carpet shell (*Ruditapes philippinarum*) was mostly farmed in Italy (94.8 % of the EU total in 2017). At world level it was the second most produced species among the molluscs.

Atlantic bluefin tuna (*Thunnus thynnus*) was farmed in cages in only three Member States: Malta farmed almost two-thirds (64.3 %) of EU production, the rest being produced in Spain and Croatia. While Malta and Croatia farmed Atlantic tuna in the Mediterranean Sea only, Spain also farmed a small proportion in the North East Atlantic.

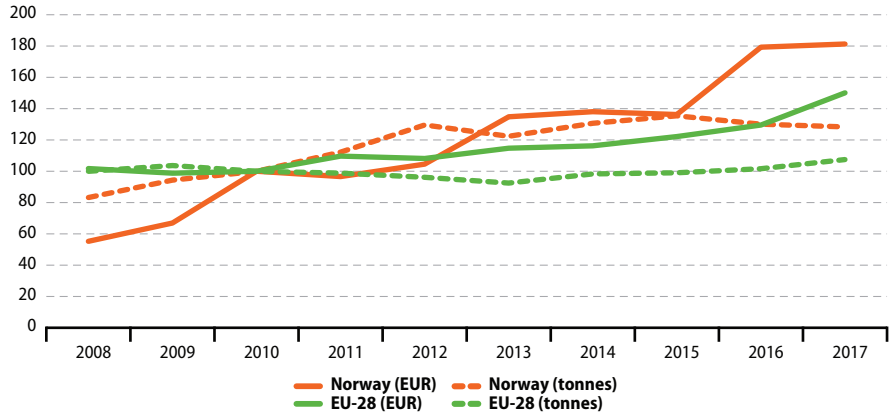
The production of farmed rainbow trout (*Oncorhynchus mykis*) in the EU is something of an exception to the general observation about country specialisation; rainbow trout were farmed in 24 EU countries. One half of the live-weight of rainbow trout produced in the EU in 2017 came from the combined output of France (18.5 %), Italy (18.2 %) and Denmark (16.2 %). Fish were farmed either in inland freshwater (about four-fifths of the total) or in the saltwater of the north-east Atlantic, and mainly in tanks (about 60 %).

Steady level of EU aquaculture production volume but rising value

Between 2008 and 2017, the volume of EU aquaculture production remained relatively stable (see Figure 6.2.6). Nevertheless, the value of this output increased relatively steadily and was an estimated one-sixth higher in 2017 than the value in 2016.

During a similar period, there was a sharp increase in both the volume and value of Norwegian aquaculture production. Nevertheless, due to a sea lice issue with salmon, aquaculture production volume in Norway declined in 2017 (-1.3 %). However, resulting higher prices in 2017 increased the value of aquaculture production (+1.1 %).

Figure 6.2.6: Aquaculture production and value, EU-28 and Norway, 2008-2017
(2010=100)



Source: Eurostat (online data code: fish_aq2a)

6.3 Landings

Eurostat's landings statistics relate to fishery products (product weight and value) landed by EU/EAA vessels on EU/EAA territory. Landings from non EU/EAA vessels or landings outside the EU/EAA territory are excluded. Landlocked EU countries without a marine fishing fleet are not included.

About 4.8 million tonnes (product weight) landed in EU in 2018

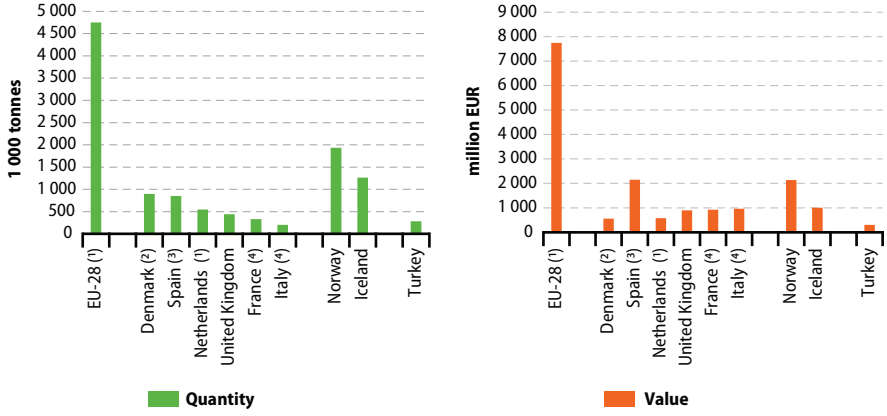
A mixture of confidential and, as yet, unavailable figures for 2018 concerning some of the key fishing Member States means that the estimates for the EU could be subject to considerable revision. It is for this reason that EU figures are presented in broad terms. Nevertheless, they give a clear indication of the size of the industry and its importance in some Member States.

The amount of fish landed in the EU in 2018 is estimated at about 4.8 million tonnes product weight. This would represent a rebound from the relative low in 2012 but remain about 350 000 tonnes less than the relative peak recorded in 2007.

Denmark accounted for about one fifth (0.9 million tonnes in 2016) of the EU landings, Spain another one fifth (0.9 million tonnes in 2017) and the Netherlands about one tenth (an estimated 0.5 million tonnes in 2018).

Among the key fishing Member States for which 2018 data are available, the quantity of landings was higher in the Netherlands (an estimated +7.2 % or 36 700 tonnes), France (a provisional +9.6 % or 29 200 tonnes), Poland (+11.0 % or 12 500 tonnes) and Italy (a provisional +4.8 % or 9 300 tonnes). The number of Member States that recorded reduced landings in 2018 was limited, the largest being the reduction of 15 800 tonnes in Finland. By way of comparison, landings to ports in Iceland were higher (up +6.4 % or 75 700 tonnes) at 1.3 million tonnes but lower in Norway (-2.3 % or 45 750 tonnes) at 1.9 million tonnes in 2018.

Figure 6.3.1: Landings in selected countries and EU-28, 2018



(1) Estimate.
(2) 2016 data for species that remain confidential in 2017 and 2018.
(3) 2017 data.
(4) Provisional.

Source: Eurostat (online data code: fish_ld_main)

Quantity of landings in EU higher in 2018 and value up to about EUR 7.8 billion

The estimated rise in the quantity of total fishery products landed in the EU in 2018 looks to have been accompanied by a rise in the value of landings to an estimated total of EUR 7.8 billion (see Figure 6.3.1). Nevertheless, it should be borne in mind that this figure includes unchanged data for Spain that relate to 2017 and a number of other estimates or provisional data.

Among Member States for which 2018 are available, the value of the fish landed in Italy remained unchanged at a provisional EUR 1.0 billion. In contrast, the value of landings in France increased sharply (a provisional +7.3 % to EUR 0.9 billion), almost in line with the rate of increase in the quantity landed. It is important to note that the value of landings in Spain were a little more than double that of Italy in 2017 at EUR 2.2 billion. This reflects the high value attached to its landings of species like tuna, hake, swordfish, squid and pilchards.

Data sources and availability

Fisheries statistics are collected by Eurostat from official national sources for the EU Member States and members of the European Economic Area (EEA). The statistics are collected using internationally agreed concepts and definitions developed by the Coordinating Working Party (CWP), comprising Eurostat and several other international organisations with responsibilities in fisheries statistics.

The European fisheries production statistics include production from catches and aquaculture. Catches refer to fishery products taken for all purposes (commercial, industrial, recreational and subsistence) by all types and classes of fishing units (including fishermen, vessels, gear, etc.). The flag of the fishing vessel is used as the primary indication of the nationality of the catch. In addition to catches, Eurostat also collects statistics on landings which relate to all fishery products (expressed as product weight) landed in the reporting country, regardless of the nationality of the vessel making the landings. Landings by vessels of the reporting country in non-EU ports and imported into the EU are to be included as well. Aquaculture production refers to the farming of aquatic (freshwater or saltwater) organisms, under controlled conditions. Aquaculture implies some form of intervention in the natural rearing process such as regular stocking, feeding and protection from predators. Farming also implies individual or corporate ownership of the stock being cultivated.

Catch statistics are submitted to Eurostat in compliance with the following EU legislation:

- Regulation (EC) No 218/2009 of the European Parliament and of the Council of 11 March 2009 on the submission of nominal catch statistics by Member States fishing in the North East Atlantic (OJ L87 of 31.03.2009);
- Regulation (EC) No 217/2009 of the European Parliament and of the Council of 11 March 2009 on the submission of catch and activity statistics by Member States fishing in the North-West Atlantic (OJ L87 of 31.03.2009);
- Regulation (EC) No 216/2009 of the European Parliament and of the Council of 11 March 2009 on the submission of nominal catch statistics by Member States fishing in certain areas other than those of the North Atlantic (OJ L87 of 31.03.2009, p.1).

The statistics are reported as the live weight equivalent of the landings (in other words, the landed weight of a product to which an appropriate conversion factor has been applied). Therefore excluded are quantities of fishery products which are caught but not landed. For the landings statistics, each country reports annual data on the quantities and values of fishery products landed in its ports under the terms of Regulation (EC) No 1921/2006 of 18 December 2006 on the submission of statistical data on landings of fishery products in EU Member States and repealing Council Regulation (EEC) No 1382/91 (OJ L403 of 30 December 2006). For aquaculture statistics, the national authorities submit aquaculture production statistics to Eurostat under the terms of Regulation (EC) No 762/2008 of 9 July 2008 on the submission by Member States of statistics on aquaculture and repealing Council Regulation (EC) No 788/96 (OJ L218 of 13.08.2008).

Concerning the fishing fleet, statistics for the EU Member States are derived from the Community Fishing Fleet Register maintained by the European Commission's Directorate-General for Maritime Affairs and Fisheries. Statistics for Iceland and Norway are compiled from fleet files submitted by the national authorities.

7 Food and beverages processing

Introduction

The food system is much wider than primary agricultural production; it also covers food preparation and sales. Farming is the activity of growing, rearing and harvesting primary products. However, before food arrives on the table, it has often been processed, packaged, transported, distributed and marketed.

The EU's Common Agricultural Policy (CAP) recognises these links with its aims to 'ensure a stable supply of affordable food', to 'keep the rural economy alive by promoting jobs in farming, agri-foods industries and associated sectors' and ' to protect food and health quality'.

In order to get a clearer picture of this chain from 'farm to fork', it is important to move beyond an analysis of only primary agricultural production.

Two further elements are examined in this Chapter; the structural elements of the food and beverages processing sector and the transport of agricultural products and food products. There is a range of legislation that enterprises must adhere to, in order to help ensure animal, food and health quality; these include laws on food hygiene, additives and residues, labelling, live animal transport (such as length of journey, safe loading and unloading practices, appropriate space, water, feed and rest) and slaughtering practices.

Did you know ...

In 2016 there were about **300 000 enterprises** involved in food and beverages production in the EU, employing **4.7 million people**

In 2018, the value of food and beverages produced in the EU was **EUR 954 billion**

95% of food and beverages enterprises are small, employing **less than 50 people**

A combined **3.1 billion tonnes** of primary agricultural, forestry and fisheries products, food products, beverages and tobacco were transported by road on EU registered trucks in 2017...

...over a payload distance of **540 billion kilometres**

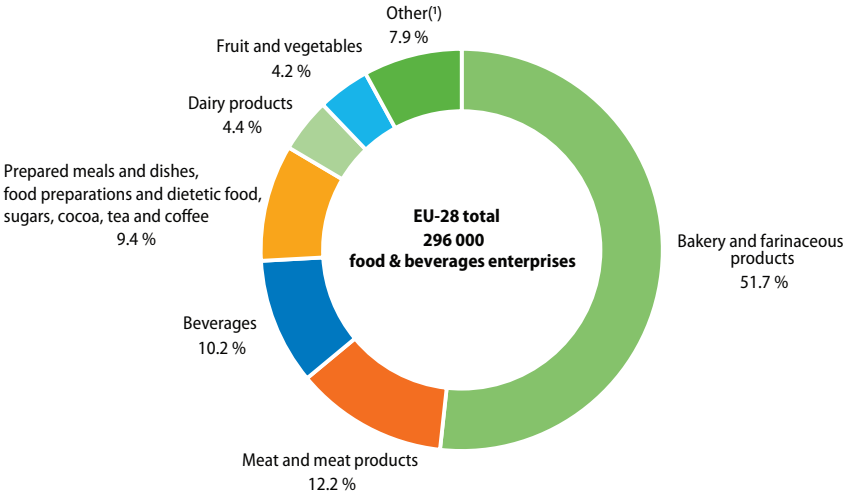
7.1 Manufacture of food products and beverages

Much of the produce from the EU's 10.5 million farms are sold on to the food and beverages industry for processing, with only some products like wine, olive oil and cheese being sometimes processed directly by farms or farmers' cooperatives. In turn, the foods and beverages processing industry produces a range of products for final consumption or for use as intermediate products (like oils, fats and sugars) for further processing or transformation in other downstream manufacturing industries, before they are available to consumers.

Almost 300 000 enterprises in the EU involved in food and beverages production

There were about 296 000 enterprises across the EU that manufactured food and beverages in 2016. These enterprises produced a range of food products and beverages, about one half (51.7 %) of which were involved in bakery and farinaceous products such as breads, cakes, biscuits, pastas and noodles (see Figure 7.1.1). Enterprises producing meat and meat products, beverages and other food products like sugars and confectionery products, prepared meals and teas together accounted for about a further one third of food and beverages enterprises in 2016.

Figure 7.1.1: Food and beverage enterprises, EU-28, 2016
(% share of all food and beverage enterprises in EU-28)



Note: due to reasons of confidentiality, the total used to calculate these shares excludes about 61 enterprises. For Malta, 2015 data were used for enterprises making meat and meat products, fruit and vegetables, dairy products, bakery and farinaceous products, and other food products. For Slovakia, 2013 data were used for fish and fish product enterprises as well as oils and fats enterprises.

(1) This grouping includes vegetable and animal oils and fats, grain mill and starch products, prepared animal feed and fish and fish products

Source: Eurostat (online data code: sbs_sc_sca_r2)

4.7 million people were employed in food and beverages manufacturing across the EU in 2016

Food and beverages enterprises provided employment to 4.7 million people and generated EUR 1 118 billion of turnover.

France and Italy had the largest number of food and beverages enterprises (see Figure 7.1.2). However, Germany employed the most people in this sector (18.9 % of the EU-28 total), followed by France (13.2 %) and the United Kingdom (10.4 %).

Most food and beverage enterprises in the EU are small, employing less than 50 persons

The overwhelming majority (about 95 %) of all food and beverage enterprises in the EU were small in nature, employing less than 50 persons. Indeed, very small enterprises employing less than ten persons accounted for just over three quarters (78.9 %) of all food and beverages enterprises in 2016.

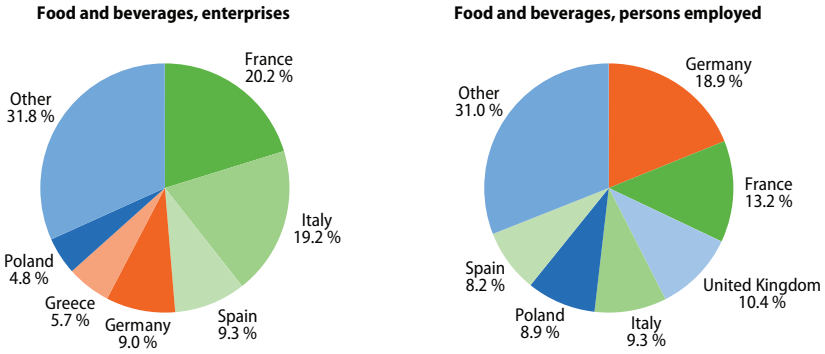
Medium-sized enterprises employing between 50 and 249 persons and large enterprises employing more than 250 persons together accounted for a minority of enterprises in all Member States; the highest shares were in Luxembourg (15.5 %), Germany (11.4 %), Estonia (10.1 %) and Poland (10.0 %) with much lower shares in most other Member States, including Spain (4.2 %), France (2.1 %) and Italy (1.7 %).

The value of food and beverages produced in the EU was EUR 954 billion in 2018

The production of food and beverages in the EU was valued at an estimated EUR 954 billion in 2018. This was double the value of the primary agricultural products from the EU's agricultural industry.

For the 374 food and beverage product categories for which data are collected, the value produced in Germany in 2017 was the highest among Member States (EUR 149.6 billion), followed by France (EUR 135.8 billion) and Italy (EUR 124.2 billion).

Figure 7.1.2: Food and beverages enterprises and persons employed, EU-28, 2016
(% share of EU-28 totals)



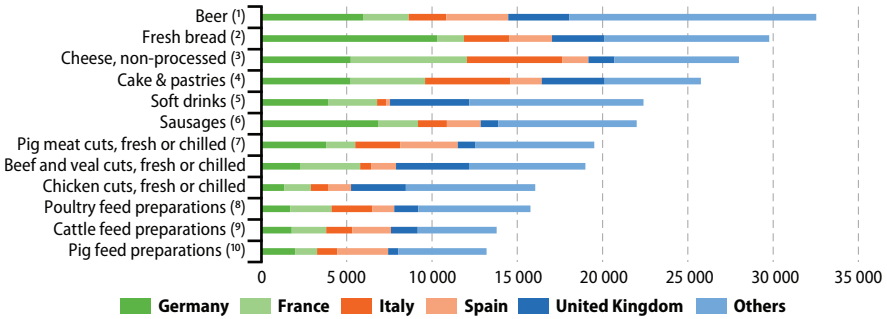
Source: Eurostat (online data code: sbs_na_sca_r2)

The five main food and beverages producer Member States, which also includes Spain and the United Kingdom, accounted for the majority of the value of each of the top dozen products manufactured in the EU in 2018 (see Figure 7.1.3). Nevertheless, there was some specialisation among Member States, even for the dozen most valuable products.

The most valuable food or beverages product manufactured in the EU in 2018 was beer (from malt but excluding non-alcoholic beer) and was valued at EUR 32.5 billion. This market is therefore of particular importance to farmers growing malted barley (but also some other grains) and hops. The main producer Member States of such beer were Germany (18.3 % of the EU total), Spain (11.2 %) and the United Kingdom (11.0 %) although there was also some specialisation in Belgium (8.9 % in 2017) and the Netherlands (6.7 %).

Among other specialisations, Austria was second only to the United Kingdom in the value of soft drinks produced (17.7 % and 20.7 % of the total EU value respectively), mainly explained by the manufacture of energy drinks. The Netherlands was the second main producer of cuts of chicken after the United Kingdom (15.7 % and 20.1 % of the total EU value respectively) and was also a key producer of preparations for cattle and chicken feed. A little less than one tenth (8.6 %) of the total value of the EU's cuts of beef and veal came from Ireland, behind Germany (12.1 %), France (18.4 %) and the United Kingdom (22.5 %).

Figure 7.1.3: Top dozen food and beverage products in the EU, by value and by selected producer Member States, 2018
(EUR million)



(1) Beer made from malt (excluding non-alcoholic beer, beer containing ≤ 0,5 % by volume of alcohol, alcohol duty).
(2) Fresh bread containing by weight in the dry matter state ≤ 5 % of sugars and ≤ 5 % of fat (excluding with added honey; eggs; cheese or fruit).
(3) Grated, powdered, blue-veined and other non-processed cheese (excluding fresh cheese, whey cheese and curd). DE: 2017.
(4) Cake and pastry products; other bakers' wares with added sweetening matter.
(5) Waters, with added sugar, other sweetening matter or flavoured, i.e. soft drinks (including mineral and aerated).
(6) Sausages and similar products of meat, offal or blood and food preparations based thereon (excluding liver sausages and prepared meals and dishes).
(7) Fresh or chilled pig meat (including fresh meat packed with salt as a temporary preservative; excluding carcases, hams and cuts thereof with bone in).
(8) Preparations used for farm animal feeding (excluding premixtures): poultry.
(9) Preparations used for farm animal feeding (excluding premixtures): cattle.
(10) Preparations used for farm animal feeding (excluding premixtures): pigs.

Source: Eurostat (https://ec.europa.eu/eurostat/web/prodcom/data/excel-files-nace-rev.2)

7.2 Transport of agricultural products and food products

The chain from 'farm to fork' relies on transport to get raw agricultural output and food from producers to consumers, often via warehouses, food processing facilities, wholesalers and retailers. The length of that journey and the modal network that the food takes can vary considerably; among many other factors, it depends on the perishable nature of the goods and the requirements to keep it fresh and in good quality. For example, some agricultural and food products will need to be kept frozen, others chilled or in a controlled atmosphere, whilst others will be transported dry or in air-conditioned storage. Optimum storage and treatment conditions are vital to ensure that the food that consumers buy is not just safe to eat but of a high quality. Before and during transport, therefore, elements like time and temperature control, sterilization, pasteurization, dehydration and canning are considered.

Only a partial picture of the transport of agricultural and food products can be given from the official data that are available. Nevertheless, it demonstrates the scale of agricultural and food transport in the EU, how reliant parts of the chain are on each other and some of the key transport flows.

This section of the Chapter looks at some details of the road freight transport and inland waterways freight transport in the EU. Information on the rail, air and sea networks are currently unavailable on a type of goods breakdown.

Billions of tonnes of agricultural products and food products are transported by road by EU trucks every year…

About 1.3 billion tonnes of primary agriculture, hunting, forestry and fishery products were transported by EU-registered trucks (over 3.5 tonnes of loading capacity) on roads in 2017. This includes both EU-produced goods and imports from outside the EU. A further 1.8 billion tonnes of food products, beverages and tobacco were driven by EU-registered trucks in 2017.

It should be noted that these figures do not take into account the weight of products transported on EU roads by non-EU registered trucks nor by trucks smaller than the 3.5 tonnes loading capacity. This is important to note in the EU-border countries, as a part of international transport is not covered by these statistics.

…over a payload-distance of about 540 billion kilometres in a year

A unit of measure of freight transport is the tonne-kilometre (tkm). This represents the transport of one tonne of goods by a given transport mode over a distance of one kilometre. For the purpose of this publication, this measurement is referred to as a 'payload-distance'. Agriculture, hunting, forestry and fishery products were transported by EU-registered trucks, with a loading capacity above 3.5 tonnes, for a payload-distance of 208 billion tonne-kilometres in 2017. Food products, beverages and tobacco were transported for a further 331 billion tonne-kilometres in 2017. To put this in some context, this was the equivalent of an average distance of 171 km for every tonne of such combined goods transported by road.

By way of comparison, metal ores and peat were transported by road for a payload-distance of 147 billion tonne kilometres in 2017, and other non-metallic mineral products for 148 billion tonne kilometres.

Continued growth in EU road freight transport of agricultural and food products

Between 2010 and 2017, the tonnes of agriculture, hunting, forestry and fishery products transported by EU-registered trucks continued to increase (+8.3 % in total). The total payload-distance for these products rose even more sharply (+15.3 % overall), suggesting that the average distance travelled by road of 1 tonne of goods had lengthened by almost 10 km. There was a similar development for food products, beverages and tobacco; the quantity transported by EU-registered trucks and the total payload-distance increased (+13.0 % and +17.2 % between 2011 and 2017 – see Figure 7.2.1).

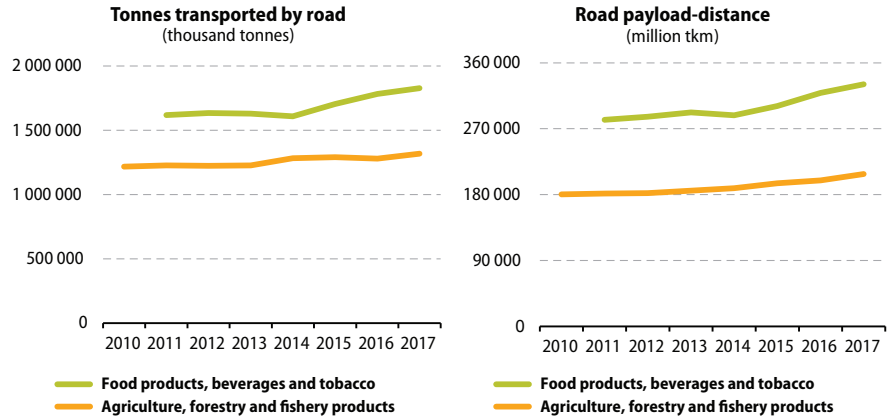
Agricultural products and food products represent the largest share of road freight transport payload-distance

A wide range of products are transported by EU-registered trucks. However, the payload-distance by road of the combined product groups of agriculture, hunting, forestry and fishery products and food products, beverages and tobacco was more than that of any other product group in 2017. These combined groups of goods accounted for 28.0 % of the payload-distance of all road freight transport on EU-registered trucks and 21.4 % of all the road freight tonnes in 2017. By way of comparison, metal ores and peat accounted for 8 % of all freight payload-distance by EU-registered trucks and 25 % of all road freight tonnes, and other non-metallic mineral products 8 % and 12 % of the total respectively.

The vast majority of agricultural and food products transported by road over distances of less than 300 km

A large majority (85.5 % of the goods in tonnes, 2017) of agriculture, hunting, forestry and fisheries products transported by EU-registered trucks were carried over distances of less than 300 km. This was also the case (79.8 %) for food products, beverages and tobacco products. Indeed, in both cases a majority (67.1 % and 57.4 % respectively) of these products were transported over distances of less than 150 km. In large part this reflects the perishable nature of many (particularly fresh) agricultural and food

Figure 7.2.1: Transport of agriculture, hunting, forestry and fishery products as well as food products, beverages, and tobacco by road in the EU



Source: Eurostat (online data code: road_go_ta_tg)

products as well as their widespread availability from regional producers. It also reflects the stated policy aim to move an increasingly high proportion of the transport of goods over 300 km onto trains or inland waterways as a more environmentally friendly means of transport over long distances ([26]).

Vast majority of road freight transport of agricultural and food products carried out within a Member State

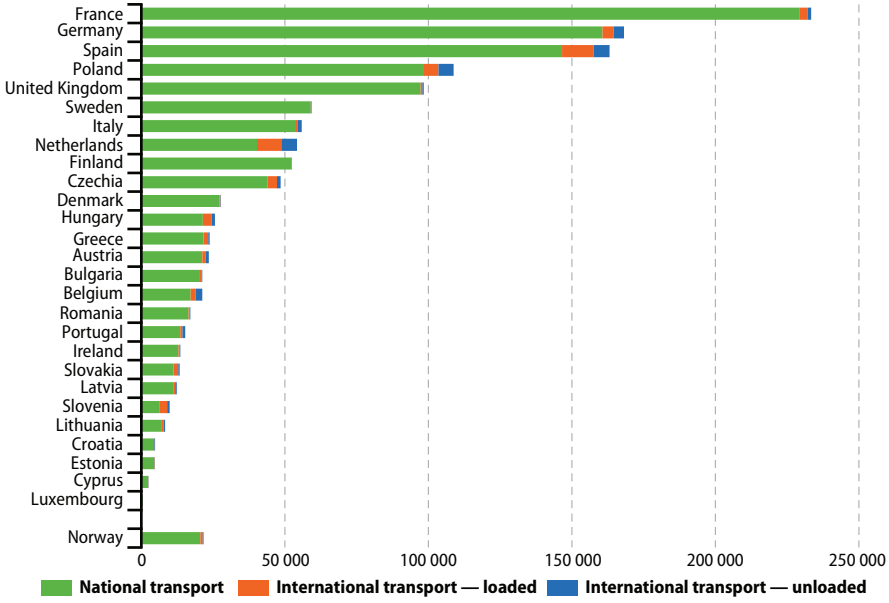
National road freight transport, which is carried out between two places located in the same country by a vehicle registered in that country, was the largest component of the road freight transport of agricultural, hunting, forestry and fishery products, and of food products in the EU, as was the case for other products. The other key component is international road transport between two places in two different countries, split between place of loading and unloading. Cross-trade transport that uses transport registered in a country other than the country of loading or unloading as well as cabotage transport performed on the national territory of a country different to that of the registered vehicle are much smaller segments of the market and not covered here.

National transport dominated road freight transport of agriculture, hunting, forestry and fishery products in all Member States (see Figure 7.2.2). The highest shares were on island Member States like the United Kingdom and Cyprus as well as Member States like Sweden and Finland with strong international sea transport links. Only in a few Member States, like the Netherlands and Belgium, where there are important cargo ports, as well as Slovenia and Hungary was the share of international freight transport of agriculture, hunting, forestry and fisheries products above 15 %.

A majority of the payload-distance by EU-registered trucks with agriculture, hunting, forestry and fishery products was done by trucks registered in just four Member States; Spain (20.7 %), France (13.4 %), Poland (12.6 %) and Germany (9.4 %). Likewise, a majority of the payload-distance of food products, beverages and tobacco was by trucks registered in four Member States in 2017; Poland (15.8 %), Germany (15.3 %), Spain (14.7 %) and the UK (12.8 %).

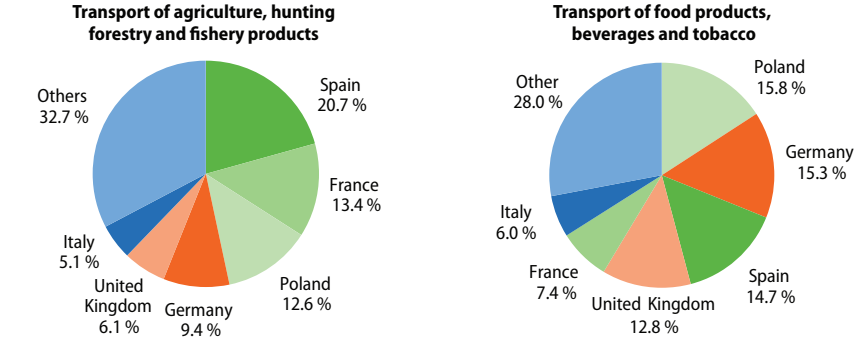
([26]) COM (2011)144 final: White paper: Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. It includes the aim that '30% of road freight over 300 km should shift to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050'.

Figure 7.2.2: Road transport of agriculture, hunting, forestry and fishery products, by type of transport, 2017
(thousand tonnes)



Source: Eurostat (online data code: road_go_na_tgtt; road_go_ia_lgtt and road_go_ia_ugtt)

Figure 7.2.3: Road freight transport of agriculture, hunting, forestry and fishery products as well as food products, beverages and tobacco, 2017
(% share of EU-28 total, tonne-kilometres)



Source: Eurostat (online data code: road_g_ta_tg)

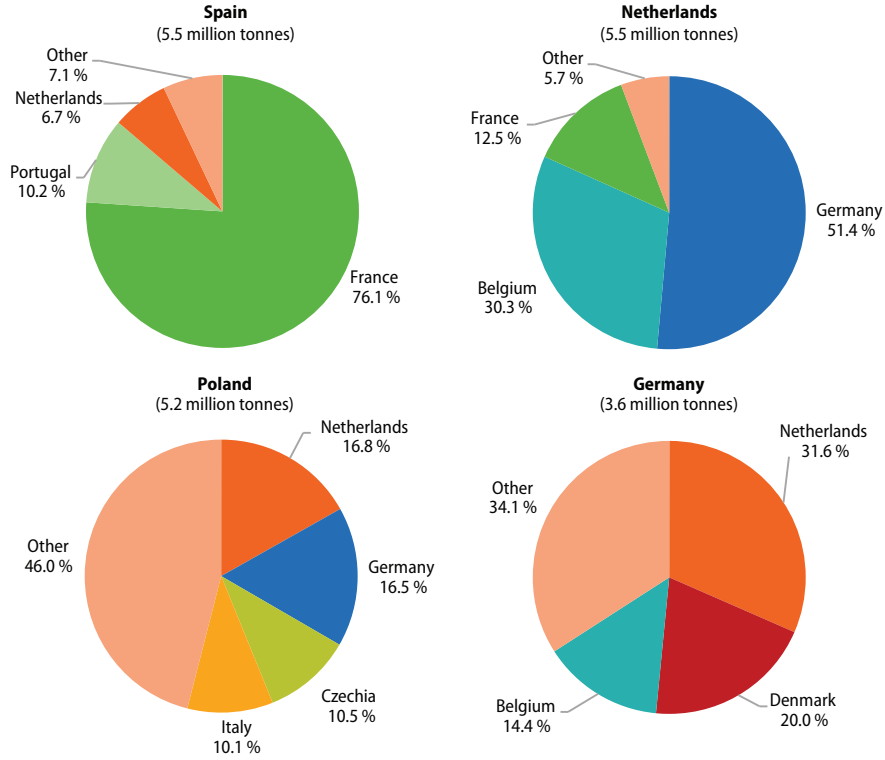
International road freight transport of agricultural products reliant on some key routes

Loading and unloading destinations can be used to get an idea of the road routes used for the international transport of agricultural and food products. An indication is given here only for agriculture, hunting, forestry and fishery products although the same analysis can be done for food products.

Based on the tonnes of goods unloaded in reporting countries, a majority of the international flow of agriculture, hunting, forestry and fishery products by EU-registered trucks was to four Member States; these were Spain (16.1 %), the Netherlands (15.9 %), Poland (15.2 %) and Germany (10.5 %).

Much of this international flow of agriculture, hunting, forestry and fishery products by road freight was between neighbouring countries; this appears to be very much the case for Spain, the Netherlands and Germany (see Figure 7.2.4). Three quarters (76.1 %) of the 5.5 million tonnes of agriculture, hunting, forestry and fishery products that travelled internationally by road on EU-registered trucks to be unloaded in Spain in 2017 were loaded back in France.

Figure 7.2.4: Agriculture, hunting, forestry and fishery products transported by road and unloaded in selected countries, 2017
(% share of tonnes by loading country)



Source: Eurostat (online data code: road_go_ia_ugtt)

Similarly one half (51.4 %) of the 5.5 million tonnes of international freight unloaded in the Netherlands in 2017 was loaded in Germany, with about another one third (30.3 %) loaded in Belgium. Almost two thirds of the 3.6 million tonnes of international freight of agriculture, hunting, forestry and fishery products that were unloaded in Germany in 2017 were loaded in the neighbouring countries of the Netherlands, Denmark and Belgium.

There were longer journeys transporting agriculture, hunting, forestry and fishery products to Poland, with one quarter of international road freight of such goods having been loaded in the Netherlands and Italy among others.

Inland waterways transport of agricultural and food products only 2 % of equivalent freight tonnes sent by road

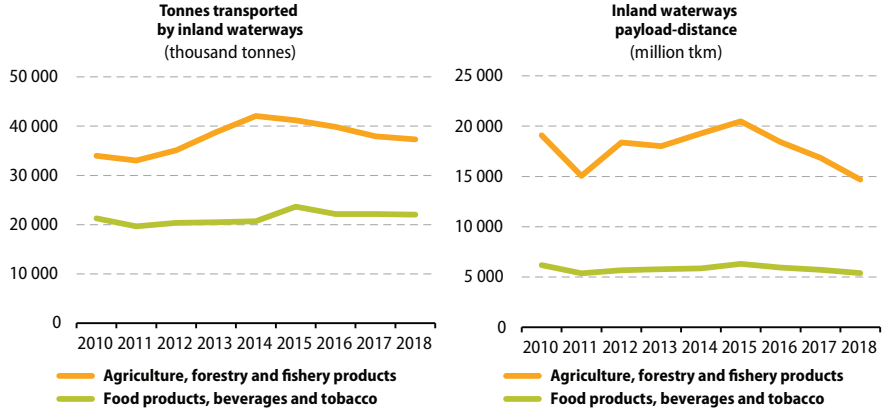
Whilst road transport is a key modal form for the transport of freight goods, the EU also has about 41 000 km of waterways and canals that are used to link cities and regions. Of the 18 Member States that have inland waterways and canals, a dozen of them have interconnected networks that allow cross-border traffic. The main river networks include the Rhine and its tributaries such as the Main, Mosel, Neckar and Sarre, as well as the Danube and Elbe, which are often connected to canal networks, of which those in Belgium and the Netherlands are the most widespread.

Europe's inland waterways were responsible for transporting a further 37.3 million tonnes of agriculture, hunting, forestry and fishery products, with a payload-distance of 14.7 billion tonne-kilometres in 2018. Likewise, a further 22.0 million tonnes of food products, beverages and tobacco were transported along the EU's inland waterways in 2018, with a payload-distance of 5.4 billion tonne-kilometres. Together these products represented 10.9 % of the total freight tonnes transport on the EU's inland waterways in 2018 and 14.9 % of the total payload-distance.

Less agricultural products sent by inland waterways in 2018 than 2014

It should be borne in mind that annual changes in inland waterways transport freight loads and performance can be impacted by water levels (either too high or too low) and whether or not navigability is affected. Over the medium-term though some trends can be determined and the figures for 2018 underlined some downward traffic trends (see Figure 7.2.5).

Figure 7.2.5: Transport of agriculture, hunting, forestry and fishery products as well as food products, beverages, and tobacco by inland waterways in the EU



Source: Eurostat (online data code: iww_go_atygo)

Since a relative peak in 2014, both the tonnes of agriculture, hunting, forestry and fishery products transported by inland waterways and the payload-distance have declined sharply (-11.3% and -23.8 % respectively through to 2018). Similarly, there were also declines in the freight tonnes and payload-distance of food products, beverages and tobacco (-6.9 % and -14.5 % respectively) since the relative peak in 2015.

For both product groups, the sharper rates of decline in the total payload-distance (tkm) suggest a marked shortening in average distances.

The vast majority of the freight on the EU's waterways was carried by vessels navigating through only a few Member States. As freight is often recorded multiple times as it travels across borders, figures for Member States do not sum to EU totals. With this in mind, the Netherlands, Belgium, France and Germany each recorded vessels carrying a total of between 10.5–13 million tonnes of agriculture, hunting, fisheries and food products in all types of packaging in 2018. A further 8 million tonnes were transported by vessels in Romania and 6 million tonnes in Bulgaria.

Just over one half of the payload distance of agriculture, hunting, forestry and fisheries products on inland waterways within the EU-28 was navigated in Germany (31.9 %) and Romania (22.6 %) in 2018. A further one third was navigated across the combined waterways of France (12.6 %), Bulgaria (10.1 %) and the Netherlands (10.0 %).

Data sources and availability

Structural business statistics (SBS) describe the structure, conduct and performance of economic activities, down to the most detailed activity level (several hundred economic sectors). SBS are transmitted annually by the EU Member States on the basis of a legal obligation from 1995 onwards.

SBS covers all activities of the business economy with the exception of agricultural activities and personal services and the data are provided by all EU Member States, Norway and Switzerland, some candidate and potential candidate countries. The data are collected by domain of activity (annex): Annex I - Services, Annex II - Industry, Annex III - Trade and Annex IV- Construction and by datasets. Each annex contains several datasets as indicated in the SBS Regulation.

The majority of the data is collected by National Statistical Institutes (NSIs) by means of statistical surveys, business registers or from various administrative sources. Regulatory or controlling national offices for financial institutions or central banks often provide the information required for the financial sector (NACE Rev 2 Section K / NACE Rev 1.1 Section J).

Member States apply various statistical methods, according to the data source, such as grossing up, model based estimation or different forms of imputation, to ensure the quality of SBSs produced.

PRODCOM statistics provide detailed information on the physical volume of production sold during the survey period, the value of production sold during the survey period, and for some products, the volume of total production during the survey period. The PRODCOM survey is based on the PRODCOM List, consisting of about 3 900 products. The 8-digit codes used in the List are based on the 6-digit CPA headings and hence the 4-digit NACE rev 1.1. From 2008 onwards the PRODCOM code is linked to CPA 2008 and NACE Rev. 2. The link to NACE enables the NSIs to use the Business Register to identify the enterprises likely to be manufacturing the product.

The PRODCOM List is revised every year.

Data on the carriage of goods by roads are derived from micro-data collected in the framework of Regulation (EU) No 70/2012 of the European Parliament and of the Council on statistical returns in respect of the carriage of goods by road. The figures are aggregated on the basis of sample surveys carried out by the reporting countries. The data cover tonnes, tonne-kilometres, vehicle-kilometres and numbers of journeys. Road freight transport statistics are reported by Member States for vehicles registered in their country.

Inland waterway transport statistics provide information on the volume and performance of freight transport on EU inland waterway network. They are reported on the basis of the "territoriality principle" which means that each country reports the loading, unloading and movements of goods that take place on its national territory, irrespective of country of origins of undertakings or place of first loading and final unloading.

8 Trade in agricultural goods

Introduction

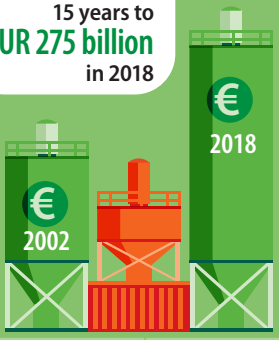
Agricultural trade is the action of buying and selling agricultural goods and services. Where countries can produce a surplus, this can be traded for other goods and services. Why trade agricultural goods? There are many possible reasons, reflecting the fact that no local alternatives exist (some crops are only grown in certain climates for example), or that some countries and regions can offer goods that are cheaper, of better quality, safe, sustainably produced and nutritious. In turn, this trade can help provide foreign currency, support employment in export industries, support industry incomes and provide consumers with quality goods at competitive prices on a more year-round basis.

Statistics on the trade in agricultural goods are fundamental to the evaluation and understanding of issues related to political agendas such as trade negotiations, food security, cooperation and aid towards developing countries, and global sustainability. Data on the trade in agriculture goods is used for two of the common EU policies: the Common Agricultural Policy (CAP) and the common trade policy which manages trade relations with non-EU countries. These are major policy areas of the European Union on which decisions are taken at Community level.

This Chapter focuses on the trade between the European Union (EU) and all countries outside the EU (extra-EU) in agricultural goods only. These goods cover animals and animal products, crop products and foodstuffs.

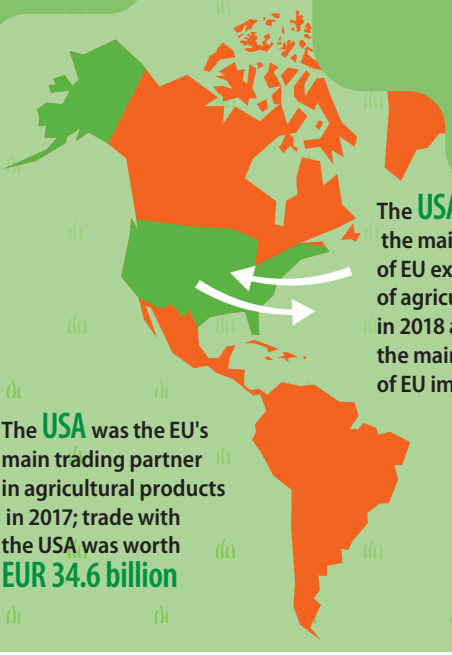
Did you know ...

EU trade in agricultural goods doubled in 15 years to **EUR 275 billion** in 2018



Trade in agricultural goods accounted for **7.0 %** of total EU international trade in goods in 2018.

The **USA** was the EU's main trading partner in agricultural products in 2017; trade with the USA was worth **EUR 34.6 billion**



The **USA** was the main destination of EU exports (16.2 %) of agricultural products in 2018 and was the main origin of EU imports (9.0 %).

8.1 EU trade in agricultural products as a whole

Trade in agricultural products accounted for 7.0 % of total EU international trade in 2018

The value of trade (imports plus exports) in agricultural goods between the EU and non-member countries was EUR 275 billion in 2018. This represented 7.0 % of total EU international trade in goods in 2018.

The value of trade was almost evenly split between exports (EUR 137.3 billion) and imports (EUR 137.5 billion), resulting in only a small trade deficit of EUR 0.2 billion. Whilst the EU imported mainly raw, unprocessed agricultural goods, it principally exported processed food products.

Trade growth in agricultural goods stalls in 2018 at EUR 275 billion

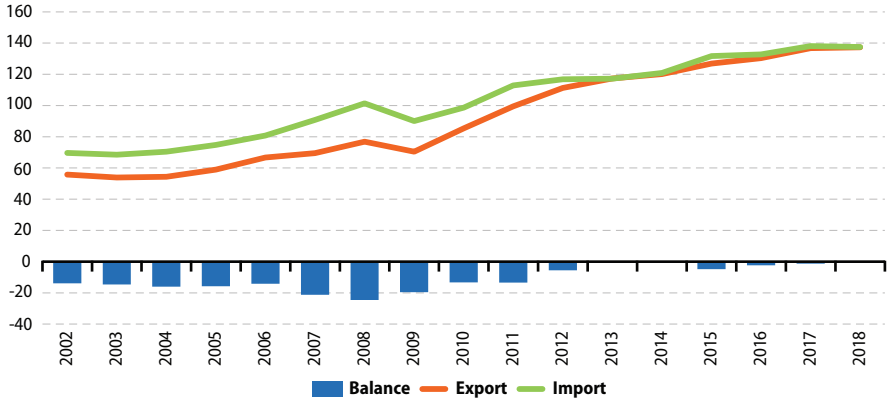
Between 2002 and 2018, the value of trade in agricultural goods doubled (see Figure 8.1.1). Both the value of exports and imports grew sharply; exports from the EU grew at an annual average rate of 5.8 %, faster than the annual average rate of 4.3 % in imports. Nevertheless, the upward trend in the value of trade in agricultural goods stalled in 2018, being unchanged from the value recorded in 2017.

These valuations reflect the amount or weight of agricultural goods traded as well as their average price. Whilst the weight of EU exports was significantly lower than imports in 2018 (99 million tonnes compared with 151 million tonnes), the average price per kilogram of weight was higher (EUR 1.4 per kg compared with EUR 0.9 per kg). Nevertheless, the gaps have narrowed; the annual average rate of growth in the weight of exports between 2002 and 2018 was faster than that for imports (+3.1 % compared with +1.5 %) but the annual average increase in prices for exports was lower than imports (+2.6 % compared with +2.8 %). The ratio between export and import prices was reduced slightly from 1.6 in 2002 to 1.5 in 2018 ([27]).

As a result of these developments, the trade deficit in agricultural goods narrowed sharply, although this was not a steady process. Between 2002 and 2006, the trade deficit remained in the range of EUR 14–16 billion. The deficit then widened to EUR 24.5 billion in 2008 before narrowing sharply. Indeed in 2013, there was even a EUR 143 million trade surplus.

([27]) For more details, see the Statistics Explained article on Extra-EU trade in agricultural goods.

Figure 8.1.1: EU exports, imports and trade balance in agricultural goods, 2002-2018
(EUR billion)



Source: Eurostat (COMEXT data code: DS-016894)

8.2 EU trade in groups of agricultural products

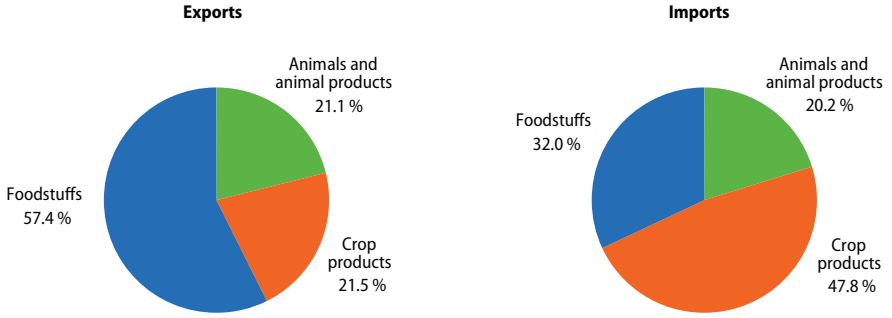
Agricultural products can be subdivided into three main groups: animals and animal products, crop products and foodstuffs. Foodstuffs accounted for a majority (57.4 %) of the agricultural goods exported from the EU in 2018 and were valued at EUR 78.8 billion (see Figure 8.2.1). The value of crop and animal and animal product exports from the EU were very similar at about EUR 29.6 billion and EUR 29.0 billion respectively.

The composition of the EU's agricultural imports was rather different to its exports; foodstuffs accounted for one third (32.0 %) of the value of EU imports, crops nearer to one half (47.8 %) and animals and animal products about one fifth (20.2 %).

Each of these three groups can be further subdivided to the level of product category (see Figure 8.2.2).

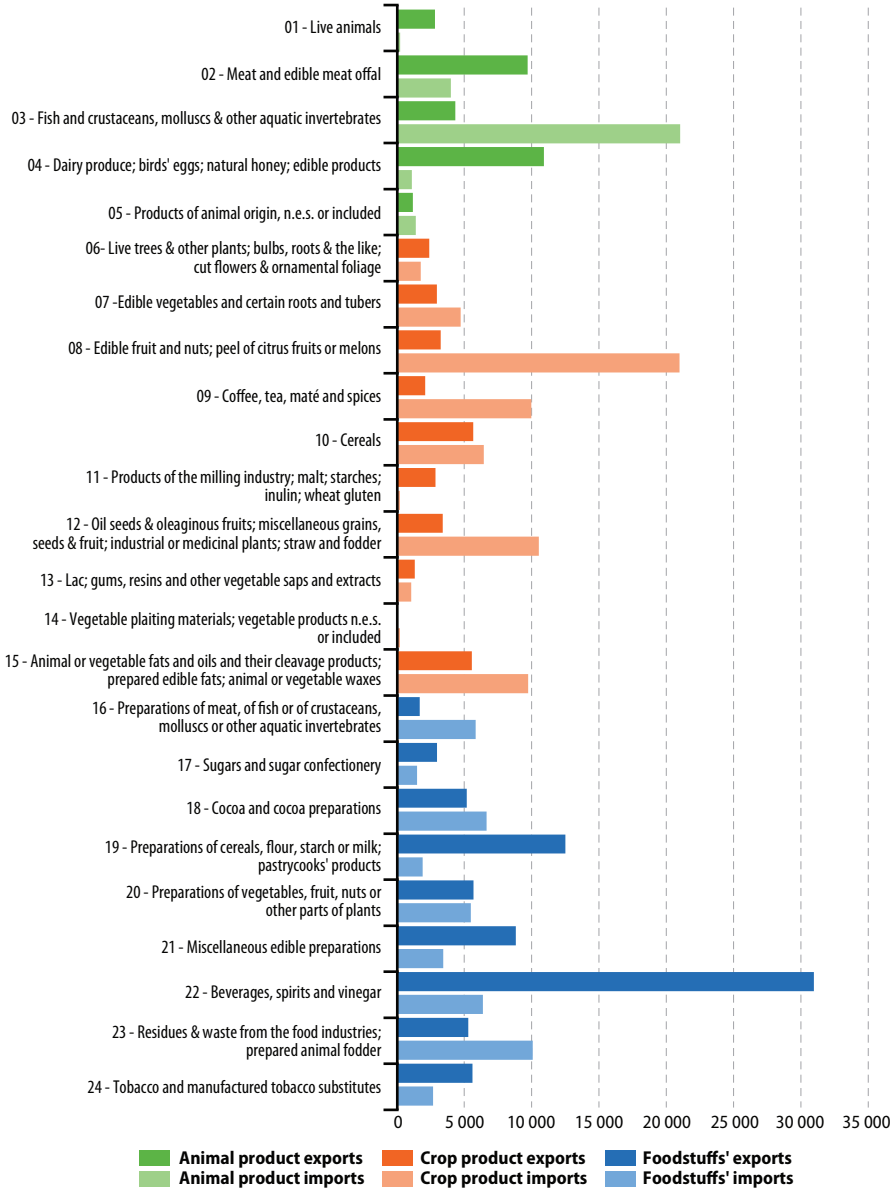
The animals and animal products group consists of live animals, meat, fish, crustaceans and aquatic invertebrates, dairy produce, eggs, honey, and other products of animal origin. The EU had a trade surplus of EUR 1.2 billion in this product category. Trade surpluses for 'dairy produce and birds' eggs' (EUR 9.8 billion), which includes cheeses, milk and yoghurts, 'meat and edible meat offal' (EUR 5.7 billion) and 'live animals' (EUR 2.6 billion), offset the deficit (EUR 16.7 billion) in fish, crustaceans and aquatic invertebrates.

Figure 8.2.1: EU exports and imports of agricultural goods, 2018



Source: Eurostat (COMEXT data code: DS-016894)

Figure 8.2.2: EU exports and imports of agricultural goods, 2018
(EUR million)



Source: Eurostat (COMEXT data code: DS-016894)

Crop products include cereals, vegetables, horticultural products, fruit, coffee and fats and oils. The EU had a trade deficit of EUR 36.2 billion in this crop products category in 2018, largely stemming from deficits in the trade of 'edible fruit and nuts' (EUR 17.7 billion), 'coffee, tea, mate and spices' (EUR 7.9 billion) and 'oilseeds and oleaginous fruits' (EUR 7.1 billion).

Foodstuffs consist of various types of processed goods derived from crop and animal products such as sugar, beverages, tobacco and prepared animal fodder. The EU had a trade surplus of EUR 34.8 billion in this foodstuffs products category. The trade surplus was driven by trade surpluses in 'beverages, spirits and vinegar' (EUR 24.6 billion) and 'preparations of cereals, flour, starch or milk' (EUR 10.6 billion).

How have the trade balances of these three categories of agricultural products changed?

In the period between 2002 and 2018, the EU's trade surplus in foodstuffs grew, the deficit for crops widened and for animals and animal products there was a switch from deficit to surplus in 2011, since when a small surplus has been maintained.

The EU's trade in foodstuffs was consistently in surplus between 2002 and 2018. The value of EU exports in such products grew at a faster rate (an annual average of +6.0 %) than imports (an annual average of +3.5 %). As a result, the trade surplus grew from EUR 5.9 billion in 2002 to EUR 34.8 billion in 2018.

Over the same reference period, the trade deficit in crop products more than doubled, from EUR -15.9 billion in 2002 to EUR -36.2 billion in 2018. There was a trade surplus of EUR 1.2 billion in animals and animal products in 2018, representing a stark turnaround from the annual trade deficits in the period between 2002 and 2010, and particularly from the EUR -7.1 billion deficit recorded for 2006.

8.3 Main trading partners in agricultural products

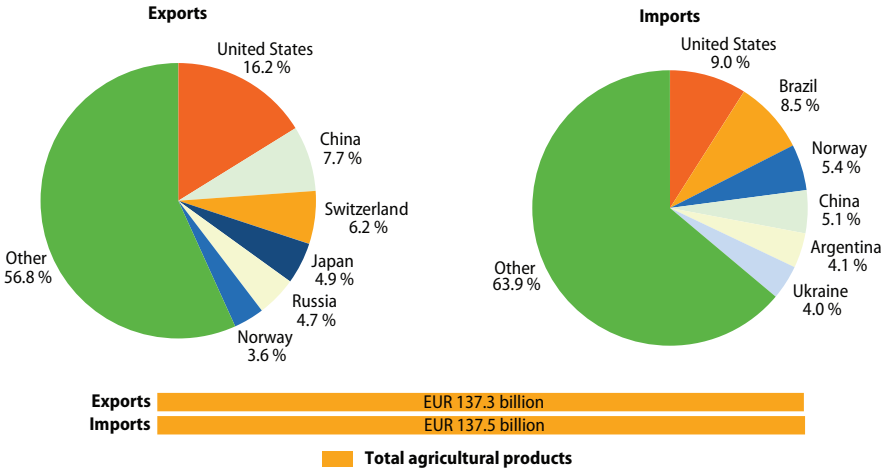
The USA is the EU's main trading partner in agricultural products

The United States of America (USA) was the EU's main trading partner in agricultural goods. The EU exported agricultural goods to the USA to the value of EUR 22.2 billion in 2018, accounting for 16.2 % of the total value of the EU's exports of agricultural goods, and imported agricultural goods to the value of EUR 12.4 billion, some 9.0 % of such imports (see Figure 8.3.1). The USA was the main export destination for foodstuffs (20.1 % of the value of all EU exports) and crop products (12.2 % of the value of all EU exports).

China was the second largest trading partner with the EU in agricultural goods. The EU exported agricultural goods to China that were valued at EUR 10.5 billion in 2018, accounting for 7.7 % of the total value of the EU's exports of agricultural goods, and imported agricultural goods from China valued at EUR 6.9 billion, which accounted for 5.1 % of such imports. China was the main destination for the EU's exports of animal and animal products in 2018, accounting for 14.1 % of this market and EUR 4.1 billion in terms of value.

The value of agricultural goods imported by the EU from Brazil (EUR 11.7 billion) was higher than imports from all other countries with the exception of the USA. About one half (48.1 %) of these imports concerned crop products. Norway was by far the largest exporter of animals and animal products to the EU, supplying about one quarter (24.2 %) of the total in 2018. Almost all (99 %) of these imports concerned fish, which were valued at EUR 6.4 billion.

Figure 8.3.1: EU exports and imports of agricultural goods by main partner, 2018
(shares and values)



Source: Eurostat (COMEXT data code: DS-016894)

Data sources and availability

The data source for EU trade data is Eurostat's COMEXT database. More specifically, COMEXT is the reference database for international trade in goods. It provides access not only to both recent and historical data from the EU Member States but also to statistics of a significant number of non-EU countries.

In this chapter, agricultural products are classified according to the sub-headings of the Combined Nomenclature (CN), based on the international classification known as the Harmonized commodity description and coding system (HS) administered by the World Customs Organization. The 24 chapters (2-digit codes) of agricultural products in the CN nomenclature are grouped into 3 major types: animal, vegetable and foodstuff products. In this analysis, the chapters are termed categories and the three groups are re-termed as in agricultural statistics, namely as animal and animal products, crops products and foodstuffs products. Chapter 15 (animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes) is included in vegetables.

EU data are compiled according to community guidelines and may, therefore, differ from national data published by Member States.

Statistics on extra-EU trade are calculated as the sum of trade of each of the 28 Member States with countries outside the EU. In other words, the EU is considered as a single trading entity and trade flows are measured into and out of the area, but not within it.

Classifications

In international trade statistics, several classifications are used. Apart from the harmonised commodity description and coding system (HS), managed by the World Customs Organization, data on trade is also available in the United Nations' Standard International Trade Classification (SITC revision 4) and in the Broad Economic Categories (BEC) classification, the latter using end–use categories more adapted to economic analysis.

Unit of measure

Trade values are expressed in millions (10^6) or in billions (10^9) of euros. They correspond to the statistical value, i.e. to the amount which would be invoiced in case of sale or purchase at the national border of the reporting country. It is called a FOB value (free on board) for exports and a CIF value (cost, insurance, freight) for imports.

9 Agriculture, forestry and fisheries at a glance

EU-28

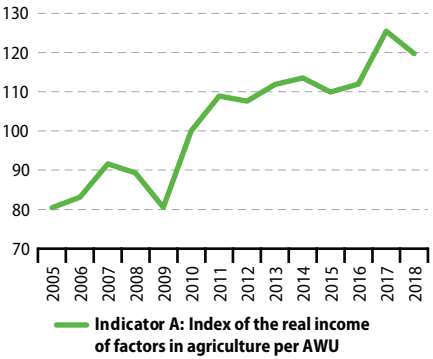
Key information:

Total land area	**2016**	4 346 737	km^2
Share of farmland in total land area	**2016**	*39.9 %*	share of total land area
Gross Domestic Product	**2018**	15 898.3	EUR billion
Population	**2018**	512.4	million

Did you know that …

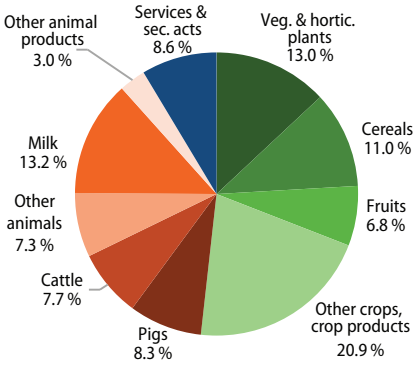
- After a period of growth, the index of agricultural factor income per annual work unit fell by -4.6 % in 2018 from the peak of the previous year. Nevertheless, it remained one fifth (+19.7%) higher than the level in 2010.
- The value of agricultural output was EUR 434.3 billion in 2018, a slight year-on-year increase of +0.6 %.
- The harvested production of cereals in the EU fell sharply (-4.8 %) to 295.1 million tonnes in 2018. The drought in many regions of central and northern Europe was the main factor behind lower harvests of key crops like wheat and spelt (-13.6 million tonnes; -9.5 %), sugar beet (-23.6 million tonnes; -16.5 %) and potatoes (-10.2 million tonnes; -16.4 %).
- In contrast, the production of most types of meat increased in 2018, with the output of bovine meat and pig meat both rising, by +1.7 % and +2.1 % respectively. The production of poultry climbed by an estimated +4.8 % to a new high of 15.2 million tonnes. There was also another rise in raw milk production (+0.9 %, or 1.6 million tonnes) to a provisional 172.2 million tonnes in 2018.
- Real terms (deflated) prices were up sharply for cereals (+7.9 % as a whole on average) in 2018, with prices for most cereals climbing sharply. In contrast, the average real-terms price of pigs tumbled (-13.0 %), that of cattle fell moderately (-1.7 %), whilst that of poultry remained stable (+0.1 %). Following a strong increase in 2017, the average milk price fell moderately in 2018 (-3.7 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.1: EU-28

Farms and farmland			
Farmland (utilised agricultural area)	**2016**	*173 339*	thousand hectares
Farms (agricultural holdings)	**2016**	*10 467 760*	number
Very small farms (with < EUR 8 000 of standard output)	**2016**	*67.6 %*	share of all farms
Family farms (with > 50 % of regular labour from family members)	**2016**	96.0 %	share of all farms
Farmers			
Employment in agriculture	**2017**	*4.1 %*	share of total employment
Total labour force input in agriculture	**2018**	*9 256*	thousand annual work units
Young farmers (under 40 years old)	**2016**	*10.6 %*	share of all farm managers
Female farmers	**2016**	*28.4 %*	share of all farm managers
Farmers with full agricultural training	**2016**	9.1 %	share of all farm managers
Economic performance of agriculture			
Contribution of agriculture to Gross Domestic Product	**2018**	*1.1 %*	share of GDP
Gross value added (at basic prices)	**2018**	*181 738*	EUR million
Value of agricultural output (production value at basic prices)	**2018**	*434 291*	EUR million
Value of crop output	**2018**	*224 850*	EUR million
Value of animal output	**2018**	*172 000*	EUR million
Agricultural factor income per annual work unit (Indicator A)	**2018**	*-4.6 %*	change 2018/2017
Agricultural production			
Cereals	**2018**	295 113	thousand tonnes
Root crops	**2018**	*173 412*	thousand tonnes
Fresh vegetables	**2018**	62 297	thousand tonnes
Permanent crops	**2018**	80 644	thousand tonnes
Raw milk	**2018**	*172 200*	thousand tonnes
Bovine meat	**2018**	7 932	thousand tonnes
Pig meat	**2018**	23 846	thousand tonnes
Poultry meat	**2018**	*15 200*	thousand tonnes
Forestry			
Forest and other wooded land	**2015**	181 918	thousand hectares
Persons employed in forestry and logging	**2016**	*535 840*	working units
Gross value added (at basic prices)	**2016**	*26 537*	EUR million
Roundwood (in the rough)	**2017**	470 301	thousand cubic metres
Fisheries			
Fishing fleet	**2018**	1 549 742	gross tonnage
Persons employed in fishing and aquaculture	**2017**	*179 570*	number
Total catches	**2018**	*5 293 335*	tonnes live weight
Total aquaculture production (volume)	**2017**	*1 367 820*	tonnes live weight
Total aquaculture production (value)	**2017**	*5 070*	EUR million

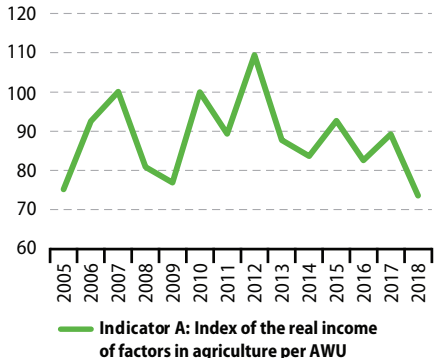
Belgium

Key information:				Share of EU-28 total
Total land area	**2016**	30 451	km^2	0.7 %
Share of farmland in total land area	**2016**	44.5 %	share of total land area	-
Gross Domestic Product	**2018**	459.8	EUR billion	2.9 %
Population	**2018**	11.4	million	2.2 %

Did you know that …

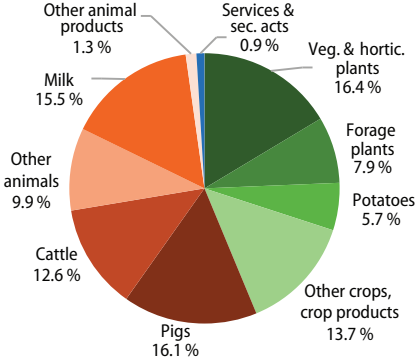
- Agricultural factor income per annual work unit fell sharply in 2018 (-17.5 %), to its lowest level over the period from 2005.
- The value of the output of the agricultural industry was EUR 8.2 billion in 2018, a moderate year-on-year decrease of -2.3 %. This overall decline in value was underpinned by strong falls in the output values of pigs (-10.4 %) and of milk (-5.4 %).
- The production of pig meat in 2018 was moderately higher (+2.7 %) at almost 1.1 million tonnes in 2018. However, the average real terms price of pigs dropped steeply (-18.6 %). The production of milk increased (+3.8 %) to over 4.2 million tonnes in 2018. However, there was a strong decline (-10.5 %) in the average real terms price.
- Drought conditions hit the production volumes of a number of crop products. In particular, the harvested production of potatoes (down -31.0 % to 3.0 million tonnes), of sugar beet (down -12.6 % to 5.2 million tonnes) and of cereals (down -10.2 % to 2.5 million tonnes) were all substantially lower in 2018 than in 2017. Supply and demand changes resulted in much higher average real-terms prices for potatoes (+67.2 %) and cereals as a whole (+18.2 %) although that of sugar beet remained relatively unchanged (+1.6 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.2: Belgium

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	1 354	thousand hectares	0.8 %
Farms (agricultural holdings)	2016	36 890	number	0.4 %
Very small farms (with < EUR 8 000 of standard output)	2016	6.2 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	83.8 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	1.2 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	56	thousand annual work units	-
Young farmers (under 40 years old)	2016	10.2 %	share of all farm managers	*10.6 %*
Female farmers	2016	14.5 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	21.3 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.4 %	share of GDP	-
Gross value added (at basic prices)	2018	1 959	EUR million	1.1 %
Value of agricultural output (production value at basic prices)	2018	8 190	EUR million	1.9 %
Value of crop output	2018	3 582	EUR million	1.6 %
Value of animal output	2018	4 531	EUR million	2.6 %
Agricultural factor income per annual work unit (Indicator A)	2018	-17.5 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	2 483	thousand tonnes	0.8 %
Root crops	2018	8 578	thousand tonnes	*4.9 %*
Fresh vegetables	2018	2 041	thousand tonnes	3.3 %
Permanent crops	2018	610	thousand tonnes	0.8 %
Raw milk	2018	4 219	thousand tonnes	2.5 %
Bovine meat	2018	277	thousand tonnes	3.5 %
Pig meat	2018	1 073	thousand tonnes	4.5 %
Poultry meat	2018	470	thousand tonnes	*3.1 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	719	thousand hectares	0.4 %
Persons employed in forestry and logging	2016	2 400	working units	0.4 %
Gross value added (at basic prices)	2016	*95*	EUR million	*0.4 %*
Roundwood (in the rough)	2017	:	thousand cubic metres	-

Fisheries				Share of EU-28 total
Fishing fleet	2018	12 898	gross tonnage	0.8 %
Persons employed in fishing and aquaculture	2017	500	number	*0.3 %*
Total catches	2018	22 722	tonnes live weight	*0.4 %*
Total aquaculture production (volume)	2017	0	tonnes live weight	*0.0 %*
Total aquaculture production (value)	2017	0	EUR million	*0.0 %*

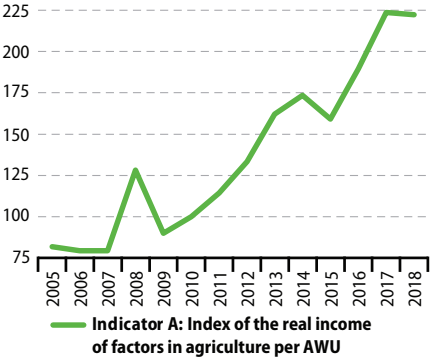
Bulgaria

Key information:				Share of EU-28 total
Total land area	**2016**	110 001	km^2	2.5 %
Share of farmland in total land area	**2016**	40.6 %	share of total land area	-
Gross Domestic Product	**2018**	56.1	EUR billion	0.4 %
Population	**2018**	7.1	million	1.4 %

Did you know that …

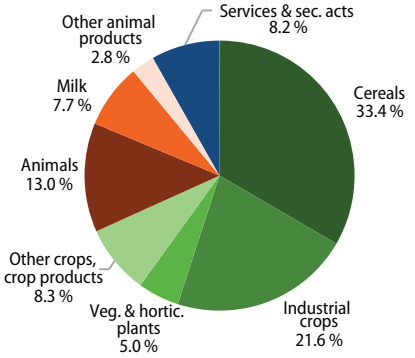
- Agricultural factor income per annual work unit fell only slightly in 2018 (-0.7 %), maintaining the peak level recorded the previous year. Nevertheless, it should be noted that agricultural labour input, measured in annual work units, halved between 2009 and 2018.
- The value of agricultural industry output was EUR 4.3 billion in 2018, up +2.6 % on 2017. One half of this total value came from just cereals (+15.8 % on 2017) and industrial crops (-7.1 %), which are principally oilseeds, and sugar beet.
- The harvested production of cereals in 2018 was higher (+3.8 %) than in 2017. The higher output figure for cereals as a whole was almost entirely due to the leap in grain maize output (+35.7 %, with the cultivated area up +11.7 %) as the harvested production of most other cereals declined, including wheat and spelt (-4.9 %, despite the cultivated area being +5.9 % higher). Among other key crops, the harvested production of sunflower seeds declined (-6.3 %), largely reflecting the steep cutback in the cultivated area (-12.3 %).
- The average real terms price of cereals rebounded in 2018 (+4.7 %), that of oilseeds continuing to decline (down a further -7.8 %).
- The production of milk has been in long-term decline and was down sharply in 2018 (-6.1 %) to 1.0 million tonnes, about one third less than in 2007. Despite this latest cut in production, the average real terms price of milk remained relatively unchanged in 2018 (+0.8 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.3: Bulgaria

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	4 469	thousand hectares	2.6 %
Farms (agricultural holdings)	2016	202 720	number	1.9 %
Very small farms (with < EUR 8 000 of standard output)	2016	81.0 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	95.4 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	17.1 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	220	thousand annual work units	-
Young farmers (under 40 years old)	2016	14.0 %	share of all farm managers	*10.6 %*
Female farmers	2016	24.8 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	6.5 %	share of all farm managers	*9.1 %*

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	2.9 %	share of GDP	-
Gross value added (at basic prices)	2018	1 873	EUR million	1.0 %
Value of agricultural output (production value at basic prices)	2018	4 324	EUR million	1.0 %
Value of crop output	2018	2 952	EUR million	1.3 %
Value of animal output	2018	1 018	EUR million	0.6 %
Agricultural factor income per annual work unit (Indicator A)	2018	-0.7 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	10 111	thousand tonnes	3.4 %
Root crops	2018	271	thousand tonnes	*0.2 %*
Fresh vegetables	2018	575	thousand tonnes	0.9 %
Permanent crops	2018	424	thousand tonnes	0.5 %
Raw milk	2018	1 025	thousand tonnes	0.6 %
Bovine meat	2018	7	thousand tonnes	0.1 %
Pig meat	2018	80	thousand tonnes	0.3 %
Poultry meat	2018	115	thousand tonnes	*0.8 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	3 845	thousand hectares	2.1 %
Persons employed in forestry and logging	2016	21 860	working units	4.1 %
Gross value added (at basic prices)	2016	235	EUR million	0.9 %
Roundwood (in the rough)	2017	6 198	thousand cubic metres	1.3 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	6 086	gross tonnage	0.4 %
Persons employed in fishing and aquaculture	2017	1 450	number	*0.8 %*
Total catches	2018	8 544	tonnes live weight	*0.2 %*
Total aquaculture production (volume)	2017	9 796	tonnes live weight	*0.7 %*
Total aquaculture production (value)	2017	22	EUR million	*0.4 %*

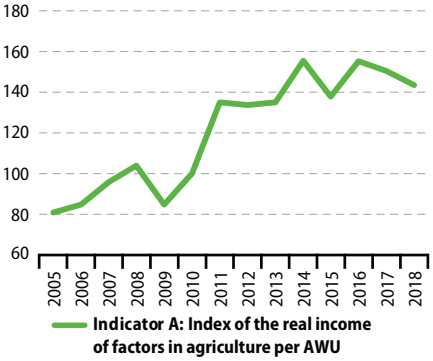
Czechia

Key information:				Share of EU-28 total
Total land area	**2016**	77 212	km^2	1.8 %
Share of farmland in total land area	**2016**	44.8 %	share of total land area	-
Gross Domestic Product	**2018**	207.8	EUR billion	1.3 %
Population	**2018**	10.6	million	2.1 %

Did you know that …

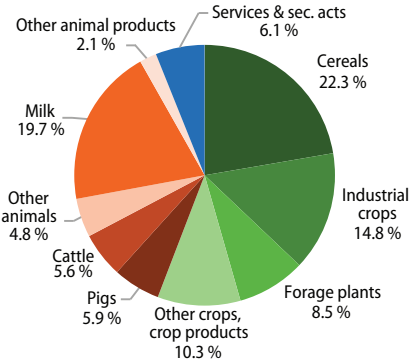
- Agricultural factor income per annual work unit in 2018 was down (-4.7 %) on the previous year. Nevertheless, it remained only just below peak levels and was +43.4 % higher than in 2010 (the base year for the index).
- The output value of the agricultural industry was EUR 5.3 billion in 2018, up +4.0 % on the value in 2017. Almost two thirds of this total value came from cereals, milk, industrial crops and forage plants.
- Following on from the adverse weather conditions in 2017, most regions of Czechia were hit by a severe drought in 2018. As a result, the harvested production of many crops declined sharply. This included cereals as a whole (-6.5 %) and more specifically wheat and spelt (-6.4 %), barley (-6.2 %) and grain maize (-16.8 %), as well as sugar beet and potatoes (both -15.3 %). In contrast, the harvested production of oilseeds rebounded strongly (+19.1%), helped by a small rise (+2.0%) in cultivated area.
- Milk production rose slightly (+2.7 %) to 3.2 million tonnes in 2018. Production of pig meat remained at the same level as in 2017, a pause in the long-term downward trend. The production of poultry meat and bovine meat both increased (up +3.4 % and +5.7 % respectively).
- The sharp decline in the outputs of many crops were reflected in higher prices; the average real terms price of wheat and spelt (+5.1 %), barley (+6.7 %) and grain maize (+4.4 %) were all higher. The average real terms price of potatoes in 2018 was up slightly (+1.3 %) but that of sugar beet remained almost unchanged (-0.4 %). Key price developments in animals and animal products included stability in the average price of milk (+0.2 %) but a sharp fall for pigs (-17.4 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.4: Czechia

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	3 455	thousand hectares	2.0 %
Farms (agricultural holdings)	2016	26 530	number	0.3 %
Very small farms (with < EUR 8 000 of standard output)	2016	31.7 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	86.0 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	2.5 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	104	thousand annual work units	-
Young farmers (under 40 years old)	2016	10.2 %	share of all farm managers	*10.6 %*
Female farmers	2016	12.1 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	38.7 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.8 %	share of GDP	-
Gross value added (at basic prices)	2018	1 687	EUR million	0.9 %
Value of agricultural output (production value at basic prices)	2018	5 290	EUR million	1.2 %
Value of crop output	2018	2 954	EUR million	1.3 %
Value of animal output	2018	2 015	EUR million	1.2 %
Agricultural factor income per annual work unit (Indicator A)	2018	-4.7 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	6 971	thousand tonnes	2.4 %
Root crops	2018	4 329	thousand tonnes	*2.5 %*
Fresh vegetables	2018	199	thousand tonnes	0.3 %
Permanent crops	2018	290	thousand tonnes	0.4 %
Raw milk	2018	3 162	thousand tonnes	1.8 %
Bovine meat	2018	72	thousand tonnes	0.9 %
Pig meat	2018	211	thousand tonnes	0.9 %
Poultry meat	2018	164	thousand tonnes	*1.1 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	2 667	thousand hectares	1.5 %
Persons employed in forestry and logging	2016	21 480	working units	4.0 %
Gross value added (at basic prices)	2016	1 123	EUR million	4.2 %
Roundwood (in the rough)	2017	19 387	thousand cubic metres	4.1 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	-	gross tonnage	-
Persons employed in fishing and aquaculture	2017	1 270	number	*0.7 %*
Total catches	2018	-	tonnes live weight	-
Total aquaculture production (volume)	2017	21 685	tonnes live weight	*1.6 %*
Total aquaculture production (value)	2017	57	EUR million	*1.1 %*

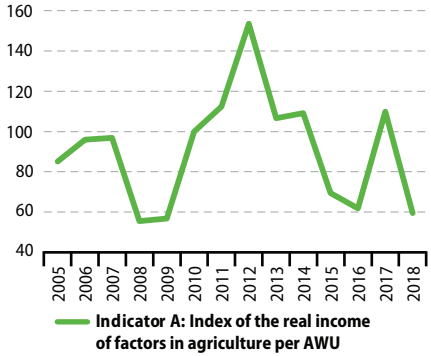
Denmark

Key information:				Share of EU-28 total
Total land area	**2016**	41 987	km^2	1.0 %
Share of farmland in total land area	**2016**	62.3 %	share of total land area	-
Gross Domestic Product	**2018**	298.3	EUR billion	1.9 %
Population	**2018**	5.8	million	1.1 %

Did you know that …

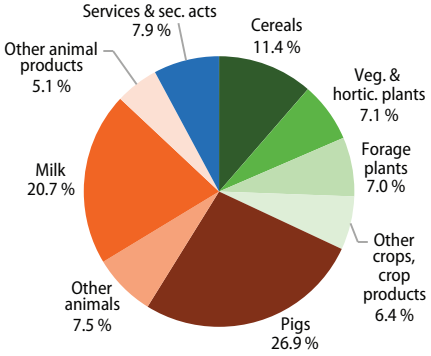
- After a strong rebound the previous year, agricultural factor income per annual work unit dropped sharply (-45.9 %) in 2018, falling to its lowest level since 2009.
- The output value of the agricultural industry fell to EUR 10.1 billion in 2018, a year-on-year decrease of -8.9 %. This decline in large part reflected lower output values for pigs (down a sharp -16.3 %) and cereals (-14.3 %), and milk (-3.4 %).
- The key factor in the decline in pig output value was the sharply lower average real-terms price (-18.3 %), with the production of pig meat in 2018 moderately higher (+3.4 %).
- The production of milk was 5.6 million tonnes in 2018 (up +2.1 %), despite the national dairy herd of 570 000 cows being 5 000 less than in 2017. After the sharp increase in the average real terms price of milk in 2017, there was a moderate decline in 2018. It should be noted that drought conditions impacted on the harvested production of fodder crops, with the production of plants harvested green from arable land and within this temporary grasses and grazings tumbling (down -21.6 % and -30.4 % respectively).
- The drought also struck the harvested production of cereals in 2018; wheat and spelt production almost halved (-45.1%) compared to 2017, with farmers harvesting a much smaller area (-27.4 %), with barley production also sharply lower (-12.7 %) despite a sharp rise in cultivated area (+19.5 %). With lower levels of harvested production, there was a rise in real-terms prices; wheat and spelt was up +12.1 % on average and barley +16.2 % on average.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.5: Denmark

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	2 615	thousand hectares	1.5 %
Farms (agricultural holdings)	2016	35 050	number	0.3 %
Very small farms (with < EUR 8 000 of standard output)	2016	11.5 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	:	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	2.1 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	*54*	thousand annual work units	-
Young farmers (under 40 years old)	2016	6.6 %	share of all farm managers	*10.6 %*
Female farmers	2016	7.7 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	6.7 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	*0.7 %*	share of GDP	-
Gross value added (at basic prices)	2018	*1 994*	EUR million	*1.1 %*
Value of agricultural output (production value at basic prices)	2018	*10 143*	EUR million	*2.3 %*
Value of crop output	2018	*3 244*	EUR million	*1.4 %*
Value of animal output	2018	*6 102*	EUR million	*3.5 %*
Agricultural factor income per annual work unit (Indicator A)	2018	*-45.9 %*	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	7 005	thousand tonnes	2.4 %
Root crops	2018	4 179	thousand tonnes	*2.4 %*
Fresh vegetables	2018	324	thousand tonnes	0.5 %
Permanent crops	2018	45	thousand tonnes	0.1 %
Raw milk	2018	5 615	thousand tonnes	3.3 %
Bovine meat	2018	129	thousand tonnes	1.6 %
Pig meat	2018	1 581	thousand tonnes	6.6 %
Poultry meat	2018	148	thousand tonnes	*1.0 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	658	thousand hectares	0.4 %
Persons employed in forestry and logging	2016	6 000	working units	1.1 %
Gross value added (at basic prices)	2016	*276*	EUR million	*1.0 %*
Roundwood (in the rough)	2017	3 483	thousand cubic metres	0.7 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	74 426	gross tonnage	4.8 %
Persons employed in fishing and aquaculture	2017	2 000	number	*1.1 %*
Total catches	2017	*904 450*	tonnes live weight	*17.0 %*
Total aquaculture production (volume)	2017	34 327	tonnes live weight	*2.5 %*
Total aquaculture production (value)	2016	116	EUR million	*2.3 %*

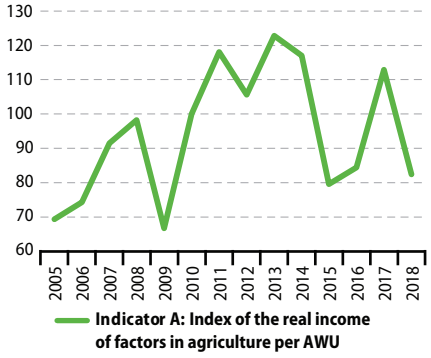
Germany

Key information:				Share of EU-28 total
Total land area	**2016**	353 296	km^2	8.1 %
Share of farmland in total land area	**2016**	47.3 %	share of total land area	-
Gross Domestic Product	**2018**	3 344.4	EUR billion	21.0 %
Population	**2018**	82.8	million	16.2 %

Did you know that …

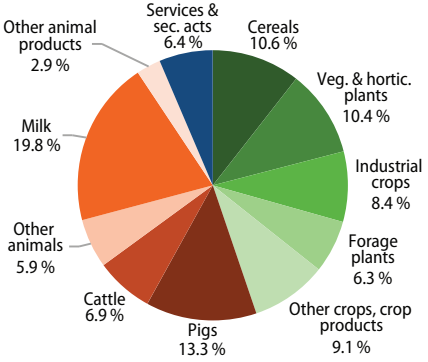
- Agricultural factor income per annual work unit fell by more than one quarter (-26.9 %) in 2018, offsetting the strong rebound recorded in 2017. As a result, the index of factor income per annual work unit in 2018 was back below (-17.5 % lower) the level in 2010.
- The output value of the agricultural industry was EUR 52.7 billion in 2018, the third highest in the EU. This represented a decrease of -6.3 % on the value recorded the previous year. Output values of six key products were lower: milk (-11.0 %), pigs (-1.8 %), cereals (-16.5 %), vegetables and horticultural products (-3.1 %), industrial crops (-4.5 %) and forage plants (-28.8 %).
- The harvested production of most non-perennial crops fell sharply in 2018, the drought being a key factor; cereals were down steeply (-16.7 %), within which wheat and spelt production (-17.2 %), barley (-11.7 %) and grain maize (-26.5 %) were much lower. Likewise, the harvested production of sugar beet and of potatoes fell sharply (by -23.1 % and -23.9 % respectively).
- Pig meat and bovine meat production in 2018 declined (-2.1 % and -2.0 % respectively), the latter continuing a clear downward trend, whereas the production of poultry meat reached a new high (up +3.8 % to 1.6 million tonnes). Milk production increased slightly (+1.5 %) to 33.1 million tonnes.
- With a restricted domestic supply, there were notable price increases for many cereals in 2018; average real-terms prices for wheat and spelt (+13.6 %), barley (+21.4 %), grain maize (+12.7 %) and rye (+15.1 %) all climbed. Similarly there was a strong rise for potatoes (+19.2 %) although not for sugar beet (a decline of -3.2 %). There were also sharp real terms prices falls for pigs (-13.9 %) and milk (-6.3 %), after strong price rises in 2017.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.6: Germany

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	16 715	thousand hectares	9.6 %
Farms (agricultural holdings)	2016	276 120	number	2.6 %
Very small farms (with < EUR 8 000 of standard output)	2016	10.5 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	94.4 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	1.3 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	474	thousand annual work units	-
Young farmers (under 40 years old)	2016	14.7 %	share of all farm managers	*10.6 %*
Female farmers	2016	9.6 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	17.0 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.5 %	share of GDP	-
Gross value added (at basic prices)	2018	16 476	EUR million	9.1 %
Value of agricultural output (production value at basic prices)	2018	52 731	EUR million	12.1 %
Value of crop output	2018	23 613	EUR million	10.5 %
Value of animal output	2018	25 732	EUR million	15.0 %
Agricultural factor income per annual work unit (Indicator A)	2018	-26.9 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	37 975	thousand tonnes	12.9 %
Root crops	2018	35 422	thousand tonnes	*20.4 %*
Fresh vegetables	2017	3 450	thousand tonnes	5.5 %
Permanent crops	2017	1 728	thousand tonnes	2.5 %
Raw milk	2018	33 110	thousand tonnes	19.2 %
Bovine meat	2018	1 102	thousand tonnes	13.9 %
Pig meat	2018	5 343	thousand tonnes	22.4 %
Poultry meat	2018	1 572	thousand tonnes	*10.3 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	11 419	thousand hectares	6.3 %
Persons employed in forestry and logging	2016	41 000	working units	7.7 %
Gross value added (at basic prices)	2016	*3 374*	EUR million	*12.7 %*
Roundwood (in the rough)	2017	53 491	thousand cubic metres	11.4 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	58 804	gross tonnage	3.8 %
Persons employed in fishing and aquaculture	2017	5 000	number	*2.8 %*
Total catches	2018	261 216	tonnes live weight	*4.9 %*
Total aquaculture production (volume)	2017	36 142	tonnes live weight	*2.6 %*
Total aquaculture production (value)	2017	131	EUR million	*2.6 %*

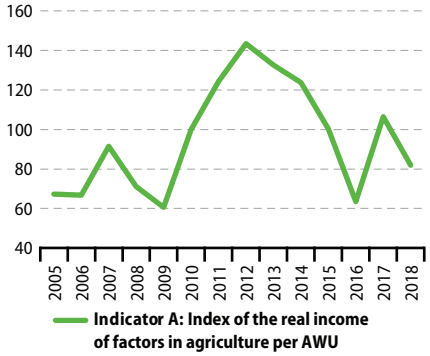
Estonia

Key information:				Share of EU-28 total
Total land area	**2016**	43 466	km^2	1.0 %
Share of farmland in total land area	**2016**	22.9 %	share of total land area	-
Gross Domestic Product	**2018**	26.0	EUR billion	0.2 %
Population	**2018**	1.3	million	0.3 %

Did you know that …

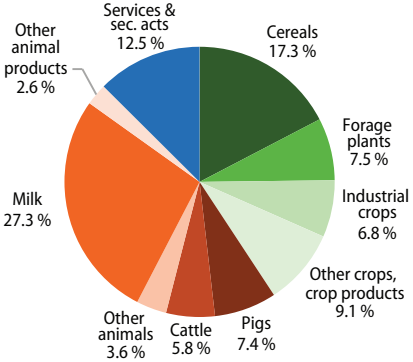
- Agricultural factor income per annual work unit fell sharply in 2018 (-23.0 %), after the sharp upturn in 2017. It means that the index level of this factor income in 2018 was almost one fifth lower than that of 2010.
- The output value of the agricultural industry was EUR 0.9 billion in 2018, representing a year-on-year decrease of -3.0 %. About 70 % of this output value came from milk, cereals, forage plants, oilseeds, cattle and pigs. Apart from forage plants (+2.1 %), the output values of these key products fell and in some cases fell sharply: milk (-5.8 % lower than in 2017), cereals (-15.3 %), oilseeds (-31.9 %), cattle (-27.4 %) and pigs (-3.6 %).
- Drought conditions in many areas of the country in 2018 hit harvested production levels, particularly of crops like cereals (-29.9 %, despite an increase in cultivated area of +6.0 %) and oilseeds (-31.0 %, although the area cultivated was -8.9 % lower). Although there was a resulting upswing in the average real-terms price of cereals as whole (+11.9 %), that of oilseeds declined (-4.3 %).
- Milk production remained relatively stable in 2018 (+0.9 %) but the average real-terms price fell sharply (-9.1 %). The production of pig meat continued to increase (+3.9 %), reaching a new high in 2018, but the average real-terms price for pigs declined sharply (-7.9 %). In contrast, bovine meat production declined (-4.9 %), suggesting a return to the long-term downward trend, but the average real-terms price of cattle increased once more in 2018 (+2.8 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.7: Estonia

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	995	thousand hectares	0.6 %
Farms (agricultural holdings)	2016	16 700	number	0.2 %
Very small farms (with < EUR 8 000 of standard output)	2016	66.0 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	79.0 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	2.3 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	20	thousand annual work units	-
Young farmers (under 40 years old)	2016	15.5 %	share of all farm managers	*10.6 %*
Female farmers	2016	33.1 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	28.6 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.8 %	share of GDP	-
Gross value added (at basic prices)	2018	206	EUR million	0.1 %
Value of agricultural output (production value at basic prices)	2018	859	EUR million	0.2 %
Value of crop output	2018	350	EUR million	0.2 %
Value of animal output	2018	401	EUR million	0.2 %
Agricultural factor income per annual work unit (Indicator A)	2018	-23.0 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	920	thousand tonnes	0.3 %
Root crops	2017	64	thousand tonnes	*0.0 %*
Fresh vegetables	2018	39	thousand tonnes	0.1 %
Permanent crops	2018	4	thousand tonnes	0.0 %
Raw milk	2018	798	thousand tonnes	0.5 %
Bovine meat	2018	9	thousand tonnes	0.1 %
Pig meat	2018	43	thousand tonnes	0.2 %
Poultry meat	2018	:	thousand tonnes	:

Forestry				Share of EU-28 total
Forest and other wooded land	2015	2 456	thousand hectares	1.3 %
Persons employed in forestry and logging	2016	6 050	working units	1.1 %
Gross value added (at basic prices)	2016	*263*	EUR million	*1.0 %*
Roundwood (in the rough)	2017	9 948	thousand cubic metres	2.1 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	15 775	gross tonnage	1.0 %
Persons employed in fishing and aquaculture	2017	740	number	*0.4 %*
Total catches	2018	83 678	tonnes live weight	*1.6 %*
Total aquaculture production (volume)	2017	870	tonnes live weight	*0.1 %*
Total aquaculture production (value)	2017	4	EUR million	*0.1 %*

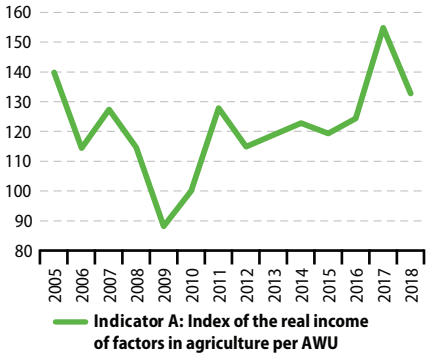
Ireland

Key information:				Share of EU-28 total
Total land area	**2016**	68 655	km^2	1.6 %
Share of farmland in total land area	**2016**	*71.1 %*	share of total land area	-
Gross Domestic Product	**2018**	324.0	EUR billion	2.0 %
Population	**2018**	4.8	million	0.9 %

Did you know that …

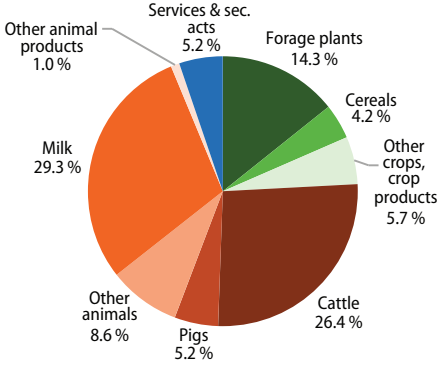
- Agricultural factor income per annual work unit in 2018 fell back (-14.2 %) from the peak recorded in 2017 but the index remained about one third higher than the level in 2010.
- The output value of the agricultural industry in 2018 reached a new high of EUR 8.6 billion (up +2.0 % on 2017). The agricultural industry is focused on cattle-related activities; the output value of milk (EUR 2.5 billion in 2018, down -1.5 %), cattle (EUR 2.3 billion, -4.2 % lower) and forage plants (EUR 1.2 billion, up +21.3 %) together accounted for 70 % of the value of the agricultural industry in 2018.
- The production of raw milk again continued to grow (+4.4 % in 2018), reaching a new high of 7.8 million tonnes, which was 2.2 million tonnes more than in 2015 when milk quotas were abolished. This latest rise was only in part due to the further rise of (+1.9 %) in the number of dairy cows. After the considerable bounce-back in the average real-terms price for milk in 2017 (a rise of almost one third), there was a decrease (-6.6 %) in 2018.
- The production of bovine meat in 2018 remained relatively similar (+0.9 %) at 0.6 million tonnes to that in 2017. The real-terms price for cattle, however, declined (-2.1 %).
- Helping to feed cattle, the production of green maize further bounced back (+33.4 %) from the relatively poor harvests in 2015 and 2016.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.8: Ireland

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	*4 884*	thousand hectares	*2.8 %*
Farms (agricultural holdings)	2016	*137 560*	number	*1.3 %*
Very small farms (with < EUR 8 000 of standard output)	2016	*31.6 %*	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	99.2 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	4.6 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	161	thousand annual work units	-
Young farmers (under 40 years old)	2016	*8.5 %*	share of all farm managers	*10.6 %*
Female farmers	2016	*10.8 %*	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	25.2 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.8 %	share of GDP	-
Gross value added (at basic prices)	2018	2 648	EUR million	1.5 %
Value of agricultural output (production value at basic prices)	2018	8 649	EUR million	2.0 %
Value of crop output	2018	2 090	EUR million	0.9 %
Value of animal output	2018	6 105	EUR million	3.5 %
Agricultural factor income per annual work unit (Indicator A)	2018	-14.2 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	1 854	thousand tonnes	0.6 %
Root crops	2018	*273*	thousand tonnes	*0.2 %*
Fresh vegetables	2018	138	thousand tonnes	0.2 %
Permanent crops	2018	21	thousand tonnes	0.0 %
Raw milk	2018	7 831	thousand tonnes	4.5 %
Bovine meat	2018	623	thousand tonnes	7.8 %
Pig meat	2018	303	thousand tonnes	1.3 %
Poultry meat	2018	157	thousand tonnes	*1.0 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	801	thousand hectares	0.4 %
Persons employed in forestry and logging	2016	2 780	working units	0.5 %
Gross value added (at basic prices)	2016	*31*	EUR million	*0.1 %*
Roundwood (in the rough)	2017	3 220	thousand cubic metres	0.7 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	64 455	gross tonnage	4.2 %
Persons employed in fishing and aquaculture	2017	3 000	number	*1.7 %*
Total catches	2017	*246 760*	tonnes live weight	*4.6 %*
Total aquaculture production (volume)	2017	*43 247*	tonnes live weight	*3.2 %*
Total aquaculture production (value)	2017	*185*	EUR million	*3.6 %*

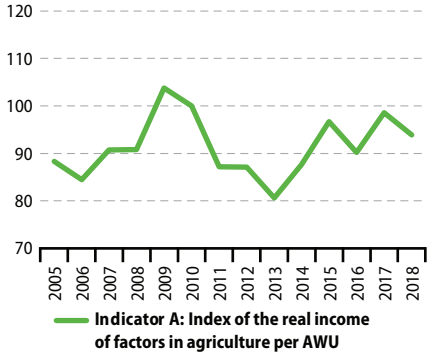
Greece

Key information:				Share of EU-28 total
Total land area	**2016**	130 048	km^2	3.0 %
Share of farmland in total land area	**2016**	35.0 %	share of total land area	-
Gross Domestic Product	**2018**	*184.7*	EUR billion	*1.2 %*
Population	**2018**	10.7	million	2.1 %

Did you know that …

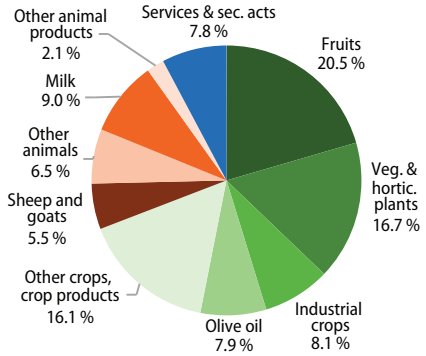
- Agricultural factor income per annual work unit in 2018 was lower (-4.7%) than in 2017, and returned it to about one tenth less than the relative peak in 2009.
- The output value of the agricultural industry decreased (-2.9 %) in 2018, falling to EUR 10.9 billion. Five types of crop product accounted for almost 60 % of total output value; these were fruit (the value of EUR 2.2 billion being up +0.8 % in 2018), vegetables (EUR 1.8 billion, up +3.1 %), olive oil (EUR 0.9 billion, down -28.3 %), industrial crops (EUR 0.9 billion, down -1.6 %) and cereals (EUR 0.6 billion, down -11.6 %).
- There were stark contrasts in the harvested production levels of key crops. The production of cereals as a whole remained relatively stable (-0.6 %) despite a decrease in cultivated area (-6.1 %). The production of root crops plummeted (-42.4 %), in large part due to a sharp reduction in the area cultivated. The production of peaches, a key fruit, continued to climb (+4.4 %), and the production of olives recovered (+20.9 %) from the poor harvest in 2017.
- The average real-terms prices of fresh vegetables and fruits increased in 2018, by +4.9 % and +2.6 % respectively. Although the real-terms price of olives as a whole remained stable (-0.2 %) in 2018, the price of olive oil fell sharply (-12.8 %).
- Milk production rose (+2.1 %) to 1.8 million tonnes in 2018, although the real-terms price of milk fell further away (-2.3 %) from the level in 2015.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.9: Greece

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	4 554	thousand hectares	2.6 %
Farms (agricultural holdings)	2016	684 950	number	6.5 %
Very small farms (with < EUR 8 000 of standard output)	2016	67.7 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	99.3 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	*10.6 %*	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	428	thousand annual work units	-
Young farmers (under 40 years old)	2016	8.3 %	share of all farm managers	*10.6 %*
Female farmers	2016	27.5 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	0.6 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	2.7 %	share of GDP	-
Gross value added (at basic prices)	2018	5 386	EUR million	3.0 %
Value of agricultural output (production value at basic prices)	2018	10 942	EUR million	2.5 %
Value of crop output	2018	7 568	EUR million	3.4 %
Value of animal output	2018	2 524	EUR million	1.5 %
Agricultural factor income per annual work unit (Indicator A)	2018	-4.8 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	2 997	thousand tonnes	1.0 %
Root crops	2018	530	thousand tonnes	*0.3 %*
Fresh vegetables	2018	2 669	thousand tonnes	4.3 %
Permanent crops	2018	5 237	thousand tonnes	6.5 %
Raw milk	2018	1 845	thousand tonnes	1.1 %
Bovine meat	2018	40	thousand tonnes	0.5 %
Pig meat	2018	82	thousand tonnes	0.3 %
Poultry meat	2018	220	thousand tonnes	*1.4 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	6 539	thousand hectares	3.6 %
Persons employed in forestry and logging	2016	*4 260*	working units	*0.8 %*
Gross value added (at basic prices)	2016	*66*	EUR million	*0.2 %*
Roundwood (in the rough)	2017	:	thousand cubic metres	:

Fisheries				Share of EU-28 total
Fishing fleet	2018	71 104	gross tonnage	4.6 %
Persons employed in fishing and aquaculture	2017	*20 850*	number	*11.6 %*
Total catches	2015	64 431	tonnes live weight	*1.3 %*
Total aquaculture production (volume)	2017	*125 640*	tonnes live weight	*9.2 %*
Total aquaculture production (value)	2017	*546*	EUR million	*10.8 %*

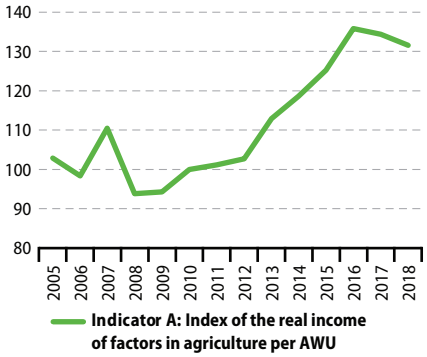
Spain

Key information:				Share of EU-28 total
Total land area	**2016**	502 654	km^2	11.6 %
Share of farmland in total land area	**2016**	46.2 %	share of total land area	-
Gross Domestic Product	**2018**	*1 202.2*	EUR billion	*7.6 %*
Population	**2018**	46.7	million	9.1 %

Did you know that …

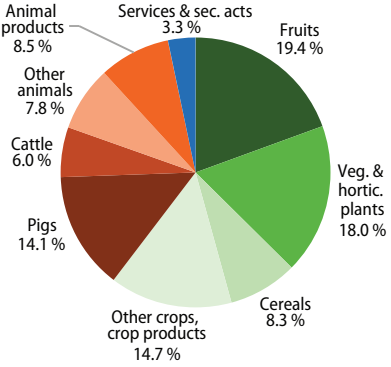
- The marked upward trend in agricultural factor income per annual work unit that had been recorded between 2009 and 2016 faltered, with a relatively small fall (-2.1 %) in 2018 following on from that in 2017.
- The value of the output of the agricultural industry was EUR 52.2 billion in 2018, representing a year-on-year increase of +3.0 % on the value in 2017. This was the fourth highest value among Member States.
- The value of fruits grew strongly (+8.3 % on 2017), in contrast to that of fresh vegetables (-7.0 %). Harvested production of vegetables in 2018 was lower (-3.4 %) at 14.5 million tonnes, while that of permanent crops rose sharply (+22.0 %) to 28.3 million tonnes. Production of olives rose steeply (+50.2 %) as did that of grapes for wine (+30.4%).
- Cereals production rebounded strongly (+47.0 %) in 2018 from the dry conditions in 2017, with 24.5 million tonnes being harvested. The harvested production of some key cereals was markedly higher: among them, barley (+57.8 %), wheat (+65.4 %) and oats (+78.0 %). Despite the rebound, the average real-terms price for cereals as a whole remained stable (+0.1 %).
- The upward trend in pig meat production continued, the latest rise (+5.4 %) to 4.5 million tonnes in 2018 being a new high. The average real-terms price for pigs in 2018 fell sharply (-8.1 %), mirroring the rise in 2017. It was a similar development for poultry meat, with production rising (+7.1 %) to a new high in 2018 of 1.6 million tonnes, but in this case the average real-terms price declined only relatively slightly (-1.0 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.10: Spain

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	23 230	thousand hectares	13.4 %
Farms (agricultural holdings)	2016	945 020	number	9.0 %
Very small farms (with < EUR 8 000 of standard output)	2016	52.7 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	88.5 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	*3.7 %*	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	865	thousand annual work units	-
Young farmers (under 40 years old)	2016	8.6 %	share of all farm managers	*10.6 %*
Female farmers	2016	22.5 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	1.9 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	2.3 %	share of GDP	-
Gross value added (at basic prices)	2018	28 813	EUR million	15.9 %
Value of agricultural output (production value at basic prices)	2018	52 158	EUR million	12.0 %
Value of crop output	2018	31 483	EUR million	14.0 %
Value of animal output	2018	18 955	EUR million	11.0 %
Agricultural factor income per annual work unit (Indicator A)	2018	-2.1 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	24 491	thousand tonnes	8.3 %
Root crops	2018	5 043	thousand tonnes	*2.9 %*
Fresh vegetables	2018	14 534	thousand tonnes	23.3 %
Permanent crops	2018	28 328	thousand tonnes	35.1 %
Raw milk	2018	*8 418*	thousand tonnes	*4.9 %*
Bovine meat	2018	669	thousand tonnes	8.4 %
Pig meat	2018	4 530	thousand tonnes	19.0 %
Poultry meat	2018	1 637	thousand tonnes	*10.8 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	27 627	thousand hectares	15.2 %
Persons employed in forestry and logging	2016	*16 700*	working units	*3.1 %*
Gross value added (at basic prices)	2016	*1 126*	EUR million	*4.2 %*
Roundwood (in the rough)	2017	17 566	thousand cubic metres	3.7 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	331 778	gross tonnage	21.4 %
Persons employed in fishing and aquaculture	2017	*41 100*	number	*22.9 %*
Total catches	2017	902 163	tonnes live weight	*17.0 %*
Total aquaculture production (volume)	2017	314 958	tonnes live weight	*23.0 %*
Total aquaculture production (value)	2017	578	EUR million	*11.4 %*

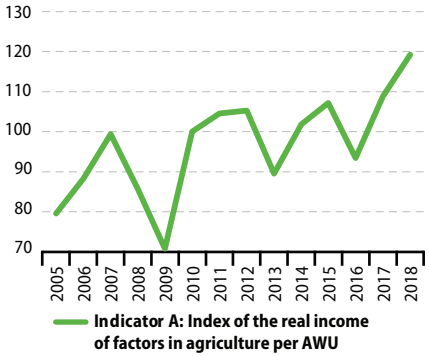
France

Key information:				Share of EU-28 total
Total land area	**2016**	633 886	km^2	14.6 %
Share of farmland in total land area	**2016**	43.9 %	share of total land area	-
Gross Domestic Product	**2018**	*2 353.1*	EUR billion	*14.8 %*
Population	**2018**	66.9	million	13.1 %

Did you know that …

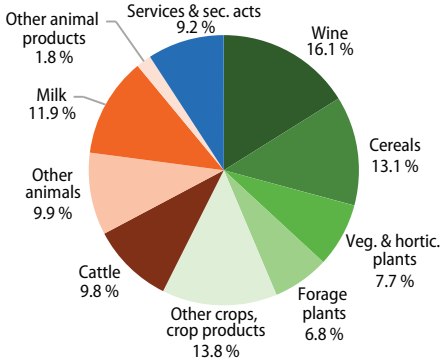
- Agricultural factor income per annual work unit rose strongly (+9.6 %) in 2018, to a relative high that was almost 20 % above the index level in 2010.
- The output from the agricultural industry was valued at EUR 77.2 billion in 2018, the highest among Member States, and represented a strong increase (+5.6 %) on the value in 2017.
- Highlighting four key products: the value of cereals output reached EUR 10.1 billion in 2018 (a rise of +3.7 %), that of milk increased slightly (+0.9 %) to EUR 9.2 billion, that of wine output surged (+29.5 %) to a new high of EUR 12.4 billion, and that of cattle remained little changed (-1.0 %) at EUR 7.6 billion.
- The harvested production of cereals was down sharply (-8.7 %) in 2018, in part due to a reduced area cultivated (-3.0 %). With a restricted domestic supply, the average real terms price of cereals climbed (+7.8 %), back to the level of 2015. The harvested production of grapes for wine rebounded strongly (+25.3 %) from the low quantity harvested in 2017 to reach 6.2 million tonnes.
- The production of raw milk remained unchanged at 26.0 million tonnes in 2018, with the real terms price also relatively stable (-1.1 %). The production of bovine meats increased slightly in 2018 (+1.2 %). The average real-terms price of cattle declined (-2.3 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.11: France

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	27 814	thousand hectares	16.0 %
Farms (agricultural holdings)	2016	456 520	number	4.4 %
Very small farms (with < EUR 8 000 of standard output)	2016	18.9 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	72.3 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	*2.5 %*	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	744	thousand annual work units	-
Young farmers (under 40 years old)	2016	15.6 %	share of all farm managers	*10.6 %*
Female farmers	2016	21.3 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	34.9 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.4 %	share of GDP	-
Gross value added (at basic prices)	2018	32 989	EUR million	18.2 %
Value of agricultural output (production value at basic prices)	2018	77 186	EUR million	17.8 %
Value of crop output	2018	44 315	EUR million	19.7 %
Value of animal output	2018	25 790	EUR million	15.0 %
Agricultural factor income per annual work unit (Indicator A)	2018	9.6 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	62 568	thousand tonnes	21.2 %
Root crops	2018	48 478	thousand tonnes	*28.0 %*
Fresh vegetables	2018	5 654	thousand tonnes	9.1 %
Permanent crops	2018	9 129	thousand tonnes	11.3 %
Raw milk	2018	26 012	thousand tonnes	15.1 %
Bovine meat	2018	*1 460*	thousand tonnes	*18.4 %*
Pig meat	2018	*2 182*	thousand tonnes	*9.1 %*
Poultry meat	2018	*1 732*	thousand tonnes	*11.4 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	17 579	thousand hectares	9.7 %
Persons employed in forestry and logging	2016	*29 000*	working units	*5.4 %*
Gross value added (at basic prices)	2016	3 339	EUR million	12.6 %
Roundwood (in the rough)	2017	51 200	thousand cubic metres	10.9 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	177 126	gross tonnage	11.4 %
Persons employed in fishing and aquaculture	2017	*20 000*	number	*11.1 %*
Total catches	2018	*587 525*	tonnes live weight	*11.1 %*
Total aquaculture production (volume)	2017	*188 622*	tonnes live weight	*13.8 %*
Total aquaculture production (value)	2017	*764*	EUR million	*15.1 %*

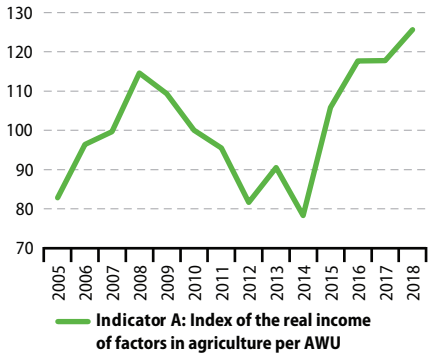
Croatia

Key information:				Share of EU-28 total
Total land area	**2016**	55 896	km^2	1.3 %
Share of farmland in total land area	**2016**	28.0 %	share of total land area	-
Gross Domestic Product	**2018**	*51.6*	EUR billion	*0.3 %*
Population	**2018**	4.1	million	0.8 %

Did you know that …

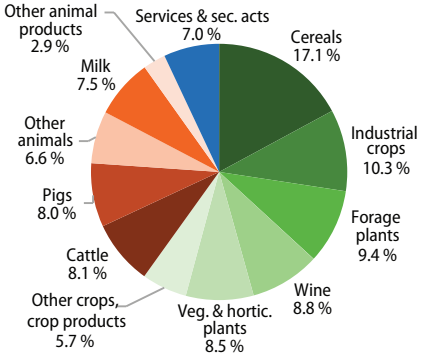
- Agricultural factor income per annual work unit rose strongly (+6.6 %) in 2018, the index reaching a new high and confirming the sharp upswing from the relative low in 2014.
- The value of output from the agricultural industry increased (+5.9 %) to EUR 2.3 billion in 2018. In large part this was driven by the strong rebound (+23.2 %) in the value of total cereals output and, more particularly, the values of wheat (+26.2 %) and grain maize (+28.7 %). Higher output values for rape and turnip rape (+48.2 %), forage plants (+20.3 %) and fruits (+34.9 %) further supported the overall rise.
- After the dry conditions experienced in 2017, better growing conditions in 2018 allowed a rebound in the harvested volume of cereals (+22.0 %). There was little change in the overall cultivated area of cereals as a whole in 2018 (-0.4 %), despite the area of wheat increasing sharply (up +17.0 %). The average real-terms price of cereals as a whole was little changed (-1.0 %), despite the higher level of production in 2018, with the price decline for maize (-7.0 %) being largely countered by small rises for wheat (+2.6 %), barley (+4.8 %) and oats (+6.1 %).
- The production of both bovine meat and pig meat picked up in 2018 (+3.7 % and +4.8 % respectively) after falls in 2017. The real-terms price of cattle remained was down slightly (-1.4 %), but that for pigs fell sharply (-13.9 %). Raw milk production was lower in 2018 (-5.1%) but the average real terms price of milk increased slightly (+1.8 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.12: Croatia

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	1 563	thousand hectares	0.9 %
Farms (agricultural holdings)	2016	134 460	number	1.3 %
Very small farms (with < EUR 8 000 of standard output)	2016	68.9 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	96.8 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	5.3 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	175	thousand annual work units	-
Young farmers (under 40 years old)	2016	10.5 %	share of all farm managers	*10.6 %*
Female farmers	2016	26.0 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	2.4 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.9 %	share of GDP	-
Gross value added (at basic prices)	2018	1 083	EUR million	0.6 %
Value of agricultural output (production value at basic prices)	2018	2 333	EUR million	0.5 %
Value of crop output	2018	1 398	EUR million	0.6 %
Value of animal output	2018	772	EUR million	0.4 %
Agricultural factor income per annual work unit (Indicator A)	2018	6.6 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	3 231	thousand tonnes	1.1 %
Root crops	2018	964	thousand tonnes	*0.6 %*
Fresh vegetables	2018	185	thousand tonnes	0.3 %
Permanent crops	2018	346	thousand tonnes	0.4 %
Raw milk	2018	634	thousand tonnes	0.4 %
Bovine meat	2018	44	thousand tonnes	0.6 %
Pig meat	2018	75	thousand tonnes	0.3 %
Poultry meat	2018	66	thousand tonnes	*0.4 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	2 491	thousand hectares	1.4 %
Persons employed in forestry and logging	2016	16 490	working units	3.1 %
Gross value added (at basic prices)	2016	196	EUR million	0.7 %
Roundwood (in the rough)	2017	5 307	thousand cubic metres	1.1 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	44 286	gross tonnage	2.9 %
Persons employed in fishing and aquaculture	2017	3 390	number	*1.9 %*
Total catches	2018	70 068	tonnes live weight	*1.3 %*
Total aquaculture production (volume)	2017	17 114	tonnes live weight	*1.3 %*
Total aquaculture production (value)	2017	101	EUR million	*2.0 %*

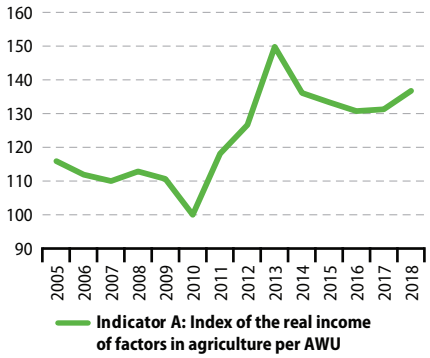
Italy

Key information:				Share of EU-28 total
Total land area	**2016**	297 734	km²	6.8 %
Share of farmland in total land area	**2016**	*42.3 %*	share of total land area	-
Gross Domestic Product	**2018**	1 765.4	EUR billion	11.1 %
Population	**2018**	60.5	million	11.8 %

Did you know that …

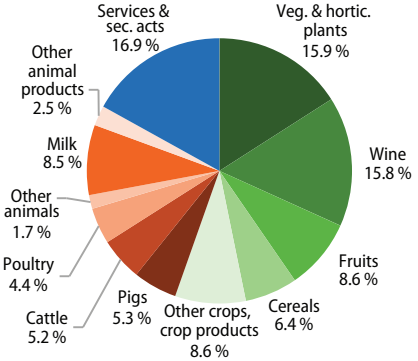
- Agricultural factor income per annual work unit in 2018 was up (+4.2 %) on the previous year. The index in 2018 remained a little over one third (36.8 %) above the relative low in 2000.
- The value of output from the agricultural industry rose (+3.0 %) to EUR 56.9 billion in 2018.
- The harvested production of grapes for wine was up sharply (+16.2 % in 2018), with the real-terms price of wine also higher (+11.5 %). The spread of disease and adverse weather affected the production of olives for olive oil in 2018 (-25.6 %). Nevertheless, the average real-terms price for olives as whole remained almost unchanged from the average in 2017 (+0.4 %).
- The harvested production of fresh vegetables in 2018 was slightly higher (+2.3 %), in part due to the rise in the production of tomatoes (+3.2 %). However, this was accompanied by sharply lower real-terms prices (-7.2 % and -9.1 % respectively). There was a sharp upturn in the harvested production of apples (+29.0 %) but less stoned fruit (-11.4 %).
- Following a dry growing season in 2017, the harvested production of cereals in 2018 only increased slightly (+1.8 %) to 16.5 million tonnes, still 2.9 million tonnes down on the level in 2014. The production of wheat and spelt remained stable (-0.5 %) and there was only a small rise in the production of grain maize and corn-cob-mix (+2.6 %). The average real-terms price for wheat was slightly higher (+2.2 %) but remained stable for grain maize (+0.2 %).
- Production of raw milk continued to grow moderately in 2018 (+1.1 %), while the average real terms price of milk fell slightly (-1.8 %). Developments in meat production in 2018 varied widely, with bovine meat production up sharply (+7.0 %), that of pig meat stable (+0.3 %) and that of poultry meat lower (-3.2 %) compared to 2017. The average real terms price for pigs fell sharply (-15.2 %), in contrast to prices for cattle and poultry which remained stable (-0.1 % and -0.3 % respectively).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.13: Italy

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	*12 598*	thousand hectares	*7.3 %*
Farms (agricultural holdings)	2016	*1 145 710*	number	*10.9 %*
Very small farms (with < EUR 8 000 of standard output)	2016	*50.6 %*	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	:	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	3.4 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	1 127	thousand annual work units	-
Young farmers (under 40 years old)	2016	*7.9 %*	share of all farm managers	*10.6 %*
Female farmers	2016	*31.5 %*	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	6.1 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.8 %	share of GDP	-
Gross value added (at basic prices)	2018	32 544	EUR million	17.9 %
Value of agricultural output (production value at basic prices)	2018	56 906	EUR million	13.1 %
Value of crop output	2018	31 533	EUR million	14.0 %
Value of animal output	2018	15 733	EUR million	9.1 %
Agricultural factor income per annual work unit (Indicator A)	2018	4.2 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	16 541	thousand tonnes	5.6 %
Root crops	2018	3 249	thousand tonnes	*1.9 %*
Fresh vegetables	2018	12 160	thousand tonnes	19.5 %
Permanent crops	2018	18 628	thousand tonnes	23.1 %
Raw milk	2018	13 132	thousand tonnes	7.6 %
Bovine meat	2018	809	thousand tonnes	10.2 %
Pig meat	2018	1 471	thousand tonnes	6.2 %
Poultry meat	2018	1 285	thousand tonnes	*8.5 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	11 110	thousand hectares	6.1 %
Persons employed in forestry and logging	2016	38 500	working units	7.2 %
Gross value added (at basic prices)	2016	*2 083*	EUR million	*7.8 %*
Roundwood (in the rough)	2017	*13 052*	thousand cubic metres	*2.8 %*

Fisheries				Share of EU-28 total
Fishing fleet	2018	146 260	gross tonnage	9.4 %
Persons employed in fishing and aquaculture	2017	28 600	number	*15.9 %*
Total catches	2018	*201 938*	thousand tonnes live weight	*3.8 %*
Total aquaculture production (volume)	2017	156 307	tonnes live weight	*11.4 %*
Total aquaculture production (value)	2017	543	EUR million	*10.7 %*

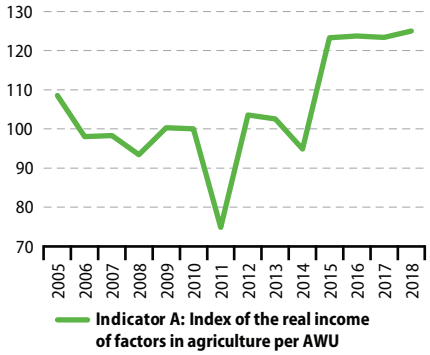
Cyprus

Key information:				Share of EU-28 total
Total land area	**2016**	9 213	km^2	0.2 %
Share of farmland in total land area	**2016**	12.1 %	share of total land area	-
Gross Domestic Product	**2018**	*21.1*	EUR billion	*0.1 %*
Population	**2018**	0.9	million	0.2 %

Did you know that …

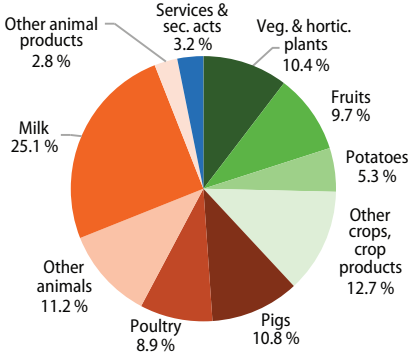
- Agricultural factor income per annual work unit rose slightly (+1.3 %) in 2018, further consolidating previous rises. The index level in 2018 was 25.0 % higher than that in 2010, at a new high.
- The output value of the agricultural industry remained at EUR 0.7 billion in 2018, increasing only slightly (+1.2 %) on the level in 2017. Almost two thirds of this agricultural output value came from milk, pigs, poultry, fruits and fresh vegetables and there were divergent developments in their values in 2018. Values of milk (+5.5 %), vegetables (+4.9 %), and poultry (+1.2 %) were all higher but lower for pigs (-4.8 %) and fruits (-5.8 %).
- Raw milk production continued to increase (+5.6 %) in 2018, supported by a corresponding rise in the national dairy cow herd (+5.7 %). In contrast, the production of pig meat resumed its downward trend (-4.0 %). The average real terms price of milk was slightly down year-on-year (-1.0 %), while that of pigs fell sharply (-5.1 %).
- The harvested production of fresh vegetables in 2018 was slightly higher (+2.3 %) than in 2017. This was not the case for fruits, the production of which fell sharply (-14.9 %), with a particularly steep decline in the production of apples (-43.0 %). The dry conditions during the growing season resulted in a much reduced harvest of cereals as a whole (-32.2 %), despite a higher area cultivated (+18.7 %), with barley production more than halving (-58.8 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.14: Cyprus

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	112	thousand hectares	0.1 %
Farms (agricultural holdings)	2016	34 940	number	0.3 %
Very small farms (with < EUR 8 000 of standard output)	2016	81.2 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	97.6 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	*3.3 %*	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	21	thousand annual work units	-
Young farmers (under 40 years old)	2016	3.3 %	share of all farm managers	*10.6 %*
Female farmers	2016	22.6 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	0.6 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.6 %	share of GDP	-
Gross value added (at basic prices)	2018	341	EUR million	0.2 %
Value of agricultural output (production value at basic prices)	2018	732	EUR million	0.2 %
Value of crop output	2018	279	EUR million	0.1 %
Value of animal output	2018	430	EUR million	0.2 %
Agricultural factor income per annual work unit (Indicator A)	2018	1.3 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	25	thousand tonnes	0.0 %
Root crops	2018	*102*	thousand tonnes	*0.1 %*
Fresh vegetables	2018	*84*	thousand tonnes	*0.1 %*
Permanent crops	2018	*146*	thousand tonnes	*0.2 %*
Raw milk	2018	295	thousand tonnes	0.2 %
Bovine meat	2018	5	thousand tonnes	0.1 %
Pig meat	2018	42	thousand tonnes	0.2 %
Poultry meat	2018	25	thousand tonnes	*0.2 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	386	thousand hectares	0.2 %
Persons employed in forestry and logging	2016	*390*	working units	*0.1 %*
Gross value added (at basic prices)	2016	2	EUR million	0.0 %
Roundwood (in the rough)	2017	16	thousand cubic metres	0.0 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	3 638	gross tonnage	0.2 %
Persons employed in fishing and aquaculture	2017	*510*	number	*0.3 %*
Total catches	2018	1 470	tonnes live weight	*0.0 %*
Total aquaculture production (volume)	2017	7 276	tonnes live weight	*0.5 %*
Total aquaculture production (value)	2017	38	EUR million	*0.7 %*

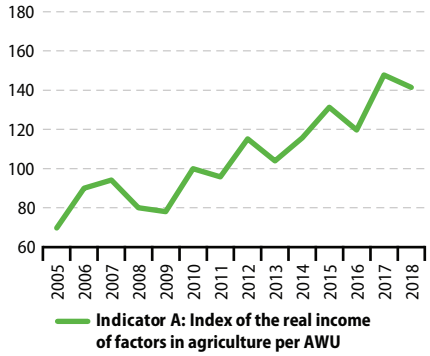
Latvia

Key information:				Share of EU-28 total
Total land area	**2016**	63 290	km^2	1.5 %
Share of farmland in total land area	**2016**	30.5 %	share of total land area	-
Gross Domestic Product	**2018**	29.2	EUR billion	0.2 %
Population	**2018**	1.9	million	0.4 %

Did you know that …

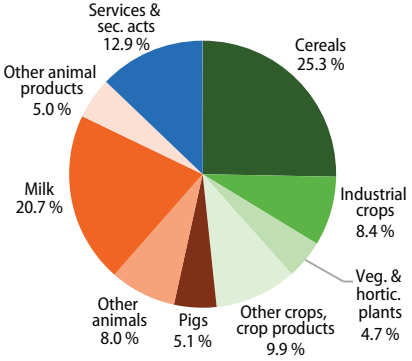
- There has been a strong upward trend in agricultural factor income per annual work unit since 2005, with the index level doubling through to 2017. However, there was fall back (-4.4 %) from the relative high in 2017.
- The output value of the agricultural industry was EUR 1.3 billion in 2018, representing a year-on-year decrease of -6.0 %. A small majority of this total output value came from three types of product: cereals, industrial crops and milk. The values of all these key products fell sharply in 2018: cereals (down -11.1 %), industrial crops (-27.8 %) and milk (-8.2 %).
- Drought conditions in the Baltic region in 2018 resulted in sharp falls in the harvested production of cereals (-23.6 %), in particular of wheat and spelt which fell by one third to 1.4 million tonnes. The decline for wheat also reflected a reduced cultivated area (-6.6 %), with the wet autumn in 2017 affecting the sowing of winter cereals. The production of rape and turnip rape seeds was also hit hard, with production down by almost one third, despite an increase in the cultivated area (+8.2 %).
- The production of raw milk on farms decreased slightly (-1.7 %) in 2018, influenced by a reduction in the number of dairy cows (-3.9 %).
- The average real-terms price for cereals rose sharply (+15.6 %) in 2018, reflecting the poor harvest and the decreased supply. The real terms price of milk fell sharply (-9.7 %), albeit after a strong rebound (+38.4 %) in 2017.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.15: Latvia

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	1 931	thousand hectares	1.1 %
Farms (agricultural holdings)	2016	69 930	number	0.7 %
Very small farms (with < EUR 8 000 of standard output)	2016	76.8 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	97.9 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	5.2 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	71	thousand annual work units	-
Young farmers (under 40 years old)	2016	9.5 %	share of all farm managers	*10.6 %*
Female farmers	2016	44.9 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	31.3 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.1 %	share of GDP	-
Gross value added (at basic prices)	2018	364	EUR million	0.2 %
Value of agricultural output (production value at basic prices)	2018	1 323	EUR million	0.3 %
Value of crop output	2018	639	EUR million	0.3 %
Value of animal output	2018	514	EUR million	0.3 %
Agricultural factor income per annual work unit (Indicator A)	2018	-4.4 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	2 057	thousand tonnes	0.7 %
Root crops	2018	201	thousand tonnes	*0.1 %*
Fresh vegetables	2018	58	thousand tonnes	0.1 %
Permanent crops	2018	16	thousand tonnes	0.0 %
Raw milk	2018	983	thousand tonnes	0.6 %
Bovine meat	2018	16	thousand tonnes	0.2 %
Pig meat	2018	37	thousand tonnes	0.2 %
Poultry meat	2018	33	thousand tonnes	*0.2 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	3 468	thousand hectares	1.9 %
Persons employed in forestry and logging	2016	17 850	working units	3.3 %
Gross value added (at basic prices)	2016	*357*	EUR million	*1.3 %*
Roundwood (in the rough)	2017	12 896	thousand cubic metres	2.7 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	22 325	gross tonnage	1.4 %
Persons employed in fishing and aquaculture	2017	1 510	number	*0.8 %*
Total catches	2016	114 655	tonnes live weight	*2.3 %*
Total aquaculture production (volume)	2016	779	tonnes live weight	*0.1 %*
Total aquaculture production (value)	2016	2	EUR million	*0.0 %*

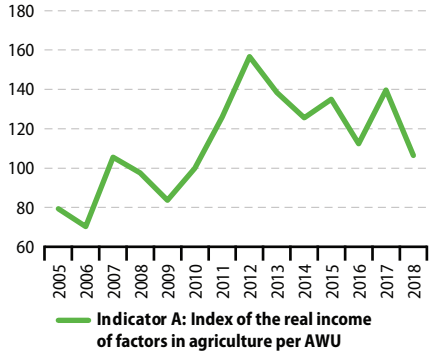
Lithuania

Key information:				Share of EU-28 total
Total land area	**2016**	62 643	km^2	1.4 %
Share of farmland in total land area	**2016**	46.7 %	share of total land area	-
Gross Domestic Product	**2018**	45.3	EUR billion	0.3 %
Population	**2018**	2.8	million	0.5 %

Did you know that …

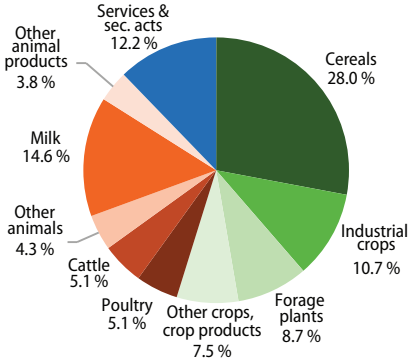
- Agricultural factor income per annual work unit fell steeply in 2018 (-23.8 %). In so doing, it underlined the falls in the index since the peak of 2012, with a return to a level little more than that in 2010.
- The value of agricultural output decreased sharply (-7.4 %) to EUR 2.9 billion in 2018. A small majority of this output value came from just cereals, industrial crops and milk. The output values of these key products were all lower in 2018 than in 2017: cereals -7.8 %, industrial crops -24.4 % and milk -4.8 %.
- The drought in the Baltic region resulted in a sharp drop in the harvested production of cereals (-21.2 %) in 2018. The production of wheat and spelt was particularly hard hit, falling by just over one quarter to 2.8 million tonnes. The impact was also on the production of rape and turnip rape seeds, which slumped one fifth (-20.2%), despite an increase in the cultivated area (+13.5%).
- The production of raw milk on farms remained stable (+0.1 %) at 1.6 million tonnes in 2018, despite the loss of 16 600 cows (-6.1 %) from the dairy herd.
- Reflecting supply-side issues, the average real-terms price of cereals as a whole rose (+7.2 %) in 2018. This was not the case for rape (-7.9 %). The average real-terms price of milk was also down sharply (-7.0 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.16: Lithuania

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	2 925	thousand hectares	1.7 %
Farms (agricultural holdings)	2016	150 320	number	1.4 %
Very small farms (with < EUR 8 000 of standard output)	2016	75.9 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	98.3 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	6.7 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	143	thousand annual work units	-
Young farmers (under 40 years old)	2016	12.3 %	share of all farm managers	*10.6 %*
Female farmers	2016	44.9 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	16.4 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.5 %	share of GDP	-
Gross value added (at basic prices)	2018	990	EUR million	0.5 %
Value of agricultural output (production value at basic prices)	2018	2 908	EUR million	0.7 %
Value of crop output	2018	1 594	EUR million	0.7 %
Value of animal output	2018	958	EUR million	0.6 %
Agricultural factor income per annual work unit (Indicator A)	2018	-23.8 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	4 000	thousand tonnes	1.4 %
Root crops	2018	1 195	thousand tonnes	*0.7 %*
Fresh vegetables	2018	196	thousand tonnes	0.3 %
Permanent crops	2018	93	thousand tonnes	0.1 %
Raw milk	2018	1 572	thousand tonnes	0.9 %
Bovine meat	2018	40	thousand tonnes	0.5 %
Pig meat	2018	64	thousand tonnes	0.3 %
Poultry meat	2018	109	thousand tonnes	*0.7 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	2 284	thousand hectares	1.3 %
Persons employed in forestry and logging	2016	12 690	working units	2.4 %
Gross value added (at basic prices)	2016	173	EUR million	0.7 %
Roundwood (in the rough)	2017	6 747	thousand cubic metres	1.4 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	41 619	gross tonnage	2.7 %
Persons employed in fishing and aquaculture	2017	1 230	number	*0.7 %*
Total catches	2018	63 262	tonnes live weight	*1.2 %*
Total aquaculture production (volume)	2017	3 406	tonnes live weight	*0.2 %*
Total aquaculture production (value)	2017	11	EUR million	*0.2 %*

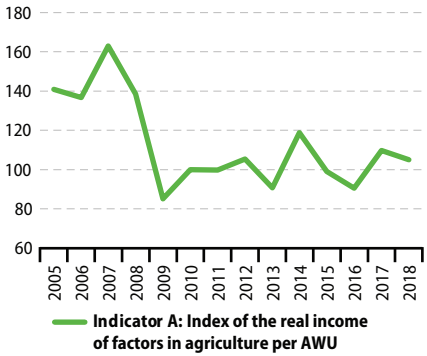
Luxembourg

Key information:				Share of EU-28 total
Total land area	**2016**	2 586	km^2	0.1 %
Share of farmland in total land area	**2016**	50.5 %	share of total land area	-
Gross Domestic Product	**2018**	60.1	EUR billion	0.4 %
Population	**2018**	0.6	million	0.1 %

Did you know that …

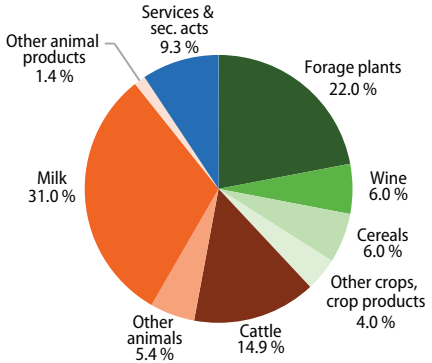
- Agricultural factor income per annual work unit decreased (-4.3 %) in 2018, following on from the sharp rise in 2017. As a result, the 2018 index level was about one third below the peak level recorded in 2007.
- The value of output from the agricultural industry remained at EUR 0.4 million in 2018, a slight rise of +1.3% on the previous year. The agricultural industry is heavily based around the cattle sector; forage plants, cattle and milk account for two thirds of the total value of the agricultural industry.
- The production levels of raw milk (+5.2 %) and bovine meat (+3.5 %) were higher in 2018 than the previous year. In contrast, the production of plants harvested green from arable land (for use as fodder) fell sharply (-10.7 %), despite an increase in the cultivated area (+6.4 %), with the drought during the growing season taking its toll.
- The harvested production of grapes for wine grew strongly (up +67.3 % in 2018).
- There was a sharp decline (-8.3 %) in the average real terms price for milk in 2018, following a sharp rebound the previous year. The real terms price of cattle remained relatively stable (-0.8 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.17: Luxembourg

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	131	thousand hectares	0.1 %
Farms (agricultural holdings)	2016	1 970	number	0.0 %
Very small farms (with < EUR 8 000 of standard output)	2016	8.1 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	92.9 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	0.7 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	4	thousand annual work units	-
Young farmers (under 40 years old)	2016	15.2 %	share of all farm managers	*10.6 %*
Female farmers	2016	17.3 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	52.5 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.2 %	share of GDP	-
Gross value added (at basic prices)	2018	121	EUR million	0.1 %
Value of agricultural output (production value at basic prices)	2018	435	EUR million	0.1 %
Value of crop output	2018	165	EUR million	0.1 %
Value of animal output	2018	229	EUR million	0.1 %
Agricultural factor income per annual work unit (Indicator A)	2018	*-4.3 %*	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	154	thousand tonnes	0.1 %
Root crops	2018	17	thousand tonnes	*0.0 %*
Fresh vegetables	2018	2	thousand tonnes	0.0 %
Permanent crops	2018	21	thousand tonnes	0.0 %
Raw milk	2018	411	thousand tonnes	0.2 %
Bovine meat	2018	10	thousand tonnes	0.1 %
Pig meat	2018	13	thousand tonnes	0.1 %
Poultry meat	2018	0	thousand tonnes	*0.0 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	88	thousand hectares	0.0 %
Persons employed in forestry and logging	2016	330	working units	0.1 %
Gross value added (at basic prices)	2016	*30*	EUR million	*0.1 %*
Roundwood (in the rough)	2017	433	thousand cubic metres	0.1 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	-	gross tonnage	-
Persons employed in fishing and aquaculture	2017	0	number	*0.0 %*
Total catches	2018	-	tonnes live weight	-
Total aquaculture production (volume)	2017	-	tonnes live weight	-
Total aquaculture production (value)	2017	-	EUR million	-

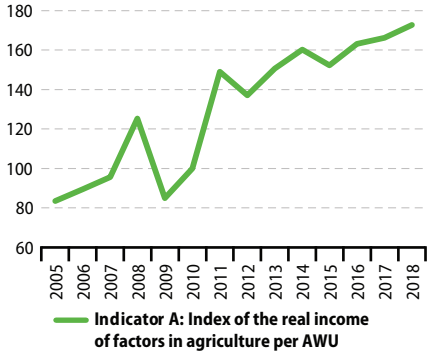
Hungary

Key information:				Share of EU-28 total
Total land area	**2016**	91 248	km^2	2.1 %
Share of farmland in total land area	**2016**	51.2 %	share of total land area	-
Gross Domestic Product	**2018**	133.8	EUR billion	0.8 %
Population	**2018**	9.8	million	1.9 %

Did you know that …

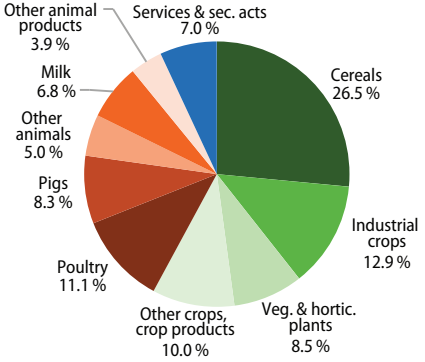
- The upward trend in agricultural factor income per annual work unit continued in 2018, with the index rising +4.0 % to a new peak. This index doubled in the period between 2005 and 2018.
- The value of output from the agricultural industry remained stable (+0.6 %) at EUR 8.4 billion in 2018. Close to half of this total output value was accounted for by only three key product types; whereas the value of cereals and poultry output rose sharply (+12.0 % and +6.7 % respectively) that of oilseeds fell sharply (-12.8 %).
- There was a strong rebound in the area of wheat and spelt cultivated in 2018 (+6.2 %), but the harvested production remained almost unchanged (+0.2 %) from the level in 2017. In contrast, farmers cultivated a reduced area of grain maize (-5.0 %), but the harvested production rose steeply (+18.4 %) to 8.0 million tonnes, the third highest level in the EU. There was also a strong fall in the area of oilseeds cultivated (-5.8 %), with harvested production also down (-3.9 %).
- Within animals and animal products, the production of poultry meat was up sharply in 2018 (+8.3 %), that of pig meat remained stable (+0.3 %) and the production of raw milk was slightly lower (-1.0 %) than in 2017, at 2.0 million tonnes.
- Regarding real-terms prices for these main products in 2018: there were price rises for both grain maize (+2.6 %) and wheat (+8.8 %); the average for milk declined (-2.4 %), following a steep increase (+20.3 %) in 2017; and, the average price of poultry declined once again (-2.5 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.18: Hungary

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	4 671	thousand hectares	2.7 %
Farms (agricultural holdings)	2016	430 000	number	4.1 %
Very small farms (with < EUR 8 000 of standard output)	2016	83.2 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	97.5 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	3.6 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	392	thousand annual work units	-
Young farmers (under 40 years old)	2016	12.6 %	share of all farm managers	*10.6 %*
Female farmers	2016	27.3 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	4.4 %	share of all farm managers	9.1 %

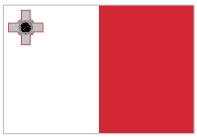
Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	2.3 %	share of GDP	-
Gross value added (at basic prices)	2018	3 465	EUR million	1.9 %
Value of agricultural output (production value at basic prices)	2018	8 444	EUR million	1.9 %
Value of crop output	2018	4 889	EUR million	2.2 %
Value of animal output	2018	2 967	EUR million	1.7 %
Agricultural factor income per annual work unit (Indicator A)	2018	4.0 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	14 932	thousand tonnes	5.1 %
Root crops	2018	1 294	thousand tonnes	*0.7 %*
Fresh vegetables	2018	1 520	thousand tonnes	2.4 %
Permanent crops	2018	1 452	thousand tonnes	1.8 %
Raw milk	2018	1 954	thousand tonnes	1.1 %
Bovine meat	2018	29	thousand tonnes	0.4 %
Pig meat	2018	436	thousand tonnes	1.8 %
Poultry meat	2018	525	thousand tonnes	*3.5 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	2 190	thousand hectares	1.2 %
Persons employed in forestry and logging	2016	20 320	working units	3.8 %
Gross value added (at basic prices)	2016	*229*	EUR million	*0.9 %*
Roundwood (in the rough)	2017	5 689	thousand cubic metres	1.2 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	-	gross tonnage	-
Persons employed in fishing and aquaculture	2017	1 380	number	*0.8 %*
Total catches	2018	-	tonnes live weight	-
Total aquaculture production (volume)	2017	18 258	tonnes live weight	*1.3 %*
Total aquaculture production (value)	2017	38	EUR million	*0.7 %*

Malta

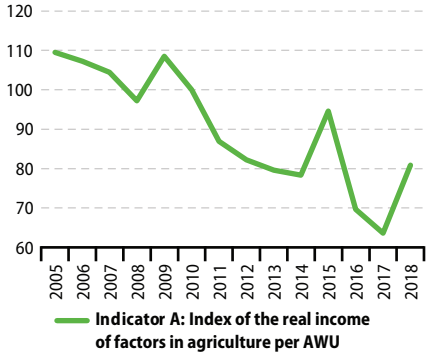


Key information:				Share of EU-28 total
Total land area	2016	313	km^2	0.0 %
Share of farmland in total land area	2016	35.5 %	share of total land area	-
Gross Domestic Product	2018	12.3	EUR billion	0.1 %
Population	2018	0.5	million	0.1 %

Did you know that …

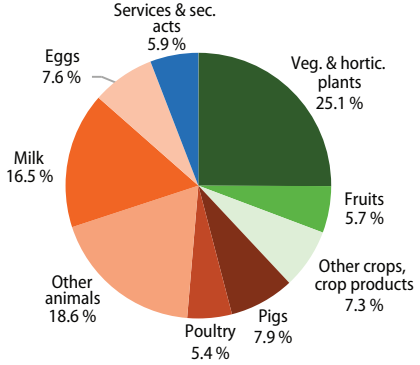
- Agricultural factor income per annual work climbed steeply (+27.0 %) in 2018. However, this should be seen against the backdrop of a fairly regular and steady decline in the index since 2005. Indeed, the index of agricultural factor income per annual work unit in 2018 still remained about one quarter less than the level in 2005.
- The value of output from the agricultural industry remained (+0.2 %) at EUR 122 million in 2018. With higher intermediate consumption costs (+3.8 %), most of the rise in agricultural factor income can be traced to a quadrupling of other subsidies on production.
- Fresh vegetables, milk and pigs accounted for almost one half of the value of the output of the agricultural industry. The harvested production of fresh vegetables fell slightly (-1.2 %) in 2018, that of pig meat declined sharply (-5.9 %), but the production of raw milk increased (+3.2 %).
- Despite the slightly lower production level of fresh vegetables in 2018, the average real-terms price declined once more (-7.3 %, following on from -7.2 % in 2017). The average real-terms price for pigs also continued to decline (-1.7 %, after falls of -2.1% in 2017 and -4.5 % in 2016). In contrast, the average price of milk on farms was slightly higher (+1.7 %) than in 2017.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.19: Malta

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	11	thousand hectares	0.0 %
Farms (agricultural holdings)	2016	9 210	number	0.1 %
Very small farms (with < EUR 8 000 of standard output)	2016	84.3 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	98.5 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	1.1 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	5	thousand annual work units	-
Young farmers (under 40 years old)	2016	7.1 %	share of all farm managers	*10.6 %*
Female farmers	2016	6.0 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	1.6 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.5 %	share of GDP	-
Gross value added (at basic prices)	2018	57	EUR million	0.0 %
Value of agricultural output (production value at basic prices)	2018	122	EUR million	0.0 %
Value of crop output	2018	46	EUR million	0.0 %
Value of animal output	2018	69	EUR million	0.0 %
Agricultural factor income per annual work unit (Indicator A)	2018	27.0 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	0	thousand tonnes	0.0 %
Root crops	2017	9	thousand tonnes	*0.0 %*
Fresh vegetables	2018	55	thousand tonnes	0.1 %
Permanent crops	2018	6	thousand tonnes	0.0 %
Raw milk	2018	43	thousand tonnes	0.0 %
Bovine meat	2018	1	thousand tonnes	0.0 %
Pig meat	2018	4	thousand tonnes	0.0 %
Poultry meat	2018	4	thousand tonnes	*0.0 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	0	thousand hectares	0.0 %
Persons employed in forestry and logging	2016	0	working units	-
Gross value added (at basic prices)	2016	:	EUR million	-
Roundwood (in the rough)	2017	0	thousand cubic metres	0.0 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	6 496	gross tonnage	0.4 %
Persons employed in fishing and aquaculture	2017	690	number	*0.4 %*
Total catches	2018	2 545	tonnes live weight	*0.0 %*
Total aquaculture production (volume)	2017	15 721	tonnes live weight	*1.2 %*
Total aquaculture production (value)	2017	180	EUR million	*3.6 %*

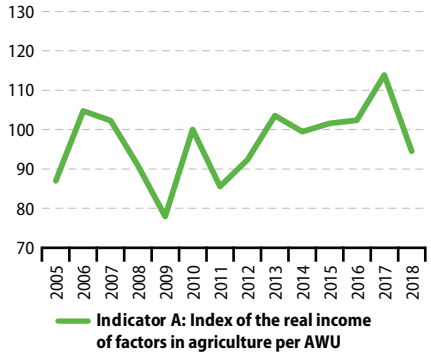
Netherlands

Key information:				Share of EU-28 total
Total land area	**2016**	34 188	km^2	0.8 %
Share of farmland in total land area	**2016**	52.5 %	share of total land area	-
Gross Domestic Product	**2018**	*774.0*	EUR billion	*4.9 %*
Population	**2018**	17.2	million	3.4 %

Did you know that …

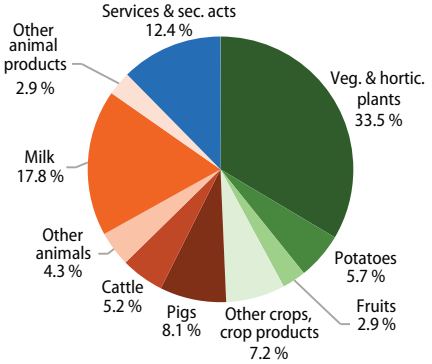
- Agricultural factor income per annual work unit fell back sharply (-17.0 %) in 2018 from the relative peak in 2017. In so doing, the index fell slightly below the level of 2010.
- The value of output from the agricultural industry was EUR 28.2 billion in 2018, which represented a year-on-year decrease of -2.7 %.
- Accounting for about 60 % of the total value of output from the agricultural industry, the four main products in 2018 were plants and flowers (alone accounting for about one quarter of the total), milk, fresh vegetables and pigs. The output value of three of these four key products declined in 2018: that of plants and flowers was down (-3.4 %) to EUR 6.8 billion; that of milk fell sharply (-8.6 %) to EUR 5.0 billion; and, that of pigs tumbled (-14.3 %) to 2.3 billion. In contrast, the output value of fresh vegetables increased sharply (+8.0 %) to EUR 2.7 billion in 2018.
- The production of raw milk decreased (-2.7 %) to 14.4 million tonnes in 2018 but the average real-terms price fell strongly (-7.8 %) after there had been a strong rebound (+18.2 %) in 2017. The production of pig meat grew strongly (+5.5 %) to a provisional 1.5 million tonnes. However, there was a sharp downturn (-16.9 %) in the real-terms price of pigs after strong increases in 2016 (+10.1 %) and 2017 (+12.5 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.20: Netherlands

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	1 796	thousand hectares	1.0 %
Farms (agricultural holdings)	2016	55 680	number	0.5 %
Very small farms (with < EUR 8 000 of standard output)	2016	4.2 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	91.2 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	*2.1 %*	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	154	thousand annual work units	-
Young farmers (under 40 years old)	2016	8.7 %	share of all farm managers	*10.6 %*
Female farmers	2016	5.2 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	9.4 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.4 %	share of GDP	-
Gross value added (at basic prices)	2018	10 682	EUR million	5.9 %
Value of agricultural output (production value at basic prices)	2018	28 153	EUR million	6.5 %
Value of crop output	2018	13 883	EUR million	6.2 %
Value of animal output	2018	10 785	EUR million	6.3 %
Agricultural factor income per annual work unit (Indicator A)	2018	-17.0 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	1 335	thousand tonnes	0.5 %
Root crops	2018	*12 538*	thousand tonnes	*7.2 %*
Fresh vegetables	2018	4 596	thousand tonnes	7.4 %
Permanent crops	2018	*713*	thousand tonnes	*0.9 %*
Raw milk	2018	14 426	thousand tonnes	8.4 %
Bovine meat	2018	*459*	thousand tonnes	*5.8 %*
Pig meat	2018	*1 536*	thousand tonnes	*6.4 %*
Poultry meat	2018	:	thousand tonnes	-

Forestry				Share of EU-28 total
Forest and other wooded land	2015	376	thousand hectares	0.2 %
Persons employed in forestry and logging	2016	*2 000*	working units	*0.4 %*
Gross value added (at basic prices)	2016	*122*	EUR million	*0.5 %*
Roundwood (in the rough)	2017	3 151	thousand cubic metres	0.7 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	120 509	gross tonnage	7.8 %
Persons employed in fishing and aquaculture	2017	*3 000*	number	*1.7 %*
Total catches	2018	411 966	tonnes live weight	*7.8 %*
Total aquaculture production (volume)	2017	51 031	tonnes live weight	*3.7 %*
Total aquaculture production (value)	2017	*93*	EUR million	*1.8 %*

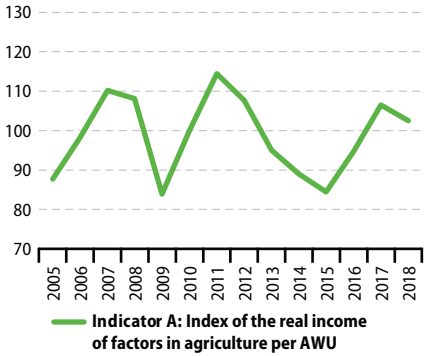
Austria

Key information:				Share of EU-28 total
Total land area	**2016**	82 519	km^2	1.9 %
Share of farmland in total land area	**2016**	32.4 %	share of total land area	-
Gross Domestic Product	**2018**	385.7	EUR billion	2.4 %
Population	**2018**	8.8	million	1.7 %

Did you know that …

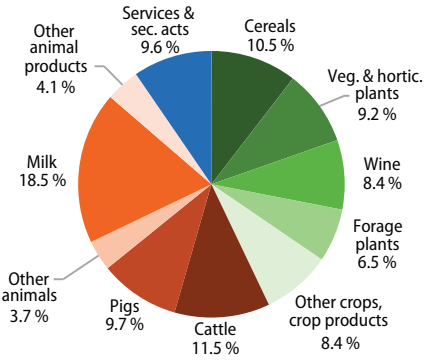
- After rebounding strongly in 2016 and 2017, agricultural factor income per annual work unit fell (-3.8 %) in 2018, back towards the level in 2010.
- The value of output of the agricultural industry in 2018 was slightly higher (+1.2 % on 2017) at EUR 7.4 billion. This was a new peak (data available since 1990).
- The value of milk output continued to rise in 2018 (+2.2 %) to a high of EUR 1.4 billion, and accounted for almost one fifth (18.5 %) of the value of total output. In contrast, the value of cattle output in 2018 was lower (-2.6 %) at EUR 0.9 billion.
- Drought conditions in some of the main cereal-producing regions in 2018 kept the harvested production of cereals below (-1.3 %) the already reduced level of 2017. There were declines in the production of wheat (-4.7 %) and barley (-11.1 %), although there was a moderate rise in grain maize (+2.6 %). Of particular note this year was the doubling (+115.2 %) of the harvested production of fruit (particularly apples and pears) and the strong rise (+10.8 %) in the production of grapes for wine. Supply and demand led to a slight increase (+2.1 %) in the average real-terms price for cereals, a moderate decline in that of wine (-3.9 %), and a stronger decline for fruits as a whole (-7.7 %).
- The rise in the production of raw milk produced on farms since quotas were abolished in 2015 continued in 2018 (up +3.0 %), reaching 3.9 million tonnes in 2018 (0.4 million tonnes more than in 2015). This was despite a reduced national dairy herd (-1.9 %, or 11 000 fewer cows) compared to 2017. Mirroring the rise in milk production, the average real-terms price of milk declined -3.0 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.21: Austria

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	2 670	thousand hectares	1.5 %
Farms (agricultural holdings)	2016	132 500	number	1.3 %
Very small farms (with < EUR 8 000 of standard output)	2016	31.6 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	:	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	3.0 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	117	thousand annual work units	-
Young farmers (under 40 years old)	2016	22.2 %	share of all farm managers	*10.6 %*
Female farmers	2016	31.1 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	23.4 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.8 %	share of GDP	-
Gross value added (at basic prices)	2018	3 189	EUR million	1.8 %
Value of agricultural output (production value at basic prices)	2018	7 414	EUR million	1.7 %
Value of crop output	2018	3 181	EUR million	1.4 %
Value of animal output	2018	3 523	EUR million	2.0 %
Agricultural factor income per annual work unit (Indicator A)	2018	-3.8 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	4 802	thousand tonnes	1.6 %
Root crops	2018	2 854	thousand tonnes	*1.6 %*
Fresh vegetables	2018	563	thousand tonnes	0.9 %
Permanent crops	2018	943	thousand tonnes	1.2 %
Raw milk	2018	3 860	thousand tonnes	2.2 %
Bovine meat	2018	233	thousand tonnes	2.9 %
Pig meat	2018	510	thousand tonnes	2.1 %
Poultry meat	2018	:	thousand tonnes	-

Forestry				Share of EU-28 total
Forest and other wooded land	2015	4 022	thousand hectares	2.2 %
Persons employed in forestry and logging	2016	22 990	working units	4.3 %
Gross value added (at basic prices)	2016	1 083	EUR million	4.1 %
Roundwood (in the rough)	2017	17 647	thousand cubic metres	3.8 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	-	gross tonnage	-
Persons employed in fishing and aquaculture	2017	350	number	*0.2 %*
Total catches	2018	-	tonnes live weight	-
Total aquaculture production (volume)	2017	3 866	tonnes live weight	*0.3 %*
Total aquaculture production (value)	2017	23	EUR million	*0.5 %*

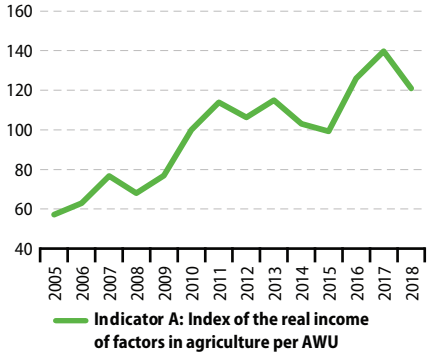
Poland

Key information:				Share of EU-28 total
Total land area	**2016**	307 236	km^2	7.1 %
Share of farmland in total land area	**2016**	46.9 %	share of total land area	-
Gross Domestic Product	**2018**	496.4	EUR billion	3.1 %
Population	**2018**	38.0	million	7.4 %

Did you know that …

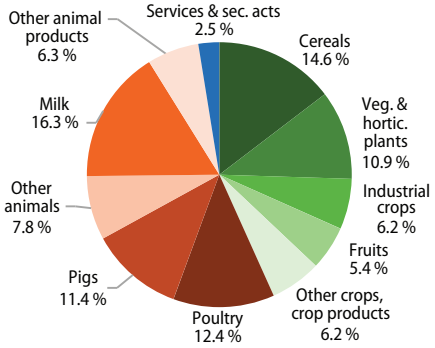
- Agricultural factor income per annual work unit was down sharply (-13.5 %) in 2018, from the relative peak reached in 2017 (data available since 2001). Nevertheless, it remained at a level twice that of 2005.
- The value of the output of the agricultural industry was EUR 25.0 billion in 2018, down by -2.4 % on the peak value recorded in 2017 (data available since 1998).
- A widespread drought resulted in sharply lower harvests for most crops in 2018. In particular, the harvested production of cereals fell steeply (-16.1 %) to 26.8 million tonnes, despite larger cultivated areas for most of the main cereals. There were lower harvested production levels for all the main cereals: wheat (-15.8 %), rye and winter mixtures (-18.5 %), barley (-19.6 %), oats and spring mixtures (-15.0 %) and grain maize (-3.9 %). Poland remained the largest producer of rye in the EU in 2018 and the second largest for oats. Reflecting the much lower supply, the average real--terms price of cereals rose (+5.1 %).
- The value of milk output remained little changed at EUR 4.1 billion in 2018. Raw milk produced on farms in 2018 rose (+3.5 %) to 14.2 million tonnes but the average real-terms price of milk fell (-4.2 %), following a sharp rise in 2017. Whereas the value of pig production fell sharply (-10.6 %) to EUR 2.8 billion in 2018, following a sharp upturn in 2017, that of poultry production increased sharply (+6.5 %) to EUR 3.1 billion. The average real-terms price for pigs was down sharply (-13.5 %) whereas that of poultry held firm (+0.6 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.22: Poland

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	14 406	thousand hectares	8.3 %
Farms (agricultural holdings)	2016	1 410 700	number	13.5 %
Very small farms (with < EUR 8 000 of standard output)	2016	64.8 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	99.3 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	9.6 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	1 676	thousand annual work units	-
Young farmers (under 40 years old)	2016	20.3 %	share of all farm managers	*10.6 %*
Female farmers	2016	29.4 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	27.4 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.8 %	share of GDP	-
Gross value added (at basic prices)	2018	9 347	EUR million	5.1 %
Value of agricultural output (production value at basic prices)	2018	25 010	EUR million	5.8 %
Value of crop output	2018	10 822	EUR million	4.8 %
Value of animal output	2018	13 552	EUR million	7.9 %
Agricultural factor income per annual work unit (Indicator A)	2018	*-13.5 %*	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	26 780	thousand tonnes	9.1 %
Root crops	2018	21 818	thousand tonnes	*12.6 %*
Fresh vegetables	2018	5 285	thousand tonnes	8.5 %
Permanent crops	2018	4 877	thousand tonnes	6.0 %
Raw milk	2018	14 179	thousand tonnes	8.2 %
Bovine meat	2018	565	thousand tonnes	7.1 %
Pig meat	2018	2 082	thousand tonnes	8.7 %
Poultry meat	2018	2 545	thousand tonnes	*16.7 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	9 435	thousand hectares	5.2 %
Persons employed in forestry and logging	2016	76 700	working units	14.3 %
Gross value added (at basic prices)	2016	1 921	EUR million	7.2 %
Roundwood (in the rough)	2017	45 348	thousand cubic metres	9.6 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	32 350	gross tonnage	2.1 %
Persons employed in fishing and aquaculture	2017	9 800	number	*5.5 %*
Total catches	2018	195 622	tonnes live weight	*3.7 %*
Total aquaculture production (volume)	2017	36 506	tonnes live weight	*2.7 %*
Total aquaculture production (value)	2017	105	EUR million	*2.1 %*

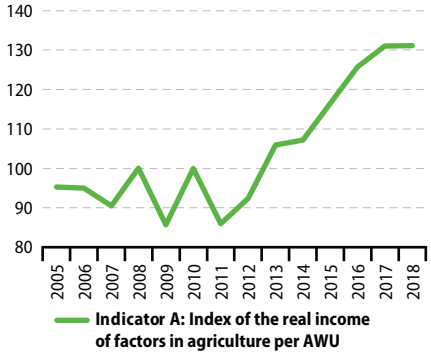
Portugal

Key information:				Share of EU-28 total
Total land area	**2016**	90 996	km^2	2.1 %
Share of farmland in total land area	**2016**	40.0 %	share of total land area	-
Gross Domestic Product	**2018**	*203.9*	EUR billion	*1.3 %*
Population	**2018**	10.3	million	2.0 %

Did you know that …

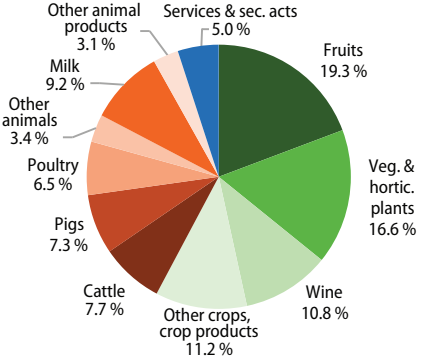
- The upward trend in agricultural factor income per annual work unit since 2011 flatlined (+0.1 %) in 2018.
- The value of the output of the agricultural industry for 2018 inched higher (+0.7 %) to a new high of EUR 7.7 billion. A majority (57.8 %) of this output value came from crop products.
- Weather conditions were less favourable for crops than in 2017, and there were some notable declines: tomatoes (-23.9 %), pears (-20.2 %), apples (-19.9 %) and grapes (-10.5 %). Coming off the back of a strong harvest in 2017, production of olives was also lower (-15.7 %).
- Production of raw milk on farms was slightly higher in 2018 (+1.0 %) despite the number of dairy cows decreasing (-1.3 %). The production of bovine meat was also higher (+3.0 %), as well as that of pig meat (+1.4 %).
- Reflecting lower harvests, average real-terms prices for many crops rose; these included peaches (+34.2 %), grapes (+10.8 %) and fresh vegetables (+9.0 %). This was not always the case and the average price of olives fell sharply (-34.5 %). The rebound in milk prices in 2017 was confirmed in 2018 (+2.3 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.23: Portugal

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	3 642	thousand hectares	2.1 %
Farms (agricultural holdings)	2016	258 980	number	2.5 %
Very small farms (with < EUR 8 000 of standard output)	2016	72.8 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	93.9 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	8.4 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	238	thousand annual work units	-
Young farmers (under 40 years old)	2016	4.2 %	share of all farm managers	*10.6 %*
Female farmers	2016	30.0 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	2.5 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.4 %	share of GDP	-
Gross value added (at basic prices)	2018	3 002	EUR million	1.7 %
Value of agricultural output (production value at basic prices)	2018	7 692	EUR million	1.8 %
Value of crop output	2018	4 444	EUR million	2.0 %
Value of animal output	2018	2 861	EUR million	1.7 %
Agricultural factor income per annual work unit (Indicator A)	2018	0.1 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	1 106	thousand tonnes	0.4 %
Root crops	2018	432	thousand tonnes	*0.2 %*
Fresh vegetables	2018	2 112	thousand tonnes	3.4 %
Permanent crops	2018	2 617	thousand tonnes	3.2 %
Raw milk	2018	2 040	thousand tonnes	1.2 %
Bovine meat	2018	94	thousand tonnes	1.2 %
Pig meat	2018	362	thousand tonnes	1.5 %
Poultry meat	2018	346	thousand tonnes	*2.3 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	4 907	thousand hectares	2.7 %
Persons employed in forestry and logging	2016	14 190	working units	2.6 %
Gross value added (at basic prices)	2016	865	EUR million	3.3 %
Roundwood (in the rough)	2017	13 534	thousand cubic metres	2.9 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	84 416	gross tonnage	5.4 %
Persons employed in fishing and aquaculture	2017	14 990	number	*8.3 %*
Total catches	2018	174 898	tonnes live weight	*3.3 %*
Total aquaculture production (volume)	2017	12 553	tonnes live weight	*0.9 %*
Total aquaculture production (value)	2017	84	EUR million	*1.7 %*

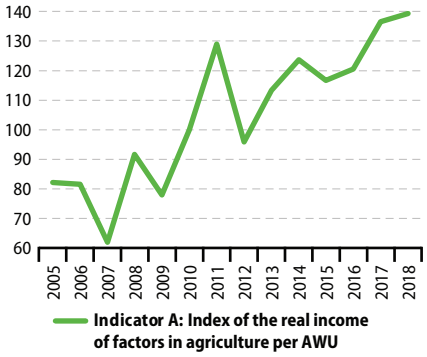
Romania

Key information:				Share of EU-28 total
Total land area	**2016**	234 270	km²	5.4 %
Share of farmland in total land area	**2016**	53.4 %	share of total land area	-
Gross Domestic Product	**2018**	202.9	EUR billion	1.3 %
Population	**2018**	19.5	million	3.8 %

Did you know that …

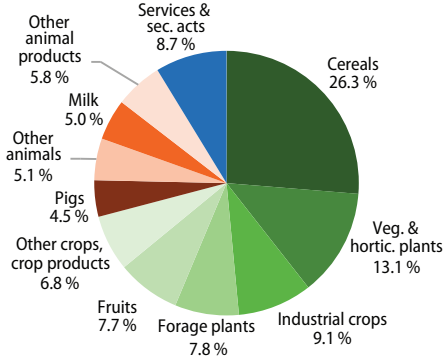
- The upward trend in agricultural factor income per annual work unit, particularly since the relative low in 2007, was confirmed by a further small rise (+1.9 %) in 2018.
- The value of the output of the agricultural industry rose strongly (+8.0 %) in 2018 to a new high of EUR 18.6 billion. A little more than two thirds of this total value came from crop products.
- There was a further strong rise in harvested cereals production in 2018 after increases in 2017: cereals as a whole (+16.2 %), underpinned by higher grain maize production (+30.3 %) that reached 18.7 million tonnes (the highest production level in the EU). Harvested production of all other key crops were also higher: oilseeds (+3.2 %), plants harvested green from arable land (+14.4 %), fresh vegetables (+5.7 %) and fruit (+75.2 %, driven the higher production of apples and plums).
- Milk production from farms remained almost unchanged (+0.1 %) in 2018. There was a sharp rise in the production of pig meat (+11.3 %)
- Despite the strong rise in harvested production of cereals, the average real-terms price remained stable in 2018. There was also stability in the real-terms price of milk (+0.8 %). Among other key products, there was a sharp price rise for fresh vegetables (+18.3 %) but steep declines in average real-terms prices for fruit (-9.9 %) and pigs (-9.2 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.24: Romania

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	12 503	thousand hectares	7.2 %
Farms (agricultural holdings)	2016	3 422 030	number	32.7 %
Very small farms (with < EUR 8 000 of standard output)	2016	94.6 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	99.3 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	22.8 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	1 474	thousand annual work units	-
Young farmers (under 40 years old)	2016	7.4 %	share of all farm managers	*10.6 %*
Female farmers	2016	33.5 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	0.4 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	4.1 %	share of GDP	-
Gross value added (at basic prices)	2018	8 321	EUR million	4.6 %
Value of agricultural output (production value at basic prices)	2018	18 554	EUR million	4.3 %
Value of crop output	2018	13 153	EUR million	5.8 %
Value of animal output	2018	3 780	EUR million	2.2 %
Agricultural factor income per annual work unit (Indicator A)	2018	1.9 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	31 553	thousand tonnes	10.7 %
Root crops	2018	4 285	thousand tonnes	*2.5 %*
Fresh vegetables	2018	2 615	thousand tonnes	4.2 %
Permanent crops	2018	2 895	thousand tonnes	3.6 %
Raw milk	2018	4 443	thousand tonnes	2.6 %
Bovine meat	2018	*50*	thousand tonnes	*0.6 %*
Pig meat	2018	*365*	thousand tonnes	*1.5 %*
Poultry meat	2018	*453*	thousand tonnes	*3.0 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	6 951	thousand hectares	3.8 %
Persons employed in forestry and logging	2016	47 200	working units	8.8 %
Gross value added (at basic prices)	2016	*811*	EUR million	*3.1 %*
Roundwood (in the rough)	2017	14 492	thousand cubic metres	3.1 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	1 472	gross tonnage	0.1 %
Persons employed in fishing and aquaculture	2017	2 000	number	*1.1 %*
Total catches	2018	7 745	tonnes live weight	*0.1 %*
Total aquaculture production (volume)	2017	12 798	tonnes live weight	*0.9 %*
Total aquaculture production (value)	2017	33	EUR million	*0.6 %*

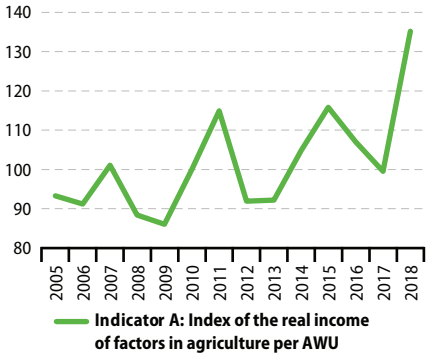
Slovenia

Key information:				Share of EU-28 total
Total land area	**2016**	20 145	km^2	0.5 %
Share of farmland in total land area	**2016**	24.2 %	share of total land area	-
Gross Domestic Product	**2018**	45.8	EUR billion	0.3 %
Population	**2018**	2.1	million	0.4 %

Did you know that …

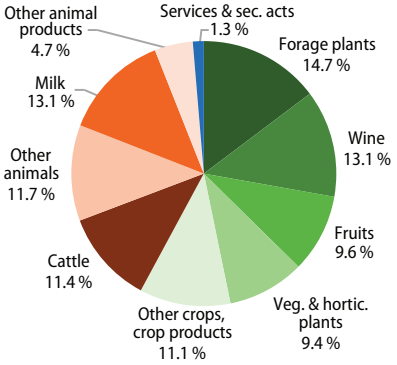
- Agricultural factor income per annual work unit rose by about one third (+35.9 %) in 2018 to a new peak.
- The value of output from the agricultural industry was EUR 1.4 billion in 2018, a year-on-year rise of +17.9 %. This rise in output value predominantly came from crops, with the values of forage plants (+28.7 %), fruits (+86.1 %) and wine (+65.9 %) all up sharply.
- The main reason for the upturn was the rebound in harvested production levels after lows in 2017; this was the case for cereals (up +9.1 %), plants harvested green from arable land (+24.2 %), fruits (+349.5 %) and grapes for wine (+42.0 %).
- The average real-terms price for cereals further firmed up (+1.4 %). Given the rebound in harvested production of fruits, the real-terms price declined relatively modestly (-13.4 %). There was also only a slight fall in the average price of wine (-2.7 %).
- Raw milk production in 2018 was down a little (-2.9 %) to 0.6 million tonnes. Nevertheless, the real-terms price of milk also declined slightly (-2.0 %), having risen steeply (+13.1 %) in 2017.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.25: Slovenia

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	488	thousand hectares	0.3 %
Farms (agricultural holdings)	2016	69 900	number	0.7 %
Very small farms (with < EUR 8 000 of standard output)	2016	58.8 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	99.6 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	6.4 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	78	thousand annual work units	-
Young farmers (under 40 years old)	2016	9.1 %	share of all farm managers	*10.6 %*
Female farmers	2016	20.2 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	14.5 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	1.4 %	share of GDP	-
Gross value added (at basic prices)	2018	621	EUR million	0.3 %
Value of agricultural output (production value at basic prices)	2018	1 371	EUR million	0.3 %
Value of crop output	2018	794	EUR million	0.4 %
Value of animal output	2018	559	EUR million	0.3 %
Agricultural factor income per annual work unit (Indicator A)	2018	35.9 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	597	thousand tonnes	0.2 %
Root crops	2018	95	thousand tonnes	*0.1 %*
Fresh vegetables	2018	101	thousand tonnes	0.2 %
Permanent crops	2018	234	thousand tonnes	0.3 %
Raw milk	2018	631	thousand tonnes	0.4 %
Bovine meat	2018	35	thousand tonnes	0.4 %
Pig meat	2018	22	thousand tonnes	0.1 %
Poultry meat	2018	69	thousand tonnes	*0.5 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	1 271	thousand hectares	0.7 %
Persons employed in forestry and logging	2016	6 850	working units	1.3 %
Gross value added (at basic prices)	2016	*248*	EUR million	*0.9 %*
Roundwood (in the rough)	2017	4 509	thousand cubic metres	1.0 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	669	gross tonnage	0.0 %
Persons employed in fishing and aquaculture	2017	230	number	*0.1 %*
Total catches	2018	122	tonnes live weight	*0.0 %*
Total aquaculture production (volume)	2017	1 730	tonnes live weight	*0.1 %*
Total aquaculture production (value)	2017	5	EUR million	*0.1 %*

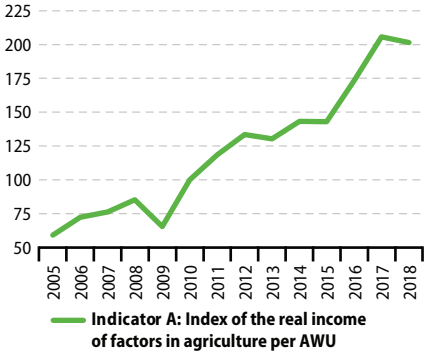
Slovakia

Key information:				Share of EU-28 total
Total land area	**2016**	48 702	km²	1.1 %
Share of farmland in total land area	**2016**	38.8 %	share of total land area	-
Gross Domestic Product	**2018**	89.7	EUR billion	0.6 %
Population	**2018**	5.4	million	1.1 %

Did you know that …

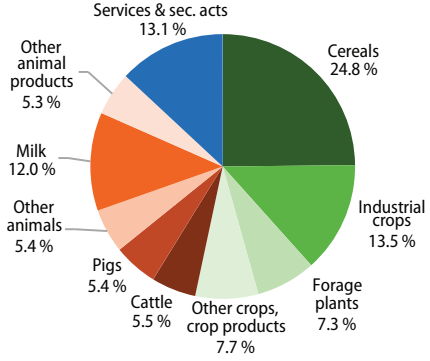
- After a strong upward trend in agricultural factor income per annual work unit between 2009 and 2017 (during which time the index trebled), there was a pause in 2018 with a slight decline of -2.0 %.
- The value of the output of the agricultural industry was EUR 2.3 billion in 2018, a year-on-year decrease of -3.0 %.
- The production of cereals rebounded (+15.9 %) after falling back in 2017. This was mainly due to grain maize (up +42.2 %), despite a reduction in cultivated area (-4.7 %). Despite the upturn, the average real-terms price for cereals as a whole held firm (-0.4 %) and even rose strongly for grain maize (+6.2 %).
- Raw milk production slipped a little further (-0.7 %) in 2018, to a low of 0.9 million tonnes. Despite this, the real-terms price fell sharply (-8.7 %), offsetting the rise in 2017.

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.26: Slovakia

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	1 890	thousand hectares	1.1 %
Farms (agricultural holdings)	2016	25 660	number	0.2 %
Very small farms (with < EUR 8 000 of standard output)	2016	68.3 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	87.0 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	1.9 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	42	thousand annual work units	-
Young farmers (under 40 years old)	2016	19.0 %	share of all farm managers	*10.6 %*
Female farmers	2016	19.2 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	9.2 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.6 %	share of GDP	-
Gross value added (at basic prices)	2018	541	EUR million	0.3 %
Value of agricultural output (production value at basic prices)	2018	2 318	EUR million	0.5 %
Value of crop output	2018	1 236	EUR million	0.5 %
Value of animal output	2018	779	EUR million	0.5 %
Agricultural factor income per annual work unit (Indicator A)	2018	-2.0 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	4 038	thousand tonnes	1.4 %
Root crops	2018	1 488	thousand tonnes	*0.9 %*
Fresh vegetables	2018	106	thousand tonnes	0.2 %
Permanent crops	2018	103	thousand tonnes	0.1 %
Raw milk	2018	917	thousand tonnes	0.5 %
Bovine meat	2018	8	thousand tonnes	0.1 %
Pig meat	2018	57	thousand tonnes	0.2 %
Poultry meat	2018	75	thousand tonnes	*0.5 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	1 940	thousand hectares	1.1 %
Persons employed in forestry and logging	2016	25 540	working units	4.8 %
Gross value added (at basic prices)	2016	407	EUR million	1.5 %
Roundwood (in the rough)	2017	9 361	thousand cubic metres	2.0 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	-	gross tonnage	-
Persons employed in fishing and aquaculture	2017	230	number	*0.1 %*
Total catches	2018	-	tonnes live weight	-
Total aquaculture production (volume)	2017	2 609	tonnes live weight	*0.2 %*
Total aquaculture production (value)	2017	6	EUR million	*0.1 %*

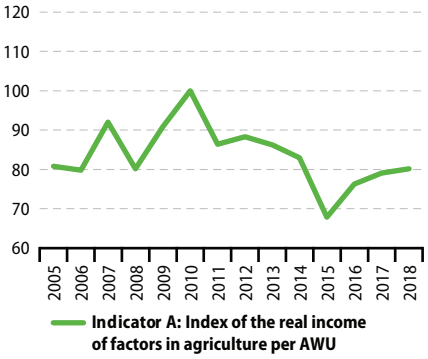
Finland

Key information:				Share of EU-28 total
Total land area	**2016**	304 316	km^2	7.0 %
Share of farmland in total land area	**2016**	7.3 %	share of total land area	-
Gross Domestic Product	**2018**	234.5	EUR billion	1.5 %
Population	**2018**	5.5	million	1.1 %

Did you know that …

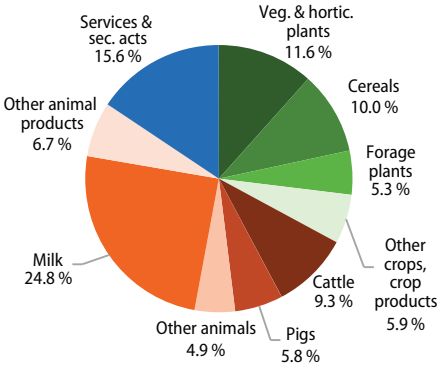
- Agricultural factor income per annual work unit in 2018 was slightly higher (+1.4 %) than in 2017, but remained about one fifth lower than the relative peak in 2010.
- The value of the output of the agricultural industry rose slightly (+2.8 %) to EUR 4.4 billion in 2018.
- The production of raw milk on farms remained stable (-0.3 %) at 2.4 million tonnes, despite a reduced dairy herd of 7 000 cows (-2.6 %). The real-terms price of milk declined slightly (-1.7 %).
- The big story in crops was the extreme drought. The harvested production of cereals plummeted (-20.1 %) to 2.7 million tonnes in 2018. Despite higher cultivated areas of barley and oats, the production of both fell sharply. Barley production fell (-8.5 %) to 1.3 million tonnes and that of oats fell (-17.8 %) to 0.9 million tonnes. Wheat production was particularly hard hit (-38.3 %). Reflecting these difficulties, the real-terms price of barley, oats and wheat all rose sharply (+21.0 % for cereals as a whole).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.27: Finland

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	2 233	thousand hectares	1.3 %
Farms (agricultural holdings)	2016	49 710	number	0.5 %
Very small farms (with < EUR 8 000 of standard output)	2016	23.4 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	:	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	2.5 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	60	thousand annual work units	-
Young farmers (under 40 years old)	2016	8.8 %	share of all farm managers	*10.6 %*
Female farmers	2016	11.9 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	11.5 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.3 %	share of GDP	-
Gross value added (at basic prices)	2018	1 114	EUR million	0.6 %
Value of agricultural output (production value at basic prices)	2018	4 416	EUR million	1.0 %
Value of crop output	2018	1 452	EUR million	0.6 %
Value of animal output	2018	2 273	EUR million	1.3 %
Agricultural factor income per annual work unit (Indicator A)	2018	1.4 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	2 730	thousand tonnes	0.9 %
Root crops	2018	956	thousand tonnes	*0.6 %*
Fresh vegetables	2018	265	thousand tonnes	0.4 %
Permanent crops	2018	10	thousand tonnes	0.0 %
Raw milk	2018	2 398	thousand tonnes	1.4 %
Bovine meat	2018	86	thousand tonnes	1.1 %
Pig meat	2018	167	thousand tonnes	0.7 %
Poultry meat	2018	135	thousand tonnes	*0.9 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	23 019	thousand hectares	12.7 %
Persons employed in forestry and logging	2016	22 300	working units	4.2 %
Gross value added (at basic prices)	2016	3 509	EUR million	13.2 %
Roundwood (in the rough)	2017	63 279	thousand cubic metres	13.5 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	15 952	gross tonnage	1.0 %
Persons employed in fishing and aquaculture	2017	1 700	number	*0.9 %*
Total catches	2018	155 163	tonnes live weight	*2.9 %*
Total aquaculture production (volume)	2017	14 584	tonnes live weight	*1.1 %*
Total aquaculture production (value)	2017	72	EUR million	*1.4 %*

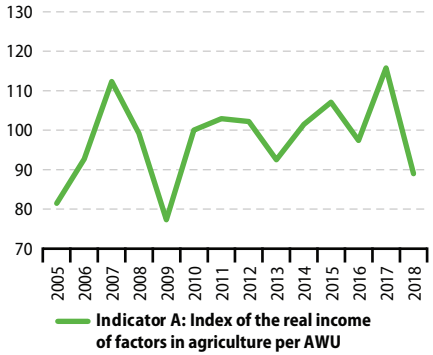
Sweden

Key information:				Share of EU-28 total
Total land area	**2016**	407 300	km^2	9.4 %
Share of farmland in total land area	**2016**	7.4 %	share of total land area	-
Gross Domestic Product	**2018**	471.2	EUR billion	3.0 %
Population	**2018**	10.1	million	2.0 %

Did you know that …

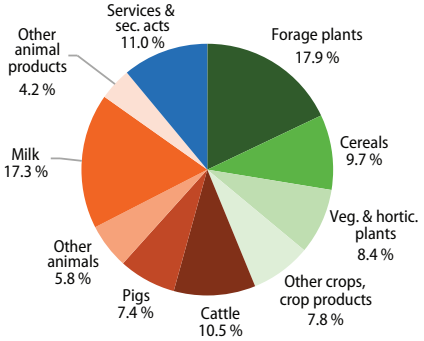
- Agricultural factor income per annual work unit in 2018 fell back sharply (-23.1 %) from its peak in 2017, towards the lower end of the range recorded since 2005.
- Output from the agricultural sector declined (-8.8 %) to EUR 5.9 billion in 2018, principally reflecting falls in the values of both crop output (-10.1 % to EUR 2.6 billion) and animal output (-7.3 % to EUR 2.7 billion).
- The severe drought almost halved (-45.3 %) the total harvested production of cereals to 3.3 million tonnes in 2018. All cereal crops were impacted: this included wheat for which production halved (-50.9 %, although the cultivated are was also a fifth lower than in 2017) and barley (-33.1 %, despite the cultivated area rising by +16.7 %).
- Domestic supply shortfalls in cereals were reflected in 2018 price changes; average real-terms prices for all types of cereal rose sharply, including wheat (+40.1 %) and barley (+47.1 %).
- The gradual slide in the production of raw milk since the abolition of quotas continued in 2018 (-2.0 %), the production of 2.8 million tonnes being 170 000 tonnes less than in 2015. The average real-terms price of milk fell slightly in 2018 (-1.4 %). Bovine meat production in 2018 rose (+3.6 %) on the level in 2017 but the average real-terms price declined sharply (-8.6 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.28: Sweden

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	3 013	thousand hectares	1.7 %
Farms (agricultural holdings)	2016	62 940	number	0.6 %
Very small farms (with < EUR 8 000 of standard output)	2016	39.3 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	30.5 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2017	1.2 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	56	thousand annual work units	-
Young farmers (under 40 years old)	2016	10.1 %	share of all farm managers	*10.6 %*
Female farmers	2016	15.5 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	21.7 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.3 %	share of GDP	-
Gross value added (at basic prices)	2018	1 414	EUR million	0.8 %
Value of agricultural output (production value at basic prices)	2018	5 890	EUR million	1.4 %
Value of crop output	2018	2 580	EUR million	1.1 %
Value of animal output	2018	2 662	EUR million	1.5 %
Agricultural factor income per annual work unit (Indicator A)	2018	-23.1 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	3 260	thousand tonnes	1.1 %
Root crops	2017	2 816	thousand tonnes	*1.6 %*
Fresh vegetables	2018	307	thousand tonnes	0.5 %
Permanent crops	2018	34	thousand tonnes	0.0 %
Raw milk	2018	2 760	thousand tonnes	1.6 %
Bovine meat	2018	137	thousand tonnes	1.7 %
Pig meat	2018	249	thousand tonnes	1.0 %
Poultry meat	2018	157	thousand tonnes	*1.0 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	30 505	thousand hectares	16.8 %
Persons employed in forestry and logging	2016	41 000	working units	7.7 %
Gross value added (at basic prices)	2016	3 786	EUR million	14.3 %
Roundwood (in the rough)	2017	72 880	thousand cubic metres	15.5 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	25 859	gross tonnage	1.7 %
Persons employed in fishing and aquaculture	2016	1 000	number	*0.6 %*
Total catches	2018	214 970	tonnes live weight	*4.1 %*
Total aquaculture production (volume)	2016	15 747	tonnes live weight	*1.2 %*
Total aquaculture production (value)	2016	51	EUR million	*1.0 %*

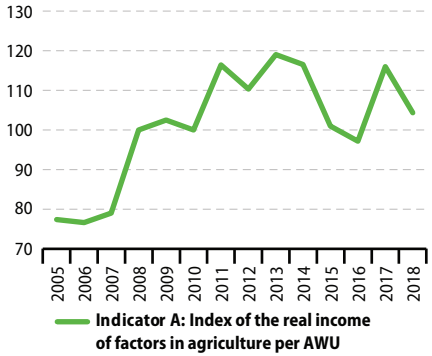
United Kingdom

Key information:				Share of EU-28 total
Total land area	**2016**	242 751	km^2	5.6 %
Share of farmland in total land area	**2016**	68.7 %	share of total land area	-
Gross Domestic Product	**2018**	2 419.2	EUR billion	15.2 %
Population	**2018**	66.3	million	12.9 %

Did you know that …

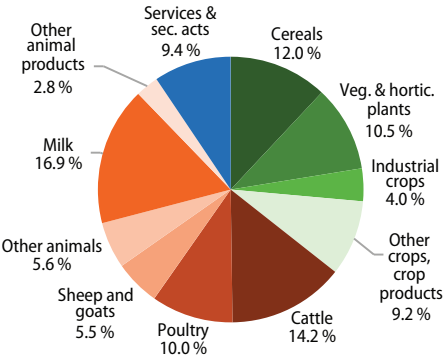
- After a rebound in 2017, agricultural factor income per annual work unit fell sharply (-9.9 %) in 2018.
- The value of agricultural output increased slightly (+1.2 %) in 2018 to EUR 29.8 billion but the cost of intermediate consumption goods and services jumped (+6.6 %) to EUR 19.3 billion.
- The production of raw milk on farms was 15.5 million tonnes in 2018, little changed (+0.3 %) from that in 2017. The average real-terms price of milk was also little changed (-0.4 %). Production of bovine meat was up (+2.0 %) in 2018, but mirrored by an average real-terms price fall (-2.3 %).
- The harvested production of cereals as a whole declined sharply (-8.3 %) to 21.1 million tonnes in 2018, with that of both wheat and barley being much lower (-8.6 % and -9.2 % respectively). However, reflecting these supply-side shortages, the average real-terms prices of cereals like wheat (+8.9 %) and barley (+22.0 %) increased sharply.
- The harvested production of fresh vegetables in 2018 was also down relatively sharply (-6.3 %), particularly for carrots (-15.5 %) and onions (-11.8 %). However, average real-terms prices rose sharply (+9.1 %) for fresh vegetables as a whole, including for carrots (+34.4 %) and onions (+9.2 %).

Figure 1: Agricultural factor income per annual work unit, 2005-2018
(index 2010=100)



Source: Eurostat (online data code: aact_eaa06)

Figure 2: Output of the agricultural industry, 2018
(% of total output value, at basic prices)



Source: Eurostat (online data code: aact_eaa01)

Table 9.29: United Kingdom

Farms and farmland				Share of EU-28 total
Farmland (utilised agricultural area)	2016	16 673	thousand hectares	9.6 %
Farms (agricultural holdings)	2016	185 060	number	1.8 %
Very small farms (with < EUR 8 000 of standard output)	2016	27.3 %	share of all farms	-
Family farms (with > 50 % of regular labour from family members)	2016	56.9 %	share of all farms	-

Farmers				EU-28 average
Employment in agriculture	2018	1.1 %	share of total employment	*4.1 %*
Total labour force input in agriculture	2018	297	thousand annual work units	-
Young farmers (under 40 years old)	2016	5.3 %	share of all farm managers	*10.6 %*
Female farmers	2016	15.1 %	share of all farm managers	*28.4 %*
Farmers with full agricultural training	2016	17.3 %	share of all farm managers	9.1 %

Economic performance of agriculture				Share of EU-28 total
Contribution of agriculture to Gross Domestic Product	2018	0.4 %	share of GDP	-
Gross value added (at basic prices)	2018	10 510	EUR million	5.8 %
Value of agricultural output (production value at basic prices)	2018	29 799	EUR million	6.9 %
Value of crop output	2018	10 612	EUR million	4.7 %
Value of animal output	2018	16 381	EUR million	9.5 %
Agricultural factor income per annual work unit (Indicator A)	2018	-9.9 %	change 2018/2017	-

Agricultural production				Share of EU-28 total
Cereals	2018	21 085	thousand tonnes	7.1 %
Root crops	2018	*12 648*	thousand tonnes	*7.3 %*
Fresh vegetables	2018	2 465	thousand tonnes	4.0 %
Permanent crops	2018	*597*	thousand tonnes	*0.7 %*
Raw milk	2018	15 488	thousand tonnes	9.0 %
Bovine meat	2018	923	thousand tonnes	11.6 %
Pig meat	2018	927	thousand tonnes	3.9 %
Poultry meat	2018	1 958	thousand tonnes	*12.9 %*

Forestry				Share of EU-28 total
Forest and other wooded land	2015	3 164	thousand hectares	1.7 %
Persons employed in forestry and logging	2016	18 970	working units	3.5 %
Gross value added (at basic prices)	2016	787	EUR million	3.0 %
Roundwood (in the rough)	2017	10 934	thousand cubic metres	2.3 %

Fisheries				Share of EU-28 total
Fishing fleet	2018	191 439	gross tonnage	12.4 %
Persons employed in fishing and aquaculture	2017	13 050	number	*7.3 %*
Total catches	2018	696 992	tonnes live weight	*13.2 %*
Total aquaculture production (volume)	2017	222 249	tonnes live weight	*16.2 %*
Total aquaculture production (value)	2017	*1 283*	EUR million	*25.3 %*

Annexes

Data coverage

Eurostat online databases contain a large amount of metadata that provides information on the status of particular values or data series. In order to improve the readability of this statistical book, only the most significant meta-information has been included under the tables and figures. The following symbols are used, where necessary:

Italic data value is forecasted, provisional or estimated and is likely to change;

: Data not available, confidential or unreliable value;

– not applicable.

This publication generally presents information for the EU-28 (the aggregate for the 28 Member States of the EU), as well as the individual EU Member States. The order of the Member States in tables generally follows their order of protocol; in other words, the alphabetical order of the countries' names in their respective original languages. In a number of the figures, the countries are ranked according to the values of a particular indicator.

The EU-28 aggregate is provided when information for all of the countries is available, or if an estimate has been made for missing information. Any incomplete totals that are created are footnoted systematically.

When available, information is also presented for EFTA countries, candidate and potential candidate countries. In the event that data for any of these non-member countries are not available, they have been excluded from the tables and figures presented.

If data are not available for a particular country, then efforts have been made to fill tables and figures with data for previous reference periods (these exceptions are footnoted); generally, an effort has been made to go back at least two years, for example showing data for 2016 and 2017 if data for 2018 are not yet available.

Glossary

Agricultural holding

This is a single unit, in both technical and economic terms, operating under a single management, which undertakes agricultural activities within the economic territory of the European Union (EU), either as its primary or secondary activity. Other supplementary (non-agricultural) products and services may also be provided by the holding.

Agricultural income per AWU

The main indicator for agricultural income is 'factor income per annual work unit', which is expressed as an index.

Animal output

Animal output comprises the sales, changes in stock levels, and the products used for processing and own final use by producers.

Annual work unit (AWU)

One annual work unit corresponds to the work performed by one person who is occupied on an agricultural holding on a full-time basis. Full-time means the minimum hours required by the relevant national provisions governing contracts of employment. If the national provisions do not indicate the number of hours, then 1 800 hours are taken to be the minimum annual working hours: equivalent to 225 working days of eight hours each.

Aquaculture

Aquaculture, also known as aquafarming, refers to the farming of aquatic (freshwater or saltwater) organisms, such as fish, molluscs, crustaceans and plants for human use or consumption, under controlled conditions. Aquaculture implies some form of intervention in the natural rearing process to enhance production, including regular stocking, feeding and protection from predators. Farming also implies individual or corporate ownership of, or contractual rights to, the stock being cultivated.

Arable land

Arable land is land worked (ploughed or tilled) regularly, generally under a system of crop rotation.

Basic price

The basic price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, by the producer as a consequence of its production or sale.

Bovine

A bovine refers to a domestic animal of the species Bos taurus (cattle) or Bubalus bubalis (water buffalo), and also includes hybrids like Beefalo.

A distinction can be made by the age of the animal (less than one year old, aged between one and two years, and two years and over), with a further division between male and female bovines.

Carcass weight

The definition of carcass weight depends on the animal species under consideration:

- for pigs, it is the weight of the slaughtered pig's cold body, either whole or divided in half along the mid-line, after being bled and eviscerated and after removal of the tongue, bristles, hooves, genitalia, flare fat, kidneys and diaphragm;
- for cattle, it is the weight of the slaughtered animal's cold body after being skinned, bled

and eviscerated, and after removal of the external genitalia, the limbs, the head, the tail, the kidneys and kidney fats, and the udder;

- for sheep and goats, it is the weight of the slaughtered animal's cold body after having been bled, skinned and eviscerated, and after removal of the head, feet, tail and genital organs. Kidneys and kidney fats are included in the carcass weight;
- for poultry, it is the weight of the cold body of the slaughtered farmyard poultry after being bled, plucked and eviscerated; the weight includes poultry offal, with the exception of foie gras.

For other species, 'carcass weight' is considered to be the weight of the slaughtered animal's cold body.

Cattle

Cattle refer to domestic animals of the species Bos taurus (cattle) and Bubalus bubalis (water buffalo); together are called bovines.

Cereals

Cereals include wheat (common wheat and spelt and durum wheat), rye, maslin, barley, oats, mixed grain other than maslin, grain maize and corn cob mix, sorghum, triticale, rice and other cereal crops such as buckwheat, millet and canary seed.

Common agricultural policy

The Common Agricultural Policy (CAP) is the EU's agricultural policy. CAP is an area in which competence is shared between the EU and its Member States. Under Article 33 of the Treaty establishing the European Community, its aims are to 'ensure reasonable prices for Europe's consumers and fair incomes for farmers, in particular through the common organisation of agricultural markets and by enforcing compliance with the principles adopted at the Stresa Conference in 1958, namely single prices, financial solidarity and Community preference'.

The CAP is one of the most important EU policies from a budget point of view. Qualified majority voting in the Council and consultation with the European Parliament decide policy. The CAP has fulfilled its main goal of food self-sufficiency in the EU. Major policy changes, however, proved necessary in order to correct imbalances and overproduction resulting from the CAP. Therefore, its aims have changed in the course of time, and the instruments used have also evolved as a result of successive reforms.

Common fisheries policy

The Common Fisheries Policy (CFP) is the EU's policy for managing fisheries in the waters of the EU Member States. Its objectives are to:

- increase productivity;
- stabilise markets;
- ensure security of supply and reasonable prices to the consumer.

Although a CFP was already provided for in the Treaty of Rome in 1957, it did not become a common policy in the full sense of the term until 1983. The CFP has the same legal basis (Articles 32 to 38 of the EC Treaty) as the Common agricultural policy and shares the same aims mentioned above. Like the CAP, the CFP is a shared responsibility of the EU and its Member States. Successive reforms of the CFP have added new aims to its initial goals, namely:

- sustainable exploitation of resources;
- protection of the environment;
- safeguards for a high level of human health protection;
- contributing to economic and social cohesion.

Protection of fish stocks and the marine environment are key issues for the CFP given the threat posed by resource depletion.

Cow

A cow is a female bovine that has calved (including any aged less than 2 years). A dairy cow is a cow kept exclusively or principally for the production of milk for human consumption and/or other dairy produce.

Crop output

Crop output comprises sales, changes in stock levels, and crop products used as animal feedstuffs, or for processing and own final use by the producers.

Family labour force

The family labour force of the agricultural holding in the context of the farm structure survey (FSS) refers to persons who carry out farm work on the holding and are classified either as a holder or the members of the sole holder's family. The term family workers is also used with the same meaning.

Farm labour force

The farm labour force of the holding includes all persons having completed their compulsory education (having reached school-leaving age) who carried out farm work on the holding during the 12 months ending on the reference day of the survey. All persons of retirement age who continue to work on the holding are included in the farm labour force.

Farm manager

A farm manager or manager of the agricultural holding is the natural person responsible for the normal daily financial and production routines of running the holding concerned. There can be only one manager on the holding.

Farm structure survey

The Farm Structure Survey (FSS), also known as Survey on the structure of agricultural holdings, is carried out by all EU Member States. The FSS are conducted consistently throughout the EU with a common methodology at a regular base and provides therefore comparable and representative statistics across countries and time, at regional levels (down to NUTS 3 level). Every 3 or 4 years the FSS is carried out as a sample survey, and once in ten years as a census.

Feed

Feed (or feeding stuff) is any substance or product, including additives, whether processed, partially processed or unprocessed, intended to be used for oral feeding to animals.

Fertiliser

A fertiliser is a substance used in agriculture to provide crops with vital nutrients to grow (such as nitrogen (N), phosphorus (P) and potassium (K)). Fertilisers can be divided into inorganic fertilisers (also called mineral, synthetic or manufactured) and organic fertilisers. Organic fertilisers include manure, compost, sewage sludge and industrial waste.

Fishing area

Geographical fishing areas in the EU's Common Fisheries Policy are defined for a number of specific areas of water, including:

- the North East Atlantic, which is roughly the area to the east of 42°W longitude and north of 36°N latitude, including the waters of the Baltic Sea;
- the North West Atlantic, which is the region that is roughly the area to the west of 42°W longitude and north of 35°N latitude;
- the Eastern Central Atlantic, which is the region to the east of 40°W longitude between latitudes 36°N and 6°S;
- the Mediterranean, which is also known as the Food and Agriculture Organization Major Fishing Area 37, comprises the Mediterranean Sea and the adjacent Black Sea.

Fish catch

Fish catch (or simply catch) refers to catches of fishery products including fish, molluscs, crustaceans and other aquatic animals, residues and aquatic plants that are:

- taken for all purposes (commercial, industrial, recreational and subsistence);
- taken by all types and classes of fishing units (including fishermen, vessels, gear, and so on);
- operated in fresh and brackish water areas, and in inshore, offshore and high-seas fishing areas.

The catch is normally expressed in live weight and derived by the application of conversion factors to the actual landed or product weight. Up to 2014, catch statistics exclude quantities of fishery products which are caught but which, for a variety of reasons, are not landed. As a result of the landing obligation foreseen in the renewed CFP and to be gradually introduced as from 2015, all catches should be kept on board, landed and counted. Production from aquaculture is excluded from catch statistics.

Fishing fleet

The data on the number of fishing vessels, the fishing fleet, in general refer to the fleet size as recorded on 31 December of the specified reference year. The data are derived from the national registers of fishing vessels which are maintained according to Commission Regulation (EC) No 26/2004 which specifies the information on vessel characteristics to be recorded in the registers.

Forest

Forest is defined as land with tree crown cover (meaning all parts of the tree above ground level including its leaves, branches and so on), or equivalent stocking level, of more than 10 % and with an area of more than 0.5 hectares (ha). The trees should be able to reach a minimum height of five metres at maturity in situ.

Goats

A goat is a domestic animal of the subspecies Capra aegagrus hircus.

Grazed area

The grazed area is the total area of pastures owned, rented or otherwise allocated to the agricultural holding on which animals are kept for grazing during the reference year. The grazed area can also be harvested by mowing or other means. It includes all grasslands that are grazed, independent of whether they are temporary or permanent in nature. Permanent grasslands no longer used for production purposes are however excluded, as well as common lands not allotted to individual holdings.

Gross value added (GVA)

Gross value added (GVA) is output at market prices minus intermediate consumption at purchaser prices; it is a balancing item of the national accounts' production account:

- GVA at producer prices is output at producer prices minus intermediate consumption at purchaser prices — the producer price is the amount receivable by the producer from the purchaser for a unit of a product minus value added tax (VAT), or similar deductible tax, invoiced to the purchaser.
- GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices — the basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product.
- GVA at factor cost is not a concept explicitly used in national accounts. It can be derived by subtracting other taxes on production from GVA at basic prices and adding other subsidies on production.

Joint forest sector questionnaire

The joint forest sector questionnaire (JFSQ) is an initiative of the International Tropical Timber Organisation (ITTO), the United Nations Economic Commission for Europe (UNECE), the Food and Agriculture Organisation of the United Nations (FaO) and Eurostat to collect statistics on the world timber situation. Each agency collects data from the countries for which it is responsible, with Eurostat compiling information from the EU Member States and EFTA countries.

Kitchen gardens

Kitchen gardens are areas of an agricultural holding devoted to the cultivation of agricultural products not intended for selling but for consumption by the farm holder and his household.

Land use

Land use refers to the socioeconomic purpose of the land. Areas of land can be used for residential, industrial, agricultural, forestry, recreational, transport purposes and so on.

Live weight of fishery products

Live weight of fishery products is derived from the landed or product weight by the application of certain factors and is designed to represent the actual weight of the fishery product as it was taken from the water and before being subjected to any processing or other operations.

Livestock survey

The livestock survey provides information about the livestock population in the EU, as well as information at a national and regional level — it is more detailed than the farm structure survey (FSS), proving more animal categories in its classification of livestock. It is conducted once a year, in December, in all of the EU Member States and in May/June for bovine animals and pigs in the Member States with the largest herds.

Livestock unit (LSU)

The livestock unit is a reference unit which facilitates the aggregation of livestock from various species and age as per convention, via the use of specific coefficients established initially on the basis of the nutritional or feed requirement of each type of animal. The reference unit used for the calculation of livestock units (= 1 LSU) is the grazing equivalent of one adult dairy cow producing 3 000 kg of milk annually, without additional concentrated foodstuffs.

Meat production

Meat production refers to the slaughter, in agreed slaughterhouses, of animals whose carcass weight is declared fit for human consumption; the definition applies to bovine animals, pigs, sheep, goats and poultry.

Milk

Milk is produced by the secretion of the mammary glands of one or more cows, ewes, goats or buffaloes. Farms produce milk for two distinct purposes: to distribute to dairies as well as for domestic consumption, direct sale and cattle feed.

Non-family labour

The non-family labour force of the agricultural holding in the context of the farm structure survey (FSS) refers to persons directly employed by the holding. They can be classified as:

- non-family labour regularly employed — all persons other than the holder and members of his family doing farm work and receiving any kind of remuneration (salary, wages, profits or other payments including payment in kind) from the agricultural holding;

- non-family labour employed on a non-regular basis — all persons other than the holder and members of his family doing farm work and receiving any kind of remuneration from the agricultural holding who did not work each week on the agricultural holding in the 12 months ending on the reference day of the survey; this category usually covers seasonal workers.

Permanent crops

Permanent crops are tree/shrub crops not grown in rotation, but occupying the soil and yielding harvests for several (usually more than five) consecutive years. Permanent crops mainly consist of fruit and berry trees, bushes, vines and olive trees.

Permanent grassland and meadow

Permanent grassland and meadow is land used permanently (for several — usually more than five — consecutive years) to grow herbaceous forage crops, through cultivation (sown) or naturally (self-seeded); it is not, therefore, included in the crop rotation scheme on the agricultural holding. Permanent grassland and meadow can be either used for grazing by livestock, or mowed for hay or silage (stocking in a silo).

Pig

A pig is a domesticated animal of the species Sus. A distinction is made between pigs, piglets, fattening pigs and breeding pigs.

Poultry

Poultry refers to domestic birds of the following species: Gallus gallus (hens and chickens); Meleagris spp. (turkeys); Anas spp. and Cairina moschata (ducks); Anser anser dom. (geese); Coturnix spp. (quail); Phasianus spp. (pheasants); Numida meleagris dom. (guineafowl); Columbinae spp. (pigeons); Struthio camelus (ostriches). It excludes, however, birds raised in confinement for hunting purposes and not for meat production.

Regular agricultural labour force

A regularly employed labour force of the agricultural holding in the context of the farm structure survey (FSS) refers to the directly employed persons who carried out farm work every week on the holding during the 12 months ending on the reference day of the survey, irrespective of length of the working week. Regularly employed labour force may be classified either as a family labour or the nonfamily labour regularly employed.

Roundwood production

Roundwood production (the term is also used as a synonym for removals in the context of forestry) comprises all quantities of wood removed from the forest and other wooded land, or other tree felling site during a defined period of time.

Sawnwood

Sawnwood is wood that has been produced either by sawing lengthways or by a profile-chipping process and, with a few exceptions, is greater than 6 millimetres (mm) in thickness.

Sheep

Sheep are domesticated animals of the species Ovis aries kept in flocks mainly for their wool or meat.

Slaughterhouse

A slaughterhouse is an officially registered and approved establishment used for slaughtering and dressing animals whose meat is intended for human consumption.

Slaughtering and meat production

Data on slaughtering and meat production are collected on a monthly basis. They refer to the activity of slaughterhouses, while the share of domestic slaughtering (in other words, outside officially recognised slaughterhouses) is explicitly left out of the statistics in order to improve comparability of the results across EU Member States.

Standard output (SO)

The standard output of an agricultural product (crop or livestock) is the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per head of livestock. A regional coefficient for each product is applied, as an average value over a reference period (five years). The sum of all the standard outputs per hectare of crop and per head of livestock for a farm is a measure of its overall economic size, expressed in euro.

Utilised agricultural area (UAA)

The utilised agricultural area (UAA) describes the area used for farming. It includes the land categories: arable land; permanent grassland; permanent crops, and; other agricultural land such as kitchen gardens (even if they only represent small share of the total UAA). The term does not include unused agricultural land, woodland and land occupied by buildings, farmyards, tracks, ponds, and so on.

Abbreviations

UNITS OF MEASUREMENT

%	per cent
AWU	annual work unit
EUR	euro
ha	hectare
kg	kilogram
km^2	square kilometre
kW	kilowatt
LSU	livestock unit
m^3	cubic metre
toe	tonne of oil equivalent
tonne	1 000 kg
TLW	tonnes live weight
tkm	tonne-kilometre

OTHER ABBREVIATIONS

AEI	agri-environmental indicators
CAP	Common agricultural policy
CCM	corn cob mix
CFP	Common fisheries policy
CLRTAP	Convention on Long-range transboundary air pollutants
COM	Communication
CO_2	carbon dioxide
CMO	Common Market Organisation
EAA	economic accounts for agriculture
EC	1. European Community 2. European Commission
EEA	European Environment Agency
EEC	European Economic Community
EMEP	European Monitoring and Evaluation Programme
Eurostat	statistical office of the European Union
FIEGT	forest law enforcement, governance and trade
FSS	farm structure survey
HICP	harmonised index of consumer prices
ICT	information and communication technologies
IPCC	Intergovernmental panel on climate change
ISCED	International standard classification of education
K	potassium
LFS	labour force survey
LULUCF	land-use, land change and forestry
N	nitrogen
NUTS	classification of territorial units for statistics (NUTS levels 1, 2 and 3)
P	phosphorus
PDO	protected designation of origin
PGI	protected geographical indication
SILC	statistics on income and living conditions
UAA	utilised agricultural area
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change

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Agriculture, forestry and fishery statistics

This statistical book provides a selection of topical data on agriculture, forestry and fishery statistics. Information is presented for the European Union (EU) and its Member States, and is supplemented (when available) with data for EFTA members and for candidate and potential candidate countries to the EU.

This publication may be viewed as an introduction to European statistics and provides a starting point for those who wish to explore the wide range of data that is freely available on Eurostat's website:

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