## Agriculture, forestry and fishery statistics

### 2020 edition



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Manuscript completed in December 2020

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Theme: Agriculture, forestry and fisheries Collection: Statistical books

Print: ISBN 978-92-76-21521-9 PDF: ISBN 978-92-76-21522-6

ISSN 1977-2262 ISSN 2363-2488 doi:10.2785/496803 doi:10.2785/143455 Cat. No: KS-FK-20-001-EN-C Cat. No: KS-FK-20-001-EN-N

#### **Foreword**

The European Green Deal is an action plan to make the EU's economy sustainable, by turning climate and environmental challenges into opportunities. A key pillar in this deal is the 'Farm to Fork strategy' that aims to make food systems more sustainable.

The new Farm to Fork strategy has a number of aims: to make sure Europeans have access to healthy, affordable and sustainable food; to tackle climate change; to protect the environment and preserve biodiversity; to ensure a fair economic return in the supply chain; and, to increase organic farming.



A series of targets for 2030 have been set: among others, action will be taken to reduce the use of chemical and more hazardous pesticides by 50 %; to reduce fertilizer use by at least 20 %; and, to aim for 25 % of total farmland being used for organic farming. The European Commission also plans to cut food waste by half through legally binding targets.

This year's edition of the *Statistical Book on Agriculture, forestry and fishery statistics* looks to build on recent changes in the publication and provide a more complete overview of the Farm to Fork chain. The flow of the publication follows a chain from the farm production stage, through the processing stage of food and beverages and the distribution stage, to the consumption stage. In so doing, the publication includes data on and analysis of new policy targets; this includes organic farms, and areas under organic farming, resource performance including pesticide and mineral fertiliser use, as well as the generation of waste along the chain.

Key messages are provided in each chapter, 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. 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**

Agriculture, forestry and fishery statistics provides a selection of recent, topical data. Information is presented for the European Union (EU) and its Member States, and is supplemented (when available) with data for the United Kingdom, EFTA members, candidate countries to the EU and potential candidates. 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 broad range of data that are 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 and data on Europe.

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#### Acknowledgements

The editor would like to thank colleagues who were involved in checking the details of this publication and in particular: Ebba Barany, Oscar Gomez Prieto, Hans-Eduard Hauser, Arja Kärkkäinen, Marjo Kasanko, Pol Marquer, Boryana Milusheva, Cecilia Pop, Noora Puolamaa, Anton Roodhuijzen, Johan Selenius and Veronika Vysna.

#### **Data extraction**

The data presented in this statistical book were extracted in October and November 2020, with the exception of international trade data that were extracted in September 2020. The accompanying text was also drafted in October and November 2020.

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#### Introduction

Agriculture, forestry and fishery statistics presents a selection of data on a wide range of topics for the European Union (EU-27 aggregate when available) and its Member States, as well as the United Kingdom, EFTA members, candidate countries to the EU and potential candidates. The data presented refer to the most recent reference years available at the time of preparing the publication, for the most part being either 2019 or 2018.

The official statistics presented in this publication are aimed at specialists (including EU and national policymakers, businesses, producers' and consumers' associations, consultancy bodies and trade unions) and generalists who have an interest in the subject.

As the statistical authority of the EU, Eurostat works in partnership with the national statistical offices and other national statistical authorities in the EU Member States to develop, produce and disseminate European statistics. The partnership for agricultural statistics has been going since the early 1950s under the umbrella of the European Agricultural Statistics System (EASS). Agricultural statistics support decisionmaking and policy design, implementation, monitoring and evaluation in areas related to agriculture, such as the common agricultural policy (CAP), climate change and environmental policies. Statistics are also required to support dialogue between the EU Member States and other partners.

On 1 June 2018, the European Commission presented legislative proposals on the CAP beyond 2020. These proposals refine the current objectives in order to (try to) make the CAP more responsive to current and future challenges. The nine objectives outlined for the future of the CAP are: (i) to ensure a fair income for farmers;

(ii) to increase competitiveness within agriculture; (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. 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, and so on).

The EU has no common forestry policy, but rather an 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, while providing a stimulus for the expansion of forest areas that are an important sink for greenhouse gases.

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 have confidence in the quality of the seafood that they eat. The CFP focuses on the environmental, economic and social sustainability of fishing. Statistics on aquaculture, catches, landings and the fishing fleet are presented in this publication.

The 2020 edition of *Agriculture, forestry and fishery statistics* is divided into 11 chapters:

- Chapter 1 Agriculture, forestry and fishery statistics in the EU — key messages is an executive summary of the publication.
- Chapter 2 Agriculture the factors of production summarises a range of data covering types of farms, the people working in agriculture and agricultural capital. It presents an overview of farms with data on: the size and nature of their activity (including information on organic farming); those working in agriculture, especially farmers according to characteristics such as age, sex and level of education; investments in agriculture, agricultural land prices and rents.
- Chapter 3 Farm production presents the most recent data on a wide range 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 economic developments and resource performance within the agricultural industry and presents data on output and input values.
- Chapter 5 Forestry activities provides data on the EU's forest area, forest ownership and timber resources, economic and employment figures for the forestry sector and wood production.
- Chapter 6 Fisheries activities gives a statistical overview of fishery production, catches, aquaculture, landings of fishery products (product weight and value) and information pertaining to the EU's fishing fleet by number of vessels, total gross tonnage and engine power.

- Chapter 7 Food and beverage processing looks at the wider food chain. It analyses the businesses and persons employed in food and beverages manufacturing in the EU.
- Chapter 8 Trade in agricultural goods presents EU international trade for various agricultural products and the EU's main trading partners.
- Chapter 9 Food and beverage distribution looks at the transport of agricultural and manufactured food products across the EU, by road and by inland waterways.
- Chapter 10 Food and beverage consumption presents data on consumers, notably their expenditure on food, extent of obesity and the generation of household waste related to food.
- Chapter 11 Agriculture, forestry and fishery statistics at a glance provides a statistical annex for the EU-27 and each of the EU Member States, covering a set of key indicators for the agricultural, forestry and fisheries sectors, as well as a set of pertinent messages regarding key agricultural developments.

This publication presents only a relatively small proportion of the statistics that are collected on agriculture, forestry and fisheries. 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 also offers free access to databases, statistical articles, predefined tables, methodological documents and publications.

## Agriculture, forestry and fishery statistics — key messages



#### Key messages

#### Agriculture — the factors of production (Chapter 2):

- There were 10.3 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 hectares in size in 2016.
- EU farms used 156.7 million hectares of land for agricultural production in 2016, which was 38.2 % of the EU's total land area.
- About 244 000 farms in the EU had some organic area in 2016. This number was about one fifth higher than in 2013.
- Organic farming covered 13.0 million hectares of agricultural land in the EU in 2018.
- One quarter (24.5 %) of all the EU's farms were specialist livestock farms in 2016 and just over one half (52.9 %) were specialist crop farms.
- Farming remains a predominantly family activity in the EU.
- About 9.2 million people worked in agriculture, hunting and related service activities in the EU in 2018.
- Farmers are typically male and relatively old; 71.3 % of farmers in the EU were male in 2016 and only 1 in 10 (10.7 %) were under the age of 40 years.
- EUR 56.0 billion was invested in agricultural capital in the EU in 2019, which was an estimated EUR 1.8 billion more than in 2018.
- There are considerable variations in agricultural land prices and rents between and within EU Member States.

#### Farm production (Chapter 3):

- Although average temperatures over the summer of 2019 were among the highest on record in much of the EU, production harvests bounced back from the drought-affected levels of 2018.
- The EU produced 299.3 million tonnes of cereal grains in 2019. This was 25.3 million tonnes more than the drought-affected level in 2018. The total cultivated area of cereals in 2019 was slightly up on 2018 (+2.5 %). The harvested production of common wheat and spelt was 131.8 million tonnes, of barley was 55.6 million tonnes and of grain maize and corn-cob-mix was 70.1 million tonnes.
- In 2019, the EU produced 43.5 million tonnes of meat in carcass weight, one half of which (22.8 million tonnes) was from pigs. It also produced 158.8 million tonnes of raw milk.
- In 2019, there was an upswing (+9.2 %) in the EU's harvested production of cereals, with rises for common wheat and spelt (+14.0 %), grain maize and corn-cob-mix (+1.6 %) and barley (+10.8 %). The production of pig meat dipped (-0.7%) as did that of bovine meats (-1.4%), but was slightly higher for poultry meats (+0.8 %) and sheep and goats meat (+0.2 %). The production of raw milk in the EU was +0.9 % higher in 2019 than in 2018.
- Real-terms (deflated) prices for cereals were lower in 2019 (when compared with 2018): wheat and spelt prices across the EU were down 1.9 % on average, barley was 6.3 % lower and grain maize and corn-cob-mix was also down 3.1 %. By contrast, pig prices rebounded in 2019 (+15.7 %). However, average real-terms prices of cattle (-4.1 %), sheep and goats (-3.0 %) and chickens (-2.9%) were all lower, as were those of milk (-0.6 %).

## Performance of the agricultural sector (Chapter 4):

- Agriculture contributed 1.3 % to the EU's GDP in 2019.
- The EU's agricultural industry created (gross) value added of EUR 181.5 billion in 2019.
- Agricultural income per AWU, expressed as an index, rose 4.7 % across the EU in 2019. This was to a level that was almost 30 % higher than in 2010.
- The rising output volume of the EU's agricultural industry has been underpinned by a rising use of input goods and services as a whole.
- The risk from pesticide use is in decline; across the EU that risk was estimated to have fallen 17 % between the average for the years 2011-2013 and 2018.

#### Forestry activities (Chapter 5):

- There are about 180 million hectares of forests and other wooded land in the EU, and the area has been expanding through natural growth and afforestation.
- Just over half a million people were employed in forestry and logging activities in the EU in 2018
- Forestry and logging activities in the EU generated gross value added of EUR 26.2 billion in 2017.
- Three quarters of roundwood production in the EU went to supply wood-based industries in 2018; the remaining one quarter (22.7 %) went to fuelwood.
- Wood-based industries in the EU generated gross value added of EUR 138.6 billion in 2018; pulp and paper production accounted for one third of this.
- 3.1 million people were employed in the EU's wood-based industries, accounting for 10.5 % of all people working in the manufacturing sector in 2018.

#### Fisheries activities (Chapter 6):

- The EU's fishing fleet is getting smaller in number, capacity and power ...
- ... but EU catches still totalled 4.1 million tonnes of live weight in 2019.
- 1.1 million tonnes of aquaculture products were harvested in the EU in 2018.
- The fisheries industry in the EU employed about 163 000 people in 2018.

## Food and beverage processing (Chapter 7):

- In 2018, there were about 289 000 enterprises involved in food and beverages production in the EU, employing 4.5 million people.
- 96 % of food and beverages enterprises in the EU are small, employing less than 50 people.
- The value of food and beverages produced in the EU was EUR 827.2 billion in 2019.
- The manufacture of food products, beverages and tobacco products in the EU generated 37.0 million tonnes of waste in 2018.

## Trade in agricultural goods (Chapter 8):

- The EU's trade in agricultural goods doubled in 13 years to EUR 324.8 billion in 2019.
- The value of trade in agricultural goods accounted for 8.0 % of the EU's international trade in goods in 2019.
- The United Kingdom was the EU's main trading partner in agricultural products in 2019, with trade worth EUR 60.4 billion.
- The United Kingdom was the main recipient of EU exports (23.2 %) of agricultural products in 2019 and was the main origin of EU imports (12.8 %).

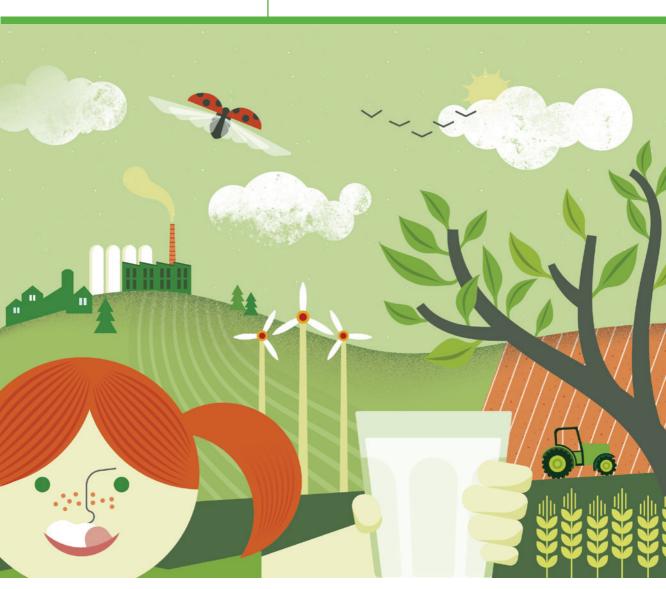
## Food and beverage distribution (Chapter 9):

- Across the EU in 2018, there were 10.8 million people employed in the wholesaling of and specialised retailing of food and beverages, and restaurants, bars, cafés and catering services.
- A combined 2.8 billion tonnes of primary agricultural, forestry and fisheries products, food products, beverages and tobacco were transported by road on EU registered trucks (over 3.5 tonnes of loading capacity) in 2019 ...
- ... over a payload-distance of about 500 billion kilometres in 2019.
- The vast majority of agricultural and food products were transported by road over distances of less than 300 kilometres.

## Food and beverage consumption (Chapter 10):

- Food and beverages (including catering services) accounted for a combined 21.4 % of the final consumption expenditure of households, on average, across the EU in 2018.
- About one in every eight people over the age
  of 16 years in the EU (an estimated 11.9 %) had
  either some or a severe inability to afford a
  meal with meat, chicken, fish, or vegetarian
  equivalent every second day in 2018.
- Just over one half (an estimated 51.8 %) of the EU's adult population over 18 years of age was classified as overweight in 2017.
- Eurostat estimates that the EU produced 70 million tonnes of food waste in 2016, which was equivalent to an average of 158 kilograms per inhabitant.

# Agriculture — the factors of production



#### Introduction

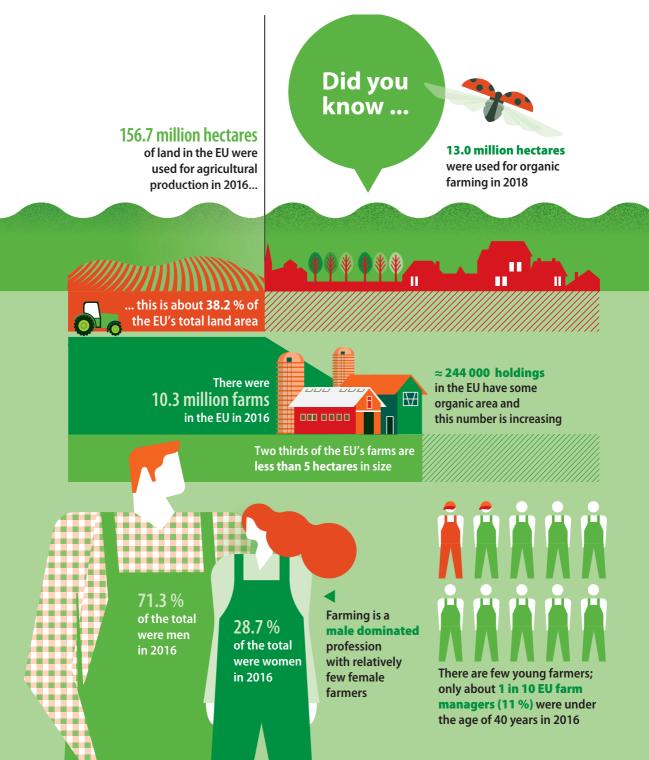
Farming is an activity that is about growing crops and raising livestock. It is the business of providing key primary ingredients for the food that we eat and much of what we drink. Farming draws on a set of resources to produce these agricultural goods, as well as agricultural services. These resources 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 1 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 climaterelated (³) and socioeconomic 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 the '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.
- (\*) See https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/key\_policies/documents/env\_background\_final\_en.pdf.
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#### 2.1. Farms and farmland

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 2019. This year's chapter on farms and farmland in the EU reviews the main messages previously provided and adds some updated analyses on organic farms.

#### 2.1.1. Key messages updated from the 2019 edition of the Statistical Book:

• There were 10.3 million agricultural holdings in the EU in 2016

One third (33.3 %) of the EU-27's agricultural holdings (termed 'farms') were located in Romania, with a further one guarter found in Poland (13.7 %) and Italy (11.1 %).

• The vast majority of the EU's farms are family farms

The overwhelming majority (96.3 % 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 in size in 2016. Although the average mean size of an agricultural holding in the EU was 15.2 hectares in 2016, only about 16 % 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-27's 10.3 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 0.9 % 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 FU 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 (68.3 %) of all farms in the EU in 2016 but were responsible for only 4.6 % the EU's total agricultural economic output.

By contrast, the largest 278 000 farms (2.7 % 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 (54.4 %) of the EU's total agricultural economic output; these farms can be characterised as being large agricultural enterprises. Two in every five of these large farms had a legal or group holding

About 60 % of the standard output generated by agriculture across the EU-27 was from farms in France (18.1 %), Italy (15.3 %), Germany (14.5 %), and Spain (11.3 %) in 2016. Although Romania accounted for one third of the EU's farms, it accounted for only 3.6 % of the EU's standard output.

<sup>(5)</sup> 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.

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

About one half (52.9 %) of all farms in 2016 could be categorised as being specialist crop farms; just under one third (31.7 %) of all farms were specialised in field cropping, about one fifth (19.3 %) were specialised in permanent crops, with the remainder (1.8 %) being specialist horticultural farms.

Another one quarter (24.5 %) of the EU's farms were specialist livestock farms. Within this specialist livestock group, sheep, goats and other grazing livestock farms (5.7 % of all farms), specialist dairy farms (5.4 %) and specialist poultry farms (4.5 %) were the most numerous. Mixed farms comprise mixed crop-animal farms, mixed cropping farms and mixed livestock farms. As a whole, mixed farms accounted for just over one fifth of all farms (21.4 %). A percentage of farms were not classified.

#### EU farms used 157 million hectares of land for agricultural production in 2016

EU farms used 156.7 million hectares of land for agricultural production in 2016. A little over two thirds (68.5 %) of the utilised agricultural area of the EU was based in just six Member States; France used 27.8 million hectares for agricultural purposes in 2016, Spain 23.2 million hectares, Germany 16.7 million hectares, Poland 14.4 million hectares, Italy a further 12.6 million hectares and Romania 12.5 million hectares.

## • Farms managed about 45 % of the total land area of the EU-27 in 2016

Farms in the EU managed 38.2 % of the total land area of the EU-27 as UAA, as well as 6.6 % as wooded areas and 1.6 % as other unused land. Of the land used for agricultural production in

the EU, the vast majority (62.0 % in 2016) was arable land which was mainly used to produce crops for human and animal consumption. Permanent grassland accounted for a further one third (31.2 %) of the utilised agricultural area, and was mainly used to provide further fodder and forage for animals. The remaining area (5.5 %) was used for permanent crops such as fruit, olives and grape production.

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 had higher shares of forested areas.

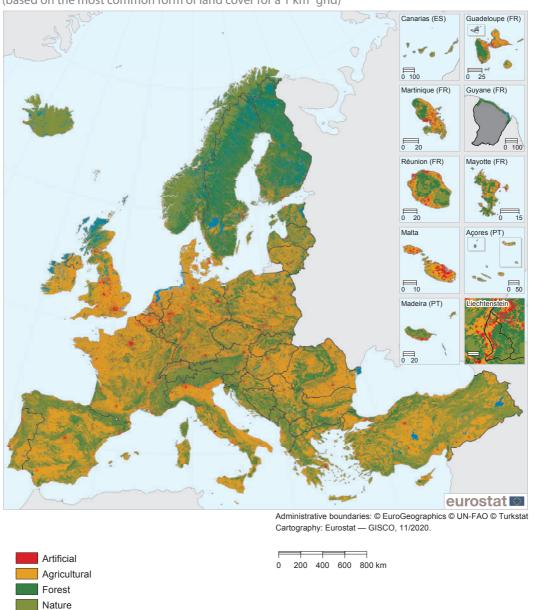
## The number of farms in the EU has been in steep decline

Bearing in mind some methodological precautions, there were about 4.1 million fewer farms in the EU-27 in 2016 than in 2005, equivalent to a decline of just less than 30 %. The vast majority of the farms lost (about 83 %) were small farms of a size under 5 hectares. 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 loss of 0.8 million farms, or 20 %) and Italy (an indicative loss of 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, 2018 (based on the most common form of land cover for a 1 km<sup>2</sup> grid)



The designation of Kosovo is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the ICJ OpinioKosovo Declaration of Independence.

Source: Corine land cover 2018, European Environment Agency (EEA)

Inland water

#### 2.1.2. 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, among others: 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.

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 (6).

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

There were about 244 000 agricultural holdings (here termed 'farms') in the EU that had some organic area in 2016.

A two-thirds (68.2 %) majority of organic farms in the EU were fully organic in 2016, the remaining one third having a mixture of organic and nonorganic production. Among Member States, the share of organic farms that were fully organic was particularly high in Czechia (98.3 %), Austria (97.7 %), Germany (97.6 %) and Estonia (94.0 %).

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 1.6 % of all farms across the EU in 2016.

## Organic farming covered 13.0 million hectares of agricultural land in the EU-27 in 2018, up sharply

The total organic area across the EU-27 in 2018 was 13.0 million hectares, corresponding to 8.0 % 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 (7).

A small majority of the EU's total organic area was located in just four Member States: Spain (17.3 %), Italy (15.7 %), France (15.1 %) and Germany (9.4 %). These four Member States had a higher collective proportion of the organic area (57.5 %) than of total utilised agricultural area (51.3 % in 2016).

The total organic area in the EU increased by 3.5 million hectares between 2012 and 2018, equivalent to a rise of a just over one third (+37.2 %). This upward development was noted in all Member States, with one notable exception (see Figure 2.1.1). The increase in the EU as a whole was driven by the above-average growth in the total organic area in France (+97.3 % between 2012 and 2018, which added 1.0 million hectares of organic area) and in Italy (+67.7 %, which added 0.8 million hectares) and supported by expansions in Spain (+27.9 %), Germany (+27.2 %) and Sweden (+27.4 %). The fastest expansions in organic area over the reference period were in Bulgaria and Croatia where they tripled, adding a combined 160 000 hectares. The overall growth in the EU's organic farm area was tempered by the relatively sharp reduction in Poland (-26.1 %, equivalent to a loss of 171 000 hectares of organic area).

<sup>(°)</sup> See https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organics-glance\_en.

<sup>(7)</sup> For more details, see the Statistics Explained article on Organic farming statistics.

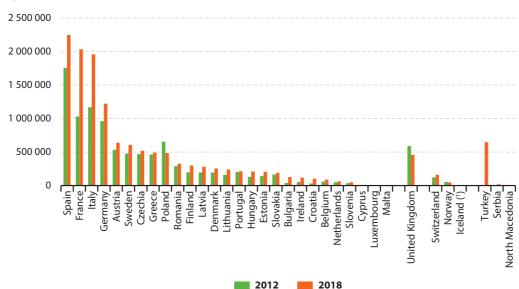


Figure 2.1.1: Total organic area (fully converted and under conversion), 2012 and 2018 (ha)

Note: no data available for Iceland (2012), North Macedonia (2012), Serbia (2012) and Turkey (2012). Preliminary data for Latvia (2018). (1) 2017 data.

Source: Eurostat (online data code: org\_cropar)

#### Organic farming is 'mainstream' in some Member States

From 2012 to 2018, the share of total organic area in the total utilised agricultural area (UAA) within the EU rose from 5.9 % to 8.0 %. There were some Member States where this share was much higher, most particularly Austria (24.1 %), Estonia (21.0 %) and Sweden (20.3 %). In contrast, there 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, among others, France (7.0 %), the Netherlands (3.5 %), Poland (3.3 %), and Romania (2.4 %).

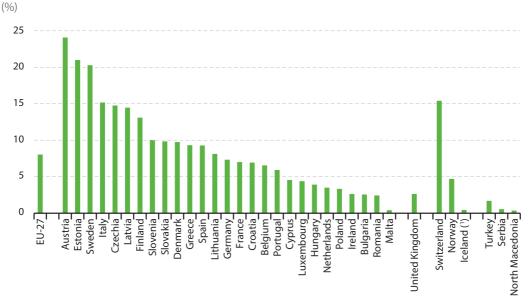
The potential for organic production can also be indicated by the area under conversion as a percentage of the utilised agricultural area. The highest shares of area under conversion in 2018 using this measure were in Italy (3.6 %), Estonia (3.5 %) and Greece (3.3 %).

## 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 6.0 million hectares across the EU-27 in 2018 and organic pastures and meadows (mostly used for grazing organic livestock) a further 5.6 million hectares; 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 (52.8 %) of the total organic area in Spain was accounted for by permanent grassland, as was the case in Germany (54.8 %) and about one half (48.3 %) by arable land in Italy, as in France (57.3 %). 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), 2018



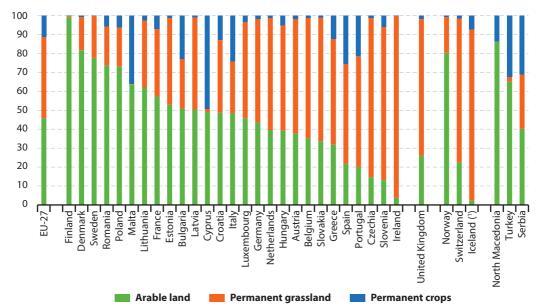
Note: provisional data for EU-27 and Latvia.

(1) 2017 data.

Source: Eurostat (online data code: org\_cropar)

**Figure 2.1.3:** Arable land crops, permanent grassland (pastures and meadows) and permanent crops, 2017

(% of total organic area — fully converted and under conversion)



Note: provisional data for EU-27 and Latvia.

(1) 2017 data.

Source: Eurostat (online data code: org\_cropar)

#### 2.2. Farmers and the agricultural labour force

## Key messages updated from the 2019 edition of the Statistical Book:

#### Agriculture remains a big employer within the EU; 9.2 million people worked in agriculture in 2018

An estimated 9.2 million people worked in agriculture, hunting and related service activities in 2018, the equivalent of 4.4 % of total employment in the EU-27. Agriculture is a particularly big employer in Romania, accounting for just less than one in every four persons employed (23.3 % in agriculture, hunting and related service activities in 2017).

## Farming remains a predominantly family activity

Nine in every ten (89.8 %) people who worked regularly in agriculture in the EU were sole holders (farmer) or members of their families in 2016 (8).

#### Farms managers are typically male and relatively old

Seven in every ten (71.3 %) farm managers on the EU-27's 10.3 million holdings were male and a majority (57.8 %) were 55 years of age or more. Only about 1 in every 10 (10.7 %) 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 1 in about every 20 farmers (the equivalent of 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 (82.7 %) of the EU's farm managers that were 65 years of age or older worked on very small (semi-subsistence) and small farms with a standard output of less than EUR 8 000 per year 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 7 in every 10 (68.3 %) of them in 2016. Less than 1 in 10 (8.9 %) farm managers had full agricultural training, and the rest (22.7 %) 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 6.4 % of total EU employment in 2005 to 4.6 % in 2016. The volume of work carried out can be measured in terms of full-time labour equivalents, with one annual work unit (AWU) being equivalent to one person working full-time. The volume of work carried out in agricultural activities across the EU declined by 3.2 million AWUs between 2005 and 2016, a decline of one quarter (–25.9 %). The biggest losses were in Romania (1.0 million AWUs), Poland (0.6 million AWUs) and Bulgaria (0.4 million AWUs, equivalent to 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 (defined here as under the age of 35 years) but this share had fallen to 5.1 % in 2016. The share of farm managers that are women, however, increased slightly (from 26.5 % in 2005 to 28.7 % in 2016).

 $\begin{tabular}{ll} (3) For more details on similar analyses, see the Statistics Explained article on Family farming in the EU. \\ \end{tabular}$ 

### 2.3. Agricultural capital and land values

## Agricultural capital: an estimated EUR 56.0 billion invested in 2019

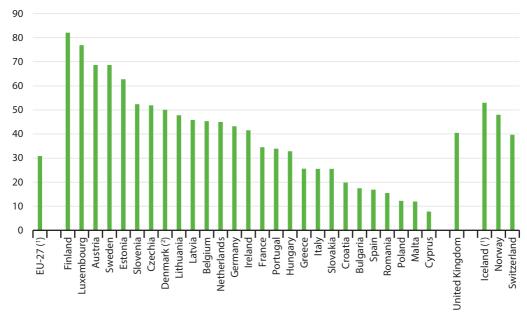
As a factor of production in agriculture, capital can be thought of as the tools, machinery and equipment, farm buildings and plantations that are required to help produce crops or animal products.

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-27 invested an estimated EUR 56.0 billion in 2019, accounting for 30.9 % of gross value added. About 70 % of this investment was made in only five Member States: France (19.7 % of the EU total), Germany (17.1 %), Italy (15.0 %), the Netherlands (9.1 %), and Spain (8.4 %). Relative to the size of their respective agricultural sectors and the value added generated, however, GFCF was highest in Finland, Luxembourg, Austria and Sweden (see Figure 2.3.1).

**Figure 2.3.1: GFCF in agriculture, 2019** (% of GVA)



<sup>(1)</sup> Estimate.

Source: Eurostat (online data code: aact\_eaa01)

<sup>(2) 2018</sup> data for GFCF in agriculture.

#### The level of investment in EU agriculture was an estimated EUR 1.8 billion higher in 2019 than in 2018

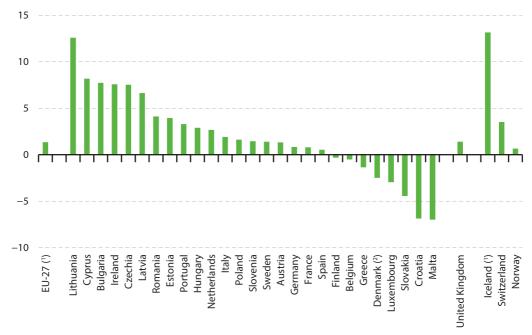
The level of investment in EU agriculture in 2019 was an estimated EUR 1.8 billion more than in 2018 and EUR 7.3 billion more than in 2016. Although there have been some strong annual fluctuations at the level of the EU, there have been some clear trends at Member State level.

During the period between 2009 and 2019, there was particularly strong investment growth in Lithuania (an average annual growth rate of

of 8.2 %), in Bulgaria, in Ireland and in Czechia (all with an average annual growth rate of between 7.5 and 7.7 %; see Figure 2.3.2). In the cases of Lithuania, Ireland and Czechia this growth was relatively steady. In the case of Cyprus, the rebound in investment was concentrated after 2015 and in the case of Bulgaria was restricted to the surge in 2018. In contrast, there were strong investment contractions over the same period in Slovakia (-4.4 % per year on average), Croatia (an average -6.9 % per year) and Malta (an average -7.0 % per year).

12.6 %), in Cyprus (an average annual growth rate

Figure 2.3.2: GFCF in agriculture, 2009-2019 (annual average growth rates, %)



(1) 2009-2018.

Source: Eurostat (online data code: aact\_eaa01)

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

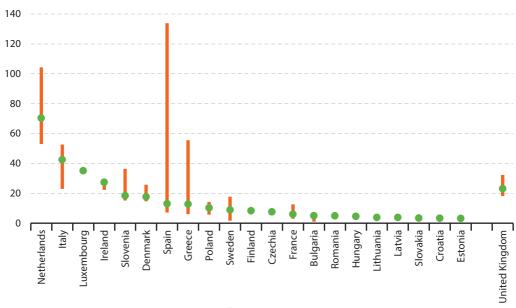
Each factor of production used in agriculture typically earns a type of income; labour receives a wage, entrepreneurs profit, capital an interest and land a rent. Understanding land prices and rents is also a key element for understanding future perspectives for agriculture.

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 and so on) 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 2018 (EUR 70 320). 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 133 863 per hectare). Arable land was cheapest in Estonia, with a hectare costing an average EUR 3 174 in 2018. At the regional level, a hectare of arable land cost least in the Yugozapaden region of Bulgaria (an average EUR 1 017).

From the data available, the strongest price growth between 2011 and 2018 for a hectare of arable land was in Czechia (just over a fourfold increase), Lithuania (a little over a three-fold increase), Estonia (a three-fold increase, albeit remaining the lowest national average in the EU-27), and Hungary and Poland (both slightly more than doubling). Prices rose in most other

**Figure 2.3.3:** National and regional prices of arable land, 2018 (EUR 1 000 per hectare)



National average, with iminimum and maximum regional averages

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).

Source: Eurostat (online data code: apri\_lprc)

Member States too, albeit at much lower rates. The notable exception was Greece, where the average price of arable land declined (by about -17 % respectively overall in the period under consideration).

In all regions for which data are available 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 in almost all regions (it was almost six times more expensive in the Spanish Región de Murcia).

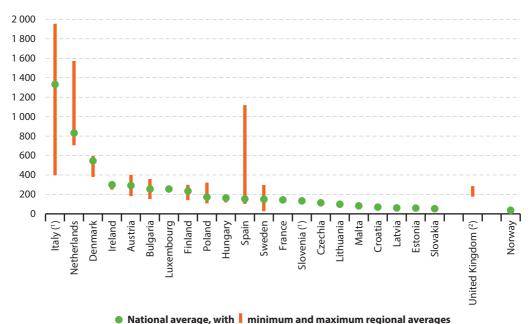
Not all land is owned by the farmer working the land. Many farmers rent their land, as either a short- or long-term business decision. The cost of renting land is another factor that farmers have to absorb in their business. Mirroring the variation in arable land prices, annual rental prices of one

hectare of agricultural land (arable or permanent grassland) also vary starkly between countries and regions within countries.

Renting one hectare of agricultural land was most expensive in Italy (an average EUR 1 332 for the year in 2017), with the highest regional average in Lombardia (EUR 1 954 for the year). Rental prices in the Netherlands were also relatively high (an average EUR 832 per year in 2018), with the region of Flevoland having a rental price that was almost twice the national average (EUR 1 572 for the year). Renting agricultural land was cheapest on average in Slovakia (EUR 54 per hectare per year), although the cheapest regions in the EU for renting were Mellersta Norrland and Övre Norrland in Sweden (both EUR 27 per hectare per year in 2018) — 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, 2018 (EUR per hectare)



Note: data for Belgium, Germany, Greece, Cyprus, Portugal and Romania are not available.

- (1) 2017 data.
- (2) No national average. 2016 data.

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 (FSS) for 2016. The 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 the United Kingdom, 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. 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 a basis for comparable statistics. These datasets 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**

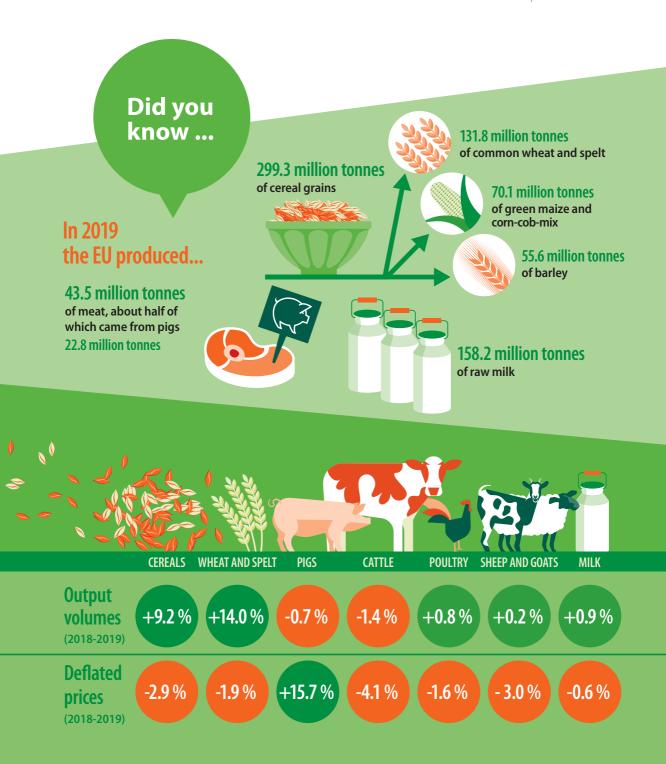


#### Introduction

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 that 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 EU, as well as data on agricultural prices available for single commodities and for larger aggregates in the form of price indices.



#### **3.1. Crops**

Crops can be broadly categorised into two groups, those that are annual and those that are perennial. Annual 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. Annual crops can either be sown in the autumn and be winter hardy (socalled winter crops) to be harvested the following year or in the spring and summer of the following year to be harvested that year. In the EU, rapeseed, wheat, rye and triticale are typically winter crops, whereas maize, sunflowers, rice, soybeans, potatoes, and sugar beet are summer crops. Barley is common in both its winter and spring varieties.

Crop production is particularly sensitive to prevailing weather and climatic conditions at key times of the growing season. 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 both the levels and quality 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 EU covering such a large area and including such diverse climates, the impacts of adverse weather conditions and extremes on production levels in one region may be 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

### Historically warm summer across much of the EU in 2019

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 2019 crop year in the EU experienced extreme weather events in terms of both temperatures and rainfall (°).

Autumn 2018: the very dry autumn across large parts of Europe complicated field preparations for sowing winter crops and then limited plant emergence and early crop development. The regions most affected were the northern half of France and Germany, north-western Poland, Czechia, eastern Slovakia and eastern Hungary, western and southern Romania, and western Bulgaria. Both the sowing and emergence of rapeseed, for which the optimal sowing window closes in September, were most impacted, resulting in smaller areas sown than originally planned and uneven stands of crops after emergence, part of which was replaced with spring or summer crops. In France, north-western Germany and southern Romania, weather conditions improved in late autumn but extended well into November in the other most affected regions.

Winter 2018-2019: the winter was mild, without marked cold spells. However, large parts of southern Europe experienced precipitation deficit. The most distinct deficits were experienced in central, western and south-western parts of the Mediterranean region; although large parts of south-eastern and southern-central Europe were also affected. This aggravated the condition of crops that were already affected by the unfavourable autumnal weather conditions.

<sup>(\*)</sup> 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

**Spring 2019**: the first half of spring brought favourable weather conditions to most parts of Europe, but continued precipitation deficits negatively affected winter crops in Spain and south-eastern Europe. This situation inverted in April, when there was well-above average rainfall in southern Europe (except the Iberian Peninsula). This replenished soil moisture reserves, with substantial benefits to winter crops and the early development of spring- and summer crops. Extremely wet conditions in north-eastern Italy and the western Balkan region caused serious delays to spring sowing activities. Meanwhile, large parts of northern-central Europe (in particular north-eastern Germany and northern Poland) experienced a marked rainfall deficit which started mid-March and got worse in April. By contrast, there was a wetter-than-usual April on the Iberian Peninsula, which was followed by the return of dry conditions in May, which then developed into a drought in southern regions.

After the mild winter had continued into early spring, the advanced winter crop development in most of Europe was then slowed down by a cold snap at the beginning of May.

These spells of warm-and-dry (April) and cold (May) weather also affected the emergence of spring and summer crops. In the most affected areas, seedlings did not develop properly, or were damaged by wind-blown dust from dry, sandy soils, or by pests to which weakened stands are more vulnerable. In northern Poland and north-eastern Germany this resulted in poor

stands over large areas, particular regarding sugar beet. In contrast, abundant rainfall in Italy, and southern-central and eastern Europe improved water supplies, but, combined with cold weather, hampered summer crop growth in large parts of these regions.

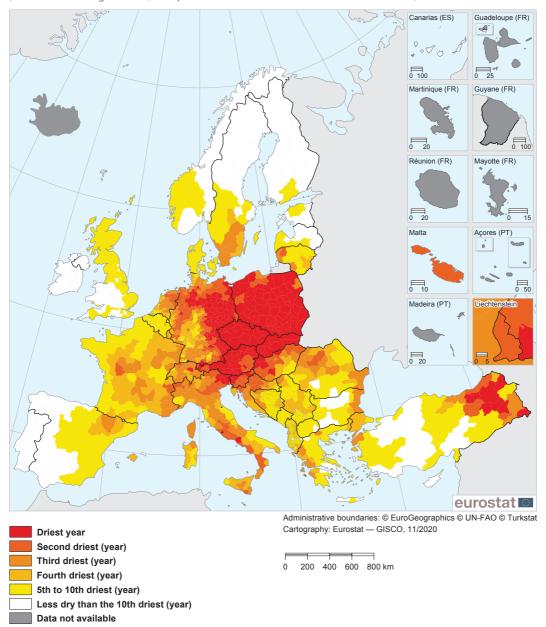
**Summer 2019**: the summer was warmer than usual in all EU Member States, except Portugal and northern Finland. In central Europe, the 2019 summer was the warmest or second warmest on record. Most parts of Europe were affected by several heatwaves, starting in June, and recordhigh daily maximum temperatures (above 40°C) were recorded in northern France, the Benelux countries and north-western Germany.

Rainfall was below average in the southern half of the Iberian Peninsula, as well as in northern France, most of Germany, Poland, Czechia, Austria, and Italy.

The yield potential of winter crops was negatively impacted in regions that had already been affected by a dry spring (in particular Spain, Germany, Poland), but in other regions (such as France) the negative effects of the hot summer conditions on winter crops remained very limited. For summer crops (maize, sunflowers, sugar beet, potatoes), yield potentials were negatively impacted in all regions affected by water deficit. Very favourable weather conditions with above-average rainfall prevailed in south-eastern Europe during most of the summer, but also there, hot and dry conditions in August negatively impacted the end of the season.

Map 3.1.1: Average temperatures in summer 2019

(01 June to 31 August 2019, compared with summers between 1979 and 2018)



<sup>\*</sup>The designation of Kosovo 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: temperature data from MARS CGMS DB aggregated at NUTS level 3, weighted on arable land, with the exception of Albania, Bosnia and Herzegovina and Kosovo\* for which data were aggregated at commune level (or GAUL level 2).

#### Cereals

## The EU's 2019 cereal harvest rebounded sharply from the drought-affected level in 2018

The harvested production of cereals (including rice) across the EU-27 was 299.3 million tonnes in 2019. This was 25.3 million tonnes more than the drought-affected level in 2018, the equivalent of a 9.2 % upswing. However, the harvested production of cereals remained below the record 308.2 million tonnes harvested in 2014 (see Figure 3.1.1).

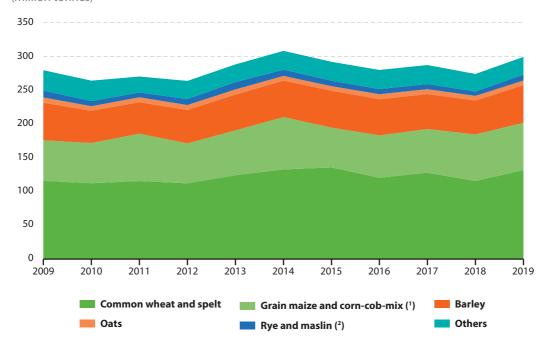
France harvested 71.2 million tonnes of cereals in 2019, a little less than one quarter (23.8 %) of the EU-27's total harvested production. Germany harvested 44.3 million tonnes (14.8 % of the EU total), Romania a further 30.4 million tonnes of cereals (10.2 % of the EU total) and Poland harvested 29.0 million tonnes (9.7 % of the EU total).

The rebound in the harvested production of cereals was prominent across central and northern Europe. Among the main cereal producing Member States, the harvested production of cereals was higher in France (+13.8 %), Germany (+16.7 %) and Poland (+8.3 %). The sharpest rates of rebound were in the Baltic and Scandinavian Member States as well as Cyprus. By contrast, harvested production in many southern European Member States was lower, including in Romania (–3.6 %) and in Spain (–18.6 %).

#### Higher harvests for most cereals

The EU-27 harvested 131.8 million tonnes of common wheat and spelt in 2019, the equivalent of 44.0 % of all cereal grains harvested (see Figure 3.1.2). This was 16.2 million tonnes more than in 2018, an increase of 14.0 %. The main reason for this upturn was the bounce back from the drought in 2018, although the cultivated area of common wheat and spelt was also higher (+3.7 %).

Figure 3.1.1: Production of main cereals, EU-27, 2009-2019 (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 Denmark, 2009.
- (2) Includes estimate for Italy, 2013.

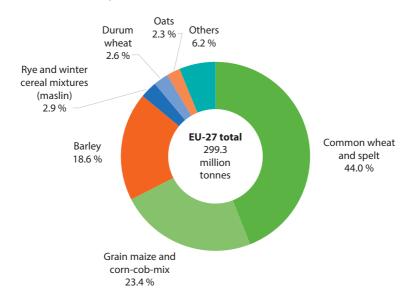
The harvested production of grain maize and corn-cob-mix for the EU-27 was 70.1 million tonnes in 2019, 1.1 million tonnes more than in 2018. Higher production levels in most Member States offset the relatively sharp decline (–6.6 %) in Romania, which remained the main producer of this cereal and accounted for one quarter of the EU's harvested production.

In 2019, the EU's harvested production of barley was 10.8 % higher than in 2018 at 55.6 million tonnes, despite little change (–0.1 %) in the area cultivated. The rebound from the drought-affected levels of 2018 was notable in many Member States including France (+22.8 %), and Germany (+21.0 %). The less favourable weather conditions on the Iberian Peninsula, however, resulted in a lower harvested production of barley in Spain (–18.9 %).

It was a similar scenario for rye and maslin, the harvested production of which across the EU was one third higher (+33.3 %) in 2019 than in 2018. This recovery was also underpinned by a strong expansion in the area cultivated; a further 273 000 hectares of rye and maslin were harvested in 2019 than in 2018, an increase of 13.4 %. Production levels rebounded in a number of key producer countries like Germany (+47.1 %), Poland (+12.2 %) and Denmark (+85.4 %).

By contrast, the harvested production of oats in 2019 was little changed from the level in 2018 (+0.4 %). The reduction in cultivated area (-6.9 %, or 177 000 hectares) was offset by higher yields in many Member States. Harvested production levels bounced back somewhat in Poland (+5.7 %), but strongly in Finland (+43.0 %) and Sweden (+84.6 %). Elsewhere, there were strong declines in harvested production, such as in Spain (-45.6 %) and Germany (-10.1 %).

**Figure 3.1.2:** Main cereals, EU-27, 2019 (% share of EU-27 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.

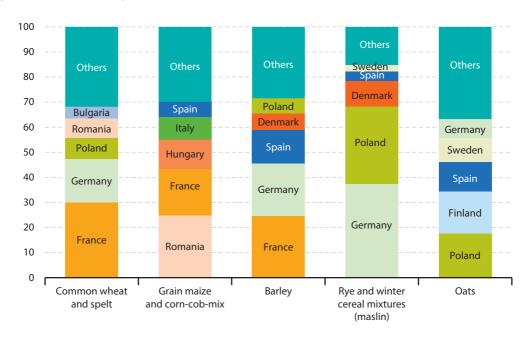


Figure 3.1.3: Production of cereals by main producing Member States, 2019 (% share of EU-27 totals)

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 harvested production of common wheat and spelt were the two French regions of Centre — Val de Loire (5.1 million tonnes in 2019) and Picardie (4.9 million tonnes). A number of other French regions — Champagne-Ardenne, Pays de la Loire, Poitou-Charentes, Nord-Pas de Calais and Haute-Normandie — were also among the EU regions with the highest levels of production in 2019. The harvested production of common wheat and spelt was also relatively high in Bayern

(southern Germany), where 3.7 million tonnes were harvested (note that the statistics presented for Germany relate to NUTS level 1 regions).

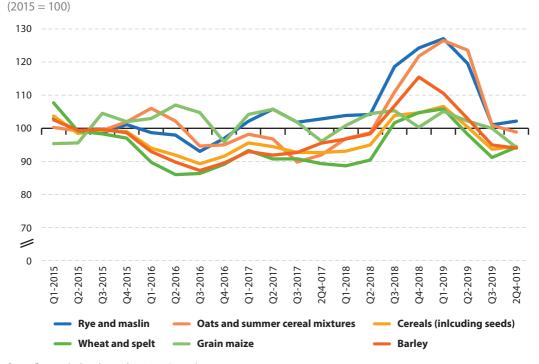
The French region of Centre — Val de Loire was the region that harvested the most barley in 2019 (2.4 million tonnes). This was closely followed by the Spanish region of Castilla y Léon (2.3 million tonnes) and Champagne-Ardenne (2.2 million tonnes). Other key barley-producing areas were the German region of Bayern, renowned for its beer production (2.1 million tonnes), and the Spanish region of Castilla-la Mancha (1.9 million tonnes).

#### Prices for EU cereals lower in 2019

The average price of cereals in the EU for 2019 declined by a provisional 2.9 % in real (deflated) terms, in part reflecting the higher supply of cereals after the drought in 2018. Provisional prices for all the categories of cereal were lower; the sharpest rates of decrease were for rye and maslin (an EU-27 average of -7.4 % in real terms), barley (-6.3 %) and oats (-4.8 %), with more moderate falls for grain maize (-3.1 %), and wheat and spelt (-1.9 %).

Over the medium-term, there has been downward pressure on prices as a result of a series of successive and record global harvests. The average real-terms price of cereals has fallen back considerably from the relative highs recorded in 2012 for many Member States. Nevertheless, that downward trend stopped in 2017 and 2018 (see Figure 3.1.4).

Figure 3.1.4: Deflated price indices for cereals, EU-27, 2015-2019



Source: Eurostat (online data code: apri\_pi15\_outq)

#### Potatoes and sugar beet

Two main root crops are grown in the EU, namely sugar beet, grown on 1.5 million hectares across the EU-27 in 2019, and potatoes, grown on 1.6 million hectares. Other root crops like fodder beet, fodder kale, rutabaga, fodder carrot and turnips are specialist crops grown on a combined total of only 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 (10).

The EU sugar market was regulated by production quotas until September 2017. The European Commission's Directorate-General for Agriculture and Rural development then established 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.

#### Sugar beet production levelled out in 2019 after a drop from the post-quota high in 2017; potato production rebounded strongly in 2019

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 across the EU-27 was 16.5 % higher than in 2016). The harvested production in 2017 reached a high of 134.2 million tonnes.

The drought of 2018 and a slightly lower area cultivated (–1.5 %) resulted in EU-27 harvested production falling 22.3 million tonnes from the 2017 high. Although the cultivated area of sugar beet contracted more sharply in 2019 (–5.5 %), the harvested production was 1.2 million tonnes higher than in 2018, due to more favourable weather conditions.

**Figure 3.1.5:** Production of sugar beet by main producing EU Member States, 2009-2019 (million tonnes)

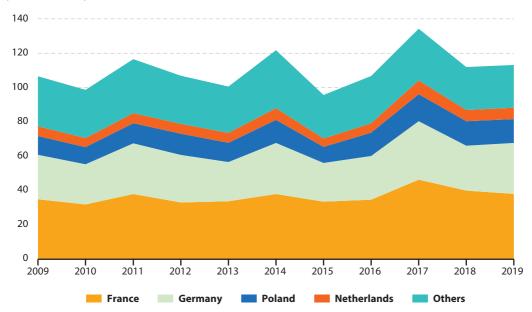
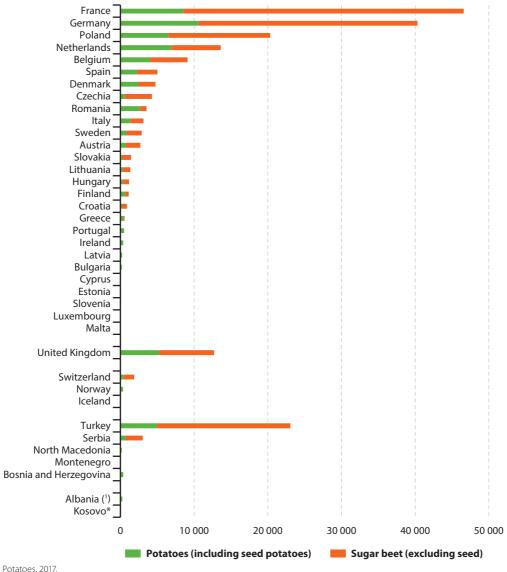


Figure 3.1.6: Production of potatoes and sugar beet, 2019 (thousand tonnes)



<sup>(1)</sup> Potatoes, 2017.

<sup>\*</sup> 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.

In 2019, the EU produced 113.1 million tonnes of sugar beet (see Figure 3.1.5), about 60 % of which came from France (33.6 %) and Germany (26.3 %) combined. France produced 38.0 million tonnes of sugar beet in 2019, which was 1.9 million tonnes less than in 2018 (a decline of 4.7 %). In large part, this reflected the sharp contraction in area cultivated (–8.1 %). By contrast, 3.5 million more tonnes of sugar beet were produced in Germany in 2019 than in 2018. This strong rebound (+13.5 %) was despite a slightly lower area being cultivated (–1.3 %).

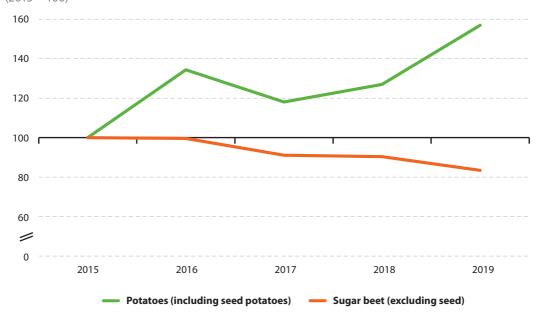
The EU produced 51.2 million tonnes of potatoes in 2019, which was 4.4 million tonnes more than in 2018 (an increase of 9.4 %). Most of the main potato producing Member States had higher harvests in 2019: the 10.6 million tonnes produced by Germany in 2019 represented a year-on-year increase of 18.8 %; the 8.6 million tonnes produced in France, a rise of 8.9 %; the 7.0 million

tonnes produced in the Netherlands an increase of 15.5 %; and, the 4.0 million tonnes produced in Belgium was 32.3 % higher than in 2018. The main exceptions were the lower harvested production levels in Poland (–11.4 %) and in Romania (–13.1 %).

#### Continued fall in real-terms price for sugar beet, but further rise for potatoes, despite the rebound in production levels

Despite the strong rebound in the level of harvested potato production for the EU-27 as a whole, the average real-terms (deflated) price of potatoes for 2019 was almost one quarter higher (a provisional +23.6 %) than in 2018 (see Figure 3.1.7). By contrast, the average real-terms price of sugar beet declined further (a provisional -7.7 %), continuing the downward trend noted since 2013 with market realignment.

**Figure 3.1.7:** Deflated price indices for potatoes and sugar beet, EU-27, 2015-2019 (2015 = 100)



Source: Eurostat (online data code: apri\_pi15\_outa)

#### **Oilseeds**

## Further sharp fall in rape and turnip rape production in 2019 drives overall decline in oilseeds production

The EU cultivates three types of oilseed crop; the main two are rape and turnip rape, and sunflower, although soya is increasingly grown. The EU harvested an estimated 29.5 million tonnes of oilseeds in 2019, which was about 2.5 million tonnes less than in 2018.

The harvested production of rape and turnip rape seeds in the EU-27 was 15.3 million tonnes in 2019, which was 2.6 million tonnes less than in 2018 (the equivalent of a 14.7 % decline). In large part, this reflected a sharp contraction (–19.0 %) in the cultivated area of rape and turnip rape, which was 1.2 million hectares less than in 2018 across the EU as a whole.

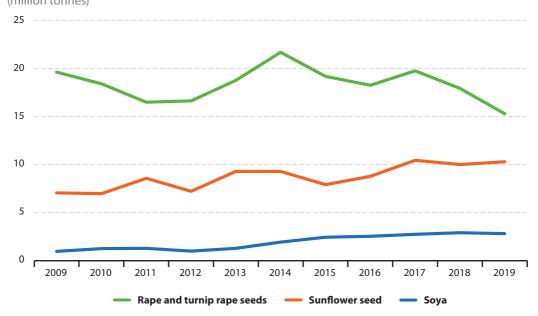
The harvested production of sunflower seeds across the EU in 2019 was 10.3 million tonnes (the equivalent of a 2.8 % rise on 2018), which was

driven by a sharp expansion (+7.8 %) in the area harvested. The relatively steady growth in soya production in the EU-27 was halted in 2019; there was a decline in the area harvested (–5.0 %) and production (–3.4 %). Nevertheless, the 2.8 million tonnes of soya produced in the EU-27 in 2019 was 1.9 million tonnes more than was harvested a decade earlier (see Figure 3.1.8).

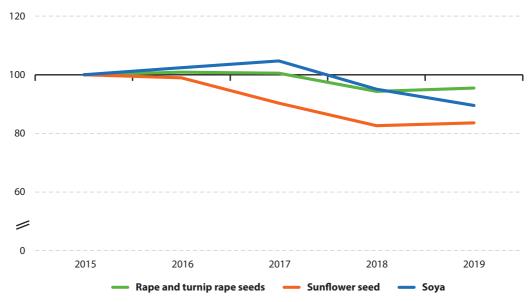
## Real-terms prices of rape and sunflower seeds flattened out in 2019 but fell sharply for soya

Real-terms (deflated) prices of oilseeds had fallen sharply and steadily in many Member States from relative peaks in 2012. In the cases of rape and turnip rape seed, and sunflower seeds this decline flattened out in 2019 (see Figure 3.1.9); for the EU-27 as a whole, average prices in 2019 for both types of oilseed were higher in real terms than in 2018 (both +1.2 % respectively). By contrast, the average real-terms price of soya for the EU-27 continued to decline sharply (a further –5.8 % in 2019).

**Figure 3.1.8:** Production of oilseeds, EU-27, 2009-2019 (million tonnes)



**Figure 3.1.9:** Deflated price indices for oilseeds, EU-27, 2015-2019 (2015 = 100)



Source: Eurostat (online data code: apri\_pi15\_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 produces millions of tonnes of fruit every year

The EU produces a wide range of fruit, berries and nuts. In 2019, the EU-27 produced 13.7 million tonnes of pome fruit (apples, pears and quinces), 7.3 million tonnes of stone fruit (peaches, nectarines, apricots, cherries, plums, sloes and

medlar), 2.5 million tonnes of sub-tropical and tropical fruits (such as figs, kiwis, avocados and bananas), 0.6 million tonnes of berries (excluding strawberries), and 1.1 million tonnes of nuts. In addition, the EU also produced 10.6 million tonnes of citrus fruit (such as oranges, satsumas, clementines, mandarins, lemons, limes and grapefruit) in 2019.

Spain and Italy are the main EU producers of fruit, but for some specific fruit other Member States were key producers.

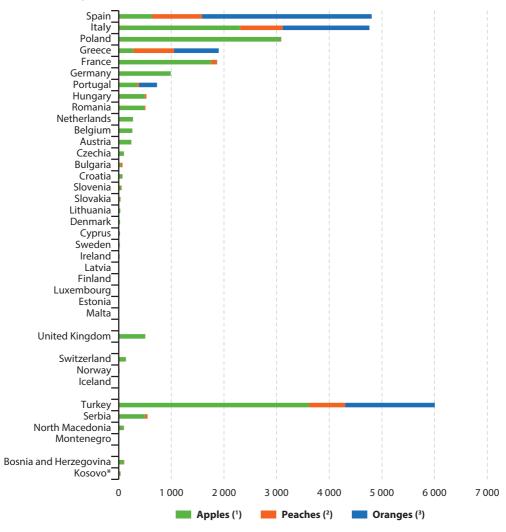
## One quarter of EU apple production in Poland; over one half of all EU oranges from Spain

Thousands of varieties of apple are 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. A little more than one quarter (26.6 %) of the EU-27's harvested

apple production came from Poland in 2019. The other principal apple-producing Member States were Italy (19.9 %) and France (15.1 %). By contrast, orange production and peach production are

much more restricted by climatic conditions (see Figure 3.1.10); about 93 % of all oranges and peaches produced in the EU-27 came from Spain, Italy and Greece.

**Figure 3.1.10:** Production of selected fruit, 2019 (thousand tonnes)



<sup>(</sup>¹) Provisional data: Belgium, Portugal and Montenegro. Estimated data: Bosnia and Herzegovina.

<sup>(2)</sup> Provisional data: Portugal and Montenegro. Estimated data: Bosnia and Herzegovina.

<sup>(3)</sup> Provisional data: Portugal.

<sup>\*</sup>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.

#### **Vegetables**

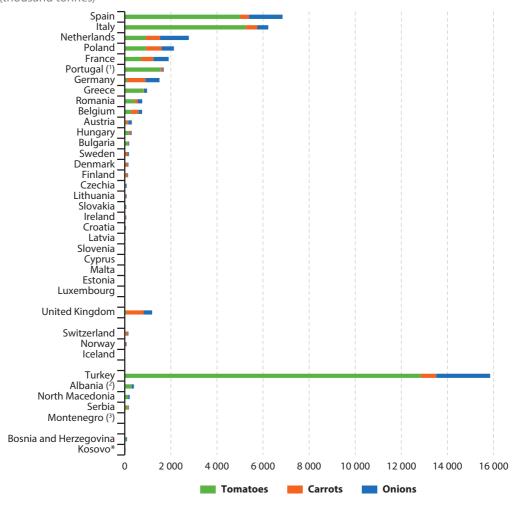
Italy and Spain produced about two thirds of the EU's tomatoes in 2019; Spain and the Netherlands produced a little less than one half of the EU's onions

The EU-27's harvested production of fresh vegetables (including melons) was 60.9 million

tonnes in 2019, about 1.1 million tonnes more than in 2018. Within the group of fresh vegetables, the harvested production of tomatoes was 16.5 million tonnes in 2019, of onions was an estimated 6.1 million tonnes and of carrots an estimated 4.7 million tonnes.

Almost two thirds of the EU-27's tomato production in 2019 came from Italy (5.3 million tonnes) and Spain (5.0 million tonnes). Despite

Figure 3.1.11: Production of selected vegetables, 2019 (thousand tonnes)



<sup>(1)</sup> Provisional.

<sup>(2) 2018</sup> data.

<sup>(3)</sup> Provisional data for tomatoes and onions.

<sup>\*</sup>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.

a higher harvested production of tomatoes in Spain compared to 2018 (+4.9 %), the overall EU-27 harvest was lower (-0.9 %), principally because of a sharp decline (-8.7 %) in Italy.

In 2019, the harvested production of carrots in the EU-27 was higher (+4.5 %) than in 2018, principally due to higher production in Germany (+26.5 %) and the Netherlands (+14.3 %) and despite the lower production level in Poland (–6.6 %). The EU-27's production of onions in 2019 was higher (+9.0 %) than in 2018, driven by strong growth in Spain (+13.3 %), Germany (+20.7 %) and France (+45.0 %).

#### Grapes

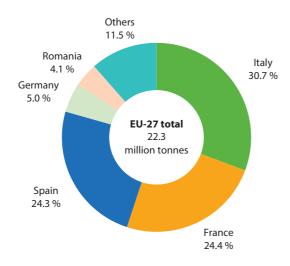
The EU is big player on the world's wine market; between 2014 and 2018 it accounted for 65 % of global production, 60 % of consumption and 70 % of exports, with 45 % of the wine-growing areas in the world (11).

#### Harvested production in the main grapeproducing countries was down sharply in 2019

The total harvested production of grapes in the EU was an estimated 22.3 million tonnes in 2019. This was 3.3 million tonnes less than in 2018. Each of the five main grape-producing Member States recorded sharply lower production levels; harvested production was down in Italy (–8.4 %), France (–12.7 %), Spain (–18.6 %), Germany (–19.8 %) and Romania (–14.1 %).

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

**Figure 3.1.12: Production of grapes for wine, 2019** (% share of EU-27 total)



#### 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, northern 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 (12) which arrived in Italy in 2013.

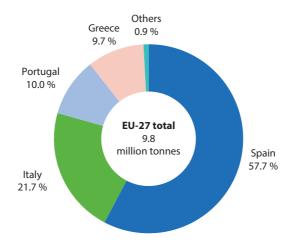
## Spain is by far the largest producer of olives for olive oil in the EU

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

The total harvested production of olives for olive oil in the EU-27 was 9.8 million tonnes in 2019. This was 3.1 million tonnes less than the production level in 2018. This overall decline was due to a much lower harvested production in Spain, which accounted for about 72 % of all EU production in 2018. The production of olives for olive oil in Spain was 5.6 million tonnes in 2019, some 3.6 million tonnes less than in 2018. By contrast, the combined production in Italy and Portugal was up almost 0.5 million tonnes. Italy produced 2.1 million tonnes of olives for olive oil in 2019 and Portugal 1.0 million tonnes. The production level in Greece was similar to that in Portugal in 2019, but this should be seen against the pronounced downward trend noted since a harvest of 1.8 million tonnes was produced in 2012.

(12) For further information see the plant health and biosecurity products webpages of the European Commission: https://ec.europa.eu/food/plant/plant\_health\_biosecurity/legislation/emergency\_measures/xylella-fastidiosa/latest-developments\_en.

**Figure 3.1.13: Production of olives for olive oil, 2019** (% of EU-27 total harvested production)



#### 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 supplyside 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. The CAP has evolved, requiring more agricultural market transparency for all actors and FU 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 Eurostat's free, online database.

#### Majority of livestock populations concentrated in just a few countries

The EU-27 has a substantial population of livestock: there were 143 million pigs, 77 million bovine animals and 74 million sheep and goats in

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

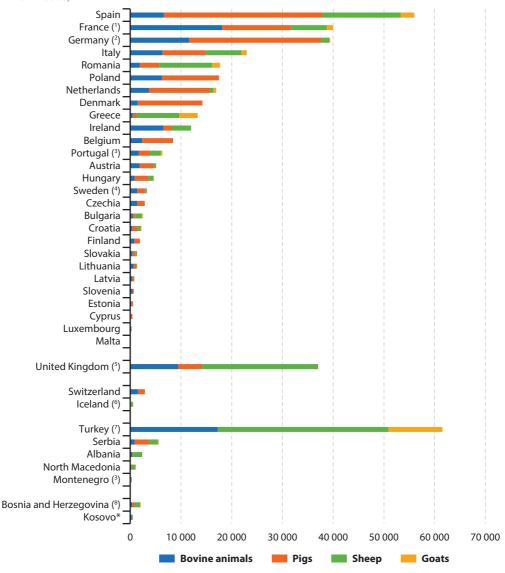
Almost three quarters of the EU's 2019 bovine population was kept in France (23.5 %), Germany (15.1 %), Spain (8.6 %), Ireland (8.5 %), Italy (8.3 %) and Poland (8.1 %).

Almost three quarters of the EU's pigs were found in Spain (21.8 %), Germany (18.2 %), France (9.4 %), Denmark (8.9 %), the Netherlands (8.3 %) and Poland (7.8 %).

Three quarters of the EU's sheep were found in Spain (24.8%), Romania (16.6 %), Greece (13.5%), France (11.4 %) and Italy (11.2 %). Two thirds of the EU's goats were found in Greece, Spain and Romania

Figure 3.2.1: Livestock population, 2019

(million heads)



<sup>(1)</sup> Bovine animals, provisional.

Source: Eurostat (online data codes: apro\_mt\_lscatl, apro\_mt\_lspig, apro\_mt\_lspiep and apro\_mt\_lsgoat)

<sup>(2)</sup> Goats, estimate.

<sup>(3)</sup> Provisional.

<sup>(4)</sup> Sheep, provisional.

<sup>(5)</sup> Goats, provisional.

<sup>(6) 2018</sup> data.

<sup>(7)</sup> Cattle, 2018: Sheep and goats, 2017.

<sup>(8)</sup> Estimates.

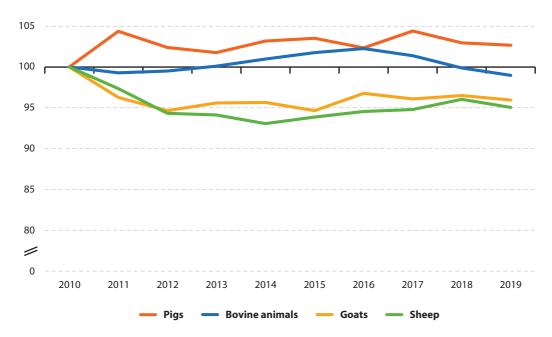
<sup>\*</sup>This designation is without prejudice to positions on status, and is in line with UNSCR 124 and the ICJ Opinion on the Kosovo Declaration of Independence.

#### Reduced EU livestock populations in 2019

Populations of the four main categories of livestock in the EU were all lower in 2019 than in 2018 (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, the declines coincided with the 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 millennium, with there being 8.9 million less head in Spain.

Figure 3.2.2: Livestock population, EU-27, 2010-2019 (index 2010 = 100 based on heads)



Note: indices for sheep and goats correspond to the sum of the available data from a consistent set of Member States, which includes all the Member States with a significant number of sheep and goats.

Source: Eurostat (online data codes: apro\_mt\_lscatl, apro\_mt\_lspig, apro\_mt\_lspiep and apro\_mt\_lsgoat)

#### Meat production

Data is collected on the number and weight of carcasses at slaughterhouses, whose meat is deemed fit for human consumption. In this subchapter, 'meat' should be understood as the carcass weight from slaughterhouses.

#### **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.

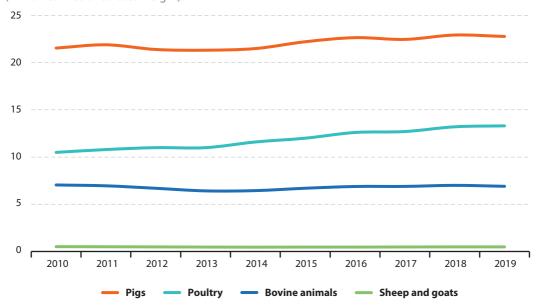
#### Dip in production of bovine meat in 2019 ...

The EU produced a provisional 6.9 million tonnes of bovine meat (beef and veal carcasses) in 2019, which was slightly less (–1.4 %) than in 2018. This decline should be seen in the context of steady rises that came after 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.

Half of the EU's beef (see Figure 3.2.4) was produced in three Member States: France (20.8 %), Germany (17.9 %) and Italy (11.7 %).

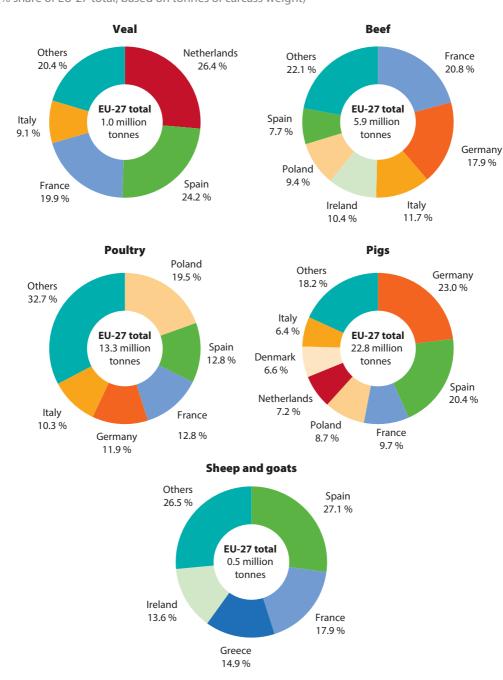
About 70 % of the EU's veal meat was also produced in three Member States: the Netherlands (26.4 %), Spain (24.2 %) and France (19.9 %).

**Figure 3.2.3:** Production of meat from slaughterhouses, by species, EU-27, 2010-2019 (million tonnes of carcass weight)



Source: Eurostat (online data codes: apro\_mt\_lscatl, apro\_mt\_lspig, apro\_mt\_lssheep and apro\_mt\_lsgoat)

**Figure 3.2.4:** Production of meat, 2019 (% share of EU-27 total, based on tonnes of carcass weight)



Note: EU-27 estimates for veal, poultry, sheep and goats meat. Source: Eurostat (online data code: apro\_mt\_pann)

#### ... and strong decline in real-terms price

For the EU as a whole, the average real-terms (deflated) price for cattle in 2019 was down sharply (a provisional –4.1 %) on the average in 2018. This continued the decline from the relative highs of 2012 and 2013.

#### **PIG MEAT**

## Pig meat production in 2019 dipped from the peak in 2018 ...

The EU produced a provisional 22.8 million tonnes of pig meat in 2019, a slight decline (-0.7 %) from the relative peak level in 2018. To put this in context, production in 2019 remained 1.2 million tonnes higher than in 2010.

The two main pig meat producing Member States are Germany (5.2 million tonnes in 2019) and Spain (4.6 million tonnes). Whereas production in Germany was lower in 2019 (down –2.2 %), which was the third successive annual contraction, it rose once again in Spain (+2.4 %, the sixth successive year of growth). There was also another year of strong growth in the Netherlands (+6.0 %).

#### ... but the real-terms price of pigs jumped

The average real-terms (deflated) price of pigs in the EU jumped (a provisional +15.7 %) in 2019, back up to its level of 2017.

#### **SHEEP AND GOAT MEAT**

#### Unchanged sheep and goat meat production ...

The EU produced an estimated 0.5 million tonnes of sheep and goat meat in 2019, which was similar to the level in 2018. Sheep meat accounted for the vast majority (about 90 %) of the combined total output.

Three quarters of the EU's sheep meat was produced in Spain (27.6 % in 2019), France (18.4 %), Ireland (15.0 %) and Greece (11.7 %). The main producers of goat meat among the EU Member States are Greece and Spain.

#### ... but a lower real-terms price

The average real-terms (deflated) price for sheep and goats across the EU in 2019 was lower (a provisional –3.0%) than in 2018 and down markedly (–7.5%) on the average in 2015.

#### **POULTRY**

#### Poultry production in EU at high in 2019 ...

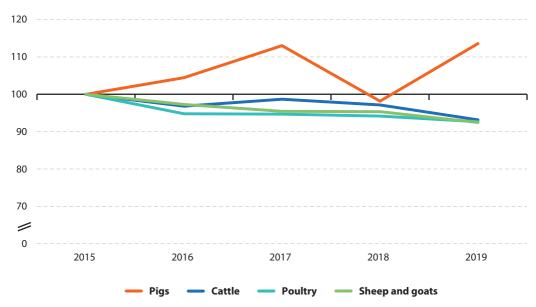
The EU produced an estimated 13.3 million tonnes of poultry meat in 2019, a new high. Against the backdrop of an upward trend, this represented a small increase in production (+0.8 %). It pushed EU production some 2.8 million tonnes above the level recorded in 2010, a cumulative rise of a little over 25 %.

In 2019, the main poultry meat producers in the EU include Poland (2.6 million tonnes), Spain (1.7 million tonnes), France (1.7 million tonnes), Germany (1.6 million tonnes) and Italy (1.4 million tonnes). Among these key producers, production levels in Italy (+6.3 %), Spain (+4.2 %) and Poland (+1.9 %) rose more sharply than in the EU-27 as a whole and in Germany (both +0.8 %), but declined in France (-2.0 %).

## ... but average real-terms price for poultry declined

When feed prices were particularly low in the period between 2013 and 2016, and with poultry meat production continuing to expand, the real-terms (deflated) price for poultry decreased. Although this downward pressure eased in 2017 and 2018, there was a further decline in 2019 (a provisional – 1.6 % in real terms).

**Figure 3.2.5:** Deflated price indices for selected animal outputs, EU-27, 2015-2019 (index 2015 = 100)



Source: Eurostat (online data code: apri\_pi15\_outa)

#### 3.3. Milk

The abolition of milk quotas in 2015 resulted in a restructuring and further modernisation of the sector, including a re-orientation towards the most productive herds, more intense cross-border milk flows and increased volatility in production. Over recent years, milk prices have followed the global milk fat market.

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

#### Milk production

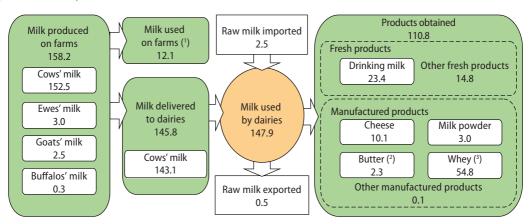
## Another rise in raw milk production to 158.2 million tonnes in 2019. 96 % of which was cows' milk

The production of raw milk on the EU's farms was a provisional 158.2 million tonnes in 2019, which

represents a year-on-year increase of 1.4 million tonnes. This higher level of EU-27 production can be put in some context by looking at production levels in the run-up to the abolition of quotas; EU farms produced 149.7 million tonnes of raw milk in 2014 and 145.1 million tonnes in 2013.

In 2019, the vast majority of raw milk is delivered to dairies; only 12.1 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 145.8 million tonnes of milk delivered to dairies, 143.1 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-27, 2019 (million tonnes)



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

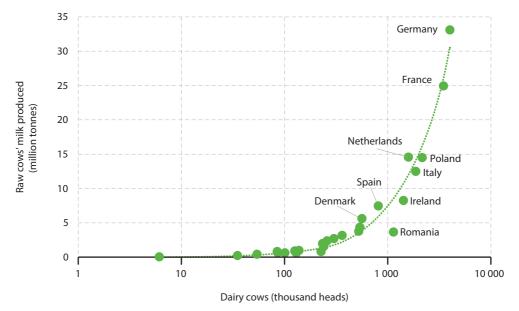
Source: Eurostat (online data codes: apro\_mk\_pobta and apro\_mk\_farm)

## 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 2019, reaching 7 346 kg per dairy cow. As a national average, apparent yields were highest

in Denmark (9 973 kg per cow), Estonia (9 656 kg per cow) and Spain (9 178 kg per cow) and lowest in Bulgaria (3 627 kg per cow) and Romania (3 217 kg per cow). Among the main cows' milk producing Member States, apparent yields were well-above the EU-27 average in Germany and the Netherlands but below average in Poland and Italy.

Figure 3.3.2: Dairy cows, milk production and the apparent milk yield, 2019



Note: the line represents the average apparent milk yield across the EU (7 346 kg per cow) for a variable herd size. Countries above the line had a higher apparent yield per cow than the EU-27 average, and vice-versa.

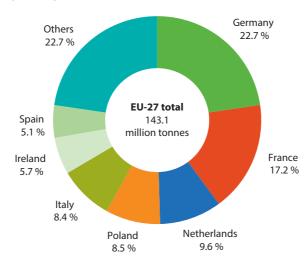
Source: Eurostat (online data codes: apro mk farm and apro mt |scat|)

## 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 crossborder milk flows between farms and between dairies. Nevertheless, this is relatively limited.

In 2019, one fifth of the EU's cows' milk was produced by farms in Germany and a similar proportion (22.7 %) was processed by German dairies. Indeed, just as Germany, France, the Netherlands, Poland and Italy together provided about two thirds (64.3 %) of the raw cows' milk produced, so they also accounted for a little over two thirds (66.5 %) of cows' milk collected by dairies (see Figure 3.3.3).

**Figure 3.3.3: Collection of cows' milk by dairies, 2019** (% share of EU-27 total, tonnes)

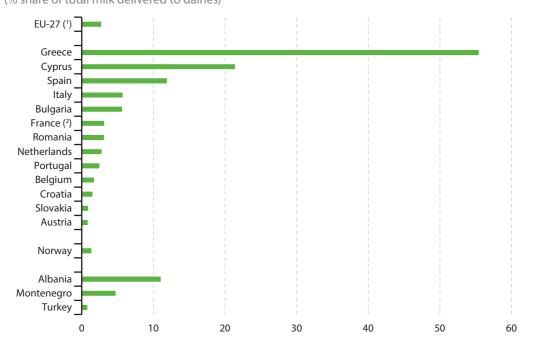


Source: Eurostat (online data code: apro\_mk\_pobta)

Whilst cows' milk is the major milk used by EU dairies, in several Member States other milks contribute significantly to milk production. In 2019, Spain produced 1.0 million tonnes of milk from ewes and goats, with Greece and France both producing 0.8 million tonnes. Italy 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 buffalos.

Whereas the collection of these other milks was dwarfed by that from cows in most countries, there were some exceptions. A majority (55.4 %) of the milk delivered to dairies in Greece came from ewes and goats in 2019 (see Figure 3.3.4). A little over one fifth (21.4 %) of the milk delivered to dairies in Cyprus also came from ewes and goats.

**Figure 3.3.4:** Milk from animals other than cows, 2019 (% share of total milk delivered to dairies)



Note: little or no milk from animals other than cows is produced in the Member States that are not shown in this figure.

- (1) Estimate.
- (2) Provisional.

Source: Eurostat (online data code: apro\_mk\_pobta)

#### Small decline in real-terms price of milk in 2019

The average real-terms (deflated) price of milk has fluctuated sharply in recent years (see Figure 3.3.5); a strong decline in 2016 was followed by a strong rebound in 2017. Compared with these changes, the real-terms price of milk was relatively stable in 2019 (–0.6 % on average).

Among the principal milk-producing Member States, there were stronger than average declines in the real-terms price of milk in 2019 in Ireland (–5.6%), Germany (–3.3%), Poland (–1.9%) and the Netherlands (–1.3%). There were also higher prices, particularly in Italy (+4.4%), Spain (+2.4%) and France (+2.3%).

**Figure 3.3.5:** Deflated price indices for milk, EU-27, 2015-2019 (2015 = 100)



Source: Eurostat (online data code: apri\_pi15\_outq)

#### Milk products

## Two thirds of all whole milk available to dairies in the EU-27 is 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 (13).

In 2019, 145.9 million tonnes of the whole milk available to the EU's dairy sector was processed.

Across the EU, the production of 2.3 million tonnes of butter and so-called 'yellow products' in 2019 required 44.0 million tonnes of whole milk (see Table 3.3.1). The production of butter and yellow products also generated 40.4 million tonnes of skimmed milk. Together with the 13.3 million tonnes generated through the fabrication of cream, this skimmed milk was used for the processing of other dairy products.

Indeed, 15.5 million tonnes of skimmed milk together with 57.6 million tonnes of whole milk were used to produce 10.1 million tonnes of cheese in the EU in 2019. Together, the production of cheese and butter used a little more than two thirds (69.6 %) of all the whole milk available to dairies in the EU.

The EU-27 also produced 23.4 million tonnes of drinking milk, from 9.8 million tonnes of skimmed milk and 13.6 million tonnes of whole milk.

Drinking milk accounted for about one tenth (9.3 %) of all the whole milk used by dairies in 2019.

In 2019, 3.0 million tonnes of dairy powder products were produced in the EU-27 from 20.7 million tonnes of skimmed milk and 4.5 million tonnes of whole milk.

Germany produced about one fifth of the EU's drinking milk (19.6 %), butter (18.7 %) and cheese (22.7 %) in 2019. The other main cheese producing Member States were France (a provisional 1.9 million tonnes, 19.2 % of the EU total), and Italy (1.3 million tonnes, 13.1 % of the EU total).

**Table 3.3.1:** Utilisation of milk and dairy products obtained, EU-27, 2019 (million tonnes)

	Utilisation of milk		Product
	Skimmed milk	Whole milk	obtained
Total	2.0	145.9	-
Sub-total of processes generating skimmed milk	-53.7	60.1	-
Butter and yellow products	-40.4	44.0	2.3
Cream	-13.3	16.0	2.5
Sub-total of processes consuming skimmed milk	55.7	85.8	-
Drinking milk	9.8	13.6	23.4
Powder products	20.7	4.5	3.0
Concentrated milk	0.9	1.4	1.0
Acidified milk	1.6	6.0	7.7
Buttermilk	0.4	0.0	0.5
Cheese	15.5	57.6	10.1
Milk based drinks	1.0	0.7	1.8
Caseins	6.0	0.0	0.2
Other fresh products	-0.2	2.1	2.2

Source: Eurostat (online data codes: apro\_mk\_pobta and apro\_mk\_farm)

### 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 levels 1 or 2.

#### 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

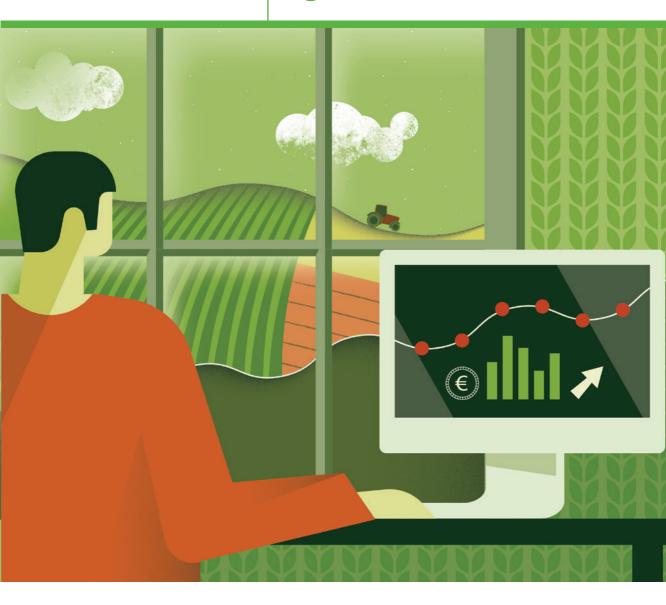
Milk and milk product statistics are collected under Decision 1997/80/EC and implementing Directive 1996/16/EC. They cover farm production and the utilisation of milk, as well as the description (structure), collection and production activity of dairies. Due to the small number of dairy enterprises, 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 are based on voluntary agreements between Eurostat and the Member States. 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 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 FU

# 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.

The European Green Deal (14) sets out how to make Europe the first climate-neutral continent by 2050. The Farm to Fork Strategy (15), for a fair, healthy and environmentally-friendly food system, was adopted by the European Commission on 20 May 2020 and lies at the heart of the Green Deal. Among other things, it addresses comprehensively the challenges of sustainable food systems by recognising that 'food production still results in [...] pollution, contributes to the loss of biodiversity and climate change, and consumes excessive amounts of natural resources' (16). This is a reason for the goal to increase the area under organic farming to 25 % of the utilised agricultural area by 2030, a goal that goes hand-in-hand with measures to change resource performance. Individual targets to reduce dependency on chemical pesticides and antimicrobials, reduce excess fertilisation, and reduce waste will pave the way for a more sustainable food-chain.

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 for 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:

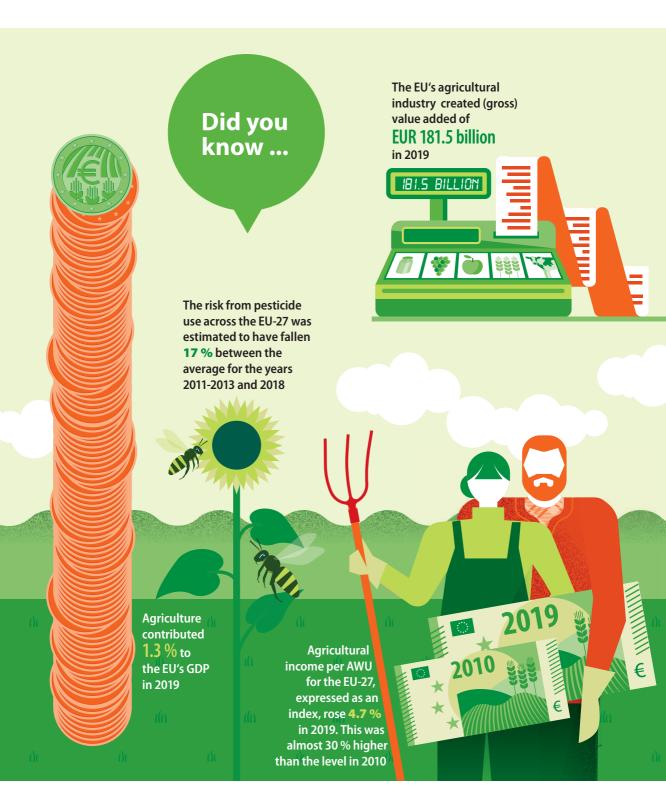
- the economic viability of agriculture;
- the income generated by farmers;
- the structure and composition of agricultural production and the inputs used in that production; and
- the relationships between prices and quantities of both outputs and inputs.

The resource performance of the agricultural sector is further enriched by analysing key targets of the European Green Deal. For this reason, analyses on sales of pesticides and the risks from their use, on fertiliser consumption, and on the generation of waste are also provided in this chapter.

<sup>(14)</sup> For more information, see: A European Green Deal.

<sup>(15)</sup> For an overview of the strategy and related documents, see https://ec.europa.eu/food/farm2fork\_en.

<sup>(6)</sup> For more information, see the Communication from the Commission on the European Green Deal.



## 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 1.3 % to the EU's GDP in 2019

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 beverage processing industry. The agricultural sector contributed EUR 176.4 billion towards the EU's overall GDP in 2019. 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 2019, the 16th largest economy among the FU Member States.

This contribution (gross value added at producer prices, which is comparable to GDP at market prices), 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 181.5 billion in 2019

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 and the costs of the services and goods used in the production process, was an estimated EUR 181.5 billion in 2019. 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 EU's agricultural industry created added value of EUR 0.77. Whilst this relative value added was lower than the EUR 0.79 in 2017, it was still higher than all the other years since 2007.

## The value of the output produced by the EU's agricultural industry was an estimated EUR 418.0 billion in 2019

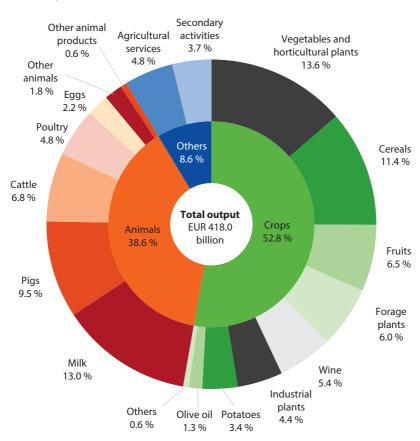
The value of everything that the EU's agricultural industry produced in 2019 was an estimated EUR 418.0 billion; this includes the value of crops, of animals, of agricultural services, as well as some goods and services that were not strictly agricultural but which could not be separately measured.

About one half (52.8 %) of the value of the total output of the EU's agricultural industry in 2019 came from crops (EUR 220.5 billion), within which vegetables and horticultural plants and cereals were the most valuable crops (see Figure 4.1.1). About two fifths (38.6 %) of total output came from animals and animal products (EUR 161.4 billion), a majority coming from just milk and pigs. Agricultural services (EUR 20.0 billion) and inseparable non-agricultural activities (EUR 16.0 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 (58.6 %) of the total output value of the EU's agricultural industry came from the 'big four' of France (EUR 77.0 billion), Germany (EUR 58.2 billion), Italy (EUR 57.8 billion) and Spain (EUR 51.7 billion). The next grouping of Member States were the Netherlands (EUR 29.1 billion), Poland (EUR 26.4 billion) and Romania (EUR 19.0 billion). Three quarters (76.4 %) of the total value of EU's agricultural industry in 2019 came from these seven Member States.

**Figure 4.1.1:** Output of the agricultural industry, EU-27, 2019 (% share of total output)



Note: values at basic prices.

Source: Eurostat (online data code: aact\_eaa01)

#### Intermediate consumption costs for the EU's agricultural industry were an estimated EUR 236.5 billion in 2019

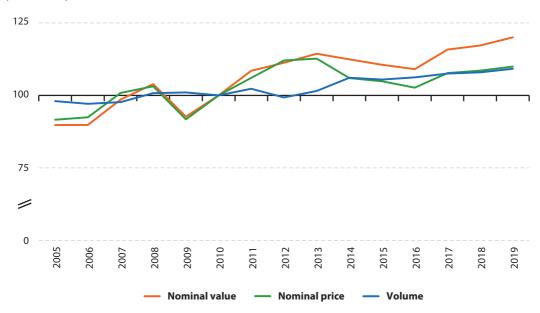
Producing all this output incurred costs. Farmers had to make purchases of goods and services to be used as inputs in the production process; they bought things like seeds, fertilisers, animal feedingstuffs and fuel for their tractors as well as veterinary services, among other things. These input costs are termed 'intermediate consumption' in an accounting context. Intermediate consumption costs for the agricultural industry came to a total of EUR 236.5 billion for the EU as a whole in 2019.

Some costs are associated with the farming of animals; they required feed, which accounted for over one third (37.7 %) 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 (5.4 % of total costs), many used plant protection products, herbicides, insecticides and pesticides (4.8 %) and fertilisers and soil improvers (6.5 %). Other costs are common to all types of farm, independent of whether specialist or mixedtvpe.

#### The value of the output produced by the EU's agricultural industry reached a new peak in 2019

The estimated value of agricultural output in 2019 rose by 2.4 % in nominal terms to a new high, confirming the upward trend since 2009 (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 +1.3 %) as well as in the volume of output (an estimated +1.1 %).

Figure 4.1.2: Output and price indices for the agricultural industry, EU-27, 2005-2019 (2010 = 100)



Note: values at basic prices.

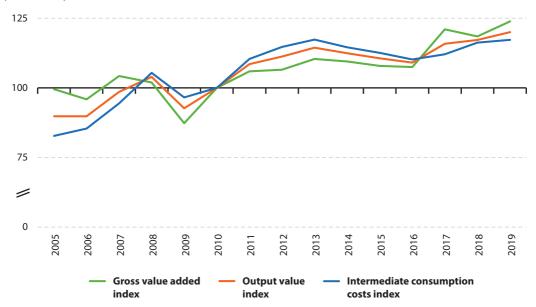
Source: Eurostat (online data code: aact eaa05)

This rise in the output value of the EU's agricultural industry in 2019 was driven by the developments in the values recorded in Germany (+10.6 %), Poland (+6.0 %), Romania (+4.2 %) and the Netherlands (+3.5 %). It should be noted that the highest rate of increase was in Latvia (+21.1 %). By contrast, there were declines in the values of the agricultural industries in a number of countries, including, France (–1.6 %), Italy (–1.2 %) and Spain (–0.9 %).

## The gross value added generated by the EU's agricultural industry rose to a new peak in 2019

The cost of the intermediate goods and services used by the agricultural industry in 2019 was slightly higher than a year earlier (an estimated +0.8 %). This rate of increase was less, however, than the rate of increase in the value of agricultural output (an estimated +2.4 %), which resulted in a strong rise (+4.6 %) in the gross value added generated by the agricultural industry. Indeed, the gross value added generated by the agricultural industry in 2019 rose to a new peak level.

**Figure 4.1.3:** Indices of the value of output, intermediate consumption costs and value added generated by the agricultural industry, EU-27, 2005-2019 (2010 = 100)



Note: values at basic prices.

Source: Eurostat (online data code: aact\_eaa05)

#### 4.2. Agricultural labour productivity

The economic 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 2019

Agricultural labour input in the EU was the equivalent of an estimated 8.7 million full-time workers in 2019. 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 6.4 million full-time workers in 2019. Salaried labour was the equivalent of 2.3 million full-time workers in 2019. In a few Member States. more salaried agricultural labour was used in 2019 than in 2018 (see Figure 4.2.1), in part reflecting hiring requirements at seasonal peaks. This was often in contrast to the overall decline in the total amount of agricultural labour used.

There is a long-established downward trend in the number of people working in the EU's agricultural sector; during the period between 2005 and 2019, the average rate of decline in the volume of agricultural labour used across the EU as a whole was 2.5 % per year. The downward trend continued in 2019, at much the same rate (–2.2 %) as the average for 2005-2019.

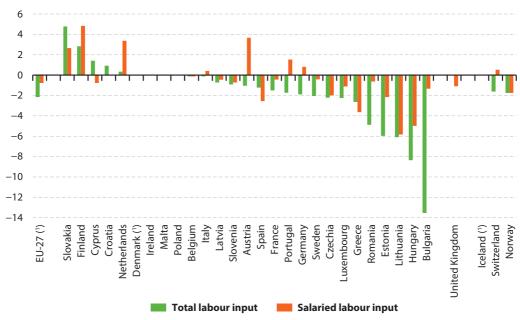
Lower volumes of labour input were used in most Member States in 2019, with particularly stark contractions continuing in Romania (–4.9 %), Estonia (–6.0 %), Lithuania (–6.1 %), Hungary (–8.4 %) and Bulgaria (–13.5 %). By contrast, the volume of total agricultural labour used in Slovakia was considerably higher (+4.8 %) in 2019 than in 2018, although this should be seen against a persistent and strong contraction over the longer-term. There were also rises in Finland (+2.8 %), Cyprus (+1.4 %), Croatia (+0.9 %) and the Netherlands (+0.3 %).

#### 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 2019 (see Figure 4.2.2); the sharpest declines were in Bulgaria (an average –8.2 % per year), Slovakia (–5.5 % per year), Estonia (–4.8 % per year) and Latvia (–4.7 % 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 (+1.6 % per year on average) and Ireland (+0.6 % per year on average).

Figure 4.2.1: Agricultural labour input, 2018-2019

(%, annual rate of change)



(1) Estimated.

Source: Eurostat (online data code: aact\_ali02)

Figure 4.2.2: Agricultural labour input, 2005-2019

(%, average annual rate of change)



(1) Estimated.

(2) Estimated for 2010 to 2019.

Source: Eurostat (online data code: aact\_ali02)

The contraction in the total work input from nonsalaried labour between 2005 and 2019 was more pronounced than for salaried labour at the level of the EU as a whole (-3.2 %) per year on average compared with -0.3 % per year). There were higher levels of salaried labour input in Ireland (+4.6 % per year on average), Luxembourg (+3.5 % per year on average), Austria (+2.8 % per year on average), Denmark (+2.1 % per year on average) and Poland (+2.0 % per year on average) among others, but sharp declines in Slovakia (-4.6 % per year on average), Greece (-3.6 % per year on average), Czechia (-3.2 % per year on average) and Romania (-3.0 % per year on average).

#### Agricultural income as defined by real factor income per AWU for the EU-27 rose moderately in 2019 (+4.7 %)

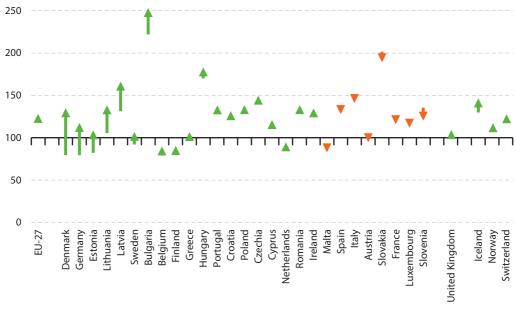
Agricultural income, as defined by deflated (real) factor income per AWU and expressed as an index (called indicator A), for the EU as a whole was

an estimated 4.7 % higher in 2019 than it was in 2018. This reflected a slightly higher (+2.5 %) level of factor income than in 2018 that was notionally shared amongst a smaller agricultural labour input (-2.2%).

A majority of Member States recorded increases in this index of agricultural income in 2019 (see Figure 4.2.3). The sharpest upturns were in Denmark (+69.4 %), Germany (+48.0 %), Estonia (+32.5 %), Lithuania (+31.3 %) and Latvia (+26.7 %), all reflecting strong rebounds from the relatively steep declines in 2018 when there were severe drought conditions.

The more moderate rise in agricultural income per AWU at the level of the EU as a whole reflected lower agricultural incomes in three of the 'big four' agricultural producer-Member States; Spain (-3.2 %), France (-6.4 %) and Italy (-3.9 %) registered declines. The sharpest rate of decrease was recorded for Slovenia (-11.4%), a year after it recorded the sharpest increase among Member States.

Figure 4.2.3: Agricultural income per annual work unit (indicator A), 2018-2019 (2010 = 100)



⇒ 2019 index point (at arrow tip) 

Note: Member States are ordered from highest rate of change 2018-2019 to lowest, positive to negative. Source: Eurostat (online data code: aact\_eaa06)

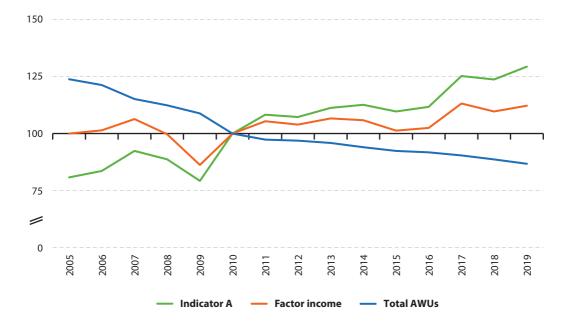
#### The upward trend in the index of agricultural income for the EU-27 resumed in 2019

Agricultural income per AWU for the EU as a whole rose to a new high in 2019. This reflected a similar

development in factor income, accompanied by a continuing contraction in agricultural labour input. Agricultural income per AWU for the EU as a whole was 29.3 % higher than the level in 2010.

**Figure 4.2.4:** Agricultural income per annual work unit (indicator A) and key components, EU-27, 2005-2019

(2010 = 100)



Source: Eurostat (online data codes: aact\_eaa06, aact\_eaa05, and aact\_ali02)

# 4.3. Resource performance of the agricultural sector

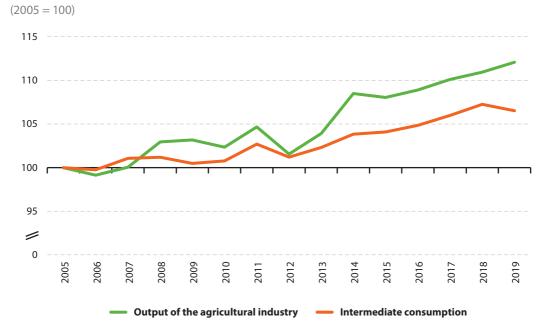
There is increasing interest in the efficiency with which resources are used (17). In order to become more sustainable, an economy would need to decouple economic growth from resource use and its environmental impact.

To better monitor this sustainability, prices should reflect the real costs of resource use. However, 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 can be derived, however, 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. 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 kilograms or tonnes. 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.

(17) The Europe 2020 strategy includes the *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:** Volume indices of agricultural output and of intermediate consumption, EU-27, 2005-2019



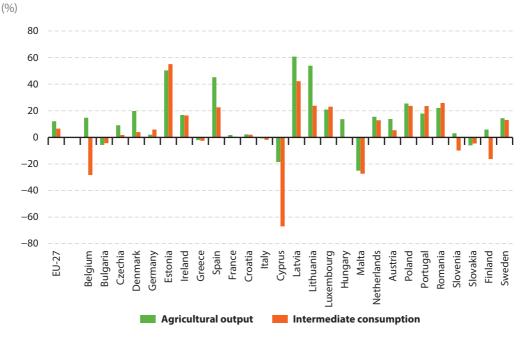
Source: Eurostat (online data code: aact\_eaa05)

#### Rising output volume of agricultural industry but with rising volume of input goods and services as a whole

Over the reference period between 2005 and 2019, there was a relatively steady upward trend in the output volume of the EU's agricultural industry (a total increase of +12.1 %). To a large extent, higher output volumes were underpinned by a greater volume (+6.5 %) of input goods and services consumed (see Figure 4.3.1). The mediumterm trends suggest that there is little evidence of any decoupling of output growth from resource use at the EU level, although figures for 2019 hint that a change is possible.

Among Member States, there was also little suggestion of an apparent decoupling of agricultural output growth from intermediate consumption resource growth, with a few notable exceptions. Over the period between 2005 and 2019, agricultural industry output in Belgium grew by 14.8 % at the same time as the volume of intermediate consumption goods and services consumed declined by 28.4 %. Likewise, Finland and Slovenia also recorded rises in agricultural output over the same period (+5.9 % and +3.1 % respectively) at the same time as a reducing their consumption of intermediate consumption goods and services (-16.4% and -9.9% respectively). 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:** Change in the volume indices of agricultural output and of intermediate consumption, 2005-2019



Source: Eurostat (online data code: aact\_eaa05)

## Sales of pesticides unchanged but risk from pesticide use in decline

Sales of pesticides in the EU-27 were about 360 000 tonnes in 2018 and this was more or less unchanged in the period from 2011. The data on pesticide sales cover all types of sales, not only for use in farming but also, among others, forestry. The types of active substances used in pesticides are changing and volume is not indicative of the potential hazards associated with the use of pesticides. Harmonised risk indicator 1 (HRI1) estimates the trend in the risk from pesticide use (18); it covers all sectors of the economy.

The risk from pesticide use has been in decline over much of the past decade across the EU as a whole; compared with the average between the years 2011 to 2013, the risk from pesticide use is estimated to have declined by about 17 % through to 2018 (see Figure 4.3.3). During this timeframe, the risk of pesticide use declined in a majority of Member States, the steepest declines being in Romania (-52 %) and Denmark (-48 %). There were a few Member States, however, where the risk rose; among others, in Latvia the risk rose an estimated 40 % and in Finland an estimated 44 %. Such increases may occur for countries starting from a baseline much lower than the EU-average. Exchanging the use of low-volume chemical pesticides in storage buildings for the use of high-volume inert gases, and obligatory applications to fight particular plant problems are other reasons for an increase in HRI1.

#### Fertiliser consumption remains high

The consumption volume of mineral fertilisers, nitrogen and phosphorus, by agriculture remained high in the period 2007 to 2018; an estimated 11.3 million tonnes were used in 2018 (19).

When the nutrients used in agriculture are not absorbed by crops, their use is considered excessive and is linked to environmental issues regarding water pollution, the climate (20) and reduced biodiversity. The gross nitrogen balance provides an indication of the potential surplus of nitrogen (N) on agricultural land (kg N per hectare per year). The gross nitrogen balance for the EU-27 decreased from an estimated average of 51 kg N per hectare per year in the period 2004-2006 to 47 kg N per hectare per year in the period 2013-2015 (21). Mineral fertilisers accounted for 45 % of the nitrogen input in the EU in 2014, manure accounting for another 38 %.

The gross phosphorus balance provides insight into links between agricultural phosphorus use, losses of phosphorus to the environment, and the sustainable use of soil nutrient resources. A persistent surplus indicates potential environmental problems, such as phosphorus leaching resulting in pollution of drinking water and eutrophication of surface waters. A persistent deficit can impair the resource sustainability of agriculture soil through soil degradation, or soil mining, resulting in declining fertility in areas under crop or forage production. The gross phosphorus balance for the EU was 1.2 kg per hectare per year in the period 2013-2015, down from 3.9 kg per hectare per year in the period 2004-2006. This means that although there remains an annual surplus, the size of this annual surplus has declined; in the period between 2013-2015 it was about 30 % of what it was in the early 2000s (22).

<sup>(18)</sup> For more information, see the European Commission's webpage on harmonised risk indicators.

<sup>(19)</sup> For more information, see the Statistics Explained article:

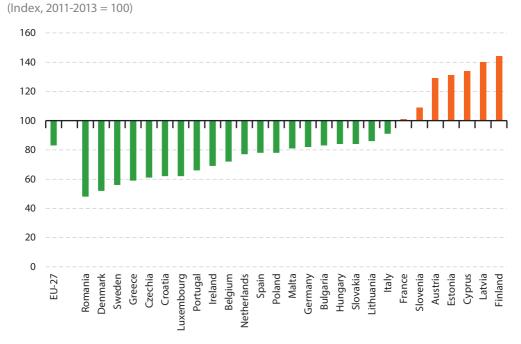
Agri-environmental indicator — mineral fertiliser consumption

<sup>(20)</sup> OECD (2019), Accelerating Climate Action: Refocusing policies through a Well-being lens.

<sup>(21)</sup> For more information, see the Statistics Explained article: Agri-environmental indicator — gross nitrogen balance.

<sup>(22)</sup> For more information, see the Statistics Explained article: Agri-environmental indicator — risk of pollution by phosphorous.





Source: Eurostat (online data code: aei\_hri)

#### Data sources and availability

The 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 industry 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.

Since the reference year 2011, statistics on pesticides have been collected under Regulation (EC) No 1185/2009, which established a common framework for the systematic production of Community statistics on sales and use of those pesticides which are plant protection products. The 'harmonised classification of substances' classifies each active substance in a major group, category of product and chemical class. For the purpose of this chapter, the term 'pesticides' refers to plant protection products and covers the following categories:

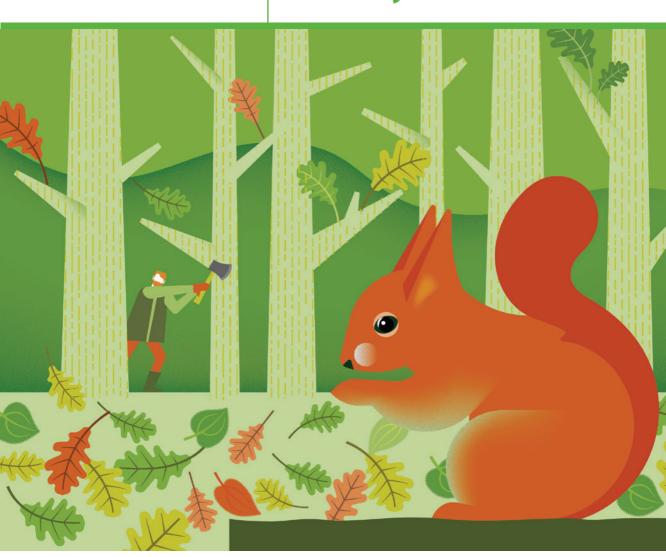
- fungicides and bactericides;
- herbicides, haulm destructors and moss killers;
- insecticides and acaricides;
- molluscicides;
- plant growth regulators;
- other plant protection products.

Harmonised risk indicators were established in 2019 to estimate the trends in risk from pesticide use under Directive 2009/128/EC on the sustainable use of pesticides. Eurostat disseminates harmonised risk indicator 1 based on sales of pesticides. The indicator is an index with a baseline set to the average for 2011-2013.

Mineral fertiliser consumption is indicated by the evolution of the consumption of the nutrients nitrogen and phosphorus in mineral fertilisers by agriculture over time. Eurostat publishes two data sets on inorganic fertilisers. The first is collected from Member States and is an estimate of the nitrogen and phosphorus use in agriculture. The other data set is estimated consumption based on the sales of mineral fertiliser in the EU; these data are provided by a European trade association, Fertilizers Europe. The figures estimated by Fertilizers Europe are based on sales of mineral fertiliser and mostly correspond with the estimates of nitrogen and phosphorus use reported by countries, although they cannot be directly compared due to methodological differences.

# 5

# **Forestry activities**



#### Introduction

Forests are one of the world's most important renewable resources, providing a wide range of benefits to society. Forests capture and store large quantities of carbon, thereby playing an important role in efforts to mitigate climate change. They impact positively on air and water quality, and are also a home to biodiversity. By binding soil, they limit soil erosion, protecting settlements and infrastructure from mudslides, while limiting the amount of sediment that may flow into rivers and lakes.

Forests are also an important resource for employment and economic development, in particular within rural areas. The vast majority of the EU's forests are managed. This makes forestry an important land use activity, which provides a basis for economic diversification in rural areas. In addition to forestry and logging activities, the processing of wood and downstream industries using wood as an input are vital to economic development in many (rural) regions, as are a range of sporting, touristic and hospitality-related services that are provided by business (for example, hunting, fishing, hotels, campsites, wellness centres).

The common agricultural policy (CAP) supports the vibrancy and economic viability of rural communities through rural development measures. Such measures provide the main source of support for the protection and the sustainable management of EU forests. Forestry measures help EU Member States to support multifunctional forests and sustainable forest management and combine them with other rural development measures (for example, advisory services, training, investments, cooperation) to address specific regional needs. They support the expansion of forests through afforestation and the establishment and renewal of agroforestry systems. Other measures supporting the sustainable management of forests include: fire and natural disasters prevention; restoration after damage; investment for climate change adaptation and provision of environmental or amenity services; and, compensation for Natura 2000 and voluntary commitments. Moreover, rural development policy supports investments to improve the economic value of forests and preindustrial wood processing.

The EU's forest strategy (2015-2020) (<sup>23</sup>) provides a coherent framework for EU forest-related policies and the national forestry policies of the individual EU Member States. It 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.

(23) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A new EU forest strategy: for forests and the forestbased sector; COM(2013) 659 final. The European Green Deal (<sup>24</sup>) is a comprehensive and ambitious package of measures to achieve a sustainable green transition, such that the EU will be carbon neutral by 2050. One of its many actions is a new EU forest strategy, a non-legislative initiative which, at the time of writing, the European Commission plans to prepare during the final quarter of 2020. Some of the key objectives for this new strategy will include effective afforestation, forest preservation and restoration, as well as reducing the impact and the extent of fires.

Climate change is having a negative impact on forest ecosystems, for example: an increase in forest fires; a higher risk of outbreaks of insects, pests or diseases; and more severe weather phenomena such as strong winds — all of which have the potential to damage forests. Forests themselves can play a role in mitigating climate change; as natural carbon sinks, they contribute to offset carbon emissions. It is therefore important to preserve, improve and increase forested areas, wetlands and peatlands in the EU (all of which play

a crucial role in removing carbon dioxide from the atmosphere), if the EU is to reach climate neutrality by 2050. Moreover, forests help deliver a number of ecosystem services, such as clean water and air, habitat for biodiversity, controlling erosion, and so on.

However, forest cover is shrinking in many parts of the world as a result of deforestation. As a follow-up to its communication on *Stepping up EU Action to Protect and Restore the World's Forests* (25), the European Commission intends to take regulatory and non-regulatory measures to promote imported products and value chains that do not involve deforestation and forest degradation.

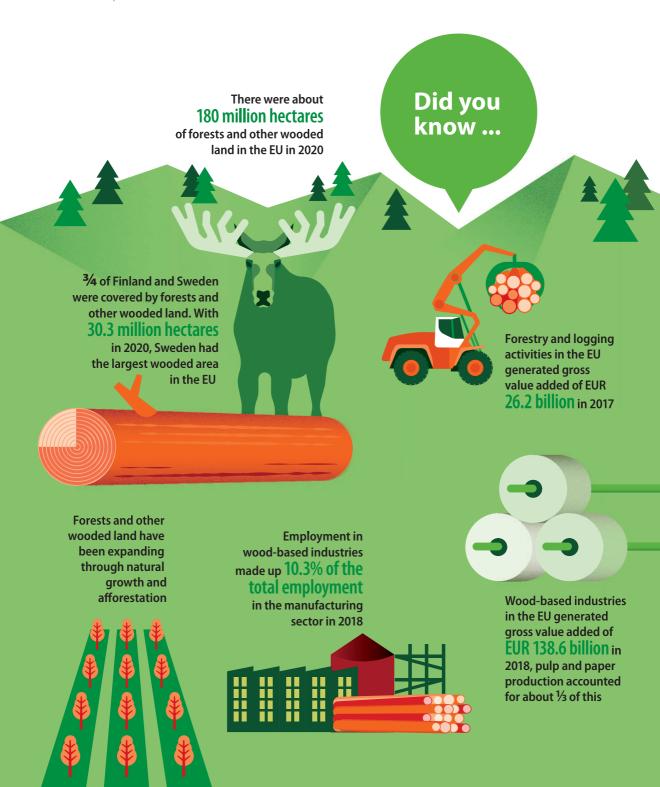
This chapter provides data on the EU's forest area, growing stock and timber resources. It also presents a range of economic and employment statistics for the forestry sector, on the volume of roundwood (<sup>26</sup>) and sawnwood (<sup>27</sup>) production, as well as information on the performance of and employment within the EU's wood-based manufacturing industries.

<sup>(24)</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *The European Green Deal*; COM(2019) 640 final.

<sup>(25)</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Stepping up EU Action to Protect and Restore the World's Forests; COM(2019) 352 final.

<sup>(26)</sup> 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.

<sup>(27)</sup> 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.



#### 5.1. Forests and other wooded land

#### What is a forest?

The Food and Agriculture Organization of the United Nations (FAO) defines a forest as lands of more than 0.5 hectares, with trees higher than 5 metres and a tree canopy cover of more than 10%, which are not primarily under agricultural or urban land use. The FAO defines other wooded land as land of more than 0.5 hectares with a canopy cover of 5-10% of trees able to reach a height of 5 metres in situ; or a canopy cover of more than 10% when smaller trees, shrubs and bushes are included.

The EU has a wide variety of forests, reflecting diversity in climatic conditions, soil types, 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.

Climate change poses a serious threat to Europe's forests. Changes in climate affect the forests' rate of growth, their land coverage and the diversity of species that they support, while higher average temperatures may make them more susceptible to damage by pests or generate opportunities for invasive species that have the potential to cause serious damage to forests. In addition, climate change influences the frequency and intensity of extreme weather events such as storms and droughts (for example, with more frequent forest fires resulting from the drier conditions).

Map 5.1.1 provides a detailed portrait of the distribution and diversity of forest types across Europe.

#### EU forests and other wooded land covered 180 million hectares

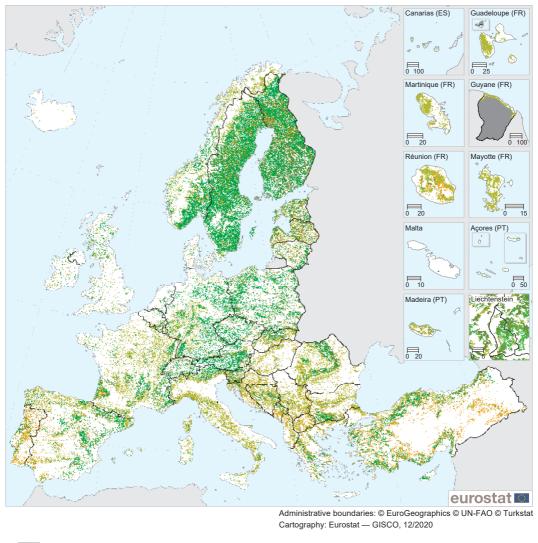
In 2020, there were an estimated 180 million hectares of forests and other wooded land in the EU-27, corresponding to around 5 % of the global forested area. This area covered by forests and other wooded land equated to 45.1 % of the EU-27's land area (in other words the total surface area excluding lakes and large rivers; see Figure 5.1.1), a slightly higher proportion than the area of land used for agriculture.

Through natural expansion of existing forests and afforestation (the creation of forests through planting trees and sowing tree seeds), the EU-27's forested area has increased slowly during the last few decades. Between 1990 and 2020, the area covered by forests and other wooded land was estimated to have increased by 10.2 million hectares (an overall increase of +6.0 %).

## Three quarters of Finland and Sweden were covered by forests and other wooded land

Among EU Member States, Sweden had the largest area of forests and other wooded land in 2020, an estimated 30.3 million hectares. The second largest area was recorded in Spain (28.0 million hectares), while Finland (23.2 million hectares) was the only other Member State to report in excess of 20 million hectares. France (18.1 million hectares), Italy and Germany (both 11.4 million hectares) had the next largest areas of forest and other wooded land. Together, these six Member States accounted for slightly more than two thirds of the EU-27's total area that was covered by forests and other wooded land in 2020.

Map 5.1.1: Forest cover, 2018 (based on the most common form of forest cover for a 1 km<sup>2</sup> grid)





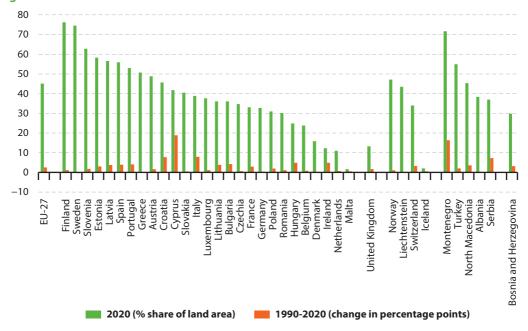
 $The \ designation \ of \ Kosovo \ is \ without \ prejudice \ to \ positions \ on \ status, and \ is \ in line \ with \ UNSCR \ 1244/1999 \ and \ the \ ICJ \ Opinion \ on \ the \ Kosovo \ declaration \ of \ independence.$ 

Source: Corine land cover 2018, European Environment Agency (EEA)

In relative terms, forests and wooded land accounted for at least half of the total land area in eight of the EU Member States in 2020. The highest shares — about three quarters of the total land area — were recorded in Finland (76.2 %) and Sweden (74.5 %); Slovenia (62.8 %) had the next highest share. In Estonia, Latvia, Spain, Portugal and Greece some 50-60 % of the total land area was covered by forests and other wooded land. By contrast, forest and other wooded land covered no more than 1.7 % of the total land area of Malta, with relatively low shares also recorded in the Netherlands (11.0 %), Ireland (12.3 %) and Denmark (15.8 %).

As noted above, there was a gradual increase between 1990 and 2020 in the share of EU-27 land area that was covered by forests and other wooded land (+2.6 percentage points). This pattern was repeated in the vast majority of EU Member States, with 24 of them recording a change within the range of 0.0-5.0 percentage points. Sweden was the only Member State to record a reduction (albeit modest) in its share of land area covered by forests and other wooded land (-0.4 percentage points). At the other end of the range, there were three Member States where the share of land area covered by forests and other wooded land increased between 1990 and 2020 at a notably faster pace: Croatia (+7.7 percentage points), Italy (+7.8 percentage points) and Cyprus (+18.9 percentage points).

Figure 5.1.1: Forest and other wooded land



Note: estimates.

Source: Food and Agriculture Organization of the United Nations — Global Forest Resources Assessment, 2020

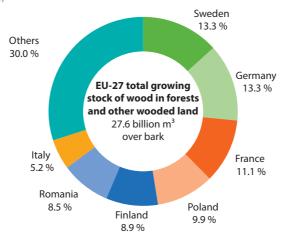
#### Sweden and Germany had the highest levels of timber resources

The timber resources available in forests and other wooded land not only reflect the area covered, but also the height and volume of trees that are growing, as well as forest density.

In 2020, the growing stocks of wood in forests and other wooded land in the FU-27 totalled

an estimated 27.6 billion cubic metres (see Figure 5.1.2). With almost 3.7 billion cubic metres (or 13.3 % of the EU-27 total) each, Sweden and Germany had the highest stocks of timber among EU Member States. There were also substantial stocks of wood in the forests and other wooded land of France (3.1 billion cubic metres or 11.1 %), Poland (2.7 billion cubic metres or 8.9 %), Finland (2.5 billion cubic metres or 8.9 %) and Romania (2.4 billion cubic metres or 8.5 %).

Figure 5.1.2: Growing stock of wood in forests and other wooded land, 2020 (% share of EU-27 total)



Note: estimates. Malta: not applicable. Belgium and Portugal: 2015 instead of 2020. Spain: other wooded land, 2015 instead of 2020. EU-27: based on data available for the individual EU Member States.

Source: Food and Agriculture Organization of the United Nations — Global Forest Resources Assessment, 2020

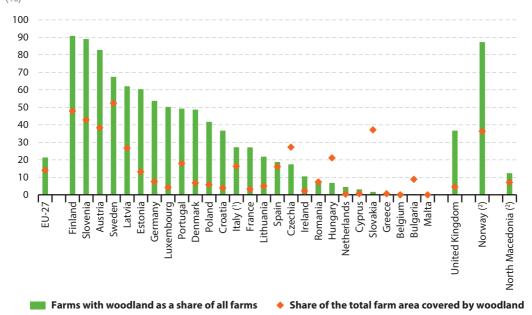
#### 9 out of every 10 farms in Finland and Slovenia had woodland (28)

The ownership structure of forests across the EU varies considerably from small family-run holdings, through publicly owned forests to large estates that are owned by investors. A majority of forested land in the EU is privately owned (around 60 %).

Many farm holdings in the EU also own woodland in addition to their agricultural areas, providing economic diversification that combines agricultural activities with forestry and logging. Ownership of woodland on farm holdings was relatively common among many of the

EU Member States that recorded large areas of forests and other wooded land. In Finland and Slovenia, around 9 out of 10 farms had some form of woodland on their holding (see Figure 5.1.3). The share of the total farm area that was covered by woodland was highest in Sweden (52.4 % of the land area owned by farm holdings), Finland (47.9 %) and Slovenia (42.8 %).

Figure 5.1.3: Woodland on farms, 2016 (%)



(¹) Provisional.

(2) 2013 instead of 2016.

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 the economic development of many rural regions across the EU. In addition to the economic benefits generated directly from forestry and logging activities, wood is also a vital input to downstream wood-based industries, while it is increasingly being used (again) as an energy source.

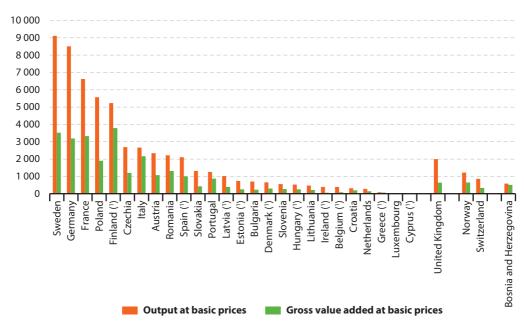
## Output from the EU-27's forestry and logging activities was valued at EUR 55.8 billion in 2017

In 2017, the total output of forestry and logging (and related secondary) activities in the EU-27 was valued at EUR 55.8 billion at basic prices (see

Figure 5.2.1); this was somewhat higher (+2.6 %) than the value recorded in 2016.

Unsurprisingly, the EU Member States with some of the largest timber resources tended to record the highest levels of output from forestry and logging activities. For example, the output of these activities in Sweden was EUR 9.1 billion (16.3 % of the EU-27 total), closely followed by Germany (EUR 8.5 billion, or 15.3 %). There were also relatively high levels of output recorded in France (EUR 6.6 billion, or 11.9 %), Poland (EUR 5.6 billion, or 10.0 %) and Finland (EUR 5.2 billion, or 9.4 %).

**Figure 5.2.1: Economic indicators for forestry and logging, 2017** (EUR million)



Note: Malta, not applicable.

(1) Estimates.

Source: Eurostat (online data code: for\_eco\_cp)

# Trees growing in managed forests and the removal of logs were the main contributors to the output of forestry and logging

Figure 5.2.2 shows the main elements that contribute towards the total output of forestry and logging activities. In 2017, the largest contributions were generally made by the growth of forest trees (net increment) in managed forests (29) or by the output from logging activities (wood in the rough, hereafter referred to as industrial roundwood). However, a few EU Member States had a relatively high degree of specialisation in non-wood products (for example, cork or berries) or other forms of output (such as forestry-related services or products from secondary activities).

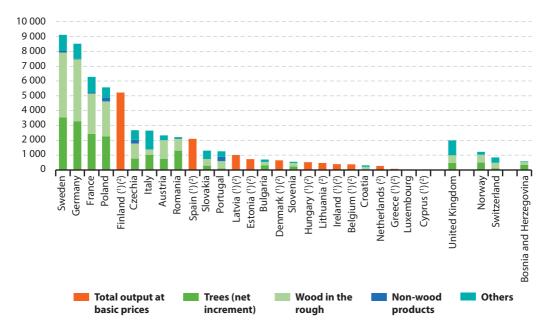
In Sweden, the output of industrial roundwood (logs) in 2017 was valued at EUR 4.4 billion (almost half of total forestry and logging output in Sweden). Germany also had a relatively high

level of output for industrial roundwood (EUR 4.2 billion), followed by France (EUR 2.7 billion) and Poland (EUR 2.4 billion).

Sweden also recorded the highest level of output among the EU Member States for the growth of forest trees (net increment) in managed forests (EUR 3.6 billion in 2017, which was almost 40 % of its forestry and logging output). Once again, the next highest levels of output were recorded for Germany (EUR 3.3 billion), France (EUR 2.4 billion) and Poland (EUR 2.3 billion).

Portugal was the main producer of cork in the EU; the output value of its non-wood products was EUR 282 million in 2017, more than one fifth (22.4 %) of its total output for forestry and logging.

**Figure 5.2.2:** Output at basic prices for forestry and logging, 2017 (EUR million)



Note: Malta, not applicable.

Source: Eurostat (online data code: for\_eco\_cp)

<sup>(1)</sup> Estimates

<sup>(2)</sup> Breakdown by type of product: partial information or not available.

#### Gross value added from forestry and logging was EUR 26.2 billion in 2017

Gross value added is defined as the value of output at basic prices minus the cost of goods and services consumed as intermediate inputs (at purchaser prices) to generate that output. In 2017, the gross value added of forestry and logging in the EU-27 was EUR 26.2 billion; this marked an increase (+1.5 %) on the level recorded in 2016. To put this into some context, forestry and logging activities accounted for 0.2 % of EU-27's total gross value added in 2017, with the gross value added of the EU-27's forestry and logging activities being approximately the same size as the GDP of Latvia.

Just over half of the EU-27's total value added for forestry and logging came from four EU Member States: Finland, Sweden, France and Germany each recorded a level within the range of EUR 3.2 billion to EUR 3.8 billion in 2017. In relative terms, forestry and logging activities contributed less than 0.3 % of total gross value added in approximately half (13) of the Member States in 2017. This share stood at more than 1.0 % in three northern EU Member States: Estonia (1.2 %), Latvia (1.7 %) and Finland (1.9 %).

## Just over half a million people were employed in forestry and logging activities across the EU

Forests are also an important source of employment for many rural areas, providing the basis for more diversified economic activities; forestry and logging, wood-based industries, tourism, environmental activities, as well as hunting.

The labour intensity of forestry and logging activities varies considerably between EU Member States. One important factor in this context is the potential to make efficient use of forest machinery, which in turn reflects (at least to some degree) the structure and characteristics of each forest, the density of growing stock, the tree species concerned, or the topography of the forested landscape.

In total, there were 511 000 persons employed in the EU-27's forestry and logging sector in 2018. The largest workforces, as measured by the domestic employment concept of national accounts, were in Poland (73 300 persons employed), Romania (48 100 persons), Sweden (41 000 persons) and Germany (40 000 persons).

50 40 30 20 10 0 -10 -20-30-40 -50 -60 Cyprus ithuania Estonia Slovenia Slovakia Belgium **Netherlands** uxembourg Jenmark erman

**Figure 5.2.3:** Overall change in the number of persons employed in forestry and logging, 2008-2018 (%)

Note: Malta, not applicable. Data are based on the domestic employment concept. Source: Eurostat (online data code: nama\_10\_a64\_e) Employment numbers in forestry and logging activities across the EU-27 as a whole fell marginally (–0.2 %) between 2008 and 2018 (see Figure 5.2.3). There was strong employment growth in some of the EU Member States, particularly: Hungary, which had the largest relative increase (up by almost 50 %, with an

additional 6 800 persons employed) and Poland, which had the largest absolute increase (an additional 11 300 persons employed; +18.2 %). By contrast, the largest overall declines in employment — in both relative and absolute terms — were recorded in Croatia (–54.5 %, or 17 100 fewer persons employed).

#### 5.3. Primary wood products

The primary products from forestry and logging are industrial roundwood and fuelwood. Industrial roundwood is an important resource for woodbased industries, being the basis for sawnwood and veneers as well as for pulp and paper production. Fuelwood is a renewable energy source

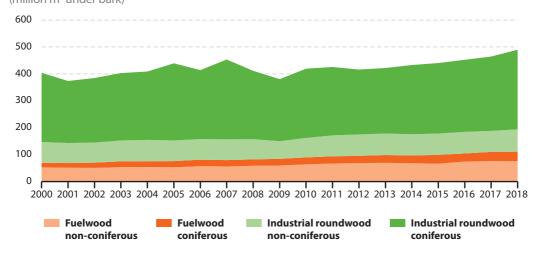
#### Roundwood production in the EU-27 was estimated to be 490 million cubic metres

In 2018, total roundwood production in the EU-27 was an estimated 489.8 million cubic metres under bark; this was higher (+5.5 %) than a year before and higher (+21.2 %) than in 2000. Roundwood

production in the EU-27 was relatively stable for non-coniferous tree species, whereas it fluctuated far more for coniferous tree species.

Industrial roundwood production from coniferous tree species accounted for three fifths of the EU-27's total roundwood production in 2018 (60.4 % or 296.0 million cubic metres). Industrial roundwood production from non-coniferous tree species (16.9 %) and fuelwood from non-coniferous tree species (15.4 %) recorded broadly similar shares, leaving 7.3 % of the EU-27's total roundwood production accounted for by fuelwood from coniferous species (see Figure 5.3.1).

**Figure 5.3.1:** Roundwood production, EU-27, 2000-2018 (million m<sup>3</sup> under bark)



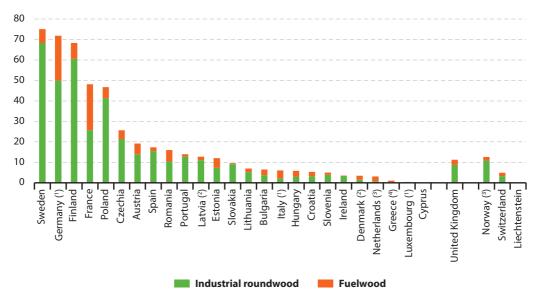
Note: estimates.

Source: Eurostat (online data code: for\_remov)

Sweden produced 75.1 million cubic metres of roundwood in 2018; this represented a slight increase (+1.1 %) compared with a year before. The vast majority of roundwood production in Sweden could be attributed to industrial roundwood (rather than fuelwood); output of the former was approximately 10 times as high as for the latter.

Sweden, Germany (71.8 million cubic metres), Finland (68.3 million cubic metres), France (48.2 million cubic metres) and Poland (46.7 million cubic metres) together accounted for almost two thirds (63.3 %) of the EU-27's total roundwood production in 2018 (see Figure 5.3.2). A majority of roundwood production went for further processing in most of the EU Member States. However, there were some exceptions: for example, industrial roundwood and fuelwood were produced in almost equal quantities in France, while in Denmark (53.6 %; 2016 data), Italy (63.4 %), Greece (70.0 %; 2013 data), the Netherlands (75.6 %) and Cyprus (80.7 %) there was a higher share of fuelwood production than industrial roundwood production.

**Figure 5.3.2:** Roundwood production, 2018 (million m<sup>3</sup> under bark)



Note: Malta, not applicable. Belgium: not available.

- (1) Estimates.
- (2) 2016.
- (3) Fuelwood: estimate.
- (4) 2013.

Source: Eurostat (online data code: for\_remov)

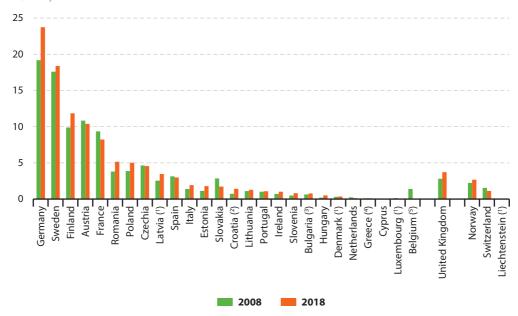
## Germany and Sweden were the leading sawnwood producers

The total output of sawnwood across the EU-27 was estimated to be 109 million cubic metres in 2018; this was higher (+11.7 %) than it had been in 2008.

Germany and Sweden were the leading producers of sawnwood in the EU, accounting for 21.9 % and

16.9 % of the EU-27's total output in 2018; Finland was the only other EU Member State to record a double-digit share (10.9 %). Over the period 2008 to 2018, the rising level of sawnwood production in the EU was principally driven by increases in production for Germany (up 4.6 million cubic metres or +23.7 %), Finland (up 2.0 million cubic metres or +19.8 %) and Romania (up 1.3 million cubic metres or +35.6 %).

**Figure 5.3.3:** Sawnwood production, 2008 and 2018 (million m<sup>3</sup>)



Note: Malta, not applicable.

- (1) 2016 instead of 2018.
- (²) 2008: estimate.
- (3) Provisional.
- (4) 2013 instead of 2018; estimate.
- (5) 2018: not available.

Source: Eurostat (online data code: for\_swpan)

#### 5.4. Wood-based manufacturing industries

The EU-27's wood-based manufacturing industries cover a broad range of downstream activities that are categorised within four subsectors: the manufacture of wood and wood products; the manufacture of paper and paper products (which includes the manufacture of pulp); printing and service activities related to printing; and, the manufacture of furniture.

Wood-based manufacturing industries form a key part of the EU-27's manufacturing sector; there were close to 400 000 enterprises performing these activities in 2018, corresponding to almost one fifth of the total for the whole of the manufacturing sector.

### Small and medium-sized enterprises dominate wood-based manufacturing industries

The 397 000 enterprises active in the EU-27's wood-based manufacturing industries in 2018 (see Figure 5.4.1) employed 3.1 million persons, while they generated EUR 138.6 billion of value added. As such, wood-based manufacturing represented almost one in five (19.6 %) enterprises across the whole of the EU-27's manufacturing sector in 2018. Comparing this with their share of manufacturing value added (7.1 %) it is apparent that small and medium-sized enterprises — defined as having less than 250 persons employed — dominated most wood-based manufacturing industries.

In 2018, the manufacture of wood and wood products accounted for just over two fifths (40.6 %) of all enterprises active in the EU-27's wood-based manufacturing industries; somewhat lower shares were recorded for the manufacture of furniture (29.9 %) and for printing and service activities related to printing (24.9 %). The exception was the manufacture of paper and paper products, insofar as enterprises producing pulp

and paper tended to be, on average, considerably larger in size — reflecting high levels of energy-and capital-intensity. This subsector accounted for just 4.6 % of all wood-based manufacturing enterprises.

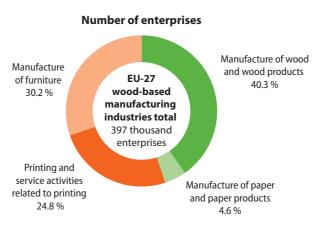
# Wood-based manufacturing industries accounted for slightly more than one tenth of manufacturing employment

Wood-based manufacturing industries in the EU-27 employed 3.1 million persons in 2018, which was equivalent to 10.5 % of all people working in the manufacturing sector. Some wood-based manufacturing industries are relatively labourintensive: almost one third (31.0 %) of the woodbased industries workforce was employed by furniture manufacturing enterprises and a similar share (30.1 %) by wood and wood products manufacturing enterprises. Lower shares were recorded for the more capital-intensive activities: those employed in the manufacture of paper and paper products (19.9 %) and printing and service activities related to printing (19.0 %) accounted for similar shares of the wood-based manufacturing industries workforce.

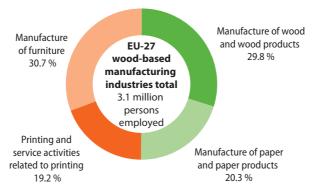
# Pulp and paper production accounted for one third of the gross value added from wood-based manufacturing industries

Of the four wood-based manufacturing industries, the largest — in terms of gross value added — was paper and paper products manufacturing with EUR 48.1 billion in 2018, equivalent to just over one third of the total value added generated by the EU-27's wood-based manufacturing industries. In 2018, the other three wood-based manufacturing industries generated levels of gross value added that were within the range of EUR 24.5 billion to EUR 35.0 billion.

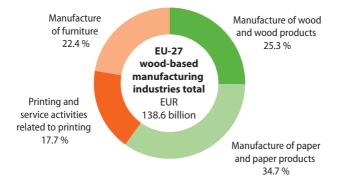
**Figure 5.4.1:** Main indicators for wood-based manufacturing industries, EU-27, 2018 (% share)



#### **Number of persons employed**



#### Value added at factor cost



Note: activities classified according to NACE Rev. 2 — manufacture of wood and wood products (Division 16); manufacture of paper and paper products (Division 17); printing and service activities related to printing (Group 18.1); manufacture of furniture (Division 31). Includes rounded estimates of low reliability.

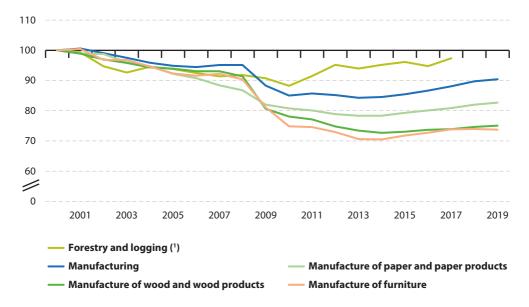
Source: Eurostat (online data code: sbs\_na\_ind\_r2)

# All of the wood-based manufacturing industries recorded falling levels of employment between 2000 and 2019

The number of people employed in the EU-27 increased by more than 10 % overall during the last two decades. By contrast, employment in the manufacturing sector fell over the period from 2000 to 2019 (–9.6 %) and there were even larger

declines for three wood-based manufacturing industries (see Figure 5.4.2). The number of persons employed in furniture manufacturing and the manufacture of wood and wood products fell by approximately one quarter (–26.3 % and –24.9 % respectively), while the rate of decline for the manufacture of paper and paper products (–17.3 %) was also larger than the manufacturing average.

Figure 5.4.2: Employment index for wood-based activities, EU-27, 2000-2019 (2000 = 100)



Note: activities classified according to NACE Rev. 2 — forestry and logging (Division 02); manufacturing (Section C); manufacture of wood and wood products (Division 16); manufacture of paper and paper products (Division 17); manufacture of furniture (Division 31). 2000-2007: estimates for wood-based industries.

(1) 2018 and 2019: not available.

Source: Eurostat (online data code: sts\_inlb\_a and nama\_10\_a64\_e)

## Wood-based activities are male-dominated and are characterised by an ageing workforce

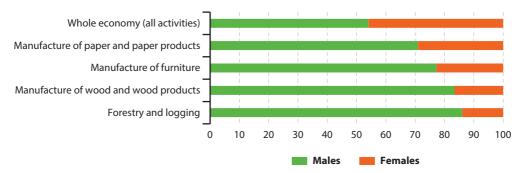
In keeping with many other primary or secondary sectors of the economy, the workforces of wood-based activities (forestry and logging and manufacturing industries) tend to be maledominated.

In 2019, more than four out of every five members of the EU-27 workforce were men for forestry and logging (86.1 %) and for the manufacture of wood and wood products (83.4 %), while the

share of male employment was somewhat lower for the manufacture of furniture (77.3 %) and the manufacture of paper and paper products (71.0 %). All four of these shares were considerably higher than the average for the whole of the EU-27 economy, where men accounted for 54.1 % of the total workforce.

In recent decades, women have accounted for an increasing share of the EU-27 workforce. There was, however, little evidence to suggest that the proportion of women employed in wood-based activities was growing.

**Figure 5.4.3:** Employment in wood-based activities, analysed by sex, EU-27, 2019 (% share)



Note: activities classified according to NACE Rev. 2 — forestry and logging (Division 02); manufacture of wood and wood products (Division 16); manufacture of paper and paper products (Division 17); manufacture of furniture (Division 31).

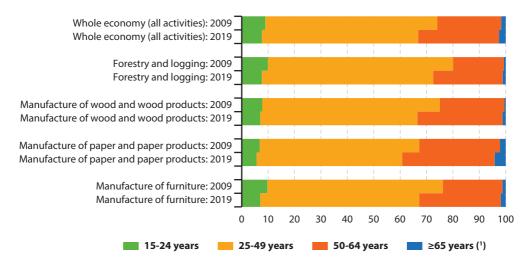
Source: Eurostat (online data code: Ifsa\_egan22d)

Nevertheless, during the period 2009 to 2019 there was a marked shift in the composition of the EU-27 workforce when analysed from a different angle. An increasing share of the workforce was composed of people aged 50 years or more. This reflects, at least in part, a change in the demographic structure of the EU-27 population: the baby-boomer cohort has started to enter retirement, with a lower number of young people joining the labour force (as a result of persistently low fertility rates and a growing proportion of young adults extending their time in education). The growing share of older people within the workforce for wood-based activities may also be attributed to younger people being more more inclined to move from rural areas (where wood-based activities are often located) to look for work in cities, whereas some older people are

more inclined to continue working in traditional manufacturing industries.

In 2019, some 30.6 % of people employed in the EU-27 economy were aged 50-64 years. The corresponding share for the largely manual activity of forestry and logging was somewhat lower at 26.2 %, while each of the wood-based manufacturing industries had a higher (than average) share of older people in their workforce. People aged 50-64 years accounted for 35.0 % of the EU-27 workforce for the manufacture of paper and paper products, while a further 4.2 % was composed of people aged 65 years or more. This relatively high share of older workers reflects, at least to some degree, the specialisation of Nordic Member States in the manufacture of paper and paper products, coupled with a later than average age for retirement (when compared with other EU Member States)

**Figure 5.4.4:** Employment in wood-based activities, analysed by age, EU-27, 2009 and 2019 (% share)



Note: activities classified according to NACE Rev. 2 — forestry and logging (Division 02); manufacture of wood and wood products (Division 16); manufacture of paper and paper products (Division 17); manufacture of furniture (Division 31).

(1) Low reliability.

Source: Eurostat (online data code: Ifsa\_egan22d)

#### Data sources and availability

Eurostat produces annual data on forestry using two questionnaires:

- the joint forest sector questionnaire (JFSQ) for production and trade statistics for wood and wood products;
- European forest accounts (EFA).

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

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 EFA forms part of an environmental satellite accounts initiative that was started in the late 1990s, using concepts that are aligned with national accounts, thus allowing links between the economy and the environment to be examined. The EFA data collection officially started in 2016; however, its predecessors, such as integrated environmental and economic accounting for forests (IEEAF) used the same concepts and definitions to collect data, through somewhat different questionnaires.

Note that the monetary values presented in this chapter are presented in current prices — in other words, the time series have not been adjusted for changes in prices (inflation).

Note also that in this 2020 edition, information presented on the area and growing stock of forests and wooded land have been sourced from the Food and Agriculture Organization of the United Nations — Global Forest Resources Assessment, 2020. This information was extracted from the FAO database in September 2020.

# 6

## **Fisheries activities**



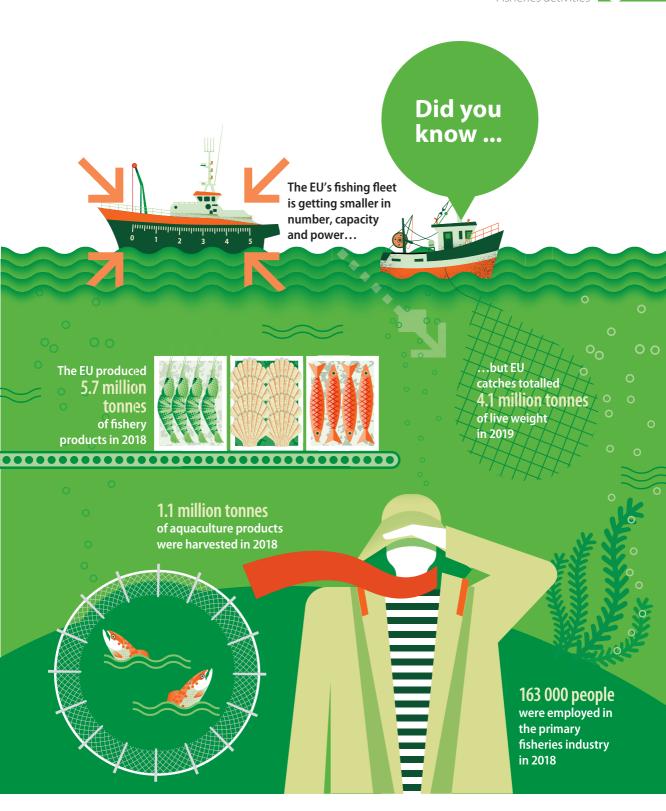
#### Introduction

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 ( $^{30}$ ) aims at an environmentally, economically and socially sustainable use of the common

(30) See: http://ec.europa.eu/fisheries/cfp/index\_en.htm.

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.



### 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 (CFP). 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

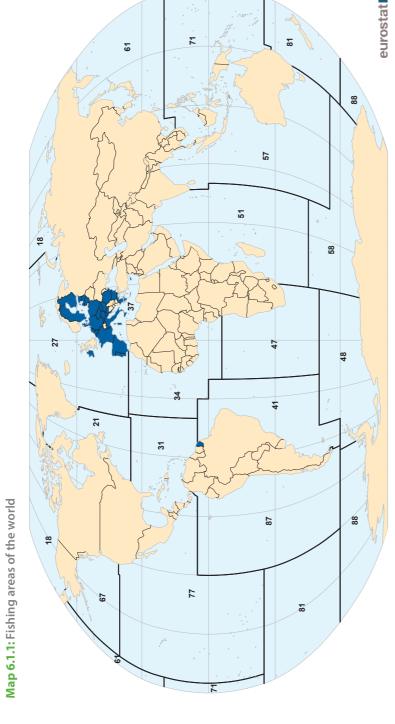
EU statistical regulations on catching fish cover seven marine areas (31); these are the north-east Atlantic; north-west Atlantic; Mediterranean and Black Sea; eastern-central Atlantic: south-east Atlantic; south-west Atlantic; and, western Indian Ocean, within each of which are a number of seas. For example, within the north-east Atlantic region are, among others, the Barents Sea, the Norwegian Sea, the Baltic Sea, the North Sea, Iceland and Faroes Grounds, Rockall, West of Scotland, the Irish Sea, the 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 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 and the Scientific, Technical and Economic Committee for Fisheries (32). 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.

The proximity of a port to sea often determines the focus of fishing activities. For example, Denmark's fishing industry focuses on the northeast Atlantic area. 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.

<sup>(31)</sup> Food and Agriculture Organization of the United Nations (FAO) major areas 21, 27, 34, 37, 41, 47, 51 (see Map 6.1.1).

<sup>(32)</sup> For further information, see the European Commission's common fisheries policy website.



Administrative boundaries. © EuroGeographics © UN-FAO © Turkstat Cartography; GJSCO 10/2020

Projection: Robinson

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 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 77: Pacific, Eastern Central; Area 81: Pacific, Southwest, Area 87: Pacific, Southeast, Area 88: Pacific, Antarctic.

Note: FAO major fishing areas for statistical purposes. The designation only and do

not imply the expression of any opinion whatsoever concerning the legal or constitutional status of any area or concerning the delimitation of frontiers or

boundaries.

Source: FA0, 2019

### 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 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).

The EU fishing fleet continues to shrink. The number of active vessels in the EU-27 was 75 405 in 2019. These vessels had a combined capacity of 1.3 million gross tonnes and a total engine power of 5.3 million kilowatts (kW). Between 2013 and 2019, the number of vessels in the EU-27 declined by 6.4 %, the overall gross tonnage fell by 8.8 % and engine power was down 7.8 %.

#### 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

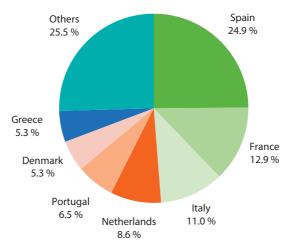
a small number of vessels exceeding 40 metres in length. The average size of an EU fishing boat in 2019 was 17.7 gross tonnes and the average engine power was 70.9 kW.

When measured by gross tonnage, Spain had, by far, the largest fishing fleet among Member States (24.9 % of the EU-27 total), followed by France (12.9 %) and Italy (11.0 %). When measured by engine power, however, the largest fleet was that in France (17.9 % of the EU-27 total), followed by Italy (17.4 %) and Spain (14.5 %).

When measured by the number of vessels, the largest fleet in the EU-27 was in Greece (19.8 % of all vessels), followed by Italy (16.0 %) and Spain (11.8 %). Greek vessels were generally small, with an average size of 4.7 gross tonnes, and an average engine power of 28.5 kW in 2019.

By way of comparison, the overall holding capacity of the Norwegian fishing fleet was the largest in Europe (0.4 million tonnes in 2019 and +9.2 % on the capacity in 2018). It was also considerably more powerful at an average 228.7 kW per vessel than the average in the EU-27.

**Figure 6.1.1:** EU fishing fleet capacity, 2019 (% share of EU-27 total gross tonnage)



Source: Eurostat (online data code: fish\_fleet\_alt)

The 1 600 fishing vessels of Iceland in 2019 were also much larger and more powerful than the EU-27 average, with an average holding capacity of 94.2 gross tonnage per vessel and 269.6 kW per vessel.

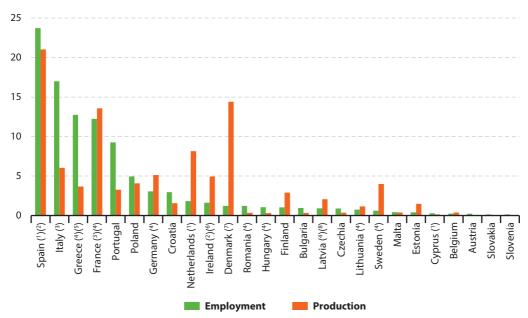
### The fisheries industry provided jobs in the EU for about 163 000 people in 2018

An estimated 163 000 people were employed in the EU-27's primary fisheries industry in 2018, of which about one third were employed in the aquaculture subsector. About one quarter (23.7 %) of employment in the primary fisheries industry of the EU-27 in 2018 was in Spain. Indeed, three quarters of EU employment in the industry was

concentrated in just Spain, Italy, Greece, France and Portugal.

Italy, Greece and Portugal accounted for much higher proportions of employment in the EU fisheries industry than of fisheries production; together they accounted for 39.0 % of EU-27 employment in the industry, but only produced 13.0 % of production. Conversely, Denmark and the Netherlands had relatively low employment in fisheries (1.2 % and 1.8 % respectively of the EU total) but much higher shares of fisheries production (14.4 % and 8.2 % respectively). 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, 2018 (% share of EU-27 total)



Note: Luxembourg, no production.

- (1) Provisional employment data.
- (2) Aquaculture data, estimated.
- (3) Catches data, provisional.
- (4) Employment data, 2017.
- (5) Catches data for Atlantic, East Central, 2015.
- (6) Catches data, 2017.
- (7) Catches data for Atlantic, Northwest, 2017.
- (8) Catches data for Atlantic Northeast, 2017 and for Atlantic Eastern Central, 2016.

Source: Eurostat (online data codes: 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.

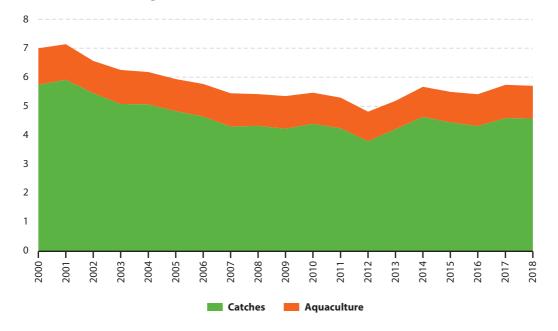
## EU production of fishery products from catches and aquaculture estimated at 5.7 million tonnes in 2018

The EU-27's (<sup>33</sup>) total production of fishery products in 2018 was an estimated 5.7 million tonnes of live weight equivalent (the mass or weight when removed from water). This represented about 3 % of the total world production of fishery products in 2018 (<sup>34</sup>).

Total production for the EU-27 in 2018 was down a little (-0.6 %) on the level in 2017 and considerably down (-18.5 %) on the corresponding level in 2000 (see Figure 6.2.1). The downward trend to 2012 and the subsequent upturn reflect parallel trends for catches, which account for four fifths of total fisheries production. This upturn in catches was despite a continued reduction in the size of the fishing fleet. The production of farmed aquatic organisms remained relatively stable.

About one half (49.0 %) of all EU-27 fisheries production from catches and aquaculture came from just three Member States in 2018; these were Spain (21.0 %), Denmark (14.4 %) and France (13.6 %). The slight decline in overall EU

**Figure 6.2.1:** Total production of fishery products, EU-27, 2000-2018 (million tonnes of live weight)



Note: substitute years have been used where there are a limited number of confidential data for catches and aquaculture. *Source*: Eurostat (online data codes: fish\_ca\_main, fish\_aq\_q and fish\_aq2a)

<sup>(33)</sup> Figures on catches and landings for the EU exclude the EU's landlocked Member States (Czechia, Luxembourg, Hungary, Austria and Slovakia). Luxembourg does not collect aquaculture statistics.

<sup>(24)</sup> The state of world fisheries and aquaculture, 2020 – FAO, available at: http://www.fao.org/3/ca9229en/online/ca9229en.html#fig3.

production in 2018, principally reflected the mixed developments in these three Member States: production in Spain was moderately lower (–1.5 %); production in Denmark fell back strongly (–12.5 %), almost entirely due to the lower catches in the Northeast Atlantic; and, production in France rose strongly (+7.8 %) driven by higher catches in the Northeast Atlantic and the Indian Ocean.

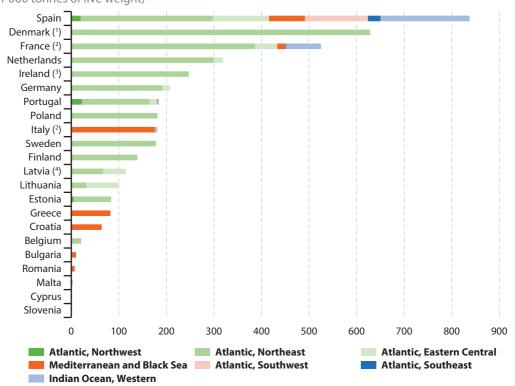
By way of comparison, it is interesting to note that total fisheries production in Norway (3.6 million tonnes of live weight in 2018) was about 80 % of that of the EU-27 as a whole. Total production in Iceland (1.3 million tonnes in 2018) was slightly higher than in Spain, the EU-27's biggest fisheries producer. Production in the United Kingdom (0.9 million tonnes in 2018) was slightly higher

than in Denmark, the EU-27's second biggest fisheries producer.

### EU catches in 2019 an estimated 4.1 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 2018, statistics on catches are available for 2019.

**Figure 6.2.2:** Catches by marine area, 2019 (1 000 tonnes of live weight)



 $Note: Czechia, Luxembourg, Hungary, Austria\ and\ Slovakia, no\ catches.$ 

- (1) Estimate using 2017 data for Atlantic, Northwest.
- (2) Provisional.
- (3) 2017 data.
- (4) 2016 data.

Source: Eurostat (online data code: fish\_ca\_main)

The total EU catch in 2019 was an estimated 4.1 million tonnes live weight, much less than the estimated 4.6 million tonnes in 2018. The level of catches in 2019 was back towards the low recorded in 2012.

The fishing fleets of Spain, Denmark, France and the Netherlands accounted for over one half (about 56 %) of the total amount of aquatic organisms caught by Member States in 2019 (see Figure 6.2.2). Catch levels were down in each of these countries, often sharply: they were moderately lower (-4.9 % or 43 000 tonnes less) in Spain; they were one fifth lower (-20.4 % or 160 000 tonnes less) in Denmark and in the Netherlands (-22.6 %); and, one tenth less (-10.6 %) in France. Catch levels in 2019 were lower than 2018 in many other Member States too, not least Germany (-20.7 %) and Sweden (-17.1 %). One of the main exceptions was the much higher catch level in Lithuania (+59.2 %), which was almost entirely from the higher catch in the Atlantic, Eastern Central area.

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 taken in the Atlantic. Northeast area

Although the European fishing fleet operates worldwide, about 70 % of all EU catches in the seven marine areas covered by EU statistical regulations were taken in the Atlantic, Northeast area (see Figure 6.2.3 and Map 6.1.1 for an overview of fishing areas). The key species caught in the Atlantic, Northeast area in 2019 were herring

(21.3 % of the live weight caught in this region), sprat (14.8 %), blue whiting (10.1 %) and mackerel (8.4 %).

About one fifth (22.1 %) of the EU-27's total live-weight catch in the Atlantic, Northeast area was made by the fishing fleet of Denmark. Together, France (13.6 %), the Netherlands (10.6 %) and Spain (9.8 %) accounted for another one third of catches in the region.

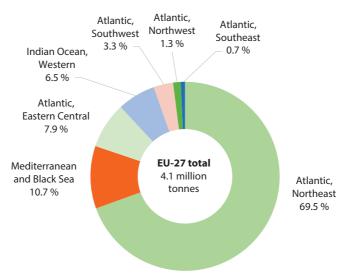
About one tenth of the total EU catch was taken in the Mediterranean and Black Sea, where the main species caught were sardines (23.6 % of the EU catch in the area) and anchovies (16.7 %). Two fifths of the total EU-27 catch in this area was by Italy, with Greece (18.9 %), Spain (17.4 %), and Croatia (14.7 %) accounting for the vast majority of the rest.

About 8 % of the total EU catch was taken in the Atlantic, Eastern Central area, where the main catches were skipjack and yellowfin tuna, sardines and mackerel. Among Member States, Spain (36.6 %) and Lithuania (21.4 %) together accounted for the majority of catches in the area.

About 7 % of the total EU catch was taken in the Indian Ocean, Western area, where the main catch was tuna, particularly skipjack, yellowfin and bigeye tuna. About 70 % of the EU-27 catch in the area was by Spain, and most of the rest by France.

Only 5 % of the total EU catch was taken in three remaining marine areas. The main species caught in these areas were the following: hake in the Atlantic, Southwest area; blue sharks and skipjack tuna in the Atlantic, Southeast area; and redfish, cod and halibut in the Atlantic, Northwest area.

**Figure 6.2.3:** Catches by marine area, EU-27, 2019 (% share of total catches, thousand tonnes of live weight)



Source: Eurostat (online data code: fish\_ca\_main)

# Aquaculture: 1.1 million tonnes of aquatic organisms produced in the EU-27 in 2018, worth EUR 3.7 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 CFP and the Blue Growth (35) agenda to support sustainable growth in the sector.

The EU-27 produced an estimated 1.1 million tonnes of aquatic organisms in 2018, corresponding to one fifth of the output of European fisheries as a whole. In terms of output, the EU's aquaculture sector was the ninth largest worldwide, alongside Myanmar, with a 1.4 % share of the volume of global output in 2018 (36). The value of aquaculture production in the EU-27 was an estimated EUR 3.7 billion in 2018, about two fifths of the total value of the EU's total production of fishery products.

<sup>(35)</sup> For more information, see the maritime affairs section on the European Commission's website.

<sup>(%)</sup> The state of world fisheries and aquaculture, 2020 – FAO, available at: http://www.fao.org/3/ca9229en/online/ca9229en.html#fig3, where it is noted that China dominates world aquaculture production (67.9 % of the total in 2018).

#### Four Member States produced about 70 % of the EU-27's aquaculture output volume and 60 % of its value

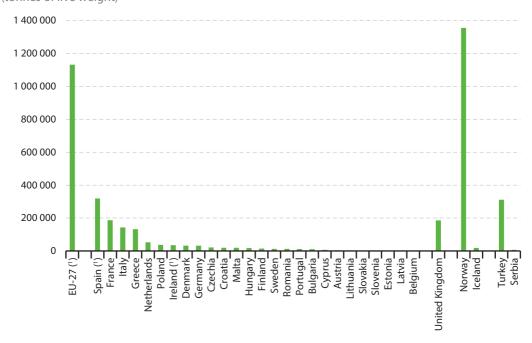
Four Member States were responsible for about 70 % of the EU's total output in tonnes live weight of farmed aquatic organisms in 2018 (see Figure 6.2.4); Spain produced a little over one quarter (an estimated 28.2 %) of the total, followed by France (16.5 %), Italy (12.6 %) and Greece (11.7%)

Different aquatic organisms fetch different prices. For instance, the average first sale prices for mussels were about EUR 1 per kg, for seabass were nearer EUR 6 per kg, and for tuna were about EUR 14 per kg. Among Member States, France had the highest value of aquaculture output in 2018 (an estimated EUR 687 million), representing about 18 % of the EU-27 total. The value of output was next highest in Spain (EUR 578 million in 2017), then in Greece (EUR 536 million) and Italy (EUR 439 million).

To put the EU-27's aquaculture industry in some perspective, the value of aquaculture output in Norway exceeded that of the whole of the EU; Norway produced 1.4 million tonnes of aquatic organisms (almost exclusively salmon), worth EUR 7.1 billion in 2018. Norway was the world's seventh largest producer in aquaculture fish production in 2018, 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 (Czechia, Hungary, Austria and Slovakia) comes from aquaculture (Luxembourg does not produce such data) and as much as 94.1 % of total fisheries production in tonnes live weight in Slovenia. 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-27 average. This helps explain why aquaculture activity plays a relatively large role in the respective fisheries

Figure 6.2.4: Aquaculture production, 2018 (tonnes of live weight)



Note: Luxembourg does not produce aquaculture statistics.

(1) Estimate

Source: Eurostat (online data code: fish\_aq2a)

industries of Malta (accounting for 88.3 % of total fisheries production in tonnes live weight in 2018), Cyprus (83.3 %), Greece (63.1 %), Romania (61.4 %), Bulgaria (55.7 %) and Italy (41.4 %).

## EU aquaculture production focussed on finfish species and molluscs

Finfish (particularly, trout, seabream, seabass, carp, tuna and salmon) and molluscs (particularly, mussels, oysters and clams) together accounted for almost all of aquaculture production by weight in the FU in 2018

Rainbow trout were the most valuable species farmed in the EU in 2018, accounting for about 17 % of all aquaculture production. The farmed production of seabass, seabream, oysters and bluefin tuna were the next most valuable (see Figure 6.2.5).

#### A high degree of country specialisation within EU

Within the EU, the aquaculture sector is highly specialised at the level of EU Member States.

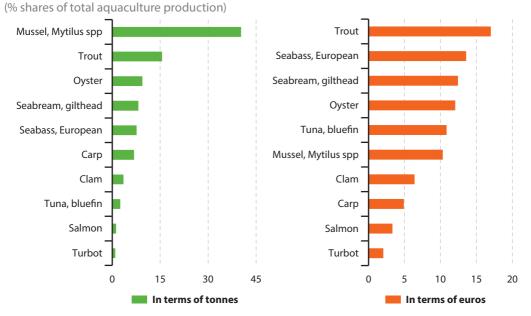
Spain produced about 7 in every 10 tonnes of the EU's farmed Mediterranean mussels (Mytilus

galloprovincialis) in 2018, largely due to its rafts in the estuaries of northern Spain using the 'off bottom' method. Blue mussels (Mytilus edulis) were farmed in the Atlantic, Northeast area by the Netherlands (about 37 % of the EU total in 2018) and France (about 36 %), and Ireland (an estimated 11 %). Both 'off bottom' (preferred in Ireland) and 'on-bottom' methods (preferred in the Netherlands) were used.

Greece produced about 61 % of the EU's farmed production of gilthead seabream (*Sparus aurata*) and 55 % of European seabass (*Dicentrarchus labrax*) in 2018. Czechia and Poland were the leading EU producers of common carp (*Cyprinus carpio*), together producing about 45 % of the EU total. At world level, common carp was the third most farmed finfish species.

Within the EU, pacific cupped oysters (*Crassostrea gigas*) were produced mainly in France (about 86 % in 2018). Worldwide, about 30 % of all molluscs produced in 2018 were cupped oysters. Italy produced the vast majority (about 78 % in 2018) of the EU's farmed Japanese carpet shell (*Ruditapes philippinarum*). At world level, it was the second most produced species among the molluscs (24 % of the total in 2018).

Figure 6.2.5: Main species in aquaculture production, EU-27, 2018



Source: Eurostat (online data code: fish\_aq2a)

Atlantic bluefin tuna (*Thunnus thynnus*) were farmed in cages in only three Member States: Malta accounted for about 61 % of EU farmed production of bluefin tuna, 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 Atlantic, Northeast area.

Ireland was responsible for about 90 % of 13 000 tonnes of farmed salmon in the EU in 2018. However, the quantity farmed was far below the 156 000 tonnes farmed in the United Kingdom and the 1.3 million tonnes farmed in Norway. At world level, Atlantic salmon (*Salmo salar*) was the ninth most produced finfish species.

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 23 EU countries. One-half of the farmed liveweight of rainbow production in the EU in 2018 came from the combined output of Italy and

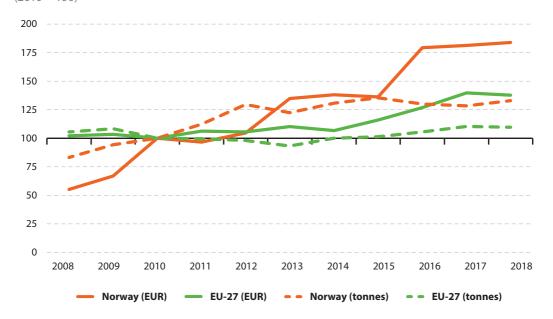
France (both about 19 % of the EU total) and Denmark (about 16 %). Fish were farmed either in inland freshwater (about four fifths of the total) or in the saltwater of the Atlantic, Northeast area, and mainly in tanks (about 60 %).

### Steady level of EU aquaculture production volume but rising value

Between 2008 and 2018, 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 third higher in 2018 than in 2008.

During a similar period, there was a sharp increase in both the volume and value of Norwegian aquaculture production. The volume of aquaculture production in Norway bounced back in 2018 (+3.6 %) from the reduced level in 2017, which had been affected by a sea lice issue with salmon. The overall value of aquaculture production in 2018 was also higher than 2017 (+1.4 %).

**Figure 6.2.6:** Aquaculture production and value, EU-27 and Norway, 2008-2018 (2010 = 100)



Note: includes Member State estimates for EU-27 figures. 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

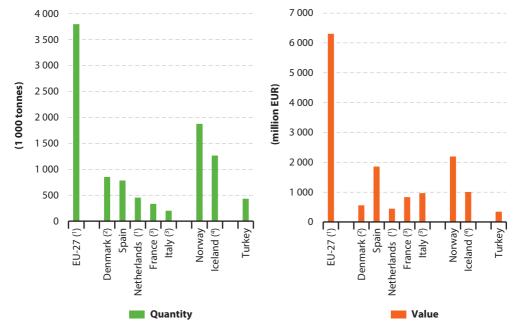
### About 3.8 million tonnes (product weight) landed in EU in 2019

A mixture of confidential and, as yet, unavailable figures for 2019 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 2019 is estimated to have been about 3.8 million tonnes product weight.

Denmark accounted for about one fifth (0.9 million tonnes in 2016) of the EU landings, Spain another fifth (0.8 million tonnes in 2019) and the Netherlands about one tenth (an estimated 0.5 million tonnes in 2019).

Figure 6.3.1: Landings in selected countries and EU-27, 2019



- (1) Estimate.
- (2) 2016 data.
- (3) Provisional, 2018 data.
- (4) 2018 data.

Source: Eurostat (online data code: fish\_ld\_main)

Among the Member States for which 2019 data are available, the quantity of landings was down considerably in the Netherlands (an estimated –17.0 % or 93 000 tonnes) and in Poland (–10.7 % or 13 000 tonnes), but higher in Portugal (+13.8 % or 18 000 tonnes) and Estonia (+27.5 % or 17 000 tonnes). By way of comparison, landings to ports in Norway were moderately lower than in 2018 (–2.9 % or 56 000 tonnes) at 1.9 million tonnes.

### Quantity and value of EU landings down slightly in 2019

The estimated fall in the quantity of total fishery products landed in the EU in 2019 looks to have been accompanied by a decline in the value of landings to an estimated total of EUR 6.3 billion

(see Figure 6.3.1). Nevertheless, it should be borne in mind that this figure is subject to data availability.

Among Member States for which 2019 data are available, the value of the fish landed in Spain was higher than in any other Member State, reflecting the high value attached to its landings of species like tuna, hake, swordfish, squid and pilchards. However, the value of landings in Spain fell to EUR 1.9 billion in 2019. The value of landings in the Netherlands fell sharply (–23.3 % on the value in 2018) to EUR 0.4 billion. In contrast, the value of landings in Portugal increased sharply (+16.0 % on 2018) to EUR 0.3 billion.

### 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.

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, and so on). 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 by EEA member countries 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 statistics on landings, 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 their national authorities.

# 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 and beverages arrive on the table, they have 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, agrifoods 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. There is a range of legislation that food and beverages 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.



### 7.1. Dairies and slaughterhouses

For animal food products, the first processing stage is at the dairy or in slaughterhouses. Dairy enterprises either purchase from milk collection centres or, more typically, directly from farms with a view to transforming milk into milk products. Slaughterhouses in the EU are registered and approved establishments used for slaughtering and dressing animals, whose meat is intended for human consumption. Their activity is not normally considered as processing but, for a balanced overview, they are included in the analysis.

#### **Dairies**

There were about 4 900 dairy enterprises across the EU-27 in 2018. A high proportion of these were in southern EU Member States; Italy alone had almost 1 200 dairies and Greece about 800 dairies

In most Member States, these dairies were relatively small, collecting less than 5 000 tonnes of milk per year. For example, 70 % of dairies in Italy collected less than 5 000 tonnes of milk per year and about 94 % of all dairies in Greece. However, there are some exceptions. A few Member States had a small number of relatively large dairies that collected more than 100 000 tonnes of milk per year; this included Ireland (about one third of its 38 dairies), the Netherlands (12 of its 30 dairies), Lithuania (6 of its 14 dairies), and Germany (53 of its 115 dairies).

There has been considerable consolidation of the dairy market within the EU. For example, the number of dairy enterprises in Italy, France and Germany halved or more than halved in the period between 1994 and 2018.

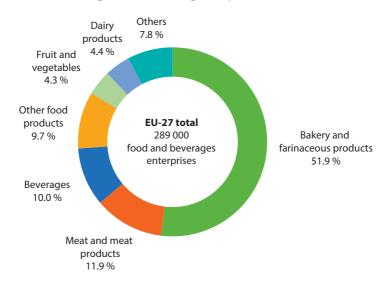
# 7.2. Manufacture of food products and beverages

Much of the produce from the EU's 10.3 million farms is sold on to the food and beverages industry for processing both within and outside the EU, 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.

### About 289 000 enterprises in EU-27 involved in food and beverages production

There were about 289 000 enterprises across the EU-27 that manufactured food and beverages in 2018. These enterprises produced a range of food products and beverages. About one half (51.9 %) of them manufactured bakery and farinaceous products such as breads, cakes, biscuits, pastas and noodles (see Figure 7.2.1). 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 2018.

**Figure 7.2.1:** Food and beverages manufacturing enterprises, EU-27, 2018 (% share of all food and beverages manufacturing enterprises)



Note: estimates made for the purpose of this publication. Source: Eurostat (online data code: sbs\_sc\_sca\_r2)

### 4.5 million people were employed in food and beverages manufacturing across the EU in 2018

Food and beverages enterprises provided employment to 4.5 million people and generated about EUR 1 100 billion of turnover in 2018.

France and Italy had the largest number of food and beverages enterprises (see Figure 7.2.2). However, Germany employed the most people in this sector (21.8 % of the EU-27 total), followed by France (14.8 %).

# Most food and beverages enterprises in the EU are micro or small, employing less than 50 persons

The overwhelming majority (about 96 %) of all food and beverages enterprises in the EU were micro or small, employing less than 50 persons. Indeed, micro enterprises employing less than 10 persons accounted for four fifths (79.7 %) of all food and beverages enterprises in 2018.

Medium-sized enterprises (employing between 50 and 249 persons) and large enterprises (employing more than 250 persons) together accounted for a minority of food and beverages enterprises in all Member States in 2018; the highest shares

were in Luxembourg (14.9 %), Germany (10.5 %), Latvia (9.3 %), Estonia (9.1 %) and Denmark (8.9 %) and the lowest in Italy (1.9 %) and France (1.8 % in 2017).

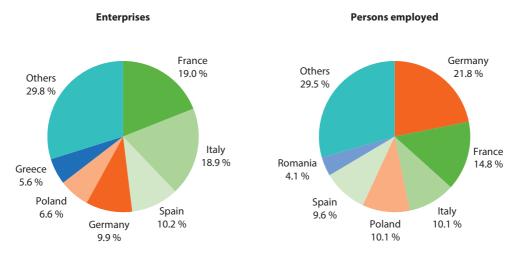
### The value of food and beverages produced in the EU-27 was EUR 827.2 billion in 2019

The production of food and beverages in the EU-27 was valued at an estimated EUR 827.2 billion in 2019. This was double the value of the primary agricultural products (EUR 412 billion) from the EU's agricultural industry.

For the 375 food and beverages product categories for which data are collected, the value produced in Germany in 2019 was the highest among Member States (an estimated EUR 155.3 billion), followed by Italy (EUR 127.3 billion) and France (EUR 118.9 billion).

The five main food, feed and beverages producer Member States, which also include Spain and Poland, accounted for the majority of the value of 9 of the top 10 products manufactured in the EU in 2019 (see Figure 7.2.3). Nevertheless, there was some specialisation among Member States, even for the 10 most highly valued products.

**Figure 7.2.2:** Food and beverages manufacturing enterprises and persons employed, 2018 (% share of EU-27 total)



Source: Eurostat (online data code: sbs\_na\_sca\_r2)

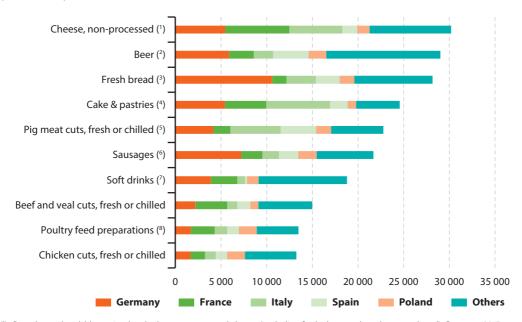
Among the food, feed and beverage products manufactured in the EU-27, non-processed cheese was the most valuable in 2019 (at EUR 30.2 billion). This market is of particular importance to the EU's dairy farmers. The value of non-processed cheese produced by enterprises in France (EUR 7.0 billion in 2019), Italy (EUR 5.8 billion) and Germany (EUR 5.5 billion) accounted for a majority of the EU-27 total.

Beer (from malt but excluding non-alcoholic beer) was the second most valuable food, feed and beverages product manufactured in the EU-27 in 2019 (at EUR 29.0 billion). This market is of particular importance to farmers growing malted barley (but also some other grains) and hops. The value of beer (from malt but excluding non-alcoholic

beer) produced by enterprises in Germany in 2019 (EUR 5.9 billion) accounted for one fifth of the total produced in the EU-27. There was also some specialisation in Spain (13.3 % of the EU total) and Belgium (10.2 % of the EU total in 2017).

Among various specialisations, enterprises in Austria accounted for a little less than one quarter (23.7 % in 2019) of the value of all soft drinks (with added sugar, other sweeteners or flavoured) produced in the EU. The value of cuts of chicken produced by enterprises in the Netherlands (17.7 % of the EU total in 2019) was higher than any other Member State. A little over one tenth (10.9 %) of the total value of the EU's cuts of beef and veal in 2019 came from Ireland, only behind France (23.2 %) and Germany (14.7 %).

**Figure 7.2.3:** Top 10 food and beverage products with the highest value of sold production, 2019 (EUR million)



- (¹) Grated, powdered, blue-veined and other non-processed cheese (excluding fresh cheese, whey cheese and curd). Germany: 2017.
- (2) Beer made from malt (excluding non-alcoholic beer, beer containing  $\leq 0.5$  % 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).
- (4) Cake and pastry products; other bakers' wares with added sweetening matter.
- (°) Fresh or chilled pig meat (including fresh meat packed with salt as a temporary preservative; excluding carcases, hams and cuts thereof with bone in).
- (9) Sausages and similar products of meat, offal or blood and food preparations based thereon (excluding liver sausages and prepared meals and dishes).
- $(')\ \ Waters, with\ added\ sugar,\ other\ sweetening\ matter\ or\ flavoured,\ i.e.\ soft\ drinks\ (including\ mineral\ and\ aerated).$
- (8) Preparations used for farm animal feeding (excluding premixtures): poultry.

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

### 7.3. Generation of waste

The manufacture of food products, beverages and tobacco products in the EU-27 generated 37.0 million tonnes of waste in 2018, which was 1.6 % of all the waste produced by economic activities and households in the EU. About 60 % of all the waste from the manufacture of food products, beverages and tobacco products was animal and vegetal wastes (both hazardous and non-hazardous). This includes animal and

plant-tissue waste, sludge, waste from preserving agents, greases and oils, and biodegradable waste.

The manufacture of food products, beverages and tobacco products in the EU-27 generated an estimated 22.4 million tonnes of animal and vegetal wastes (both hazardous and nonhazardous) in 2018. This was about 1.6 million tonnes more than in 2014.

### 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 countries and potential candidates. 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.

Data are mainly 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).

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 the SBS produced.

PRODCOM statistics provide detailed information on the quantity of production sold during the survey period, the value of production sold during the survey period, and for some products, the quantity 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. 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 products.

The PRODCOM list is revised every year.

In order to monitor the implementation of waste policy, in particular compliance with the principles of recovery and safe disposal, reliable statistics on the production and management of waste from businesses and private households are required. In 2002, Regulation (EC) No 2150/2002 on waste statistics was adopted, creating a framework for harmonised Community statistics in this field.

Starting with reference year 2004, the regulation requires EU Member States to provide data on the generation, recovery and disposal of waste every two years. Data on waste generation and treatment are currently available for even reference years from 2004 to 2018.

# 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 international 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 are used for two of the common EU policies: the common agricultural policy (CAP) and the common trade policy that manages trade relations with non-EU countries. These are major policy areas of the EU on which decisions are taken at Community level.

This chapter focuses on the trade in agricultural goods only between the EU and countries outside the EU (extra-EU trade flows), including trade with the United Kingdom. These goods cover animals and animal products, crop products and foodstuffs.



### 8.1. EU trade in agricultural products as a whole

### Trade in agricultural products accounted for 8.0% of total EU international trade in 2019

The value of the total trade (imports plus exports) in agricultural products between the EU-27 and the rest of the world was EUR 324.8 billion in 2019. This represented 8.0 % of total EU international trade in 2019

The EU had a trade surplus of EUR 39.0 billion in the trade of agricultural goods, the value of exports (EUR 181.9 billion) exceeding that of imports (EUR 142.9 billion). Whilst the EU imported mainly raw, unprocessed agricultural goods, it principally exported processed food products.

### Total trade in agricultural goods jumped to EUR 324.8 billion in 2019

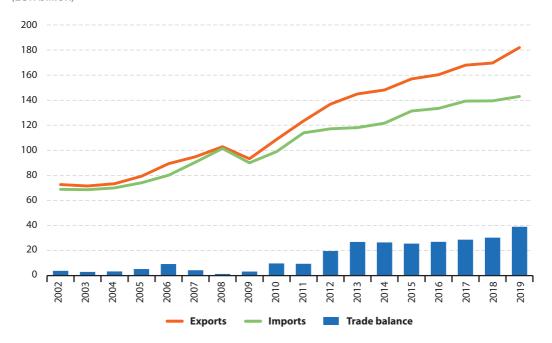
Between 2002 and 2019, the value of EU trade in agricultural goods more than doubled (see

Figure 8.1.1), equivalent to an average annual growth of 5.0 %. Both the value of exports and imports grew sharply; exports from the EU grew at an average annual rate of 5.5 %, and imports at an average annual rate of 4.4 %. The EU recorded a growing trade surplus in agricultural goods over the period as a whole, with a jump to EUR 39.0 billion in 2019

These valuations reflect the amount or weight of agricultural goods traded as well as their average price. Although the weight of EU exports was lower than imports in 2019 (134.0 million tonnes compared with 152.7 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 gap in the average price narrowed, the average annual rate of growth for exports being lower than imports (+2.0 % compared with +2.6 %) between 2002 and 2019 (37).

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

**Figure 8.1.1:** EU-27 exports, imports and trade balance of agricultural products, 2002-2019 (EUR billion)



Source: Eurostat (online 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 (54.3 %) of the agricultural goods exported from the EU in 2019 and were valued at EUR 98.8 billion (see Figure 8.2.1). The value of crop and animal and animal product exports from the EU were both EUR 41.6 billion.

The composition of the EU's agricultural imports was rather different to its exports; foodstuffs accounted for one third (34.0 %) of the value of EU imports, crop products almost 45 % and animals and animal products a little over one fifth (21.5 %).

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

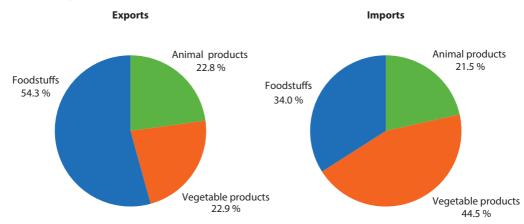
The animals and animal products group consists of live animals, meat, fish, crustaceans and aquatic invertebrates, dairy produce, eggs, honey, and other products of animal origin. The EU had a trade surplus of EUR 7.3 billion in this product category in 2019. Trade surpluses for 'dairy produce, birds' eggs, natural honey and

edible products of animal origin not elsewhere specified or included' (which includes cheeses, milk and yoghurts; EUR 12.5 billion), 'meat and edible meat offal' (EUR 9.9 billion) and 'live animals' (EUR 2.8 billion), offset the deficit (EUR 17.7 billion) for fish, crustaceans and aquatic invertebrates.

Crop products include cereals, vegetables, horticultural products, fruit, coffee and fats and oils. The EU had a trade deficit of EUR 25.3 billion for crop products in 2019, largely stemming from deficits in the trade of 'edible fruit and nuts' (EUR 13.9 billion), 'coffee, tea, mate and spices' (EUR 7.6 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 51.1 billion in this category in 2019. The trade surplus was driven by trade surpluses for 'beverages, spirits and vinegar' (EUR 25.7 billion) and 'preparations of cereals, flour, starch or milk' (EUR 13.7 billion).

**Figure 8.2.1:** EU-27 exports and imports of agricultural products, 2019 (% share of agricultural exports/imports)



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

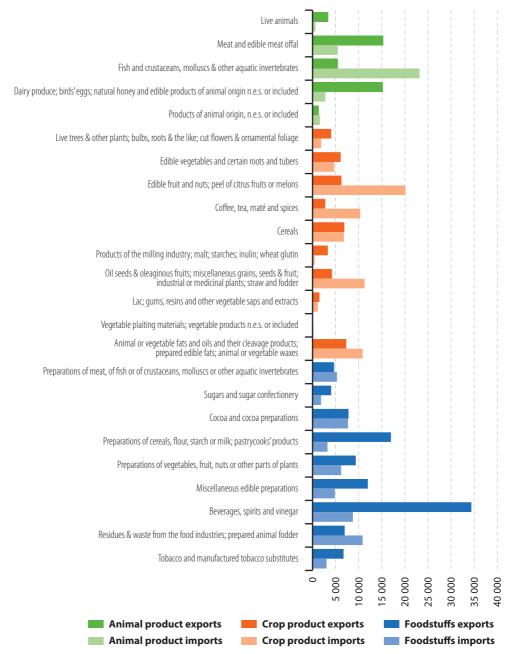
How have the trade balances of these three categories of agricultural products changed?

In the period between 2002 and 2019, the EU's trade surplus in foodstuffs grew relatively steadily, the deficit for crops widened and for animals and animal products the sharp rise in the surplus between 2009 and 2013 was maintained and then grew again in 2019.

The EU's trade in foodstuffs was consistently in surplus between 2002 and 2019. The value of EU exports in such products grew at a faster rate (an average annual rate of +5.8 %) than imports (an average annual rate of +3.6 %). As a result, the trade surplus grew from EUR 11.2 billion in 2002 to EUR 50.1 billion in 2019.

Over the same reference period, the trade deficit in crop products almost tripled, from EUR –7.8 billion in 2002 to EUR –22.0 billion in 2019. There was a trade surplus of EUR 10.8 billion in animals and animal products in 2019, representing a stark turnaround from the relatively balanced trade position in the period between 2002 and 2009.

**Figure 8.2.2:** EU-27 exports and imports of agricultural products, 2019 (EUR million)



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

# 8.3. Main trading partners in agricultural products

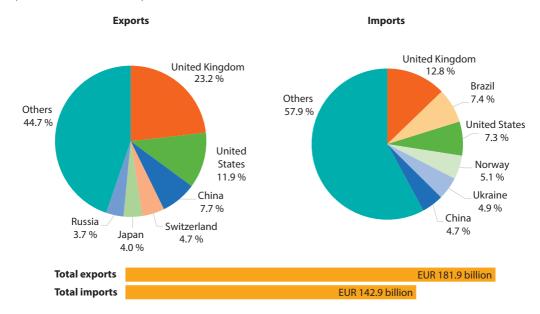
## The United Kingdom is the EU's main trading partner in agricultural products

The EU exported agricultural goods to the United Kingdom to the value of EUR 42.2 billion in 2019, accounting for a little less than one quarter (23.2 %) of the total value of the EU's exports of agricultural goods, and imported agricultural goods to the value of EUR 18.3 billion, 12.8 % of such imports (see Figure 8.3.1). The United Kingdom was the main export destination for foodstuffs (23.3 % of all EU exports within this product group), crop products (23.0 %) and animal products (23.2 %).

The United States of America (USA) was the second largest trading partner with the EU in agricultural goods. The EU exported agricultural goods to the USA that were valued at EUR 21.7 billion in 2019, accounting for 11.9 % of the total value of the EU's exports of agricultural goods, and imported agricultural goods from the USA valued at EUR 10.4 billion, which accounted for 7.3 % of such imports.

The value of agricultural goods imported by the EU from Brazil (EUR 10.6 billion) was higher than imports from all other countries with the exception of the United Kingdom. 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 fifth (21.5 %) of the total in 2019. Almost all of these animals and animal products from Norway, which were valued at EUR 6.6 billion, were fish.

**Figure 8.3.1:** EU-27 exports and imports of agricultural products by main partner, 2019 (% share and EUR billion)



Source: Eurostat (online data code: DS-018995)

### 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.

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 administered by the World Customs Organization. The 24 chapters (2-digit codes) of agricultural products in the CN are grouped into three 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 27 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, data on trade are also available in the United Nations' standard international trade classification (SITC Revision 4) and in the broad economic categories classification, the latter using end-use categories more adapted to economic analysis.

#### Unit of measure

Trade values are expressed in millions (10<sup>6</sup>) or in billions (10<sup>9</sup>) of euros. They correspond to the statistical value, in other words, 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

# Food and beverage distribution



## Introduction

Food and beverage distributors operate between producers and consumers; they comprise wholesalers and retailers. In a simplified form, wholesalers can be thought of as the intermediaries operating between producers and retailers or between two producers.

The ability to trace food through the distribution chain helps ensure food safety, while reducing disruption to trade. Based on EU legislation, traceability has been compulsory since 2005 for all enterprises involved in food and animal feed. This is to ensure that it is possible to identify where products have come from and where they are going

Food comes into contact with many materials and articles during its production, processing, storage, preparation and serving, before its eventual consumption. These so-called food contact materials (FCMs) should be sufficiently inert so that their constituents neither adversely affect consumer health nor influence the quality of the food. To ensure the safety of FCMs, and to facilitate the free movement of goods, EU law provides for binding rules that business operators must comply with. This safety measure covers containers for transporting food and packaging materials safety and inertness for all food contact materials (38).

(38) For more information, see the European Commission's webpage on food contacts materials.



# 9.1. Wholesalers, retailers and service providers in food and beverages

## Wholesalers and retailers in food and beverages

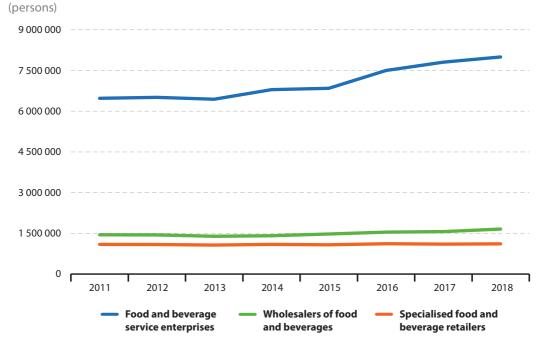
There were 201 000 enterprises specialised in food and beverage wholesaling in the EU-27 in 2018 and a further 723 000 retail enterprises either specialising in food and beverages, or in which these goods predominate. There were also about 1.5 million food and beverage service enterprises, like restaurants, bars, cafés and catering food services across the EU.

Food and beverage distribution enterprises are major employers in the EU. There were an estimated 10.8 million people employed in wholesaling of and the specialised retailing of food and beverages, and restaurants, bars, cafés

and catering services in 2018. The majority of this workforce was employed in food and beverage service enterprises. In addition, there were another 5.0 million persons working in non-specialised stores where the retail sale of food and beverages predominates.

There was steady employment growth in the food and beverage service enterprises during the period between 2011 and 2018; an extra 1.5 million people were employed by such enterprises, of which 1.1 million more were employed in restaurants and mobile food services. An extra 117 000 persons were employed in the wholesale of food and beverages in 2017 compared with 2011, but there was almost no change in the number of persons employed in specialised food and beverage retailers.

**Figure 9.1.1:** Persons employed in food and beverage wholesalers, retailers and service providers, EU-27



Source: Eurostat (online data codes: sbs\_na\_dt\_r2 and sbs\_na\_1a\_se\_r2)

# 9.2. 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 looks at some details concerning freight transport in the EU by road and inland waterways. Data on rail, air and sea transport by type of goods are currently unavailable or too provisional for data analysis.

## Every year, EU-registered trucks transport billions of tonnes of agricultural products and food products by road ...

About 1.2 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 2019. This includes both EU-produced goods and imports from outside the EU. A further 1.6 billion

tonnes of food products, beverages and tobacco were driven by EU-registered trucks in 2019.

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 vehicles with a loading capacity smaller than 3.5 tonnes. This is important to note in those EU Member States that have an EU external border, as a part of international transport is not covered by these statistics.

## ... over a payload-distance of about 500 billion kilometres in 2019

A unit of measure of freight transport is the tonnekilometre (t-km). 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 of 3.5 tonnes or more, for a payload-distance of 197 billion tonne-kilometres in 2019. Food products, beverages and tobacco were transported for a further 303 billion tonnekilometres in 2019. To put this in some context, this was the equivalent of an average distance of 177 km for every tonne of these goods transported by road.

By way of comparison, metal ores and peat were transported by road for a payload-distance of 138 billion tonne-kilometres in 2019, and other non-metallic mineral products for 146 billion tonne-kilometres; these were the next largest product groups.

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

Between 2010 and 2019, the tonnage of agriculture, hunting, forestry and fishery products transported by EU-registered trucks continued

to increase (+11.2 % in total). The total payload-distance for these products rose even more sharply (+16.3 % overall), suggesting that the average distance travelled by road of 1 tonne of goods had lengthened by about 7 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 (+19.9 % and +22.8 % between 2011 and 2019).

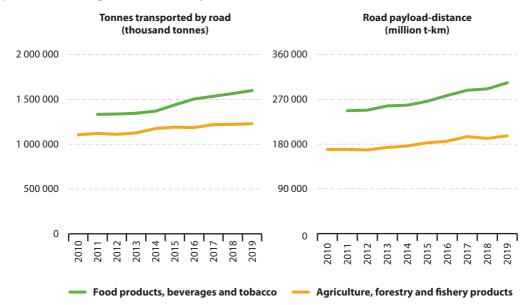
# Agricultural products and food products represent the largest share of road freight transport payload-distance

A wide range of products are transported by EU-registered trucks but 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 2018. These combined groups of goods accounted for 27.4 % of the payload-distance of all road freight transport on EU-registered trucks and 20.7 % of all the road freight tonnes in 2018. By way of comparison, metal ores and peat accounted for 7.8 % of all freight payload-distance by EU-registered trucks and 25.8 % of all road freight tonnes, and other non-metallic mineral products 7.9 % and 12.2 % of the total respectively.

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

A large majority (85.4 % of the goods in tonnes, 2019) 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,

**Figure 9.2.1:** Transport of agriculture, hunting, forestry and fishery products as well as food products, beverages, and tobacco by road in the EU-27, 2010-2019



Note: 2018 figures include the 2017 figure for Belgium for agriculture, forestry and fishery products and the 2017 figure for Finland for food products, beverages and tobacco. 2010 figures for food products, beverages and tobacco: confidential.

Source: Eurostat (online data code: road\_qo\_ta\_tg)

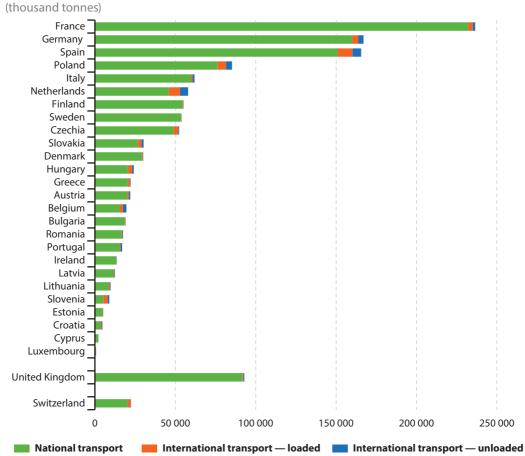
beverages and tobacco products. Indeed, in both cases a majority (68.3 % and 58.8 % respectively) of these products were transported over distances of less than 150 km. In large part this reflects the perishable nature of many (particularly fresh) agricultural and food products as well as their widespread availability from regional producers. It also fits with 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 (39).

## 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 agriculture, 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.

(29) 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 9.2.2:** Road transport of agriculture, hunting, forestry and fishery products, by type of transport, 2019



Source: Eurostat (online data codes: road\_go\_na\_tgtt, road\_go\_ia\_lgtt and road\_go\_ia\_ugtt)

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 are not covered here

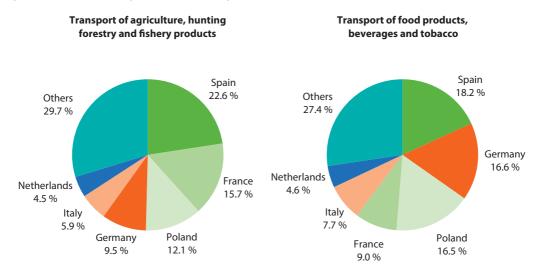
National transport dominated road freight transport of agriculture, hunting, forestry and fishery products in all Member States (see Figure 9.2.2). Only in a few Member States, like the Netherlands and Belgium, where there are important cargo ports, as well as Slovenia, Luxembourg and Croatia, was the share of international freight transport of agriculture, hunting, forestry and fisheries products above 20 %.

About 60 % 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 in 2019; Spain (22.6 %), France (15.7 %), Poland (12.1 %) and Germany (9.5 %). Likewise, about 60 % of the payload-distance of food products, beverages and tobacco was by trucks registered in four Member States in 2019: Spain (18.2 %), Germany (16.6 %), Poland (16.5 %) and France (12.8 %).

#### 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

Figure 9.2.3: Road freight transport of agriculture, hunting, forestry and fishery products as well as food products, beverages and tobacco, 2019 (% share of EU-27 total, tonne-kilometres)



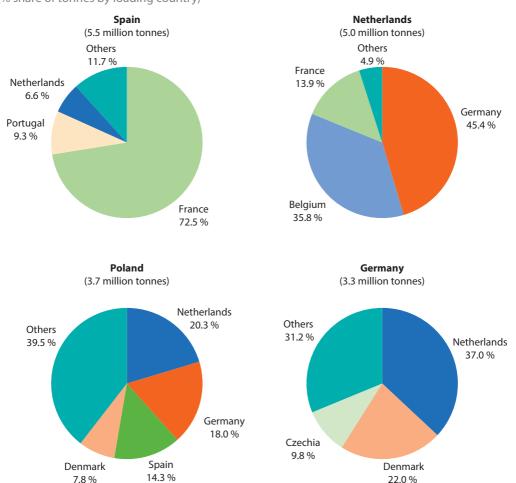
Source: Eurostat (online data code: road\_g\_ta\_tg)

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 in 2019; these were Spain (17.8 %), the Netherlands (16.1 %), Poland (12.0 %) and Germany (10.7 %).

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. Almost three quarters (72.5 %) 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 2019 were loaded back in France. Similarly about 80 % of the 5.0 million tonnes of international freight unloaded in the Netherlands in 2019 was loaded

**Figure 9.2.4:** International road transport of agriculture, hunting, forestry and fishery products unloaded in selected countries, 2019 (% share of tonnes by loading country)



Source: Eurostat (online data code: road\_go\_ia\_ugtt)

either back in Germany (45.4 %) or in Belgium (35.8 %). About two thirds of the 3.3 million tonnes of international freight of agriculture, hunting, forestry and fishery products that were unloaded in Germany in 2019 were loaded in the neighbouring countries of the Netherlands, Denmark and Czechia.

There were longer journeys transporting agriculture, hunting, forestry and fishery products to Poland. The Netherlands was the principal loading Member State for such goods to Poland (20.3 % of the total) and Spain was the third main loading destination (accounting for 14.3 % of the total unloaded in Poland).

## 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 38.7 million tonnes of agriculture, hunting, forestry and fishery products, with a payload-distance of 16.9 billion tonnekilometres in 2019. Likewise, a further 20.9 million tonnes of food products, beverages and tobacco

were transported along the EU's inland waterways in 2019, with a payload-distance of 5.5 billion tonne-kilometres. Together these products represented 11.4 % of the total freight tonnes transported on the EU's inland waterways in 2018 and 16.0 % of the total payload-distance.

## Less agricultural products sent by inland waterways in 2019 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, despite the upturn in traffic in 2019 (see Figure 9.2.5).

Since a relative peak in 2014, the tonnes of agriculture, hunting, forestry and fishery products transported by inland waterways have declined, from 42.0 million tonnes to about 38.7 million tonnes in 2019. Between 2014 and 2019, the payload-distance over which agriculture, hunting, forestry and fishery products were transported on inland waterways declined even faster. Similarly, there were also declines in the freight tonnes and payload-distance of food products, beverages and tobacco since their relative peak in 2015.

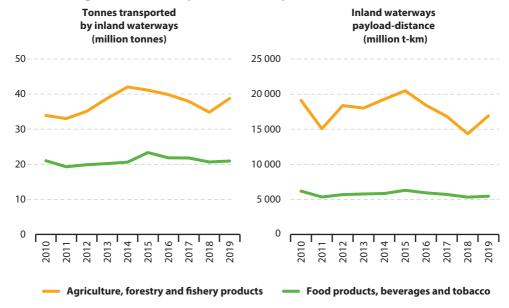
For both product groups, the steeper rates of decline in the total payload-distance (t-km) than in tonnes carried suggest a marked shortening in average distances over time.

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 on tonnes

transported do not sum to EU totals. With this in mind, the Netherlands recorded vessels carrying a total of 29.8 million tonnes of agriculture, hunting, forestry and fishery products, and food products, beverages and tobacco in 2019 and Germany recorded vessels carrying 21.5 million tonnes of such products. France recorded vessels carrying more agriculture, hunting, forestry and fishery products (at 13.6 million tonnes) than any other Member State in 2019 but relatively little in the way of food products, beverages and tobacco (1.3 million tonnes).

About 70 % of the payload-distance of agriculture, hunting, forestry and fisheries products and food products, beverages and tobacco on inland waterways within the EU-27 was carried on the waterways of Germany (32.2 %), Romania (19.4 %) and the Netherlands (17.8 %) in 2019. A further 20 % of the EU total was carried along the waterways of France (10.4 %) and Bulgaria (9.0 %).

**Figure 9.2.5:** Transport of agriculture, hunting, forestry and fishery products as well as food products, beverages, and tobacco by inland waterways in the EU-27, 2010-2019



Source: Eurostat (online data code: iww\_go\_atygo)

## Data sources and availability

Structural business statistics (SBS) describe the structure and performance of businesses in the EU. They cover the 'business economy' (NACE Rev. 2 Sections B to N and Division 95) which includes industry, construction, distributive trades, and services.

The statistics can be broken down to a very detailed sectoral level (in other words, several hundred economic activities). Thus, the information available from SBS is more detailed than data from short-term business statistics and national accounts. The main variables within SBS are expressed as monetary values or as counts, for example for the numbers of enterprises or persons employed.

Data on the carriage of goods by roads are derived from micro-data collected in the context 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 quantity and performance of freight transport on the EU's inland waterway network. They are reported on the basis of the 'territoriality principle' which means that each Member State reports the loading, unloading and movements of goods that take place on its national territory, irrespective of country of origins of enterprises or place of first loading and final unloading.

# 10

# Food and beverage consumption



## Introduction

Food and beverages are vital for satisfying physiological needs of hunger and thirst. As such, food and beverages are a recurrent expenditure item for almost all households. There is a wide variety of food and drinks available to EU citizens.

Purchases often reflect local, regional and national cuisine and form part of the national cultural identity of a Member State.



## 10.1. Consumption expenditure

Food and beverages (including catering services) accounted for a combined 21.4 % of the final consumption expenditure of households, on average, across the EU-27 in 2018. Of this total, an average 11.8 % was spent on food, 6.8 % on catering services, 1.6 % on alcoholic beverages and 1.2 % on non-alcoholic beverages.

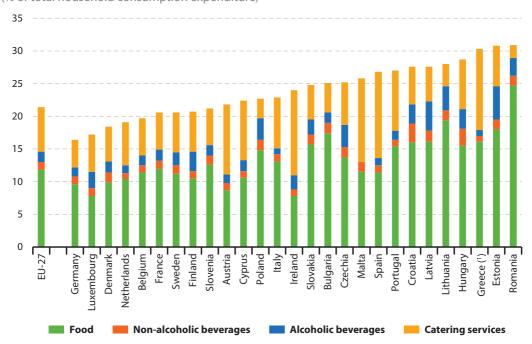
There are considerable differences in the proportion of household income spent on food and beverage products within the EU (see Figure 10.1.1). Among the Member States, the lowest shares of household consumption expenditure on food, beverages and catering services was in Germany (16.4 %) and then Luxembourg (17.2 %). By contrast, the highest shares were in Romania (30.9 %) and Estonia (30.8 %).

For most people, food and beverages are essential items of expenditure, although for many people

there is food poverty. About one in every eight people over the age of 16 years in the EU-27 (an estimated 11.9 %) had either some or a severe inability to afford a meal with meat, chicken, fish, or vegetarian equivalent every second day in 2018. The proportion was highest (13.8 %) in the age range of people aged 55 to 64 years old.

In some Member States, this measure of food poverty was relatively acute. In Bulgaria, about two in every five people (43.8 %) aged 16 years or more had some inability or a severe inability to afford a meal with meat, chicken, fish or vegetarian equivalent every second day in 2018 (see Figure 10.1.2). In Lithuania, Romania, Slovakia and Hungary the equivalent proportion was about one in every five people aged 16 years or more. Nevertheless, food poverty in the EU has been in decline in almost all Member States since about 2012 and particularly in the aforementioned Member States.

**Figure 10.1.1:** Structure of household consumption, 2018 (% of total household consumption expenditure)



(1) 2017 data

Source: Eurostat (online data code: nama\_10\_co3\_p3)

Poverty in the EU prevents many people from having nutritious meals. However, as average incomes rise, there is often product substitution for better quality products and a higher consumption of catering services. The average expenditure on food and beverages as a proportion of income tends to decline as average income rises.

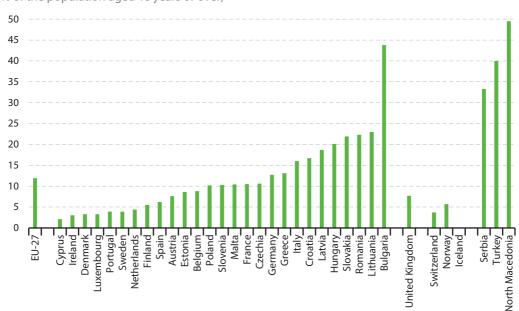
People from different socioeconomic groups also dedicate varying proportions of their consumption expenditure to food and beverages. Unemployed people dedicated a higher proportion of their consumption expenditure to food and non-alcoholic beverages (18.8 % in 2015) than other socioeconomic groups, and especially non-manual workers in industry and services (13.8 % in 2015).

So what foods and drinks are people spending money on? With the exception of the Netherlands, Malta and Cyprus, meat accounted for the largest share of household consumption (40) expenditure (an average 3.5 % across the EU in 2017), reaching a high in Romania (8.3 %). Of the food categories, the next highest shares among Member States after meat were generally bread and cereals (2.6 % share in the EU-27), milk, cheese and eggs (2.2 %) or vegetables (1.9 %). Portugal was an exception as the share of expenditure on fish and seafood (3.2 %) was more than that on milk, cheese and eggs (2.1 %) or vegetables (1.6 %).

The share of household consumption expenditure on alcoholic beverages was 2.0 % on average across the EU-27 in 2017, but this share varied from highs of 5.1 % in Estonia and 4.9 % in Latvia to a low of 0.8 % in Spain.

(40) This information is based on the item weights for the harmonised index of consumer prices (HICP), based on the classification of individual consumption according to purpose (COICOP). Note that the information presented is based on a different definition of household consumption from that used earlier for total final household expenditure, which comes from national accounts.

**Figure 10.1.2:** Food poverty in the EU-27, 2018 (% of the population aged 16 years or over)



Note: food poverty is defined here as some or a severe inability to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day.

Source: Eurostat (online data code: hlth\_dm030)

## 10.2. Obesity

The European Commission has had a number of initiatives that promote healthy and sustainable diets. Among these was the 2007 initiative on nutrition, overweight and obesity-related health issues (41) which encompassed initiatives on food labelling, school fruit and milk schemes, on sport and on research projects. Among other objectives were: the avoidance of nutritional deficiencies and of direct health problems of being overweight; the promotion of safe and sustainable food: a reduction in food waste; and, improved animal welfare. The direct health problems related to being overweight or obese also have an economic impact as costs related to treatments for weightrelated illnesses. Obesity causes a range of chronic diseases, including diabetes, cancers and heart disease. The body mass index (BMI) is defined as a person's weight in kilograms divided by the square of their height.

One half (an estimated 51.8 %) of the EU-27's adult population over 18 years of age was classified as overweight in 2017 (see Figure 10.2.1). A little over one third (36.9 %) of the EU's adult population was preobese (with a BMI over 25 but less than 30) and about

one in every seven adults (14.9 %) was classified as obese (with a BMI greater than 30) in 2017.

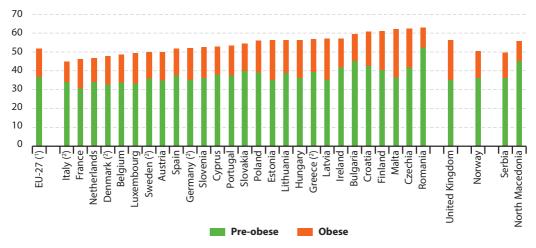
The Member States with the highest proportions of their adult populations (aged 18 years or over) that were overweight in 2017 were Croatia (60.9 %), Finland (61.1 %), Malta (62.2 %), Czechia (62.3 %) and Romania (62.9 %). Italy and France had the lowest proportions (44.9 % in 2014 and 46.1 % in 2017 respectively).

These proportions appear to be rising. This was the case for the overwhelming majority of the Member States for which data are available from 2008. In some Member States, the proportion of the adult population that was overweight rose significantly: in Bulgaria it rose from 50.8 % in 2008 to 59.5 % in 2017 and in Romania from 50.3 % in 2008 to 62.9 % in 2017.

The proportion of overweight adults (those that were pre-obese and obese) grew steadily with age in the survey year. A little more than one fifth (22.2 % in 2014) of young adults aged 18 to 24 years were pre-obese or obese across the EU-27. However, nearer two thirds (66.4 % in 2014) of adults aged between 65 and 74 years were pre-obese or obese.

(41) For more information, see https://ec.europa.eu/health/nutrition\_physical\_activity/policy/strategy\_en.

**Figure 10.2.1: Overweight adult populations, 2017** (% of the adult population aged 18 years or over)



(1) Estimate.

(2) 2014 data.

Source: Eurostat (online data code: sdg\_02\_10)

## 10.3. Generation of waste by households

Reducing food loss and waste is an integral part of the Action Plan of the European Commission's Farm to Fork strategy towards a sustainable EU food system that safeguards food security and ensures access to healthy diets sourced from a healthy planet (42).

Within the EU-27, households generated 189.8 million tonnes of waste in 2018, equivalent to 8.2 % of all the waste generated by economic activities and households. This waste includes plastics, metals and clothing among much more, but also includes food waste.

Within the three classification categories of animal and mixed food waste, vegetal waste, and mixed household waste are types of food waste. Eurostat estimates that the EU-27 produced 70 million tonnes of food waste in 2016, which was the equivalent of 158 kg per inhabitant over the year across the EU. As such, just over one third of all the household waste produced in the EU-27 in 2016 was considered food waste.

During the short time series for which data are available, there was little change in food waste levels: food waste in 2012 was an estimated 69 million tonnes, the equivalent of 157 kg per inhabitant over the year.

(\*2) For more information on food waste, visit the European Commission's website: https://ec.europa.eu/food/safety/food\_waste/eu\_actions\_en.

## Data sources and availability

## Final consumption expenditure in national accounts

Eurostat collects data on household final consumption expenditure according to the international classification of individual consumption by purpose (COICOP) in the framework of ESA 2010. The transmission requirements for each dataset are defined in ESA 2010 transmission programme. For COICOP data these are *t*+9 months after the reference period.

Household consumption expenditure is classified by consumption purpose according to the COICOP classification (see also Commission Regulation (EC) No 113/2002 of 23 January 2002). Relevant COICOP categories at three-digit level for this chapter are as follows:

- P010 food and non-alcoholic beverages;
- P011 food;
- P012 non-alcoholic beverages;
- P021 alcoholic beverages;
- P111 catering services.

## Harmonised indices of consumer prices

Harmonised indices of consumer prices (HICPs) are economic indicators constructed to measure the changes over time in the prices of consumer goods and services acquired by households. HICPs give comparable measures of inflation between the Member States and some other countries. They are calculated according to a harmonised approach and a single set of definitions. The coverage of HICPs is defined in terms of 'household final monetary consumption expenditure', by reference to national accounts concepts (ESA 2010).

#### **Body mass index statistics**

The European health interview survey (EHIS) and the EU's statistics on income and living conditions (EU-SILC) are the sources of information for body mass index (BMI) statistics. The aim is to provide harmonised statistics across the EU Member States in relation to the respondents' health status, lifestyle (health determinants) and their use of healthcare services. The BMI is a measure of a person's weight relative to their height that links fairly well with body fat. The BMI is accepted as the most useful measure of obesity for adults (those aged 18 years and over) when only weight and height data are available. It is calculated as a person's weight (in kilograms) divided by the square of his or her height (in metres).

BMI  $(kg/m^2)$  = weight (kg) /  $(height (m))^2$ 

The following subdivision (according to the WHO) is used to classify results for the BMI:

- < 18.50: underweight;</li>
- ≥ 18.50 < 25: normal range;
- ≥ 25: overweight;
- > 30: obese

#### **Food waste statistics**

Eurostat has been working together with Member States to see how food waste data could be collected within the data collection framework set by the Waste Statistics Regulation (EC 2150/2002). In order to get more information on the EWC-Stat items that might contain food waste, the food waste plug-in consisted of a disaggregation of some data by list of waste code and by NACE activity. Data on food waste estimations from the Member States are voluntary (43).

(43) Details on the project and outputs regarding the 2012 reference year are described in Eurostat's *The "food waste plug-in"* — reference year 2012, Project description and outputs: https://circabc.europa.eu/ui/group/b01d2930-990e-44fb-9121-a9a6b00a1283/library/ec3f307e-1107-4d5e-8f7e-12d2ff43b464/details.

# 11

# Agriculture, forestry and fisheries at a glance



### **EU-27**



Gross domestic product (GDP) 20 Population on 1 January 20	110 120		
Population on 1 January 20	JI9 13 9	963.6	EUR billion
1 oparation on 1 sandary	)19 4	146.8	million
Land area 20	016 4 104	251	km²
Farmland 20	)16 1 566	653	km²
Share of farmland in land area 20	016	38.2	%

Source: Eurostat (online data codes: nama\_10\_gdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

### Did you know that...

- Having fallen (–1.4 %) in 2018, the index of agricultural factor income per annual work unit grew (+4.7 %) in 2019 to reach a new peak. The index was three fifths (+60.1 %) above the level of 2005.
- The output of the agricultural industry was valued at EUR 418.0 billion in 2019, an increase (+2.4 %)
  compared with 2018.
- The harvested production of cereals increased sharply (+9.2 %) to 299.3 million tonnes in 2019. Part of this increase reflected a rebound from a relatively low harvest in 2018 due to that year's drought in many regions of central and northern Europe.
- The production of some types of meat (measured in carcass weight) decreased in 2019, notably bovine meat (–1.4 %) and pig meat (–0.7 %). By contrast, there was another rise in raw milk production (+0.9 %) to 158.2 million tonnes in 2019, continuing an upward trend.
- Output prices for cereals were lower (-2.9 %) in 2019 than in 2018 in real (deflated) terms; there were falls for all major types of cereals. By contrast, there were increases for potatoes (+23.6 %) and tomatoes (+13.5 %). The real-terms price index for animals increased (+4.5 %) in 2019, reflecting a large increase recorded for pigs (+15.7 %) balanced against decreases for the other major types of meat: poultry (-1.6 %), sheep and goats (-3.0 %), and cattle (-4.1 %). Following strong fluctuations in recent years, the average milk price was relatively stable in 2019 (-0.6 %).

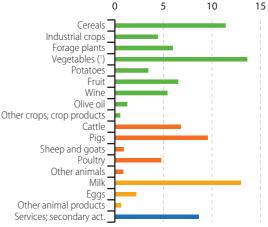
**Figure 11.1a:** Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. 2019: estimate. Source: Eurostat (online data code: aact\_eaa06)

**Figure 11.1b:** Output value of the agricultural industry, 2019

(% of total output, at basic prices)



Note: estimates. (1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.1: Key indicators for agriculture, forestry and fisheries for the EU-27

Farmland: utilised agricultural area (UAA) 2016   55665   thousand hectares Farms (agricultural holdings) 2016   6282700   number  Share of very small farms (with < EUR 8000 of standard output) (*) 2016   68.3   %    Farmers   Year   Value   Unit  Employment in agriculture as a share of total employment (*) 2019   8.739.7   thousand annual work units  Young farmers (under 40 years old) as a share of all farm managers 2016   10.7   %    Economic performance of agriculture 2019   8.739.7   thousand annual work units  Young farmers (under 40 years old) as a share of all farm managers 2016   10.7   %    Economic performance of agriculture 2019   18.1   70   EUR million  Contribution of agriculture to gross domestic product 2019   18.1   70   EUR million  Value of agricultural industry output (production value at basic prices) 2019   417.96   EUR million  Value of agricultural factor income per annual work unit (indicator A) 2019   2.0   502   EUR million  Value of amimal output 2019   2.0   502   EUR million  Value of amimal output 2019   16.1   416   EUR million  Agri-environmental indicators 2019   47.9   %  Area under organic farming as a share of the UAA 2018   8.0   %  Area under organic farming as a share of the UAA 2018   8.0   %  Area under conversion to organic farming as a share of the UAA 2018   2019   299 309   thousand tonnes  Agricultural production  Year   Value  Agricultural production   2909   299 309   thousand tonnes  Thousand tonnes  Thousand tonnes  Year   Value  Agricultural production   2019   299 309   thousand tonnes  Year   Value  Agricultural production   2019	Farms and farmland	Year	Value	Unit
Farms (agricultural holdings)         2016         10 282 700         number           Share of very small farms (with < EUR 8000 of standard output) (*)				*****
Share of very small farms (with < EUR 8 000 of standard output) (*)   Parmers   Year   Value   Unit				
Employment in agriculture as a share of total employment (°)	· • • • • • • • • • • • • • • • • • • •			
Employment in agriculture as a share of total employment (°)	Farmers	Year	Value	Unit
Total labour force in agriculture   Young farmers (under 40 years old) as a share of all farm managers   2016   10.7   %				
Young farmers (under 40 years old) as a share of all farm managers   2016   10.7   %	1, 1, 1,	2019	8 739.7	thousand annual work units
Economic performance of agriculture   Year   Value   Unit	·	2016	10.7	%
Contribution of agriculture to gross domestic product     2019     1.3     %       Gross value added (at basic prices)     2019     181 479     EUR million       Value of agricultural industry output (production value at basic prices)     2019     220 502     EUR million       Value of rop output     2019     220 502     EUR million       Value of animal output     2019     161 416     EUR million       Annual change in agricultural factor income per annual work unit (indicator A)     2019     4.7     %       Area under organic farming as a share of the UAA     2018     8.0     %       Area under conversion to organic farming as a share of the UAA     2018     8.0     %       Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013     2018     -17     %       Cereals (including rice)     2019     299 309     thousand tonnes       Root crops     2019     166 853     thousand tonnes       Fresh vegetables     2019     2099     309     thousand tonnes       Permanent crops     2019     168 823     thousand tonnes       Milk     2019     158 204     thousand tonnes       More and the wood of the wood		Voar	Value	Unit
Gross value added (at basic prices)     2019     181 470     EUR million       Value of agricultural industry output (production value at basic prices)     2019     417 984     EUR million       Value of crop output     2019     161 416     EUR million       Value of animal output     2019     161 416     EUR million       Annual change in agricultural factor income per annual work unit (indicator A)     2019     4.7     %       Agri-environmental indicators     Year     Value     Unit       Area under organic farming as a share of the UAA     2018     8.0     %       Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013     2018     -17     %       Cereals (including rice)     2019     299 309     thousand tonnes       Root crops     2019     166 853     thousand tonnes       Fresh vegetables     2019     166 853     thousand tonnes       Fresh vegetables     2019     166 853     thousand tonnes       Permanent crops     2019     166 853     thousand tonnes       Milk       10     158 204     thousand tonnes       10     158 204     thousand tonnes       10     158 204     thousand tonnes <t< th=""><th><u> </u></th><th></th><th></th><th></th></t<>	<u> </u>			
Value of agricultural industry output (production value at basic prices)     2019     417 984     EUR million       Value of rop output     2019     220 502     EUR million       Value of animal output     2019     4.7     %       Annual change in agricultural factor income per annual work unit (indicator A)     2019     4.7     %       Agri-environmental indicators     Year     Value     Unit       Area under conversion to organic farming as a share of the UAA     2018     8.0     %       Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013     2018     -17     %       Agricultural production     Year     Value     Unit       Cereals (including rice)     2019     299 309     thousand tonnes       Root crops       Person expetables     2019     166 853     thousand tonnes       Person expetables     2019     70 642     thousand tonnes       Permanent crops     2019     70 642     thousand tonnes       Milk     2019     70 642     thousand tonnes       Bovine meat     2019     2078     8 thousand tonnes       Por grade     2019     13 300     thousand tonnes       Por grade     2019     13 300     thousand tonnes	· · · · · · · · · · · · · · · · · · ·			, · ·
Value of crop output2019220 502EUR millionValue of animal output2019161 416EUR millionAnnual change in agricultural factor income per annual work unit (indicator A)20194.7%Agri-environmental indicatorsYearValueUnitArea under organic farming as a share of the UAA20188.0%Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-20132018-17%Magricultural productionYearValueUnitCereals (including rice)2019166 853thousand tonnesRoot crops2019166 853thousand tonnesFresh vegetables201960 905thousand tonnesPermanent crops201970 642thousand tonnesMilk201970 642thousand tonnesBovine meat20196 907thousand tonnesPig meat201922 768thousand tonnesPoultry meat2019133 300thousand tonnesForest and other wooded land2020180 262thousand tonnesForest and other wooded land2020180 262thousand annual work unitsGross value added (at basic prices)201726 221EUR millionRoundwood (under bark)2018378 694thousand annual work unitsFishing fleet20191 335 750gross tonnagePersons employed in fishing and aquaculture2018378 504thousand cubic metresTotal catches (major fis	· ,			
Value of animal output       2019       161 416       EUR million         Annual change in agricultural factor income per annual work unit (indicator A)       2019       4.7       %         Agri-environmental indicators       Year       Value       Unit         Area under organic farming as a share of the UAA       2018       8.0       %         Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013       2018       -17       %         Agricultural production       Year       Value       Unit         Cereals (including rice)       2019       166 833       thousand tonnes         Fresh vegetables       2019       166 833       thousand tonnes         Fresh vegetables       2019       60 905       thousand tonnes         Permanent crops       2019       70 642       thousand tonnes         Milk       2019       69 907       thousand tonnes         Bovine meat       2019       69 907       thousand tonnes         Pig meat       2019       13 300       thousand tonnes         Forestry       Year       Value       Unit         Forestry       Year       Value	, , , , , , , , , , , , , , , , , , , ,			FUR million
Annual change in agricultural factor income per annual work unit (indicator A)  Agri-environmental indicators  Agri-environmental indicators  Year  Value  Unit  Area under conversion to organic farming as a share of the UAA  Area under conversion to organic farming as a share of the UAA  Area under conversion to organic farming as a share of the UAA  Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013  Agricultural production  Year  Value  Unit  Cereals (including rice)  Agricultural production  Year  Value  Unit  Cereals (including rice)  2019  2099  2099  1068  Root crops  2019  1068  Root crops  Permanent crops  2019  1068  2019  1080  1080  1080  1080  1080  Root crops  Poultry meat  2019  1080  10				
Area under organic farming as a share of the UAA       2018       8.0       %         Area under conversion to organic farming as a share of the UAA       2018       :       %         Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013       2018       -17       %         Agricultural production       Year       Value       Unit         Cereals (including rice)       2019       299 309       thousand tonnes         Root crops       2019       166 853       thousand tonnes         Fresh vegetables       2019       60 905       thousand tonnes         Permanent crops       2019       70 642       thousand tonnes         Milk       2019       6907       thousand tonnes         Bovine meat       2019       6907       thousand tonnes         Pig meat       2019       6907       thousand tonnes         Poultry meat       2019       13 300       thousand tonnes         Persons employed in forestry and logging       2017       483.7       thousand tonnes         Persons employed in forestry and logging       2017       26 221       EUR million         Roundwood (under bark)       2018       378 694       thousand cubic metres         Fisheries	· · · · · · · · · · · · · · · · · · ·	2019	4.7	%
Area under organic farming as a share of the UAA       2018       8.0       %         Area under conversion to organic farming as a share of the UAA       2018       :       %         Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013       2018       -17       %         Agricultural production       Year       Value       Unit         Cereals (including rice)       2019       299 309       thousand tonnes         Root crops       2019       166 853       thousand tonnes         Fresh vegetables       2019       60 905       thousand tonnes         Permanent crops       2019       70 642       thousand tonnes         Milk       2019       6907       thousand tonnes         Bovine meat       2019       6907       thousand tonnes         Pig meat       2019       22768       thousand tonnes         Poultry meat       2019       13 300       thousand tonnes         Persons employed in forestry and logging       2017       483.7       thousand tonnes         Persons employed in forestry and logging       2017       26 221       EUR million         Roundwood (under bark)       2018       378 694       thousand cubic metres         Fisheries	Agri-environmental indicators	Year	Value	Unit
Area under conversion to organic farming as a share of the UAA  Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013    Year   Value   Unit		2018		%
Agricultural production  Agricultural production  Year Value Unit  Cereals (including rice)  Root crops  2019 299 309 thousand tonnes  Fresh vegetables 2019 60 905 thousand tonnes  Permanent crops 2019 70 642 thousand tonnes  Milk 2019 158 204 thousand tonnes  Bovine meat 2019 6907 thousand tonnes  Pig meat 2019 22768 thousand tonnes  Poultry meat 2019 13 300 thousand tonnes  Forestry Year Value Unit  Forest and other wooded land 2020 180 262 thousand tonnes  Persons employed in forestry and logging 2017 48.37 thousand annual work units  Gross value added (at basic prices) 2018 2018 2018 2018 2018 2018 2019 1335750 gross tonnage Persons employed in fishing and aquaculture  Fishing fleet 2019 13355750 gross tonnage Persons employed in fishing and aquaculture 2018 160.55 thousand 2010 160.60 2010 160.		2018	:	%
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Milk2019158 204thousand tonnesBovine meat20196 907thousand tonnesPig meat201922 768thousand tonnesPoultry meat201913 300thousand tonnesForest and other wooded land2020180 262thousand hectaresPersons employed in forestry and logging2017483.7thousand annual work unitsGross value added (at basic prices)201726 221EUR millionRoundwood (under bark)2018378 694thousand cubic metresFishing fleet20191 335 750gross tonnagePersons employed in fishing and aquaculture2018163.5thousandTotal catches (major fishing areas)20194 100 000tonnes live weightTotal aquaculture production (quantity)20181 100 000tonnes live weight	Cereals (including rice)	2019	299 309	thousand tonnes
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Pig meat     2019     22 768     thousand tonnes       Poultry meat     2019     13 300     thousand tonnes       Forest and other wooded land     2020     180 262     thousand hectares       Persons employed in forestry and logging     2017     483.7     thousand annual work units       Gross value added (at basic prices)     2017     26 221     EUR million       Roundwood (under bark)     2018     378 694     thousand cubic metres       Fishing fleet     2019     1 335 750     gross tonnage       Persons employed in fishing and aquaculture     2018     163.5     thousand       Total catches (major fishing areas)     2019     4 100 000     tonnes live weight       Total aquaculture production (quantity)     2018     1 100 000     tonnes live weight	Cereals (including rice) Root crops Fresh vegetables	2019 2019 2019	299 309 166 853 60 905	thousand tonnes thousand tonnes thousand tonnes
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Persons employed in forestry and logging     2017     483.7     thousand annual work units       Gross value added (at basic prices)     2017     26 221     EUR million       Roundwood (under bark)     2018     378 694     thousand cubic metres       Fishing fleet     2019     1 335 750     gross tonnage       Persons employed in fishing and aquaculture     2018     163.5     thousand       Total catches (major fishing areas)     2019     4 100 000     tonnes live weight       Total aquaculture production (quantity)     2018     1 100 000     tonnes live weight	Cereals (including rice) Root crops Fresh vegetables Permanent crops Milk Bovine meat Pig meat	2019 2019 2019 2019 2019 2019 2019 2019	299 309 166 853 60 905 70 642 158 204 6 907 22 768	thousand tonnes
Gross value added (at basic prices)     2017     26 221     EUR million       Roundwood (under bark)     2018     378 694     thousand cubic metres       Fishing fleet     Year     Value     Unit       Persons employed in fishing and aquaculture     2019     1 335 750     gross tonnage       Persons employed in fishing and aquaculture     2018     163.5     thousand       Total catches (major fishing areas)     2019     4 100 000     tonnes live weight       Total aquaculture production (quantity)     2018     1 100 000     tonnes live weight	Cereals (including rice) Root crops Fresh vegetables Permanent crops Milk Bovine meat Pig meat Poultry meat	2019 2019 2019 2019 2019 2019 2019 2019	299 309 166 853 60 905 70 642 158 204 6 907 22 768 13 300	thousand tonnes
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Fisheries         Year         Value         Unit           Fishing fleet         2019         1 335 750         gross tonnage           Persons employed in fishing and aquaculture         2018         163.5         thousand           Total catches (major fishing areas)         2019         4 100 000         tonnes live weight           Total aquaculture production (quantity)         2018         1 100 000         tonnes live weight	Cereals (including rice) Root crops Fresh vegetables Permanent crops Milk Bovine meat Pig meat Poultry meat Forestry Forest and other wooded land	2019 2019 2019 2019 2019 2019 2019 2019	299 309 166 853 60 905 70 642 158 204 6 907 22 768 13 300 <b>Value</b> 180 262	thousand tonnes
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Persons employed in fishing and aquaculture     2018     163.5     thousand       Total catches (major fishing areas)     2019     4 100 000     tonnes live weight       Total aquaculture production (quantity)     2018     1 100 000     tonnes live weight	Cereals (including rice) Root crops Fresh vegetables Permanent crops Milk Bovine meat Pig meat Poultry meat  Forestry  Forest and other wooded land Persons employed in forestry and logging Gross value added (at basic prices)	2019 2019 2019 2019 2019 2019 2019 2019	299 309 166 853 60 905 70 642 158 204 6 907 22 768 13 300 Value 180 262 483.7 26 221	thousand tonnes Unit thousand hectares thousand annual work units EUR million
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	Cereals (including rice) Root crops Fresh vegetables Permanent crops Milk Bovine meat Pig meat Poultry meat  Forestry  Forest and other wooded land Persons employed in forestry and logging Gross value added (at basic prices) Roundwood (under bark)  Fisheries Fishing fleet Persons employed in fishing and aquaculture Total catches (major fishing areas) Total aquaculture production (quantity)	2019 2019 2019 2019 2019 2019 2019 2019	299 309 166 853 60 905 70 642 158 204 6 907 22 768 13 300 Value 180 262 483.7 26 221 378 694 Value 1 335 750 163.5 4 100 000	thousand tonnes Unit thousand hectares thousand annual work units EUR million thousand cubic metres Unit gross tonnage thousand tonnes live weight

 $<sup>(^1\!)</sup>$  Excluding farms with no standard output in Luxembourg, Malta and Finland.

<sup>(2)</sup> Includes 2017 data for Romania and Sweden.

## **Belgium**



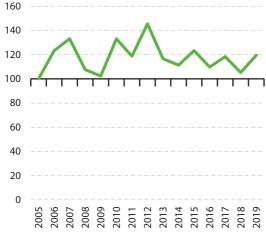
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	476.2	EUR billion	3.4
Population on 1 January	2019	11.5	million	2.6
Land area	2016	30 451	km²	0.7
Farmland	2016	13 543	km²	0.9
Share of farmland in land area	2016	44.5	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

### Did you know that...

- Having fallen (–11.1 %) in 2018, agricultural factor income per annual work unit rebounded in 2019 (+13.6 %). Nevertheless, it remained below (–17.8 %) its most recent peak level which was recorded in 2012.
- The output value of the agricultural industry was EUR 8.7 billion in 2019, an increase of +6.2 % over 2018. This overall rise in value reflected higher values for animal output (+5.4 %), notably for pigs (+21.9 %), and for crop output (+7.3 %), notably for fresh vegetables (+14.6 %).
- The production of bovine, poultry and pig meat in 2019 was lower than in 2018 (–4.9 %, –4.6 % and –3.2 % respectively). For poultry meat this was the first fall since 2013. The price of poultry also declined in real-terms in 2019 (an average –4.6 %). By contrast, there was a strong rebound in the price of pigs (+24.8 %) after the fall in 2018, and slight increase in the real-terms price of cattle (+1.0 %). The production of raw milk increased (+2.6 %) in 2019, continuing the unbroken upward trend started in 2013. The real-terms output price of milk remained broadly stable (+0.2 %).
- A rebound from the previous year's drought conditions lifted the production of a number of crop products. In particular, the harvested production of fresh vegetables (+8.9 %), cereals (+16.9 %) and potatoes (+32.3 %) were notably higher in 2019. With higher harvested production levels, so real-terms output prices fell sharply for potatoes (-25.3 %) and cereals (-10.2 %), although not for fresh vegetables (+4.8 %).

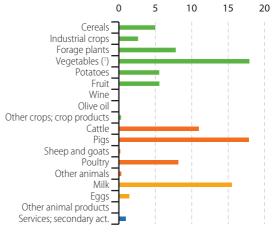
**Figure 11.2a:** Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

**Figure 11.2b:** Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

Table 11.2: Key indicators for agriculture, forestry and fisheries for Belgium

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	1 354	thousand hectares	0.9
Farms (agricultural holdings)	2016	36 890	number	0.4
Share of very small farms (with < EUR 8 000 of standard output)	2016	6.2	%	_
Farmers	Year	Value	Unit	EU-27 average/ total
Employment in agriculture as a share of total employment (¹)	2018	1.2	%	4.4
Total labour force in agriculture	2019	55.6	thousand annual work units	8 739.7
Young farmers (under 40 years old) as a share of all farm managers	2016	10.2	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
Contribution of agriculture to gross domestic product	2019	0.5	%	-
Gross value added (at basic prices)	2019	2 448	EUR million	1.3
'alue of agricultural industry output (production value at basic prices)	2019	8 713	EUR million	2.1
Value of crop output	2019	3 905	EUR million	1.8
Value of animal output	2019	4 730	EUR million	2.9
Annual change in agricultural factor income per annual work unit (indicator A)	2019	13.6	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
rea under organic farming as a share of the UAA	2018	6.6	%	8.0
rea under conversion to organic farming as a share of the UAA	2018	0.9	%	:
hange in the harmonised risk indicator 1 for pesticides compared with the overage for 2011-2013	2018	-28	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
Cereals (including rice)	2019	2 904	thousand tonnes	1.0
loot crops	2019	9 519	thousand tonnes	5.7
resh vegetables	2019	2 222	thousand tonnes	3.6
Permanent crops	2019	608	thousand tonnes	0.9
Ailk	2019	4 395	thousand tonnes	2.8
Bovine meat	2019	264	thousand tonnes	3.8
Pig meat	2019	1 039	thousand tonnes	4.6
Poultry meat	2019	448	thousand tonnes	3.4
Forestry	Year	Value	Unit	Share of EU-27 total (%)
orest and other wooded land	2020	722	thousand hectares	0.4
Persons employed in forestry and logging	2017	2.3	thousand annual work units	0.5
Gross value added (at basic prices)	2017	83	EUR million	0.3
Roundwood (under bark)	2018	:	thousand cubic metres	:
Fisheries	Year	Value	Unit	Share of EU-27 total (%)
ishing fleet	2019	12 914	gross tonnage	1.0
	2018	0.4	thousand	0.2
Persons employed in fishing and aquaculture				
	2019	21 061	tonnes live weight	0.5
Persons employed in fishing and aquaculture Total catches (major fishing areas) Total aquaculture production (quantity)		21 061 0	tonnes live weight tonnes live weight	0.5 0.0

<sup>(1)</sup> EU-27 average: includes 2017 data for Romania and Sweden.

## Bulgaria



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	61.2	EUR billion	0.4
Population on 1 January	2019	7.0	million	1.6
Land area	2016	110 001	km²	2.7
Farmland	2016	44 685	km²	2.9
Share of farmland in land area	2016	40.6	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

### Did you know that...

- Agricultural factor income per annual work unit increased (+14.1 %) in 2019, returning to the generally upward trend that was interrupted in 2018. As such, a new peak was recorded for this indicator, which was 3.1 times as high in 2019 as it had been in 2005. Nevertheless, it should be noted that agricultural labour input in 2019, measured in annual work units, was approximately one third of its level in 2005.
- The output value of the agricultural industry was EUR 4.3 billion in 2019, slightly higher (+0.6 %) than in 2018. The sharp rise in the value of animal output (+9.2 %), which was driven by the strong increase in the value of sheep and goats (+86.3%), was largely offset by the fall in the value of crop output (-2.3%).
- The harvested production of cereals in 2019 was (+10.1 %) higher than in 2018. The higher production figure for cereals as a whole reflected an increase in the harvested production level of grain maize and corn-cobmix (+14.7 %) and wheat and spelt (+5.7 %). The output price of cereals fell (-5.2 %) in real (deflated) terms in 2019, reflecting among other factors the increased level of harvested production.
- Production of poultry meat declined slightly in 2019 (-0.7 %), while pig meat production fell somewhat more strongly (-2.3 %) and bovine meat production slumped (-24.1 %). The fall in pig meat production was the first since 2010. There were higher real-terms prices for cattle (+11.7 %), poultry (+9.2 %) and pigs (+4.5 %). Raw milk production also fell strongly (-8.4 %), continuing the downward trend started in 2014. Despite the fall in the level of milk production, the real-terms output price fell slightly (-0.8 %).

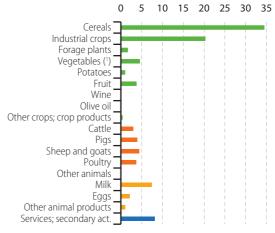
Figure 11.3a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100Source: Eurostat (online data code: aact\_eaa06)

Figure 11.3b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

Table 11.3: Key indicators for agriculture, forestry and fisheries for Bulgaria

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	4 469	thousand hectares	2.9
arms (agricultural holdings)	2016	202 720	number	2.0
Share of very small farms (with < EUR 8 000 of standard output)	2016	81.0	%	-
Farmers	Year	Value	Unit	EU-27 average tota
mployment in agriculture as a share of total employment (')	2018	17.1	%	4.4
otal labour force in agriculture	2019	190.4	thousand annual work units	<i>8 739.</i> .
oung farmers (under 40 years old) as a share of all farm managers	2016	14.0	%	10
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%
ontribution of agriculture to gross domestic product	2019	2.7	%	-
ross value added (at basic prices)	2019	1 906	EUR million	1.
alue of agricultural industry output (production value at basic prices)	2019	4 348	EUR million	1.
Value of crop output	2019	2 883	EUR million	1.
Value of animal output	2019	1 112	EUR million	0.
nnual change in agricultural factor income per annual work unit (indicator A)	2019	14.1	%	-
Agri-environmental indicators	Year	Value	Unit	EU-27 average
ea under organic farming as a share of the UAA	2018	2.6	%	8.
ea under conversion to organic farming as a share of the UAA	2018	0.9	%	
ange in the harmonised risk indicator 1 for pesticides compared with the erage for 2011-2013	2018	-17	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
ereals (including rice)	2019	11 132	thousand tonnes	3.
oot crops	2019	198	thousand tonnes	0.
esh vegetables	2019	551	thousand tonnes	0.
rmanent crops	2019	413	thousand tonnes	0.
lk	2019	940	thousand tonnes	0.
ovine meat	2019	5	thousand tonnes	0.
g meat	2019	78	thousand tonnes	0.
ultry meat	2019	114	thousand tonnes	0.
Forestry	Year	Value	Unit	Share of EU-2 total (%
rest and other wooded land	2020	3 917	thousand hectares	2.
rsons employed in forestry and logging	2017	12.0	thousand annual work units	2.
	2017	233	EUR million	0.
oss value added (at basic prices)		3 680	thousand cubic metres	1.
,	2018	5 000		
	2018 Year	Value	Unit	
oundwood (under bark) Fisheries	Year	Value		Share of EU-2 total (%
Fisheries shing fleet	<b>Year</b> 2019	<b>Value</b> 6 029	gross tonnage	<b>total (%</b>
Fisheries shing fleet ersons employed in fishing and aquaculture	<b>Year</b> 2019 2018	<b>Value</b> 6 029 1.6	gross tonnage thousand	<b>total (%</b> 0. 1.
ross value added (at basic prices) bundwood (under bark)  Fisheries  shing fleet ersons employed in fishing and aquaculture btal catches (major fishing areas) btal aquaculture production (quantity)	<b>Year</b> 2019	<b>Value</b> 6 029	gross tonnage	<b>total (%</b>

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

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## Czechia



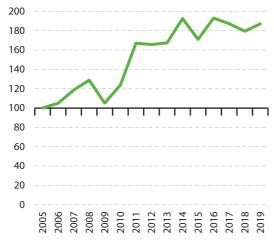
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	223.9	EUR billion	1.6
Population on 1 January	2019	10.6	million	2.4
Land area	2016	77 212	km²	1.9
Farmland	2016	34 554	km²	2.2
Share of farmland in land area	2016	44.8	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

### Did you know that...

- Agricultural factor income per annual work unit in 2019 was higher (+4.3 %) than in 2018 and back towards the recent peak level in 2016. The index level in 2019 was 87.0 % higher than in 2005.
- The output value of the agricultural industry was EUR 5.5 billion in 2019, representing a year-on-year increase of 3.6 %. Nearly two thirds of this total value came from cereals (+3.3 % compared with the value for 2018), milk (+1.4 %), industrial crops (-10.3 %) and forage plants (+31.9 %).
- Following on from the severe drought in most regions in 2018, the harvested production of many key crops increased in 2019. This included cereals as a whole (+9.7 %) and more specifically wheat and spelt (+8.9 %), barley (+7.0 %) and grain maize and corn-cob-mix (+26.8 %), as well as plants harvested green (+22.0 %) and potatoes (+6.7 %). The increase in the harvested production of cereals and potatoes in 2019 was accompanied by an increase in output prices in real (deflated) terms (+3.8 % and +33.9 % respectively). The price of oilseeds also rose (+2.7 %), accompanying a sharp decline in the harvested production (–17.4 %).
- Production of pig meat fell slightly (-0.6%) in 2019, the fifth consecutive annual fall. The average real-terms (deflated) price of pigs, however, climbed (+13.3 %) after falling sharply in 2018. The production of poultry meat (+2.3 %) and bovine meat (+1.8 %) grew, the former continuing an upward rebound that started in 2014. By contrast, real-terms prices of poultry (-0.3 %) and cattle (-5.1 %) declined. The production of raw milk was almost unchanged (-0.2 %) in 2019 after several years (at least since 2013) of expanding production; this was accompanied by almost no change in the average real-terms price of raw milk (+0.2 %).

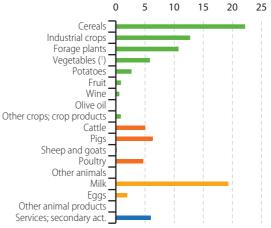
Figure 11.4a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.4b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

Table 11.4: Key indicators for agriculture, forestry and fisheries for Czechia

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
Farmland: utilised agricultural area (UAA)	2016	3 455	thousand hectares	2.
arms (agricultural holdings)	2016	26 530	number	0.
Share of very small farms (with < EUR 8 000 of standard output)	2016	31.7	%	
Farmers	Year	Value	Unit	EU-27 average
imployment in agriculture as a share of total employment (¹)	2018	2.6	%	4.
otal labour force in agriculture	2019	102.0	thousand annual work units	<i>8 739.</i>
oung farmers (under 40 years old) as a share of all farm managers	2016	10.2	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
Contribution of agriculture to gross domestic product	2019	0.8	%	
Gross value added (at basic prices)	2019	1 759	EUR million	1.
Value of agricultural industry output (production value at basic prices)	2019	5 498	EUR million	1.
Value of crop output	2019	3 113	EUR million	1.
Value of animal output	2019	2 058	EUR million	1.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	4.3	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	14.8	%	8.
Area under conversion to organic farming as a share of the UAA	2018	1.3	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-39	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	7 646	thousand tonnes	2.
Root crops	2019	4 298	thousand tonnes	2.
Fresh vegetables	2019	226	thousand tonnes	0.
Permanent crops	2019	195	thousand tonnes	0.
Milk	2019	3 156	thousand tonnes	2.
Bovine meat	2019	73	thousand tonnes	1
Pig meat	2019	210	thousand tonnes	0.
Poultry meat	2019	168	thousand tonnes	1.
Forestry	Year	Value	Unit	Share of EU-2 total (%
Forest and other wooded land	2020	2 677	thousand hectares	1.
Persons employed in forestry and logging	2017	21.7	thousand annual work units	4.
Gross value added (at basic prices)	2017	1 200	EUR million	4.
Roundwood (under bark)	2018	21 443	thousand cubic metres	5.
Fisheries	Year	Value	Unit	Share of EU-2 total (9
Fishing fleet	2019	_	gross tonnage	
Persons employed in fishing and aquaculture	2018	1.5	thousand	0.
Total catches (major fishing areas)	2019	_	tonnes live weight	
Total aquaculture production (quantity)	2018	21 750	tonnes live weight	2.
Total aquaculture production (value)	2018	49	EUR million	1.

 $<sup>(^{\</sup>text{!}})\;$  EU-27 average: includes 2017 data for Romania and Sweden.

## Denmark



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	312.7	EUR billion	2.2
Population on 1 January	2019	5.8	million	1.3
Land area	2016	41 987	km²	1.0
Farmland	2016	26 146	km²	1.7
Share of farmland in land area	2016	62.3	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- After a strong decrease (-24.9 %) in 2018, agricultural factor income per annual work unit rebounded (+69.4 %) in 2019 to the highest level since its 2012 peak.
- The output value of the agricultural industry rose strongly (+12.7 %) to EUR 11.6 billion in 2019. This increase in large part reflected higher output values for pigs (+16.7 %), cereals (+40.2 %) and forage plants (+28.2 %), which together accounted for one half (49.8 %) of the total output value in 2019. The output value of milk (with an 18.3 % share of the total output value) fell by 1.0 %.
- Production of pig meat (-5.2 %) and bovine meat (-3.6 %) fell in 2019, while the production of poultry meat increased (+7.5 %). After expanding every year since 2012, the level of production of raw milk was unchanged in 2019 compared with 2018.
- The rebound in 2019 from the drought conditions experienced in 2018 resulted in higher harvested production levels of all major crops: oilseeds (+49.0 %), plants harvested green (+39.3 %), cereals (+37.5 %) and root crops (+22.8 %). The higher levels of harvested production in 2019 of several major crops were accompanied by higher output prices in real-terms (deflated): sugar beet (+20.6 %), cereals (+2.3 %), potatoes (+1.5 %) and oilseeds (+0.7 %).
- After the sharp fall in 2018 (-18.2 %), the average real-terms price of pigs rebounded strongly (+27.5 %) in 2019. The real-terms output price for milk fell back further (-4.4 % in 2019) from the relatively high level in

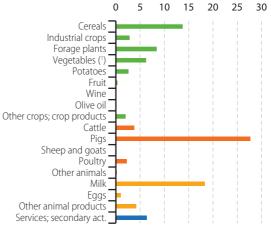
Figure 11.5a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. 2019: estimate. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.5b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



Note: estimates. (1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.5: Key indicators for agriculture, forestry and fisheries for Denmark

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%
Farmland: utilised agricultural area (UAA)	2016	2 615	thousand hectares	1.3
Farms (agricultural holdings)	2016	35 050	number	0
Share of very small farms (with < EUR 8 000 of standard output)	2016	11.5	%	-
Farmers	Year	Value	Unit	EU-27 average tota
Employment in agriculture as a share of total employment (¹)	2018	2.1	%	4.
Total labour force in agriculture	2019	53.7	thousand annual work units	8 739.
Young farmers (under 40 years old) as a share of all farm managers	2016	6.6	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-22 total (%
Contribution of agriculture to gross domestic product	2019	1.1	%	-
Gross value added (at basic prices)	2019	3 499	EUR million	1.
Value of agricultural industry output (production value at basic prices)	2019	11 629	EUR million	2.
Value of crop output	2019	4 215	EUR million	1.
Value of animal output	2019	6 672	EUR million	4.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	69.4	%	-
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	9.8	%	8.
Area under conversion to organic farming as a share of the UAA	2018	2.6	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-48	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2: total (%
Cereals (including rice)	2019	9 630	thousand tonnes	3.
Root crops	2019	5 131	thousand tonnes	3.
Fresh vegetables	2019	282	thousand tonnes	0
Permanent crops	2019	36	thousand tonnes	0.
Milk	2019	5 615	thousand tonnes	3.
Bovine meat	2019	125	thousand tonnes	1.3
Pig meat	2019	1 499	thousand tonnes	6.
Poultry meat	2019	159	thousand tonnes	1
Forestry	Year	Value	Unit	Share of EU-2: total (%
Forest and other wooded land	2020	665	thousand hectares	0.
Persons employed in forestry and logging	2017	6.0	thousand annual work units	1.
Gross value added (at basic prices)	2017	296	EUR million	1.
Roundwood (under bark)	2016	1 468	thousand cubic metres	0.
	Year	Value	Unit	Share of EU-2 total (%
Fisheries				total (/
	2010	70 906	gross tonnage	5
Fishing fleet	2019	70 906	gross tonnage thousand	
Fishing fleet Persons employed in fishing and aquaculture	2018	2.0	thousand	
Fishing fleet Persons employed in fishing and aquaculture				5. 1. 2.
Fishing fleet Persons employed in fishing and aquaculture Total catches (major fishing areas)	2018 2017	2.0 904 450	thousand tonnes live weight	

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

## **Germany**



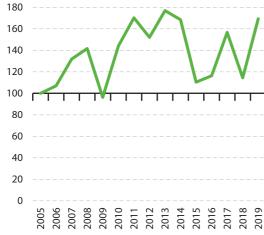
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	3 449.1	EUR billion	24.7
Population on 1 January	2019	83.0	million	18.6
Land area	2016	353 296	km²	8.6
Farmland	2016	167 153	km²	10.7
Share of farmland in land area	2016	47.3	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

### Did you know that...

- Agricultural factor income per annual work unit rebounded strongly in 2019 (+48.0 %) after its sharp decrease (-27.0 %) in 2018.
- The output value of the agricultural industry was EUR 58.2 billion in 2019, the second highest among EU Member States and higher (+10.6 %) than in 2018. Output values of five key products were substantially higher: milk (+6.9 %), pigs (+14.5 %), cereals (+28.7 %), potatoes (+48.5 %) and forage plants (+65.4 %).
- The harvested production of most crops increased in 2019 after the drought in 2018. The production of total cereals was higher (+16.7 %), with notable increases for common wheat and spelt (+13.8 %) and barley (+21.0 %). The harvested production of root crops increased (+14.6 %), including that of potatoes (+18.8 %).
- Germany had the highest production among the EU Member States of pig meat (5.2 million tonnes of carcass weight) and of milk (33.1 million tonnes) in 2019. Pig meat production declined (–2.2 %) in 2019, a third consecutive annual fall. The production of poultry meat (+0.8 %) and bovine meat (+0.4 %) increased slightly in 2019. Raw milk production in 2019 was unchanged compared with 2018.
- Accompanying the higher domestic supplies of many crops, there were also lower real-terms (deflated) output prices, including those for cereals (–8.8 %), fresh vegetables (–4.1 %) and sugar beet (–1.4 %). By contrast, despite higher supplies, the price of potatoes rose strongly (+26.2 %). In the animal and animal products sector, there was a sharp increase in the average real-terms price of pigs (+20.0 %) but a decline in that of milk (–3.3 %).

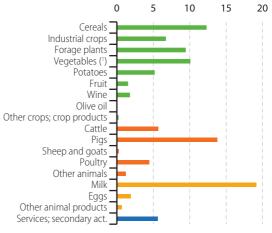
**Figure 11.6a:** Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

**Figure 11.6b:** Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(¹) Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

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Table 11.6: Key indicators for agriculture, forestry and fisheries for Germany

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
armland: utilised agricultural area (UAA)	2016	16 715	thousand hectares	10.7
arms (agricultural holdings)	2016	276 120	number	2.7
Share of very small farms (with < EUR 8 000 of standard output)	2016	10.5	%	-
Farmers	Year	Value	Unit	EU-27 average, tota
Employment in agriculture as a share of total employment (¹)	2018	1.3	%	4.4
otal labour force in agriculture	2019	465.0	thousand annual work units	<i>8 739.</i> .
oung farmers (under 40 years old) as a share of all farm managers	2016	14.7	%	10.3
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%
Contribution of agriculture to gross domestic product	2019	0.6	%	-
Gross value added (at basic prices)	2019	22 086	EUR million	12
/alue of agricultural industry output (production value at basic prices)	2019	58 220	EUR million	13.
Value of crop output	2019	27 584	EUR million	12.
Value of animal output	2019	27 351	EUR million	16.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	48.0	%	-
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	7.3	%	8.
Area under conversion to organic farming as a share of the UAA	2018	:	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-18	%	-1
Agricultural production	Year	Value	Unit	Share of EU-27 total (%
Cereals (including rice)	2019	44 329	thousand tonnes	14.8
Root crops	2019	40 609	thousand tonnes	24
Fresh vegetables	2019	3 904	thousand tonnes	6.4
Permanent crops	2019	2 313	thousand tonnes	3.
Milk	2019	33 103	thousand tonnes	20.
Bovine meat	2019	1 106	thousand tonnes	16.0
Pig meat	2019	5 227	thousand tonnes	23.0
Poultry meat	2019	1 584	thousand tonnes	11.9
Forestry	Year	Value	Unit	Share of EU-2 total (%
Forest and other wooded land	2020	11 419	thousand hectares	6
Persons employed in forestry and logging	2017	48.0	thousand annual work units	9.
Gross value added (at basic prices)	2017	3 186	EUR million	12.
Roundwood (under bark)	2018	49 928	thousand cubic metres	13
Fisheries	Year	Value	Unit	Share of EU-2 total (%
Fishing fleet	2019	57 581	gross tonnage	4.
Persons employed in fishing and aquaculture	2018	5.0	thousand	3.
Total catches (major fishing areas)	2019	207 225	tonnes live weight	5.
Total Catches (major hishing areas)				
Total aquaculture production (quantity)	2018	31 796	tonnes live weight	2.

<sup>(</sup>¹) EU-27 average: includes 2017 data for Romania and Sweden.

## **Estonia**



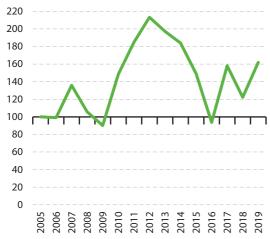
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	28.1	EUR billion	0.2
Population on 1 January	2019	1.3	million	0.3
Land area	2016	43 466	km²	1.1
Farmland	2016	9 951	km²	0.6
Share of farmland in land area	2016	22.9	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

### Did you know that...

- Agricultural factor income per annual work unit increased sharply in 2019 (+32.5 %), after a downturn in 2018 (-22.7 %).
- The output value of the agricultural industry was EUR 1.0 billion in 2019, which was up sharply (+16.1 %) on 2018. More than three fifths of this output value came from milk, cereals, industrial crops (mainly oilseeds) and pigs. The output value of all of these key products increased, in several cases strongly: industrial crops (+57.9 %) and cereals (+49.0 %).
- Drought conditions in many areas hit harvests in 2018; production subsequently rebounded. In 2019, there was considerable growth for harvested production levels of cereals (+76.6 %) and oilseeds (+67.0 %). After increasing in 2018, there was further growth in the level of harvested production of green maize (+49.8 %) and fresh vegetables (+48.2 %) in 2019. With higher production, there were lower real-terms prices for cereals (-6.8 %) and oilseeds (-1.0 %) but higher prices for potatoes (+24.8 %) and fresh vegetables (+14.5 %).
- The production of pig meat continued to increase (+4.3 % in 2019), the eighth annual increase in the last 10 years since a relative low in 2009. The price of pigs also increased strongly in real (deflated) terms (+8.3 %). By contrast, bovine meat production was stable (+0.1 %) but the average price for cattle fell sharply (-6.1 %). Raw milk production increased in 2019 (+3.0 %), the 13th annual increase in the last 16 years since rebounding from a low in 2003. The average real-terms price of milk, however, declined a little further (-1.4 %) from the relative high in 2017.

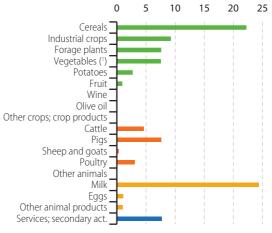
**Figure 11.7a:** Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

**Figure 11.7b:** Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(¹) Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

Table 11.7: Key indicators for agriculture, forestry and fisheries for Estonia

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%
Farmland: utilised agricultural area (UAA)	2016	995	thousand hectares	0.0
arms (agricultural holdings)	2016	16 700	number	0
Share of very small farms (with < EUR 8 000 of standard output)	2016	66.0	%	
Farmers	Year	Value	Unit	EU-27 average
mployment in agriculture as a share of total employment (¹)	2018	2.3	%	4.
otal labour force in agriculture	2019	18.9	thousand annual work units	<i>8 739.</i>
oung farmers (under 40 years old) as a share of all farm managers	2016	15.5	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
ontribution of agriculture to gross domestic product	2019	1.0	%	
ross value added (at basic prices)	2019	282	EUR million	0.
alue of agricultural industry output (production value at basic prices)	2019	998	EUR million	0.
Value of crop output	2019	503	EUR million	0.
Value of animal output	2019	418	EUR million	0.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	32.5	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
rea under organic farming as a share of the UAA	2018	21.0	%	8
rea under conversion to organic farming as a share of the UAA	2018	3.5	%	
change in the harmonised risk indicator 1 for pesticides compared with the overage for 2011-2013	2018	31	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	1 625	thousand tonnes	0.
loot crops	2019	86	thousand tonnes	0.
resh vegetables	2019	58	thousand tonnes	0
ermanent crops	2019	3	thousand tonnes	0.
Ailk	2019	822	thousand tonnes	0.
Sovine meat	2019	9	thousand tonnes	0.
Pig meat	2019	45	thousand tonnes	0.
Poultry meat	2019	:	thousand tonnes	
Forestry	Year	Value	Unit	Share of EU-2 total (%
orest and other wooded land	2020	2 533	thousand hectares	1.
Persons employed in forestry and logging	2017	5.5	thousand annual work units	1.
iross value added (at basic prices)	2017	249	EUR million	1.
oundwood (under bark)	2018	7 353	thousand cubic metres	1.
Fisheries	Year	Value	Unit	Share of EU-2 total (%
ishing fleet	2019	15 707	gross tonnage	1.
Persons employed in fishing and aquaculture	2018	0.7	thousand	0.
otal catches (major fishing areas)	2019	83 626	tonnes live weight	2.
	2018	944	tonnes live weight	0
Total aquaculture production (quantity)	2010	ノイイ	torries rive weight	U

<sup>(1)</sup> EU-27 average: includes 2017 data for Romania and Sweden.

## Ireland



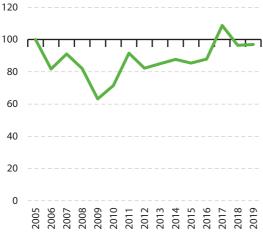
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	356.1	EUR billion	2.5
Population on 1 January	2019	4.9	million	1.1
Land area	2016	68 655	km²	1.7
Farmland	2016	48 837	km²	3.1
Share of farmland in land area	2016	71.1	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

### Did you know that...

- Agricultural factor income per annual work unit was almost unchanged (+0.5 %) in 2019, having fallen back (-11.3 %) in 2018 from a peak recorded in 2017. As such, the 2019 index level remained slightly lower (-3.1 %) than it had been in 2005.
- The output value of the agricultural industry in 2019 was EUR 8.5 billion (-1.9 % compared with 2018). The agricultural industry is focused on cattle-related activities: the output value of milk (EUR 2.6 billion in 2019; +1.7 %), cattle (EUR 2.3 billion; -1.1 %) and forage plants (EUR 1.0 billion; -20.0 %) together accounted for 68.7 % of total output value in 2019.
- The production of raw milk grew strongly (+5.3 %) in 2019, reaching a new high of 8.2 million tonnes. This represents an increase in raw milk production of 2.6 million tonnes since 2015 when milk quotas were abolished. During this period, the number of dairy cows increased by about 186 000 head. The average real-terms price for milk in 2019 declined strongly (-5.6%), following on from a similar rate of decline in 2018 (-6.6 %), after it had surged in 2017 (+32.8 %).
- After three years of expansion, in 2019 the production level of bovine meat levelled off (-0.4 %). The realterms output price for cattle declined (-6.5 %). The production of pig meat also remained similar to that recorded in 2018 (+0.4 %) but the real-terms price of pigs rebounded strongly (+17.4 %) after the fall in 2018.
- The harvested production of green maize, which is used to feed cattle, was moderately less (-3.4 %) than the relative high in 2018.

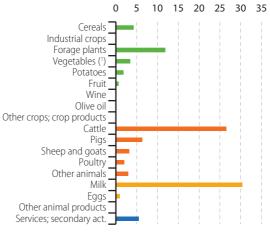
Figure 11.8a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.8b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.8: Key indicators for agriculture, forestry and fisheries for Ireland

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
armland: utilised agricultural area (UAA)	2016	4 884	thousand hectares	3.
arms (agricultural holdings)	2016	137 560	number	1.
Share of very small farms (with < EUR 8 000 of standard output)	2016	31.6	%	
Farmers	Year	Value	Unit	EU-27 average
mployment in agriculture as a share of total employment (¹)	2018	4.6	%	4.
otal labour force in agriculture	2019	160.7	thousand annual work units	8 739.
oung farmers (under 40 years old) as a share of all farm managers	2016	8.5	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
Contribution of agriculture to gross domestic product	2019	0.8	%	
iross value added (at basic prices)	2019	2 874	EUR million	1.
'alue of agricultural industry output (production value at basic prices)	2019	8 522	EUR million	2.
Value of crop output	2019	1 897	EUR million	0.
Value of animal output	2019	6 163	EUR million	3.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	0.5	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
rea under organic farming as a share of the UAA	2018	2.6	%	8.
rea under conversion to organic farming as a share of the UAA	2018	1.1	%	
change in the harmonised risk indicator 1 for pesticides compared with the overage for 2011-2013	2018	-31	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	2 396	thousand tonnes	0.
oot crops	2019	382	thousand tonnes	0.
resh vegetables	2019	151	thousand tonnes	0.
ermanent crops	2019	20	thousand tonnes	0.
lilk	2019	8 245	thousand tonnes	5.
ovine meat	2019	620	thousand tonnes	9.
Pig meat	2019	304	thousand tonnes	1.
oultry meat	2019	167	thousand tonnes	1.
Forestry	Year	Value	Unit	Share of EU-2 total (%
orest and other wooded land	2020	848	thousand hectares	0.
Persons employed in forestry and logging	2017	3.3	thousand annual work units	0.
	2017	53	EUR million	0.
ross value added (at basic prices)	2018	3 330	thousand cubic metres	0.
, , ,				
· · · ·	Year	Value	Unit	
Coundwood (under bark) Fisheries		<b>Value</b> 65 491	<b>Unit</b> gross tonnage	Share of EU-2 total (%
Fisheries Fishing fleet Persons employed in fishing and aquaculture	Year			total (%
Fisheries Fishing fleet Persons employed in fishing and aquaculture	<b>Year</b> 2019	65 491	gross tonnage	total (%
Roundwood (under bark)  Fisheries  Fishing fleet	<b>Year</b> 2019 2018	65 491 2.7	gross tonnage thousand	total (%

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

### Greece



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	183.4	EUR billion	1.3
Population on 1 January	2019	10.7	million	2.4
Land area	2016	130 048	km²	3.2
Farmland	2016	45 538	km²	2.9
Share of farmland in land area	2016	35.0	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

#### Did you know that...

- Agricultural factor income per annual work unit reached a new peak level in 2019 after rising 10.2 %. As such, the index level in 2019 was 29.7 % higher than it had been in 2005.
- The harvested production of the main crops generally fell in 2019. The downward trend in the harvested production of cereals particularly of durum wheat and grain maize and corn-cob-mix continued in 2019 (albeit at a more moderate rate of –1.7 %); the 2.9 million tonnes produced were 1.0 million tonnes less than in 2016 and 2.1 million tonnes less than in 2011. There were strong declines in the harvested production of citrus fruits (–7.9 %), grapes (–13.5 %), plants harvested green (–15.1 %) and fresh vegetables (–17.5 %). For grapes and fresh vegetables the latest falls were continuations of many years of declining harvests.
- There was continued expansion in the production of poultry meat in 2019 (+4.6 %), the fourth consecutive annual increase. There were also increases for sheep meat (+1.7 %, the first increase since 2004) and goat meat (+7.0 %, the first increase since 2002). Greece had the highest production of goat meat (20 900 tonnes) among the EU Member States. Raw milk production rose relatively strongly in 2019 (+6.2 %).
- Lower domestic production of crops in 2019 was often accompanied by higher real-terms (deflated) prices, for example cereals (+2.5 %), citrus fruits (+3.9 %) and fresh vegetables (+5.8 %). Grapes were an exception, as output prices fell (-2.6 %) despite a fall in production. The average real-terms (deflated) price of poultry declined once more (-1.8 % in 2019), as did the price of milk (-4.0 %). The long-term decline in the price of sheep and goats continued, although the decrease was only marginal (-0.2 %).

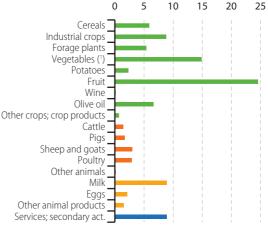
**Figure 11.9a:** Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

**Figure 11.9b:** Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(¹) Including also horticultural plants.

Table 11.9: Key indicators for agriculture, forestry and fisheries for Greece

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
armland: utilised agricultural area (UAA)	2016	4 554	thousand hectares	2.
arms (agricultural holdings)	2016	684 950	number	6.
Share of very small farms (with < EUR 8 000 of standard output)	2016	67.7	%	
Farmers	Year	Value	Unit	EU-27 average
mployment in agriculture as a share of total employment (¹)	2018	10.6	%	4.
otal labour force in agriculture	2019	416.9	thousand annual work units	<i>8 739</i> .
oung farmers (under 40 years old) as a share of all farm managers	2016	8.3	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
ontribution of agriculture to gross domestic product	2019	3.1	%	
ross value added (at basic prices)	2019	6 141	EUR million	3
/alue of agricultural industry output (production value at basic prices)	2019	11 880	EUR million	2
Value of crop output	2019	8 261	EUR million	3
Value of animal output	2019	2 563	EUR million	1.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	10.2	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
rea under organic farming as a share of the UAA	2018	9.3	%	8
rea under conversion to organic farming as a share of the UAA	2018	3.3	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-41	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	2 947	thousand tonnes	1.
loot crops	2019	550	thousand tonnes	0.
resh vegetables	2019	2 201	thousand tonnes	3
Permanent crops	2019	5 120	thousand tonnes	7.
Ailk	2019	1 959	thousand tonnes	1.
Bovine meat	2019	33	thousand tonnes	0.
Pig meat	2019	81	thousand tonnes	0.
Poultry meat	2019	230	thousand tonnes	1.
Forestry	Year	Value	Unit	Share of EU-2 total (%
orest and other wooded land	2020	6 537	thousand hectares	3
Persons employed in forestry and logging	2017	9.3	thousand annual work units	1
Gross value added (at basic prices)	2017	66	EUR million	0.
Roundwood (under bark)	2018	:	thousand cubic metres	
Fisheries	Year	Value	Unit	Share of EU-2 total (%
ishing fleet	2019	70 776	gross tonnage	5
Persons employed in fishing and aquaculture	2018	20.6	thousand	12
Total catches (major fishing areas)	2019	82 232	tonnes live weight	2
Total aquaculture production (quantity)	2018	132 413	tonnes live weight	12

 $<sup>(^{\</sup>text{!}})\;$  EU-27 average: includes 2017 data for Romania and Sweden.

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# Spain



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	1 244.8	EUR billion	8.9
Population on 1 January	2019	46.9	million	10.5
Land area	2016	502 654	km²	12.2
Farmland	2016	232 298	km²	14.8
Share of farmland in land area	2016	46.2	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- The marked upward trend in agricultural factor income per annual work unit that had been recorded between 2008 and 2016 faltered, with relatively small and consecutive falls in 2017, 2018 and 2019 (-3.2%). Combining these falls, the index level in 2019 was 5.8 % below its 2016 peak.
- The output value of the agricultural industry decreased slightly (-0.9 %) in 2019, falling to EUR 51.7 billion, the fourth largest value among the EU Member States.
- Spain had the highest production among the EU Member States of fresh vegetables (15.4 million tonnes), citrus fruits (6.0 million tonnes) and olives (6.0 million tonnes). After relatively high production levels in 2018, many crops had lower harvest levels in 2019; this included cereals (-18.6 %) and several permanent crops like citrus fruit (-11.3 %), grapes (-17.7 %) and olives (-39.3 %). By contrast, the harvested production of fresh vegetables in 2019 was higher (+6.2 %) than in 2018.
- The upward trend in pig (+2.4 %) and poultry meat (+4.2 %) production continued in 2019. Spain had the highest production for sheep meat (121 300 tonnes) among the EU Member States, its output increasing 1.4 % in 2019. Raw milk production increased (+1.7 %) in 2019, continuing the upward trend started in 2008.
- Output prices of most permanent crops fell in real (deflated) terms in 2019, for example for olives (-19.3 %), fresh fruit (excluding citrus fruit and grapes; -18.7%), citrus fruits (-14.4%) and grapes (-4.5%). Output prices for fresh vegetables also fell (-3.9 %), as they did for potatoes (-2.2 %) and sugar beet (-10.2 %). By contrast, price increases were recorded for cereals (+1.9 %) and oilseeds (+2.2 %). Whereas the output price fell for most animals, there was a strong rise (+9.5 %) for pigs.

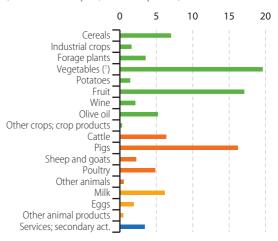
Figure 11.10a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

#### Figure 11.10b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Table 11.10: Key indicators for agriculture, forestry and fisheries for Spain

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
armland: utilised agricultural area (UAA)	2016	23 230	thousand hectares	14.
arms (agricultural holdings)	2016	945 020	number	9.
Share of very small farms (with < EUR 8 000 of standard output)	2016	52.7	%	
Farmers	Year	Value	Unit	EU-27 average
imployment in agriculture as a share of total employment (¹)	2018	3.7	%	4.
Total labour force in agriculture	2019	854.7	thousand annual work units	<i>8 739.</i>
oung farmers (under 40 years old) as a share of all farm managers	2016	8.6	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
Contribution of agriculture to gross domestic product	2019	2.2	%	
Gross value added (at basic prices)	2019	28 066	EUR million	15.
Value of agricultural industry output (production value at basic prices)	2019	51 669	EUR million	12.
Value of crop output	2019	29 993	EUR million	13.
Value of animal output	2019	19 907	EUR million	12.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	-3.2	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	9.3	%	8
Area under conversion to organic farming as a share of the UAA	2018	1.3	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-22	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	19 942	thousand tonnes	6.
Root crops	2019	5 167	thousand tonnes	3
Fresh vegetables	2019	15 439	thousand tonnes	25.
Permanent crops	2019	22 697	thousand tonnes	32.
Milk	2019	8 560	thousand tonnes	5.
Bovine meat	2019	695	thousand tonnes	10
Pig meat	2019	4 641	thousand tonnes	20.
Poultry meat	2019	1 705	thousand tonnes	12.
Forestry	Year	Value	Unit	Share of EU-2 total (%
Forest and other wooded land	2020	27 954	thousand hectares	15
Persons employed in forestry and logging	2017	17.8	thousand annual work units	3.
Gross value added (at basic prices)	2017	995	EUR million	3.
Roundwood (under bark)	2018	15 457	thousand cubic metres	4
Fisheries	Year	Value	Unit	Share of EU-2 total (%
Fishing fleet	2019	332 454	gross tonnage	24
Persons employed in fishing and aquaculture	2018	38.8	thousand	23.
Total catches (major fishing areas)	2019	837 216	tonnes live weight	20
T-4-1 (	2017	314 958	tonnes live weight	27
Total aquaculture production (quantity)	2017	J17 JJ0	torrics rive weight	27.

 $<sup>(^{\</sup>text{!}})\;$  EU-27 average: includes 2017 data for Romania and Sweden.

## **France**



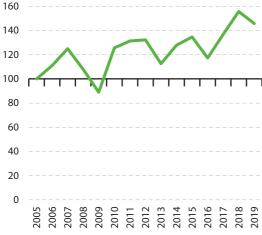
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	2 425.7	EUR billion	17.4
Population on 1 January	2019	67.0	million	15.0
Land area	2016	633 886	km²	15.4
Farmland	2016	278 142	km²	17.8
Share of farmland in land area	2016	43.9	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- Agricultural factor income per annual work unit rose strongly (+13.9 %) in 2018 and reached its highest level during the period since 2005. However, in 2019 the index fell back (-6.4 %) from this peak.
- Output from the agricultural industry was valued at EUR 77.0 billion in 2019, the highest value among the EU Member States; this was slightly lower (-1.6 %) than in the previous year. The value of crop output fell (-4.0 %) while that of animal output increased (+2.3 %).
- France had the largest harvests among the EU Member States for cereals (71.2 million tonnes), root crops (47.3 million tonnes) and oilseeds (5.3 million tonnes). The production of cereals as a whole rebounded (+13.8 %) in 2019, having fallen in 2018, with increases reported for all major types of cereal. Falls were recorded for root crops (-2.4 %), plants harvested green (-3.2 %), oilseeds (-20.5 %) and grapes (-12.4 %).
- France had the highest production of bovine meat (1.4 million tonnes) among the EU Member States. In 2019, production of bovine meat fell (-2.2 %), as it did for poultry meat (-2.0 %) and sheep meat (-0.6 %). By contrast production of pig meat increased (+0.9 %).
- Lower prices in real (deflated) terms for cereals (-3.0%) and fresh fruit (-7.6%) in 2019 accompanied their increased production levels. The output price for grapes (-5.1 %) and wine (-5.6 %) also fell, as did that for sugar beet (-20.6 %). Output price increases were recorded for potatoes (+38.3 %), fresh vegetables (+5.2 %) and oilseeds (+4.8 %). Output prices for pigs (+20.3 %) and poultry (+1.4 %) rose, while the price for cattle fell (-2.4%).

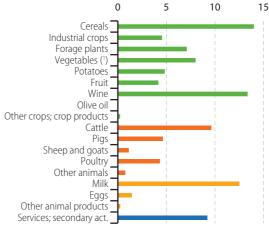
Figure 11.11a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.11b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Table 11.11: Key indicators for agriculture, forestry and fisheries for France

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
armland: utilised agricultural area (UAA)	2016	27 814	thousand hectares	17.
arms (agricultural holdings)	2016	456 520	number	4.
Share of very small farms (with < EUR 8 000 of standard output)	2016	18.9	%	
Farmers	Year	Value	Unit	EU-27 average
mployment in agriculture as a share of total employment (¹)	2018	2.5	%	4.
otal labour force in agriculture	2019	726.1	thousand annual work units	8 739
oung farmers (under 40 years old) as a share of all farm managers	2016	15.6	%	10
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
ontribution of agriculture to gross domestic product	2019	1.3	%	
iross value added (at basic prices)	2019	31 920	EUR million	17.
/alue of agricultural industry output (production value at basic prices)	2019	77 024	EUR million	18
Value of crop output	2019	43 353	EUR million	19
Value of animal output	2019	26 571	EUR million	16
Annual change in agricultural factor income per annual work unit (indicator A)	2019	-6.4	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
rea under organic farming as a share of the UAA	2018	7.0	%	8
rea under conversion to organic farming as a share of the UAA	2018	1.8	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	1	%	-
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	71 208	thousand tonnes	23
loot crops	2019	47 329	thousand tonnes	28
resh vegetables	2019	5 552	thousand tonnes	9
Permanent crops	2019	8 416	thousand tonnes	11
Milk	2019	25 909	thousand tonnes	16
Bovine meat	2019	1 428	thousand tonnes	20
Pig meat	2019	2 200	thousand tonnes	9
Poultry meat	2019	1 698	thousand tonnes	12
Forestry	Year	Value	Unit	Share of EU-2 total (%
orest and other wooded land	2020	18 096	thousand hectares	10
Persons employed in forestry and logging	2017	28.7	thousand annual work units	5
Gross value added (at basic prices)	2017	3 322	EUR million	12
Roundwood (under bark)	2018	25 721	thousand cubic metres	6
Fisheries	Year	Value	Unit	Share of EU-2 total (9
Fishing fleet	2019	172 656	gross tonnage	12
Persons employed in fishing and aquaculture	2018	20.0	thousand	12
Total catches (major fishing areas)	2019	525 122	tonnes live weight	12
Total aquaculture production (quantity)	2018	186 775	tonnes live weight	17

 $<sup>(^{\</sup>text{!}})\;$  EU-27 average: includes 2017 data for Romania and Sweden.

## Croatia



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	54.2	EUR billion	0.4
Population on 1 January	2019	4.1	million	0.9
Land area	2016	55 896	km²	1.4
Farmland	2016	15 630	km²	1.0
Share of farmland in land area	2016	28.0	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- Agricultural factor income per annual work unit rose (+5.6 %) in 2019, after growth (+6.3 %) in 2018. This latest rise marked a fifth consecutive annual increase, taking the index to a new peak.
- The output value of the agricultural industry increased (+3.9 %) to EUR 2.4 billion in 2019. This reflected an increase (+12.4 %) in animal output (mainly for cattle and pigs) and stability (-0.1 %) for crop output.
- Cereals production increased (+8.3 %) in 2019, reflecting similar growth for the two major cereal types grain maize and corn-cob-mix (+7.0 %) and wheat and spelt (+6.7 %) — and faster growth for some smaller crops (such as barley and oats). Output prices for cereals as a whole fell (-1.7 %) in real-terms (deflated) in 2019, strongly influenced by the fall in the price for grain maize (-8.6%). Although the harvested production of oilseeds fell sharply (-11.1 %), the real-terms price of oilseeds also fell (-1.0 %), pulled lower by the fall in the price for soya (-3.8 %) and despite rising prices for rape and turnip rape seeds as well as for sunflower seeds.
- The production of all major types of meats increased in 2019: pig meat (+4.8 %), bovine meat (+3.8 %) and poultry meat (+1.0 %). For poultry meat, this continued the upward trend that started in 2014. By contrast, raw milk production fell (-3.0%) in 2019, the seventh consecutive annual decline.
- In 2019, output prices for animals generally increased in real (deflated) terms, particularly in the case of pigs (+14.6 %), the exception being a fall in the price for poultry (-5.9 %). The fall in milk production was slightly offset by an increase (+0.8 %) in the output price.

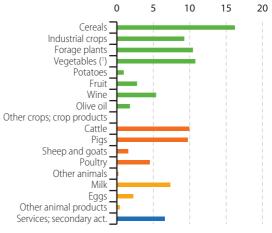
Figure 11.12a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.12b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Table 11.12: Key indicators for agriculture, forestry and fisheries for Croatia

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
Farmland: utilised agricultural area (UAA)	2016	1 563	thousand hectares	1.
Farms (agricultural holdings)	2016	134 460	number	1.
Share of very small farms (with < EUR 8 000 of standard output)	2016	68.9	%	
Farmers	Year	Value	Unit	EU-27 average
Employment in agriculture as a share of total employment (¹)	2018	5.1	%	4.
Total labour force in agriculture	2019	176.4	thousand annual work units	8 739.
Young farmers (under 40 years old) as a share of all farm managers	2016	10.5	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
Contribution of agriculture to gross domestic product	2019	1.9	%	
Gross value added (at basic prices)	2019	1 134	EUR million	0.
Value of agricultural industry output (production value at basic prices)	2019	2 423	EUR million	0.
Value of crop output	2019	1 397	EUR million	0.
Value of animal output	2019	868	EUR million	0
Annual change in agricultural factor income per annual work unit (indicator A)	2019	5.6	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	6.9	%	8
Area under conversion to organic farming as a share of the UAA	2018	3.1	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-38	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	3 499	thousand tonnes	1.
Root crops	2019	888	thousand tonnes	0.
Fresh vegetables	2019	166	thousand tonnes	0.
Permanent crops	2019	291	thousand tonnes	0.
Milk	2019	615	thousand tonnes	0.
Bovine meat	2019	45	thousand tonnes	0.
Pig meat	2019	78	thousand tonnes	0.
Poultry meat	2019	67	thousand tonnes	0.
Forestry	Year	Value	Unit	Share of EU-2 total (%
Forest and other wooded land	2020	2 557	thousand hectares	1
Persons employed in forestry and logging	2017	13.8	thousand annual work units	2
Gross value added (at basic prices)	2017	196	EUR million	0.
Roundwood (under bark)	2018	3 214	thousand cubic metres	0.
Fisheries	Year	Value	Unit	Share of EU-2 total (%
Fishing fleet	2019	44 361	gross tonnage	3
Persons employed in fishing and aquaculture	2018	4.9	thousand	3
Total catches (major fishing areas)	2019	64 020	tonnes live weight	1
Total aquaculture production (quantity)	2018	19 680	tonnes live weight	1.
rotar aquacurtar c production (quantity)				

 $<sup>(^{\</sup>text{!}})\;$  EU-27 average: includes 2017 data for Romania and Sweden.

# Italy



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	1 789.7	EUR billion	12.8
Population on 1 January	2019	60.4	million	13.5
Land area	2016	297 734	km²	7.3
Farmland	2016	125 982	km²	8.0
Share of farmland in land area	2016	42.3	%	

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- Agricultural factor income per annual work unit in 2019 was lower (-3.9 %) than in 2018, losing some of the gains (+12.2 %) made when it peaked in 2018.
- The output value of the agricultural industry fell slightly (-1.2 %) in 2019 to EUR 57.8 million, the third highest value among the EU Member States. The value of crop output fell (-3.1 %), while that of animal output increased slightly (+0.9 %).
- Among the EU Member States, Italy had the highest harvested productions of fruit (excluding citrus fruit and grapes), berries and nuts and grapes. The harvested production of grapes for wine was much lower in 2019 (-8.4%), although this was accompanied by a similarly sharp decline in the real (deflated) price of wine (-9.9 %). Similarly, the harvested production of fruit (excluding citrus fruit and grapes), berries and nuts in 2019 was down sharply (-6.4 %) but the price of fresh fruit (excluding citrus fruit and grapes) was also down strongly (-7.0 % in real terms). On the other hand, the output price of fresh vegetables as a whole rose strongly (+9.0 %) despite a small rise in the harvested production (+0.8 %).
- In 2019, the only increase in production among the major meat types was for poultry meat (+6.3 %), with the production of bovine meat (-3.6 %) as well as pig meat (-1.6 %) falling. In real-terms, (deflated) output prices for poultry (-2.3 %), cattle (-1.5 %) and pigs (-0.9 %) fell. Production of raw milk grew moderately (+1.3 %), its fourth consecutive annual increase, and was accompanied by a real-terms increase in output prices (+4.4 %).

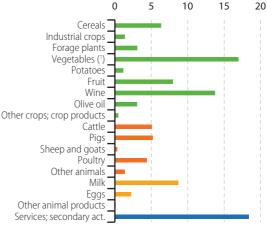
Figure 11.13a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.13b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.13: Key indicators for agriculture, forestry and fisheries for Italy

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	12 598	thousand hectares	8.0
arms (agricultural holdings)	2016	1 145 710	number	11.
Share of very small farms (with < EUR 8 000 of standard output)	2016	50.6	%	
Farmers	Year	Value	Unit	EU-27 average tota
mployment in agriculture as a share of total employment (¹)	2018	3.4	%	4.4
otal labour force in agriculture	2019	1 103.0	thousand annual work units	<i>8 739.</i> .
oung farmers (under 40 years old) as a share of all farm managers	2016	7.9	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
ontribution of agriculture to gross domestic product	2019	1.8	%	-
ross value added (at basic prices)	2019	32 928	EUR million	18.
alue of agricultural industry output (production value at basic prices)	2019	57 829	EUR million	13.
Value of crop output	2019	31 403	EUR million	14.
Value of animal output	2019	15 805	EUR million	9.
nnual change in agricultural factor income per annual work unit (indicator A)	2019	-3.9	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average tota
rea under organic farming as a share of the UAA	2018	15.2	%	8.
rea under conversion to organic farming as a share of the UAA	2018	3.6	%	
hange in the harmonised risk indicator 1 for pesticides compared with the verage for 2011-2013	2018	-9	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2: total (%
ereals (including rice)	2019	16 132	thousand tonnes	5.
oot crops	2019	3 123	thousand tonnes	1.
resh vegetables	2019	12 253	thousand tonnes	20.
ermanent crops	2019	18 311	thousand tonnes	25.
ilk	2019	13 300	thousand tonnes	8.
ovine meat	2019	780	thousand tonnes	11.
ig meat	2019	1 448	thousand tonnes	6.
oultry meat	2019	1 366	thousand tonnes	10.
ountry ineat				
Forestry	Year	Value	Unit	Share of EU-2 total (%
Forestry		<b>Value</b> 11 432	<b>Unit</b> thousand hectares	total (%
Forestry orest and other wooded land	Year			
Forestry  orest and other wooded land ersons employed in forestry and logging	<b>Year</b> 2020	11 432	thousand hectares	total (% 6. 8.
Forestry  orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices)	<b>Year</b> 2020 2017	11 432 39.8	thousand hectares thousand annual work units	total (% 6. 8.
Forestry  orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices)	Year 2020 2017 2017	11 432 39.8 2 158	thousand hectares thousand annual work units EUR million	6. 8. 8. 0. Share of EU-2
Forestry  orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)  Fisheries	Year 2020 2017 2017 2018  Year	11 432 39.8 2 158 2 213 Value	thousand hectares thousand annual work units EUR million thousand cubic metres	total (% 6. 8. 0. Share of EU-2 total (%
Forestry  orest and other wooded land ersons employed in forestry and logging iross value added (at basic prices) toundwood (under bark)  Fisheries	Year 2020 2017 2017 2018  Year 2019	11 432 39.8 2 158 2 213 <b>Value</b>	thousand hectares thousand annual work units EUR million thousand cubic metres Unit gross tonnage	total (% 6. 8. 8. 0. Share of EU-2 total (%
Forestry  orest and other wooded land lersons employed in forestry and logging iross value added (at basic prices) loundwood (under bark)  Fisheries ishing fleet lersons employed in fishing and aquaculture	Year 2020 2017 2017 2018  Year 2019 2018	11 432 39.8 2 158 2 213 <b>Value</b> 146 272 27.8	thousand hectares thousand annual work units EUR million thousand cubic metres  Unit gross tonnage thousand	total (% 6. 8. 8. 0. Share of EU-2 total (% 11.
Forestry  orest and other wooded land ersons employed in forestry and logging iross value added (at basic prices) toundwood (under bark)  Fisheries	Year 2020 2017 2017 2018  Year 2019	11 432 39.8 2 158 2 213 <b>Value</b>	thousand hectares thousand annual work units EUR million thousand cubic metres Unit gross tonnage	total (% 6. 8. 0. Share of EU-2 total (%

<sup>(</sup>¹) EU-27 average: includes 2017 data for Romania and Sweden.



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	22.3	EUR billion	0.2
Population on 1 January	2019	0.9	million	0.2
Land area	2016	9 213	km²	0.2
Farmland	2016	1 119	km²	0.1
Share of farmland in land area	2016	12.1	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- Agricultural factor income per annual work unit rose slightly (+2.6 %) in 2019 after a fall (-3.9 %) in 2018.
- The output value of the agricultural industry increased (+5.9 %) to EUR 0.8 billion in 2019. More than three fifths of this output value came from milk, pigs, poultry, fresh vegetables and fruits. While the output value increased for poultry (+5.6 %), milk (+5.3 %) and pigs (+3.7 %), there were decreases for fresh vegetables (-2.1 %) and fruit (-3.5 %). The value of the small cereals crop doubled (+104.5 %).
- Raw milk production continued to increase strongly (+5.3 %) in 2019, driven by a further marked expansion in the number of dairy cows (+9.8 %). Despite higher production, the real-terms (deflated) price of milk also continued to increase (+1.8 %). The production of most meat products increased in 2019, the exception being sheep meat (-6.4 %). For poultry meat, the increase (+5.7 %) in 2019 was the fifth consecutive annual increase. In real terms, output prices for sheep and goats (+7.1 %) and pigs (+1.6 %) increased, but were relatively unchanged for poultry (-0.3 %) and cattle (-0.4 %).
- The harvested production of fresh vegetables in 2019 was lower (-6.1 %, the fifth consecutive annual fall) than in 2018, as was the production of citrus fruits (-10.4 %, the fourth consecutive annual fall). The harvested production of cereals in 2019 was more than double (+138.9 %) that of 2018 when conditions during the growing season had been dry. Alongside the large increase in the cereals harvest in 2019, the output price dropped (-2.4 %) in real (deflated) terms. Increases in output prices for potatoes (+54.5 %) and fresh vegetables (+22.5 %) accompanied lower harvests. The output price of citrus fruits fell modestly (-2.6 %).

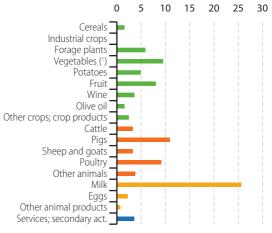
Figure 11.14a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.14b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Table 11.14: Key indicators for agriculture, forestry and fisheries for Cyprus

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	112	thousand hectares	0.1
arms (agricultural holdings)	2016	34 940	number	0.3
Share of very small farms (with < EUR 8 000 of standard output)	2016	81.2	%	
Farmers	Year	Value	Unit	EU-27 average tota
mployment in agriculture as a share of total employment (¹)	2018	3.2	%	4.4
otal labour force in agriculture	2019	21.4	thousand annual work units	<i>8 739.</i> .
oung farmers (under 40 years old) as a share of all farm managers	2016	3.3	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
ontribution of agriculture to gross domestic product	2019	1.5	%	-
ross value added (at basic prices)	2019	329	EUR million	0
alue of agricultural industry output (production value at basic prices)	2019	756	EUR million	0.
Value of crop output	2019	285	EUR million	0.
Value of animal output	2019	444	EUR million	0.
nnual change in agricultural factor income per annual work unit (indicator A)	2019	2.6	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average tota
rea under organic farming as a share of the UAA	2018	4.6	%	8.
rea under conversion to organic farming as a share of the UAA	2018	1.7	%	
hange in the harmonised risk indicator 1 for pesticides compared with the verage for 2011-2013	2018	34	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
ereals (including rice)	2019	59	thousand tonnes	0.
oot crops	2019	82	thousand tonnes	0.
resh vegetables	2019	78	thousand tonnes	0.
ermanent crops	2019	140	thousand tonnes	0.
ilk	2019	310	thousand tonnes	0.
ovine meat	2019	6	thousand tonnes	0
g meat	2019	43	thousand tonnes	0.
oultry meat	2019	27	thousand tonnes	0.
Forestry	Year	Value	Unit	Share of EU-2 total (%
		206	thousand hectares	0.
prest and other wooded land	2020	386	triousariu riectares	U.
	2020 2017	0.1	thousand annual work units	0.
ersons employed in forestry and logging				
ersons employed in forestry and logging ross value added (at basic prices)	2017	0.1	thousand annual work units	0
ersons employed in forestry and logging ross value added (at basic prices)	2017 2017	0.1	thousand annual work units EUR million	0. 0. 0. Share of EU-2
ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark) Fisheries	2017 2017 2018 <b>Year</b>	0.1 3 2 <b>Value</b>	thousand annual work units EUR million thousand cubic metres Unit	0. 0. 0. Share of EU-2 total (%
ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)  Fisheries	2017 2017 2018 <b>Year</b> 2019	0.1 3 2 <b>Value</b> 3 757	thousand annual work units EUR million thousand cubic metres Unit gross tonnage	0.0 0.0 0.0 Share of EU-2 total (%
ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)  Fisheries ishing fleet ersons employed in fishing and aquaculture	2017 2017 2018 Year 2019 2018	0.1 3 2 <b>Value</b> 3 757 0.5	thousand annual work units EUR million thousand cubic metres  Unit gross tonnage thousand	0. 0. 0.
orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)  Fisheries  ishing fleet ersons employed in fishing and aquaculture otal catches (major fishing areas) otal aquaculture production (quantity)	2017 2017 2018 <b>Year</b> 2019	0.1 3 2 <b>Value</b> 3 757	thousand annual work units EUR million thousand cubic metres Unit gross tonnage	0.0 0.0 0.0 Share of EU-2 total (%

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

## Latvia



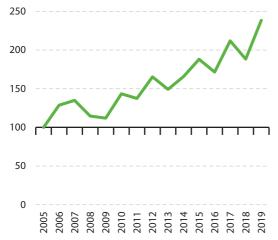
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	30.5	EUR billion	0.2
Population on 1 January	2019	1.9	million	0.4
Land area	2016	63 290	km²	1.5
Farmland	2016	19 309	km²	1.2
Share of farmland in land area	2016	30.5	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- There has been a strong upward trend in agricultural factor income per annual work unit since 2005, despite relatively large falls in 2008, 2013, 2016 and 2018 and smaller falls in 2009 and 2011. These were more than outweighed by increases in other years (for example, +26.7 % in 2019). As such, the index level in 2019 was higher (+138.4 %) than in 2005 and was also higher than in any intervening year.
- The output value of the agricultural industry increased (+21.1 %) in 2019 to EUR 1.6 billion. Output values increased for the three largest products in 2019: cereals (+42.7 %), milk (+4.4 %) and industrial crops (+60.6%)
- After three years of declining harvests, cereals production in 2019 rebounded (+53.8 %). The relatively large wheat and spelt harvest increased (+65.6 %). The production of oilseeds (almost exclusively rape and turnip rape seeds) also rebounded strongly (+76.5 %).
- The production of pig (+5.2 %) and poultry meat and (+5.1 %) increased in 2019, continuing well-established upwards trends (leaving aside the moderate fall recorded for poultry meat in 2018). By contrast, the production of bovine meat fell (-6.9 %), its third consecutive annual fall. The production of raw milk was relatively unchanged compared with 2018 (-0.2 %).
- Output prices for cereals decreased (-7.7 %) in real (deflated) terms while those for oilseeds increased (+2.9 %). Output prices also rose for pigs (+16.1 %), poultry (+4.4 %) and milk (+0.7 %).

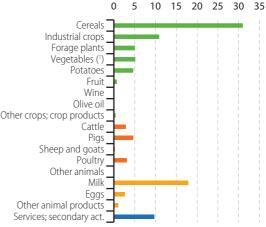
Figure 11.15a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.15b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

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Table 11.15: Key indicators for agriculture, forestry and fisheries for Latvia

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
armland: utilised agricultural area (UAA)	2016	1 931	thousand hectares	1.
arms (agricultural holdings)	2016	69 930	number	0.
Share of very small farms (with < EUR 8 000 of standard output)	2016	76.8	%	
Farmers	Year	Value	Unit	EU-27 average
mployment in agriculture as a share of total employment (¹)	2018	5.1	%	4
otal labour force in agriculture	2019	70.0	thousand annual work units	8 739
oung farmers (under 40 years old) as a share of all farm managers	2016	9.5	%	10
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
ontribution of agriculture to gross domestic product	2019	1.6	%	
iross value added (at basic prices)	2019	550	EUR million	0
/alue of agricultural industry output (production value at basic prices)	2019	1 629	EUR million	0
Value of crop output	2019	943	EUR million	0
Value of animal output	2019	528	EUR million	0
Annual change in agricultural factor income per annual work unit (indicator A)	2019	26.7	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	14.5	%	8
rea under conversion to organic farming as a share of the UAA	2017	2.7	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	40	%	-
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	3 163	thousand tonnes	1
Root crops	2019	231	thousand tonnes	0
resh vegetables	2019	77	thousand tonnes	0
Permanent crops	2019	14	thousand tonnes	0
Milk	2019	981	thousand tonnes	0.
Bovine meat	2019	15	thousand tonnes	0
Pig meat	2019	38	thousand tonnes	0
Poultry meat	2019	35	thousand tonnes	0
Forestry	Year	Value	Unit	Share of EU-2 total (%
orest and other wooded land	2020	3 519	thousand hectares	2
Persons employed in forestry and logging	2017	17.2	thousand annual work units	3
Gross value added (at basic prices)	2017	393	EUR million	1
Roundwood (under bark)	2016	11 094	thousand cubic metres	3
Fisheries	Year	Value	Unit	Share of EU-2 total (9
ishing fleet	2019	13 406	gross tonnage	1
Persons employed in fishing and aquaculture	2018	1.5	thousand	0
Total catches (major fishing areas)	2016	114 655	tonnes live weight	
Total aquaculture production (quantity)	2018	828	tonnes live weight	0
rotar aquacurture production (quantity)	2010	020	torrice iive vvergiit	

 $<sup>(^{\</sup>text{!}})\;$  EU-27 average: includes 2017 data for Romania and Sweden.

# Lithuania



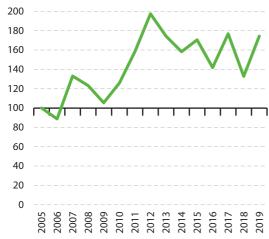
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	48.8	EUR billion	0.3
Population on 1 January	2019	2.8	million	0.6
Land area	2016	62 643	km²	1.5
Farmland	2016	29 246	km²	1.9
Share of farmland in land area	2016	46.7	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- Agricultural factor income per annual work unit increased strongly (+31.3 %) in 2019, more than offsetting the fall (-24.9 %) recorded in 2018.
- The output value of the agricultural industry increased strongly (+10.4 %) to EUR 3.2 billion in 2019. The output values for the two largest crops were higher: cereals (+18.9 %) and industrial crops (+28.1 %). For animal output, the value of milk (-3.0 %) and poultry (-6.9 %) fell while that of pigs (+15.5 %) rose.
- The production of cereals in 2019 rebounded (+30.2 %) after three years of declining harvests. The production of wheat and spelt (which accounted for nearly three quarters of cereals production) bounced back from the drought-affected harvest in 2018 (+35.4 %). Root crop production also bounced back (+12.7 %) as did rape and turnip rape seeds (+58.9 %).
- The production of raw milk fell for the fourth consecutive year (-1.3 % in 2019). This reduction was underpinned by a fall (-12.2 % between 2015 and 2019) in the size of the dairy herd. The production of poultry meat decreased sharply (-7.4 %) in 2019, while the production of bovine meat (+5.4 %) and pig meat (+11.0 %) increased.
- Output prices increased in real (deflated) terms for root crops (potatoes +28.7 % and sugar beet +20.3 %) and for oilseeds (+1.7 %) in 2019, while a slight fall (-0.8 %) was recorded for cereals. The output price of poultry was almost unchanged (+0.1 %), while a slight fall (-0.6 %) was recorded for milk.

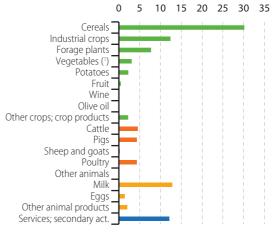
Figure 11.16a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.16b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.16: Key indicators for agriculture, forestry and fisheries for Lithuania

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
armland: utilised agricultural area (UAA)	2016	2 925	thousand hectares	1.9
arms (agricultural holdings)	2016	150 320	number	1.5
Share of very small farms (with < EUR 8 000 of standard output)	2016	75.9	%	-
Farmers	Year	Value	Unit	EU-27 average, tota
mployment in agriculture as a share of total employment (¹)	2018	6.2	%	4.4
otal labour force in agriculture	2019	134.6	thousand annual work units	<i>8 739.</i> .
oung farmers (under 40 years old) as a share of all farm managers	2016	12.3	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%
ontribution of agriculture to gross domestic product	2019	1.8	%	-
ross value added (at basic prices)	2019	1 232	EUR million	0
alue of agricultural industry output (production value at basic prices)	2019	3 209	EUR million	0.0
Value of crop output	2019	1 873	EUR million	0.
Value of animal output	2019	949	EUR million	0.
nnual change in agricultural factor income per annual work unit (indicator A)	2019	31.3	%	-
Agri-environmental indicators	Year	Value	Unit	EU-27 average
ea under organic farming as a share of the UAA	2018	8.1	%	8.
ea under conversion to organic farming as a share of the UAA	2018	0.9	%	
ange in the harmonised risk indicator 1 for pesticides compared with the erage for 2011-2013	2018	-14	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
ereals (including rice)	2019	5 208	thousand tonnes	1.
oot crops	2019	1 347	thousand tonnes	0.
esh vegetables	2019	218	thousand tonnes	0.
rmanent crops	2019	40	thousand tonnes	0.
lk	2019	1 551	thousand tonnes	1.
vine meat	2019	42	thousand tonnes	0.
g meat	2019	71	thousand tonnes	0.
ultry meat	2019	101	thousand tonnes	0.
Forestry	Year	Value	Unit	Share of EU-2 total (%
rest and other wooded land	2020	2 263	thousand hectares	1.
rsons employed in forestry and logging	2017	13.2	thousand annual work units	2.
oss value added (at basic prices)	2017	212	EUR million	0.
undwood (under bark)	2018	5 233	thousand cubic metres	1.
	Year	Value	Unit	Share of EU-2 total (%
Fisheries				totai (/
		40.658	gross tonnage	٦
shing fleet	2019	40 658	gross tonnage thousand	
shing fleet ersons employed in fishing and aquaculture	2019 2018	1.1	thousand	3. 0. 2.
Fisheries shing fleet ersons employed in fishing and aquaculture otal catches (major fishing areas) otal aquaculture production (quantity)	2019			

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

# Luxembourg



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	63.5	EUR billion	0.5
Population on 1 January	2019	0.6	million	0.1
Land area	2016	2 586	km²	0.1
Farmland	2016	1 307	km²	0.1
Share of farmland in land area	2016	50.5	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- Agricultural factor income per annual work unit decreased (-7.5 %) in 2019, following on from a rise (+5.4 %) in 2018. As a result, the 2019 index level was about one third below (-31.3 %) its peak recorded in 2007.
- The output value of the agricultural industry decreased slightly (-0.5 %) in 2019 to EUR 433 million. The agricultural industry is heavily based around the cattle sector: milk, forage plants and cattle accounted for 69.2 % of the total output value.
- Production levels of bovine meat (+3.0 %) and pig meat (+0.6 %) increased in 2019; for bovine meat, this was the continuation of an upward trend started in 2014. The production of raw milk increased (+3.2 %), also continuing a trend going back at least until 2014.
- The production of plants harvested green for use as fodder fell (-5.8 %) in 2019, while there was an increase (+3.7 %) in the production of cereals (a third consecutive annual increase), reflecting increases for most types of cereals. The grape harvest in 2019 was considerably smaller (-43.9 %) than the 2018 harvest.
- There was a moderate increase (+1.4 %) in the average real-terms (deflated) price for milk in 2019. By contrast, the real-terms (deflated) price of cattle decreased (-2.7 %).

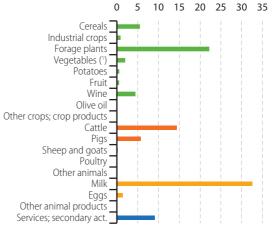
Figure 11.17a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.17b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.17: Key indicators for agriculture, forestry and fisheries for Luxembourg

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	131	thousand hectares	0.1
Farms (agricultural holdings)	2016	1 970	number	0.0
Share of very small farms (with < EUR 8 000 of standard output) (¹)	2016	8.1	%	_
Farmers	Year	Value	Unit	EU-27 average/ total
mployment in agriculture as a share of total employment (²)	2018	0.7	%	4.4
otal labour force in agriculture	2019	3.3	thousand annual work units	8 739.7
oung farmers (under 40 years old) as a share of all farm managers	2016	15.2	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
ontribution of agriculture to gross domestic product	2019	0.2	%	_
ross value added (at basic prices)	2019	119	EUR million	0.1
alue of agricultural industry output (production value at basic prices)	2019	433	EUR million	0.1
Value of crop output	2019	158	EUR million	0.1
Value of animal output	2019	236	EUR million	0.1
nnual change in agricultural factor income per annual work unit (indicator A)	2019	-7.5	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
rea under organic farming as a share of the UAA	2018	4.4	%	8.0
rea under conversion to organic farming as a share of the UAA	2018	0.5	%	
hange in the harmonised risk indicator 1 for pesticides compared with the verage for 2011-2013	2018	-38	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
ereals (including rice)	2019	160	thousand tonnes	0.1
loot crops	2019	16	thousand tonnes	0.0
resh vegetables	2019	4	thousand tonnes	0.0
Permanent crops	2019	13	thousand tonnes	0.0
Ailk	2019	424	thousand tonnes	0.3
Sovine meat	2019	10	thousand tonnes	0.1
Pig meat	2019	13	thousand tonnes	0.1
Poultry meat	2019	0	thousand tonnes	0.0
Forestry	Year	Value	Unit	Share of EU-27 total (%)
orest and other wooded land	2020	91	thousand hectares	0.1
orest and other wooded land	2017	0.6	thousand annual work units	0.1
	2017			
ersons employed in forestry and logging	2017	32	EUR million	0.1
ersons employed in forestry and logging ross value added (at basic prices)		32 363	EUR million thousand cubic metres	
Persons employed in forestry and logging iross value added (at basic prices)	2017			O.1 Share of EU-27
Persons employed in forestry and logging Gross value added (at basic prices) Roundwood (under bark) Fisheries	2017 2018 <b>Year</b>	363 Value	thousand cubic metres  Unit	0.1
Persons employed in forestry and logging Gross value added (at basic prices) Roundwood (under bark)  Fisheries Fishing fleet	2017 2018	363	thousand cubic metres	O.1 Share of EU-27 total (%)
Persons employed in forestry and logging Gross value added (at basic prices) Roundwood (under bark)  Fisheries Persons employed in fishing and aquaculture	2017 2018 <b>Year</b> 2019	363 Value	thousand cubic metres  Unit gross tonnage	O.1 Share of EU-27 total (%)
Persons employed in forestry and logging Gross value added (at basic prices) Roundwood (under bark)	2017 2018 <b>Year</b> 2019 2018	363 Value  - 0.0	thousand cubic metres  Unit  gross tonnage thousand	0.1 Share of EU-27 total (%)

<sup>(1)</sup> Excluding farms with zero standard output.

<sup>(2)</sup> EU-27 average: includes 2017 data for Romania and Sweden.

# Hungary



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	146.1	EUR billion	1.0
Population on 1 January	2019	9.8	million	2.2
Land area	2016	91 248	km²	2.2
Farmland	2016	46 706	km²	3.0
Share of farmland in land area	2016	51.2	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- The upward trend in agricultural factor income per annual work unit continued in 2019, with the index rising (+7.7 %) to a new peak. The index more than doubled during the period between 2005 and 2019.
- The output value of the agricultural industry increased (+3.3 %) in 2019, to reach EUR 8.7 billion. Close to half of this total output value was accounted for by only three types of products: whereas the value of cereals and poultry output rose (+2.8 % and +1.1 % respectively) that of industrial crops fell (-3.0 %).
- There was a further increase (+5.1 %) in the harvested production of cereals in 2019, which was underpinned by an expansion in the area cultivated (+3.8 %). This overall rise in harvested cereal production reflected increases for all types of cereals and in particular (+20.8 %) for barley. By contrast, the harvested production of oilseeds fell sharply (-7.4 %), principally due to the sharp reduction (-8.1 %) in the area
- Developments in the production levels of the two major types of meat diverged somewhat in 2019, with an increase for poultry meat (+1.5 %) and a relatively stable development (-0.2 %) for pig meat; 2019 was the first year since 2013 in which the production of pig meat fell.
- There was a fall (-3.3%) in the average real-terms (deflated) price of cereals as a whole in 2019, within which the average price of grain maize fell more strongly (-6.0 %). The smaller domestic supply of oilseeds in 2019 was accompanied by a small rise (+1.4 %) in real terms in the average price of oilseeds, although within this average there was a stronger price rise for rape and turnip rape (+4.0 %). The real-terms price of poultry declined once again (-1.4%).

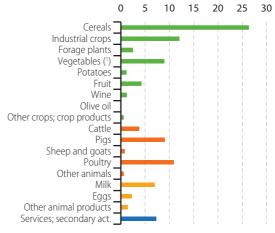
Figure 11.18a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.18b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.18: Key indicators for agriculture, forestry and fisheries for Hungary

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	4 671	thousand hectares	3.0
Farms (agricultural holdings)	2016	430 000	number	4.2
Share of very small farms (with < EUR 8 000 of standard output)	2016	83.2	%	
Farmers	Year	Value	Unit	EU-27 average/ total
Employment in agriculture as a share of total employment (¹)	2018	3.6	%	4.4
Total labour force in agriculture	2019	358.9	thousand annual work units	8 739.7
Young farmers (under 40 years old) as a share of all farm managers	2016	12.6	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
Contribution of agriculture to gross domestic product	2019	2.2	%	_
Fross value added (at basic prices)	2019	3 584	EUR million	2.0
'alue of agricultural industry output (production value at basic prices)	2019	8 722	EUR million	2.1
Value of crop output	2019	4 995	EUR million	2.3
Value of animal output	2019	3 096	EUR million	1.9
Annual change in agricultural factor income per annual work unit (indicator A)	2019	7.7	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
rea under organic farming as a share of the UAA	2018	3.9	%	8.0
rea under conversion to organic farming as a share of the UAA	2018	0.7	%	:
hange in the harmonised risk indicator 1 for pesticides compared with the verage for 2011-2013	2018	-16	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
Cereals (including rice)	2019	15 698	thousand tonnes	5.2
Root crops	2019	1 175	thousand tonnes	0.7
resh vegetables	2019	1 458	thousand tonnes	2.4
Permanent crops	2019	1 185	thousand tonnes	1.7
Ailk	2019	1 967	thousand tonnes	1.2
Bovine meat	2019	30	thousand tonnes	0.4
Pig meat	2019	435	thousand tonnes	1.9
Poultry meat	2019	533	thousand tonnes	4.0
Forestry	Year	Value	Unit	Share of EU-27 total (%)
orest and other wooded land	2020	2 253	thousand hectares	1.2
Persons employed in forestry and logging	2017	20.6	thousand annual work units	4.3
ross value added (at basic prices)	2017	249	EUR million	0.9
loundwood (under bark)	2018	3 038	thousand cubic metres	0.8
Fisheries	Year	Value	Unit	Share of EU-27 total (%)
ishing fleet	2019	_	gross tonnage	-
•	2018	1.4	thousand	0.9
Persons employed in fishing and aquaculture	2018 2019	1.4	tonnes live weight	0.9
rosining need Persons employed in fishing and aquaculture Total catches (major fishing areas) Total aquaculture production (quantity)				0.9 - 1.6

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

# Malta



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	13.4	EUR billion	0.1
Population on 1 January	2019	0.5	million	0.1
Land area	2016	313	km²	0.0
Farmland	2016	111	km²	0.0
Share of farmland in land area	2016	35.5	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

- Agricultural factor income per annual work fell (-1.1 %) in 2019, losing a small amount of the gain (+32.9 %) made in 2018. Due to declines during most years since 2005 (2009, 2015 and 2018 were the only increases), the level of this indicator in 2019 was below (-23.1 %) its 2009 peak.
- The output value of the agricultural industry increased (+4.3 %) to EUR 126 million in 2019. Fresh vegetables accounted for one quarter (25.2 %) of this total output, their value increasing sharply (+15.3 %) in 2019. The three main types of animal output had slightly differing developments in output value in 2019: increases for milk (+1.2 %) and poultry (+3.8 %) alongside a more stable development for pigs (-0.1 %).
- The production of pig meat decreased (-0.5 %) in 2019 (the fifth consecutive annual fall) while the production of bovine meat decreased (-3.7 %, the third consecutive annual fall). By contrast, raw milk production increased (+2.1 %).
- The production of fresh vegetables was lower (-8.2 %) in 2019 than in 2018, its third consecutive annual fall.
- The output price index for fresh vegetables rebounded in real (deflated) terms (+23.1 %) in 2019, after two years in which it fell sharply. The average price of pigs continued to fall (-1.5 % in real terms in 2019), whereas that of cattle increased again (+2.1 %), completing the rebound from the price decline in 2016. The average output price of milk fell in 2019 (-3.3 % in real terms).

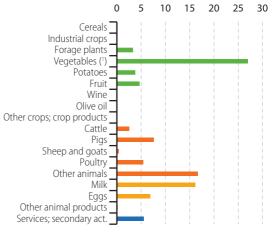
Figure 11.19a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.19b: Output value of the agricultural industry, 2019

(% of total output, at basic prices)



(1) Including also horticultural plants.

Table 11.19: Key indicators for agriculture, forestry and fisheries for Malta

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
Farmland: utilised agricultural area (UAA)	2016	11	thousand hectares	0.
arms (agricultural holdings)	2016	9 210	number	0.
Share of very small farms (with < EUR 8 000 of standard output) (1)	2016	84.3	%	
Farmers	Year	Value	Unit	EU-27 average
mployment in agriculture as a share of total employment (²)	2018	0.8	%	4.
otal labour force in agriculture	2019	5.0	thousand annual work units	8 739
oung farmers (under 40 years old) as a share of all farm managers	2016	7.1	%	10
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
ontribution of agriculture to gross domestic product	2019	0.5	%	
ross value added (at basic prices)	2019	61	EUR million	0
'alue of agricultural industry output (production value at basic prices)	2019	126	EUR million	0
Value of crop output	2019	49	EUR million	0
Value of animal output	2019	70	EUR million	0
innual change in agricultural factor income per annual work unit (indicator A)	2019	-1.1	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
rea under organic farming as a share of the UAA	2018	0.4	%	8
rea under conversion to organic farming as a share of the UAA	2018	0.1	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-19	%	-
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
ereals (including rice)	2019	0	thousand tonnes	0
loot crops	2019	9	thousand tonnes	0
resh vegetables	2019	51	thousand tonnes	0
Permanent crops	2019	5	thousand tonnes	0
Ailk	2019	44	thousand tonnes	0
Bovine meat	2019	1	thousand tonnes	0
Pig meat	2019	4	thousand tonnes	0
Poultry meat	2019	4	thousand tonnes	0
Forestry	Year	Value	Unit	Share of EU-2 total (9
orest and other wooded land	2020	1	thousand hectares	0
Persons employed in forestry and logging	2017	0.0	thousand annual work units	0
Gross value added (at basic prices)	2017	0	EUR million	0
oundwood (under bark)	2017	0	thousand cubic metres	0
Fisheries	Year	Value	Unit	Share of EU-2 total (9
Fishing fleet	2019	6 502	gross tonnage	0
Persons employed in fishing and aquaculture	2018	0.7	thousand	0
Total catches (major fishing areas)	2019	2 230	tonnes live weight	C
Total aquaculture production (quantity)	2018	19 291	tonnes live weight	1

<sup>(1)</sup> Excluding farms with zero standard output.

<sup>(2)</sup> EU-27 average: includes 2017 data for Romania and Sweden.

# **Netherlands**



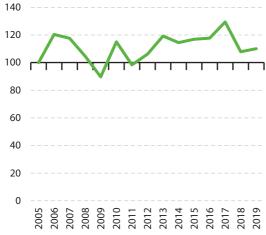
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	810.2	EUR billion	5.8
Population on 1 January	2019	17.3	million	3.9
Land area	2016	34 188	km²	0.8
Farmland	2016	17 963	km²	1.1
Share of farmland in land area	2016	52.5	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

#### Did you know that...

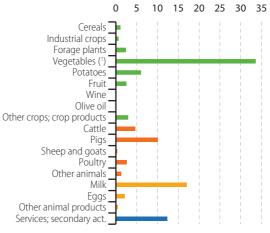
- Agricultural factor income per annual work unit increased slightly (+2.1 %) in 2019 after the larger fall (-16.7 %) recorded in 2018, having reached a peak level in 2017.
- The output value of the agricultural industry increased (+3.5 %) to EUR 29.1 billion in 2019. The output value for three of the four largest key products increased in 2019: plants and flowers (+1.5 %), pigs (+31.6 %) and fresh vegetables (+9.61 %). By contrast, the output value of milk fell (–1.0 %).
- The harvested production of fresh vegetables as a whole in 2019 was higher (+3.8 %) than in 2018, which included a strong rise for carrots (+14.3 %). There was a strong rebound in the volumes of potatoes harvested (+15.5 %) and cereals (+18.8 %) after the relatively poor harvests of 2018.
- The production of raw milk on farms increased (+3.6 % in 2019) to 14.9 million tonnes, which is 2.0 million tonnes more than in 2014. Although the dairy herd in 2019 was larger than in 2018, it was slightly less than in 2014. The production of pig meat grew strongly (+6.0 %) in 2019.
- The higher harvested production of fresh vegetables in 2019 was accompanied by a strong increase (+6.0%) in the average real (deflated) price, with particularly strong increases for cabbages, cauliflowers and tomatoes. Even though there was a lower production of fruits (other than citrus fruits and grapes) in 2019, there was also a steep fall (-24.6%) in the output price in real (deflated) terms, driven by falls for dessert apples (-30.4%) and pears (-27.3%). By contrast, despite a rebound in the harvested production of potatoes, there was also a sharp rise in price (+13.3% in real terms). Output prices for pigs rose steeply (+23.0%). Milk prices fell moderately (-1.3%).

**Figure 11.20a:** Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.20b: Output value of the agricultural industry, 2019
(% of total output, at basic prices)



(') Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

Table 11.20: Key indicators for agriculture, forestry and fisheries for the Netherlands

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	1 796	thousand hectares	1.1
arms (agricultural holdings)	2016	55 680	number	0.5
Share of very small farms (with < EUR 8 000 of standard output)	2016	4.2	%	
Farmers	Year	Value	Unit	EU-27 average, tota
mployment in agriculture as a share of total employment (¹)	2018	2.1	%	4.4
otal labour force in agriculture	2019	156.4	thousand annual work units	<i>8 739.</i> .
oung farmers (under 40 years old) as a share of all farm managers	2016	8.7	%	10
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%
ontribution of agriculture to gross domestic product	2019	1.4	%	-
iross value added (at basic prices)	2019	11 269	EUR million	6
alue of agricultural industry output (production value at basic prices)	2019	29 138	EUR million	7.
Value of crop output	2019	14 380	EUR million	6.
Value of animal output	2019	11 172	EUR million	6.
nnual change in agricultural factor income per annual work unit (indicator A)	2019	2.1	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average tota
rea under organic farming as a share of the UAA	2018	3.5	%	8.
rea under conversion to organic farming as a share of the UAA	2018	0.3	%	
hange in the harmonised risk indicator 1 for pesticides compared with the verage for 2011-2013	2018	-23	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
ereals (including rice)	2019	1 587	thousand tonnes	0.
oot crops	2019	13 606	thousand tonnes	8.
resh vegetables	2019	4 773	thousand tonnes	7.
ermanent crops	2019	690	thousand tonnes	1.
lilk	2019	14 944	thousand tonnes	9.
ovine meat	2019	424	thousand tonnes	6.
ig meat	2019	1 628	thousand tonnes	7.
oultry meat	2019	:	thousand tonnes	
				Share of EU-2
Forestry	Year	Value	Unit	total (%
·	<b>Year</b> 2020	Value 370	thousand hectares	
orest and other wooded land				total (%
orest and other wooded land ersons employed in forestry and logging	2020	370	thousand hectares	total (% 0. 0.
orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices)	2020 2017	<i>370</i> 2.0	thousand hectares thousand annual work units	total (%
orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices)	2020 2017 2017	370 2.0 141	thousand hectares thousand annual work units EUR million	0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0
orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)  Fisheries	2020 2017 2017 2018 <b>Year</b>	370 2.0 141 766 <b>Value</b>	thousand hectares thousand annual work units EUR million thousand cubic metres	<b>total (%</b>
rest and other wooded land ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)  Fisheries	2020 2017 2017 2018 <b>Year</b> 2019	370 2.0 141 766 <b>Value</b>	thousand hectares thousand annual work units EUR million thousand cubic metres Unit gross tonnage	total (%
rest and other wooded land ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)  Fisheries ishing fleet ersons employed in fishing and aquaculture	2020 2017 2017 2018 <b>Year</b> 2019 2018	370 2.0 141 766 <b>Value</b> 115 458 3.0	thousand hectares thousand annual work units EUR million thousand cubic metres  Unit gross tonnage thousand	total (%
orest and other wooded land ersons employed in forestry and logging ross value added (at basic prices) oundwood (under bark)	2020 2017 2017 2018 <b>Year</b> 2019	370 2.0 141 766 <b>Value</b>	thousand hectares thousand annual work units EUR million thousand cubic metres Unit gross tonnage	total (%

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

## Austria



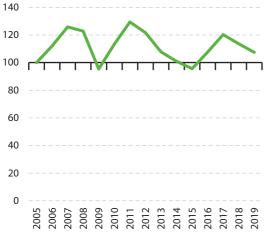
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	397.6	EUR billion	2.8
Population on 1 January	2019	8.9	million	2.0
Land area	2016	82 519	km²	2.0
Farmland	2016	26 698	km²	1.7
Share of farmland in land area	2016	32.4	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

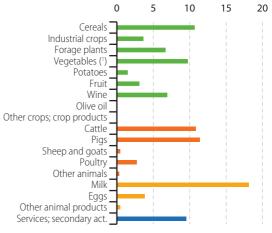
- Agricultural factor income per annual work unit decreased (-5.6 %) in 2019, following a similar rate of decline (-5.4 %) in 2018.
- The output value of the agricultural industry in 2019 was slightly higher (+1.6 %) than a year before, reaching EUR 7.5 billion. Within this total, the value of milk output in 2019 was a little less than a year earlier (-1.0 %), but the output value of pigs jumped higher (+17.8 %) to overtake cattle (-3.9 %) in value terms.
- For the first time since 2005, the level of raw milk production fell, although only slightly (-1.0 %). This was accompanied by a small decline in the real-terms (deflated) price of milk (-1.6 %). Production levels of both pig meat (-1.5 %) and bovine meat (-1.6 %) decreased moderately in 2019. Whereas the price of pigs increased (+16.2 %), the price of cattle fell (-4.9 %).
- The harvested production of cereals as a whole in 2019 bounced back (+12.8 %) from the drought-affected levels of 2018. The production of grain maize and corn-cob-mix (+7.9 %), wheat and spelt (+16.8 %) and barley (+19.8 %) all increased. The production of plants harvested green increased (+4.4 %). The largest rates of decline were for fruits: grapes (-15.6 %) and fruit (other than citrus fruits and grapes), berries and nuts (-44.1 %); the latter was mainly due to a fall (-38.3 %) for apples.
- Alongside the increase in the cereals harvest in 2019, there was a decrease in the average real-terms (deflated) output price (-6.6%). Rising output prices were recorded for potatoes (+14.3%), fresh vegetables (+12.9 %) and oilseeds (+1.6 %). Among those crops for which harvested production had fallen, price rises were recorded for grapes (+13.6 %) and sugar beet (+17.4 %).

Figure 11.21a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.21b: Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

Table 11.21: Key indicators for agriculture, forestry and fisheries for Austria

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%
armland: utilised agricultural area (UAA)	2016	2 670	thousand hectares	1
arms (agricultural holdings)	2016	132 500	number	1.
Share of very small farms (with < EUR 8 000 of standard output)	2016	31.6	%	
Farmers	Year	Value	Unit	EU-27 average
Employment in agriculture as a share of total employment (¹)	2018	3.0	%	4.
otal labour force in agriculture	2019	116.2	thousand annual work units	<i>8 739.</i>
oung farmers (under 40 years old) as a share of all farm managers	2016	22.2	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
Contribution of agriculture to gross domestic product	2019	0.8	%	
Gross value added (at basic prices)	2019	3 080	EUR million	1.
/alue of agricultural industry output (production value at basic prices)	2019	7 483	EUR million	1.
Value of crop output	2019	3 169	EUR million	1.
Value of animal output	2019	3 598	EUR million	2.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	-5.6	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	24.1	%	8.
Area under conversion to organic farming as a share of the UAA	2018	:	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	29	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2: total (%
Cereals (including rice)	2019	5 417	thousand tonnes	1.3
Root crops	2019	2 722	thousand tonnes	1.
Fresh vegetables	2019	611	thousand tonnes	1.
Permanent crops	2019	637	thousand tonnes	0.
Milk	2019	3 820	thousand tonnes	2.
Bovine meat	2019	230	thousand tonnes	3.
Pig meat	2019	502	thousand tonnes	2.
Poultry meat	2019	:	thousand tonnes	
Forestry	Year	Value	Unit	Share of EU-2 total (%
Forest and other wooded land	2020	4 029	thousand hectares	2.
Persons employed in forestry and logging	2017	19.0	thousand annual work units	3.
Gross value added (at basic prices)	2017	1 072	EUR million	4.
Roundwood (under bark)	2018	13 949	thousand cubic metres	3.
Fisheries	Year	Value	Unit	Share of EU-2 total (%
Fishing fleet	2019	_	gross tonnage	
		0.4	thousand	0.
•	2018	0.4	tilousulu	U.
Persons employed in fishing and aquaculture Total catches (major fishing areas)	2018	- 0.4	tonnes live weight	
Persons employed in fishing and aquaculture				0.

<sup>(</sup>¹) EU-27 average: includes 2017 data for Romania and Sweden.

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## **Poland**



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	532.3	EUR billion	3.8
Population on 1 January	2019	38.0	million	8.5
Land area	2016	307 236	km²	7.5
Farmland	2016	144 057	km²	9.2
Share of farmland in land area	2016	46.9	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

#### Did you know that...

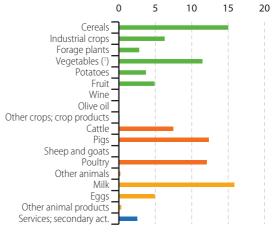
- Having fallen (–6.4 %) in 2018, agricultural factor income per annual work unit increased (+4.6 %) in 2019, almost returning to its 2017 peak level.
- The output value of the agricultural industry was EUR 26.4 billion in 2019, higher (+5.1 %) than in 2018. The values of crop output (+7.3 %) and animal output (+3.4 %) both increased.
- Among the EU Member States, Poland had the highest production of poultry meat (2.6 million tonnes). Poultry meat production increased (+1.9 %) in 2019, continuing its unbroken upward development since the start of the time series in 2003. By contrast, pig production fell sharply (–5.0 %) and that of bovine meat declined slightly (–0.8 %). Raw milk production increased (+2.3 %) in 2019, continuing a generally upward pattern recorded in recent years. The real-terms (deflated) output price for pigs increased strongly (+19.0 %), while that for cattle fell (–10.2 %) and that for poultry stayed relatively unchanged (–0.1 %).
- In 2019, the cereals harvest rebounded (+8.3 %) after a drought-hit harvest in 2018. By contrast, many other crops had lower production levels in 2019: root crops (–5.7 %), plants harvested green (–6.9 %), and fruits (other than citrus fruits and grapes), berries and nuts (–23.0 %).
- Output prices for cereals (-1.5 %) and oilseeds (-3.1 %) fell in real (deflated) terms in 2019, reflecting among other factors their increased production. By contrast, output prices for fresh vegetables increased (+24.3 %) and those for potatoes more than doubled (+111.5 %). Despite a lower level of harvested production, output prices for fresh fruit (excluding citrus fruit and grapes) fell (-6.5 %).

Figure 11.22a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.22b: Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(1) Including also horticultural plants.

Table 11.22: Key indicators for agriculture, forestry and fisheries for Poland

Farms and farmland	Year	Value	Unit	Share of EU-27
				total (%)
Farmland: utilised agricultural area (UAA)	2016	14 406	thousand hectares	9.2
Farms (agricultural holdings)		1 410 700	number	13.7
Share of very small farms (with < EUR 8 000 of standard output)	2016	64.8	%	
Farmers	Year	Value	Unit	EU-27 average/ total
Employment in agriculture as a share of total employment (1)	2018	9.1	%	4.4
Total labour force in agriculture	2019	1 675.8	thousand annual work units	8 739.7
Young farmers (under 40 years old) as a share of all farm managers	2016	20.3	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
Contribution of agriculture to gross domestic product	2019	1.8	%	-
Gross value added (at basic prices)	2019	10 189	EUR million	5.6
Value of agricultural industry output (production value at basic prices)	2019	26 358	EUR million	6.3
Value of crop output	2019	11 676	EUR million	5.3
Value of animal output	2019	14 013	EUR million	8.7
Annual change in agricultural factor income per annual work unit (indicator A)	2019	4.6	%	_
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
Area under organic farming as a share of the UAA	2018	3.3	%	8.0
Area under conversion to organic farming as a share of the UAA	2018	0.8	%	:
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-22	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
Cereals (including rice)	2019	28 990	thousand tonnes	9.7
Root crops	2019	20 569	thousand tonnes	12.3
Fresh vegetables	2019	5 036	thousand tonnes	8.3
Permanent crops	2019	3 756	thousand tonnes	5.3
Milk	2019	14 511	thousand tonnes	9.2
Bovine meat	2019	560	thousand tonnes	8.1
Pig meat	2019	1 979	thousand tonnes	8.7
Poultry meat	2019	2 593	thousand tonnes	19.5
Forestry	Year	Value	Unit	Share of EU-27 total (%)
Forest and other wooded land	2020	9 483	thousand hectares	5.3
Persons employed in forestry and logging	2017	52.7	thousand annual work units	10.9
Gross value added (at basic prices)	2017	1 906	EUR million	7.3
Roundwood (under bark)	2018	41 368	thousand cubic metres	10.9
Fisheries	Year	Value	Unit	Share of EU-27 total (%)
Fishing fleet	2019	32 328	gross tonnage	2.4
Persons employed in fishing and aquaculture	2018	8.1	thousand	5.0
Total catches (major fishing areas)	2019	181 088	tonnes live weight	4.4
Total aquaculture production (quantity)	2018	36 806	tonnes live weight EUR million	3.3 2.8

 $(\mbox{\sc i})$  EU-27 average: includes 2017 data for Romania and Sweden.

# **Portugal**



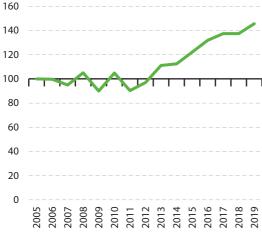
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	213.3	EUR billion	1.5
Population on 1 January	2019	10.3	million	2.3
Land area	2016	90 996	km²	2.2
Farmland	2016	36 417	km²	2.3
Share of farmland in land area	2016	40.0	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

#### Did you know that...

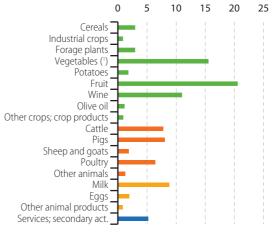
- The upward trend in agricultural factor income per annual work unit, which started in 2012, continued in 2019 (with growth of 6.0 %).
- The output value of the agricultural industry increased (+3.2 %) in 2019 to reach EUR 8.1 billion. The value of crop output (+2.1 %) and animal output (+5.0 %) both increased.
- There was a slight decline (-0.6 %) in the harvested production of cereals in 2019, continuing a downward trend; an increase in the grain maize and corn-cob-mix harvest (+4.9 %) was in contrast to the lower harvested production of several other cereal crops. There was a much higher harvested production of fresh vegetables (+10.2 %), underpinned by the rise in the production of tomatoes (+16.1 %) and of olives (+35.0 %). The harvest of grapes (+7.6 %) and fruits (other than citrus fruits and grapes), berries and nuts (+15.1 %) also increased, the latter mainly due to the increase (+34.8 %) for apples.
- The production of pig meat (+1.2 %) and poultry meat (+1.8 %) increased, the latter continuing its upward trend that started in 2014. By contrast, the production of bovine meat fell (–1.9 %). Raw milk production was higher (+1.6 %) in 2019.
- Output price developments in real (deflated) terms in 2019 for crops often reflected changes in domestic supply. Fresh vegetables were an exception, with the average price increasing (+4.0 %), despite overall production growth. Output prices for pigs (+12.5 %) and poultry (+1.0 %) both increased, while prices for cattle fell (-0.8 %). Milk output prices were relatively stable (-0.2 %).

**Figure 11.23a:** Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

**Figure 11.23b:** Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(') Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

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Table 11.23: Key indicators for agriculture, forestry and fisheries for Portugal

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	3 642	thousand hectares	2.3
Farms (agricultural holdings)	2016	258 980	number	2.5
Share of very small farms (with < EUR 8 000 of standard output)	2016	72.8	%	_
Farmers	Year	Value	Unit	EU-27 average/ total
Employment in agriculture as a share of total employment (¹)	2018	7.9	%	4.4
Total labour force in agriculture	2019	234.4	thousand annual work units	8 739.7
oung farmers (under 40 years old) as a share of all farm managers	2016	4.2	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
Contribution of agriculture to gross domestic product	2019	1.4	%	-
Gross value added (at basic prices)	2019	3 193	EUR million	1.8
/alue of agricultural industry output (production value at basic prices)	2019	8 084	EUR million	1.9
Value of crop output	2019	4 681	EUR million	2.1
Value of animal output	2019	2 984	EUR million	1.8
Annual change in agricultural factor income per annual work unit (indicator A)	2019	6.0	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
rea under organic farming as a share of the UAA	2018	5.9	%	8.0
rea under conversion to organic farming as a share of the UAA	2018	0.5	%	:
hange in the harmonised risk indicator 1 for pesticides compared with the verage for 2011-2013	2018	-34	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
Cereals (including rice)	2019	1 099	thousand tonnes	0.4
loot crops	2019	491	thousand tonnes	0.3
resh vegetables	2019	2 326	thousand tonnes	3.8
Permanent crops	2019	3 039	thousand tonnes	4.3
Ailk	2019	2 072	thousand tonnes	1.3
Sovine meat	2019	92	thousand tonnes	1.3
Pig meat	2019	366	thousand tonnes	1.6
Poultry meat	2019	352	thousand tonnes	2.6
Forestry	Year	Value	Unit	Share of EU-27 total (%)
orest and other wooded land	2020	4 855	thousand hectares	2.7
Persons employed in forestry and logging	2017	14.1	thousand annual work units	2.9
Gross value added (at basic prices)	2017	871	EUR million	3.3
oundwood (under bark)	2018	12 767	thousand cubic metres	3.4
Fisheries	Year	Value	Unit	Share of EU-27 total (%)
ishing fleet	2019	87 278	gross tonnage	6.5
Persons employed in fishing and aquaculture	2018	15.1	thousand	9.3
	2019	183 972	tonnes live weight	4.5
Total catches (major fishing areas) Total aquaculture production (quantity)	2019 2018	183 972 11 766	tonnes live weight tonnes live weight	4.5

<sup>(</sup>¹) EU-27 average: includes 2017 data for Romania and Sweden.

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# Romania



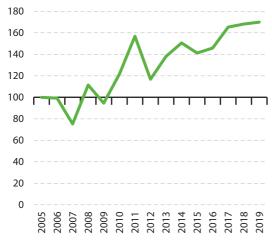
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	223.3	EUR billion	1.6
Population on 1 January	2019	19.4	million	4.3
Land area	2016	234 270	km²	5.7
Farmland	2016	125 025	km²	8.0
Share of farmland in land area	2016	53.4	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

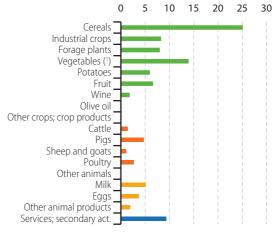
- The generally upward development of agricultural factor income per annual work unit since a low in 2007 continued in 2019, increasing slightly (+1.0 %) to a new peak.
- The output value of the agricultural industry rose (+2.2 %) in 2019 to EUR 19.0 billion; more than two thirds (70.0 %) of this total value came from crop products.
- The total cereals harvest in 2019 was lower (-3.6%) than in 2018, as a fall in grain maize and corn-cob-mix (-6.6%) outweighed smaller increases for other large crops; this was the first contraction in the cereals harvest since 2015. Most other crops also experienced a fall in harvested production: oilseeds (-6.9 %, again the first contraction since 2015), fresh vegetables (-8.9 %), root crops (-11.4 %), plants harvested green (-12.2 %) and fruits (other than citrus fruits and grapes), berries and nuts (-18.4 %).
- There was a sharp fall in the production of pig meat (-6.2%) in 2019, in contrast to increased poultry meat production (+6.6 %). Whereas the price for pigs increased (+9.6 % in real terms), prices for cattle (-1.7 %) and poultry (-1.3 %) fell. Production of raw milk declined further (-2.3 %), the level in 2019 being 464 000 tonnes less than in 2014 in part reflecting the fact that the dairy herd declined by 50 000 head during the same period. The average real-terms price of milk in 2019 was higher than a year earlier (+3.3 %).
- The slight fall (-0.3 %) in output prices in real (deflated) terms for cereals as a whole in 2019 was principally due to a fall for grain maize (-3.2 %). The decrease (-3.4 %) for oilseeds reflected relatively large falls for soya (-8.1 %) and sunflower seeds (-5.0%). Most of the other major crops that had lower levels of production in 2019 experienced higher prices, for example, potatoes (+47.7 %), grapes (+16.3 %), fresh fruit (excluding citrus fruit and grapes; +11.3 %), and fresh vegetables (+8.1 %).

Figure 11.24a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100Source: Eurostat (online data code: aact\_eaa06)

Figure 11.24b: Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(1) Including also horticultural plants.

Table 11.24: Key indicators for agriculture, forestry and fisheries for Romania

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
armland: utilised agricultural area (UAA)	2016	12 503	thousand hectares	8.0
arms (agricultural holdings)	2016	3 422 030	number	33.3
Share of very small farms (with < EUR 8 000 of standard output)	2016	94.6	%	-
Farmers	Year	Value	Unit	EU-27 average/
mployment in agriculture as a share of total employment	2017	22.8	%	4.5
otal labour force in agriculture	2019	1 402.0	thousand annual work units	8 739.7
oung farmers (under 40 years old) as a share of all farm managers	2016	7.4	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
ontribution of agriculture to gross domestic product	2019	3.9	%	-
iross value added (at basic prices)	2019	8 786	EUR million	4.8
alue of agricultural industry output (production value at basic prices)	2019	18 964	EUR million	4.5
Value of crop output	2019	13 269	EUR million	6.0
Value of animal output	2019	3 925	EUR million	2.4
Annual change in agricultural factor income per annual work unit (indicator A)	2019	1.0	%	-
Agri-environmental indicators	Year	Value	Unit	EU-27 average
rea under organic farming as a share of the UAA	2018	2.4	%	8.0
rea under conversion to organic farming as a share of the UAA	2018	1.2	%	
change in the harmonised risk indicator 1 for pesticides compared with the overage for 2011-2013	2018	-52	%	-1:
Agricultural production	Year	Value	Unit	Share of EU-27 total (%
Cereals (including rice)	2019	30 412	thousand tonnes	10.2
Root crops	2019	3 798	thousand tonnes	2
resh vegetables	2019	2 384	thousand tonnes	3.9
Permanent crops	2019	2 406	thousand tonnes	3.4
Ailk	2019	4 340	thousand tonnes	2.7
Bovine meat	2019	44	thousand tonnes	0.6
Pig meat	2019	343	thousand tonnes	1.5
Poultry meat	2019	482	thousand tonnes	3.6
Forestry	Year	Value	Unit	Share of EU-27 total (%
orest and other wooded land	2020	6 945	thousand hectares	3.9
Persons employed in forestry and logging	2017	47.8	thousand annual work units	9.
Gross value added (at basic prices)	2017	1 308	EUR million	5.1
Roundwood (under bark)	2018	10 436	thousand cubic metres	2.8
Fisheries	Year	Value	Unit	Share of EU-22 total (%
ishing fleet	2019	1 529	gross tonnage	0.
Persons employed in fishing and aquaculture	2017	2.0	thousand	1
Total catches (major fishing areas)	2019	7 149	tonnes live weight	0
			to the second second	
Total aquaculture production (quantity)	2018	12 298	tonnes live weight EUR million	1. 0.

# Slovenia



Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	48.4	EUR billion	0.3
Population on 1 January	2019	2.1	million	0.5
Land area	2016	20 145	km²	0.5
Farmland	2016	4 884	km²	0.3
Share of farmland in land area	2016	24.2	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

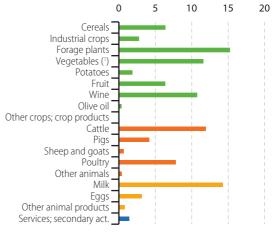
- After a large increase (+39.0 %) in 2018 which had established a new peak, agricultural factor income per annual work unit fell (-11.4 %) in 2019.
- The output value of the agricultural industry was EUR 1.3 billion in 2019, lower (-3.3 %) than in 2018. This fall in output value was driven by a fall for crops (-7.9%), there being a rise for animal output (+3.2%).
- Cereals (+7.6 %) and fresh vegetables (+19.4 %) were the two major crops for which higher production was reported in 2019 than in 2018. Decreases were recorded in the production of plants harvested green (-2.6 %), grapes (-17.3 %) and fruits (other than citrus fruits and grapes), berries and nuts (-35.2 %).
- Poultry meat production was moderately higher (+1.2 %) in 2019 than in 2018, the fourth consecutive annual increase. Somewhat larger increases were recorded for bovine meat (+2.5 %) and pig meat (+6.3 %). Raw milk production in 2019 was slightly lower (-0.9 %) in 2019, the third consecutive annual decrease.
- · Alongside a higher harvested production in 2019, the real-terms (deflated) price of fresh vegetables was also up (+5.1 %). The fall in output prices for cereals (-9.1 %) largely mirrored an increase in domestic supply. Equally, prices for grapes (+8.3 %) and potatoes (+44.2 %) were higher alongside lower levels of harvested production. Despite the large fall in the production of fruit from the bumper 2018 harvest level, the output price index for fresh fruit (excluding citrus fruit and grapes) was also down strongly (-12.7 %), reflecting a large fall in the average price of dessert apples (-21.0 %). The output price for pigs increased strongly (+13.2 %). Cattle prices fell (-3.0 %) while the output price for milk increased (+5.1 %).

Figure 11.25a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.25b: Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(1) Including also horticultural plants. Source: Eurostat (online data code: aact\_eaa01)

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Table 11.25: Key indicators for agriculture, forestry and fisheries for Slovenia

Farms and farmland	Year	Value	Unit	Share of EU-2 total (%
Farmland: utilised agricultural area (UAA)	2016	488	thousand hectares	0.
Farms (agricultural holdings)	2016	69 900	number	0.
Share of very small farms (with < EUR 8 000 of standard output)	2016	58.8	%	
Farmers	Year	Value	Unit	EU-27 average
Employment in agriculture as a share of total employment (¹)	2018	6.4	%	4.
Total labour force in agriculture	2019	77.3	thousand annual work units	8 739.
Young farmers (under 40 years old) as a share of all farm managers	2016	9.1	%	10.
Economic performance of agriculture	Year	Value	Unit	Share of EU-2 total (%
Contribution of agriculture to gross domestic product	2019	1.2	%	
Gross value added (at basic prices)	2019	561	EUR million	0.
Value of agricultural industry output (production value at basic prices)	2019	1 325	EUR million	0.
Value of crop output	2019	735	EUR million	0.
Value of animal output	2019	571	EUR million	0.
Annual change in agricultural factor income per annual work unit (indicator A)	2019	-11.4	%	
Agri-environmental indicators	Year	Value	Unit	EU-27 average
Area under organic farming as a share of the UAA	2018	10.0	%	8.
Area under conversion to organic farming as a share of the UAA	2018	1.3	%	
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	9	%	-1
Agricultural production	Year	Value	Unit	Share of EU-2 total (%
Cereals (including rice)	2019	642	thousand tonnes	0.
Root crops	2019	92	thousand tonnes	0.
Fresh vegetables	2019	120	thousand tonnes	0.
Permanent crops	2019	174	thousand tonnes	0.
Milk	2019	626	thousand tonnes	0.
Bovine meat	2019	36	thousand tonnes	0.
Pig meat	2019	24	thousand tonnes	0.
Poultry meat	2019	70	thousand tonnes	0.
Forestry	Year	Value	Unit	Share of EU-2 total (%
Forest and other wooded land	2020	1 265	thousand hectares	0.
Persons employed in forestry and logging	2017	7.2	thousand annual work units	1.
Gross value added (at basic prices)	2017	267	EUR million	1.
Roundwood (under bark)	2018	3 921	thousand cubic metres	1.
Fisheries	Year	Value	Unit	Share of EU-2 total (9
Fishing fleet	2019	673	gross tonnage	0
Persons employed in fishing and aquaculture	2018	0.2	thousand	0
Total catches (major fishing areas)	2019	120	tonnes live weight	0.
Takal a magazikana mada aki sa / magakika)	2018	1 938	tonnes live weight	0.
Total aquaculture production (quantity)	2010	1 220	torrics live weight	0.

 $<sup>(^{\</sup>text{!}})\;$  EU-27 average: includes 2017 data for Romania and Sweden.

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# Slovakia

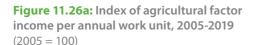


Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	93.9	EUR billion	0.7
Population on 1 January	2019	5.5	million	1.2
Land area	2016	48 702	km²	1.2
Farmland	2016	18 898	km²	1.2
Share of farmland in land area	2016	38.8	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, reg\_area3 and ef\_m\_farmleg)

#### Did you know that...

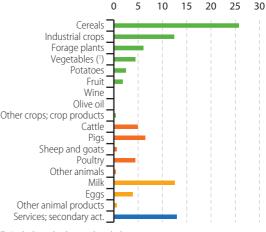
- After more than trebling between 2005 and 2017 (with falls registered only in 2009, 2013 and 2015), agricultural factor income per annual work unit decreased in 2018 (–2.0 %) and in 2019 (–6.2 %).
- The output value of the agricultural industry was EUR 2.3 billion in 2019, which was lower (–2.4 %) than in 2018. The values of crop output (–2.0 %) and animal output (–2.7 %) both fell. Among the main products, the output values of cereals (+1.3 %), milk (+1.6 %) and pigs (+15.7 %) were the main exceptions to this general pattern.
- The harvested production of cereals as a whole was higher in 2019 (+1.6 %) than in 2018, principally due to a jump in the harvested production of barley (+23.1 %) and a smaller rise in that of common wheat and spelt (+2.9 %). There were lower harvested production levels of other crops like plants harvested green (–2.6 %), root crops (–3.3 %) and oilseeds (–15.5 %).
- Whereas the production of poultry meat fell (–4.1 %) in 2019, a fifth consecutive annual production increase was recorded for pig meat (+9.4 %). The level of raw milk production remained relatively unchanged (–0.1 %). There was a moderate decrease in the average real-terms (deflated) output price of poultry (–2.9 %), while pig prices increased (+1.9 %). Milk output prices fell (–1.7 %).
- The higher domestic supply of cereals in 2019 was reflected in a fall in real-terms (deflated) output price of cereals as a whole (-3.1 %). The output price of oilseeds was almost unchanged (+0.2 %). Among root crops, output prices for sugar beet fell (-3.5 %) and potatoes rose (+34.4 %).





Source: Eurostat (online data code: aact\_eaa06)

**Figure 11.26b:** Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(¹) Including also horticultural plants.

Table 11.26: Key indicators for agriculture, forestry and fisheries for Slovakia

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	1 890	thousand hectares	1.2
Farms (agricultural holdings)	2016	25 660	number	0.2
Share of very small farms (with < EUR 8 000 of standard output)	2016	68.3	%	
Farmers	Year	Value	Unit	EU-27 average/ total
Employment in agriculture as a share of total employment (¹)	2018	1.9	%	4.4
Total labour force in agriculture	2019	44.5	thousand annual work units	8 739.7
Young farmers (under 40 years old) as a share of all farm managers	2016	19.0	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
Contribution of agriculture to gross domestic product	2019	0.5	%	_
Gross value added (at basic prices)	2019	521	EUR million	0.3
/alue of agricultural industry output (production value at basic prices)	2019	2 261	EUR million	0.5
Value of crop output	2019	1 212	EUR million	0.5
Value of animal output	2019	757	EUR million	0.5
Annual change in agricultural factor income per annual work unit (indicator A)	2019	-6.2	%	_
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
rea under organic farming as a share of the UAA	2018	9.9	%	8.0
rea under conversion to organic farming as a share of the UAA	2018	0.7	%	:
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-16	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
Cereals (including rice)	2019	4 104	thousand tonnes	1.4
Root crops	2019	1 440	thousand tonnes	0.9
resh vegetables	2019	126	thousand tonnes	0.2
Permanent crops	2019	84	thousand tonnes	0.1
Milk	2019	916	thousand tonnes	0.6
Bovine meat	2019	8	thousand tonnes	0.1
Pig meat Pig meat	2019	63	thousand tonnes	0.3
Poultry meat	2019	72	thousand tonnes	0.5
Forestry	Year	Value	Unit	Share of EU-27 total (%)
orest and other wooded land	2020	1 946	thousand hectares	1.1
Persons employed in forestry and logging	2017	19.7	thousand annual work units	4.1
Gross value added (at basic prices)	2017	426	EUR million	1.6
Roundwood (under bark)	2018	9 079	thousand cubic metres	2.4
Fisheries	Year	Value	Unit	Share of EU-27 total (%)
	2010	_	gross tonnage	-
Fishing fleet	2019			
•	2019	0.3	thousand	0.2
Persons employed in fishing and aquaculture				0.2
Fishing fleet Persons employed in fishing and aquaculture Total catches (major fishing areas) Total aquaculture production (quantity)	2018	0.3	thousand	0.2 - 0.2

 $<sup>(\</sup>sp{\scriptsize '})~$  EU-27 average: includes 2017 data for Romania and Sweden.

Source: Eurostat (online data codes: ef\_m\_farmleg, nama\_10\_a64\_e, aact\_ali01, ef\_m\_farmang, nama\_10\_gdp, aact\_eaa01, aact\_eaa06, org\_cropar, farm structure survey — 2016, aei\_fm\_salpest09, aei\_pr\_gnb, apro\_cpnh1, apro\_mk\_farm, apro\_mt\_pann, for\_area, for\_awu, for\_eco\_cp, for\_remov, fish\_fleet\_alt, fish\_ca\_main and fish\_aq2a) and Food and Agriculture Organization of the United Nations — Global Forest Resources Assessment, 2020

# Finland



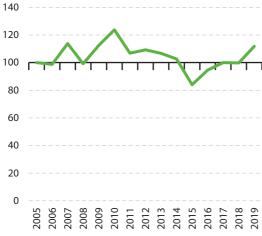
Year	Value	Unit	Share of EU-27 total (%)
2019	240.6	EUR billion	1.7
2019	5.5	million	1.2
2016	304 316	km²	7.4
2016	22 331	km²	1.4
2016	7.3	%	-
	2019 2019 2016 2016	2019 240.6 2019 5.5 2016 304 316 2016 22 331	2019 240.6 EUR billion 2019 5.5 million 2016 304 316 km² 2016 22 331 km²

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

# Did you know that...

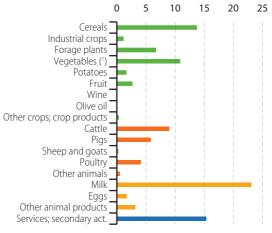
- Agricultural factor income per annual work unit in 2019 was higher (+12.1 %) in 2019 than a year earlier. Despite this upward development, the index indicator level remained below (-9.6 %) its 2010 peak, but was higher (+11.8 %) than it had been in 2005.
- The output value of the agricultural industry rose (+6.2 %) in 2019, reaching EUR 4.7 billion. The value of crop output grew strongly in 2019 (+22.4 %) and contrasted with the slight fall (-1.2 %) recorded for animal output. Milk, cereals and cattle together accounted for close to half (45.7 %) of total output value. Of these, the value of total cereals output increased strongly (+47.1 %).
- The production of all three major types of meat increased in 2019: pig meat (+0.9 %), poultry meat (+2.8 %) and bovine meat (+0.8 %); for poultry meat this continued the upward trend since 2010. The production of raw milk decreased slightly (-1.0 %) in 2019, a fourth consecutive annual decrease.
- The three main categories of crops all experienced higher harvested production levels in 2019 compared with the drought-hit levels of 2018: cereals (+45.9 %, the first increase since 2014), plants harvested green (+27.2 %) and root crops (+17.2 %).
- The large rebound in cereals production was accompanied by a relatively modest rise in output prices in real (deflated) terms (+2.4 % on average). Output price developments for the two main root crops diverged: sugar beet (-3.3 %) and potatoes (+4.4 %). Output prices increased for pigs (+2.8 %), poultry (+2.2 %) and cattle (+0.3 %); by contrast, a fall (-2.4 %) was recorded for milk.

Figure 11.27a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.27b: Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(1) Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

Table 11.27: Key indicators for agriculture, forestry and fisheries for Finland

Farms and farmland	Year	Value	Unit	Share of EU-27 total (%)
Farmland: utilised agricultural area (UAA)	2016	2 233	thousand hectares	1.4
Farms (agricultural holdings)	2016	49 710	number	0.5
Share of very small farms (with < EUR 8 000 of standard output) (')	2016	23.4	%	_
Farmers	Year	Value	Unit	EU-27 average/ total
Employment in agriculture as a share of total employment (2)	2018	2.5	%	4.4
Total labour force in agriculture	2019	61.6	thousand annual work units	8 739.7
Young farmers (under 40 years old) as a share of all farm managers	2016	8.8	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
Contribution of agriculture to gross domestic product	2019	0.4	%	_
Gross value added (at basic prices)	2019	1 401	EUR million	0.8
Value of agricultural industry output (production value at basic prices)	2019	4 745	EUR million	1.1
Value of crop output	2019	1 766	EUR million	0.8
Value of animal output	2019	2 253	EUR million	1.4
Annual change in agricultural factor income per annual work unit (indicator A)	2019	12.1	%	_
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
Area under organic farming as a share of the UAA	2018	13.1	%	8.0
Area under conversion to organic farming as a share of the UAA	2018	2.7	%	:
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	44	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
Cereals (including rice)	2019	3 982	thousand tonnes	1.3
Root crops	2019	1 120	thousand tonnes	0.7
Fresh vegetables	2019	293	thousand tonnes	0.5
Permanent crops	2019	12	thousand tonnes	0.0
Milk	2019	2 374	thousand tonnes	1.5
Bovine meat	2019	87	thousand tonnes	1.3
Pig meat	2019	169	thousand tonnes	0.7
Poultry meat	2019	139	thousand tonnes	1.0
Forestry	Year	Value	Unit	Share of EU-27 total (%)
Forest and other wooded land	2020	23 155	thousand hectares	12.8
Persons employed in forestry and logging	2017	20.4	thousand annual work units	4.2
Gross value added (at basic prices)	2017	3 784	EUR million	14.4
Roundwood (under bark)	2018	60 530	thousand cubic metres	16.0
		William	Unit	Share of EU-27
Fisheries	Year	Value	Unit	total (%)
				total (%)
Fishing fleet	2019	15 723	gross tonnage	1.2
Fishing fleet Persons employed in fishing and aquaculture	2019 2018	15 723 1.7	gross tonnage thousand	1.2 1.0
Fishing fleet	2019	15 723	gross tonnage	1.2

<sup>(1)</sup> Excluding farms with zero standard output.

Source: Eurostat (online data codes: ef\_m\_farmleg, nama\_10\_a64\_e, aact\_ali01, ef\_m\_farmang, nama\_10\_gdp, aact\_eaa01, aact\_eaa06, org\_cropar, farm structure survey — 2016, aei\_fm\_salpest09, aei\_pr\_gnb, apro\_cpnh1, apro\_mk\_farm, apro\_mt\_pann, for\_area, for\_awu, for\_eco\_cp, for\_remov, fish\_fleet\_alt, fish\_ca\_main and fish\_aq2a) and Food and Agriculture Organization of the United Nations — Global Forest Resources Assessment, 2020

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<sup>(2)</sup> EU-27 average: includes 2017 data for Romania and Sweden.

# Sweden



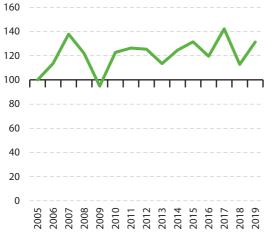
Key information	Year	Value	Unit	Share of EU-27 total (%)
Gross domestic product (GDP)	2019	474.2	EUR billion	3.4
Population on 1 January	2019	10.2	million	2.3
Land area	2016	407 300	km²	9.9
Farmland	2016	30 126	km²	1.9
Share of farmland in land area	2016	7.4	%	-

Source: Eurostat (online data codes: nama\_10\_qdp, demo\_pjan, req\_area3 and ef\_m\_farmleq)

#### Did you know that...

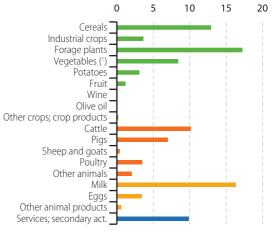
- Agricultural factor income per annual work unit rebounded guite strongly in 2019 (+16.4 %) from the fall (-20.7 %) recorded the previous year. The level of this indicator in 2019 was below (-7.7 %) its 2017 peak but above (+31.4 %) its level in 2005.
- The output value of the agricultural industry increased (+1.6 %) to EUR 6.0 billion in 2019. The value of crop output increased sharply (+8.1 %) whereas that of animal output fell (-2.1 %). The increase in the value of crop output reflected strong rises for cereals (+34.4 %) and industrial crops (+49.8 %).
- The production of cereals (+88.6 %), plants harvested green (+40.8 %), potatoes (+17.1 %) and sugar beet (+19.5 %) were all higher in 2019 than in 2018, as harvests rebounded from the previous year's drought. The relatively small harvests of oilseeds (+74.0 %) and fresh vegetables (+12.3 %) also increased.
- Among the three major types of meat, production fell for pig meat (-3.5 %) while it increased for poultry meat (+4.6 %) and bovine meat (+2.0 %). The gradual slide in the production of raw milk since the abolition of quotas continued in 2019 (-2.0 %), a fourth consecutive annual fall.
- The rebound in cereals production in 2019 was reflected in a lower real-terms (deflated) output price (-24.2 %). Similarly, the increase in harvested production of fresh vegetables was accompanied by a fall in the average price (-5.4 %). Despite higher production, the prices of potatoes (+0.9 %) and oilseeds (+1.8 %) increased moderately. Output prices also increased moderately for pigs (+0.4 %), cattle (+1.2 %) and milk (+1.3%).

Figure 11.28a: Index of agricultural factor income per annual work unit, 2005-2019 (2005 = 100)



Note: index rescaled from 2010 = 100 to 2005 = 100. Source: Eurostat (online data code: aact\_eaa06)

Figure 11.28b: Output value of the agricultural industry, 2019 (% of total output, at basic prices)



(1) Including also horticultural plants.

Source: Eurostat (online data code: aact\_eaa01)

Table 11.28: Key indicators for agriculture, forestry and fisheries for Sweden

Forms and formland	Von	Value	IIn:t	Share of EU-27
Farms and farmland	Year	Value	Unit	total (%)
Farmland: utilised agricultural area (UAA)	2016	3 013	thousand hectares	1.9
Farms (agricultural holdings)	2016	62 940	number	0.6
Share of very small farms (with < EUR 8 000 of standard output)	2016	39.3	%	_
Farmers	Year	Value	Unit	EU-27 average/ total
Employment in agriculture as a share of total employment	2017	1.2	%	4.5
Total labour force in agriculture	2019	54.8	thousand annual work units	8 739.7
Young farmers (under 40 years old) as a share of all farm managers	2016	10.1	%	10.7
Economic performance of agriculture	Year	Value	Unit	Share of EU-27 total (%)
Contribution of agriculture to gross domestic product	2019	0.3	%	-
Gross value added (at basic prices)	2019	1 553	EUR million	0.9
Value of agricultural industry output (production value at basic prices)	2019	5 999	EUR million	1.4
Value of crop output	2019	2 804	EUR million	1.3
Value of animal output	2019	2 602	EUR million	1.6
Annual change in agricultural factor income per annual work unit (indicator A)	2019	16.4	%	_
Agri-environmental indicators	Year	Value	Unit	EU-27 average/ total
Area under organic farming as a share of the UAA	2018	20.3	%	8.0
Area under conversion to organic farming as a share of the UAA	2018	2.4	%	:
Change in the harmonised risk indicator 1 for pesticides compared with the average for 2011-2013	2018	-44	%	-17
Agricultural production	Year	Value	Unit	Share of EU-27 total (%)
Cereals (including rice)	2019	6 148	thousand tonnes	2.1
Root crops	2019	2 876	thousand tonnes	1.7
Fresh vegetables	2019	345	thousand tonnes	0.6
Permanent crops	2019	25	thousand tonnes	0.0
Milk	2019	2 704	thousand tonnes	1.7
Bovine meat	2019	140	thousand tonnes	2.0
Pig meat	2019	240	thousand tonnes	1.1
Poultry meat	2019	164	thousand tonnes	1.2
Forestry	Year	Value	Unit	Share of EU-27 total (%)
Forest and other wooded land	2020	30 344	thousand hectares	16.8
Persons employed in forestry and logging	2017	41.0	thousand annual work units	8.5
Gross value added (at basic prices)	2017	3 523	EUR million	13.4
Roundwood (under bark)	2018	68 300	thousand cubic metres	18.0
Fisheries	Year	Value	Unit	Share of EU-27 total (%)
Fishing fleet	2019	23 290	gross tonnage	1.7
Persons employed in fishing and aquaculture	2017	1.0	thousand	0.6
Total catches (major fishing areas)	2019	178 137	tonnes live weight	4.3
Total aquaculture production (quantity) Total aquaculture production (value)	2018 2018	13 094 51	tonnes live weight EUR million	1.2 1.4

Source: Eurostat (online data codes: ef\_m\_farmleg, nama\_10\_a64\_e, aact\_ali01, ef\_m\_farmang, nama\_10\_gdp, aact\_eaa01, aact\_eaa06, org\_cropar, farm structure survey — 2016, aei\_fm\_salpest09, aei\_pr\_gnb, apro\_cpnh1, apro\_mk\_farm, apro\_mt\_pann, for\_area, for\_awu, for\_eco\_cp, for\_remov, fish\_fleet\_alt, fish\_ca\_main and fish\_aq2a) and Food and Agriculture Organization of the United Nations — Global Forest Resources Assessment, 2020

# **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 information has been included under the tables, figures and maps. The following symbols are used in tables, where appropriate:

Italic data value is forecasted, provisional or estimated and is likely to change;

: not available, confidential or unreliable value:

not applicable.

This publication generally presents information for the EU-27 (an aggregate for the 27 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 languages. In figures, the countries are ranked according to the values of a particular indicator.

The EU-27 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 the United Kingdom, EFTA countries, candidate countries to the EU and potential candidates. In the event that data for any of these nonmember countries are not available, they have been excluded from the tables, figures and maps presented.

If data are not available for a particular country, then efforts have been made to fill tables, figures and maps with data for previous reference periods (these exceptions are footnoted); generally, an effort has been made to go back at least two reference years for those countries that do not have the most recent information available, for example showing data for 2017 or 2018 if data for 2019 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 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' (AWU), which is generally 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 or fish farming, 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 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 genitalia. 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 (CAP)

The common agricultural policy (CAP) is the EU's agricultural policy. The 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 developed as a result of successive reforms.

#### Common fisheries policy (CFP)

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 CAP 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 two 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 the survey on the structure of agricultural holdings, is carried out by all EU Member States. The FSS is 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 level 3). Every three or four years the FSS is carried out as a sample survey, and once in 10 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 (CFP) are defined for a number of specific areas of water, including:

- the Northeast 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 (also referred to as the Food and Agriculture Organization Major Fishing Area 27);
- the Northwest Atlantic, which is the region that is roughly the area to the west of 42°W longitude and north of 35°N latitude (also referred to as the Food and Agriculture Organization Major Fishing Area 21);

- the Eastern Central Atlantic, which is the region to the east of 40°W longitude between latitudes 36°N and 6°S (also referred to as the Food and Agriculture Organization Major Fishing Area 34);
- the Mediterranean and Black Sea, which is also referred to as the Food and Agriculture Organization Major Fishing Area 37.

#### 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 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.

#### **Forests**

Forests are 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 Organization 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 for the EU Member States, the United Kingdom 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

The 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), providing 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)

A livestock unit (LSU) 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 is the delivery of live animals by agriculture (in other words, excluding livestock renewal) whose meat fits needs for human consumption (in other words, excluding removals and losses). The slaughterhouses are the first points where this fate becomes certain and their activity reflects meat production. Keep in mind though that animals slaughtered may have been produced abroad and that the live animals delivered may be slaughtered abroad.

In the present publication, slaughtering in the slaughterhouses of the EU Member States is called meat production. This definition applies to bovine animals, pigs, sheep, goats and poultry.

#### Milk

Milk is produced by the secretion of the mammary glands of 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/her 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/her 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

The regularly employed labour force of an 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. The regularly employed labour force may be classified either as family labour or non-family 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 forests 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.

#### **Standard output (SO)**

The standard output (SO) 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 LSU livestock unit AWU annual work unit m³ cubic metre

EUR euro toe tonne of oil equivalent

ha hectare tonne 1 000 kg

kg kilogram TLW tonnes live weight km² square kilometre t-km tonne-kilometre

kW kilowatt

#### OTHER ABBREVIATIONS

AEI agri-environmental indicators ICT information and communication CAP common agricultural policy technologies

CCM corn cob mix IPCC intergovernmental panel on climate

CFP common fisheries policy change

CLRTAP Convention on Long-range ISCED international standard classification of

Transboundary Air Pollution education

 $\begin{array}{cccc} \text{COM} & \text{communication} & \text{K} & \text{potassium} \\ \text{CO}_2 & \text{carbon dioxide} & \text{LFS} & \text{labour force survey} \end{array}$ 

CMO common market organisation LSU livestock unit
EAA economic accounts for agriculture LULUCF land-use, land change and forestry

EC 1. European Community NUTS classification of territorial units for

2. European Commission statistics

EEA European Environment Agency PDO protected designation of origin
EEC European Economic Community PGI protected geographical indication
EMFP European monitoring and evaluation SILC statistics on income and living

European monitoring and evaluation SILC statistics on income and living programme conditions

Eurostat statistical office of the European Union SO standard output FAO Food and Agriculture Organization (of UAA utilised agricultural area

the United Nations)

UNECE United Nations Economic Commission

forest law enforcement, governance and for Europe

trade UNFCCC United Nations Framework Convention

FSS farm structure survey on Climate Change

harmonised index of consumer prices

**FIEGT** 

HICP

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# Agriculture, forestry and fishery statistics

2020 EDITION

Agriculture, forestry and fishery statistics provides a selection of recent, topical data. Information is presented for the European Union (EU) and its Member States, and is supplemented (when available) with data for the United Kingdom, EFTA members, candidate countries to the EU and potential candidates. 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 broad range of data that are freely available on Eurostat's website.

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Print: ISBN 978-92-76-21520-2

doi:10.2785/496803 PDF: ISBN 978-92-76-21522-6 doi:10.2785/143455