

TRENDS IN THE AGRICULTURAL ECONOMY | YEAR 2020

Production and value added fell sharply, secondary activities collapse

In 2020 agricultural production decreased in volume by 3.2% and value added by 6%; employment also dropped significantly (-2.3%).

The production of olive oil has suffered the greatest downsizing (-14.5%) while the production of fruit (+3.7%), cereals (+3%), milk (+2.7%) and vegetables (+0.2%) increased.

The effects of the Covid-19 health emergency have affected secondary activities (-20.3%), the horticultural sector (-8.4%) and agricultural support services (-4.1%).

In the EU27, production (-0.8%) and agricultural income (-1.5%) fall. Italy remains the leading European country in terms of value added and the third in terms of value of production.

59,6

billion euro

The value of agriculture, forestry and fishing production in Italy

32.9 billion euro is the value added of agriculture, forestry and fishing in Italy

-1,2%

The value added (at current prices) of the agri-food sector

177

billion euro

The value added of agriculture for all the EU27 countries

411.8 billion euro is the value of EU27 agricultural production

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2020 difficult year for the agricultural sector, but the weight of agri-food consolidates

After the negative performance of 2019 (-1.6% value added in volume), with the crisis due to the Covid-19 pandemic, the agriculture, forestry and fishing sector suffered a further marked contraction: in 2020 production in volume decreased by 3.2% and the value added by 6%.

The decline was more limited for agricultural production of goods and services (-1.4% in volume and -0.5% in value), but the effects of the pandemic had a heavy impact on the secondary activities of agriculture (-20.3% by volume). For forestry, there was a slight increase in production (+0.4%) and in value added (+0.7%), while the trend in the fishing sector was very negative, with a sharp drop in both production (-8.8%) and value added (-5.3%).

The value added of the food, beverage and tobacco industry grew by 1.8% at current prices but decreased by the same amount in volume (-1.8%).

The agri-food sector (which includes agriculture, forestry and fishing and the food industry) recorded, for the first time since 2016, a decrease in value added (-1.2% at current prices and -4% in volume). It is the sector in which the 4.3% of value added of the entire economy was formed (it was 4.1% in 2019): the primary sector contributed 2.2% (as in 2019) and the food industry for 2.1% (1.9% in 2019). Despite the non-positive results, the agri-food sector consolidated its weight within the national economic framework in 2020.

Significant decline in employment, investment and agricultural income

Employment in the agriculture, forestry and fishing sector, measured in Labor Units (AWUs), decreased by 2.3% compared to 2019: the employee component fell by 3.3% and the independent one by 1.8%. The decline in employment in the food industry was even more pronounced (-6.7%), leading to an overall decrease in labour input in the agri-food sector of 3.4%.

In 2020, compensation of employees in agriculture, forestry and fishing decreased by 2.3%; in particular, gross wages fell by 2.7%. Gross fixed investments recorded a sharp downsizing both in current values (-12.3%) and in volume (-12.2%).

AGRICULTURE: KEY NUMBERS. Production and value added. Changes in volume, price and value. Year 2020, current values in millions of euro and percentage values

ECONOMIC ACTIVITY	Current millions of euro Year 2020	% Changes of volume 2020/2019	% Changes of price 2020/2019	% Changes of value 2020/2019
Production of agricultural goods and services	52,275	-1.4	+0.8	-0.5
- Herbaceous crops	29,463	-1.5	+2.4	+0.9
- Livestock breeding	16,016	0.0	-2.1	-2.0
- Agricultural support activities	6,796	-4.1	+1.1	-3.0
Secondary activities (*)	4,399	-20.3	-0.4	-20.6
Agriculture production	55,740	-3.2	+0.9	-2.4
Value added of agriculture	30,013	-6.4	+2.3	-4.3
Forestry production	2,476	+0.4	+0.4	+0.8
Value added of forestry	2,022	+0.7	+0.1	+0.9
Fishery production	1,421	-8.8	-2.8	-11.4
Value added of fishing	844	-5.3	+8.5	+2.7
Agriculture, forestry and fishing production	59,637	-3.2	+0.8	-2.5
Value added of agriculture, forestry and fishing	32,878	-6.0	+2.3	-3.8

* These are non-agricultural secondary activities carried out within the agricultural sector (mainly: agricultural-tourism, processing of milk, fruit and meat, production of renewable energy), net of secondary agricultural activities carried out by non-agricultural sectors (essentially related to crops and to farms and exercised, for example, by commercial enterprises).

Heavy repercussions of the pandemic crisis on the agricultural economy

The crisis due to the Covid-19 pandemic, starting from February 2020 led national and regional authorities to adopt severe restrictive measures, that caused a sharp contraction in production. Although agriculture and many activities of the agricultural supply chain are among those defined as essential and, therefore, not directly subject to the restrictions, farms have had to face a number of difficulties, depending on the commercial channels used, the reference markets, the degree of dependence on external production factors and the areas of location.

Non-strictly food production was more directly affected by the restrictions to mobility, the interruption of commercial channels, the difficulties in accessing domestic and foreign markets and the cancellation of tourist flows. Among these, the horticultural sector was strongly affected by the restrictive measures in the initial period of the year in which the production and sale of flowers and plants are concentrated.

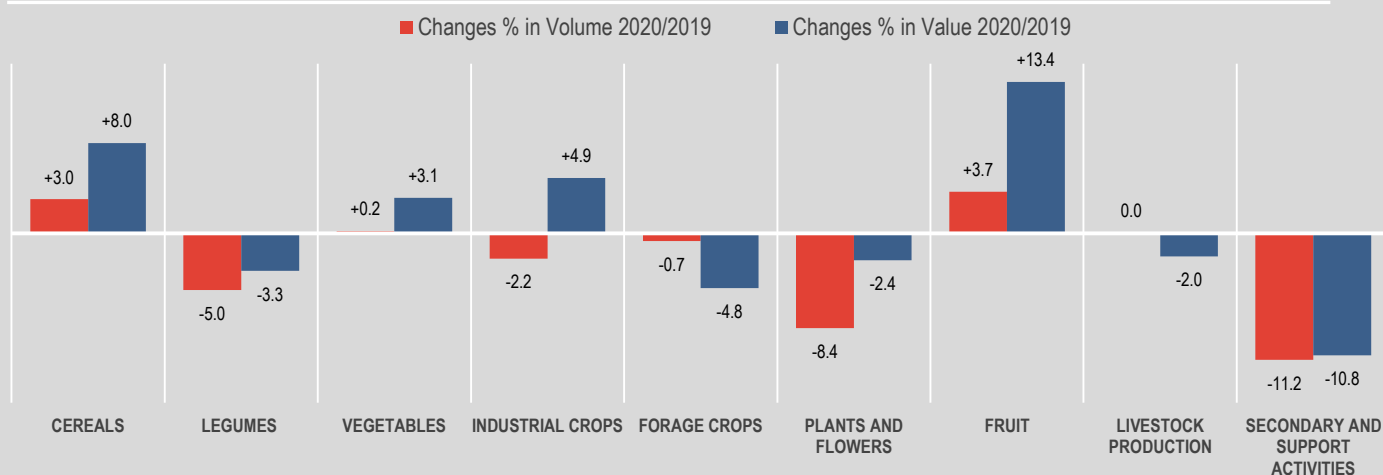
Non-agricultural secondary activities in particular have experienced an unprecedented decline after a decade of steadily growing trends. Agricultural tourism activities were particularly affected, due to the prolonged closure of accommodation facilities and the sharp decline in attendance, as well as those related to landscaping and park and garden maintenance. The production of support services also fell sharply due to the downsizing of the initial processing of products.

The marked contraction of all activities in the catering sector has affected the sale of many agri-food products, especially high-end products, which find an important outlet market in non-domestic consumptionⁱⁱ. In addition, the blockade of borders, especially in the first phase of the health emergency, had repercussions on the export volumes of many typical Made in Italy products (such as wine and high-end food products).

The crisis has also had an impact on the decline in agricultural employment, due to restrictions on the movement of seasonal and foreign workers.

For strictly agricultural production, however, no particular critical issues have emerged directly attributable to the health emergency. On the contrary, in some areas, such as that of crops, according to recent surveysⁱⁱⁱ among farmers, there seems to be a prevailing opinion that the crisis due to the health emergency has not had a significant effect on the activities of farms.

FIGURE 1. TRENDS IN AGRICULTURE FOR SOME OF THE MAIN PRODUCTION CATEGORIES. PERCENTAGE CHANGES IN VOLUME AND VALUE. Year 2020.



A bad year also for olive oil and wine, especially in the South

The 2020 was a very unfavorable year for olive oil production. Following the normal cyclical trend^{iv}, after the expansion of 2019 (production had increased of 27.6% in volume and 29.6% in value), in 2020 production decreased both in volume (-14.5%) and in value (-22.4%).

The decline was particularly marked in the southern regions, on which a large part of national production depends. In particular, the volume of production suffered a drastic downsizing in Puglia (-31.7%), Campania (-22.6%) and Calabria (-21.6%), only partially offset by the significant increase in some regions of the Center (Tuscany +28.6%, Umbria +14.7%, Marche +3.6%) and the North (Emilia-Romagna +20%, Veneto +19%, Liguria +3.8%).

The year was also negative for the wine, which recorded a 2% drop in the quantity produced. Among the regions with the greatest wine-growing vocation, almost all of those in the South suffered the most in terms of production volumes. (Sicily -14% and Calabria -9.1%) and of the Center (Tuscany -7.9%, Umbria -7.2% and Lazio -6.3%), but also some northern regions (Liguria -11.7% and Friuli Venezia-Giulia -8.8%).

The share of the product that remained unsold due to lack of marketing to the catering sector or due to difficulties in exports led to a general decrease in prices, with more marked reductions in Puglia, Campania and Sicily and less incisive, on the other hand, in Piedmont and Veneto. Overall, the value of wine production decreased by 3.4%.

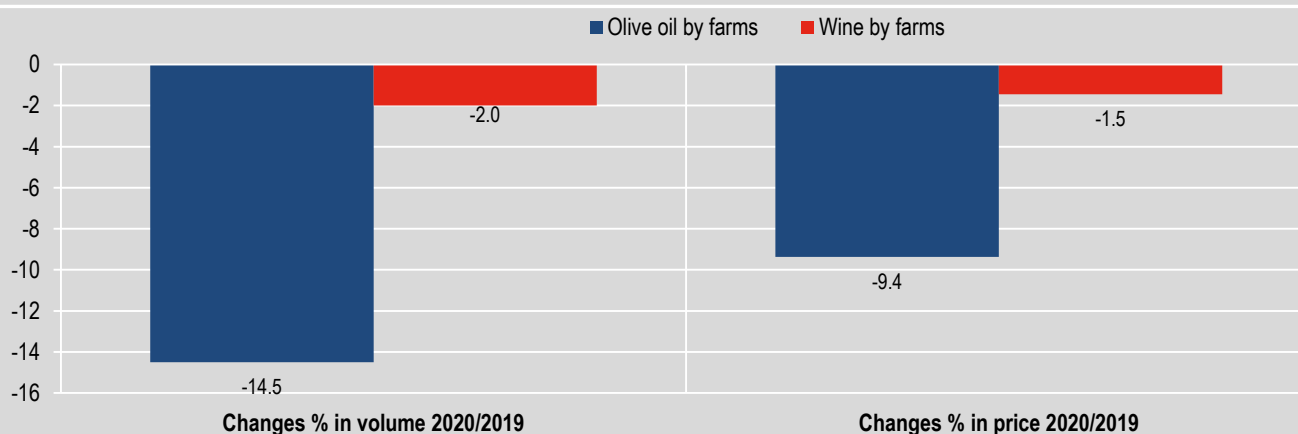
Decrease for legumes, industrial crops, plants and flowers and animal meats

After the boom of the last 5 years (with an overall growth of almost 50%), legume crops have suffered a drop in volume production of 5% and 3.3% in value. The downsizing has mainly affected some varieties: dried peas, chickpeas and lentils. A negative performance was also recorded for industrial plants (-2.2% volume), connected especially to the decline in the production of tobacco (-5.2%), hemp (-4.1%) and soybeans (-3.6%).

Significant losses were also recorded in the plants and flowers sector (-8.4% in volume). In particular, the floricultural sector experienced a significant reduction in volume (-9%) and a more muted decline in value (-3%) thanks to a robust rise in prices (+6.5%). A similar trend was found for the plants nursery sector (-7.9% in volume, -1.9 in value and +6.5% in prices).

Difficulties have also affected the livestock sector. The reduction in consumption had repercussions above all on the slaughter of animal meat: pigs suffered a drop in production of 3.6% in volume and 7.7% in value, cows by 1.3% in volume and 3.9% in value while for poultry the increase in volumes (+1.3%) was accompanied by a decrease in the value of production (-3.5%) due to the marked drop in prices (-4.7%).

FIGURE 2. AGRICULTURAL OLIVE OIL AND WINE PRODUCTION. PERCENTAGE CHANGES IN VOLUME AND PRICE (DEFLATOR). Year 2020



Collapse of secondary activities, support services also down

The production of secondary activities, after years of constant growth, fell in 2020 (-20.3% in volume and -20.6% in value) back to the levels of 2012. Overall, the loss in value of production compared to 2019 was approximately 1.2 billion euros.

The repercussions of the health emergency have affected above all the activities related to Agricultural tourism (-60.8% in volume and -60.5% in value). The sector, which also includes recreational and social activities and educational farms, in 2020 suffered a drop in the value of production of around 950 million euros.

The impact on parks and gardens was also notable (-25% in volume and -26.1% in value) and on direct sales/marketing activities (-19.8% in volume and -20.6% in value).

Positive signals were recorded, once again, from the renewable energy sector (which constitutes 50% of the total secondary activities), whose production grew by 0.8% (in terms of volume and value), exceeding the 2.2 billion euros. Within this sector, photovoltaics account for 41%, biogas from animal manure for 11% and biomass from agriculture and forestry for 48%.

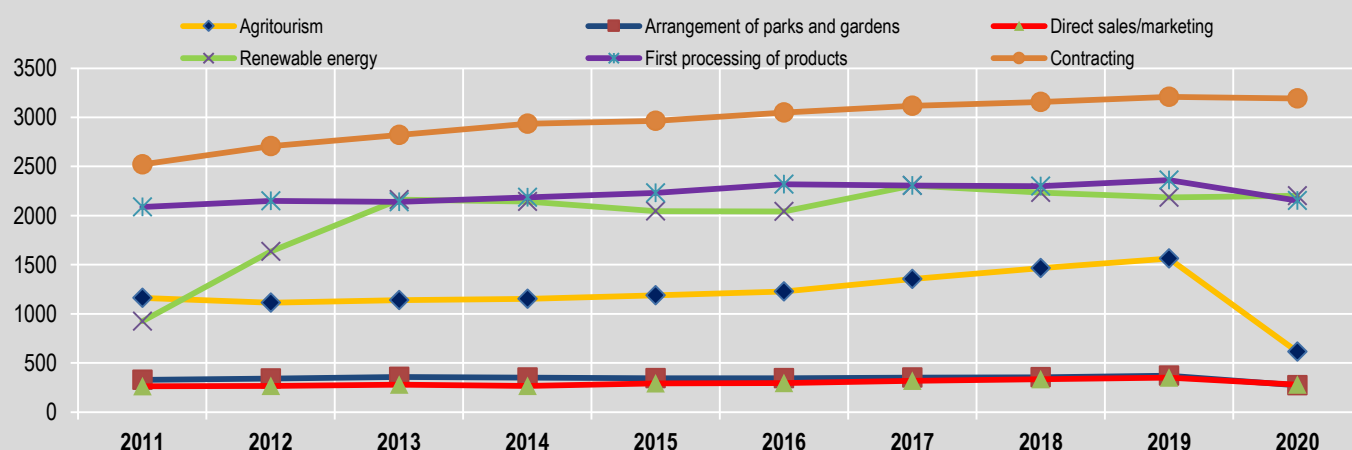
There was also a significant contraction in agricultural support activities (-4.1% in volume and -3% in value), mainly due to the downsizing of primary processing activities (-10.8% in volume and -8.8% in value), which were also affected by the closure of many plants. The initial processing activities carried out after the harvest (calibration, washing, packaging for the market, fresh-cut processing, etc.) have become an integral part of the production processes of farms and constitute an important element of product enhancement: in recent years the value of their production has progressively increased to exceed 2 billion euros.

Agricultural activities for third parties (subcontracting) in 2020 recorded a value of 3.2 billion euros, slightly down compared to 2019 (-1% in volume and -0.5% in value).

Overall, the sector of services activities in 2020 suffered a decrease in the value of production of about 200 million euros.

In spite of the drastic downsizing due to the crisis, all secondary and support activities, i.e. all activities that are not strictly agricultural, have maintained their characteristic role of primary importance for Italian agriculture: they contribute to the value of the entire national agricultural production for a share of more than 20% and represent 31% of the secondary and support activities of the entire EU27.

FIGURE 3. AGRICULTURE: PRODUCTION TREND OF THE MAIN SECONDARY AND SUPPORT ACTIVITIES.
2011-2020 years. Current values in millions of euro.



Growing production of vegetables, fruit, cereals and milk

Horticultural crops performed well overall in 2020 (+0.2% in volume and +3.1% in value) mainly due to a significant increase in prices (+2.9%). High increases in the volume of production were recorded for potatoes (+6.8%), tomatoes (+5.9%), fresh beans (4.9%) and cabbage (+3.8%), worst performers were radicchio (-5.8%), asparagus (-5.6%) and lettuce (-5.5%). On the price front, poplins (+31.8%), strawberries (+24%) and artichokes (+23.3%) were the main price risers.

The favourable weather conditions and the reduction in the problems related to the Asian bug^v, compared to the previous year favoured fruit crops. In addition, the phenomenon of alternating production that characterises woody crops led to opposite trends in almost all fruit products compared to 2019.

In particular, the harvest of hazelnuts (+36.5% in volume) and pears (+35.5%) increased; good results also for cherries (+5.8%), apples (+1.6%) and for all dried fruit. The vintage was difficult, however, for apricots (-36.6%), nectarines (-32.7%) and plums (-26.8%) and the volume of citrus fruit production decreased (-6.4%) after the good result of the previous year.

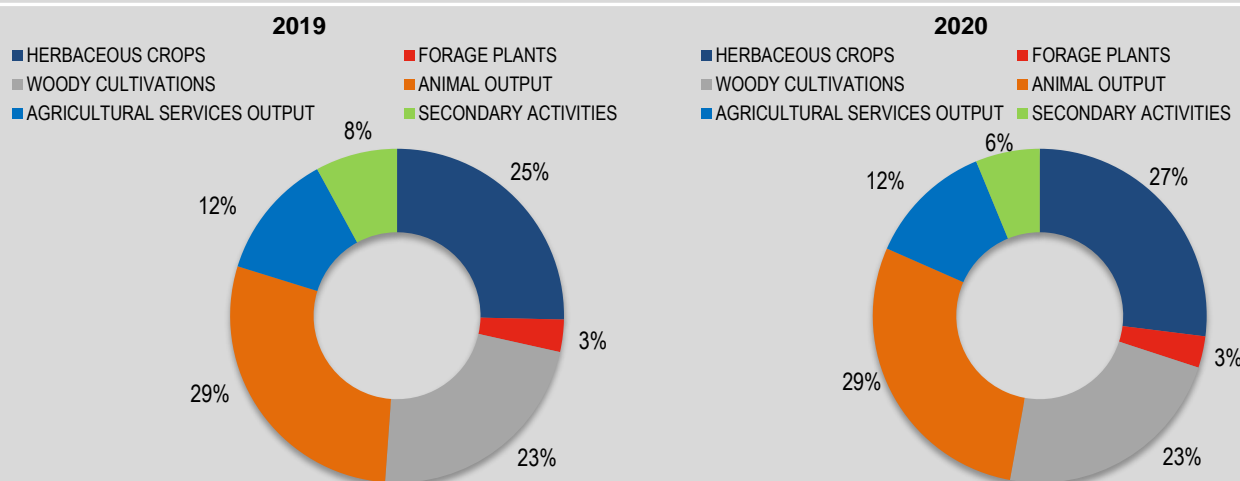
The prices of the fruit sector, which in 2019 had decreased by 8.1%, increased considerably (+9.4%).

Cereal crops performed well (+3% in volume and +8% in value), which had continued to decline in previous years, especially in value. The production of durum wheat, which grew by 1% in volume, was not sufficient to satisfy the increase in demand also at an international level: the result was a surge in prices, which led to an increase in value equal to 16.9%. The most recent data show that the greatest increase in cultivated area is expected precisely for durum wheat^{vi}.

Production volumes of oats and barley also increased (+1.9% and +1.7% respectively). The positive trend of maize is confirmed (+8.1% in volume), thanks to the increasingly important role of this crop in the zootechnical field, which has pushed up the overall growth of non-food livestock production consisting essentially of feed (+3.8% volume and +0.9% value).

The trend in milk production was also positive. The beginning of the year, characterized by a production surplus (with consequent fall in prices), was followed by a period of recovery in consumption, fueled mainly by domestic demand: the volume of production thus increased overall by 2.7% while price front fell by 1.5%. Volumes of livestock food products held steady thanks to good demand on the domestic market.

FIGURE 4. AGRICULTURAL PRODUCTION FOR THE MAIN PRODUCTION SECTORS. Years 2019 and 2020. Percentage composition.



Modest increase in the prices of agricultural products

In terms of prices, in 2020 there was an overall growth of 0.9% in the prices of agricultural products, as a result of an increase in the prices of fruit (+9.4%), products of industrial crops (+7.3%), flower crops (+6.5%), cereals (+4.8%), vegetables (+2.9%) and legumes (+1.8%) and a decrease in olive oil prices (-9.4%), fodder crops (-4.2%), animal meats (-3.7%) and wine (-1.5%).

Particularly significant price increases affected above all the fruit sector: nectarines (+68.6%), kiwis (+37.5%), peaches (+36.7%), melons (+31.8%), plums and plums (+26.2%), apricots (+25.8%) and strawberries (+24%); on the other hand, there were considerable reductions for pears (-18%) and cabbages (-16.6%), oats (-10.5%), fennel (-10%), asparagus (-9.9%) and barley (-8.9%).

Farmers' costs down

Agriculture production costs were down (-0.6%), a result in contrast to the previous three-year period during which they had increased on average by 2.2%.

A slight overall increase in the quantities of products used was associated with a drop in prices essentially due to the significant reduction in costs for motive power (-9.5%) and fertilizers (-2.2%). As in 2019, the price of re-uses, i.e. the part of agricultural production reused in production cycles, decreased (-3.9%) and their volume fell by 0.9%.

Seeds (up 4.3%), irrigation water (up 2.5%), transport (up 2.3%), credit and insurance (up 2.2%), barn expenses (up 1.5%) and feed (up 1.1%) all increased in price. Transport costs decreased slightly due to a significant reduction in volumes (-3%), as a result of restrictive measures taken for the sanitary emergency.

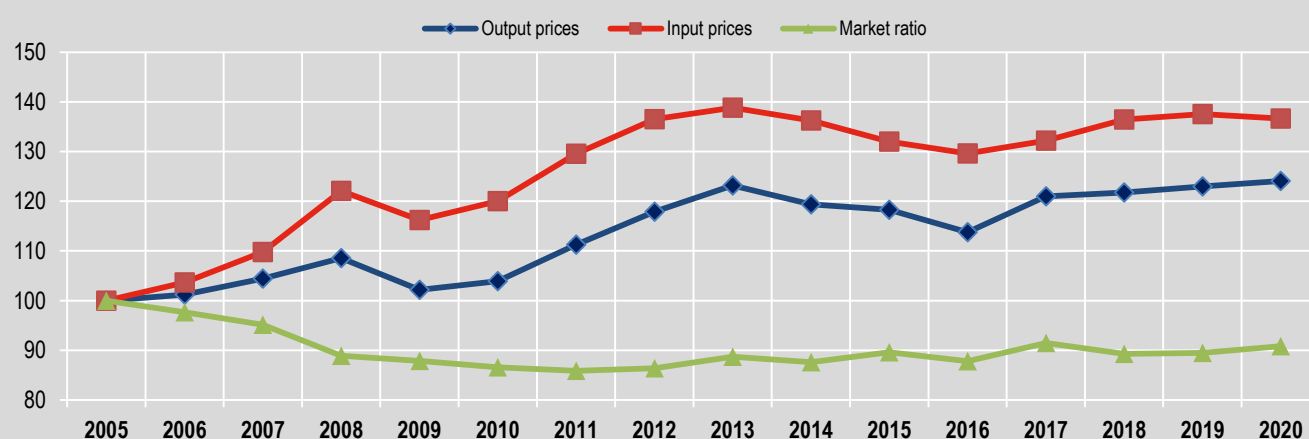
The terms of trade improve

An important element in assessing the performance of the agricultural sector is the terms of trade, i.e. the relative development of producer prices and intermediate costs.

Taking as reference a longtime lapse (2005-2020), producer prices rose less than half of those of purchased inputs, driven by increases in the prices of fertilizers, motive power and feed. This generated a gap between the dynamics of input prices and output of more than 22 percentage points, which led to a contraction in the profit margins of the producers in the sector. The implicit value-added deflator recorded a decline between 2005 and 2011, a short and limited rise in 2012-2013 and a new decline in recent years.

In 2020 the terms of trade improved, since output prices grew 1.6%, as by 0.9% and input prices fell by 0.6%.

FIGURE 5. AGRICULTURE: DEVELOPMENT OF OUTPUT AND INPUT PRICES AND TERMS OF TRADE. Index numbers base year 2005=100. Years 2005-2020.



Drop in production throughout the territory

Provisional estimates for the agricultural sector as a whole in the territorial area have shown in 2020a decline in the volume of production in all areas of the country. At the division level, the Center suffered the most consistent decline (-5.4%), followed by the South (-4.3%), Islands (-3.6%), Northeast (-2.7%) and Northwest (-1%). In terms of value added, these performances are even more amplified.

Among the regions, the worst results were experienced by the autonomous province of Bolzano (-15.8% in volume and -21.9% in value added), Valle d'Aosta (-12.8% and -21.9%), Tuscany (-10.1% and -14.8%), Friuli-Venezia Giulia (-9.8% and -20.9%), the autonomous province of Trento (-9.4% and -12.9%), Liguria (-7.8% and -12.5%) and the Marche (-6.5% and -14.2%). Only three regions recorded positive results for volume production: Veneto (+0.9%), Lombardy (+0.5%) and Lazio (+0.2%). In terms of value added, Veneto is the only region to record growth (+1.5%).

Analyzing the different sectors in terms of production volume, Veneto contributed the most to the overall positive trend of cereals (+20.9%), while Emilia-Romagna for the vegetables (+9.4%); for the fruit, the greatest growth was in Tuscany (+44.7%) and for livestock food products the strongest growth was in Puglia (+1.7%).

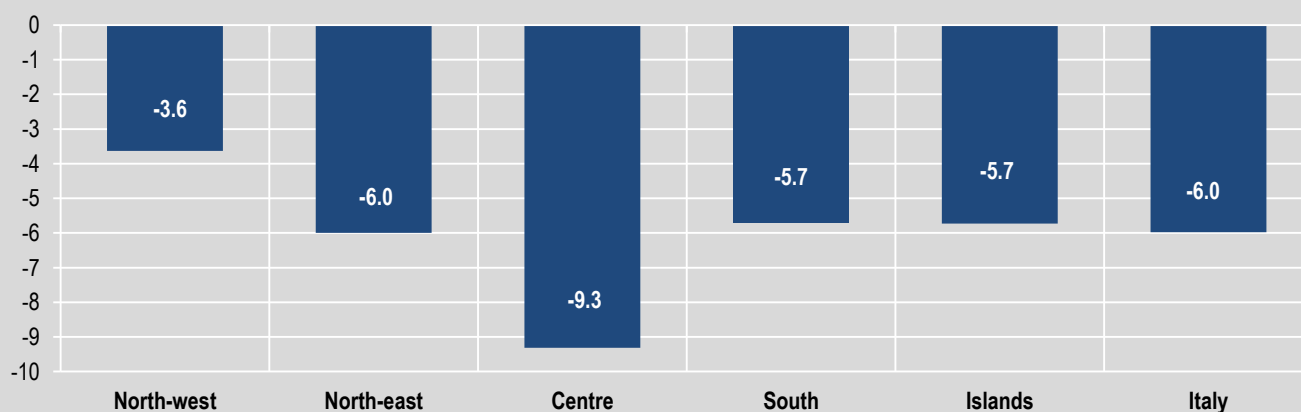
The negative performance of legumes was driven by Friuli Venezia-Giulia (-48.9% the volume of production) while the decline in industrial crops was more pronounced in Lazio (-40.1%); for flower crops the most significant loss was recorded in Campania (-11.1%), for nurseries in Emilia-Romagna (-10%) while for the animal meat sector occurred in the Marche (-2.4%) the most significant decline.

With regard to some of the most representative agricultural products, among those with favourable trends in 2020, durum wheat production increased most in Tuscany (+16.7%), potatoes performed best in Veneto (+30.8%), tomatoes in Piedmont (+44.3%), apples and pears performed best in Tuscany (+84% and +83.7% respectively) and milk in Apulia (+4.4%). Among the products that suffered production downsizing, the biggest declines were in wine in Sicily (-14%), olive oil in Apulia (-31.7%), beef in Lombardy (-2.7%), pork in Emilia-Romagna (-6.3%) and poultry in Marche (-1.1%).

For non-strictly agricultural production, Valle d'Aosta (-46.6%), Tuscany (-44.1%) and the autonomous provinces of Bolzano and Trento (-42.5%) were affected by the particularly negative year of secondary activities while for support services activities the most negative results were obtained in the autonomous provinces of Bolzano and Trento (-7%) and in Campania (-6.2%).

The prices of the output of the agricultural branch, measured by the production deflator, have grown almost everywhere, especially in Basilicata (+5.4%), Valle d'Aosta (+4.6%), Campania (+4.1%) and Liguria (+2.8%) while the only decreases involved Lombardy (-1.1%), Emilia-Romagna (-0.8%), Calabria (-0.4%) and Veneto (-0.2%).

FIGURE 6. VALUE ADDED IN AGRICULTURE, FORESTRY AND FISHING BY GEOGRAPHICAL AREA. Year 2020, percentage changes in volume.



European Union: decline in production, prices and agricultural income

According to provisional data available, in 2020 the agricultural sector, as represented in the satellite account of agriculture (which also includes agricultural cooperatives producing wine and oil) ^{vii}, recorded a decrease in the volume of production of 0.8% for all EU27 countries. Among the largest Member States by weight in the agricultural sector, the decline mainly concerned Romania (-15.3%), but also Italy (-3.1%), France (-2.6%) and Hungary (-2.2%). The volume of production instead increased in Poland (+7.2%), Spain (+1.9%), Ireland (+1.4%), Denmark (+1.2%) and Germany (+1%).

The decrease was more substantial for the value of production, with a decrease of 1.4% for the whole of the EU27. The biggest drops were recorded in Romania (-9.4%), the Netherlands (-3.1%), Germany (-2.9%), Italy (-2.6%) and France (-2.1%) while increases in value affected Poland (+6.6%), Hungary (+4.8%), Ireland (+2.8%) and Spain (+2.4%).

Prices (measured in basic price terms) decreased by 0.7% for the EU27 as a whole. The largest decreases were seen in Germany (-3.9%), the Netherlands (-3%) and Denmark (-1.2%), while prices rose sharply in Hungary (+7.2%) and Romania (+6.9%) and, to a lesser extent, in France, Spain and Italy (+0.5%).

The A indicator of agricultural income ^{viii}, which measures labor productivity in agriculture, decreased by 1.5% for the EU27 as a whole, with particularly significant decreases in Germany (-14.6%), Romania (-13.8%), Belgium (-8.4%), France (-7.6%), the Netherlands (-5.1%) and Italy (-4.9%). The trend of the indicator was instead positive for Spain (+13%), Hungary (+11.6%), Greece (+7.2%) and Poland (+1.1%).

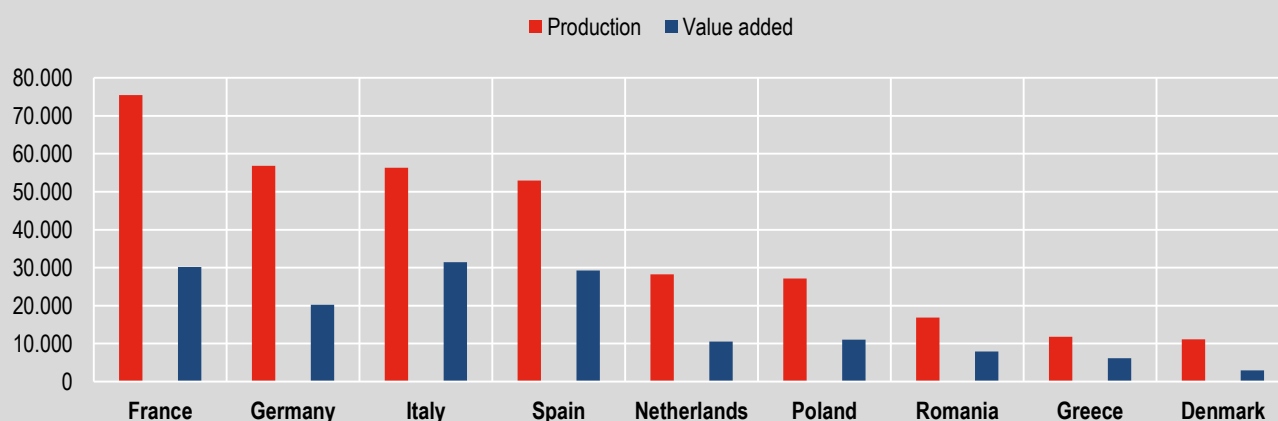
The value added of Italian agriculture is still the highest in the EU

With value added of agriculture of 31.4 billion euros in current values, Italy maintains the first place in the European ranking also in 2020, followed by France (30.2 billion). In third position Spain (29.3 billion), which has significantly reduced, compared to 2019, the gap from France while Germany has lost ground, which confirmed the fourth position (20.3 billion).

Out of a total value added of approximately 177 billion euro for the entire EU27 agriculture, Italy contributed 17.8%, France 17.1%, Spain 16.5% and Germany for 11.4%.

In terms of value of production, however, France still leads with 75.4 billion euro; Germany (56.8 billion) and Italy (56.3 billion), as in 2019, ranked second and third respectively. For the entire EU27, the total value of production stopped at 411.8 billion euro, about 6 billion less than in 2019.

FIGURE 7. PRODUCTION AND VALUE ADDED OF EU27 AGRICULTURE; RANKING OF THE MAIN MEMBER STATES. Year 2020. Millions of current euro.



EU27: negative year for crops, animal output and secondary activities

In 2020, in all the EU27 countries there was a decline in production for crops in volume (-1.6%) and in value (-1.2%). There was a significant contraction in Romania (-22.1% and -16.9% respectively) but also in France (-5.1% and -3.6%), Ireland (-3.5% and -4.1%) and Denmark (-2.4% and -6.7%). On the other hand, the trend was very positive for Poland (+14.2% in volume and +15.9% in value) and less marked for Spain (+1.3% and +3.1%).

Among crops, the sharpest drop was in olive oil (-24.2% in volume and -32.3% in value) caused, essentially, by the collapse in production in Spain (-38.8% in volume and -45.5% in value) and Italy (-18% and -22.9%).

The plants and flowers sector showed a sharp decline (-5.1% in volume and -0.9% in value), again dragged down by the negative results in Spain (-12.2% in volume and -10.7% in value) and Italy (-8% and -2%). Cereals also performed poorly (-4.4% in volume and -2.7% in value), for which the sharp drop in production in Romania (-37.9% and -31.4%) and France (-18.7% and -12.1%) was decisive.

The wine sector (-1.2% in volume and -1.6% in value) was affected by the negative performance of Italy (-1.9% and -3.1%) and France (-0.8% and -6.3%), not compensated by the positive result of Spain (+21.5% and +9.4%).

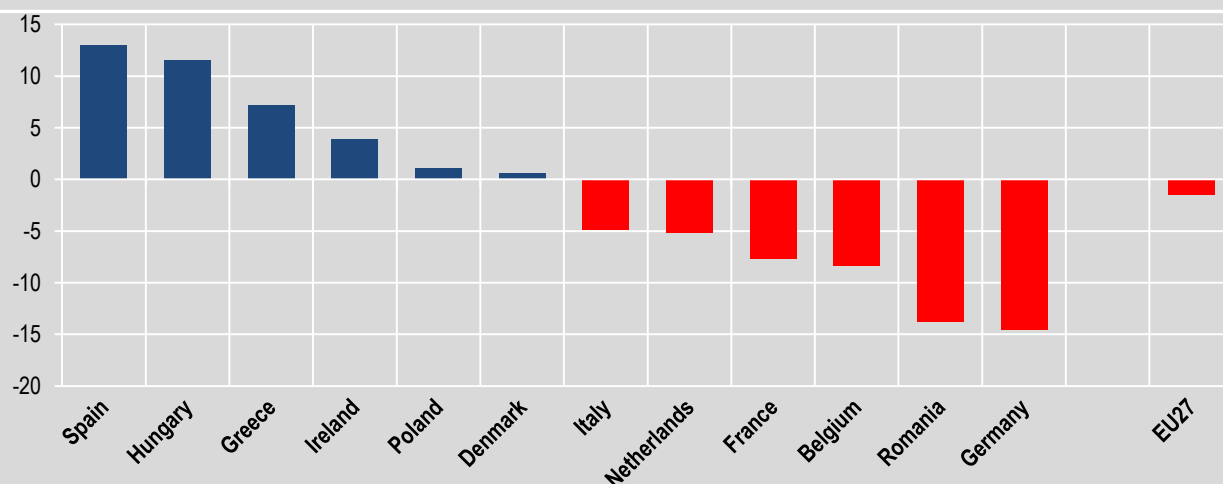
The quantity of vegetables produced also fell significantly for almost all major producers, accompanied by a general increase in prices (+2.5% on average in the EU) leading to an increase in value of 0.7%. Potato cultivation, against a favorable result in production volumes (+9.6%), suffered a drop in prices of 22.1%, accusing a loss in value of production of 14.6%.

With regard to fruit, very negative results were recorded in Germany (-10.3% in volume and -10.9% in value) and Romania (-15.3% and -5%) while for France and the Netherlands the decline of volumes (respectively -9.3% and -3.8%) was offset by an increase in value induced by the rise in prices. The fruit year was instead positive for Poland (+10.5% in volume and +14% in value), Spain (+2% and +12.2%), Greece (+3% and +7.2%) and Italy (+0.3% and +12.6%).

The livestock sector experienced an increase in volumes of 0.9%, with favorable trends in Denmark (+3.3%), Spain (+2.9%), Poland (+1.7%) and Romania (+1.4%), but showed an overall loss in value of 1.6%, in particular due to poultry (-3.4%) and pigs (-1.7%) whose prices fell by respectively 4.5% and 3.2%.

Finally, a sharp decline hit the secondary activities sector (-6% in volume and -4.6% in value), essentially attributable to the collapse in Italy.

FIGURE 8. INDICATOR A OF AGRICULTURAL INCOME FOR EU27 AND MAIN EUROPEAN COUNTRIES. Year 2020 (Annual percentage changes).

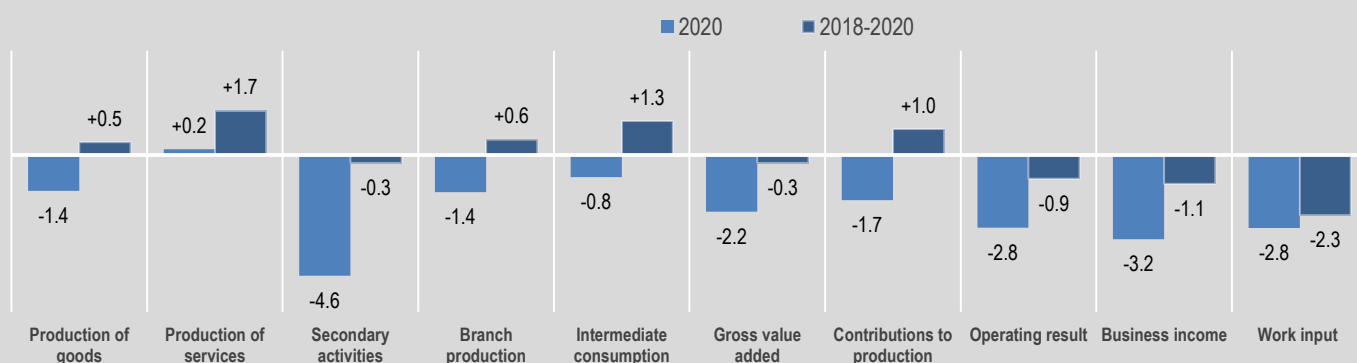


Limited impact of the Covid-19 crisis on EU27 agriculture

The Economic Accounts for Agriculture estimates published by Eurostat earlier this year provided an initial overview of the impact of the crisis on the EU agricultural economy during 2020. Although the information gathered is still partial, and despite physiological fluctuations in some sectors, the indicators showed that the agricultural economy as a whole has been remarkably resilient in the face of difficulties.

The value of agricultural production decreased by 1.4% compared to 2019 but remained at the average levels of the previous three years, and indicator A of agricultural income also decreased relatively little (-1.5%). This suggests that the potential damage caused by the restrictions put in place to counteract the effects of the pandemic has, in fact, been contained.

FIGURE 9. PERFORMANCE OF THE MAIN ECONOMIC AGGREGATES OF EU27 AGRICULTURE. Year 2020 and triennium 2018-2020. Percentage changes..



Glossary

Secondary activities of agriculture: are the activities of production of non-agricultural goods and services (i.e. not belonging to the Nace codes 01, 02 and 03) carried out within the agricultural sector or referable to it (mainly agricultural tourism, processing of milk, fruit and meat, renewable energy production).

Support activities for agriculture and post-harvest activities: they are activities related to agricultural production, not aimed at the collection of agricultural products, carried out on behalf of third parties. Also included are activities that follow the harvest, aimed at preparing agricultural products for the primary market. Agriculture support activities are identified with the code 01.6 in the Classification of economic activities Ateco 2007 (derived from the Nace Rev.2).

Deflator: is the ratio between an aggregate expressed in nominal terms and the same expressed in real terms. It indicates how much of the growth of the aggregate, expressed in nominal terms, is attributable to price changes.

Agricultural income indicator: is the so-called indicator A, defined by Eurostat as the value added at the cost of factors in real terms of agriculture per unit of work. The deflator used is that of GDP.

Base price: is the measure of the actual amount received by the manufacturer. Includes contributions on products and excludes product taxes and any trade and transport margins invoiced separately by the manufacturer.

Market ratio: in this context, the market ratio of agriculture is measured by the ratio between the index of producer prices of agricultural products (output) and that of intermediate consumption prices (input) for domestic producers.

Income from employment: is the cost borne by employers as remuneration for the work performed by workers employed by them. The aggregate of compensation of employees includes both gross salaries and social contributions, both actual and/or figurative.

Gross salaries: include salaries, salaries and ancillary skills, in cash and in kind, gross of tax and social security deductions, paid to employees directly and on a regular basis, as established by contracts, company agreements and legal regulations in force.

Labor Units (Ula): they represent a measure of employment with which part-time jobs (part-time work contracts and second activities) are reported in full-time work units. The work units are calculated net of the redundancy fund.

Value added at basic prices: it is the difference between the value of the production of goods and services and the value of the intermediate costs incurred for this production. Production is valued at basic prices, ie net of taxes on products and gross of product subsidies and intermediate costs at purchase prices. Corresponds to the sum of production factors and depreciation.

Concatenated values: it is the measure in volume of the national accounting aggregates that allows to represent the real dynamics of the economic quantities net of the price Changes. For each aggregate and for each year the ratio between the value expressed at the prices of the previous year is calculated (for example the estimates for 2009 are expressed at 2008 prices) and the current value of the aggregate referred to the previous year. The volume indices on a mobile basis thus obtained are then reported to a fixed reference base (currently 2010) giving rise to chained volume indices. Multiplying these by the current value relating to the reference year we obtain the aggregate in chained values.

Methodological note

The Economic Accounts of Agriculture

The Economic Accounts of Agriculture (CEA) provide an overview of the activity of the sector. From the agricultural accounts derive economic trends by product, changes in basic prices and production volumes by product groups and by production sector. The data are processed according to the methodologies established by the European system of national and regional accounts (Sec 2010) and concern economic aggregates such as production, intermediate consumption, value added and agricultural income. The data has a high level of detail, both territorial and product. The methodology used follows the guidelines recommended by Eurostat¹.

¹ Regulation (EC) No. 138/2004 of the European Parliament and of the Council of 5 December 2003 on the Economic Accounts of Agriculture in the EU (OJ L33, 05.02.2004) establishes the legal basis for defining a harmonized methodology for the compilation of the Economic Accounts of Agriculture. The regulation was amended by subsequent regulations 306/2005, 909/2006 and 212/2008. The reference methodological document

In this Report, in the first part, the data relating to the central framework of the National Accounts are presented and analyzed, while in the second part those relating to the Account Satellite of Agriculture prepared for Eurostat for international comparisons (UE27). The two accounts present some differences: the Agriculture Satellite Account does not include the activities of family gardens, small farms and some service activities while it provides for the inclusion, among agricultural activities, of the production of wine and olive oil transformed by cooperatives (which, instead, is not included in the National Accounts as it is attributed to the beverage industry). In the case of wine, for example, the economic value of production is divided between Ateco 01.21.00 (cultivation of grapes and production of wine from own grapes) and Ateco 11.02.10 (production of table wine and quality wines produced in specific regions) where wine cooperatives and the wine industry are included.

The value of agricultural production

For the definition of the production value, the "quantity by price" method is used, which consists in multiplying the quantities of the products by their average annual unit price. This method guarantees the completeness of the estimates as more than 170 products and activities covering the entire production of the agricultural sector are considered. The calculation procedures are extremely detailed and concern every type of product at the 4-digit level of the Nace Rev.2. The quantities are detected starting from the survey "Estimation of surfaces and production of agricultural crops": the survey includes details at the provincial level and measures the areas invested, the average yields per hectare, the total production and the collected production and answers to the European Regulation 543/2009. Prices are collected through a specific survey called "Monthly survey of producer prices of products sold by farmers" with details for each province; the survey takes into account the seasonality of productions and excludes imported products. The average prices recorded (to the producer) are then increased by any contributions and adjusted for taxes on the products, thus obtaining the basic prices. Using the basic prices, the "quantity by price" method allows the production value to be obtained for each product. For other types of production, such as farms, the quantities (which also take into account ongoing production) are derived from specific surveys of a corporate nature: the most relevant are those on slaughterhouses for butchered meat and that on dairy farms for the conferment of milk to the dairy-dairy industry. This information makes it possible to extend the quantity by price method to the evaluation of livestock production.

A similar consideration concerns the estimates of other production aggregates such as secondary activities and support activities. For example, in the estimates of the agricultural tourism the surveys on presence and flows in agricultural tourism companies and on the movement of customers in hospitality establishments are taken into account; these estimates are then compared with the evaluations of the sector organizations and with the VAT declarations of the agricultural sector. Another example concerns the production of electricity from renewable sources (photovoltaic, biomass, biogas) which is estimated starting from the data relating to the energy produced expressed in KW / h for the main sectors of economic activity (agriculture, industry, services) taken over by the Energy Services Manager (GSE). The quantities of energy produced by the agricultural sector are then valued through the average sale price including any aid.

In September 2019, following the review of the National Accounts (which also affected the branch of agriculture, forestry and fishing), new assessments on the Economic Accounts of Agriculture were included on the estimates of renewable energy within the activities secondary. These assessments also took into account the heat production of biomass and biogas plants. In addition, new technical coefficients have been adopted to determine the production and use of cereal straws.

The intermediate consumption of agriculture

The estimate of the intermediate consumption of the sector is processed through a methodology attributable to the "quantity by price" approach. In addition to the consolidated cost components (for example technical means such as feed, fertilizers, seeds and phytosanitary), new types of farm costs have been included such as insurance costs for structures and animal husbandry, costs related to bottling, the marketing of the wine produced on the farm, costs for packaging related to the first processing of the products and preparation for the markets, routine maintenance costs for photovoltaic systems and biogas plants, expenses for the maintenance of parks and gardens, other minor expenses related to farm tourism and related activities and finally the expenses related to other support activities. The sources used range from specific surveys on technical means, to the monthly survey on the prices of products purchased by farmers to end up with the Rica-Rea sample survey, which provides basic microeconomic information on farms and includes a specific section in the questionnaire to costs.

is the "Manual of Economic Accounts for Agriculture and Forestry CEA / CES97". The indicator is produced by Eurostat, starting from the data provided by all Member States..

The value of forestry and fishing production

The production of forestry is calculated with the quantity approach by price of the cut by type of wood (for work or wood for energy use) for the respective prices. With the Nace Rev.2 classification, the evaluation of the harvest of vegetables and fruit trees from the woods previously associated with agriculture was added. Industry estimates were also affected by the revaluation of support services (Ateco 02.20.00) through the processing of administrative data of the VAT returns of the forestry sector.

Finally, regional forestry companies (Ateco 02.40.00) were included which in the past were classified in the Public Administrations sector. The activity of regional forest companies, oriented to the preservation of parks and woods, expands the field of forest support activities with a more oriented attribution towards services related to production. With the review of the National Accounts of September 2019 in the field of forestry production, the estimate of "standing timber" was taken into account and accounted for, that is, the value of the net growths in the forest.

Fishing production is also calculated using the quantity by price approach. The quantities of fish caught (fish, molluscs and crustaceans), are supplemented with further estimates to ensure the exhaustiveness of the phenomenon. The quantities of aquaculture production come from the specific survey carried out by the Ministry of Agriculture, Food and Forestry (MIPAAF). All quantities are valued with the respective average prices. The sector estimates were also affected by the revaluation of support services (Ateco 03.11.00) deriving from the administrative data of the fisheries sector VAT returns.

References

More detailed data from the 1980-2020 time series are available on <http://dati.istat.it> under the theme "National Accounts" / "Accounts of the branch of agriculture, forestry and fishing" where it is also possible to acquire information to the regional level of detail.

News and in-depth information on "News in agricultural accounts -The revision of the national and regional accounts of agriculture and the changes made with the introduction of the Sec 2010" are available on the page <http://www.istat.it/it/archivio/162712>.

Information on national accounts (annual and quarterly) and on institutional, territorial and environmental accounts is available on the page <http://www.istat.it/it/conti-nazionali>.

Detailed data at European level are available at <http://ec.europa.eu/eurostat/data/database> under the theme "Agriculture, forestry and fisheries"/"Agriculture"/"Economic Accounts for Agriculture".

Note

ⁱ For further details, see what is reported in the "Methodological note".

ⁱⁱ Horeca (acronym for Hotellerie-Restaurant-Café but the third word is sometimes identified with Catering). It is a commercial term that refers to the hotel and restaurant industry sector and is used to indicate the distribution of a product in hotels, restaurants, trattorias, pizzerias, bars and the like, catering. In practice, the Horeca channel is represented by those who, by profession, supply food and drinks while that of large-scale distribution (GDO) or shops is related to those who trade food and drinks.

ⁱⁱⁱ Istat, "Coltivazioni agricole" (<https://www.istat.it/it/archivio/256287>).

^{iv} In the cultivation of olive oil, generally, a year with abundant production (called charge) follows one with low production (called discharge). This alternation of production is sometimes repeated for several consecutive years with relative constancy and is genetically determined, even if its intensity is influenced by the variety, the quantity of fruiting of the previous year, the climatic-environmental conditions as well as the cultivation and cultivation and pruning techniques.

^v *Halyomorpha halys*, known as "Asian bedbug" or "Brown marble bug", is an insect of Asian origin considered harmful to agriculture as it feeds on fruits and cultivated plants causing deformations, alterations of the pulp, abortion of seeds. The fruit crops most damaged by this insect are pear, apple, peach, nectarine and cherry.

^{vi} <http://dati.istat.it/index.aspx?queryid=33655>

^{vii} These are data that refer to the Agriculture Satellite Account prepared by Eurostat. For further details see the "Methodological note".

^{viii} See the Glossary.

Further technical and methodology information

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