

TREND IN THE AGRICULTURAL ECONOMY | YEAR 2019

Agriculture: -0.7% production and -1.6% value added. Agri-food sector growing

In 2019, there was a significant slowdown in the production of wine (-12.1%); fruit (-6.6%), industrial crops (-3.2%) and cereals (-1.5%) also fell. Significant recovery for olive oil (+27.6%); legumes production also increased (+8.7%) as well as forage crops (+3.4%).

The impact of agriculture on the Italian economy was 2.2%, if we include the food industry it raised to 4.1%. Employment was essentially stable (+0.1%). Production (+0.5%) and agricultural income (+3.0%) were growing in the Eu28, but Italy was confirmed as the first country for value added and the third for the production value.

61.6

billion euro

The value of agriculture, forestry and fishing production in Italy

+1.0%

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

188.7

billion euro

The value added of agriculture for all the Eu28 countries

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The data presented in this Report are part of the National Accounts for Agriculture and provide a general overview of the sector's activity in 2019. The first part presents the economic results of the agriculture, forestry and fishing sectors and general information on the progress of the agri-food sector, which includes the food industry. In the second part, the performance of agricultural companies in the strict sense is complemented by the economic results of agricultural cooperatives producing wine and olive oil. The results of this "enlarged" agricultural sector are shown in the Account Satellite of Agriculture, drawn up according to a common pattern by all the EU countries²⁸ in order to produce a homogeneous basis for international comparisons¹.

In 2019 the agricultural sector decreased but the agri-food sector grew

After the positive performance of 2018 (+1.6% value added by volume), the agriculture, forestry and fishing sectors recorded a drop in 2019: production decreased by 0.7% in volume and 1.6% in value added. Agriculture in the strict sense recorded a drop of 0.8% in the volume of production and 1.7% of value added. Negative signs emerged for forestry, with a significant increase in both production (-0.7%) and value added (-1.1%). The fishing sector was bucking the trend, with an increase in both production (+1.7%) and value added (+1.6%). In 2019, the value added of food, beverage and tobacco industries continued to grow, increasing by 2.7% at current prices and by 2.0% in volume. The agri-food sector (which includes agriculture, forestry and fishing and the food industry) had a 1.0% increase in value added at current prices and 0.1% in volume. In the agri-food sector there was 4.1% of the value added of the entire economy (from 3.9% in 2018), 2.2% in the primary sector (it was 2.1% in 2018) and 1.9% in the food industry (1.8% in 2018). However, despite difficulties, the agri-food sector managed to consolidate its weight in 2019 within the national economic framework.

Stable employment and investment, modest growth in wages

The employment of agriculture, forestry and fishing, measured in Labor Units (AWUs), remained substantially stable compared to 2018 (+0.1%): the component of dependent labor slightly increased (+0.5%) while the independent one remained unchanged at the same levels of 2018. The labor input of the agri-food sector suffered an overall decrease of 0.4% due to the decrease recorded in the food industry (-2.0%).

In 2019, income from employee work in agriculture, forestry and fishing increased by 1.9%; in particular, gross wages increased by 1.7%.

Gross fixed investments in the sector showed a positive trend in current values (+0.5%) and a modest decrease in volume (-0.1%).

AGRICULTURE: KEY NUMBERS. Production and value added. Changes in volume, price and value. Year 2019, current values in millions of euro and percentage values

ECONOMIC ACTIVITY	Current millions of euro Year 2019	% Changes of volume 2019/2018	% Changes of price 2019/2018	% Changes of value 2019/2018
Production of agricultural goods and services	52.820	-1.0	+1.1	+0.2
- Herbaceous crops	29.495	-1.8	+1.1	-0.7
- Livestock breeding	16.320	-0.2	+1.1	+0.9
- Agricultural support activities	7.005	+0.8	+1.3	+2.2
Secondary activities (*)	5.499	+0.7	+0.6	+1.3
Agriculture production	57.316	-0.8	+1.0	+0.1
Value added of agriculture	31.589	-1.7	+1.1	-0.7
Forestry production	2.389	-0.7	+1.4	+0.6
Value added of forestry	1.975	-1.1	+1.3	+0.2
Fishery production	1.876	+1.7	+5.4	+7.2
Value added of fishing	1.015	+1.6	+5.9	+7.6
Agriculture, forestry and fishing production	61.581	-0.7	+1.1	+0.4
Value added of agriculture, forestry and fishing	34.579	-1.6	+1.2	-0.4

(*)These are non-agricultural secondary activities carried out within the agricultural sector (mainly: agro-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).

Abrupt braking for wine, fruit too bad

Year 2019 was severely negative for wine production. After the 2018 exploit, when production increased by 24.2% in volume and 41.2% in value, in 2019 there was a significant reduction in volumes (-12.1%) and production values (-17.5%).

The contraction was affected by the unfavorable climate trends of spring season. On the other hand, the prolonged hot and dry summer period allowed the grapes to ripen with a significant sugar content, which favored medium-high quality wines, especially in areas where the harvest could be delayed. This has made it possible to maintain the share of wines with high quality products certified² and to safeguard the effort made by the Italian producers in recent years to raise and maintain the quality standards of our wine production. The reduction in production volume did not prevent Italy from confirming itself as the world's leading wine producer ahead of France and Spain.

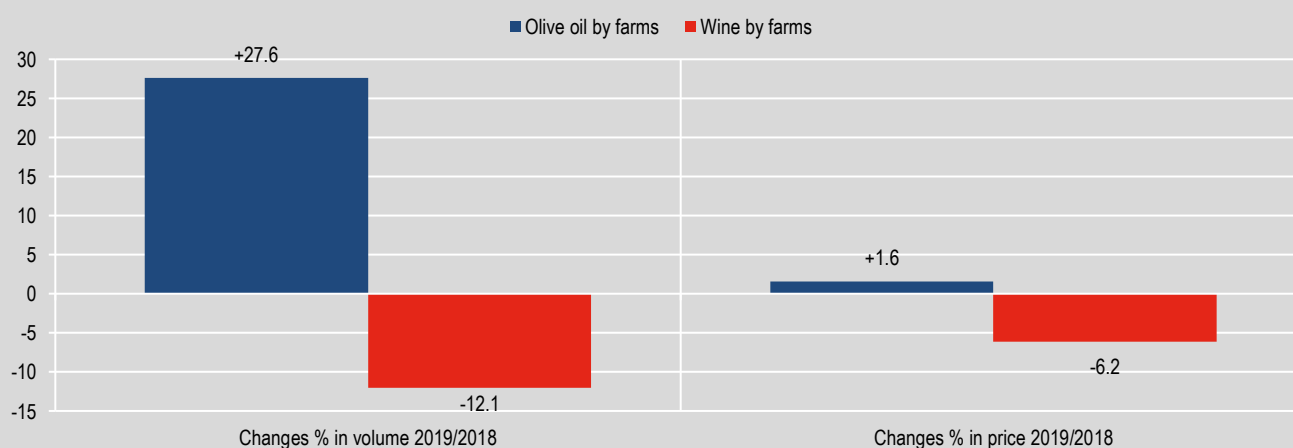
Year 2019 was negative also for fruit (-6.6% of volume production and -12.6% in value). The sector was indeed heavily affected by the effects of particularly aggressive parasitic agents (invasion of the Asian bedbug) and by pathologies connected to adverse climate events (rain and cold in the flowering season and excessive increase in temperatures during summer). The production of pears (-34.6%), cherries (-14.6%), lemons (-9.7%), kiwis (-4.2%), apples (-4) were very negative and with dried fruit.

Remarkable recovery for olive oil

The agricultural product with the best performance in 2019 was olive oil, whose production grew by 27.6% in volume and 29.6% in value, with an increase in producer prices by 1.6%.

The sector, which in 2018 had suffered a production collapse of over 25%, benefited from the first effects of the measures to combat the spread of xylella³ and the presence of oil fly attacks as well as the favorable conjuncture in the alternation between years of charge and discharge⁴. In the case of olive oil, climatic factors differently affected the various areas of the country, resulting more favorable in the southern regions, less exposed to rain and cold in the first months of the year. The recovery was therefore mainly driven by Campania (+50.3%), Calabria (+48.9%) and Puglia (+36.6%).

FIGURE 1. PRODUCTION OF OLIVE OIL AND WINE BY FARMS. PERCENTAGE CHANGES IN VOLUME AND PRICE (DEFLATOR). Year 2019



Negative year for industrial crops, cereals and livestock sector

Industrial and cereal crops fell (respectively -3.2% and -1.5% volume production), also as a consequence of the farmers' choices regarding the destination of the areas.

In details, for industrial crops there was a sharp drop in the volume of soy production (-14.8%), rapeseed (-4.6%) and sugar beet (-4.8%), the latter particularly impacted by another definitive closure of a sugar factory on the national territory⁵.

For cereal crops, an increase in the areas destined for maize (whose production increased by 1.6% in volume) was associated with a sharp reduction in those destined for wheat in total (-4.7% in volume). A negative signal also came from the livestock sector, where there was an overall drop in production by 0.2%, which particularly affected the production of beef (-1.4%) and milk (-0.8%) while there have been increases in the production of pork (+2.4%) and poultry (+1.3%).

Positive legumes, vegetables, flower crops, nurseries, related and secondary activities

Good results were recorded for legumes (+8.7% the volume of production). In recent years, following the rapid increase in consumption, there has been a significant recovery in production, from 15 million quintals in 2015 to 25 in 2019 (+61.3%). Forage crops also grew (+3.4%).

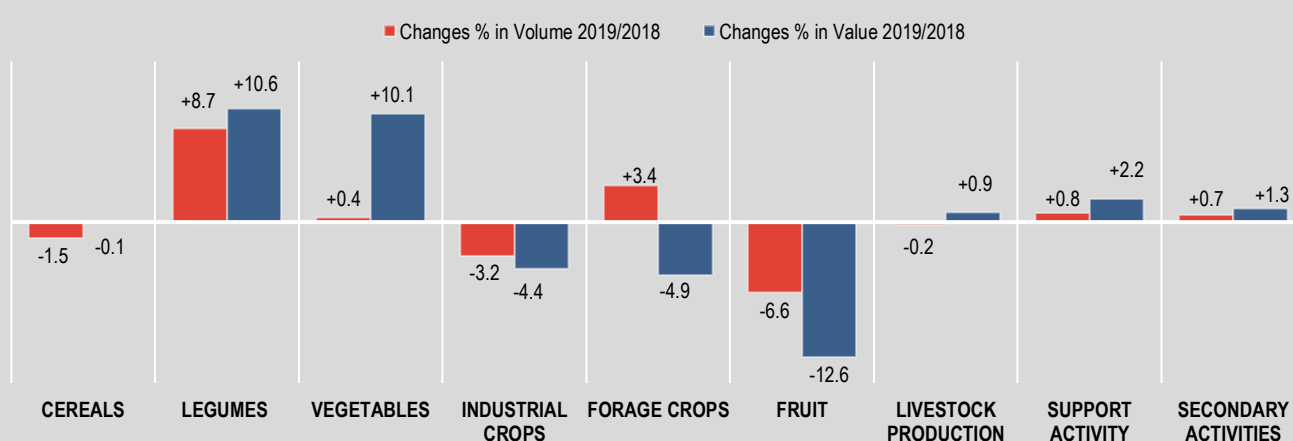
The vegetable sector experienced moderate growth in 2019 (+0.4% the volume of production), with different trends according to the areas and products. The most positive results were obtained for cucumbers (+14.7%), watermelons (+11.7%), carrots (+8.4%), strawberries (+7.2%), onions (+5.8 %) and cabbage (+5.1%) while the biggest losses involved vegetable beet (-20.9%), endive (-10%), radicchio (-8.3%), spinach (-8.2 %) and fresh peas (-7.9%).

Italy, with 7.2 billion euros of vegetable production value, surpassed Spain in 2019 (6.9 billion euros), ranking first among European countries. Italy and Spain together represent 37% of the total European production of vegetables.

The trend in nurseries was also positive in 2019, which marked an increase in production of 0.5% in volume and 3.3% in value. The production value of flower crops also sharply grew (+8.9%), favored by strong price growth (+9.1%) against a substantially stable production volume (-0.2%).

In 2019, the expansionary trend continued (+0.8%) in the activities of connected services (support activities for agriculture) and in secondary activities (+0.7%) even if, for the latter, the pace was slower to previous years. The good result of the agricultural tourism activities (+1.5%) should be noted.

FIGURE 2. AGRICULTURE TREND FOR SOME OF THE MAIN PRODUCTION CATEGORIES. PERCENTAGE CHANGES IN VOLUME AND VALUE. Year 2019



Modest increase in prices for agricultural products

On the price side, 2019 showed an overall growth of 1% in prices for the agricultural products, as a synthesis of an increase in prices for the vegetable production (+9.7%), floriculture (+9.1%), milk (+4.8%), dried legumes (+1.7%) and cereals (+1.5%) and a decrease in prices for the citrus fruits (13.1%), fodder (-8.1%), fruit (-6.4%), wine (-6.2%), products of industrial crops (-1.2%) and animal meats (-0.8%). Particularly significant price increases involved pears (+ 38.5%), watermelons (+ 32%), cherries (+ 28%), artichokes (+ 24%), tomatoes (+ 22.2%) and rice (+16,1%); on the other hand, considerable price reductions especially in the fruit sector affected: apples (-18.2%), oranges (-16.9%), kiwis (-14%), peaches (-13.6%), strawberries (-12.5%), lemons (-11.3%) and plums (-10.9%).

Slight improvement in the market ratio

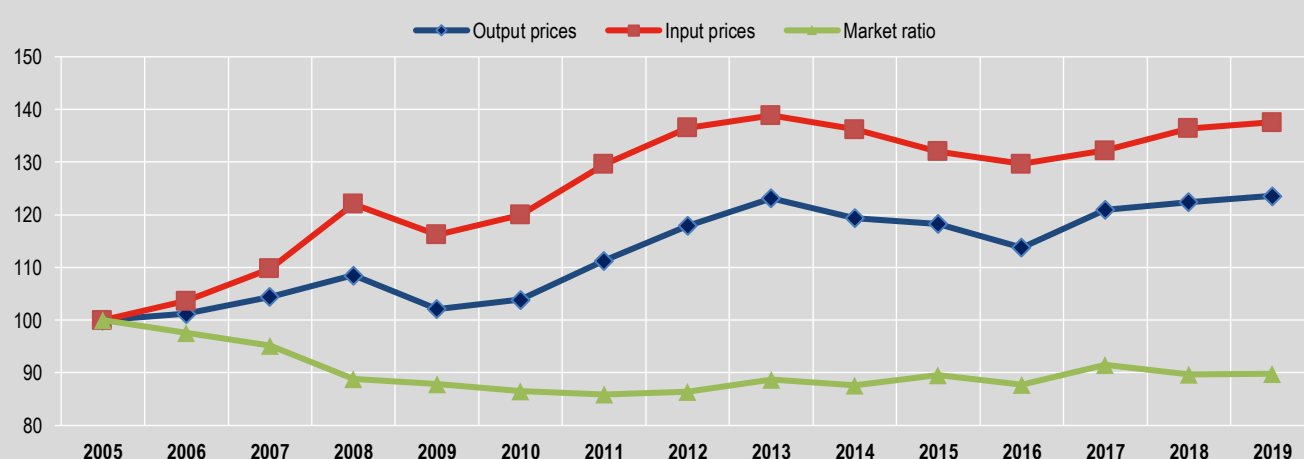
An important aspect of the evolution of the agricultural sector dealt with the market ratio, or the relative trends of production prices and intermediate consumption. Taking as reference a long time lapse (2005-2019), producer prices rose less than half of those of purchased inputs, driven by increases 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 2019, the market ratio slightly improved, as output prices increased 1.1% against a more moderate input price growth of 0.8%.

Still growing the costs incurred by farmers

The production costs of agriculture for 2019 were still growing. A slight increase in the quantities of the used products was associated with a generalized increase in their prices, which affected almost all categories of used products. There was an increase in the price for seeds (+3.8%), motive energy (+2.9%), plant protection products (+2.8%), credit and insurance (+2.6%), irrigation water (+2.2%), transport (+2.2%) and fertilizers (+2%). The price dropped for feed only (-1%). The price of re-use, i.e. the part of agricultural production reused in production cycles, also decreased (-7.2%) while their volume increased by 2.8%. In terms of value, the component of costs incurred by farmers recorded an overall increase of 1.2% for 2019.

FIGURE 3. AGRICULTURE: TREND OF OUTPUT PRICES AND INPUT PRICES AND MARKET RATIO. Base index numbers 2005=100. Years 2005-2019



Positive performance only in the South, down North Center and Islands

The provisional estimates on the agricultural sector at a territorial level showed, for 2019, a drop in production volume in all areas of the country except in the South, where there was an increase of 2.3%. The north-east suffered the highest drop (-3.1%), followed by the center (-1%), the islands (-0.9%) and the north-west (-0.5%). In terms of value added, these performances were even more amplified (figure 4). At a general level the performance of some important specific products (wine, olive oil, fruit and vegetables), typical of some specific territorial contexts, evidenced how their impact is crucial in determining the economic result of the various divisions.

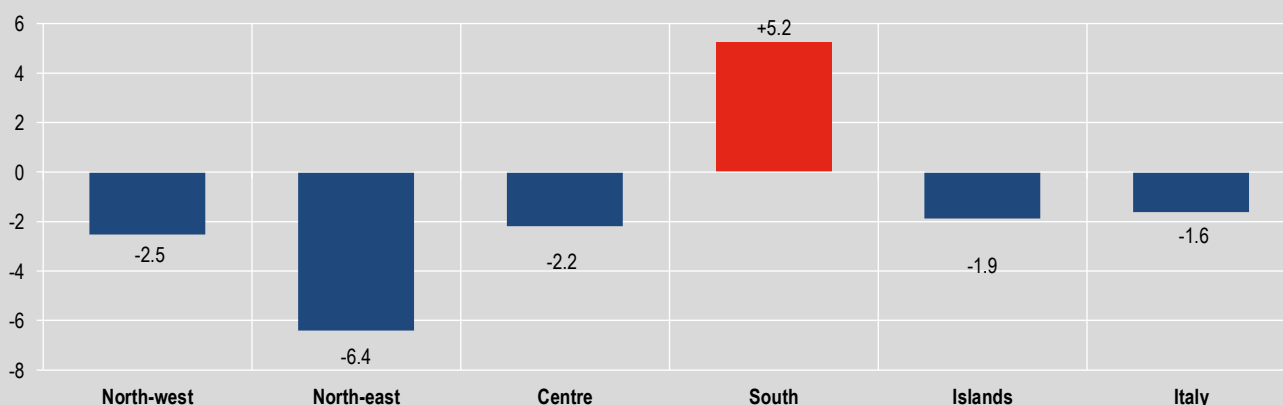
The regions that had positive results in terms of volume of production and value added were Calabria (+10.6% and +17% respectively), Campania (+2.8% and +6.5%), Umbria (+2.5% and +4.3%) and Liguria (+1.6% and +1.5%). The trend of value added in Puglia (+1.7%) and Abruzzo (+1.3%) only, was positive. The most negative results in terms of production and value added were in the autonomous province of Trento (-4.3% and -6.1% respectively), Veneto (-3.7% and -7.9%), Emilia Romagna (-3% and -6.7%), Marche (-2.2% and -5.7%), Toscana (-2% and -3.2%), Friuli-Venezia Giulia (-1,9% and -3.9%) and the autonomous province of Bolzano (-1.8% and -3.2%).

As for Calabria, the positive performance was determined by the olive oil products, citrus fruits and vegetables. For Campania as well, the good regional result was affected by the olive oil products, vegetables and fruit. In Umbria, the positive trend was mainly driven by legumes, tobacco and cereals while for Liguria the positive result was achieved thanks to the olive oil products, vegetables and flower crops. In Puglia, in particular, olive oil products, citrus fruits and cereals, while vegetables, industrial crops and cereals were good for Abruzzo.

On the other hand, among the regions with a negative trend, for the autonomous provinces of Trento and Bolzano the products of viticulture, fruit (particularly apples) and cereals were in sharp decline, for Veneto the drop in viticulture products was noticeable, fruit and cereals, for Emilia-Romagna, the products of viticulture, fruit and industrial crops negatively affected; also for Marche and Toscana, viticulture products weighed negatively as well as vegetables, cereals and fruit.

Output prices, measured by the production deflator, grew almost everywhere, especially in Liguria (+4.9%), Abruzzo (+3%), Marche (+2.9%), Puglia (+2.1 %) and Toscana (+2%) while the only decreases was for the autonomous province of Bolzano (-3.7%) and Trento (-2.5%), Friuli-Venezia Giulia (-0.2%) and Piemonte (-0.1%).

FIGURE 4. VALUE ADDED IN AGRICULTURE, FORESTRY AND FISHING BY GEOGRAPHICAL AREA. Year 2019, percentage changes in volume



Strong territorial specificities for the agriculture of the provinces

Agriculture is an economic sector strongly characterized by territorial specificities. Agricultural activities have different connotations and values in the various areas of the country and represent an extremely varied picture of the territories in terms of economic results. To give the possibility to analyze the data at a greater level of territorial detail, the provisional data of the value added at current prices of agriculture for the year 2018 at provincial level are anticipated for the first time in this report.

Province of Bolzano and Verona first in value added in 2018

In 2018 the ranking of the Italian provinces for value added in agriculture saw the province of Bolzano together with Verona as the first (on an almost equal footing just over 1 billion euros); Foggia, Cuneo, Brescia, Treviso, Salerno, the province of Trento and Mantova were at a short distance, with very close values between 950 and 670 million euros.

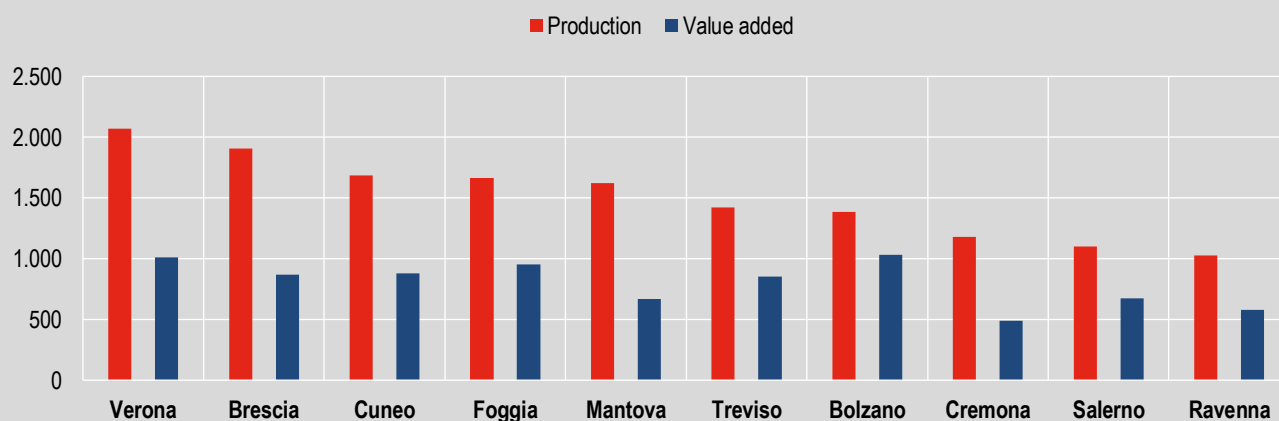
As regards the value of production, the same provinces were found in the top ranking (albeit with slightly different positions), with the primacy of Verona (2.1 billion), followed by Brescia (1.9 billion), Cuneo and Foggia (1.7 billion), Mantua (1.6 billion). As for the type of production, Foggia and Verona led the ranking of crops (with 1.3 and 1.1 billion euros respectively), Brescia and Mantova that of livestock (1.3 billion and 960 million), Foggia and Salerno that of related activities (in particular for the first processing of products); the provinces of Bolzano and Trento were at the top for secondary activities (especially for agricultural tourism activities).

Relevant Italian provinces: Verona in the North and Foggia in the South

Examining the ranking by value of the specific products, the absolute primacy is ascribed to the province of Pistoia with nurseries (570 million euros), followed by the province of Brescia for milk (500 million euros), by the province of Bolzano for apples (450 million euros), from Treviso for wine (400 million euros), from Verona for poultry (400 million euros) and again from Brescia for pork (370 million).

Taking a quick overview of the most representative products of the territory, it emerges that for the production of durum wheat the most productive province was Foggia, for corn Torino, for potatoes and carrots L'Aquila, for tomatoes, artichokes and cabbage still Foggia, for the fennel Crotona, for lettuce and peppers Salerno, for courgettes Latina, for strawberries Caserta, for tobacco Perugia, for soybeans Venice, for flower crops Imperia, for olive oil Reggio Calabria, for oranges Catania, for lemons Syracuse, for peaches and nectarines Caserta and Ravenna, for pears Ferrara, for hazelnuts Viterbo, for kiwis Latina, for beef, rabbits and game Cuneo, for sheep and goat meat and sheep and goat milk Sassari, for eggs Forli-Cesena, for honey Verona.

FIGURE 5. AGRICULTURE. THE RANKING OF THE ITALIAN PROVINCES BY PRODUCTION AND VALUE ADDED.
Year 2018, current millions of euros



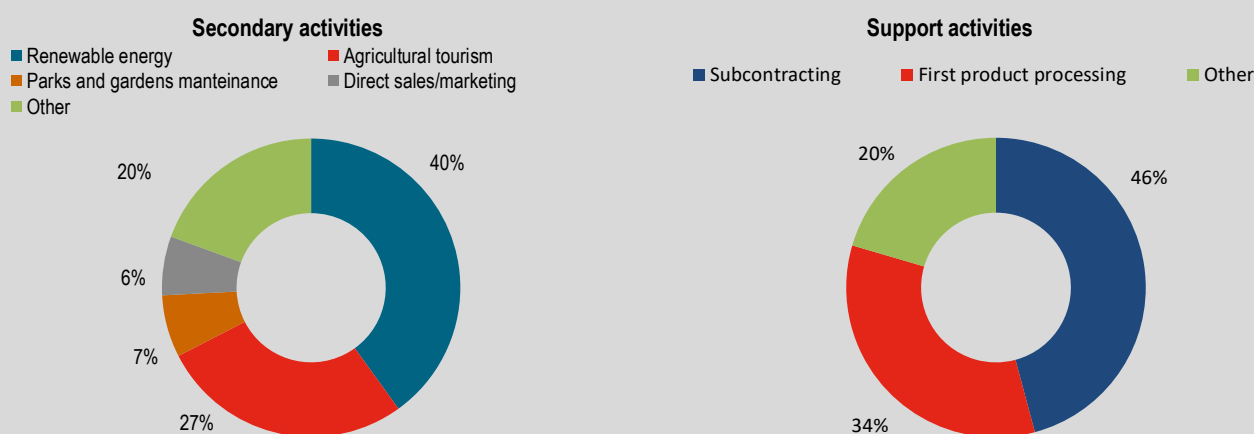
Italian agriculture first for multifunctionality in the EU

In our country, the agricultural sector has increasingly developed and consolidated, especially in recent years, a marked vocation for multifunctionality⁶ resulting from the need for businesses to improve their competitive position. This connotation has assumed a distinctive character for Italian agriculture, which is not found, in size, in any other European country. In 2019, the value of production produced by secondary activities and support activities reached almost 22% of the total value of agricultural production, representing a share of approximately 30% of secondary and support activities of the whole EU28.

The value of secondary activities and agriculture support activities has increased over the years, from € 6.3 billion in 2000 to around € 12.5 billion in 2019. The production of renewable energy (photovoltaic, biogas, and biomass) represented 40% of the complex of secondary activities followed by the farmhouse with 27.4%. The value of secondary activities reached 5.5 billion euros in 2019 of which over 1.5 billion from the agricultural tourism (including recreational and social activities and educational farms) and 2.2 billion from renewable energy divided as follows: 38% from photovoltaics, 12% from biogas from animal manure and 50% from biomass from agricultural and forestry activities.

Among the support activities (whose value in 2019 exceeded 7 billion euros) agricultural activities for third parties (subcontracting) produced a value of 3.2 billion euros and those of first processing of agricultural products (excluding the transformation) of about 2.4 billion. The latter activity includes calibration, washing, packaging for the market, IV range processing, etc., all activities that in the recent past were mainly carried out on a commercial level while they are now activities of the farms, carried out after the harvest of the product.

FIGURE 6. SECONDARY ACTIVITIES AND SUPPORT ACTIVITIES OF AGRICULTURE. Year 2019, percentage composition



In the EU, production, prices and agricultural income were increasing

According to the so far available provisional data⁷, in 2019 the agricultural sector, represented in the satellite account of agriculture, recorded an increase in production volume of 0.5% for all the 28 EU countries. The most significant growth occurred in Denmark (+8%), the United Kingdom (+3.9%) and Greece (+3.1%); the trend was also positive in the Netherlands (+0.7%) and Germany (+0.6%). Production, on the other hand, underwent a significant contraction in Romania (-3%) and Poland (-2.3%) and, to a lesser extent, in Italy (-1.6%), France (-1.5%) and Spain (-0.3%).

Price growth (measured in terms of basic prices) was 1.5% for the whole European Union. More marked increases were recorded in Poland (+8.7%), Romania (+8.4%), Germany (+7.1%) and Denmark (+4.6%) while prices were only decreasing in Spain (-2.6%) and France (-0.5%).

The agricultural income indicator A⁸, which measures labor productivity in agriculture increased by 3% at EU level²⁸, with particularly significant increases in Denmark (+68.2%) and Germany (+24.6%), countries that marked decreases of similar intensity in 2018. There were also positive results for Greece (+8.6%) and the United Kingdom (+7.3%). The trend of the indicator was negative for Spain (-8.6%), France (-7.4%) and Italy (-3%).

The value added of Italian agriculture at the top of the European ranking

Italy, with a value added of agriculture of 31.8 billion current euros, in 2019 ranked first in Europe, once again above France (31.3 billion). Spain (26.6 billion) was more distant, in third position (as in 2018), followed by Germany (21.1 billion).

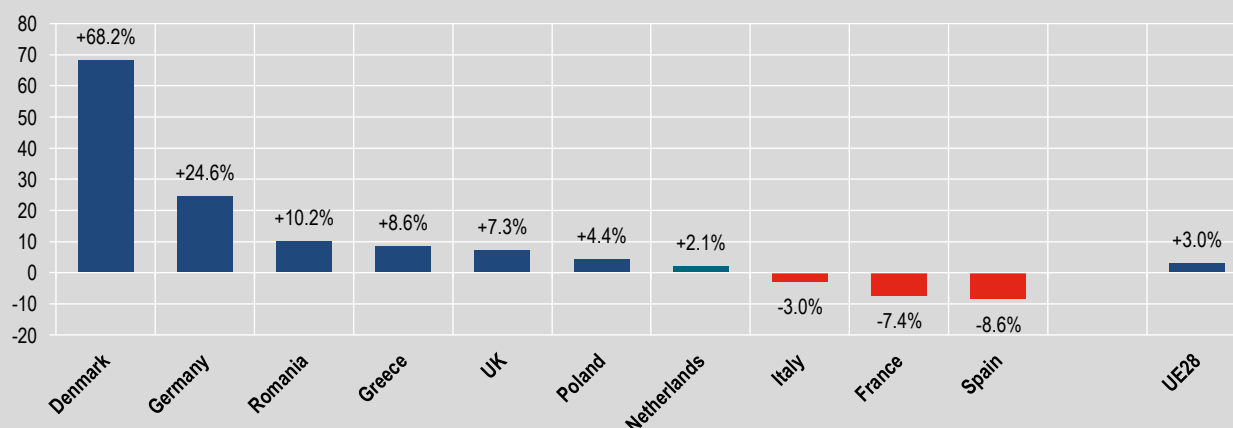
Almost a fifth of the value added of the entire EU agricultural system was generated in Italy: i.e. out of an estimated total of 188.7 billion euros in 2019, Italy contributed for 16.8%, France for 16.6%, Spain for 14.1% and Germany for 11.2%.

It should be considered that the agricultural value added created in our country originated from relevant productions both for quantity and quality, obtained with a relatively limited support of subsidies. Italian agriculture, was indeed the least subsidized among the main European countries.

Considering absolute amounts, in the ranking of countries that in 2019 received the greatest contributions to agriculture (both national and European) France ranked first with 7.9 billion euros, followed by Germany (6.9 billion) and Spain (5.6 billion). For Italy, production subsidies amounted to 5 billion.

In terms of production value, the leadership was of France, with 75.7 billion while Germany (56.8 billion euro) and Italy (56.5 billion) were respectively in second and third ranking, exchanging positions between 2019 and 2018. For the entire EU28, the total value reached 443 billion euros.

FIGURE 7. INDICATOR A OF AGRICULTURAL INCOME FOR EU28 AND MAIN EUROPEAN COUNTRIES
Year 2019 (Annual percentage changes)



In the EU, wine and fruit falling, a positive trend for cereals, oil and vegetables

In 2019, the countries of the Mediterranean area such as Spain, Italy and France suffered a more or less marked decrease in overall production volumes while the Northern European countries (Germany and the United Kingdom of all) showed positive values. Analyzing the various sectors, there was a decrease in production of the wine sector (with the maximum peak for Spain of -24.6%), of that of industrial crops (with the largest decrease again for Spain of -17.4%) and in the fruit and citrus sector (with similar trends for the major producers Spain -7.4% and Italy -7%).

In Europe, the performance of cereals was positive (+10.2% for the EU28), supported above all by the performance of the United Kingdom (+22.1%), Germany (+21.1%) and France (+13, 6%). The fresh vegetables sector also posted a positive result (+2.5% in the EU28) thanks to Spain (+5.6%), the Netherlands (+3.2%), the United Kingdom (+2.1%) and Italy (+1.4%) among the main producing countries.

The olive oil sector showed a clear recovery (+36.1% in the EU28) with the boom in Spain (+52%), the excellent recovery in Italy (+32%) and the good result of Greece (+6%). The livestock sector was stable, with negative values for Poland (-2.3%), France (-1%), Germany (-0.6%), the Netherlands (-0.3%) and Italy (-0.2%) balanced by growth in Greece (+ 3.6%), the United Kingdom (+ 2.7%), Spain (+ 1.3%) and Romania (0.9%).

Also, at European level, the effects on agricultural crops of the climate affects and the alternation of production clearly emerged (a vintage with abundant production followed by one with poor production). Often these effects acted in a combined manner assuming cyclical and recurrent connotations that unite in a special way neighbor countries both at geographical and typical cultivation levels.



NOTE

1 For further details, see the "Methodological note".

2 There are over 500 Italian wines certified by the European Union, which represent almost 90% of the value of the production.

3 *Xylella fastidiosa* is a bacterium of the class Gammaproteobacteria, family of Xanthomonadaceae that lives and reproduces within the conductive apparatus of the raw sap (the so-called xylematic vessels, carriers of water and minerals). It is capable of inducing heavy alterations to the host plant, often lethal. The microorganism is known for the serious damage it is capable of causing to various agricultural crops due to its extreme polyphagia, being able to spread through a large number of host plants. A subspecies of *Xylella fastidiosa* is at the origin of the complex of the rapid drying of the olive tree, a very serious phytopathology that has made its appearance in Italian agriculture since the years 2008/2010, hitting heavily the olive plots especially in Salento and in the neighboring territories. Thanks to the drastic measures to contain the phenomenon with the systematic destruction of the infested plants, in recent years in Puglia there have been positive signs in terms of circumscription of the phenomenon.

4 In olive growing, generally, with a year of abundant production (so called of charge), one follows with a scarce production (called discharge). This phenomenon of alternation of production is sometimes repeated for several consecutive years with a relative constancy and is genetically determined, even if its intensity is influenced by the variety, the amount of fruiting of the previous vintage, the climatic-environmental conditions and the cultivation techniques and pruning.

5 In Italy, in the last few years, 17 sugar factories out of 19 have closed, eliminating almost all the national industrial potential.

6 Multifunctional agriculture means agriculture, which, in addition of fulfilling its primary function, namely the production of food, is capable of providing secondary services, useful to the community. The concept of multifunctionality should not be confused with that of diversification and multisectoriality, which refer to different agricultural activities, in the first case, and to different production sectors, in the second.

7 These are data that refer to the Agricultural Satellite Account prepared by Eurostat." For further details, see the contents of the "Methodological note".

8 See Glossary.

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 Eurostat.

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 (Ue28). 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.

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 1980-2019 time series are available on <http://dati.istat.it>, under the theme "National Accounts" / "Accounts of the branch of agriculture, forestry and fishing".

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".

Further technical and methodology information

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