



ITALIAN AGRICULTURE IN FIGURES 2019



CREA - Research Centre for Agricultural Policies and Bioeconomy, 2019



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“Italian agriculture in figures” edited by CREA - Research Centre for Agricultural Policies and Bioeconomy, now in its 32nd edition, represents a well established and an easy informative tool about the trend of the Italian agro-food system. The thematic structure of this edition has been updated to make it easier to read and better assimilate the available information, thus providing a clearer picture of the relationships between the different components that define the role of the primary sector in an advanced economy.

In 2018, the Italian agricultural system, understood as including agriculture, forestry and fishing, indicated a small but significant recovery of its main indicators, in an overall rather difficult economic context. Volume production (+0.6%) of 59.2 billion euro and value added (+0.9%), of 33.070 billion euro in absolute terms slightly increased. Employment (+0.7% units of work) and investments (+4.1%) also showed positive results. The good performance of Italian agri-food

exports continues, which with 41.6 billion euro, represents 9% of our country's total exports of goods. The Made in Italy component further strengthened its presence in the overall agri-food sector thanks, above all, to products such as DOP wines, Grana Padano and Parmigiano Reggiano, and products of more complex transformation, in general.

This does not mean that the sector is free of operating problems and structural difficulties. Worsening trade terms (-3%) are proof of this, triggered by an increase in the intermediate consumer prices index (+3.7%) higher than that of the agricultural products price index (+1%), which particularly affected the livestock sector, especially the two components of pig farming and sheep and goat breeding. Faced with the increase in production costs, the sector does not find relief with easy access to credit, which in fact contracted further (-3.9%).

Beyond the economic trends, the evidence remains that the agri-food system - as the

sum of agriculture, forestry and fishing, the food and beverage industry, retail trade and restaurant services - is a strategic part of our economic system. It represents 15% of the total turnover of the national economy, for a value of 522,170 billion euro, an increasingly important weight, growing continuously since 2013, and characterised by some particularly favourable dynamics, as in the case of the restaurant sector (+20% in the five-year period), which represents one of the most important markets in Europe.

The picture of the sector would not be complete without considering the important functions carried out by agriculture in favour of the environment, providing goods and services useful to the community and contributing significantly to the development of the bioeconomy, of which it constitutes a major component. In terms of environmental emergencies, although the balance of climate-changing emissions in the sector has slowed down the marked reduction trend

started since 1990, thanks to the role of forests and shrub cover, including permanent crops, which affect more than half of the national territory, agriculture continues to play an irreplaceable mitigation role and makes a strategic contribution to the absorp-

tion of CO₂ from the atmosphere.

Within this generally positive scenario, the dynamic of the non-strictly agricultural component of farming activities is confirmed as lively. This is defined as “diversification”, i.e.: the combined value of the production of

the support and secondary activities has now exceeded the incidence of 20% of the total agricultural production; this is also due to the leading role played by the production of energy from renewable sources and by agritourism.

The Director of CREA Research Centre
for Agricultural Policies and Bioeconomy
Roberto Henke



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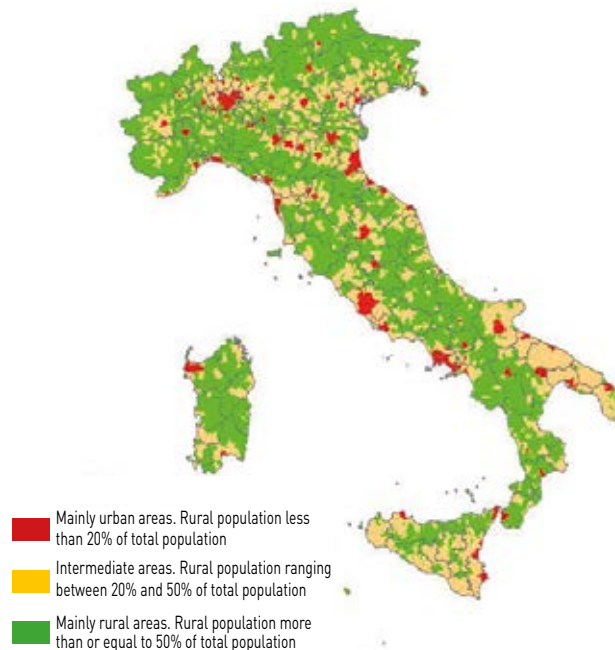
GENERAL BACKGROUND

AREA AND POPULATION

Italy covers a total surface area of 302,073 km² with a maximum latitude extension of 1,180 km and a maximum longitude width of 530 km. The considerable extension in latitude means that Italy has very varied climatic conditions and this favours the development of highly diversified cultivation systems that generate highly specialised agri-food products. These products together with clothing-fashion, furniture and automation-mechanics make up the so-called Made in Italy brand. From the orographic point of view, the country features a predominantly hilly landscape (41.6% of the total area, where 38.8% of the population resides), followed by the mountainous area (35.2%, in which 12.2% of the population resides) and plains (23.2%, in which 48.9% of the population resides).

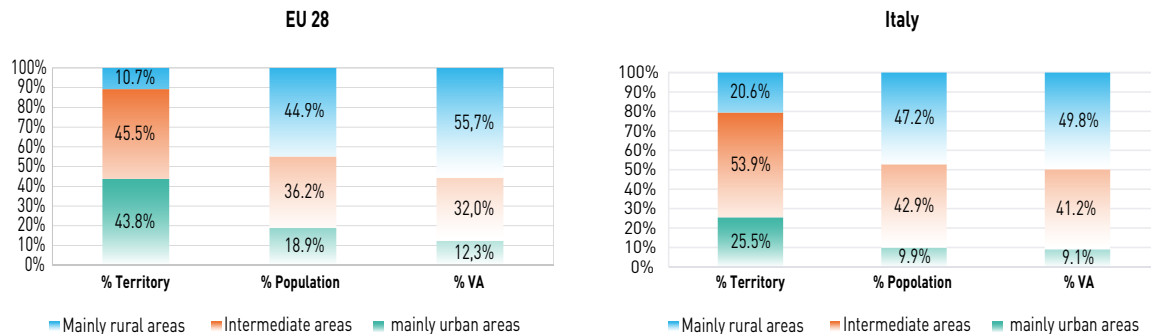
Based on the Eurostat 2011 classification, in Italy 25.5% (77.048 km²) of the land is made up of mainly rural areas, 53.9% (162.876 km²) is made up of intermediate areas and the remaining 20.6% (62.149 km²) mainly urban areas.

Degrees of urbanisation



Source: European Commission, Eurostat (ESTAT), GISCO.

The importance of rural areas in the EU and in Italy



Source: Eurostat.

Italy has been in a phase of demographic decline since 2015. As of January 1, 2019 the population is estimated to be 60 million 391 thousand residents, more than 400,000 less than on January 1, 2015 (-6.6 per thousand). The population of Italian citizens dropped to 55 million 157 thousand (-11.2 per thousand compared

to January 1, 2015), while there were 5 million 234 thousand (+43.8 per thousand compared to January 1, 2015) foreign citizen residents, representing 8.7% of the population.

Italians continue to migrate abroad and the balance has been negative since 2008, producing a net loss of about 420,000 resi-

dents in ten years. About half of this loss (208,000) is made up of young people aged 20 to 34 and of these, two out of three have a medium-high level of education.

The ageing of the population is accentuated by a significant increase in longevity and an equally marked drop in the birth rate.

GROSS DOMESTIC PRODUCT

In 2018, Italy's gross domestic product (GDP) increased by 0.8% in real terms (chain values) showing a sharp drop compared to +1.6% in 2017. GDP at market prices is equal to 1,766,906 million euro (current values), while GDP per capita stands at 29,498 euro (current values). The debt trend also worsened, standing at 134.8%. The deficit/GDP ratio stands at 2.2%, an improvement compared to 2.4% in 2017, a year during which the effects of the bailouts of the

banks in crisis had weighed heavily, but still far from the 1.5% achieved in 2007. In the fourth quarter of 2018, Italy entered a technical recession after five years: the sharp slowdown in growth, in particular industrial production, the absence of public and private investments on the one hand and the spread levels and lack of investor confidence on the other, have had strong repercussions on the country's economy.

The trend of the main aggregates of in-

ternal demand sees gross fixed investments as the most dynamic component of demand, with an increase of 3.4% (+4.4% in 2017). Exports of goods and services increased in volume by 1.9% (+5.7% in 2017), imports by 2.3% (+5.2% in 2017). The trend in national demand shows a slowdown in household consumption (+0.6% in volume, compared to 1.5% in 2017).

The international economy as a whole showed a global deceleration rate, albeit

Trend in the 2014-2018 GDP and 2019-2020 forecast

Current prices	2014	2015	2016	2017	2018
GDP (million euro)	1,621,827	1,652,085	1,689,748	1,724,955	1,766,906
GDP per capita*	26,589	27,662	28,394	28,814	29,498
% change over the previous year	2014	2015	2016	2017	2018
Growth rate % (at constant prices)	0.1	0.9	1.1	1.6	1.1
Harmonised index of consumer prices	0.2	0.1	-0.1	1.3	1
Exports (goods and services)	2.7	4.4	2.1	5.9	1.9
Imports (goods and services)	3.2	6.8	3.6	5.5	2.3
Net exports of goods and services (million euro)	46,275	47,887	54,134	50,304	43,961

* Purchasing Power Parities

Source: Eurostat

with different trends in different countries. Among the factors that contributed to this trend are the still unfinished process of Brexit and the repercussions due

to the introduction of tariffs between the United States and China and the United States and the EU. The greatest weight exerted on world GDP remains China

(18.7%) and the United States (15.2%), followed by India (7.7%) and Japan (4.2%). The EU countries overall showed a recovery of 3.2% compared to 2017.

Trend in the GDP of some countries [% change of current values at market prices]

	2016	2017	2018	Incidence on the 2018 world GDP*
China	6.7	6.9	6.6	18.7
United States	1.5	2.3	2.9	15.2
Euro Area Countries	0.7	2.8	3.2	11.4
India	7.1	6.7	7.4	7.7
Japan	0.9	1.7	1.2	4.2
Germany	1.9	2.5	2.5	3.2
Russia	-0.2	1.5	1.7	3.1
Brazil	-3.5	1.0	2.3	2.5
UK	1.9	1.8	1.6	2.2
France	1.2	1.8	2.1	2.2
Mexico	2.9	2.0	2.3	1.9
Italy	0.9	1.5	1.5	1.8
Turkey	3.2	7.0	4.4	1.7
South Korea	2.8	3.1	3.0	1.6
Spain	3.3	3.1	2.8	1.4
Canada	1.4	3.0	2.1	1.4

* measured in % on the Purchasing Power Parities

Source: International Monetary Fund (estimates)

VALUE ADDED

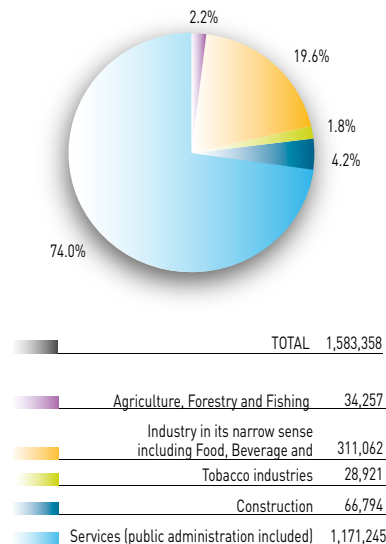
In 2018, total value added increased overall by 1.6% at current values compared to 2017. The food and beverage and tobacco industry is growing (+3.1%), while the value added of the agriculture, forestry and fishing sector shows a much more limited positive change, at +1.2%. Agricultural value added amounts to 34,357 million euro and represents 2.2% of national value added.

The volume production of agriculture in the strict sense shows a weak growth of 0.6%, with value added of +0.8%. Forestry recorded positive increases, both for

production (+1.5%) and for value added, which, compared to 2017, recorded +1.7%. Fishing, on the other hand, remains substantially stable. The agro-food sector as a whole represents 4% of the total value added (2.2% comes from the primary sector and 1.8% from the food industry).

The value added of the EU agricultural sector is € 230,367 million at current prices (Eurostat). The most negative annual changes were recorded in Denmark, Ireland, Lithuania, the Netherlands and Poland, the best were recorded for Malta, Slovenia and Luxembourg.

Breakdown of the value added at basic prices by sector, 2018



Source: ISTAT.

Breakdown of the value added at basic prices by sector, 2018 - Values at current prices (million euro)

Countries	%	Countries	%
Austria	1.3	Luxembourg	0.3
Belgium	0.8	Malta	1.0
Bulgaria	4.2	Netherlands	1.8
Cyprus	2.0	Poland	2.8
Croatia	3.6	Portugal	2.3
Denmark	1.2	UK	0.6
Estonia	2.6	Czech Rep.	2.2
Finland	2.8	Romania	4.8
France	1.8	Slovakia	3.3
Germany	0.9	Slovenia	2.4
Greece	4.3	Spain	2.9
Ireland	1.0	Sweden	1.2
Italy	2.1	Hungary	4.3
Latvia	3.8	EU 28	1.6
Lithuania	3.0		

* VA at basic prices - current values.

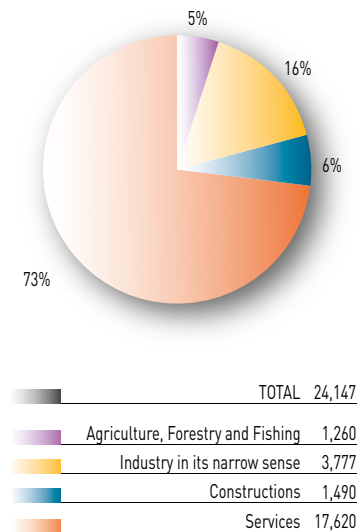
Source: Eurostat.

EMPLOYMENT

In 2018, for the fifth year in a row, all aggregates relating to employment in the Italian economy grew. Total employees (+0.9%), work units (+0.8%) and total hours worked (+1.1%) increased. Although in employment terms the levels have almost returned to those prior to the 2008 crisis, overall labour input, measured in terms of units of work and hours worked, still remains well below, reflecting the fact that in the ten past years there has been a recomposition of employment in favour of more discontinuous and short-term jobs. Indeed, the incidence of fixed-term and part-time employment has increased. In addition to the characteristics of the work done, the so-

cio-demographic composition of employed people has changed: the number of women has increased (42% in 2018, it was 40% in 2008), while that of younger people has decreased, partly as a consequence of demographic ageing. The number of foreigners has increased, however, they are often segregated into occupations that are not very popular with Italians. As regards the breakdown by sector, the impact of agriculture, forestry and fishing has remained practically unchanged, while the relative weight of industry and construction has decreased in favour of services.

Total work units, 2018 (.000)



Source: ISTAT, National Accounting.

PRODUCTIVITY

In 2018, the Italian economy recorded an increase in labour input higher than that recorded by GDP (+0.1%). This determined a slight reduction (-0.2%) of the average productivity of the economy measured as the ratio between value added and hours worked. In consideration of the increase in investments (+3.4%), this result can be interpreted as an expansion of the production and employment base despite a difficult economic scenario.

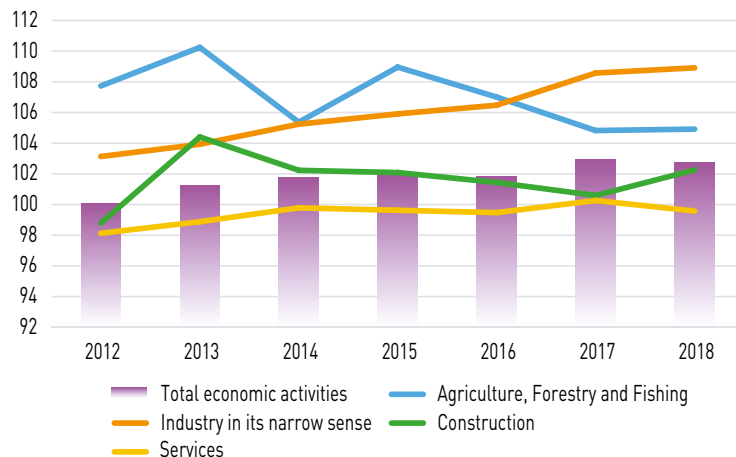
With regard to specific sectors, the productivity trend is increasing in construction (+1.7%), remains positive in industry in the strict sense (+0.3%) and in agriculture (+0.1%), while it is getting slightly worse in services (-0.7%).

The average productivity (gross value added per unit of work) of Italian agriculture, at 28,800 euro, although higher than the European average (19,000 euro) is lower than that of agricultural systems, which are comparable in terms of size and level of development, such as

the French (42,900 euro). At the same time, however, in 2018, the profitability of the agricultural sector in Italy, measured by the index of the real factor

income in agriculture per annual work unit (indicator A), significantly improved (+5.5%), unlike the average situation occurring in the European Union (-5.7%).

Labour productivity - valued added at chained basic prices per hour worked - indices 2010=100



Source: ISTAT.



FARMS

FARMS AND UAA

The results of the 2016 FSS (Farm Structure Survey) survey help to give an overall picture of the agricultural sector. The decrease in the number of farms (- 28% compared to 2013) was offset by a redistribution of the relative agricultural area which led to a generalised increase in the average farm UAA, which went from 8.4 ha in 2013 to 11 ha. However, differences at the regional level were consistent, in fact, from a minimum of 4.3 ha in Liguria, followed by Apulia and Campania, where the average surface area slightly exceeded 6 ha, to over 20 ha in Sardinia, Lombardy and Aosta Valley.

N. of farms, UAA and average UAA, 2016

	Farms	UAA (ha)	Average UAA (ha)
Piedmont	49,965	960,445	19.2
Aosta Valley	2,320	52,856	22.8
Lombardy	41,120	958,378	23.3
Liguria	8,872	38,592	4.3
Bolzano	16,122	208,354	12.9
Trento	8,813	128,253	14.6
Veneto	74,884	781,633	10.4
Friuli Venezia Giulia	18,611	231,442	12.4
Emilia-Romagna	59,674	1,081,217	18.1
Tuscany	45,116	660,597	14.6
Umbria	28,650	334,618	11.7
Marche	36,783	471,004	12.8
Lazio	68,295	622,086	9.1
Abruzzo	43,098	374,904	8.7
Molise	20,871	192,189	9.2
Campania	86,594	527,394	6.1
Apulia	195,795	1,285,274	6.6
Basilicata	38,776	490,468	12.6
Calabria	99,332	572,148	5.8
Sicily	153,503	1,438,685	9.4
Sardinia	48,511	1,187,624	24.5
Italy	1,145,706	12,598,163	11.0

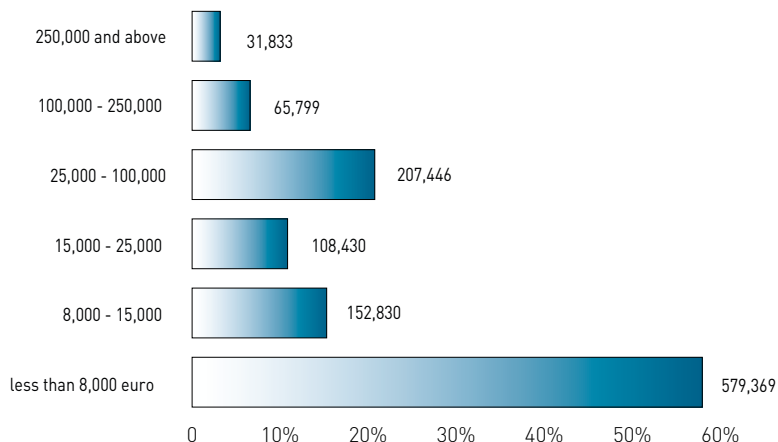
¹ The survey on the farm structure (FSS) is a sample survey carried out by ISTAT every three years. The 2016 FSS sample is composed of 29,127 farms, representing a total population of 1,145,706 farms.

Source: ISTAT.

FARMS BY ECONOMIC DIMENSIONS

The data show a clear prevalence of non-professional farms, more than half of the farms surveyed, in fact, have an economic dimension, measured in terms of standard output, of less than 8,000 euro. The average dimension is about 45,000 euro but, here too there are significant fluctuations between one region and another, with values below the average for the southern regions, which are contrasted by very high values in the northern regions, especially Lombardy, Emilia-Romagna and Veneto.

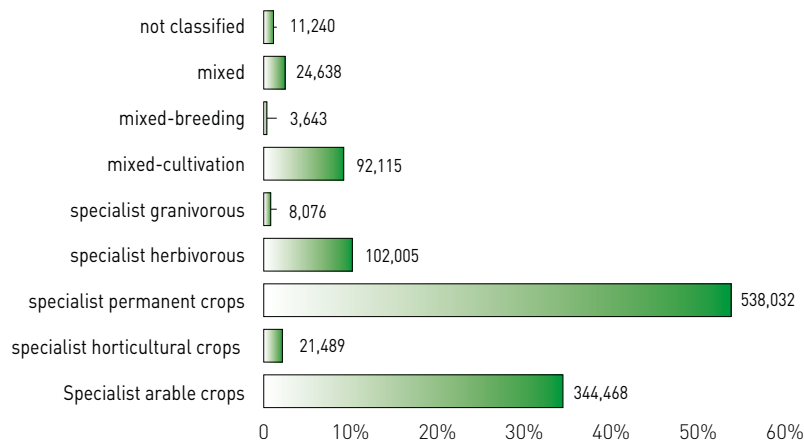
% incidence of farms by economic size class, 2016



Source: ISTAT.

FARMS BY PRODUCTION ORIENTATION

Breakdown of farms by production orientation, 2016



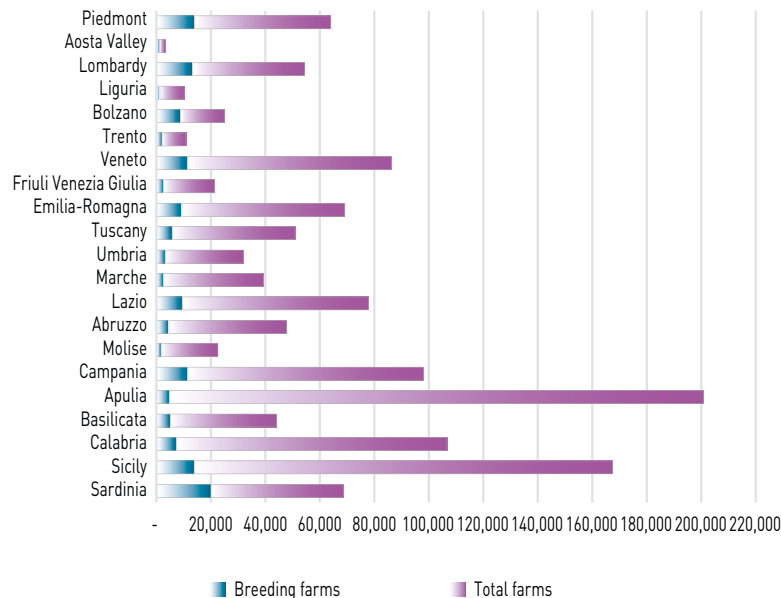
Source: ISTAT.

In terms of production orientation, the predominant activities are the permanent crops, with 47% of farms being specialised and with regional variations affected by the productive vocation of the region, with about one third of farms specialised in orchards, vines and olive trees, and arable crops.

FARMS RAISING LIVESTOCK

With regard to livestock, farms specialise above all in herbivores, including cattle and sheep and goats; this is especially true in the regions of Sardinia, Sicily, Piedmont, Lombardy and the province of Bolzano. But if you look in ALU (Adult Livestock Unit) terms, the regions of Piedmont, Lombardy and Veneto alone hold more than half of the entire national livestock population. In some regions, such as Sardinia and Aosta Valley, farms with livestock represent over 40% of the total and in Bolzano over half of the farms surveyed reported keeping livestock.

Farm with breeding on total farms, 2016



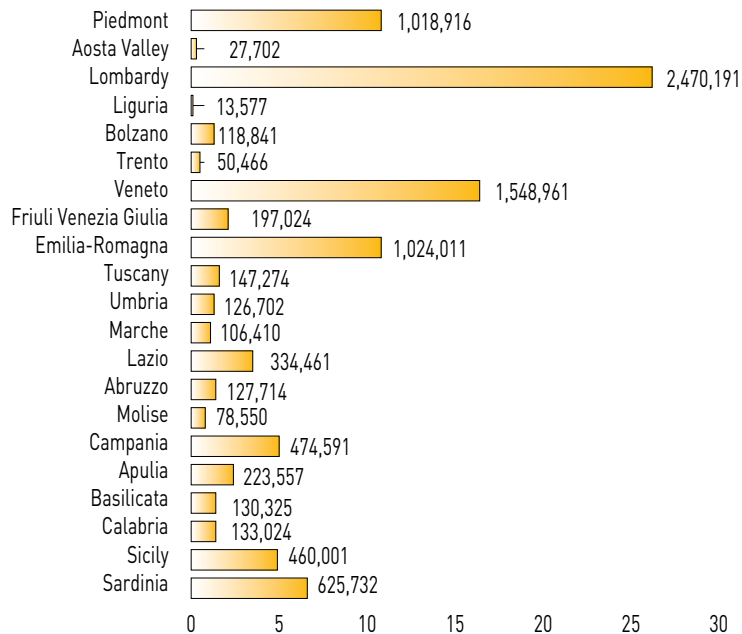
Source: ISTAT.

N. of heads of livestock raised, 2016

	Cattle and buffaloes	Horses	Sheep and goats	Pigs	Poultry	Other breedings
Piedmont	814,879	17,044	228,351	1,193,339	8,325,712	1,467,223
Aosta Valley	34,124	210	8,111	85	9,739	3,463
Lombardy	1,439,390	26,672	143,839	4,391,075	26,059,573	103,972
Liguria	11,483	1,692	9,995	1,033	107,352	18,988
Bolzano	131,223	4,126	57,972	5,895	62,858	8,062
Trento	49,328	2,032	20,018	5,795	613,084	5,686
Veneto	835,539	6,986	53,159	758,662	64,179,451	3,405,479
Friuli Venezia Giulia	87,880	3,246	32,490	186,392	5,707,507	1,114,181
Emilia-Romagna	591,337	8,932	86,046	1,066,057	16,220,051	295,251
Tuscany	93,595	6,659	379,234	103,404	792,682	53,247
Umbria	51,123	5,827	105,787	155,780	3,067,924	4,728
Marche	49,205	827	136,489	110,713	3,653,900	302
Lazio	275,106	16,013	659,680	7,304	4,358,817	666,092
Abruzzo	73,042	10,541	172,464	52,784	2,864,853	25,804
Molise	47,148	1,452	41,633	20,308	4,141,772	593
Campania	449,183	10,748	321,082	42,378	3,851,820	101,369
Apulia	198,125	10,565	277,545	26,573	3,062,113	366
Basilicata	104,855	3,602	260,807	64,389	8,492	8,731
Calabria	112,072	1,187	359,394	20,068	112,019	16,497
Sicily	384,163	14,525	1,023,568	67,182	3,135,217	123,244
Sardinia	281,714	11,886	3,630,870	96,307	897,609	29,111
Total	6,114,514	164,771	8,008,535	8,375,525	151,232,544	7,452,388

Source: ISTAT.

% breakdown of the ALU, 2016



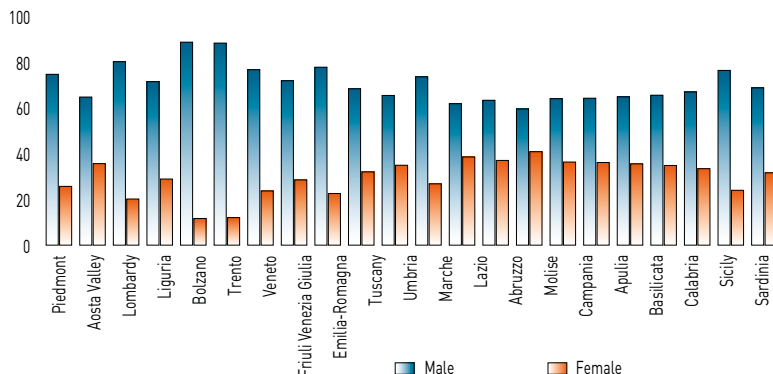
Source: ISTAT.

GENDER AND EDUCATION OF FARMERS

With regard to the gender of farmers, males are clearly prevalent, with an overall incidence of 68.5%. However, both at national level and in some regions, there was a slight increase in the number of farms run by women, which went from less than 30% in 2013 to 31.5% in 2016.

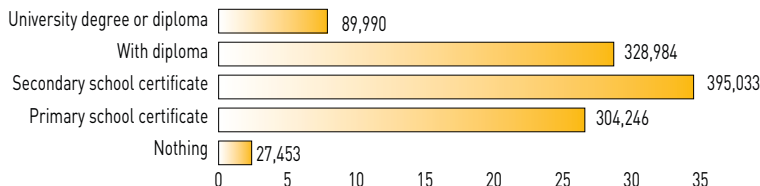
Over a third of farmers hold a middle school diploma and over 28% have a high school diploma; the percentage of graduates remains rather low, less than 8%, but has increased slightly compared to the previously recorded figure (6.4%).

Breakdown of farms by gender of holder, 2016



Source: ISTAT.

% breakdown of farms by type of holder's qualification, 2016



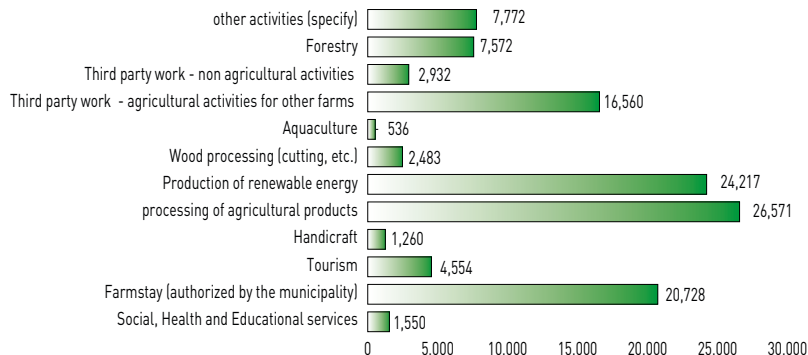
Source: ISTAT.

DIVERSIFIED FARMS

Production diversification, measured in terms of the presence of other gainful activities (OGAS), involves about 8% of farms, those that have at least one activity connected to agriculture in Italy are in fact 87,267. Of these, approximately 74%, or 64,418 farms, carry out only one activity, while the remainder perform more than one activity up to a maximum of 7 among those envisaged by the survey. These additional activities include the following in particular: agricultural product processing, production of renewable energy, agritourism and work for third parties.

At the regional level, diversification is more widespread in central and northern regions, the only exception being Calabria, where more than 6% of the farms with at least one related activity are located.

Breakdown of farms by type of related activities, 2016



Source: ISTAT.

% breakdown of farms with, at least, one related activity

	N. of farms	% incidence	% incidence on total farms
Piedmont	7,274	8.3	14.6
Aosta Valley	385	0.4	16.6
Lombardy	7,672	8.8	18.7
Bolzano	7,567	8.7	46.9
Trento	1,044	1.2	11.8
Veneto	7,089	8.1	9.5
Friuli-Venezia Giulia	2,856	3.3	15.3
Liguria	3,716	4.3	41.9
Emilia-Romagna	8,750	10.0	14.7
Tuscany	8,985	10.3	19.9
Umbria	2,488	2.9	8.7
Marche	3,851	4.4	10.5
Lazio	3,340	3.8	4.9
Abruzzo	1,714	2.0	4.0
Molise	937	1.1	4.5
Campania	3,814	4.4	4.4
Apulia	3,092	3.5	1.6
Basilicata	1,794	2.1	4.6
Calabria	5,304	6.1	5.3
Sicily	2,773	3.2	1.8
Sardinia	2,820	3.2	5.8
Total	87,267	100.0	7.6

Source: ISTAT.



AGRI-FOOD SYSTEM

VALUE OF THE AGRI-FOOD CHAIN

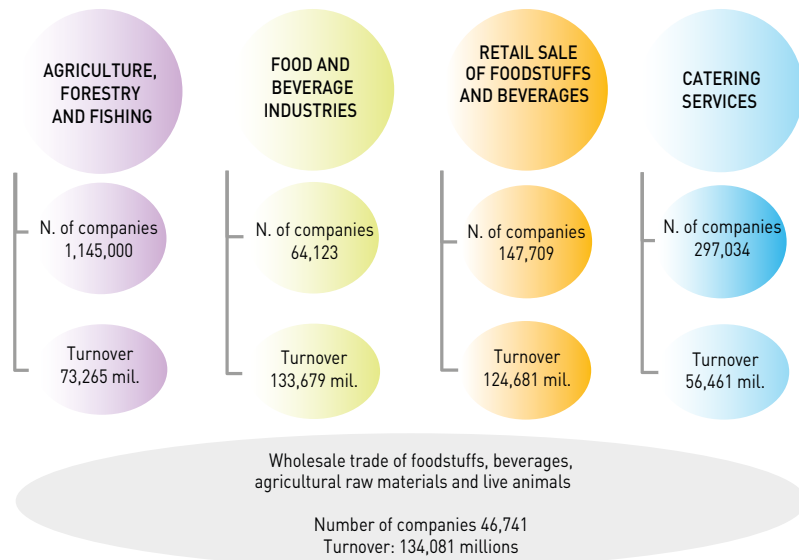
The agri-food system is made up of numerous components, operating at different levels, ranging from the production of agricultural products to the distribution of food and drinks, including restaurant services.

Looking at the information provided with VAT returns made for tax purposes (which concern the professional component of the system), it is possible to obtain details on the number of companies and on the turnover produced in relation to the prevailing economic activity. Since these are VAT returns, companies with an annual turnover of € 7,000 or less are excluded from the count, as they are exempt from the return.

In 2017, the last year available, more than one million companies were operating in the entire agri-food system, which generated a total turnover of 522,164 million.

In detail, the agricultural component includes approximately 487,055 companies, compared to the over one million

The agri-food chain in Italy: companies and turnover



Source: VAT declarations (tax year 2017) Ministry of Economics and Finance, ISTAT, Survey on the structure and productions of farms

resulting from the SPA Survey of ISTAT (2016), which contribute to the turnover for 14% of the total. While the food and beverage industry accounts for 26% of the total agri-food turnover, thanks to the involvement of just over 64,000 system operators. On the other hand, 147,709 businesses operate in the retail trade of agri-food products and beverages, with a total turnover of over 124,600

million euro (24% of the entire system). The latter includes the business of those specialised in the agri-food sector and other entities, such as supermarkets, hypermarkets and other players, which also deal with sales of non-food products (such as detergents, personal care products, small household appliances, etc.). Catering services (bars, restaurants, catering) include around 297,000

businesses, with a turnover exceeding 56,000 million euro (11% of the total). Finally, it should be considered that some transversal players, operating in the wholesale trade of food and drink products, as well as agricultural raw materials and live animals, can be considered as part of the agri-food system. These include about 46,000 businesses, with a total turnover of 15,600 million euro.

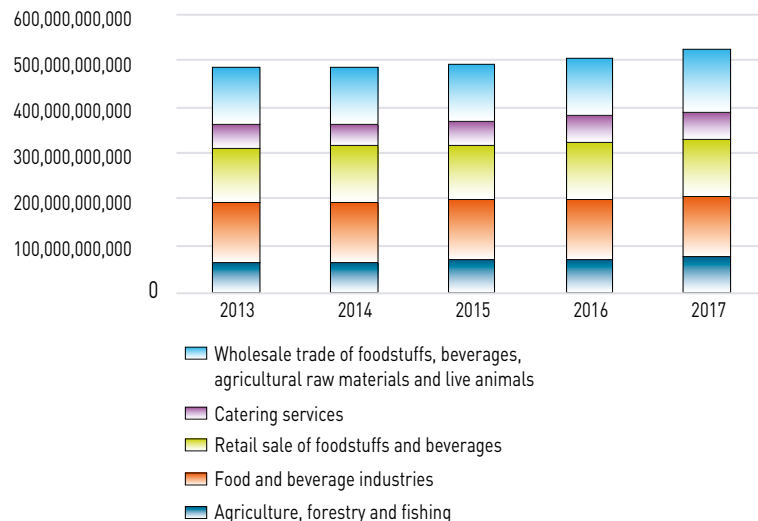
IMPORTANCE OF THE FOOD CHAIN

In 2017, the agri-food system - as the sum of agriculture, forestry and fishing, the food and beverage industry, retail trade and restaurant services - represented a total of 15% of the total turnover of the economy, a value substantially unchanged in recent years.

The trend of the agri-food turnover shows an increase in the entire system, with a positive variation of 8% in the 2013-2017 period, where the components of the system played out differently in terms of the volume of business produced.

Specifically, the development of the different components was not always homogeneous. In fact, while the restaurant services recorded an increase of 20% over the period of time considered, the turnover of the primary sector grew by a lesser extent (+11%), followed by that of the wholesale trade in agricultural raw materials, food and drink (+9%). At the same time, the retail trade in food and drink products is growing at a lower rate

Trend of the components of the agri-food system



Source: Ministry of Economics and Finance.

(+6%), followed by that of the food and drink industries (+4%).

The bioeconomy includes those economic activities that use renewable land and sea organic resources - such as agricultural crops, forests, land and sea marine animals and microorganisms, organic residues - to produce food and feed, materials, energy and services.

In October 2018, the EU launched the review of the European strategy, in which

sustainability and circularity are affirmed as the founding principles on which to develop the European bioeconomy, defined as the renewable component of the circular economy. The strategy identifies three fields of action, namely strengthening the organic-based sectors through greater mobilisation of public and private resources in research and innovation, re-

ducing constraints on the diffusion of innovations; developing local bioeconomies strongly linked to agricultural and rural contexts and increasing knowledge on the state of ecosystems through a coherent European monitoring system.

In 2018, Italy revised its Italian bioeconomy strategy (BIT 2), aligning it with the new European Union strategy. Nine European countries have a bioeconomy strategy: Spain, France, Ireland, Germany, Finland, Austria, the Netherlands and Sweden as well as Italy. Other countries such as Denmark and Belgium have specific sub-national initiatives.

Italy, together with Germany and France, has a leadership position in all sectors of the bioeconomy and is the leading European country, in terms of number of plants (10) for the production of biomaterials and chemical and pharmaceutical products of organic origin. In 2018, the turnover of the Italian bioeconomy amounted to over 322 billion euro.

Turnover of the bioeconomy in Italy (million euro)

	2017	2018	% change 2018/17
Agriculture, Forestry and Fishing	59,639	60,632	1.67
Food industry	139,032	139,863	0.60
Paper and pulp	23,099	23,538	1.90
Manufacturing of timber products	22,777	24,288	6.63
Manufacturing of organic textiles	48,654	50,201	3.18
Bio-based chemical products	3,237	3,515	8.57
Bio-based pharmaceutical products P	14,653	15,239	4.00
Bioplastics	1,808	2,025	12.00
Biofuels	178	144	-19.57
Bioelectricity	3,034	3,034	0.00
Bioeconomy	316,111	322,478	2.01

Source: CREA-PB estimates.

Bio-refineries: industrial plants and flagship



Source: Italian strategy for Bioeconomy,2019



AGRICULTURE, FORESTRY AND FISHERIES

PRODUCTION IN THE AGRICULTURE, FORESTRY AND FISHERIES SECTOR

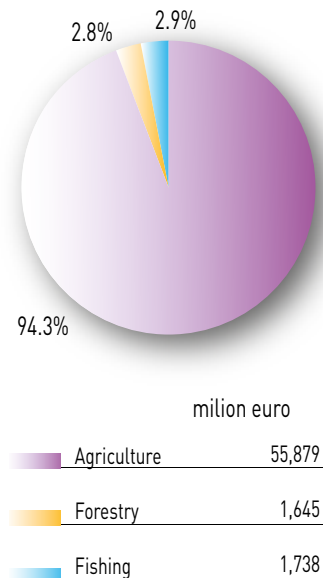
In 2018, the recovery of production in Italy in the AFF (agriculture, forestry and fishing) sector was consolidated, albeit to a lesser extent than in the previous year. The entire sector recorded a total production value of over € 59.2 billion in current values, with an increase of 1.8%, deriving from a modest growth in the volumes produced (+0.6%), but especially by a more substantial rise in the prices of products sold (+1.1%).

All three components contributed to the overall positive result, with the most significant variations marked by forestry and fishing (respectively with +3% and +2.6% in current values), which however remain marginal compared to agriculture alone which accounts for over 94% of the total sector (+1.7%).

In 2018, forestry showed a recovery in volume production, which was accompanied by an equally significant rise in prices. At the same time, variations in mean consumption were more contained, causing

an even more significant increase in value added (+3.4% in current values). Fishing trends were less lively, in this area growth was driven above all by the trend in prices, against a much more moderate volume growth (+0.5%). These dynamics were accompanied by a marked rise in mean consumption prices, with a compression effect on the sectoral value added, which grew by just 1.3%. In spite of the less positive performance, agricultural production marked a 0.6% growth in volume, also driven forward by a recovery in prices. However, in this case, there was a bad result in terms of the value added trend (-0.2%), which was affected by strong variations in mean consumption prices (+3.9% in current values).

% breakdown of the production value in the agriculture, forestry and fishing sectors, 2018



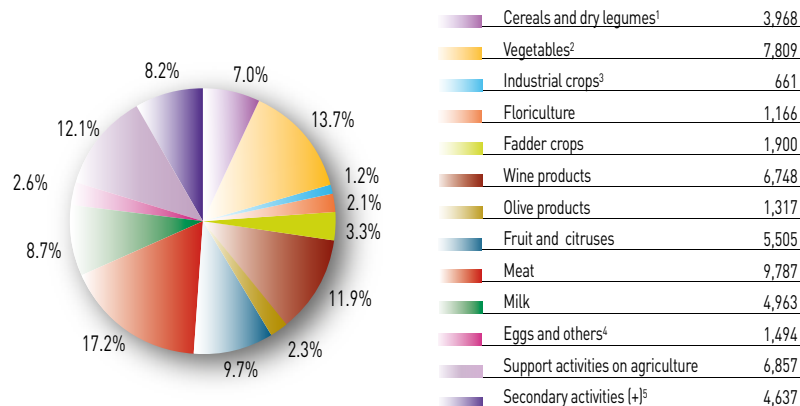
Source: ISTAT.

AGRICULTURAL PRODUCTION

The value of agricultural production touched 55.9 billion euro, with an increase in current values of 1.7% (which stops at 0.6% in volume). The overall trend in 2018 is the result of highly diverse behaviour in the various production macro-sectors.

With regard to vegetable crops, the greatest contribution to growth in current values came from wood (+7.4%), which also recorded a very slight increase in the volumes produced. The trend of forage crops was very positive, however its marginal importance did not produce a significant impact. Finally, despite the recovery in volume, herbaceous plants showed a moderately negative value (-0.5%), due to a drop in prices. The zootechnical component shows a completely different trend, recording a drop both in current terms and in volume, thus meaning its contribution to the agricultural sector decreased. Finally, the contribution of the support activities was moderately positive, growing by just 0.4%, while secondary activi-

Production of goods and services at basic prices of the agricultural sector - Values at current prices (million euro), 2018



¹ Dried legumes (162 million euro).

² Of which potatoes (640 million euro) and fresh beans (280 million euro).

³ Sugar beet (86 million euro), tobacco (167 million euro), sunflower (55 million euro), soya (321 million euro).

⁴ Of which honey (62 million euro).

⁵ Secondary activity (+) refers to the activity carried out in the agricultural sector, related to farmstay, processing of fruit, milk, meat, production of renewable energy etc.

Source: ISTAT.

Value of productions and services at basic prices by main sectors, 2018

	Current values		% Change 2018/17		
	million euro	%	on current values	on chained values	implicit prices
Production of goods and agricultural services Prod	52,176	93.4	1.7	0.6	1.1
- herbaceous crops	13,603	24.3	-0.5	1.5	-2.0
- woody crops	13,571	24.3	7.4	0.3	7.1
- fodder crops	1,900	3.4	29.3	8.8	18.9
- animal breeding	16,245	29.1	-2.8	-0.6	-2.2
- support activities to agriculture	6,857	12.3	0.4	0.4	0.0
Secondary activities (+) ¹	4,637	8.3	1.4	0.9	0.4
Secondary activities (-) ²	933	1.7	-2.8	0.9	-3.6
Agricultural production	55,879	100.0	1.7	0.6	1.1
Intermediate consumption (Sifim included)	25,145	-	4.2	0.3	3.9
Agricultural value added	30,735	-	-0.2	0.8	-1.1

¹ Activities carried out in the agricultural sector, such as farmstays, processing of milk, fruit and meat, etc...

² Activities carried out in agriculture by other economic sectors. They are not included in the value and % incidence.

Source: ISTAT.

ties recorded a wider variation (+1.4%), but downsizing compared to the previous year.

For the EU average too, 2018 represented a moderately positive year, with a volume production growth of 0.6%. However, un-

like the Italian case, the overall result was determined by a drop in the plant component, which was more than offset

Value of agricultural production at basic prices, Value added and Indicator A for the main EU countries, current values in millions of euro (2018)*

	EU 28	France	Germany	Italy	Spain	UK	Netherlands	Poland
Agricultural production of goods	398,381	68,918	49,811	47,090	51,628	27,046	25,163	24,183
Agricultural production of services	20,746	4,552	2,424	5,010	520	1,317	2,687	548
Secondary activities (non-separable)	16,768	2,536	964	4,630	1,244	1,518	899	106
Production of the agricultural activity	435,895	76,006	53,199	56,730	53,392	29,882	28,749	24,837
Intermediate consumption	253,562	43,866	36,428	24,497	23,205	19,128	17,735	15,373
Value added	182,333	32,140	16,772	32,233	30,187	10,754	11,014	9,464

* Figures related to Italy differ from the ones reported in other tables due to method differences used by ISTAT and Eurostat in determining the values

Source: Eurostat

by a growth in livestock products. A positive contribution to growth came mainly from Romania, as well as from Spain, France and Italy whose production was supported by the recovery of wine production; while, the trend was negative for

Germany, Denmark and Greece, among others. Compared to the other countries, Italy came second among the main Community partners for the value of agricultural production, after France and before Spain and Germany; while, in terms of

value added, it ranks firmly in first place in the Community ranking. Finally, it should be noted that services and secondary activities share of agricultural production is much higher for Italy (17%), compared to the EU 28 average (8.6%).

CROP PRODUCTION

Crop production, including herbaceous, woody and forage crops, is confirmed as the main component of Italian agricultural production, with a share of over 52% of the total value. The trend of the various sectors and single production, however, has been somewhat diverse and, more and more frequently in recent years, conditioned by adverse climatic conditions, sometimes of an exceptional nature, which during the year regarded mainly heat waves, with the highest values in the last 200 years being reached.

In detail, the best results involved some

wood sectors, including vines which showed a clear recovery compared to the disappointing result of the previous year, with a growth in value of over 30% both in relation to wine production and grapes supplied or sold. Similarly, after the collapse of 2017, there was also a strong growth in apple production, as well as positive results for table grapes. On the other hand, there was a reduction in the production of citrus fruits, pears and the situation in the olive oil sector was extremely serious, with a drastic reduction (-42.8% in value and -36.9% in volume)

connected, not only to climatic trends, but also to attacks by *xylella fastidiosa* and the oil fly.

Extremely large and mainly negative trends were seen in the production value of most vegetables, with greater fluctuations in relation to tomatoes, potatoes, lettuce and artichokes. The opposite was true for results of the main herbaceous plants (soft wheat and corn), although with more contained variations, while durum wheat showed a slight growth in value, which, however, was accompanied by a decrease in the quantities obtained (- 1.6%).

Main crop productions, 2018

	Quantity		Value ¹	
	000 t	% change 2018/17	000 euro	% change 2018/17
Wine (000 hl)	22,564	15.3	4,291,342	31.5
Olive oil	236	-36.9	1,139,404	-42.8
Grape conferred and sold	3,982	16.0	1,767,059	31.9
Fodder (in hay)	-	-	1,900,018	29.3
Nurseries	-	-	1,398,835	1.7
Durum wheat	4,145	-1.6	1,225,749	1.5
Flowers and ornamental plants	-	-	1,165,629	0.3
Hybrid corn (maize)	6,187	2.5	1,165,447	3.1
Tomatoes	5,799	-3.7	914,805	-10.3
Fennels	534	3.5	918,650	13.6
Potatoes	1,308	-2.5	639,810	-9.3
Apples	2,416	25.7	1,050,309	50.2
Kitchen gardens	1,775	2.4	665,013	-3.3
Lettuce	473	1.4	580,768	-13.5
Table grape	1,017	3.9	673,037	17.4
Oranges	1,522	-4.1	444,519	-15.7
Zucchini	556	2.8	506,053	-3.4
Common wheat	2,788	1.3	525,875	3.2
Artichokes	390	0.5	397,192	-16.0
Pears	719	-7.0	473,939	-10.5

¹ Production at basic prices expressed at current values.

Source: ISTAT.

LIVESTOCK PRODUCTION

In 2018, the livestock products results were rather diverse; the total importance of which stood at just above 29%. The general negative result was influenced above all by the poor performance of the meat sector. Specifically, while beef hardly moved, the pig sector showed a striking contraction (-10.8% in current values, compared to stable production in volume), which was associated with a decrease in poultry (with a reduction of more than 3% both in current values and

in volumes), while the loss of value in the rabbit, game and other minor sectors was even greater (-12%). The only exception was, once again, the equine sector (+4.4%) which, however, always remains marginal.

As far as cow and buffalo milk was concerned, values remained stationary while the quantities produced increased. The trend in the sheep and goat sector appeared more problematic, with a loss in value of 2.8%, against a more significant

growth in volume. These developments anticipated the price crisis, which subsequently exploded in 2019, undermining the endurance of the sector.

Finally, the good performance of eggs (+8.1%) and especially honey (+22.3%), both supported by a strong rise in prices, deserve to be mentioned. In particular, honey recorded a recovery in volume production, after consecutive years of production losses.

Main livestock productions, 2018

	Quantity ¹		Value ²	
	000 t	% change 2018/17	000 euro	% change 2018/17
Cow and buffalo milk (000 hl)	121,104	1.6	4,521,534	-0.1
Pigs	2,080	0.9	3,036,125	-10.8
Cattle	1,180	-1.0	2,978,648	-0.0
Poultry	1,833	-3.2	2,750,166	-3.5
Eggs (million units)	13,150	1.2	1,421,915	8.1
Rabbits, game meat and small-scale breedings	285	-13.5	762,449	-12.0
Sheep and goat milk (000 hl)	5,930	3.4	441,813	-2.8
Goats and sheep	59	1.7	162,718	-0.4
Horses	42	1.5	97,283	4.4
Honey	8	5.4	61,560	22.3

¹ live weight for meat.

² Production at basic prices expressed at current values.

Source: ISTAT.

DIVERSIFICATION

In 2018, the dynamics related to the components of diversification in agriculture were confirmed as quite significant. During the year, the combined value of agricultural production linked to support and secondary activities exceeded 20% of the total, with a contribution of around 12% for support activities and 8% for secondary activities.

Both components grew in both in value and volume as a result of somewhat dif-

ferentiated trends between the various items that make them up.

Among the support activities, we note the further strengthening of activities done on a fee or contract basis which alone account for more than 46% of the value of the total aggregate, offset by the decrease in the value achieved from the initial processing of agricultural products, which is the second most important item.

With reference to secondary activities, the leading role of energy production from renewable sources was confirmed, which however remained stable, while the value of agritourism and the minor activities connected with it grew by 2.5%. Other items include growth in feed production, direct sales and aquaculture; on the other hand, activities related to the various forms of product transformation are decreasing.

Production of the support activities and secondary activities of the agricultural sector

	2018	% change - current values 2018/17	% change - chained values (2010) 2018/17	% incidence
SUPPORT ACTIVITIES				
Seed processing for sowing	238.7	-3.9	-5.0	3.5
New cultivations and plantations	184.4	-1.4	-2.5	2.7
Subcontracting	3,155.9	1.2	0.5	46.0
First processing of agricultural products	2,293.0	-0.6	1.0	33.4
Soil maintenance	583.9	1.1	0.4	8.5
Support activity to the livestock breeding	212.7	1.7	-0.5	3.1
Other support activities	188.4	2.4	1.2	2.7
Total	6,859.1	0.4	0.3	100.0
SECONDARY ACTIVITIES				
Aquaculture	8.0	2.0	1.0	0.17
Processing of vegetable products (fruit)	186.5	-0.3	-2.3	4.02
Milk processing	282.6	-0.6	0.8	6.09
Farmstays, recreational and social activities, educational farms	1,393.3	2.5	0.4	30.05
Processing of animal products (meat)	326.7	-0.5	0.9	7.05
Renewable energy (photovoltaic, biogas, biomas)	1,504.1	0.0	1.5	32.44
Handicraft (wood processing)	60.8	0.0	-1.0	1.31
Production of animal feeding	182.5	7.4	1.0	3.94
Maintenance of parks and gardens	355.8	1.6	0.5	7.67
Direct sales/marketing	336.6	5.1	3.5	7.26
Total	4,636.8	1.4	0.9	100.00

Source: ISTAT.

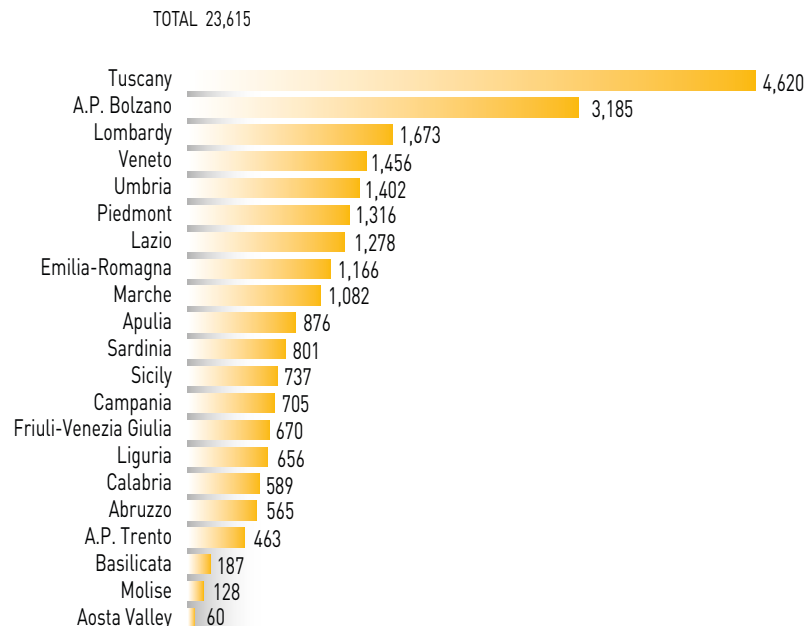
FARM STAYS

In 2018, agritourism farms increased by 0.9%, reaching 23,615 and spreading in 63% of Italian municipalities.

Guests in farm stays (3.4 million tourists, 47% of whom are foreign nationals) increased by 6.3% compared to 2017. The current value of the agritourism, with 1.39 billion euro, also increased sharply (+29%). The dynamism of the sector, thanks to the diversification of the services offered, represents an element of strength for the socio-economic fabric of rural areas; in fact, almost 84% of the facilities are concentrated in mountain and hilly areas.

The role of women in this sector is significant, with 8,563 female-run facilities (+1% compared to 2017), representing 36.3% of the national total.

Farm stays by Region, 2018



Source: ISTAT.

Surface areas

The provisional results of the third national forest inventory INFC 2015 confirm the constant growth of the Italian forest area in recent decades, reaching almost 11 million hectares (36% of the national area).

Forestry area in Italy (ha)

	Forest	Other wooded lands	Total forestry area
Piedmont	882,268	72,843	955,111
Aosta Valley	103,820	7,898	111,718
Liguria	359,315	38,216	397,531
Lombardy	602,170	62,022	664,192
A.P. Bolzano	342,776	36,127	378,903
A.P. Trento	377,862	32,339	410,201
Veneto	414,361	51,264	465,625
Friuli-V.G.	330,578	34,908	365,486
Emilia-Romagna	581,746	47,878	629,624
Tuscany	1,055,144	141,848	1,196,992
Umbria	396,540	20,120	416,660
Marche	294,124	16,908	311,032
Lazio	599,211	68,493	667,704
Abruzzo	423,943	51,150	475,093
Molise	153,480	18,742	172,222
Campania	420,195	66,750	486,945
Apulia	153,903	35,183	189,086
Basilicata	290,190	103,674	393,864
Calabria	511,793	159,175	670,968
Sicily	288,943	92,704	381,647
Sardinia	583,142	658,266	1,241,408
ITALY	9,165,505	1,816,508	10,982,013

¹ The data presented here are taken from the Annual Report on Forests 2017-2018: <https://www.reterurale.it/foreste>

Source: The National Inventory of Forests and Forest Carbon Pools (INFC - 2015).

Companies and employees

There are 6,471 businesses with 12,067 employees (on average 1.86 per company). In five years the number of companies in Italy has increased by 14%, while the number of employees has decreased by as many percentage points, especially in the Centre-South.

Companies and employees in the Italian forestry sector

	Companies (n.)		Trend of Companies	Employees (n.)		Trend of employees
	2011	2016	2011-2016 %	2016	2011-2016 %	
Piedmont	508	664	30.7	856	689	-19.5
Aosta Valley	7	15	114.3	22	30	36.4
Liguria	187	211	12.8	304	288	-5.3
Lombardy	492	629	27.8	1,065	1,058	-0.7
A.P. Bolzano	183	243	32.8	277	515	85.9
A.P. Trento	165	189	14.5	418	347	-17.0
Veneto	249	304	22.1	379	316	-16.6
Friuli-V.G.	169	221	30.8	326	247	-24.2
Emilia-Romagna	257	348	35.4	590	500	-15.3
Tuscany	980	1,035	5.6	2,944	2,296	-22.0
Umbria	313	329	5.1	1,148	1,061	-7.6
Marche	120	128	6.7	221	165	-25.3
Lazio	449	420	-6.5	883	664	-24.8
Abruzzo	191	202	5.8	471	300	-36.3
Molise	68	58	-14.7	110	66	-40.0
Campania	375	411	9.6	857	531	-38.0
Apulia	109	115	5.5	373	366	-1.9
Basilicata	148	145	-2.0	358	292	-18.4
Calabria	485	554	14.2	1,963	1,770	-9.8
Sicily	85	104	22.4	153	213	39.2
Sardinia	136	146	7.4	338	353	4.4
ITALY	5,676	6,471	14.0	14,056	12,067	-14.2

Source: firms registered with ATECO code 02 "Forestry and use of forestry areas", RAF 2017-2018.

Production

Estimates on the production of wood materials are not proportional or linked to those on wood harvesting, since the raw material for wood processing depends largely on imports. Compared to the previous survey (2017), an important increase was seen in the sawn timber sector (+34%). A small but steady increase can be observed in the paper, cardboard and recycling paper sectors. The other sectors are practically stable, with the exception of the production of wood-based panels which recorded a drop of 28%.

National production of wood-based products and paper-based products

Type of product	(measuring unit)	2016 Production (a)	2017 Production (a)	2018 Production (b)
Wood chips, wood particles and residuals	1000 m ³	783	1,045	949
Sawn wood (railway sleepers included)	1000 m ³	1,427	1,423	1,919
Wood-based panels, peeled or sliced wood	1000 m ³	3,921	4,856	3,450
Wood pulp and other pulps	1000 mt	392	388	369
Recycling paper	1000 mt	4,887	4,994	5,144
Paper and cotton	1000 mt	8,888	9,071	9,081
Pellet and other wood agglomerations	1000 mt	131	92	92

Source: (a) - Annual Forest Report

(b) - ISTAT (Prodcom)

FISHING AND AQUACULTURE

The territorial distribution of the Italian fleet is concentrated in the South and in the Islands where 61.7% of the total use of boats and 58.1% of gross tonnage is concentrated. Compared to 2017, the use of boats decreased by 124 units and 4.3% in terms of tonnage.

Apulia and Sicily account for more than a third of the total amount of Italian fish and a value of 41% of the total, or 384 million euro in 2018. Fishing is also significant in the Adriatic regions of Veneto, Emilia-Romagna and Marche, with a share of 14.2%, 10.5% and 11.2% respectively of total landings.

In 2018 too, there was a prevalence of the use of trawling; it was not only the most used system but also the most profitable. With an annual contribution of almost 530 million euro, it accounts for more than half of the total revenue of Italian fish caught. Line fishing, second in terms of total landings, is a much less profitable fishing system, with just 56.4 million fish

Fishing fleet per region, 2018

	Boats (n.)	Tonnage	Motive power (Kw)
Abruzzo	522	9.114	42.744
Calabria	800	5.691	43.498
Campania	1.088	8.962	63.439
Emilia-Romagna	591	6.861	58.207
Friuli Venezia Giulia	350	1.511	21.288
Lazio	574	6.717	49.406
Liguria	500	3.237	32.447
Marche	778	14.540	81.075
Molise	93	1.785	8.585
Apulia	1.509	16.513	119.395
Sardinia	1.354	10.371	80.719
Sicily	2.740	42.455	221.236
Tuscany	579	4.781	38.387
Veneto	659	12.027	78.949
Italy	12.137	144.565	939.376

Source: MIPAAF.

caught (6% of the total economic value). The system that uses fixed equipment, the most traditional in Italy, is a highly

practiced and sufficiently profitable fishing practice (one fifth of the total value). Analysis of the quantities landed high-

Value and quantity of catches

	Quantity of catches (t)	Value of catches (euro)
Abruzzo	10,129	44,687,026
Calabria	7,350	38,678,446
Campania	8,325	49,060,546
Emilia-Romagna	20,154	56,367,765
Friuli Venezia Giulia	2,475	16,597,933
Lazio	5,715	45,010,235
Liguria	4,815	22,230,286
Marche	21,432	86,091,070
Molise	1,620	10,870,136
Apulia	28,824	142,226,373
Sardinia	8,072	60,095,745
Sicily	37,476	242,064,014
Tuscany	7,978	45,945,947
Veneto	27,301	84,242,315
Italy	191,666	944,167,837

Source: MIPAAF.

lights a significant weight of anchovy fishing once again in 2018, representing 19% of the Italian catch. In monetary terms, on

the other hand, shrimp, scampi and cuttlefish are the most profitable species with an average market value of around 15-20

euro / kg live weight.

With a national fish value of 944 million euro in 2018 (+3.7% compared to 2017) and a production of 191,000 tons (+1.5%), Italy ranks first among the EU countries. Italy also ranks first for the consumption of fish products, with 28 kg per capita consumption.

The Italian market is mainly driven by preserved products; tuna alone currently has a market value of 55 billion euro. Italy therefore plays an important role in terms of supplying preserved fish on the global market and, in particular, in Europe.

The 2018 income statement for fisheries confirmed the good performance of the sector, with production increasing by 2.6% and value added recording +1.3%.

There are over 3,300 aquaculture farms in Italy. 1,474 farms are intended for fattening for consumption, of which 59% specialised in the production of shellfish, 40% in fish and 1% in crustaceans. The farms are located mainly in the Veneto region

Value and quantity of catches by type of fishing systems

Type of fishing	Quantity of catches (t)	Value of catches (euro)
Demersal trawlers and/or demersal purse seine fishing	73,782	529,763,495
Pelagic trawl	39,850	56,439,637
Purse seine fishing	27,586	75,130,403
Vessels using only passive gears	26,658	188,912,538
Trawler fishing for molluscs	15,601	43,908,551
Vessels using hooks (longlines)	4,201	23,956,065
Beam trawl	3,988	26,057,148
Total	191,666	944,167,837

Source: MIPAAF.

Quantity and value of catches by main catches

Species	Quantity of catches (t)	Economic value (euro)
Anchovy	36,331	67,532,002
Cuttlefish	5,862	64,158,314
Pink shrimp	9,827	56,694,657
Red shrimp	2,524	54,731,083
Hake/Codfish	7,298	53,775,303
Lobster	1,781	36,566,960
Clam/Lupine	13,994	35,608,171
Tuna/Red tuna	3,541	34,199,295
Squilla mantis	4,795	32,986,558
Red mullet	6,756	32,525,291

Source: MIPAAF.

(shellfish and fish), in Emilia-Romagna and Apulia.

Fish farming produces 62,300 tons of fresh fish and a production value of over 300 million euro. The main sector of Italian pisciculture consists of trout in freshwater plants and sea bass and sea bream in marine and brackish waters.

Shellfish farming produces around 100,000 tons for a value of over 280 million euro (MIPAAF data for 2017). Mussels make up 63% of production and 20% of value, clams 37% of production but 80% of value.

Quantity and value of catches in Italy

	Quantity of catches (t)	Value of catches (euro)	Quantity of catches (% change 2018/2017)	Value of catches (% change 2018/2017)
2018	191,666	944,167,837	3.7	1.5
2017	184,778	930,548,776		

Source: MIPAAF.

Profit and Loss account for the fishing sector, 2018

Activity	Aggregate	2017	2018	% change 2018/2017
		(million euro)		
Fishing and aquaculture	Production	1,693	1,738	2.6%
	Production of goods and services by product p	1,736	1,782	2.6%
	(-) secondary activities	43	44	2.6%
	intermediate consumption	754	786	4.3%
	value added	939	952	1.3%

Source: MIPAAF.

Italian aquaculture: production and value, 2018

Species	Total production (t)	Value of production (million euro)
Bass	7,300	59.0
Bream	9,700	75.0
Ombrine	100	0.8
Eel	850	9.4
Mullet	2,500	9.5
Trout	37,500	120.0
Others	4,350	27.1
Total pisciculture	62,300	300.7

Source: Associazione Piscicoltori italiani.

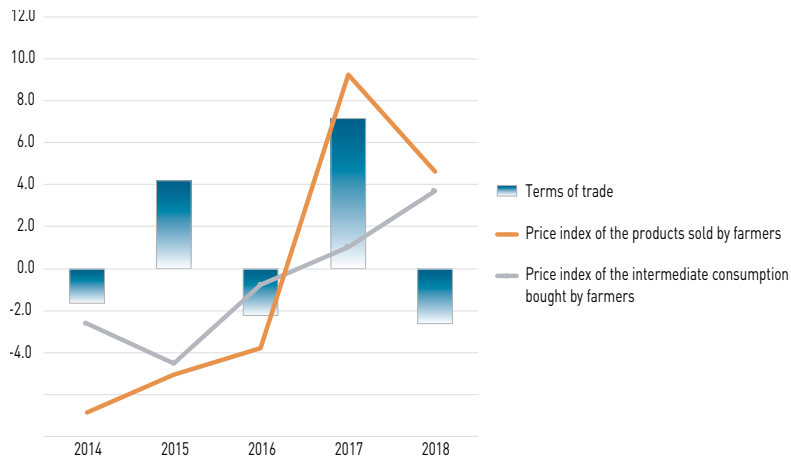
PRICES AND COSTS

In 2018, the terms of trade of the agricultural sector, measured by comparing the index of producer prices with that of intermediate consumption prices, showed a turnaround in relation to 2017, marking a 3% downturn. This decrease was triggered by an increase in the intermediate consumer price index (+3.7%), higher than that of the price index of products sold by farmers (+1%).

Despite this negative result, the medium-term trend (2014-2018) points out an increase in producer prices (+5.4%) against a reduction in the prices of current assets (-0.8%), so favouring positive effects on the terms of trade (+6.3%). Even considering investments, whose prices increased by 7%, among production inputs, there is still an improvement of 4.2% in the ratio of selling prices to purchase prices.

The breakdown of the indices shows that the increase in the intermediate consumption component is a consequence of an increase in all cost items, particularly ener-

Year variation of price indices and terms of trade



Source: ISTAT.

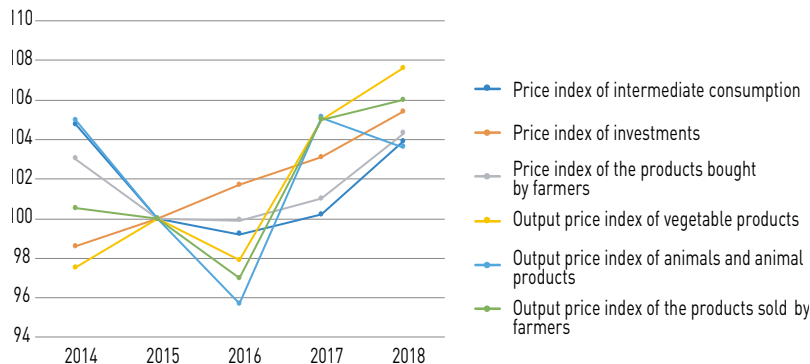
gy and lubricant costs (+14%), and prices of simple animal feed (+11%). Investment goods prices also rose, mainly due to the dynamics concerning capital goods, but at

a rate of about half that of current assets. In the medium term, there is a generalised reduction in several items of current assets, attenuated by increases that specifi-

cally involved lubricants (+13%), insecticides (+12%) and veterinary expenses (+10%). All categories of capital goods show positive changes, 9% in the case of capital equipment.

The modest growth of the price index of products sold by farmers is the result of two opposing trends represented by an increase in prices of vegetable products (+2.5%) and by a decrease in prices of animal products and their derivatives (-1.4%), respectively. The first mainly depends on an increase in the prices of fodder (+21%), wine (+13%) and fruits (+9%), while the reduction in prices in the livestock sector is attributable to pig farming (-14%) and, to a lower extent, the sheep and goat sector (-2%). This confirms the medium-term trend, characterised by an increase in the prices of vegetable products (+10%), driven by the fruits and vegetables and permanent crops sectors, and a weakening in the prices of all livestock products.

Price index of the products bought and sold by farmers - n. indices (2015=100)

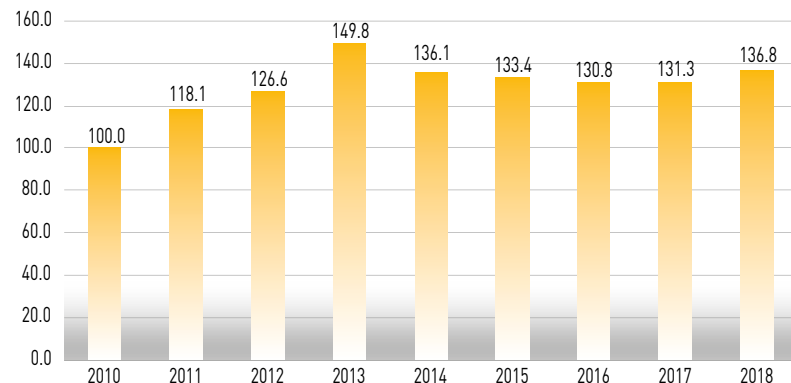


Source: ISTAT.

INCOME

The A indicator of agricultural income, which corresponds to the real agricultural net value added per unit of annual work, showed an increasing trend over the last decade to 2013, then settling at fairly stable values in the last five years. In 2018, the indicator, at 136.8, showed an increase of 4% compared to the previous year, in contrast with what was recorded by the EU 28, where a decrease of 4.8% was noted. The situation within the European Union appears to be quite diversified, with some countries showing growth values such as France (+8.7%), Slovenia (+26.4%), Malta (+21.4%) and Croatia (+6.2%) while other countries showed significant downsizing, such as Germany (-36.8%), Lithuania (-31.3%) and Sweden (-30.1%).

Index of the real income of the agricultural factors per annual work unit



Source: Eurostat.



PRODUCTION FACTORS

INTERMEDIATE CONSUMPTION

The current value in 2018 of intermediate consumption in the agriculture branch is just over 25 billion euro, up 4.2% compared to 2017. Therefore, the expansionary phase of consumption which began last year has continued although it is a purely nominal increase caused by the increase of prices (+3.9%) while quantities remain almost constant (+0.3%).

Among the costs, the increase intra-unit consumption stands out (+14.8) followed by energy (+7.1%) and feed and various expenses for livestock (+5.5%). Only re-deployment showed a significant increase in the quantities consumed, just under 5%.

Excluding the residual item of other goods and services, zootechnical feed are the main cost for farms as it accounts for over a third of total consumption

(33.9%), another relevant item is that of seeds (27.3 %). Motive energy is progressively increasing its incidence on the total, reaching a share of 14%.

The trend of price ratios for products purchased by farmers during 2018 highlights a certain variability especially for energy and feed. The prices of energy products in particular rose by more than 9% from the previous year and feed prices by 4%.

Intermediate consumption of the agriculture branch constitutes a 96% share of the total consumption of the primary sector which includes forestry, fishing and aquaculture. For these last two branches, there is an increase in current values, +1% for forestry and +4.3% for fishing. For the former, the increase was determined by quantities (+0.7%) while

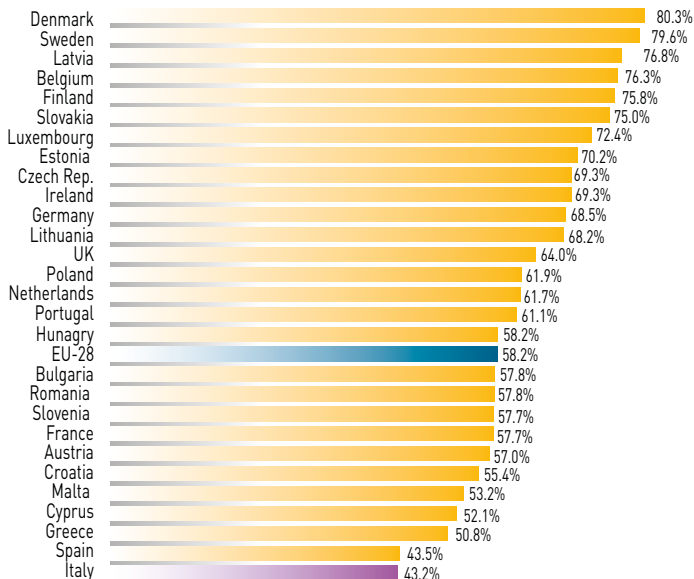
for fishing, prices have had the greatest impact (+3.2%).

In 2018, Italy was confirmed as the European country with the lowest share of intermediate consumption compared to the total value of agricultural production, due to its agricultural production variety and to the presence of activities that require less use of technical resources.

Almost all EU countries have seen an increase of intermediate consumption share on production compared to 2017, with deviations that in several cases exceeded 5% while the rate in Italy was 1%.

In the European context too, the 4.4% growth of intermediate consumption at current value was mainly determined by price changes (+3.8%). The prices of energy products (+9.5%) and feed (+5.4%) are the ones that have increased the most.

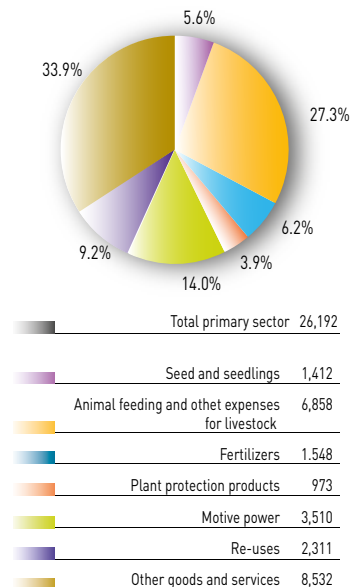
Intermediate consumption on the EU* agricultural output, 2018



*estimated value of the agricultural output of goods and services at basic prices and intermediate consumption measured at current prices.

Source: Eurostat.

Breakdown of the agricultural intermediate consumption (million euro at current values), 2018



Source: ISTAT.

WORK AND EMPLOYMENT

With 9.2 million people employed in 2018, around 4% of total employment, agriculture remains a good “employer” in the EU. This is an average value that hides a wide variation between countries: employment in the sector is particularly relevant in Romania, where it still represents 22% of employment, while it is very contained in Belgium (1%). Italy is in an intermediate position (3.8%).

In Italy, in 2018, employment in agriculture remained almost unchanged, but this result derives from opposite changes in the two components: employees and self-employed. The self-employed component remains relevant, especially if measured in terms of standard units, due to the specific factors that characterise the sector, such as the great working contribution of the owner, the often informal contribution of family members, as well as the incidence of work that is partly or completely undeclared.

Work units in the EU agriculture, 2018

	Total	% self-employed		Total	% self-employed
Austria	118.2	82.9	Luxembourg	3.4	67.6
Belgium	57.1	79.1	Malta	5.0	90.7
Bulgaria	220.0	69.5	Netherlands	147.4	54.1
Cyprus	22.0	64.5	Poland	1,675.8	89.7
Croatia	173.0	90.8	Portugal	244.7	66.3
Denmark	53.9	46.4	UK	295.1	65.8
Estonia	20.1	35.9	Czech Rep.	104.6	28.8
Finland	59.9	79.3	Romania	1,464.0	89.0
France	738.0	61.6	Slovakia	43.9	36.0
Germany	475.2	55.3	Slovenia	77.9	91.7
Greece	428.2	83.3	Spain	865.3	51.2
Ireland	160.7	91.8	Sweden	56.0	60.4
Italy	1,124.3	66.7	Hungary	404.9	68.4
Latvia	70.3	75.5			
Lithuania	147.9	72.5	EU - 28	9,256.8	73.5

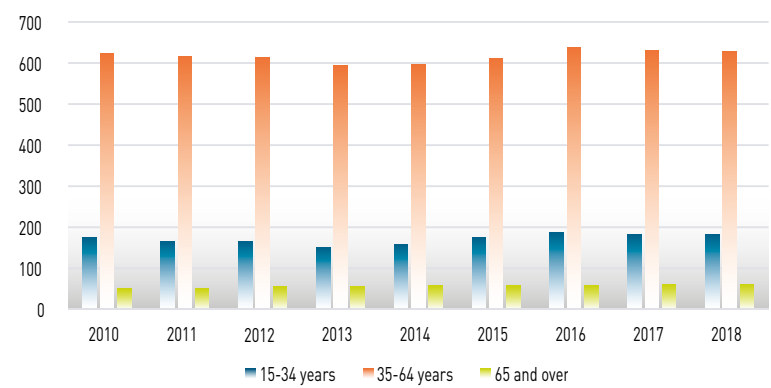
Source: EUROSTAT.

Work trend in agriculture, forestry and fishing (thousand)

		2015	2016	2017	2018
Employees	workers	444	463	469	477
	independent workers	470	474	452	450
	Total	913	937	921	927
Work units	workers	409	429	435	446
	independent workers	836	847	815	814
	Total	1,244	1,277	1,250	1,260

Source: ISTAT, National Accounting.

Employees per age class in agriculture, forestry and fishing (thousand)



Source: ISTAT, Labour Force Survey.

INVESTMENTS

The ISTAT series, which have been subject to a methodological review since 2019, show a significant increase in gross fixed investments in agriculture, forestry and fishing for 2018, of 4.2% in current values and 2.4% in linked values. A positive investment trend has already been observed since 2015, a sign of a growing climate of business confidence. The sums invested in 2018 amounted to

8,038 million current euro, most of which was destined for the purchase of plant and machinery (63.4%). This aggregate is also the one that achieved the highest percentage increase during the year analysed (+5.1%), but the performance of investments in rural buildings and for intangible assets is also interesting. The positive tone of investments can also be seen when observing some charac-

teristic sector reports. The investments expressed in work units, which in 2018 amounted to 6,381 euro, recorded an increase of 3.4% compared to 2017. Capital stock also showed encouraging trends, slowing down the negative changes that have taken place over the past few years. The reduction in 2018 was 0.9%, while in 2015 and 2016 they fell by 2.7% and 2.4%.

Trend in the gross fixed investments for agriculture, forestry and fishing

Year	Current values	Change previous year	Chained values*	% on ¹	
	mio. euro	%	mio. euro	tot. invest.	agricultural VA
2014	7,129	-	7,154	2.6	21.9
2015	7,207	1.1	7,207	2.6	21.1
2016	7,471	3.7	7,460	2.6	21.8
2017	7,714	3.3	7,555	2.5	23.0
2018	8,038	4.2	7,737	2.5	23.4

* Chained values, reference year 2015.

¹ Incidence chained values; agricultural VA at basic prices.

Source: ISTAT, National Accounting.

Type of investments in agriculture, forestry and fishing*

Year	Rural buildings	Change previous year	Installations, machineries and equipment	Change previous year	Organic resources cultivated	Change previous year	Products of intellectual property	Change previous year
	mio. euro	(%)	mio. euro	(%)	mio. euro	(%)	mio. euro	(%)
2014	1,803	-	4,614	-	631	-	81	-
2015	1,951	8.2	4,563	- 1.1	608	- 3.6	85	6.0
2016	2,115	8.4	4,668	2.3	616	1.3	72	- 15.6
2017	2,162	2.2	4,847	3.8	633	2.7	72	0.3
2018	2,234	3.3	5,093	5.1	636	0.5	74	2.8
% on total investments	27.8	-	63.4	-	7.9	-	0.9	-

* current values

Source: ISTAT.

Gross fixed investments: characteristic reports by main sectors, 2018*

	Agriculture, forestry and fishng	Manufacturing industry	Constructions	Services ¹	Total economic activities
Investments per work unit					
euro	6,381	19,466	4,664	12,104	12,976
% change 2018/17	3.4	3.4	6.8	2.7	2.9
Net capital stock per work unit ²					
euro	120,452	140,908	38,991	279,929	245,400
% change 2018/17	-1.7	0.7	1.1	0.0	-0.1

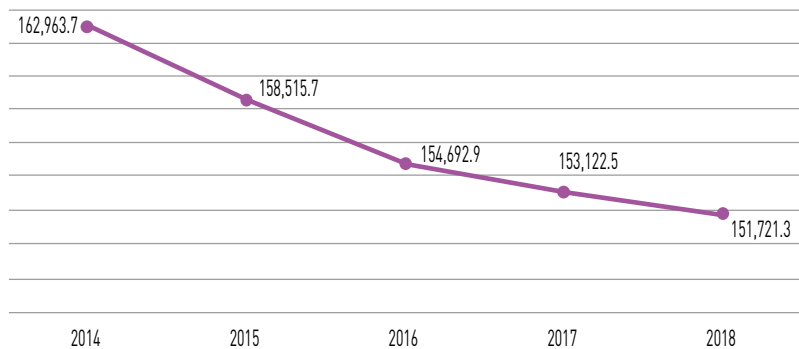
* Current values

² Net of depreciation

¹ Investments in housing included.

Source: ISTAT.

Trend of the capital stock net of depreciation (million euro, current value)



Source: ISTAT.

The contraction in credit granted to the agricultural sector continued and even worsened: in 2018 the amounts went from 42,920 million euro at the end of 2017 to 41,224 million euro the following December, slowing down at a rate of 3.9%, compared to 1.2% registered in 2017. In comparison with 2017, the ratio between loans and production value dropped from 74% to 69.6%, while the incidence between loans and value added went from 129.9 to 124.7%. However, banks' limiting the finance on offer has affected all production

sectors, leaving the incidence of loans for agriculture on the rest of the economy unchanged.

Looking at the regions in detail, it is clear that credit contraction has been greatest in the central and southern areas. Central regions recorded drops of 7.6%, the South and the Islands of 5.5% and 8.8%.

A more encouraging sign was the increase in the incidence of loans for investments compared to those aimed at the day-to-day management of businesses. In fact, although an absolute value reduction of

medium and long-term loans continues to be evident, -1.4% (2.5% in 2017), the ratio between this type of loan and total loans granted to agriculture rose from 27 to 28%. Reduction in medium-long term debt in absolute terms mainly concerned loans intended for the purchase of machines and tools and for rural buildings and constructions, the values of which decreased by 2.8% and 2.4% respectively; other rural properties, on the other hand, increased by 2.7%. As regards long-term loans, there is a territorial imbalance with the regions of Northern Italy holding 61% of the national total. However, the trends indicate a recovery of 2.6% in the Southern area.

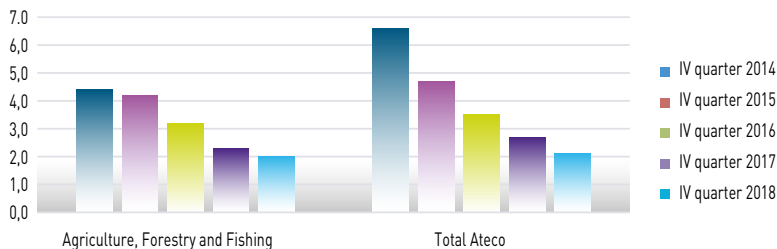
The quality of agricultural credit, as well as that of the entire economy, has improved slightly, continuing the decreasing trend in the flow of impaired loans. The rate of decay, i.e. the number of new loans that become bad debts with regard to the loan stock, went from 2.4% at the end of 2017 to 2% in the same quarter of 2018.

Loans to agriculture beyond the short term, consistencies - dec 2018

Description	Italy (million euro)	2017/2018 (%)
Machines and Equipment	4,384	-2.8
Constructions and rural buildings	4,292	-2.4
Other rural buildings	2,771	2.7
Total	11,447	-1.4
North-West	3,169	-3.2
North-East	3,777	0.0
Centre	2,213	-3.8
South	1,569	2.6
Islands	719	0.8

Source: Bank of Italy.

Annual decay rate of loans - rectified default: used



Source: Bank of Italy.

Bank loans to agriculture, forestry and fishing - Dec 2018

	Agriculture (million euro)	% changes-previous year	% on total agricultural financing	% on total economy financing	% on the value of agricultural output ¹	% on the agricultural value added ²
North-West	11,555	-3.4	28.0	4.1	92.3	190.2
North-East	14,801	-0.9	35.9	7.5	87.2	164.9
Centre	7,553	-7.6	18.3	4.5	86.6	144.2
South	4,714	-5.5	11.4	6.2	33.8	56.8
Islands	2,602	-8.8	6.3	8.4	36.7	58.1
Total	41,224	-3.9	100.0	5.4	69.6	124.7

¹Output at basic prices of agriculture, forestry and fishing expressed at current values.

²Value added of agriculture, forestry and fishing at current values.

Source: Bank of Italy and ISTAT.



ECONOMIC RESULTS OF AGRICULTURAL HOLDINGS

PRODUCTION AND INCOME

In 2017, the total revenues of Italian FADN companies amounted, on average, to 66,755 euro, while the net income, that is the part that remains for the entrepreneur and their family once the explicit costs incurred for the business activity have been deducted, is 26,158 euro and constitutes 39% of business revenues.

Higher economic values were recorded in the northern regions, attributable to a greater presence of intensive farms and industrial type livestock enterprises. Southern companies, although recording lower values on average, are generally more efficient in terms of net income on company revenues. Ongoing costs and

higher corporate expenses make up, on average, 39% of company revenues, multi-year costs (depreciation and provisions) 8% while distributed income (wages, social security contributions and passive rents) make up 15%. Regional differences are mainly justified by the different regional specialisations.

Structural data and main economic results by district, farm averages 2017

	UAA	ALU	WU	FWU	GSP	current costs	Long-term costs	Distributed incomes	Off-farm management	Net income
	ha	n.			euro					
Piedmont	21.5	16.4	1.4	1.2	90,121	39,274	5,382	9,886	2,418	37,997
Aosta Valley	44.0	23.5	1.8	1.6	56,092	19,504	10,256	9,827	13,242	29,748
Lombardy	22.7	47.0	1.5	1.3	125,091	57,729	6,140	14,414	-2,040	44,767
Liguria	4.1	2.1	1.2	1.1	52,031	18,114	5,187	7,264	-420	21,046
Alto-Adige	8.6	8.2	1.6	1.2	79,359	25,115	10,568	12,571	208	31,313
Trentino	5.8	3.4	1.1	1.0	55,396	17,915	6,013	5,884	7,980	33,564
Veneto	12.8	9.1	1.3	1.1	89,358	36,604	7,089	10,005	-415	35,245
Friuli Venezia Giulia	16.6	9.1	1.5	1.2	96,650	39,671	8,149	11,750	672	37,752
Emilia-Romagna	25.4	16.3	1.4	1.1	111,544	50,357	6,106	16,105	-1,483	37,493
Tuscany	21.0	5.3	1.6	1.3	74,225	30,735	8,970	13,463	405	21,462
Umbria	23.3	8.9	1.2	0.9	52,537	22,126	4,643	9,475	4,765	21,059
Marche	23.5	4.4	1.2	1.1	53,540	22,055	4,969	7,528	1,113	20,100
Lazio	18.5	9.2	1.4	1.0	63,409	22,075	6,889	11,142	2,095	25,398
Abruzzo	13.2	4.1	1.3	1.2	38,283	13,331	3,928	6,326	522	15,220
Molise	19.6	7.4	1.3	1.2	42,684	16,776	4,553	5,483	1,890	17,762
Campania	11.6	9.9	1.2	0.9	48,304	16,216	4,063	7,839	556	20,741
Apulia	15.3	2.3	1.2	0.8	52,953	18,609	4,060	10,006	108	20,386
Basilicata	28.4	6.9	1.5	1.0	55,776	19,978	4,462	10,689	1,110	21,756
Calabria	9.4	2.4	1.4	1.0	39,338	10,103	3,971	8,634	3,410	20,040
Sicily	17.1	5.5	1.1	0.8	42,894	14,248	4,384	8,198	1,779	17,844
Sardinia	39.6	17.9	1.1	1.0	45,200	18,169	4,512	6,106	3,120	19,534
Italy	18.2	10.5	1.3	1.0	66,755	26,168	5,439	10,035	1,045	26,158

Source: FADN.

Structural and economic indicators by district, 2017

	GSP/ha	GSP/ALU	GSP/WU	NI/FWU	NI/GSP (%)	NI/ha	NI/ALU
Piedmont	4,200	5,487	63,927	30,552	42	1,771	2,314
Aosta Valley	1,276	2,382	30,428	19,155	53	676	1,263
Lombardy	5,513	2,659	84,953	34,170	36	1,973	952
Liguria	12,647	25,208	42,126	19,811	40	5,116	10,196
Alto-Adige	9,196	9,622	49,984	25,696	39	3,628	3,796
Trentino	9,485	16,213	48,712	32,028	61	5,747	9,823
Veneto	6,962	9,767	69,621	31,366	39	2,746	3,852
Friuli Venezia Giulia	5,810	10,672	65,525	30,945	39	2,269	4,169
Emilia-Romagna	4,397	6,848	78,347	34,157	34	1,478	2,302
Tuscany	3,528	14,037	45,315	16,895	29	1,020	4,059
Umbria	2,251	5,925	45,246	22,759	40	902	2,375
Marche	2,275	12,055	43,407	17,608	38	854	4,526
Lazio	3,424	6,886	46,947	24,802	40	1,372	2,758
Abruzzo	2,908	9,445	29,400	13,026	40	1,156	3,755
Molise	2,179	5,741	32,978	15,098	42	907	2,389
Campania	4,178	4,858	39,476	22,348	43	1,794	2,086
Apulia	3,457	23,513	44,591	27,055	38	1,331	9,052
Basilicata	1,961	8,076	36,956	21,037	39	765	3,150
Calabria	4,165	16,180	28,485	20,598	51	2,122	8,242
Sicily	2,506	7,865	39,133	23,083	42	1,043	3,272
Sardinia	1,141	2,520	41,315	19,876	43	493	1,089
Italy	3,669	6,373	51,229	25,542	39	1,438	2,497

Source: FADN.

Structural data and main economic results by TF, farm averages 2017

		UAA	ALU	WU	FWU	GSP	Current costs	Long-term costs	Distributed incomes	off-farm management	Net income
		ha	n.					euro			
Vegetable TF	Cereals	28.6	0.1	1.0	0.9	49,388	23,468	4,287	7,102	146	14,677
	Horticulture	2.8	0.1	2.1	1.3	99,246	42,277	5,386	18,696	-1,494	31,392
	Fruit	7.9	0.1	1.3	0.9	55,452	16,414	4,889	10,384	1,700	25,465
	Wine	8.2	0.1	1.2	0.9	57,052	17,225	5,343	8,537	687	26,634
	Olives	11.1	0.1	1.2	0.9	41,855	11,511	3,518	8,865	2,878	20,838
Livestock TF	Dairy cattle	28.4	64.6	1.7	1.5	161,025	70,345	11,454	14,644	2,677	67,259
	Goats and sheep	42.5	26.5	1.2	1.1	44,365	15,648	5,199	6,147	4,434	21,805
	Mixed cattle	34.9	38.3	1.3	1.2	70,469	33,495	6,127	7,711	2,092	25,228
	Granivorous	18.2	187.1	2.1	1.6	307,697	183,885	12,094	22,505	-10,246	78,966
	Mixed livestock	24.5	30.1	1.3	1.2	60,654	28,953	7,344	7,199	-30	17,128
Mixed cultures and breedings		20.6	14.0	1.3	1.2	53,881	22,753	5,322	7,819	1,936	19,924

Source: FADN.

Structural and economic indicators by TF, 2017

		GSP/ha	GSP/ALU	GSP/WU	NI/FWU	NI/GSP (%)	NI/ha	NI/ALU
Vegetable TF	Cereals	1.724	434.029	49.535	15.522	30	512	128.982
	Horticulture	35.700	747.487	47.857	23.828	32	11.292	236.437
	Fruit	7.046	796.556	42.157	27.286	46	3.236	365.793
	Wine	6.948	658.580	47.847	29.354	47	3.243	307.446
	Olives	3.779	555.532	34.147	24.397	50	1.881	276.583
Livestock TF	Dairy cattle	5.671	2.492	92.584	44.994	42	2.369	1.041
	Goats and sheep	1.044	1.674	35.760	19.128	49	513	823
	Mixed cattle	2.021	1.841	55.469	21.439	36	724	659
	Granivorous	16.872	1.645	148.420	49.796	26	4.330	422
	Mixed livestock	2.471	2.018	48.008	14.548	28	698	570
	Mixed cultures and breedings	2.619	3.855	40.887	17.027	37	969	1.425

Source: FADN.

ARABLE PRODUCTION TENDENCIES

Among the main arable production systems, horticulture, characterised by very small surface areas with a high use of manpower, has on average the highest production values as well as the highest productivity and land profitability. Farms producing fruit and wine obtain better remuneration for family work and

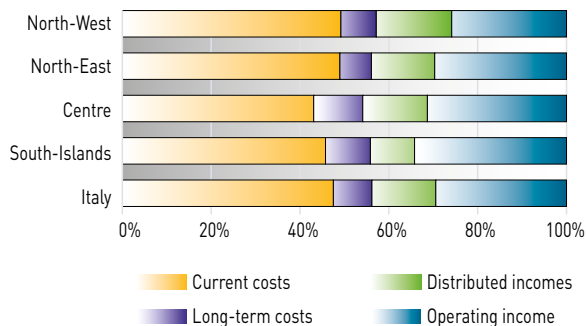
are more efficient in terms of income on revenues. At the regional level, fruit crops show the best results in the North-East and wineries in the North-West. The cereal sector, characterised by large surface areas and a high incidence of family work on the overall work done (95% against 78% of the national average),

recorded low land productivity and remuneration of family work, while labour productivity is greater than in the other arable sectors. Olive farms, even if they provide limited financial results, manage to translate 50% of their revenues into income.

Structural and economic data by district, specialist cereal TF: 2017

	UAA ha	WU n.	GSP/ha euro	GSP/WU euro	NI/FWU
North-West	32.9	1.4	2,346	55,859	15,361
North-East	20.8	0.8	1,885	49,720	13,490
Centre	30.6	1.1	1,380	40,168	13,625
South-Islands	31.8	0.8	1,238	46,738	19,130

Farms specialising in cereals: % breakdown of the GSP, 2017

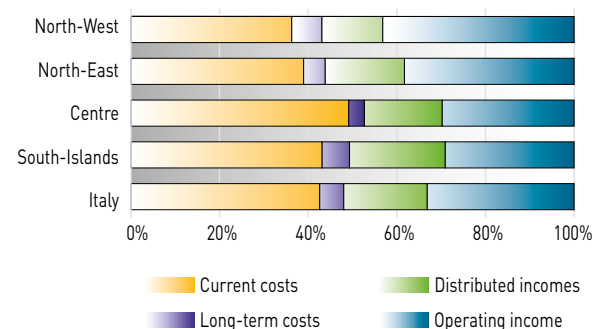


Source: FADN.

Structural and economic data by district, specialist horticulture TF: 2017

	UAA ha	WU n.	GSP/ha euro	GSP/WU euro	NI/FWU
North-West	1.8	1.4	29,244	37,898	17,605
North-East	4.0	2.6	36,382	55,918	29,097
Centre	3.1	2.2	41,727	59,808	25,939
South-Islands	2.8	2.3	35,386	44,194	24,165

Farms specialising in horticulture: % breakdown of the GSP, 2017

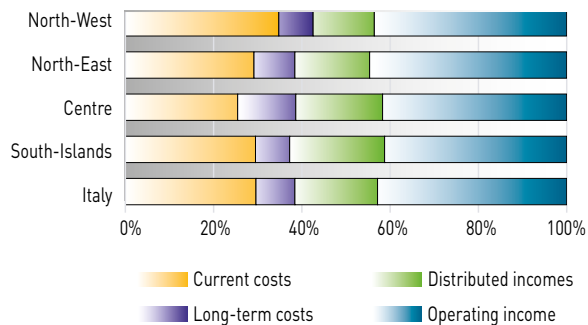


Source: FADN.

Structural and economic data by district: specialist fruit TF: 2017

	UAA ha	WU n.	GSP/ha euro	GSP/WU euro	NI/FWU
North-West	8.1	1.3	8,806	54,414	31,839
North-East	7.8	1.6	11,270	54,130	36,054
Centre	10.5	1.3	4,881	38,716	23,123
South-Islands	7.4	1.2	5,412	33,848	21,891

Farms specialising in fruit: % breakdown of the GSP, 2017

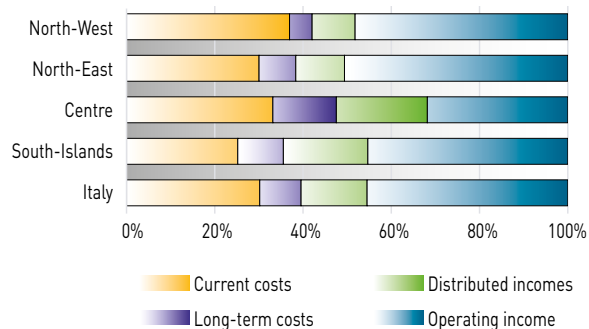


Source: FADN.

Structural and economic data by district, specialist wine TF: 2017

	UAA ha	WU n.	GSP/ha euro	GSP/WU euro	NI/FWU
North-West	8.4	1.5	11,280	64,379	41,509
North-East	6.9	1.2	10,312	59,576	35,247
Centre	14.2	1.6	5,595	49,028	23,996
South-Islands	7.5	1.0	4,852	35,262	22,590

Farms specialising in wine: % breakdown of the GSP, 2017

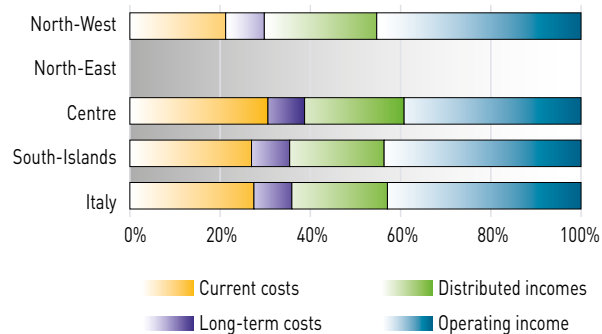


Source: FADN.

Structural and economic data by district, specialist olive-growing TF: 2017

	UAA	WU	GSP/ha	GSP/WU	NI/FWU
	ha	n.	euro		
North-West	5.8	1.4	9,333	37,763	24,419
Centre	13.4	1.4	4,191	40,661	23,538
South-Islands	10.8	1.2	3,664	32,980	24,548

Farms specialising in olive-growing: % breakdown of the GSP, 2017



Source: FADN.

LIVESTOCK PRODUCTION TENDENCIES

Large and intensive farms specialising in granivores achieve, on average, financial results decidedly superior to other livestock sectors. The total costs incurred by these companies are also very high and account for more than 70% of company revenues, limiting the part of turnover which translates into income (26%).

Farms specialising in dairy cattle follow at a distance, with regard to productivity and profitable results, with an average herd of 65 LU, about a third of that of granivores. Both granivores and dairy cattle farms recorded the best performances in the North-West, where farm livestock consistency is greater. Farms specialised in the breeding of

mixed cattle, i.e. meat and milk, show lower livestock density and financial results than dairy cattle farms. The profitability of family work, in particular, is about half. The sheep and goat sector, characterised by extensive farms located mainly in the Centre and South, especially in Sardinia, achieves a modest average turnover and income.

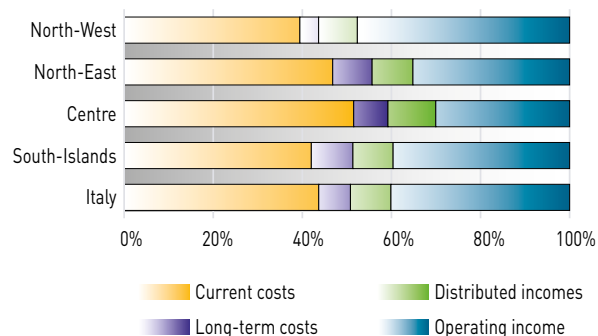
Structural and economic data by district, specialist dairying TF: 2017

	UAA	ALU	WU	GSP/HA	GSP/ALU	GSP/WU	NI/FWU
	ha	n.		euro			
North-West	42.9	88.6	1.9	5,306	2,567	120,437	66,048
North-East	22.5	51.8	1.7	6,488	2,820	87,335	37,898
Centre	37.2	74.2	2.2	5,727	2,866	97,754	45,854
South-Islands	21.1	58.9	1.6	4,957	1,778	65,805	30,909

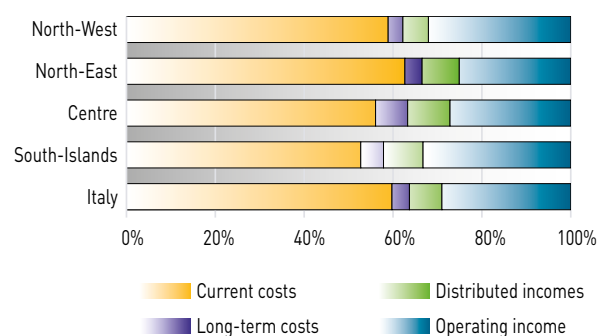
Structural and economic data by district, specialist granivorous TF: 2017

	UAA	ALU	WU	GSP/HA	GSP/ALU	GSP/WU	NI/FWU
	ha	n.		euro			
North-West	23.4	325.5	2.2	18,011	1,297	194,294	64,139
North-East	17.6	169.8	2.4	21,214	2,193	157,782	50,246
Centre	16.2	93.0	1.7	8,801	1,538	86,518	31,013
South-Islands	12.5	57.5	1.7	10,012	2,170	73,186	28,437

Farms specialising in cattle dairying: % breakdown of the GSP, 2017



Farms specialising in granivorous: % breakdown of the GSP, 2017



Source: FADN.

Source: FADN.

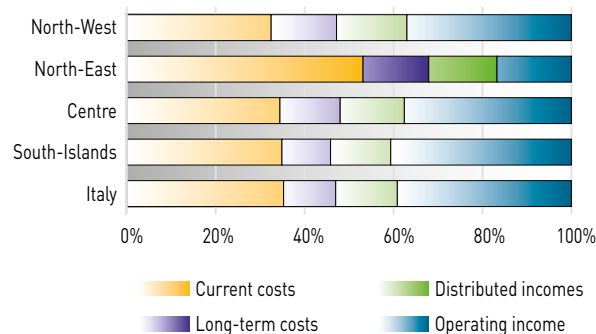
Structural and economic data by district, specialist goats and sheep TF: 2017

	UAA	ALU	WU	GSP/HA	GSP/ALU	GSP/WU	NI/FWU
	ha	n.		euro			
North-West	28.5	16.9	1.3	1,010	1,709	22,322	12,337
North-East	13.5	10.0	1.1	2,062	2,778	24,358	6,440
Centre	33.8	28.1	1.4	1,598	1,919	38,761	20,615
South-Islands	47.6	28.1	1.2	940	1,593	36,978	20,267

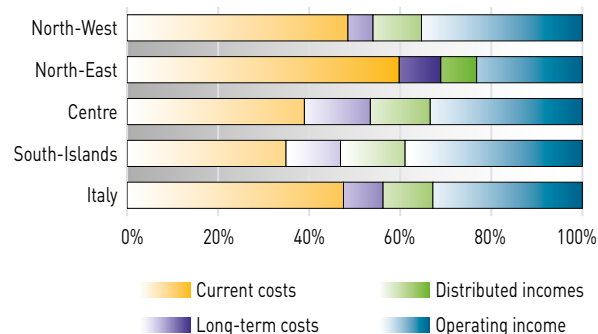
Structural and economic data by district, specialist mixed cattle TF: 2017

	UAA	ALU	WU	GSP/HA	GSP/ALU	GSP/WU	NI/FWU
	ha	n.		euro			
North-West	27.7	53.3	1.4	3,499	1,821	70,329	27,327
North-East	20.2	31.2	1.4	5,427	3,524	78,607	20,738
Centre	32.4	27.2	1.3	1,578	1,881	40,191	19,447
South-Islands	47.3	33.0	1.1	831	1,192	34,758	16,916

Farms specialising in goats and sheep: % breakdown of the GSP, 2017



Farms specialising in mixed cattle: % breakdown of the GSP, 2017



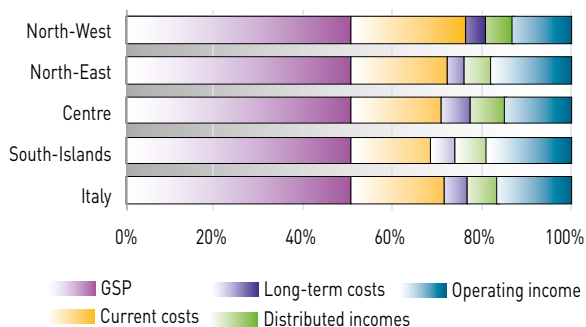
Source: FADN.

Source: FADN.

Structural and economic data by district, specialist mixed culture and breedings TF: 2017

	UAA	ALU	WU	GSP/HA	GSP/ALU	GSP/WU	NI/FWU
	ha	n.		euro			
North-West	16.4	16.0	1.2	3,531	3,629	48,798	14,543
North-East	16.4	19.7	1.6	5,498	4,579	56,814	23,960
Centre	23.0	12.9	1.3	2,212	3,955	37,764	15,489
South-Islands	23.0	11.2	1.3	1,668	3,423	30,719	15,381

Farms specialising in mixed culture and breedings: % breakdown of the GSP, 2017



Source: FADN.

ITALIAN AGRICULTURE IN THE EUROPEAN CONTEXT

Using the FADN, it is possible to compare the economic performances of the farms of different EU countries for each production sector, while keeping in mind the great differences that exist with regard to production factors and agro-climatic contexts. The comparison presented here relates to the three-year period 2015-2017¹.

Italian companies specialising in the livestock sector achieved excellent performance in terms of land productivity and profitability, adult livestock and work factors, in line with companies in European countries with more advanced agriculture. The economic results of the arable systems are, however, conditioned by a structure, in terms of surface area and work units, that is small compared to other countries.

In the dairy cattle sector, Italian com-

panies in the sector, characterised by a livestock consistency above the EU average (85 LU against 69 EU) and by medium-intensive farms, rank first in terms of land profitability factors, livestock units and family work units and are preceded only by Holland for land productivity.

In mixed cattle farming too, Italian companies achieve good results and rank first in terms of profitability of the production factors considered and among the first in terms of land and livestock productivity. Dutch companies, characterised by highly intensive farms, are the ones that have the highest labour productivity, significantly out distancing other countries.

Italy also achieves excellent production and profitable performance, including in granivore farming, well above the Euro-

pean average, with the exception of LU productivity.

Generally of an extensive nature, sheep and goat farms achieve economic results that are on average lower than other livestock sectors. In this area of specialisation too, Italy ranks at the top for productivity and profitability of production factors.

With regard to crop cultivation, Italian farms specialising in cereal cultivation manage on average surface areas of modest size (31 hectares against 69 EU) which limits their production results but allows them to reach first place for land profitability.

The Netherlands holds first place for productivity and profitability of the land and labour factors in horticultural farms ranking, Italy comes in second place but with decidedly more contained values.

¹ For livestock systems, countries with an LU share greater than 1% compared to LUs farmed by the total number of European farms specialised in the sector were considered. With regard to plant regulations for each sector, the countries with a UAA share greater than 1% compared to UAAs managed by the total number of European farms specialised in the sector were considered.

In the fruit sector, the best production results are achieved by Germany, the United Kingdom and France. Italy, nevertheless, achieves land and labour productivity and profitability values above the European average. Among farms specialising in viticulture,

the French and Germans have achieved the best economic performance: France is first for labour productivity, with a value that is almost double that of Italy, and for family labour remuneration; while Germany achieves first place for land productivity and profitability.

In the olive sector, Italian companies report the best production and income results in relation to the land factor, while with regard to the labour factor, the Spanish and Portuguese, characterised by large farm sizes in terms of UAA, obtain the highest values.

Farms specialising in dairy cattle: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/ALU	GP/TWUs	NI/ha	NI/ALU	NI/FWU
Austria	2,947	2,416	41,375	898	736	12,825
Belgium	3,922	1,777	119,513	1,032	468	32,248
Bulgaria	1,791	902	10,560	851	429	7,119
Denmark	5,229	3,159	282,776	288	174	37,881
Finland	2,617	3,321	84,159	437	554	16,685
France	2,121	1,815	104,516	355	304	19,884
Germany	3,187	2,171	116,509	659	449	32,627
Ireland	3,135	1,514	114,621	1,231	595	52,303
Italy	6,495	2,536	115,060	2,703	1,055	58,721
Netherlands	6,701	2,656	189,994	1,013	402	33,615
Poland	1,635	1,372	19,368	702	589	8,520
UK	3,779	1,967	152,855	514	267	35,516
Romania	2,011	1,643	8,996	1,132	925	5,256
Spain	4,839	2,011	84,459	1,433	596	31,278
Sweden	2,960	3,200	169,857	428	463	36,193
EU-28	2,973	2,071	62,174	717	499	17,679

Farms specialising in mixed cattle: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/ALU	GP/TWUs	NI/ha	NI/ALU	NI/FWU
Austria	1,730	1,999	33,073	489	565	9,575
Belgium	2,273	1,117	79,593	530	260	18,961
France	983	861	73,372	228	199	18,344
Germany	1,730	1,477	84,759	298	254	17,230
Ireland	915	771	36,734	386	325	15,959
Italy	1,987	1,452	58,328	982	718	31,640
Netherlands	6,334	1,255	113,466	768	152	15,264
Poland	770	910	9,574	304	359	3,950
Portugal	402	668	15,830	335	557	14,920
UK	1,127	980	82,122	157	137	13,625
Czech Rep.	490	1,019	23,631	206	429	20,624
Romania	1,425	1,094	7,122	727	558	3,818
Spain	767	885	39,914	339	391	20,133
Sweden	1,330	2,293	94,896	179	309	14,082
EU-28	1,140	1,067	42,698	338	317	14,023

Source: FADN

Farms specialising in granovorous: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/ALU	GP/TWUs	NI/ha	NI/ALU	NI/FWU
Austria	6,623	1,905	128,626	1,617	465	32,506
Belgium	26,192	1,114	407,738	4,765	203	76,799
Bulgaria	19,589	1,260	48,169	4,169	268	39,412
Denmark	7,642	1,467	357,885	577	111	91,343
France	8,577	998	209,603	926	108	31,698
Germany	6,072	1,458	207,399	773	186	39,934
Italy	17,661	732	199,851	6,979	289	110,358
Netherlands	96,092	1,314	436,614	11,261	154	74,718
Poland	5,314	1,336	71,337	1,149	289	21,698
UK	15,386	1,037	232,627	1,435	97	70,037
Romania	11,182	1,222	28,097	3,493	382	16,120
Spain	10,830	683	137,944	3,393	214	69,771
Sweden	5,477	1,112	245,016	644	131	59,228
Hungary	12,124	1,332	90,598	1,131	124	34,779
EU-28	9,492	1,092	158,601	1,619	186	45,976

Farms specialising in goats and sheep: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/ALU	GP/TWUs	NI/ha	NI/ALU	NI/FWU
Bulgaria	972	716	5,449	728	536	5,432
France	1,153	1,718	61,404	263	391	15,985
Germany	1,432	2,437	67,056	414	704	26,628
Greece	1,930	1,198	23,750	1,085	673	15,861
Ireland	493	648	24,283	218	287	10,994
Italy	1,088	1,648	42,204	610	924	26,051
Portugal	381	744	10,226	354	692	11,024
UK	459	791	73,418	114	196	22,204
Romania	1,862	1,058	10,487	761	433	4,576
Spain	1,071	1,378	50,222	487	627	28,886
EU-28	963	1,220	27,723	379	481	12,504

Source: FADN

Farms specialising in cereals: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/TWUs	NI/ha	NI/FWU
Austria	1,457	74,191	481	25,794
Bulgaria	717	38,715	84	32,698
Denmark	2,224	185,703	48	6,461
Finland	645	67,146	67	7,231
France	1,118	101,909	83	8,492
Germany	1,294	121,464	173	25,374
Italy	1,349	41,839	634	20,968
Latvia	719	56,717	163	24,956
Lithuania	714	39,531	220	16,655
Poland	828	17,979	238	5,731
UK	1,316	138,570	171	28,761
Czech Rep.	1,013	65,924	160	25,888
Romania	724	27,294	262	13,907
Slovakia	959	60,043	41	19,058
Spain	563	41,749	240	20,241
Sweden	1,271	137,734	50	7,422
Hungary	1,025	59,538	340	42,539
EU-28	971	51,928	207	15,005

Farms specialising in horticulture: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/TWUs	NI/ha	NI/FWU
Belgium	43,312	101,650	8,776	54,497
Bulgaria	11,020	9,261	1,765	3,218
Denmark	50,820	123,416	3,232	70,395
Finland	32,692	91,238	3,365	31,507
France	32,604	71,406	5,870	35,603
Germany	45,141	71,965	6,710	42,208
Greece	22,156	25,241	7,064	14,760
Italy	29,862	55,979	10,611	33,952
Netherlands	95,696	145,730	15,417	110,049
Poland	10,549	22,417	3,087	11,269
Portugal	10,317	21,716	3,634	11,723
UK	45,257	69,173	3,077	34,993
Romania	6,515	6,292	1,328	1,510
Spain	17,166	46,747	6,516	50,302
Hungary	11,493	33,740	3,149	30,477
EU-28	29,625	59,137	6,414	31,273

Source: FADN

Farms specialising in fruit: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/TWUs	NI/ha	NI/FWU
Bulgaria	1,760	6,352	743	5,557
France	8,627	50,916	1,799	34,182
Germany	10,311	55,434	2,223	32,131
Greece	5,379	21,370	2,439	12,845
Italy	7,008	41,352	3,425	29,978
Poland	2,714	12,574	890	5,945
Portugal	3,927	17,223	2,095	13,324
UK	9,216	63,112	685	41,247
Romania	2,972	9,275	1,401	5,277
Spain	3,596	39,629	1,721	39,152
Hungary	2,358	19,019	1,033	21,969
EU-28	4,915	31,509	1,897	20,740

Farms specialising in olive-growing: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/TWUs	NI/ha	NI/FWU
Croatia	3,122	9,068	-999	-3,565
Greece	2,299	14,342	1,241	9,280
Italy	2,642	30,116	1,629	29,179
Portugal	991	31,138	716	48,565
Spain	1,855	38,069	1,123	40,902
EU-28	2,062	27,116	1,208	23,239

Source: FADN

Farms specialising in wine-growing: average farm results in euro (three-year period 2015-2017)

	GP/ha	GP/TWUs	NI/ha	NI/FWU
Austria	6,296	47,914	2,012	19,038
Bulgaria	2,143	13,075	541	45,335
Croatia	5,770	13,642	1,603	5,146
France	9,589	85,148	2,471	47,319
Germany	11,976	62,197	4,177	32,676
Greece	3,275	20,024	1,509	11,528
Italy	6,490	48,537	3,315	32,338
Portugal	3,730	22,056	1,649	15,617
Romania	4,286	17,410	2,030	17,109
Spain	1,898	31,575	1,025	25,075
Hungary	5,226	25,263	1,443	22,644
EU-28	6,311	54,359	2,275	31,758



FOOD INDUSTRY

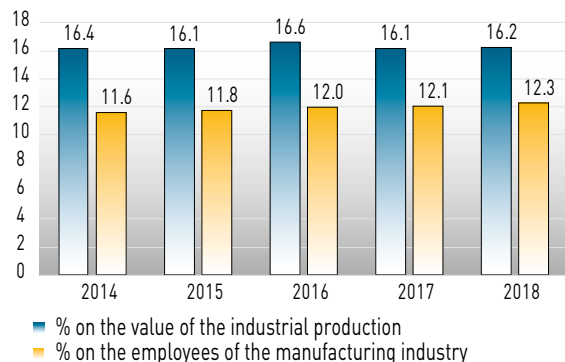
PRODUCTION

The food beverage and tobacco industry play a fundamental role within the national manufacturing sector. In 2018, the sector represented around 16% of the value of production and 12% of employment. Compared to 2017, employees increased by around 3%, reaching around 484,000 units while the value of produc-

tion fell by 5.4% to 113.7 billion euro. Food represents 84% of the value of the sector and, compared to 2017, it fell by 5.7% after the growth trend of the last four years. This negative performance is attributable to all sectors except for the production of vegetable and animal oils and fats (+ 24%) and for the production

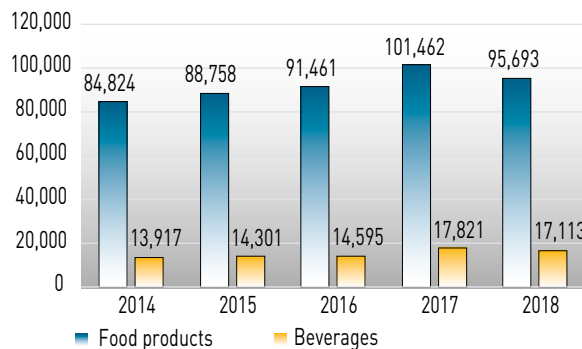
of animal feed products (+19.4%). The value of beverage production decreased by 4% compared to 2017. Alcohol (-8.5%) and wines (-2.2%) registered negative results, whereas the beer sector was particularly dynamic, with a 14% increase in the value of production.

Incidence of the food, beverage and tobacco industries on total industrial sector [%]



Source: ISTAT, Industry and National Accounting.

Trend of the production value (thousand euros)



Source: ISTAT.

Production sold and incidence of each single sector in 2018

	Production sold (thousand euros)	Incidence on the total [%]	% change 2018/2017
Food products	95,693	84.8	-5.7
Processing and preservation of meat and production of meat-based products	21,769	19.3	-2.9
Processing and preservation of fish, shelfishes and molluscs	1,453	1.3	-9.3
Processing and preservation of fruit and vegetables	10,079	8.9	-11.5
Production of oils and vegetable and animal fats	6,120	5.4	24.1
Dairy industry	14,975	13.3	0.0
Processing of grains, production of starches and starch products La	5,154	4.6	-12.8
Production of bakery products and flour-based products	13,770	12.2	-10.7
Other food products	15,425	13.7	-17.6
Animal feeding	6,719	6.0	19.4
Tobacco	5	0.0	nd
Beverages	17,113	15.2	-4.0
Distilling, rectifying and blending of spirits	1,361	1.2	-8.5
Production of wines from grape	8,211	7.3	-2.2
Production of cider	52	0.0	11.0
Production of other non-distilled fermented beverages	173	0.2	-18.2
Beer	2,229	2.0	13.8
Soft drinks, mineral waters and other bottled waters	5,087	4.5	-11.1
Total food and beverages	112,806	100.0	-5.43

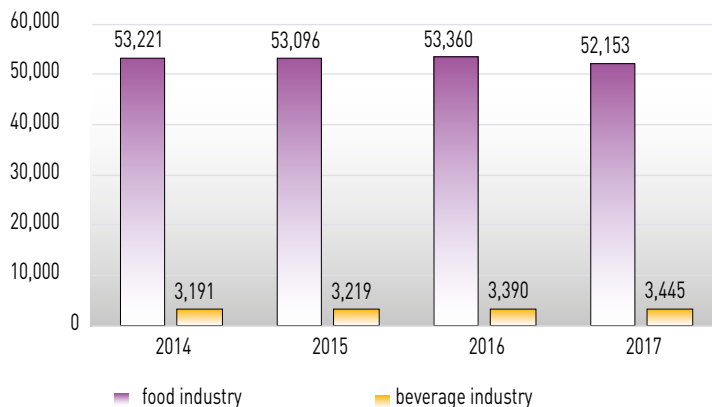
Source: ISTAT.

COMPANIES AND DISTRIBUTION SERVICES IN ITALY

According to the latest available data for 2017, companies in the food beverage and tobacco industries represent 14.6% of companies in the manufacturing sector. These decreased by 1.5% and slightly less those of drinks (-1.2%).

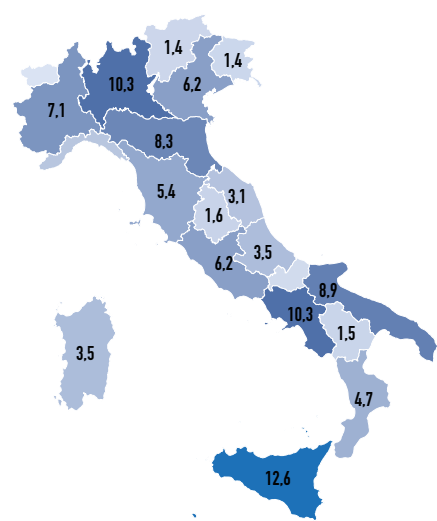
37.4% of food and beverage companies are located in the north of the country, 30% in the south and around 16% in the islands. Lombardy, Campania and Sicily are the regions with the highest percentage of companies in the sector. The specialisation index, measured at regional level using the weighting of employees on the entire manufacturing sector, is higher in the South and Islands than in Northern Italy.

Number of active companies 2014-2017



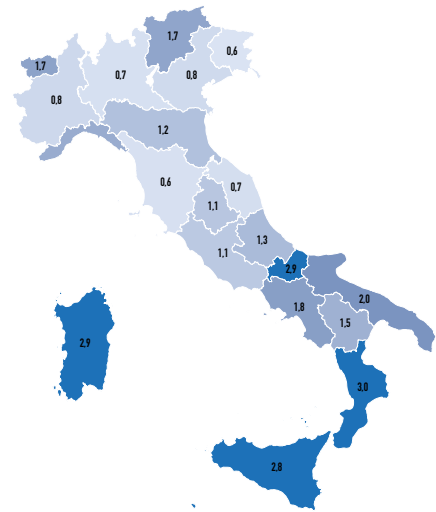
Source: ISTAT.

Regional breakdown of the food and beverage industry per region, 2017 (%)



Source: ISTAT.

The specialisation of the food and beverage industry

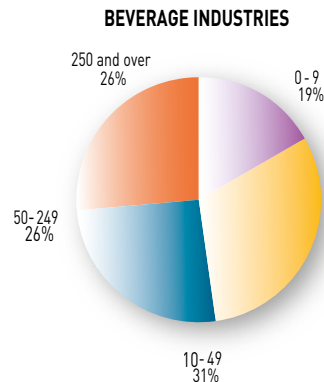
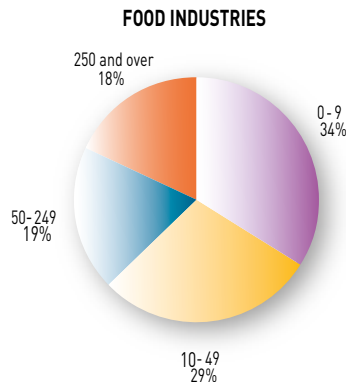


Source: ISTAT.

WORK FORCE

The sector recorded an average of 8 employees per company. In particular, 34% of companies in the food industry have up to 9 employees, however the size of the companies in the beverage industry is larger. The average company size showed a marked regional variation: from a minimum of 3.7 employees per company in Calabria to a maximum of 13.8 employees in Emilia-Romagna.

Employees by size class, 2017



Source: ISTAT.

COMPARISON WITH THE EU 28

The Italian food industry represents around 11% of the value added of the Union food industry and absorbs 9.5% of employees. Italy represents around 20%

of the companies followed by France (19.4%) and ranks third in terms of turnover, with a weighting of 11.6%, after Germany and France (18% and

17.5%). The Italian beverage sector accounts for 11.8% of turnover, 8.8% of employees and 12% of companies in the EU 28.

Main indicators of the food industry in the EU 28 countries, 2017

	Companies	Employees	Production value	Value added*	Turnover
	(.000 units)		(million euro)		
Austria	3,535	76,979	16,157	4,422	17,761
Belgium	6,720	88,917	41,780	6,781	44,693
Bulgaria	5,357	82,626	4,381	859	4,938
Cyprus	839	12098	1,266	342	1,477
Croatia	2,726	54,010	3,726	956	4,637
Denmark	1,474	52,987	21,167	nd	25,629
Estonia	640	13,377	1,486	327	1,676
Finland	1,634	34,850	nd	nd	9,499
France	51,288	618,868	149,283	34,386	178,559
Germany	21,498	814,397	168,816	36,626	183,270
Greece	15,309	111,039	11,152	2,790	13,342
Ireland	1,843	48,336	23,315	6,993	24,183
Italy	52,542	408,082	112,891	22,028	118,117
Latvia	1,055	21,265	1,493	322	1,624
Lithuania	1,541	38,111	3,552	726	3,772

	Companies	Employees	Production value	Value added*	Turnover
	(.000 units)		(million euro)		
Luxembourg	125	5,259	718	242	764
Malta	337	2,819	nd	nd	nd
Netherlands	5,924	125,464	65,546	10,981	70,773
Poland	14,436	404,096	49,790	9,734	55,091
Portugal	9,327	97,268	11,764	2,423	13,433
UK	8,035	413,529	87,990	nd	97,595
Czech Rep.	8,087	101,460	9,809	2,142	11,385
Romania	8,458	163,011	8,458	1,305	9,926
Slovakia	3,152	37,021	3,111	674	3,772
Slovenia	2,263	15,994	1,751	457	2,084
Spain	23,151	352,841	97,058	16,376	101,578
Sweden	3,868	57,513	14,798	3,472	17,198
Hungary	4,558	92,157	9,286	1,912	10,382
EU-28	264,157	4,289,108	913,597	nd	1,017,730

*at factor costs.

Source: Eurostat.



DOMESTIC MARKET AND FOREIGN DEMAND

Italian families spend an average of € 462 per month on food and drinks, that is to say 18% of total expenditure, with large gaps depending on the geographical location, the number of family members and the working status of the head of the family. In the South and Islands the incidence of food expenditure is 22.9% and 21.3% while the Northeast has the lowest value (16%).

Expenditure also decreases from small towns to metropolitan areas, from 19% to 15%. In terms of impact on total expenditure, it also decreases according

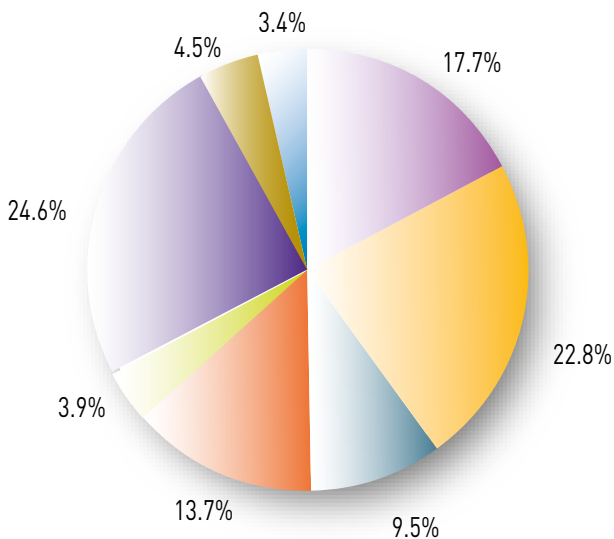
to the professional status of the head of the family, with values above 20% for manual workers and the unemployed and 14-15% for senior managers, executives, entrepreneurs and the self-employed. The latter are the ones that spend the most on accommodation and catering services. Consumption outside the home, which continues to expand, stands at 34% of total food consumption.

In addition to consumption styles, the composition of the basket of food items consumed has changed over time. From 2013 to 2018, the relative weight of meat

(-2.1%) and that of milk, cheese and eggs (-0.4%) decreased, while fruit and vegetables (+8.5%) increased dramatically and fish (+2% almost) and bread and cereals (+1.5%) rose moderately.

In 2018, according to the ISMEA-Nielsen survey, there was a marked slowdown compared to 2017 in the growth trend of household spending on food products (+0.3%), due to the increase in prices that affected sales volumes. Consumer packaged products were the driving force behind spending (+1.9%), while for bulk products spending decreased by 3.1%.

Average monthly family expenditure, 2018



AVERAGE MONTHLY EXPENDITURE 2.571,2

Bread and cereals	75.8
Meat	97.6
Fish and fish products	40.7
Milk, cheese and eggs	58.6
Oils and fats	16.6
Fruit and vegetables	105.4
Sugar, fruit jams, honey, cocoa and sweets	19.1
Coffee, tea and cocoa	14.6

Source: ISTAT.

DISTRIBUTION

In 2018, the number of specialised and non-specialised food sector businesses with a fixed location, standing at 182,665, showed a slight decrease compared to 2017 (-0.7%).

In the specialised retail stores, the food and beverage shops (+ 5.4%) and fishmongers (+ 0.9%) are growing, while all other merchandise sales decreased; among these, butchers, with 29,861 units (-2.2%), continue to represent the largest category. For nonspecialised retail stores, food and beverage shops (-5.7%) and minimarkets (-0.8%) decreased, the latter still having the largest number of shops, while large-scale retail continued to grow (+1.3%). Specifically, hypermarkets are increasing (+ 0.4%), whose diffusion at national level is 114 m² per 1,000 inhabitants, while supermarkets remain substantially stable, increasingly in competition with discount stores, widely distributed throughout the country (54 m² per 1,000 inhabitants) and with a ten-year growth trend which makes

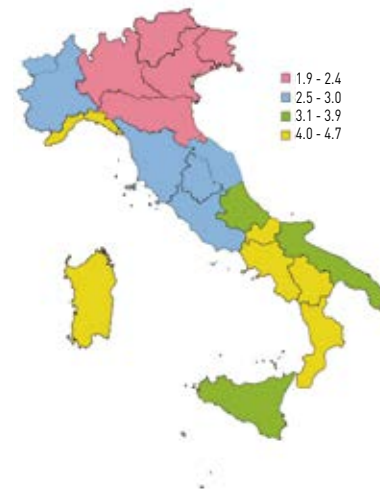
the slight decrease in 2018 (-0.6%) insignificant. The number of superette continued to decrease (-1.1%), these are retail business selling widely consumed products below 400 square metres, typical of small towns.

Regarding regional differences, supermarkets, neighbourhood shops and discount stores are found to a greater extent in the southern regions. Hypermarkets, on the other hand, are more widespread in the North, where the network is denser, like the more developed European areas.

In 2018, according to ISTAT data, retail sales in the food sector decreased in volume (-0.5%) but increased in value (+0.6%), with a slight contraction for small surfaces (-0.2%) and modest growth for large retailers (+1.1%), driven by the growth of discount stores (+4.4%).

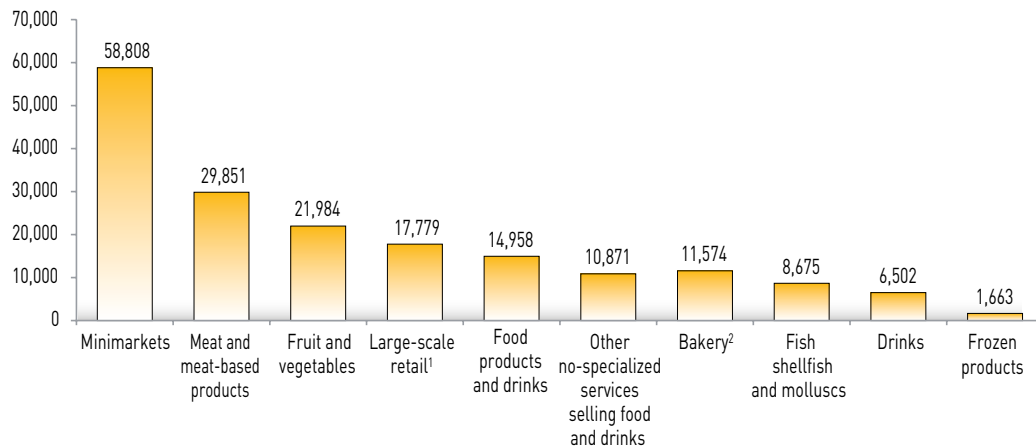
The street food retail sector, in the first half of 2018, had 34,713 businesses, 18.4% of the total businesses in the street trade.

Permanent food retail services per 1.000 inhabitants, 2018



Source: National Trade Observatory, MISE; ISTAT.

Permanent retail food trade services, 2018



¹ Including hypermarkets, supermarkets, discount.

² Including sales of sweets.

Source: Observatory on National Trade, Ministry of Economic Development.

CATERING SECTOR

According to FIPE (Italian Federation of Public Exercises) data, household spending on catering services in 2017 was 82,868 million euro, an increase of 4.7% over the previous year. The extra-domestic food and drink channel in Italy represents 35.5% of total food consumption; the Italian catering market is the third largest in Europe, after the United Kingdom and Spain.

In 2017, there were 333,647 companies operating in commercial catering (bars, restaurants, taverns, pizzerias, pastry shops and ice cream parlours) and in collective catering (catering and canteens). The network of retailers covers the entire

country in a capillary manner with higher shares in Lombardy (15.3%), Lazio (11.9%) and Campania (9.6%).

Restaurants and the like represent 54.3% of the total number of businesses, up on 2016 due to the inclusion of patisseries and ice cream parlours in this category; followed by bars (44.7%) and, last but not least, companies that provide prepared meals for canteens and catering (1% of the total).

Also, in 2017 the business turnover in catering services was high, with a negative balance of 11,793 businesses, which affected bars and restaurants in equal measure. On the other hand, the econom-

ic performance was positive: the turnover index estimated by FIPE increased in the third quarter of 2018 (1.9% compared to the same period of 2017), while value added, estimated at 43 billion euro in 2017, continued the growth that began in 2015.

Employment in the sector is also recovering according to INPS data, employed workers, numbering 864,062, increased by 18.3% in 2017 compared to the previous year. 66.4% of workers are permanent workers (78% in 2017), while the use of seasonal work is marginal (6.4%); one in two workers is a woman and one in four is a foreigner.

Active companies in the catering services, 2017

Region	Catering services			Total
	Restaurants and street-food services	Bar and other similar services with no kitchen	Canteens and catering	
Piedmont				
Aosta Valley	600	507	4	1,111
Lombardy	25,439	24,859	627	50,925
Trentino-Alto Adige	3,051	2,618	70	5,739
Veneto	13,671	12,420	160	26,251
Friuli-Venezia Giulia	3,683	3,487	31	7,201
Liguria	6,613	5,955	75	12,643
Emilia-Romagna	13,512	11,742	147	25,401
Tuscany	13,227	8,842	237	22,306
Umbria	2,552	2,053	55	4,660
Marche	4,976	3,424	62	8,462
Lazio	20,776	15,652	454	36,882
Abruzzo	4,959	3,279	81	8,319
Molise	996	897	23	1,916
Campania	17,122	14,627	369	32,118
Apulia	10,892	8,449	132	19,473
Basilicata	1,299	1,419	37	2,755
Calabria	6,051	4,560	111	10,722
Sicily	13,143	8,640	223	22,006
Sardinia	5,750	5,127	107	10,984
Italy	181,317	149,154	3,176	333,647

Source: FIPE Survey on Catering services, 2018.

FOREIGN TRADE

In 2018, Italian exports of agri-food products exceeded 41.6 billion euro, confirming the positive trend with a 1.4% growth in value compared to 2017. Agri-food imports, after the clear growth of last year, decreased in value by almost 2%, falling to 43.7 billion euro. This trend translated into a reduction in the deficit in the agri-food balance, which for the first time fell below 2 billion euro.

The EU 28 area represented 70.8% of Italy's purchases from abroad and just over 66% of sales. These are substantially stable values compared to 2017. North America consolidated its role as our main non-EU outlet market and also increased its incidence as a supplier to Italy. On the other hand, flows from the main non-EU suppliers, such as South America (-4.6%) and Asia (-7.2%), decreased.

On the export side, the top five customer countries (Germany, France, the United States, the United Kingdom and Spain) absorbed more than half of the value of

Agri-industrial balance and agro-industrial system*

Macroeconomic aggregates		2000	2017	2018
Total agro-industrial production ¹	(P)	67,899	86,289	88,183
Imports	(I)	25,358	44,519	43,666
Exports	(E)	16,867	41,098	41,679
Balance	(E-I)	-8,491	-3,420	-1,987
Trade volume ²	(E+I)	42,225	85,617	85,346
Apparent consumption ³	(C = P+I-E)	76,390	89,709	90,170

INDICATORS (%)

Degree of self-sufficiency ⁴	(P/C)	88.9	96.2	97.8
Propensity to import ⁵	(I/C)	33.2	49.6	48.4
Propensity to export ⁶	(E/P)	24.8	47.6	47.3
Degree of trade-cover ⁷	(E/I)	66.5	92.3	95.4

* Millions of current euro, the figures of the agro-industrial output include also the item "processed tobacco". ⁴ Production-Consumption ratio.

¹ Agricultural, forestry and fishing production and value added of the food industry at basic prices.

² Sum of the exports and imports.

³ Agro-industrial production plus imports and minus exports.

⁵ Import-Consumption ratio.

⁶ Export-Production ratio.

⁷ Export-Import ratio.

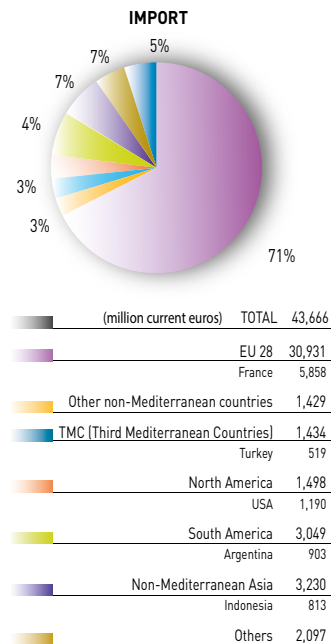
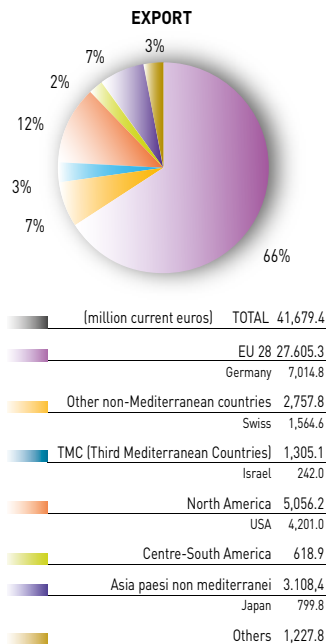
Source: CREA PB processing of ISTAT figures.

agro-food exports. This is a stable share compared to 2017. The trend is diversified, with exports decreasing to some markets, such as Germany and Spain, and growing to other important partners, such as France and the United States. France, Germany and Spain were confirmed as Italy's main supply markets. For France, the value of imports remains substantially stable compared to 2017, while for Germany (-3.6%) and, above all, Spain (-8%) there was a significant contraction in value.

From a commodity point of view, the growth of agri-food exports in 2018 affected the processed sector (+1.9%), in particular drinks (+6.2%), while the primary sector suffered a decrease (-5.5%). As regards imports, on the other hand, the primary sector (-0.5%) and the food industry (-2.3%) showed a decrease against a sharp increase in drink imports (+10%).

The reduction in the value of primary sector exports affected many of the

Italian agri-food trade by geographical areas, 2018



Source: CREA PB processing of ISTAT figures

Foreign Trade by main agri-food sectors (million euro), 2018

	Import	Export	Sn (%)
Seeds	549	302	-29.1
Cereals	2,557	74	-94.4
Fresh legumes and vegetables	743	1,257	25.7
Dried legumes and vegetables	253	47	-68.9
Citruses	373	239	-21.8
Tropical fruit	712	78	-80.3
Other fresh fruit	687	2,465	56.4
Dried fruit	1,208	498	-41.6
Filamentary crude vegetables	69	5	-87.1
Seeds and oleaginous fruits	826	31	-92.7
Cocoa, coffee, tea and spices	1,594	87	-89.7
Flowers and plants	525	884	25.5
Raw tobacco	150	306	34.3
Live animals	1,579	54	-93.4
Other breeding products	597	68	-79.6
Forestry products	654	132	-66.3
Fishing products	1,343	251	-68.5
Hunting products	60	4	-86.8
TOTAL PRIMARY SECTOR	14,478	6,781	-36.2
Rice	127	538	61.9
Cereal derivatives	1,427	4,920	55.0
Sugar	720	146	-66.3

	Import	Export	Sn (%)
Pastries/sweets	989	1,973	33.2
Fresh and frozen meat	4,304	1,182	-56.9
Prepared meat	366	1,693	64.4
Fish products	4,546	452	-81.9
Processed vegetables	1,115	2,526	38.8
Processed fruit	621	1,191	31.5
Dairy-products	3,701	3,387	-4.4
Oils and fats	3,552	2,064	-26.5
Animal feeding	2,031	1,136	-28.3
Other food-industry products	2,111	4,272	33.9
Other non-food products	1,393	403	-55.1
TOTAL FOOD INDUSTRY (beverages excluded)	27,002	25,884	-2.1
Wine	336	6,319	89.9
Grape must	11	55	65.5
Other alcoholics	1,241	1,297	2.2
Soft drinks	255	1,048	60.8
TOTAL BEVERAGES	1,843	8,719	65.1
TOTAL FOOD INDUSTRY AND BEVERAGES	28,846	34,603	9.1
Other agro-food products (under threshold: 1-24)	343	295	-7.5
TOTAL AGRO-FOOD BALANCE	43,666	41,679	-2.3

Source: CREA PB processing of ISTAT figures

Exports of the "Made in Italy" agri-food products*

	2018 (million euros) Export	% change 2018/17	
		Current values	Quantity
Cereals	5.6	1.0	-0.2
Fresh fruit	2,519.7	-9.4	-13.2
Fresh vegetables	1,113.1	0.9	3.7
Flowers and Plants	706.6	9.3	4.2
AGRICULTURAL MADE IN ITALY	4,345.0	-4.2	-8.0
Rice	537.9	-2.5	-5.0
Processed tomatoe	1,742.6	2.9	3.0
Fruit juices and cider	631.1	12.9	2.5
Other vegetables and prepared or preserved fruit	1,190.5	0.2	0.7
Cured metas	1,611.0	1.3	1.8
Cheese	1,859.7	2.0	-1.4
Olive Oil	1,461.9	-6.1	-0.2
Bottled wine	5,865.4	3.2	-2.3
Bulk wine	406.1	4.6	-24.7
Vinegar	256.3	1.2	-9.8
Mineral waters	567.7	9.3	5.9
Essences	157.1	12.8	6.1
Other processed products	980.0	1.1	-1.5
Processed "MADE IN ITALY"	17,267.3	2.1	-0.6
Pasta	2,381.1	2.8	0.1
Bakery products	2,099.1	3.9	3.9
Other cereal derivatives	203.8	10.9	9.9
Cocoa-based sweets	1,804.5	0.3	5.4
Ice creams	247.5	7.4	6.5
Coffee	1,352.5	-0.6	5.6
Spirit and liqueurs	895.5	21.6	17.8
MADE IN ITALY of the food industry	8,984.0	3.9	3.5
TOTAL MADE IN ITALY	30,596.3	1.6	-1.3

* The Made in Italy products are included in the agro-food products, with a constant positive balance, which usually recall our country in terms of image.

Source: CREA PB processing of ISTAT figures.

main sectors, although the net decrease in value of the “other fresh fruit” sector (-11.2%) had the greatest impact. On the other hand, citrus exports are increasing in value. The growth of the food industry is linked to the increase in export value in almost all sectors with the exception of sugar (-14%), rice (-2.5%), fresh and frozen meats (-7.2%) and oils and fats (-4.8%). All sectors, especially “other spirits”, contributed to the sharp growth in beverage exports (+6.2%), with an increase in value of more than 20%. On the import side too, beverages showed the highest growth in value (+10%) driven by the import of “other spirits” from Belgium, Germany and the United States. The decrease in the value of food industry imports concerns many of the main sec-

tors, although the volumes imported are growing in most cases. This trend is particularly evident in the case of sugar and oils and fats, with significant reductions in value (-20.3% and -12.1% respectively) accompanied by increases in quantity. On the other hand, flows in value of the main import sector, that of fish products, led by the largest imports from Spain and Argentina, increased.

Made in Italy represents 73.4% of the country’s agri-food exports, a share that increased slightly compared to 2017. The increase in value of Made in Italy exports was 1.6%, compared to 1.4% for the agro-food industry as a whole. This growth concerned first-stage (+2.1%) and second-stage processed (+3.9%) products, while the export of primary products de-

creased by over 4% in 2018.

The largest share of Made in Italy exports is attributable to first-stage processed products, with a weighting of 56.4%. Within the aggregate, the export value is growing for all sectors, with the exception of rice and olive oil. For some sectors, the growth in value of exports corresponds to a decrease in volume; these include cheeses, wine and vinegar. Exports of second-stage processed products represent more than 29% of total Made in Italy exports and 21.6% of total agri-food exports. The positive trend, both in value and in quantity, affects all sectors, with the exception of a slight decrease in value of coffee exports (-0.6%). Growth is driven by the major exports of “spirits and liqueurs” and baked goods.



FOOD AND EATING HABITS

2018 does not look like a completely favourable year for the Italian organic sector: although organic operators increased by 4.2%, as many as 30% of the regions showed a contraction in their number, even more widespread (40% of the regions) if we focus our attention only on exclusive producers. Sicily alone presented a decrease of over 1,200 units. In contrast, Campania displayed an increase of almost 51% in exclusive producers.

Overall, the largest increase in operators was found in the North. As many as 60% of the regions, on the other hand, showed a double-digit increase in mixed producers who, in order to retain a greater share of value added, now carry out one or more raw material processing stages within the company. The strong polarisation between

North and South in relation to the concentration of exclusive processing also weakened, 34% carried out in southern regions against 47.9% in the North.

In 2018, the organic UAA increased by only 2.6% and was accompanied by a small contraction in the organic farm average UAA.

The largest increases in area were found in Campania and Veneto while the average organic farm UAA increased mainly in Veneto (+ 39.5%), Marche (+ 18.5%) and Aosta Valley (+ 15.5%), where it was mainly small businesses that abandoned the organic regime. Despite these results, the organic UAA was still concentrated in the South, particularly in Sicily, while first place for the incidence of the organic UAA on regional UAA went to Calabria.

Among the various production systems, only other permanent crops, citrus fruits, permanent meadows and pastures showed a reduction in the organic area.

2018 was not a particularly rosy year for organic livestock farming either, as the number of animals reared was reduced, with the exception of cattle and poultry. Despite the contraction, sheep were still second to cattle by incidence on total organic LU.

The situation regarding organic aquaculture was better, where companies increased from 39 to 53 units and were still concentrated in the two leading regions, namely Emilia-Romagna (41.5% of the total) and Veneto (36%), to which Apulia was added, going from two to five companies.

Organic operators, 2018

	Exclusive Producers		Producers/Processors		Exclusive Processors		Total operators ¹	
	n.	% change 2018/17	n.	% change 2018/17	n.	% change 2018/17	n.	% change 2018/17
Piedmont	1,960	8.2	557	10.7	556	3.7	3,135	7.9
Aosta Valley	61	-14.1	17	21.4	15	25.0	93	-4.1
Lombardy	1,517	20.6	472	6.5	1,069	21.3	3,144	18.2
Liguria	241	4.3	82	9.3	156	3.3	496	5.5
Trentino-Alto Adige	2,267	14.6	245	-11.6	447	7.5	2,974	10.8
Veneto	2,025	-1.0	461	-2.1	974	-1.1	3,524	-0.9
Friuli Venezia Giulia	668	5.7	147	44.1	178	19.5	1,002	12.6
Emilia-Romagna	4,192	24.7	611	10.5	1,038	8.8	5,920	19.8
Tuscany	2,813	-5.0	1,714	16.0	674	0.4	5,235	1.8
Umbria	1,408	5.6	359	16.9	194	10.2	1,971	8.1
Marche	2,427	-2.7	220	-23.1	313	18.6	2,967	-2.8
Lazio	3,696	0.2	545	10.8	492	5.1	4,746	1.8
Abruzzo	1,407	6.3	309	37.3	271	10.2	1,990	10.6
Molise	392	4.5	40	21.2	70	6.1	504	6.3
Campania	5,107	50.8	362	6.5	548	17.3	6,042	43.3
Apulia	7,316	-0.2	1,169	-2.5	778	-7.3	9,275	-1.1
Basilicata	2,064	1.3	102	-4.7	105	16.7	2,271	1.6
Calabria	9,513	-3.0	1,199	15.3	313	1.0	11,030	17.6
Sicily	8,166	-13.0	1,597	20.3	947	5.7	10,736	-7.7
Sardinia	1,714	-7.5	155	18.3	119	6.3	1,991	-5.0
Italy	58,954	2.8	10,363	10.2	9,257	6.5	79,046	4.2

¹ The sum of producers and processors does not correspond to total operators who do include also importers.

Source: processing of SINAB figures.

Organic surface area, 2018

	Organic UAA ¹			Incidence on total UAA ²	
	ha	%	% change 2018/17	Farm average (ha)	%
Piedmont	50,951	2.6	9.4	20.2	5.3
Aosta Valley	3,367	0.2	5.9	43.2	6.4
Lombardy	53,832	2.7	19.2	27.1	5.6
Liguria	4,407	0.2	2.3	13.6	11.4
Trentino-Alto Adige	16,870	0.9	19.8	6.7	5.0
Veneto	38,558	2.0	37.8	15.5	4.9
Friuli Venezia Giulia	16,522	0.8	7.2	20.3	7.1
Emilia-Romagna	155,331	7.9	15.5	32.3	14.4
Tuscany	138,194	7.1	6.2	30.5	20.9
Umbria	43,302	2.2	-0.5	24.5	12.9
Marche	98,554	5.0	12.8	37.2	20.9
Lazio	140,556	7.2	1.6	33.1	22.6
Abruzzo	39,950	2.0	3.1	23.3	10.7
Molise	11,209	0.6	4.4	25.9	5.8
Campania	75,683	3.9	43.8	13.8	14.4
Apulia	263,653	13.5	4.5	31.1	20.5
Basilicata	100,993	5.2	-1.1	46.6	20.6
Calabria	200,904	10.3	-0.6	18.8	35.1
Sicily	385,356	19.7	-9.8	39.5	26.8
Sardinia	119,852	6.1	-9.3	64.1	10.1
Italy	1,958,045	100.0	2.6	28.2	15.5

¹ Organic UAA and UAA in conversion.

² Total UAA according to SPA 2016 Survey, ISTAT.

Source: processing of SINAB and ISTAT figures.

Organic surface area by type of farming, 2018

Type of farming	Organic surface area	Organic surface area by type of cultivation/total organic surface area	UAA variation 2018/17
Total arable crops	887,128	45.3	5.7
of which:			
Cereals	326,083	16.7	6.6
Protein crops, legumes, grain legumes	50,477	2.6	1.5
Root crops	2,696	0.1	49.2
Industrial crops	33,169	1.7	13.6
Fresh vegetables, strawberries, cultivated mushrooms	61,155	3.1	11.1
Fodder crops	392,218	20.0	4.2
Other arable crops	21,330	1.1	0.7
Permanent grassland and meadows	540,011	27.6	-0.7
Total permanent crops	471,343	24.1	1.0
of which:			
Fruit ¹	36,917	1.9	9.3
Nuts	50,244	2.6	5.9
Citruses	35,660	1.8	-10.1
Olive tree	239,096	12.2	1.4
Grapevine	106,447	5.4	1.0
Other permanent crops	2,979	0.2	-39.2
Fallow lands	59,562	3.0	2.2
Total	1,958,045	100.0	2.6

¹ Fruit does include "fruit from temperate zone", "fruit from sub-tropical zone", "small fruits".

Source: eprocessing of Sinab figures

Incidence of the organic livestock by species reared, 2018

	n. of heads	% change 2018/17	% on total ani- mal husbandry ¹	ALU ²
Cattle	375,414	11.6	6.5	300,331
Sheep	680,369	-7.6	9.7	102,055
Pigs	59,623	-2.6	0.7	17,887
Goats	110,055	-4.8	11.2	16,508
Horses	12,982	-15.1	7.9	12,982
Poultry	3,482,435	15.0	2.2	34,824
Bees (n. of hives)	164,824	-3.7		

¹ Total animal husbandry (n. of heads) according to SPA 2016 data, ISTAT.

² LUs are estimated on the basis of the number of heads by species, since detail data about the different categories of livestock are not available.

Source: processing of SINAB figures.

PRODUCTS OF DESIGNED ORIGIN

Agricultural products and foodstuffs

Italy holds first place for PDO and PGI agri-food products in the EU with 299 registered products. The most numerous awards belong to the vegetable category, followed by cheeses and extra virgin olive oils. The products that weigh most in terms of turnover, economic activity in the area and as an extension of the supply chain are cheeses and cured meats, which hold 86% of the total value of the PDO-PGI production, almost 7 billion euro. Parmigiano Reggiano and Grana Padano alone produce 38% of the production value and feed a production circuit in which 90,000 employees are employed. On the other hand, there is olive oil and the large aggregate of fruit and vegetables: the former accounts for just 1% of the value of production, fruit and vegetables just 4%. Olive oil is dominated by the results of the PDO Terra di Bari and the PGI Toscano which account for almost 40% of the value of the sector. Over 50% of the value of fruit and vegetable production is achieved by two apples, PGI Alto Adige and PDO Val di

Non, followed by the PGI Piedmont hazelnut (7.8%) at a considerable distance. The PGI red orange of Sicily accounts for just 2% with a production of over 17,000 tons.

The most economically relevant districts are concentrated in the North: Emilia-Romagna and Lombardy occupy the top positions, followed by Campania (the only exception in the South thanks to the Campania buffalo mozzarella supply chain) and Veneto, which, on the other hand, holds the first place for the joint value of GI wine with food.

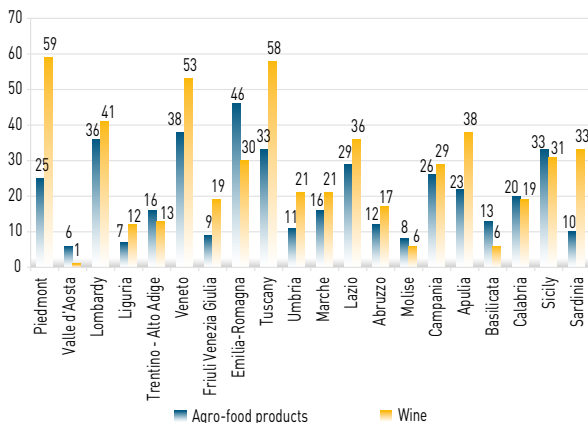
Wines

Among the 526 Italian denomination wines, 408 are PDO and are divided according to the traditional Italian mention, into 74 DOCG and 334 DOC; there are 118 PGIs. In 2018, the areas invested in IG wines were estimated at 513,000 hectares, or almost 78% of the total Italian areas under vines. The production of PDO wine, which stood at 22.8 million hectolitres in the 2018 vintage, increasingly represents a significant share

of the total wine produced in Italy (over 42%); if we add to this the share of PGI wine (13.4 million hectolitres), we get certified production equal to almost 67% of the total wine production. The 2018 vintage, unlike that of 2017, showed a sharp increase for all types of wine and in particular for PDO wines (+31%). The increase in the PGI component was more moderate (+14.2%). At the regional level, there were increases in the production volumes of the PDO in all regions, with the exception of Abruzzo, where the level remained stationary. The increases were significant in Sardinia (+84% for the PDO and equally for the PGI), in Lombardy (+43%), in Veneto (+43%), in Tuscany (+38%) and in Piedmont (+35.6%).

The PDO and PGI wines were confirmed in the list of the Italian best-selling agro-food products abroad, for a total value exceeding 5.4 billion euro in 2018, with a significant increase for PDO wines (12% compared to 2016).

Number of PDO, PGI and TSG products by region¹

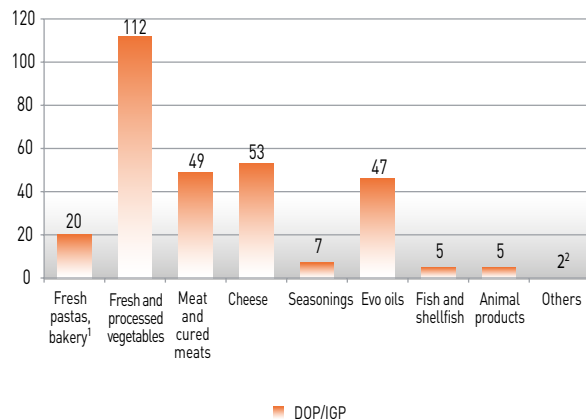


¹ Some products are interregional, therefore the sum of the regional products does not correspond to the total of Italy

Updated at December 31st, 2019

Source: Qualivita.

Italian PDO, PGI and TSG products by categories (n.)



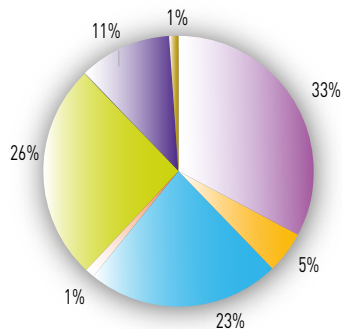
¹ It also includes the Modica chocolate;

² PDO liquorice of Calabria and PDO essential oil of Bergamotto from Reggio Calabria

Source: Door.

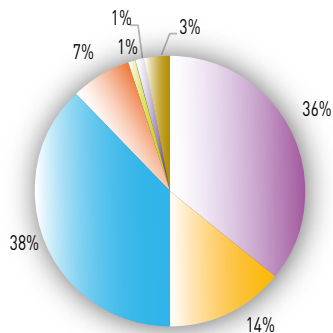
Numbers of PDO and PGI products by main categories, 2017

Operators (n.)



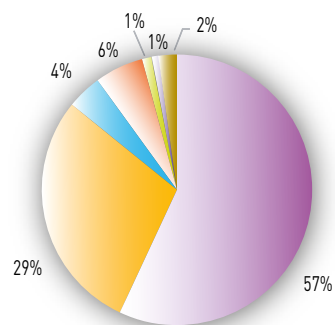
Cheese	27,933
Cured meats	4,014
Fruit and vegetables /cereals	18,829
Balsamic vinegars	650
Olive oil	21,881
Fresh meat	9,513
Other products	875

Production (t)



Cheese	525,000
Cured meats	200,000
Fruit and vegetables /cereals	548,000
Balsamic vinegars (litres)	98,000
Olive oil	10,293
Fresh meat	14,000
Other products	52,000

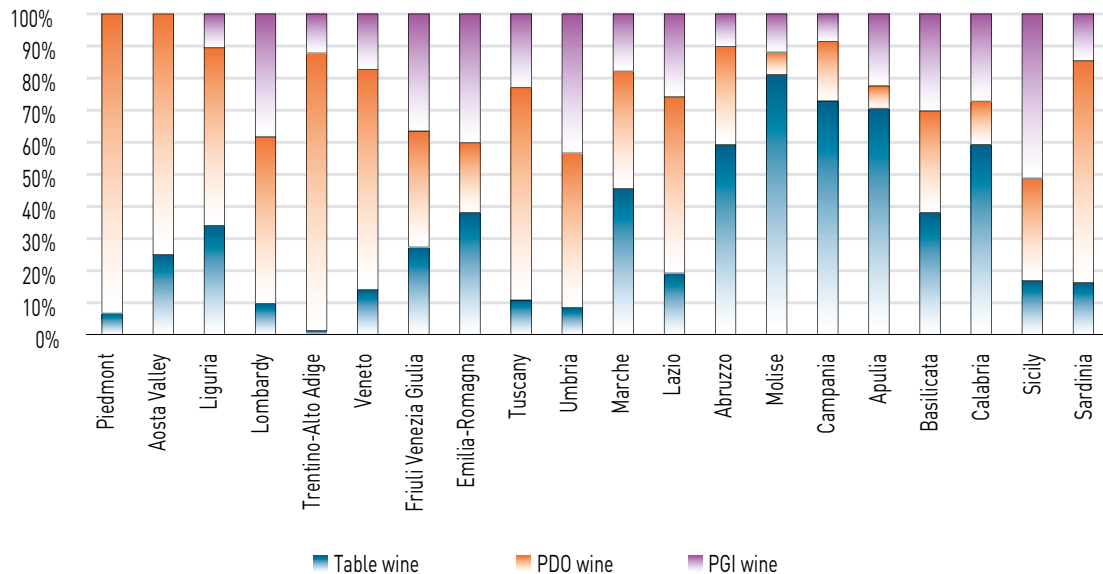
Production value (million euros)



Cheese	3,937
Cured meats	2,053
Fruit and vegetables /cereals	286
Balsamic vinegars	396
Olive oil	72
Fresh meat	88
Other products	130

Source: Qualivita-ISMEA e ISTAT.

Incidence of the production of the PDO and PGI wine on the total, 2018



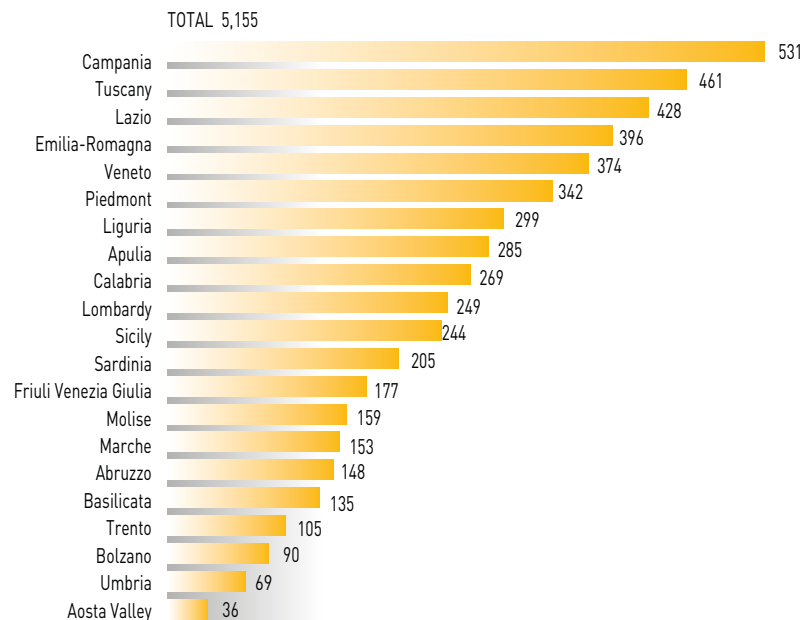
Source: ISTAT.

TRADITIONAL AGRI-FOOD PRODUCTS

Traditional agri-food products (TAP) are those niche products that have a high gastronomic and cultural value but to which the community protection of designations of origin does not apply. The fundamental requirement in these cases is the traditional processing, conservation and seasoning method, which must be consolidated over time (for a period of at least 25 years). These products received official investiture with legislative decree 173/98 which established the national list at the MIPAAF [Ministry of Agriculture, Food and Forestry], updated annually by the Regions. Since 2008, they have been defined as an expression of the Italian cultural heritage, like historical, artistic and architectural heritage.

The 19th revision of the list contains 5,155 traditional food specialities, 99 more than in 2018. Most of the TAPs fall into the categories of “Fresh pasta, bakery products and biscuits” (1,561 products), “Vegetable products” (1,457), as well as “Fresh and processed meats” (799 products).

Traditional agri-food products by region (n.), 2019



Source: 19th review of the national list of the traditional agri-food products, MIPAAF Decree 13 March.

WINE AND FOOD TOURISM

In 2018, tourism in Italy exceeded 431 million visitors (+13.5%) (ISTAT). According to Isnart-Unioncamere and Città del vino estimates, the contribution of food and wine tourism to the overall tourist flow exceeds 110 million visitors (14 million are exclusively wine tourists); of these, about half are Italian tourists.

The second Report on Italian food and wine tourism states that tourism linked to food and wine strengthened in 2018 (+48%), 45% of the total number of Italian tourists were food and wine tourists, with a per capita expenditure of 199 euro. Research shows that in southern Italy the propensity to travel for food and wine

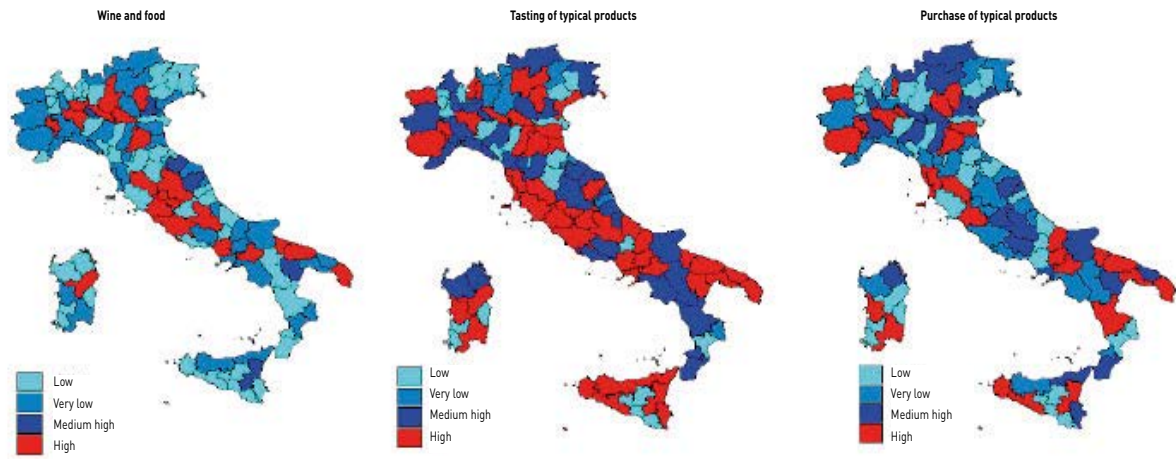
reasons accounts for 52%, against 47% in the regions of Central Italy and 40% in those of the North. The most visited regions are Sicily, Tuscany and Emilia-Romagna. 46% of young people born between 1981 and 1998 (millennials generation) said they had made food and wine trips in 2018, an 86% increase compared to the previous year. In the last three years, 98% of Italians have participated in at least one food and wine experience during a trip: 88% have eaten typical dishes in a local restaurant; 82% visited a market; 72% went to historic bars and restaurants; 62% visited the production sites (farms, pasta factories, oil mills)

and 56% visited wine cellars.

The report also includes a survey conducted on 99 foreign tour operators: 62% of these offer food and wine themed packages to Italy, with a greater number of offers for itineraries in Tuscany and Piedmont.

In 2018, a Travel Appeal study analysed over 17 million online reviews of foreign and Italian tourists, relating to three sectors connected to Italian food and wine: hospitality, catering, offer of experiences and activities. With regard to catering, guests' general satisfaction was positive for 85.5%.

Geography of tourists' motivations



Source: Isnart-Unioncamere, 2017.

FOOD WASTE

The amount of food produced for human consumption worldwide that is wasted or lost each year along the agri-food chain is over 1.3 billion tons (more than a third of the total produced). This is four times the amount of food needed to feed the 820 million people who suffer from hunger worldwide (FAO data, 2019). About 14% of food is wasted after harvesting and before reaching the retail level, as well as through in-company activities, storage and transportation. The annual cost of Food Losses and Waste - FLW, worldwide, exceeds 900 billion US dollars.

In the European Union, the total annual food waste is estimated at 88 million tons (equal to 20% of the food produced).

In Italy, according to a survey carried out in 2018 by CREA on a sample of over 1,400 families, every day over 20 grams of food are wasted per capita. This is a figure that fits in with the average of the values collected in other European countries within the European Refresh project.

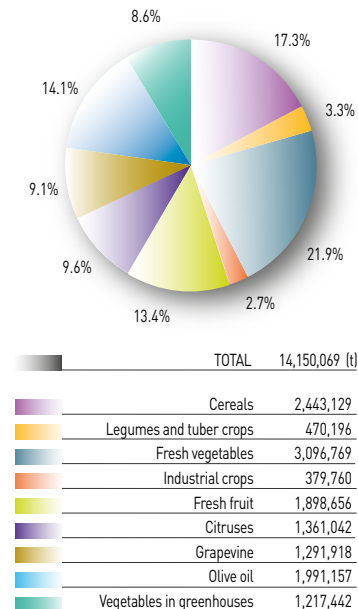
The survey estimates an average annual household waste of around 700,000 tons of food; more than half of this is fruit and vegetables, bread, milk and yogurt.

According to estimates by Coldiretti and the Waste Watcher Observatory, over 70% of waste occurs in the domestic consumption and catering phases, almost 20% in distribution and sales and over 10% in the agricultural and processing phase. The value of FLW along the supply chain is estimated at over 15 billion euro, or 0.88% of Italy's GDP.

In 2018, according to ISTAT data, over 1.4 million tons of agricultural production is left on the fields and this represents 2.8% of total production. 21.9% of unharvested production concerns vegetables grown in the open air; followed by cereals, with a 17.3% share, olives (14.1%) and fresh fruit (13.4%).

Italy also stands out in the fight against waste along the supply chain as a result of the Gadda law (law no.166 of 2016),

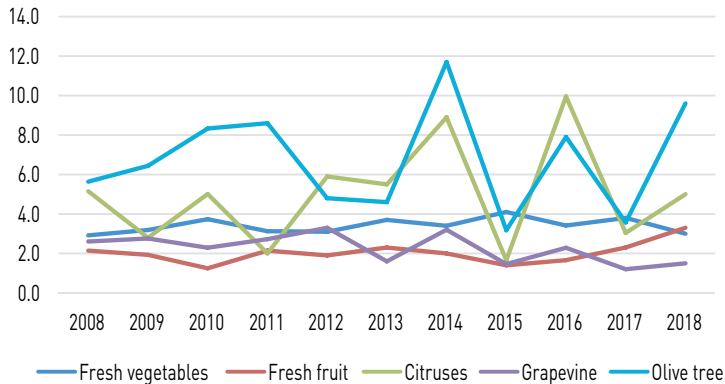
Agricultural production left on the field, by category, in Italy (t), 2018



Source: ISTAT.

which finances projects that aim at improving and developing new packaging technologies, creating digital applications and platforms, as well as redistributing surpluses for social solidarity purposes. In 2018, according to the estimates of the Banco Alimentare Foundation, 90,411 tons of excess products were recovered from large-scale distribution and organised catering and were distributed to 7,569 charitable structures and canteens for the benefit of over 1.5 million poor people.

Trend of the agricultural production left on the field, by sector in Italy (%)



Source: ISTAT.



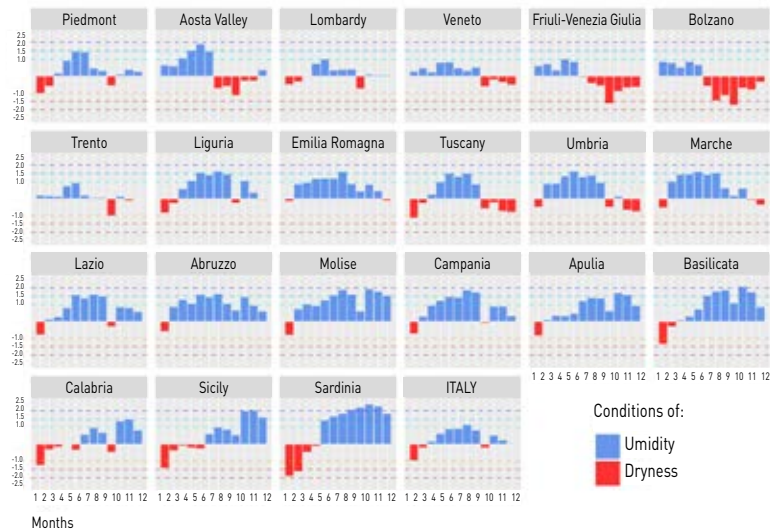
ENVIRONMENT

CLIMATE AND WATER AVAILABILITY

2018 was characterised by minimum and maximum temperatures higher than the climatic average 1981 - 2010, with increases of +1.5 and +1.0°C respectively and with 25% higher rainfall. The first 20 consecutive days of October saw rainfall causing flooding in the South; the last 10 days showed a significant deterioration across the country, with marked rainfall gradients. On 27/29 October, the Northeast regions were hit by the storm “Vaia”, which razed large portions of the forest in the Alps and caused violent rainfall with significant accumulations: more than 80 mm in 2 hours around Genoa, over 600 mm in three days in the northern Apennines and between Belluno and Carnia.

In 2018, water availability in agriculture, measured by the SPEI (Standardised Precipitation Evapotranspiration Index) indicator did not show any critical issues at the beginning of the growing season. In fact, although the Tyrrhenian and

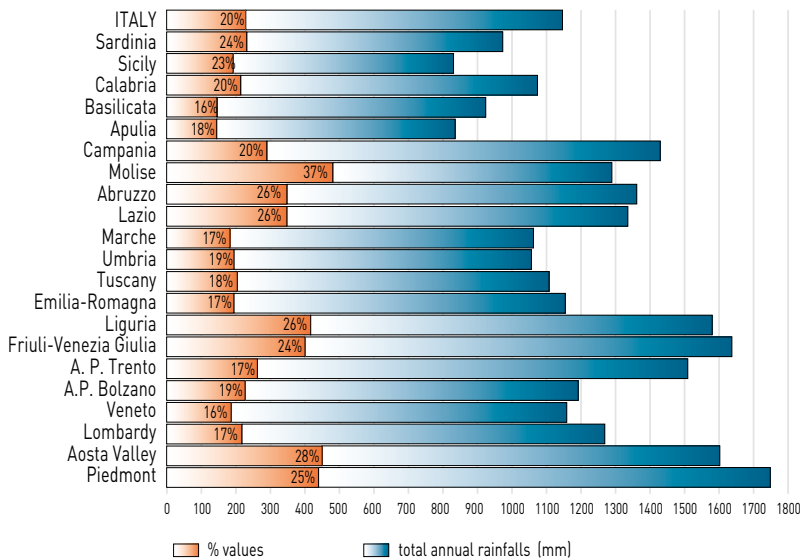
Drought index in agriculture (Standardized Precipitation Evapotranspiration Index) – 6 months, 2018



Source: CREA Agriculture and Environment – processing of ERA5 data - Copernicus Climate Change Service (C3S).

Ionian side showed a moderate drought more marked values for Sardinia (SPEI ≤ -1.5), the area returned to normal values in January/February (SPEI ≤ -1), with

Index of intense precipitations - R95pTOT



with the spring rainfall. In general, the growing season was marked by $\text{SPEI} \geq +1$ or normal, with some exceptions in September with severe drought levels ($\text{SPEI} \leq -1.5$) in the North-East.

The intense rainfall represented by the ETCCDI extreme R95pTOT index¹, in 2018, amounted to 20% of the total annual precipitation, with a higher incidence in some regions, of around 25-26%, mainly in Friuli-Venezia Giulia, in the north-western sector (Piedmont, Aosta Valley and Liguria), in Central Italy, as well as in the major islands.

Source: CREA Agriculture and Environment – processing of ERA5 data – Copernicus Climate Change Service [C3S].

¹ Expert Team on climate Change Detection and Indices.

LAND CONSUMPTION

Italy ranks third in Europe in terms of average annual increase in soil sealing (Eurostat and European Environment Agency).

The data updated to 2018 indicate an increase in land consumption compared to 2017 of 51 sq km (on average 14 hectares per day). Taking into consideration the restoration of some areas, net land consumption stands at 48 sq km, a slight slowdown compared to the previous two years.

The percentage of artificial coverage reached 7.64% of the national territory (in the 1950s it was 2.7%), with an area greater than 23,000 sq km. Thus, in Italy, rural areas continue to be reduced to the advantage of suburban and urban areas.

Although a slowdown has been observed in recent years, increases in artificial areas have resumed at the expense of natural areas in some regions and areas, namely Veneto, upper Tuscany, the northern plains, the metropolitan area

of Rome, lower Lazio, the Romagna and Abruzzo coasts, lower Campania and Salento. Coastal areas, peri-urban areas, plains and valley bottoms generally record the phenomenon with greater intensity. Land consumption mainly affects agricultural areas (66%), followed by urban areas (27%) and natural areas (7%).

Location and absolute values (ha) of the changes triggered by soil consumption in the 2017-18 period



Source: ISPRA 2018.

AGRICULTURAL AND FORESTRY SECTOR EMISSIONS

Cultivated lands and forests are of fundamental importance for Italy because, in addition to producing food, they supply energy, heat, wood products, paper and a whole series of consumer goods essential for our survival. While agri-

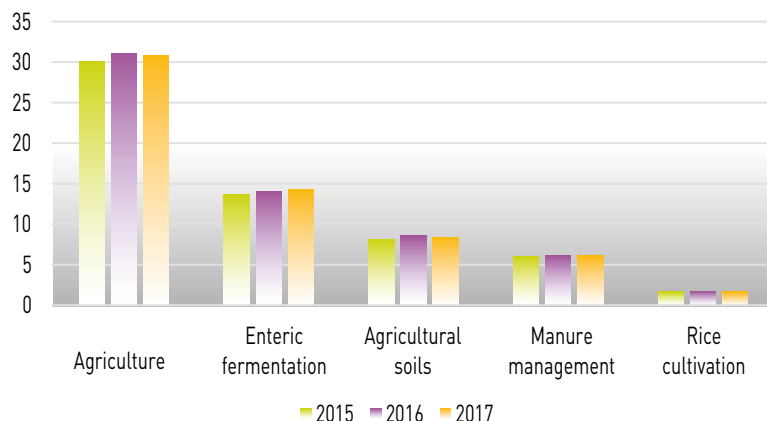
culture, especially for livestock, emits 30.8 MtCO_{2e}¹ per year, forests are able to remove up to about 30 MtCO_{2e} of annual emissions produced in Italy by other sectors.

Agricultural emissions

Agricultural emissions at EU level are accounted for within the non-ETS sector (transport, residential, tertiary, non-ETS industry, agriculture and waste) and contribute to achieving the objectives of the "Climate-Energy package 20 20 20".

According to the latest available data of the national inventory of greenhouse gas emissions, relating to 2017, agricultural emissions amounted to 30.8 MtCO_{2e}, in third place among the sectors producing most emissions after the energy and industrial processes sectors. In recent years, the trend of falling emissions, which allowed an overall reduction from 1990 to today of 13.5%, has stopped. As of 2010 (30.06 MtCO_{2e}), the emissions balance has remained almost unchanged. The livestock sector is mainly responsible with 20.32 MtCO_{2e} emitted, 46.2% of which can be attributed to enteric

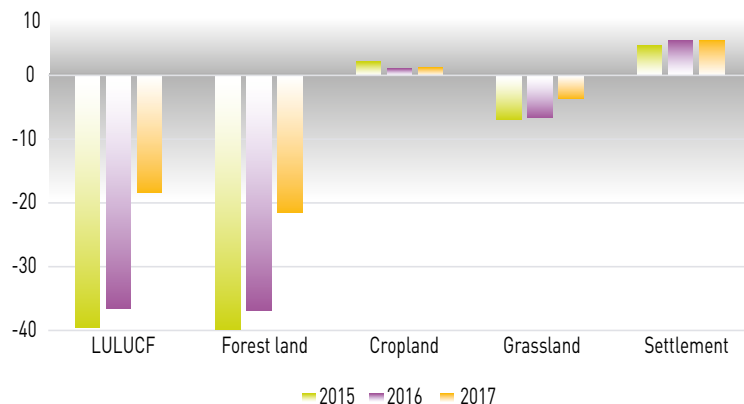
Emissions in the agricultural sector, MtCO_{2e}



Source: National Inventory of Greenhouse Gas Emissions.

¹ A ton of CO_{2e} is a unit of measurement that allows you to weigh different greenhouse gas emissions together.

Emissions/absorptions in the LULUCF sector, Mt CO_{2e}



fermentation and 19.8% to the management of animal manure. Nitrous oxide emissions, connected to the management of agricultural lands, on the other hand, contribute 27.2% (8.4 MtCO_{2e}) to the total agricultural emissions and, finally, rice fields (CH₄) contribute 5.4% (1.6 MtCO_{2e}).

Emissions by the LULUCF sector

In addition to forests, the LULUCF (Land Use, Land Use Change and Forestry) sector also includes emissions/absorptions deriving from land use changes for cropland, grassland, wetland, urban areas (settlements) and long-life wood products

(harvest wood product) purposes.

Forests, unlike agriculture, are a carbon sink, therefore they absorb CO₂ from the atmosphere and store it in compartments: Aboveground biomass, Belowground biomass, Litter, Dead wood and soil organic matter. The amount of CO₂ removed by forests in 2017 decreased by 42% compared to 2016 and amounted to 21.53 MtCO_{2e}; this was mainly due to the fires that occurred during the year, mostly caused by drought. Pastures also recorded a 46% reduction in CO₂ removals, again due to fires, while changes in the use of agricultural land increased emissions (+13% compared to 2016).

Certified forests

In Italy, forests certified by the two entities (PEFC and FSC) for sustainable forest management (SFM) have increased by 17% in the last five years, going from 746,221 hectares in 2014 to 870,300 hectares in August 2019.

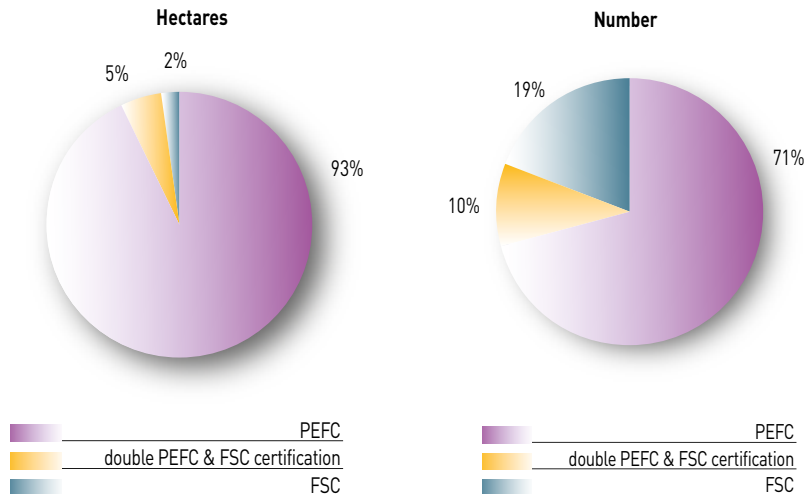
The two schemes consider a different certifiable surface: FSC is based on the management unit, which can include pastures and plantations, while PEFC follows the definition of woods in the current legislation.

Six entities (1 Friuli-Venezia Giulia, 1 Lombardy, 1 AP of Trento, 1 Umbria and 2 Tuscany) hold the double GFS certification for a total of 45,491.94 hectares.

Excluding plantations, GFS certification affects about 8% of the Italian forest area.

Certified plantations, i.e. used for wood arboriculture, represent 1% of the certified area. Most of the Italian certified area (95%) and certifications (81%) are located in the regions of Northern Italy.

GFS certifications in Italy



Source: PEFC and FSC data.

Fires

After the annus horribilis of 2017, 2018, with 19,481 hectares involved, had the lowest area affected by fire since 1970. There were 3,220 fires, with an average of 6.05 hectares burned, the lowest figure in the last 12 years.

The areas most affected by fires were the other wooded lands (10,676 hectares). 80% of the area affected by fire and 66% of the fires hit three regions: Sicily, Calabria and Sardinia. 55% of the national area affected by fire was in Sicily (10,674.25 hectares), while 42% of the number of fires occurred in Sardinia, hit by 1,339 events. Veneto held first place for the highest average surface area covered by fire, equal to 78.75 hectares, followed by Sicily (20.45 ha).

Area burned and number of fires from 1970 to 2018



Source: processing of NIAB data.

Land cover

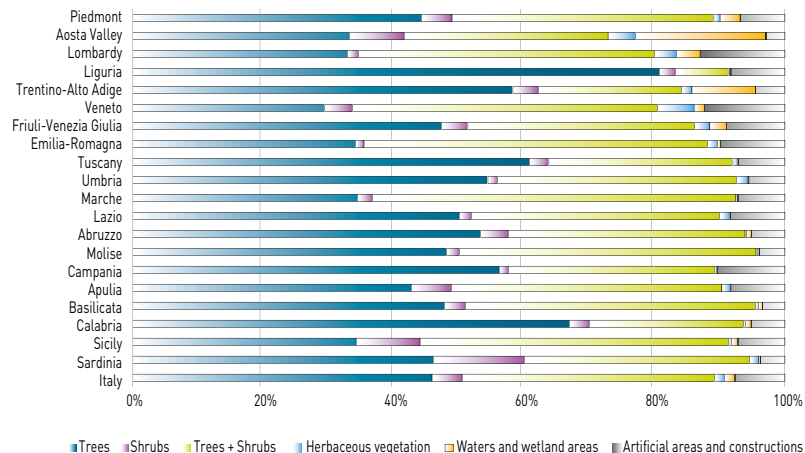
Tree and shrub cover, including permanent crops and the different categories of trees outside the forest, covers over 15 million hectares, 50.5% of the national territory (45.9% trees and 4.6% shrubs).

Liguria has the largest percentage of tree-covered area (80.7%, +34.8% compared to the average value), followed by Calabria, where the deviation from the national average is 21% and Tuscany with 14.9%. Veneto, on the other hand, has the lowest tree cover index, 16.4% below the national average, with a value of 29.5%.

Forest condition

The “Forest condition in Europe 2018” survey shows that most of the Italian trees analysed (78.4%) are slightly defoliated (10-25%). The index is therefore worse than the survey carried out in 2015, which showed a result of 71.2% slight defoliation on 4,757 trees. Broad-leaved trees are the most affected, espe-

% land cover per region



Source: processing of ISPRA 2017 data, from RAF 2017-2018.

cially the chestnut tree with the greatest damage: 70.5% of young plants and 66.1% of old plants (> 60 years) show a defoliation rate higher than 25%. The spe-

cies in the best state of health are Turkey oak and holm oak. Among conifers, domestic pine suffers the most marked defoliation. The healthiest species are black

pine and common larch.

Biotic factors are mainly responsible for damage to vegetation and, in particular, 16.5% is attributable to insects, divided into defoliators (13.1%) and galligens (0.9%), and 3.4% it is due to fungi. The other factors responsible for the defoliation are the drought and the very high temperatures recorded in the summer (10.5%) and, to a lesser extent, frosts (2.3%).

Vaia Storm

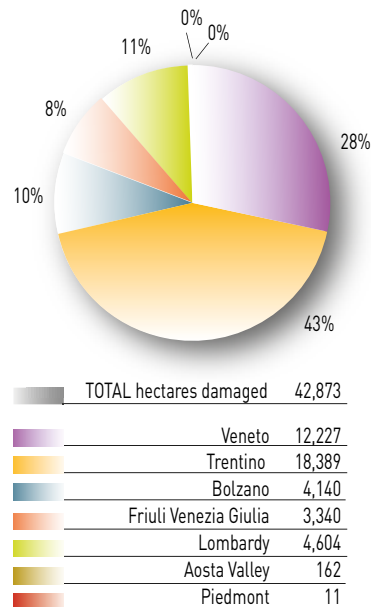
From 27 to 30 October 2018, Northern Italy was affected by a deep depression called Vaia. The meteorological event was characterised by two phases: in the first, between Saturday 27 and Sunday 28, there were heavy rains; in the second phase, between Monday 29 and Tuesday 30, the depression vortex, fed by the cold air, strengthened the libeccio and sirocco winds (which reached peaks of over 200 km/h). In three days of rain in the northern Apennines, in the Belluno area and

in Carnia, 600 mm of rain fell, half of the average annual rainfall.

The storm affected 494 municipalities for a total area of 2,306,968 hectares, of which 1,399,483 were forested (60%). A total of 42,873 hectares of forest were damaged: 18,389 in Trentino, 12,227 in Veneto, 4,140 in South Tyrol, 3,340 in Friuli-Venezia Giulia, 4,604 in Lombardy, 162 in Aosta Valley and 11 in Piedmont. The volume of trees felled is estimated at around 8.5 million cubic meters (about seven times the amount of logs cut and processed annually in Italy). The event also greatly reduced or cancelled for the forests involved the protective function forests perform with regard to hydrogeological risks.

According to an estimate by the University of Padua, the economic damage was around 630 million euro, of which 434 million for the damaged mass alone.

Vaia storm: hectares damaged



Source: Article by Chirici et al. (2019): estimate of the Vaia storm damages in the Italian forests. Forest@ 16: 3-9. - doi: 10.3832/efor3070-016 [online 2019-02-15]

USE OF CHEMICALS

In 2018, according to Federchimica, consumer sales of fertilisers in Italy decreased by 5.2% compared to 2017, reaching just over 2.8 million tons. There was a 5.1% drop in solid fertilisers, which account for 92% of the sector, as well as a reduction in fluid fertilisers (-0.6%) and water-soluble fertilisers (-7.1%). On the other hand, there was an increase in organic fertilisers (+1.5%) and organo-minerals (+3.4%).

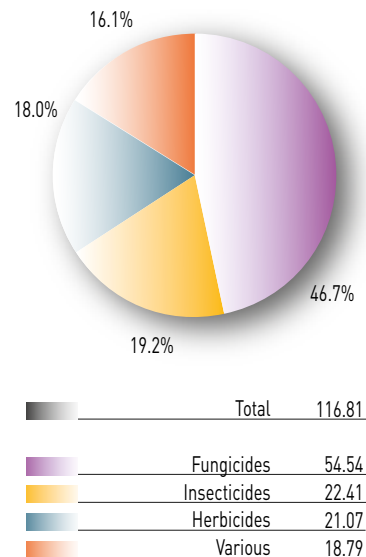
According to Assofertilizzanti¹, 1.07 million tons of fertilisers were used in 2018, substantially stable compared to the previous year. Potassium, with 151,000 tons, is the only element showing any growth (+5.3%), while phosphorus (-1.9%) and nitrogen (-0.7%) dropped, the latter representing 70% of total fertiliser elements. The sale of ready-to-use pesticide products (Agrofarma) amounts to 945 million euro

for a quantity of 102.6 thousand tons. The area treated is estimated at around 9 million hectares, with a regional distribution that places the North in first place, in which Emilia-Romagna stands out with 19,400 tons and Veneto with 18,500 tons. In the south, Apulia stands out with 12,000 tons.

ISTAT data on the types of plant protection products estimate, for 2017, the last year available, a total consumption of plant protection products of 116,800 tons (-5.2% compared to 2016). The decrease concerned fungicides (-10.6%) and herbicides (-6.9%) in particular. Fungicides, amounting to over 54,500 tons, accounted for 47% of the total. Insecticides and herbicides followed with a distribution of 22,410 and 21,070 tons.

Legally, the National Action Plan is the

Breakdown of the plant protection products used (.000 t) 2017

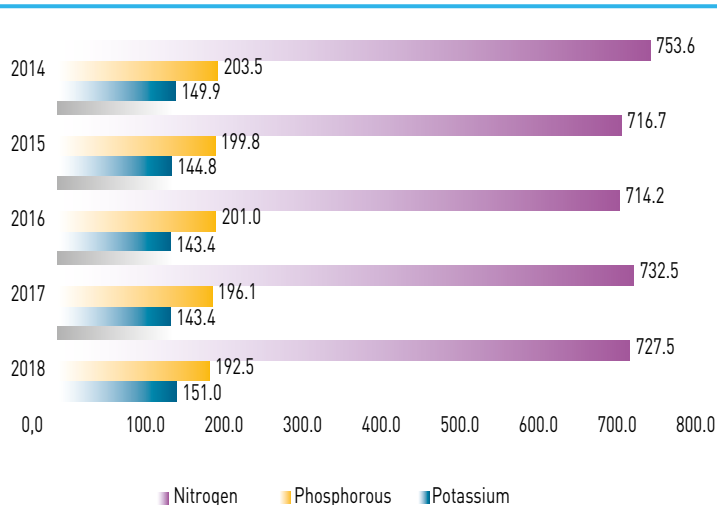


¹ The data refers to the content of nutrients in fertilisers intended as a total product; these are divided into simple, complex, liquid, solid, organic, etc.

Source: ISTAT.

document that regulates the sustainable use of plant protection products. The new Plan adds new requirements for agricultural businesses, which aggravate an already complex framework. The application of Ministerial Decree 33 of 22 January 2018 places severe limits on the use of pesticides for non-professional use. Currently, the European system of authorisation and control of agrochemicals is the most stringent in the world and Italy proves to be even more virtuous: residues that do not comply with the food law limits are less than 1% compared to a European average of 2.5%².

Trend in the use of fertilisers (.000 t)



Source: Assofertilizzanti.

² Ministry of Health - report "Official Control on the residues of plant protection products in food", pp. 91-95 and p. 164.

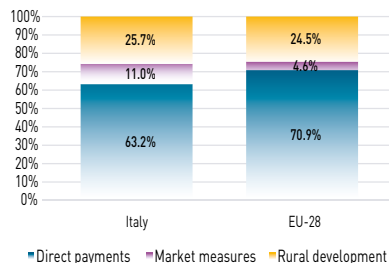


AGRICULTURAL POLICY

COMMON AGRICULTURAL POLICY - GENERAL FRAMEWORK

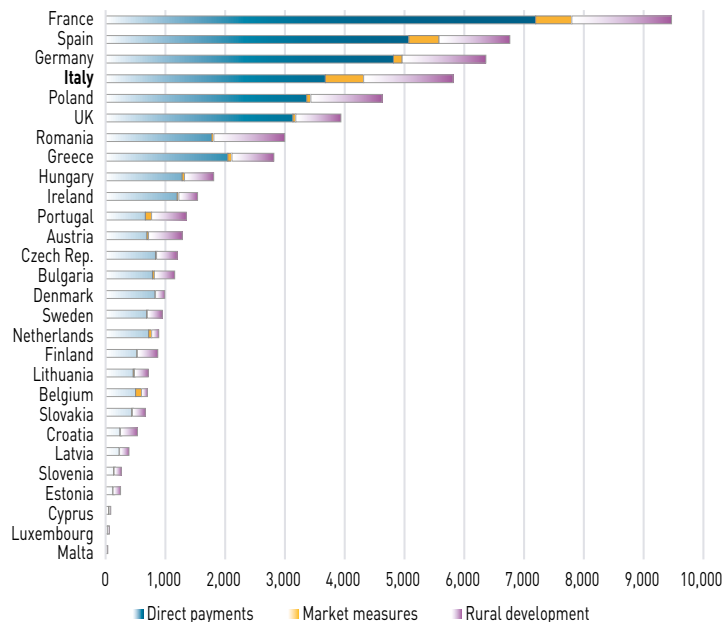
In 2018, the resources attributed to Italy for implementing the CAP totaled 5.8 billion euro, 9.9% of the EU total, ranking fourth after Germany and immediately before Poland. In Italy, direct payments represent 63% of the total, a share much lower than the EU average (71%), due to the higher impact of market measures and rural development.

Distribution of the expenditure for CAP in Italy and EU (2018; %)



Note: Expenditure for direct payments and market measures; budget ceiling for rural development
Source: European Commission.

Distribution of the expenditure for CAP by EU Member State (2018; million euros)

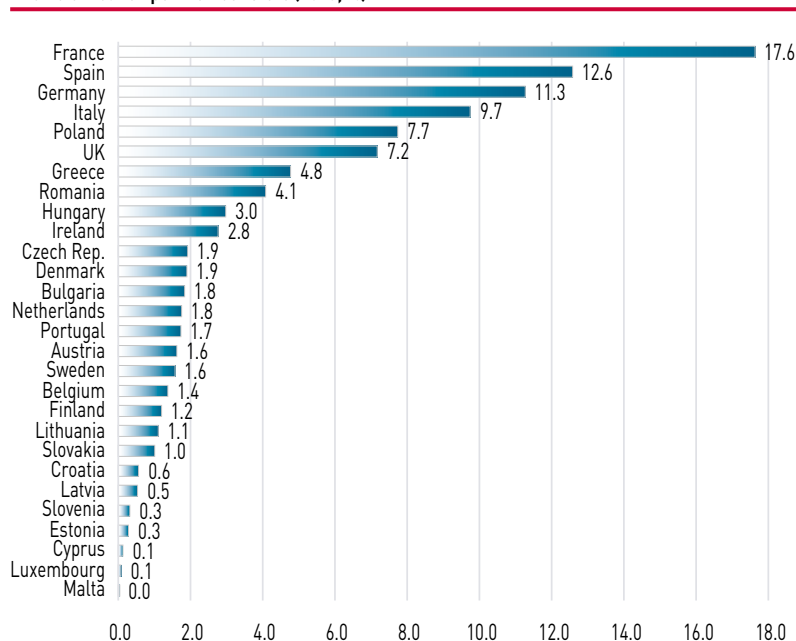


Note: Expenditure for direct payments and market measures; budget ceiling for rural development.
Source: European Commission.

FIRST PILLAR CAP

In 2018, a total of 4,323 million euro were spent in Italy on financing the first pillar of the CAP, 9.7% of what was spent at EU level. Direct payments represent 85% of the total, a lower weight than that assumed at EU level, due to the greater importance of some of the intervention measures typical of the Italian production system. In particular, the national support programme in the wine sector and the financing of operational funds for operational programmes in the fruit and vegetable sector represent 13% of our country's EAGF expenditure, a much higher weight than the EU average. The importance of these sectors and the associated expenditure is also confirmed by the fact that what received by Italy for the financing of these interventions represents just under 1/3 of what the EU spent on each of them. Regarding direct payments, a preponderant weight is assumed by decoupled payments, within which the basic payment stands out, with 2,011 million euro, and the payment for

EAGF distribution per Member State (2018; %)



Source: EU Commission.

EAGF expenditure by type of intervention, 2018

	Italy		EU		Italy/EU
	mio. euro	%	mio. euro	%	%
Interventions on agricultural markets	640,3	14,8	2.709,4	6,1	23,6
- Storage	0	0,0	182,3	0,4	0,0
- Olive programs	34,0	0,8	47,9	0,1	71,0
Fruit and vegetables	249,1	5,8	830,9	1,9	30,0
- National support programs to the wine sector	308,6	7,1	968,0	2,2	31,9
- Other	48,6	1,1	680,3	1,5	7,1
Direct Aid	3.675,7	85,0	41.496,5	93,5	8,9
- Decoupled direct aid	3.078,0	71,2	35.304,8	79,6	8,7
- Voluntary coupled Regime (art. 52)	420,9	9,7	4.033,2	9,1	10,4
- Other direct Aid	176,8	4,1	2.158,5	4,9	8,2
Other measures	6,8	0,2	158,6	0,4	4,3
TOTAL EAGF*	4.322,8	100,0	44.364,5	100,0	9,7

*administrative expenditures included

Source: EU Commission

areas with natural constraints, with 1,018 million euro, while the payment for young farmers stood at a much lower amount of 40.1 million euro. Among other payments, it is worth mentioning voluntary coupled support, intended, in Italy, mainly for meat

and dairy product sectors, durum wheat and olive trees, and the small farmers scheme which has received 142.4 million euro.

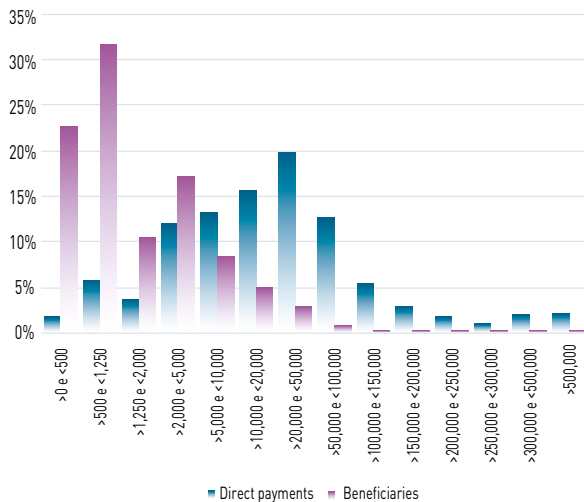
France is the main recipient of the first pillar expenditure (around 18% of the total),

followed by Spain. Italy holds fourth place also in terms of resources actually spent on direct payments and market measures, with a share of 9.7%, after Germany and immediately before Poland.

In terms of distribution of direct payments by size-class of payment, the well-known paradigm is confirmed which sees the majority of payments concentrated on a limited number of beneficiaries. In particular, in 2017 around 18% of the beneficiaries (those above 5,000 euro) received 77% of the payments. Over half of the beneficiaries (those under 1,250 euro) received just 7.5% of the payments.

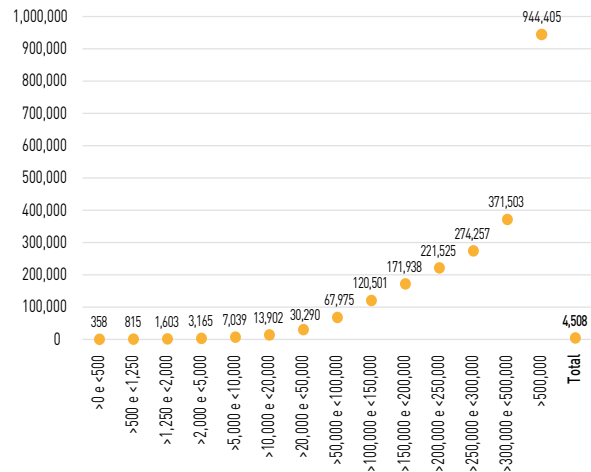
Average payments are positioned within a fork ranging from about 360 euro/farm, as the average of the lowest class (0-500 euro), to 944,000 euro/farm, as the average of the highest class (over 500,000 euro). National average is equal to 4,500 euro per farm.

Distribution of direct payments and beneficiaries by payment class in Italy (2017)



Source: EU Commission.

Average payment per beneficiary by payment class (2017; €/beneficiary)



Source: EU Commission.

SECOND PILLAR CAP

At 31 December 2018, the total public expenditure incurred under the second pillar of the CAP amounted to 5,993 million euro, of which 2,953 million euro financed through the Community budget. Two years before the end of the current programming cycle, Italy's absorption capacity of the initial funds stands at 29%, without any penalty applied by the Euro-

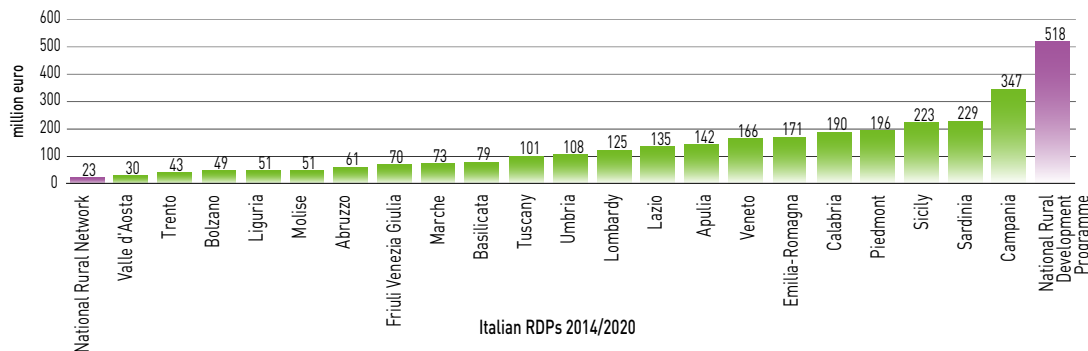
pean Commission. The programmes that contribute most to this result involve the national rural development programme (627.8 million euro), the regions of Sicily (577 million euro) and Veneto (507.86 million euro), which alone represent around 30% of the national financial advances.

Total public expenditure disbursed in

2018 by the Italian rural development programmes stands at 3,180 million euro, with an EAFRD fund share of 1,570 million euro. Public expenditure among the individual RDPs sees more than 40% of the finances distributed going to only four programmes: RDP, Campania, Sardinia and Sicily.

The largest part (43.8%) of the public

2018 Public expenditure - CAP II pillar

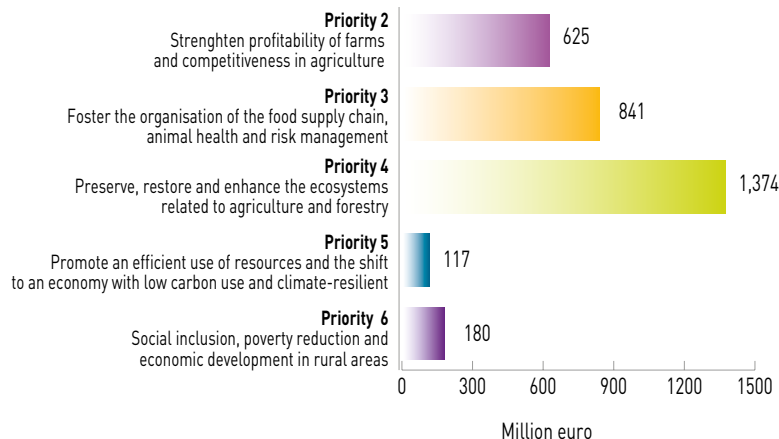


Source: MIPAAF.

Allocations and expenditure 2018 (mio.euro)

PROGRAMME	Allocation 2014-2020	Expenditure 2018	Total expenditure	Financial progress (%)
	Public expenditure	Public expenditure	Public expenditure	
	a	b	c	d = c/a
Piedmont	1,078.9	195.8	336.4	31.2
Aosta Valley	136.9	29.8	40.5	29.6
Lombardy	1,142.7	125.2	292.1	25.6
Liguria	309.7	50.6	63.0	20.3
Bolzano	361.7	49.2	190.8	52.8
Trento	297.6	43.2	107.6	36.2
Veneto	1,169.0	166.4	507.9	43.4
Friuli Venezia Giulia	292.3	69.7	82.1	28.1
Emilia-Romagna	1,174.3	170.8	357.6	30.5
Tuscany	949.4	101.5	260.3	27.4
Umbria	928.6	108.0	280.4	30.2
Marche	697.2	73.4	122.5	17.6
Lazio	822.3	134.9	203.5	24.8
Total of the most developed regions	9,360.6	1,318.5	2,844.6	30.4
Abruzzo	479.5	60.9	90.0	18.8
Molise	207.8	51.1	73.1	35.2
Sardinia	1,291.5	228.8	465.8	36.1
Total of the regions in transition	1,978.7	340.8	629.0	31.8
Basilicata	671.4	78.9	146.9	21.9
Calabria	1,089.3	190.3	391.3	35.9
Campania	1,812.5	346.7	455.5	25.1
Apulia	1,616.7	142.2	298.1	18.4
Sicily	2,184.2	222.7	577.0	26.4
Total of the less developed regions	7,374.1	980.9	1,868.7	25.3
Programme of the National Rural Development	2,084.7	518.0	627.8	30.1
NRN: National Rural Network	114.7	22.7	22.7	19.8
Total	20,912.9	3,180.9	5,992.9	28.7

Distribution of the expenditure by strategic priority



Source: MIPAAF.

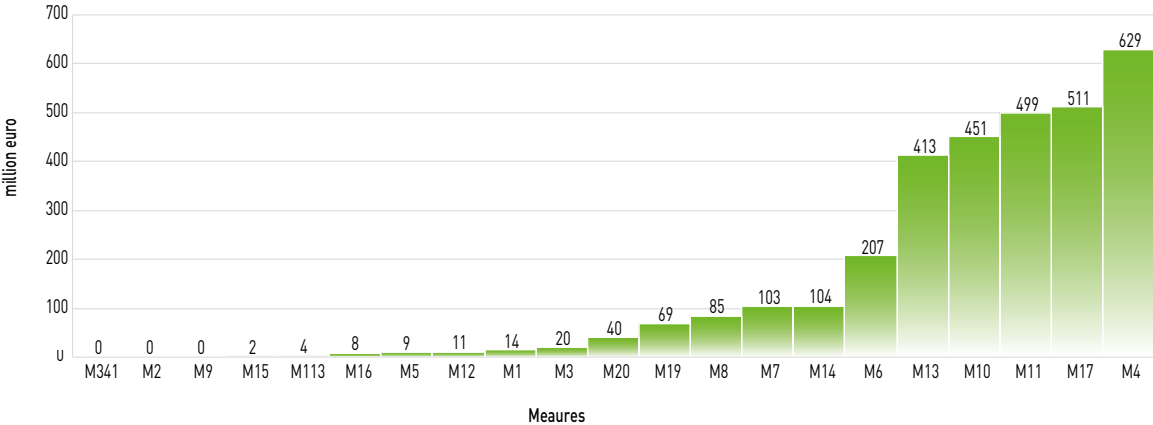
grants disbursed (1,374 million euro) went to environmental and landscape interventions and, as such, came under strategic priority 4. This was followed by interventions relating to priority 3 with 26.8% (841 million euro) and those relat-

ing to priority 2 with 19.9% (625 million euro). Operations financed under priorities 5 and 6 were less incisive.

With regard to the individual intervention measures that contributed to the 2018 spending result, there was a strong surge

in the M4 “Investments in tangible fixed assets” which, with 629 million euro, represented 19.79% of total public grants disbursed. This was followed by the M17 “Risk Management” measure with 511 million euro (16.08%) and the “premium” measures which, together, make up about 46% of the total: M11 “Organic agriculture” with 499 million euro (15.7%), M10 “Agro-climatic-environmental payments” with 451 million euro (14.2%), M13 “Indemnity for areas subject to natural or specific constraints” with 413 million euro (13%) and M14 “Animal welfare” with 104 million euro (3.3%).

Distribution of the expenditure per measure



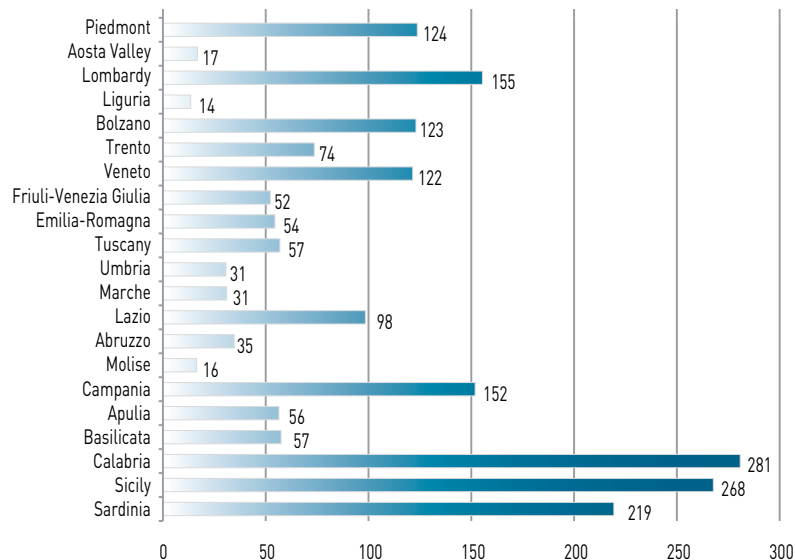
Source: MIPAAF.

REGIONAL EXPENDITURE

Analysis of the expenditure data relating to the regional budgets for 2017 identifies an overall payment amount of approximately 2 billion euro for the agricultural sector, substantially stable compared to the previous year¹. The regions with the highest percentage of payments to the sector include Calabria (16.1%), Sardinia (15.4%), the AP of Bolzano (13.5%) and the AP of Trento (13.4%).

Analysis of expenditure by type of agricultural policy interventions, according to the classification adopted by CREA PB, shows that the largest part of the total payments is directed to forestry activities (27.3%) and technical assistance and research (25.4%), with values of approximately 554 and 517 million euro respectively. This is up on 2016 as far as forestry activities are concerned and down for technical assistance. Corporate investments (14%) and

Payments to the agricultural sector (million euros), 2017



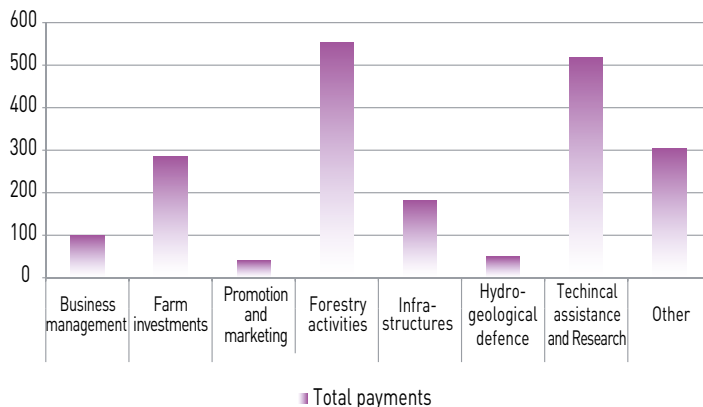
¹ Data for Abruzzo, Piedmont and Marche are estimated.

Source: CREA Research Centre for Policies and Bioeconomy.

infrastructure spending (8.9%) follow.

The weight of payments for the agricultural sector compared to overall budget payments for each Region shows how agricultural expenditure is somewhat modest and, for 2017, only Calabria exceeded the 5% threshold. Other regions with a significant level of agricultural expenditure are Basilicata, with an incidence of 2.8%, Sardinia with 2.7% and the AP of Bolzano with 2.1%.

Agricultural financing per economic-functional destination (million euro), 2017



Source: CREA Research Centre for Policies and Bioeconomy.

In 2018-2019, government action in the agri-food sector focused on the following topics:

- A. Protection of the land and forest heritage
- B. Support for agricultural sectors in crisis and promotion of certain types of production
- C. Review of the control system and administrative simplification
- D. Income support for farmers
- E. Reduction of the tax burden on businesses and introduction of new tax breaks for the sector.

A) Protection of the land and forest heritage

1. The establishment of a Fund for the management and maintenance of Italian forests, with a budget of 2 million euro for 2019, 2.4 million euro for 2020, 5.3 million euro for 2021 and of 5.2 million euro for 2022.
2. The financing of the National Mountain

Fund for an amount of 10 million euro for each of the years 2019, 2020 and 2021.

3. A payment for the removal and recovery of trees or trunks, fallen or felled as a consequence of the Vaia storm that occurred at the end of October in the Alpine regions of the North-East. The payment is 50% of the costs to a maximum spending limit of 3 million euro for 2019.
4. An increase of 2 million euro for the years 2019 and 2020 and new resources of 2 million in 2021, to be used for replanting with plants tolerant or resistant to the bacterium *Xylella fastidiosa* and district contracts for implementing a regeneration programme for agriculture in the affected regions.

B) Support for agricultural sectors in crisis and promotion of certain types of production

The 2019 budget authorised expenditure of

one million euro for each of the years 2019 and 2020 to support beekeeping.

Law no. 44/2019 provides for:

1. Support measures for sugar industry businesses and established that the recovery procedures for some aid granted for the sugar sector, resulting from the Commission's Implementing Decision no. 2015/103, should remain suspended until the obligation to be borne by beneficiaries has been definitively assessed.
2. Access to compensation from the National Solidarity Fund for agricultural companies in Apulia, operating in the olive-oil sector, which suffered damage from the exceptional frosts that occurred in 2018 and which had not subscribed to subsidised insurance policies to cover risks. A payment was also introduced for restarting production in mills located in the region, within the spending limit of 8 million euro for 2019 and a payment to cover the costs incurred for interest due for 2019 on bank

loans contracted by companies by 31 December 2018, within the overall spending limit of 5 million for 2019. There are also compensatory measures of 5 million euro for 2019 for restoring lost production. Finally, an extraordinary plan was adopted for the regeneration of the olive sector in Apulia, with 150 million euro for each of the years 2020 and 2021 in the areas infected with the *Xylella fastidiosa* bacterium.

3. A 10 million euro fund was established at MIPAAF for 2019 to promote the quality and competitiveness of sheep milk, with interventions in support of the supply chain and district agreements, the regulation of the supply of PDO sheep cheese, research and technology transfer. Finally, an additional 5 million euro were earmarked for granting payments to cover the costs incurred for interest payable on bank loans contracted by companies in the sector by 31 December 2018.

C) Review of the control system and administrative simplification

The budget law 2019 provided for:

1. Strengthening the control system for the protection of the quality of agri-food products, with the authorisation to hire 57 units of staff working at the Central Inspectorate for the protection of quality and fraud repression of agri-food products (CIQFR).
2. Establishing the national fruit register to record areas intended for fruit and vegetables.
3. Extending to January 2020 the date by which the Uniemens system must be applied to the agricultural sector, the mandatory report that the employer is required to send each month to INPS.
4. The option for agricultural entrepreneurs to sell not only their own products but also products purchased from other agricultural entrepreneurs.
5. Extending the right, already existing for companies in mountain municipalities,

to farms of the pre-Alpine hills, foothills and non-irrigated plains of not having to have the agricultural land tenure document for the purpose of establishing the relative company file.

D) Income support for sector operators

The budget law 2019 provided for:

1. Extending to 2019 the daily allowance up to a maximum of 30 euro, and within the spending limit of 11 million euro, for workers employed by sea fishing enterprises, for the period of suspension of work due to obligatory temporary stoppages.
2. Increasing the allocation, by 1 million euro for each of the years 2019, 2020 and 2021, of the Fund for the distribution of food to the most deprived people, which has an endowment of 5 million euro when fully operational.
3. Allocating a portion of agricultural land free of charge to families with three or more children, provided that at least

one child is born in the years between 2019 and 2021.

E) Reducing the tax burden on businesses and introducing new tax breaks for the sector

The budget law 2019 provided for:

1. Reducing excise duty on beer from 3 euro to 2.99 euro per hectolitre and degrees Plato. In addition, the provision was introduced, for craft breweries, with annual production not exceeding 10,000 hectolitres, to be able to consider the finished product ascertained at the conclusion of operations and not upstream, as well as the 40% reduction on the ordinary rate.

2. Extending the VAT rate reduced to 4% to some ingredients used in the preparation of bread.

3. The option for biogas plants up to 300 kW, powered by by-products from farming and green management activities, created by agricultural entrepreneurs, to access the incentives provided for electricity produced from renewable sources other than photovoltaic, within the limits of an average annual cost of 25 million euro.

4. Equalising tax treatment of family members who assist the farmer directly to that of owners of agricultural enterprises.

5. Extending tax relief for the greening of

uncovered areas of private residential buildings for 2019.

6. Establishing a substitute tax on the income tax of individuals and related additions to be applied to income derived from the occasional performing of activities to collect non-woody wild products and spontaneous medicinal plants. In particular, the payment of 100 euro of substitute tax is provided for in the event that the threshold of payments received from the sale of the product does not exceed 7,000 euro, this to be paid by 16 February of the reference year.