# AGRICULTURE REPORT
# 2024
## Flemish agriculture in figures

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FISHERIES

Flanders
State of the Art

LARA
'24

# AGRICULTURE REPORT 2024

Flemish agriculture in figures

First copy submitted to

**Jo Brouns**
Flemish Minister for Economy, Innovation, Work, Social Economy and Agriculture

# COLOPHON

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The report and underlying data are available at www.vlaanderen.be/landbouwcijfers.

# PREFACE

In the first half of 2024, Belgium will chair the Council of the European Union. This means that our country will lead the European agenda and promote cooperation among member states and EU institutions in order to make progress in various areas, including climate change, economic growth and social cohesion. Various summits and conferences will be held during the Belgian EU Presidency.

For example, the Flemish government is organising an Open Food conference in Leuven in March. We are putting forward a sustainable European food policy via collaboration and innovation, seeking synergies between science, policy and practice through dialogue and interaction. We are organising workshops, panel discussions, visits and networking events, in connection with themes such as novel proteins, food environments, nutrition for specific target groups, food security, fair prices, food inequality and policy strategies.

Agriculture is one of the pre-eminent policy issues decided at the EU level. The Common Agricultural Policy (CAP) is managed at the European level and funded by the common EU budget. It is a partnership between society and agriculture to ensure a stable supply of food, a fair income for farmers, environmental protection and vibrant rural areas. Flanders adds its own emphases in the Flemish CAP Strategic Plan 2023-2027.

In the context of the EU Presidency, the Agency for Agriculture and Fisheries is publishing its new Agriculture Report (LARA). The ninth edition of the this report, which is stipulated by decree, presents Flemish agriculture and horticulture on the basis of structural, economic, social and environmental indicators, and also covers agricultural policy and related policies. A Fisheries Report (VIRA) is also published at the same time as the LARA.

The Agriculture Report 2024 is a summary report. Readers interested in more figures relating to Flemish agriculture and its various subsectors should visit the Dutch-language website www.vlaanderen.be/landbouwcijfers. The site aims to be the reference for current data and descriptive data on Flemish agriculture.

I would like to thank all those who contributed to this comprehensive document. It is a useful reference tool for anyone involved in Flemish agriculture and horticulture, while also remaining accessible to a broader audience. Sector representatives, policy officers, researchers, students, journalists, citizens and farmers will gain insight into the state of and expected developments within the sector. These insights are also essential for undergirding the policy to be pursued.

I wish you pleasant and instructive reading.

**Patricia De Clercq**
**Administrator-General Agency for Agriculture and Fisheries**

January 2024

# INHOUD

# BACKGROUND

## SUMMARY REPORT, COMPREHENSIVE WEBSITE

This is the 9th edition of the Agriculture Report. The LARA has become a benchmark containing current figures and facts about agriculture and horticulture. The report is intended for all those closely following agriculture and agricultural policy, but is also accessible to anyone with an interest in the sector. It is published along with the Fisheries Report (VIRA).

The Agriculture Report 2024 was conceived as a pocketbook: concise, handy and with a focus on figures. The report starts with an explanation of European and Flemish agricultural policies, before making the link to climate, food and other policies. This is followed by a description of the state of Flemish agriculture and horticulture based on structural, economic, social and environmental indicators. After a general outline of the sector, the main subsectors are also covered: arable farming, outdoor vegetables, vegetables under glass, fruit, ornamental crops, beef cattle, dairy cattle, pigs and poultry. The final section consists of a European benchmarking: how does Flemish agriculture compare to other EU member states?

The indicators include a link to a web page for more information, using a QR code. In general, this is the website on agricultural figures: www.vlaanderen.be/landbouwcijfers. Since 2021, this site has been the reference for current data and descriptive information on Flemish agriculture. The website contains a wealth of data and reports, presenting statistical material in an attractive, user-friendly and interactive way. The site is also updated regularly, so the latest figures will always be available.

## MULTIPLE SOURCES

The Agriculture Report is the result of the processing and analysis of the available figures, both published and unpublished, from various reliable databases. The three main databases are the following:

1. The Belgian statistical office Statbel rolls out a general agricultural survey once every three or four years, to get a picture of the structure of agriculture, and it also collects statistical data from other administrative databases.

1. The single application to the Agency for Agriculture and Fisheries is the annual declaration that a land user must make of their plots in use, and this is an important basis for farmers, for various applications for support and for the declaration requirement for the 'Mestbank'.

2. The Agricultural Monitoring Network (LMN) is the accountancy network of Flemish agricultural and horticultural farms, and is managed by the Agency for Agriculture and Fisheries. It is a source of business results and key technical figures. This sample also includes regular surveys.

3. Other sources include the Department of Environment and Spatial Development, Eurostat, the Institute for Agricultural, Fisheries and Food Research (ILVO), the National Bank of Belgium, Notaris.be, Statbel, the Energy and Climate Agency of Flanders (VEKA) and the Flanders Environment Agency (VMM). The sources consulted are indicated next to the indicator.

As regards the statistics compiled, all figures refer to Flanders unless explicitly stated otherwise. These are the latest available data, which is not the same year for all indicators. As regards the figures, the final version of the report was drawn up in November 2023. The report reflects the situation at that time. It is therefore possible that some information is no longer up-to-date at the time of publication. We advise you to consult our website with figures for the most recent situation.

The text often refers to agriculture, and to agriculture and horticulture together. As long as no explicit difference is made (in indicators and suchlike) between agriculture and horticulture, agriculture refers to both agriculture and horticulture.

## A COLLABORATIVE EFFORT

The Agriculture Report is published by the Agency for Agriculture and Fisheries of the Flemish government. Project manager Jonathan Platteau was responsible for the general coordination of LARA 2024. Tom Van Bogaert was editor-in-chief. The head of the project team was Ellen Maertens.

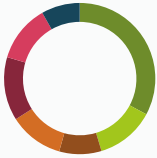
The editors of the texts were the following, in alphabetical order: Maxime Bolle, Margo Daelemans, Sylvie Danckaert, Eline de Regt, Jan De Samber, Matti Defillet, Sandrine Defour, Timo Delvaux, Els Demuynck, Joeri Deuninck, Evelyne Goemaere, Maayke Keymeulen, Sonia Lenders, Isabelle Magnus, Jonathan Platteau, Ilse Timmermans, Tom Van Bogaert, Sam Van Vlierberghe, Dirk Vervloet and Koen Wellemans. In addition, other colleagues assisted with photos and accompanying text: Peter Coucke, Sara Gomand and Deborah Martens (Agency for Agriculture and Fisheries) and Ann-Sophie Sacré, Stephanie Van Weyenberg and Veerle Verlinden (ILVO).

As stipulated by decree, the Strategic Advisory Council for Agriculture and Fisheries (SALV) assists the Department in drafting the Agriculture Report and Fisheries Report. The SALV advises the Government of Flanders and the Flemish Parliament on agriculture and fisheries in the broad sense. The opinions are translated into interactive, supported political decision-making. The SALV is incorporated within the administrative structure of the Social and Economic Council of Flanders (SERV). The SALV is made up of 20 representatives and their deputies from 18 stakeholder organisations involved in the agriculture and horticulture sector. Two inspiring SALV documents from 2022 include the "Vision Paper. A sustainable future for agriculture in Flanders: from challenges to opportunities' and 'Opinion on the European Presidency 2024'.

# KEY FIGURES

## SPECIALISATION OF FARMS

**22,449**
farms
16,251
professional
farms



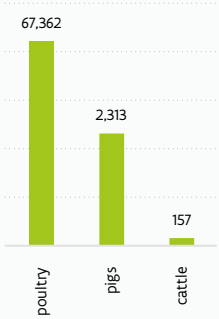
- arable farming
- horticulture
- mixed farming
- milk production
- beef production
- other livestock farming
- pigs

## AVERAGE NUMBER OF LIVESTOCK ANIMALS ON SPECIALISED FARMS

**5,388,318**
number of pigs
-13%
vs. 2012

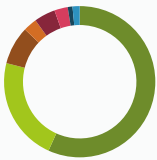
**45,539,253**
number of poultry
+51%
vs. 2012

**1,248,195**
number of cattle
-2%
vs. 2012




## USE OF AGRICULTURAL AREA

**619,806 ha**
utilised
agricultural area
average of 27.6 hectares of
agricultural land per farm



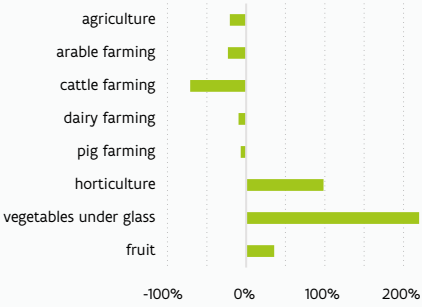
- fodder
- cereals
- potatoes
- sugar beets
- vegetables
- fruit
- other horticulture
- other uses

## AGE OF THE MANAGING DIRECTORS

**56 years old**
average age
of farmer
20% female
managing directors


## FAMILY INCOME PER FAMILY WORKER RELATIVE TO TOTAL AGRICULTURE AND HORTICULTURE

**€ 44,705**
income per
family worker
€48,595
average salary
Flemish employee




## PRODUCTION VALUE OF AGRICULTURE AND HORTICULTURE

**€ 6.27 billion**
production value
45,938
people regularly
employed

# AGRICULTURAL FIGURES WEBSITE

Not only was the 8th edition of the Agriculture Report published in 2021, a website featuring agricultural figures was also published at www.vlaanderen.be/landbouwcijfers. This figures-based website innovatively fulfils a core mission of the Agriculture Report: to describe the state of agriculture in Flanders.

Since then, this site has been the reference for current data and descriptive information on Flemish agriculture. The website contains a wealth of figures and reports, presenting statistical material in an attractive and user-friendly way. Think of the website as a living digital encyclopaedia of agriculture and fisheries.

The major advantage of a website over a report is that the information can be updated quickly. New indicators, datasets and publications are continually being added, and data are updated throughout the year. As such, you will always find the latest figures.

The figures-based website features an interactive map. Visitors can search for the desired information in various ways, either via the navigation or through the search function. Users can zoom in on the figures and visualise additional variables. The visualisations and the underlying data can always be downloaded. Open data are made available, and stakeholders can perform their own analyses on these using filters and parameters, either on the site itself or with their own software.

Key target groups such as policy makers, sector representatives, journalists, researchers, students, farmers and citizens can actively use the website as a resource. Accurate, reliable and up-to-date data help undergird policy, objectively inform the debate around agriculture, and bridge the divide between farmers and citizens. The sector and price information made available can help farmers make informed business decisions, thereby enhancing innovation and resilience within the agriculture and horticulture sectors.

The figures-based website is part of the Agency for Agriculture and Fisheries' mission to remain the authority on agricultural data in Flanders. The Department is a data-driven organisation with a permanent focus on quality, reliability, innovation and safety. Data that are useful for third parties are made available as much as possible on the figures-based website, in the form of high-quality indicators and datasets, always with due observance of applicable privacy regulations. With its figures-based website, the agency is ahead of the pack within the Flemish government.

# BACKGROUND INFORMATION PHOTO MATERIAL

**Page 13 High tech and data in agriculture**

These days, we cannot imagine life without digital applications: from handling digital paperwork to making informed choices based on data. Digitisation is a fact of life, and Flemish farmers and horticulturists are no exception to the rule, having a range of digital tools at their disposal. One problem is that the administrative burdens remains very high for farmers. They need to manually enter the same information into the digital tool over and over again, or copy information from one application into another and vice versa. When data is shared digitally, farmers are presented with various contracts, agreements and privacy statements. They therefore end up losing track of what data has been shared and with whom.

One solution: DjustConnect, the data sharing platform in the agri-food sector with a focus on farmers and horticulturists, hosted by the Institute for Agricultural, Fisheries and Food Research (ILVO). Firstly, DjustConnect provides one clear overview of all data requests for farmers and horticulturists, which means they can take back control, and one overarching contract. Secondly, the DjustConnect team is actively looking for solutions to the administrative burden by linking an application with the necessary data sources, so that copying data becomes a thing of the past.

**Page 49 Protein cultivation**

Proteins are a crucial part of human and animal nutrition. The current model of protein production and consumption is under pressure around the world, with challenges in the area of food security, the environmental impact and public health. Making protein production and consumption more sustainable and diverse creates opportunities for prosperity, the environment and health.

The Flemish Protein Strategy 2021-2030 targets more vegetable proteins, one of the six strategic themes. That means that our farmers will produce more protein-rich crops themselves. A supply of locally grown vegetable proteins, both for human consumption and animal feed, means we are less dependent on imported proteins, while lowering our ecological footprint. That way, we can grow more protein-rich (mixed) crops, such as grass clover or grass alfalfa for animal feed applications. These crops are more drought resistant, and need less fertilizer. Flanders already boasts significant know-how in this area. In addition, we can focus on more vegetable proteins for human consumption by growing protein crops, such as legumes (e.g., chickpeas, soya, lentils and broad beans). Through the CAP, farmers can receive support for growing protein crops.

**Page 69 Young farmers**

Flanders will also need farmers in the future, not only for local food production, but also for the landscape and social services they provide. The inflow of workers into agriculture and horticulture plays an important role in the sustainability of the agricultural sector, the economic development of the agri-food sector, rural development and strategic food supply in general. The inflow also enriches the sector, by bringing new knowledge and skills.

The most common form of inflow into agriculture is still intergenerational succession, where the son or daughter takes over the farm from the parents. But there are also newcomers who did not grow up on a farm and had no previous link to agriculture. A familiar and growing problem is the limited inflow of young farmers, given the major challenges within the sector. As such, focusing on the inflow of farmers and generational change in the sector is a key aspect in the future sustainability of agriculture.

**Page 79 European Innovation Partnership**

The European directives of the 'Clean Energy for all Europeans Package' state that members of an energy community are entitled to produce their own energy, store it and share it with each other, or sell it on the (local) energy market. 19 farmers from the rural hamlet of Hal (Minderhout) were therefore inspired to team up with their neighbours to form a local energy cooperative, Halnet cv. The operational group aims to accelerate the development of rural energy communities with farmers into active players in the energy market. It intends to do this by investigating, developing and fleshing out business models for commercialising self-generated energy in a pilot project, in accordance with the forthcoming Flemish 'Energy Communities' legislation and the approved European directive from the 'Clean Energy Package'.

**Page 91 Dairy cattle and climate**

What is the situation of our Flemish farmers in the climate issue, and how can they gradually become more sustainable in a practical and economically feasible way? This was the key question in the VLAIO research project Klimrek, in which ILVO, the Belgian National Farmers Union and VITO developed climate pathways tailored to dairy farms, arable farms and pig farms. These pathways consist of a climate scan, which gives farmers detailed insight into the climate impact of their farm, combined with company-specific advice on possible climate measures. The entire pathway is organised under the guidance of a specialist climate consultant.

The detailed climate scans on around 150 Flemish dairy farms show that, on average, 1 kg of Flemish milk is only associated with 0.99 kg of $CO_2$ equivalents. That is lower than the score of all other milk-producing countries. The distribution around the mean shows that improvements are still possible. Examples include adjusting cows' rations, focusing on healthy young cattle rearing and longevity, or switching to grass clover. One interesting aspect is that typical farm characteristics (large- or small-scale, organic or conventional, with grazing or not) have no bearing on the farm's climate performance. Climate-efficient milk production is therefore unrelated to the farm typology. A customised scan, with tailored measures, is therefore clearly worthwhile.

**Page 103 High-tech greenhouse cultivation**

Flanders' temperate climate is perfect for greenhouse cultivation. Our greenhouse cultivation is continually evolving and striving for improvements in the areas of automation, circularity, energy supply and energy saving. The controlled environment of a greenhouse enables high yields, which for certain products can be as much as five times higher than regular cultivation in other countries.

The Netherlands also has a robust greenhouse sector where the growers, like in Flanders, are focusing on high-tech greenhouses. In Belgium, we see more family-owned businesses with smaller surface areas, which can be advantageous in terms of spreading risk. Moreover, producer organisations in Flanders play a crucial role in greenhouse cultivation, with the result that there is more transparency in pricing.

**Page 123 Vineyard in Flanders**

The changing climate is having a major impact on our agriculture and soils in Flanders. This may nevertheless lead to new strengths emerging, such as local viticulture. Although wine production is still modest compared to our neighbouring countries, we are witnessing impressive growth.

Wine regions in Flanders are scattered throughout the hilly regions, where the soil and microclimate are ideal for growing wine grapes. Thanks in part to the more favourable climate and technological advances, wine makers are successfully producing high-quality wines, meaning that the sector has a promising future.

# ABOUT FLANDERS

Like Wallonia and Brussels, Flanders is a region of the federal state of Belgium. Dutch is the official language here. Belgium is a parliamentary democracy subject to the rule of law. The kingdom gained independence in 1830, and in 1951, along with France, West Germany, the Netherlands, Luxembourg and Italy, set up the European Coal and Steel Community, the forerunner of the European Union.

Following various state reforms, the Flemish Region has a large degree of autonomy. The Flemish Parliament is the legislative power, while the Government of Flanders is the executive power. Flanders also has competence in the Brussels-Capital Region, which is officially bilingual. Indeed, Flanders is also one of Belgium's three communities, alongside the French Community (Wallonia-Brussels Federation) and the German-speaking Community. Communities in Belgium are responsible for matters directly related to the public, including education, wellbeing, sports, media and culture. Regions are competent for spatial matters, such as spatial and urban planning, the economy, employment, agriculture, public works and foreign trade.

The Flemish Region covers an area of 13,522 km$^2$. By way of comparison: Belgium covers 30,528 km$^2$. Flanders consists of five provinces: West Flanders, East Flanders, Antwerp, Flemish Brabant and Limburg. The capital is Brussels. Flanders is a flat country. The highest points are the Stroevenbos and the Reesberg in Voeren, which rise to a height of 287.5 m. Flanders lies on the North Sea and has a 66 km-long coastline. There are three river basins of the Scheldt, Meuse and Ijzer rivers.

As of 2023, the Flemish Region had nearly 6.8 million inhabitants. By way of comparison: Belgium officially has a population of 11.8 million. The average population density in Flanders is 498 inhabitants per km$^2$. Population density is especially high in and around the 'Flemish Diamond', the central area straddling Ghent, Antwerp, Leuven and Brussels. This is also the case in certain coastal municipalities (Ostend, Bredene, Blankenberge, Bruges), in South-West Flanders (Kortrijk, Roeselare) and in some central municipalities of the province of Limburg (Hasselt, Genk).

Not only is Flanders densely populated but, thanks to its central location, constitutes one of the most important traffic crossroads in Western Europe. These traffic arteries cross the region from north to south and east to west. This creates significant pressure on the open space, the living environment and mobility on the one hand, but attracts economic activity and housing on the other.

Flanders is a prosperous region. As of 2023, gross domestic product per capita in the Flemish Region is estimated at €45,200 purchasing power standard. In the EU-27, the average is €30,100 in 2020. The countries at the top are Luxembourg and Ireland, given that they are home to major (international) administrative and corporate headquarters. Flanders is behind Denmark, the Netherlands, Austria, Germany and Sweden, but ahead of Finland, France and Italy.

Flanders has an open economy that depends on imports and exports. This is due to its central location in a prosperous region, as mentioned above, but clearly also because of the ports of Antwerp and Zeebrugge, which are gateways to the European market. After Rotterdam, the Port of Antwerp-Bruges is the largest port in Europe and is the lifeblood of the Belgian economy. It is also home to the largest integrated chemical cluster in Europe. Exports of goods in the Flemish Region totals €480 billion in 2022. The 5 main export products are petroleum and natural gas, pharmaceutical products, vehicles and components, plastic products and applications, and machinery and tools. Among food products, potato preparations, frozen vegetables, fresh meat, pastry products, beer and chocolate were the primary exports. Flanders imports €495 billion worth of goods.

The Flemish business landscape primarily consists of small or medium-sized enterprises (SMEs). With over 714,000 businesses, the Flemish Region has significantly more businesses in 2022 compared to the other Belgian regions. In 2021, employment is highest in the trade sector, which accounted for 372,000 jobs. The top five sectors with the highest employment also includes headquarters and consulting firms, administrative and support services, education and social services.

Flanders attaches great importance to research and development. Its universities and university colleges, among other places in Leuven, Ghent, Brussels and Antwerp, are highly regarded internationally. For example, in terms of the number of scientific publications per 10,000 inhabitants in 2021, the Flemish Community is at a similar level to the best performing EU member states: the Scandinavian countries and the Netherlands. Research and development spending by businesses, research institutions and the government in the Flemish Region is an estimated €10.8 billion in 2021. As a result, R&D intensity achieves 3.65% of gross domestic product. That puts Flanders at the top of the European rankings, ahead of Sweden, Austria and Germany.

Agriculture, while only accounting for a small amount of GDP in Flanders, remains an essential link in the food system and agri-business complex. Flemish agriculture contributes to the food supply, plays a key role as a major land user in landscape and nature management, fosters the vitality of the countryside and, in urbanised Flanders, also provides other social services, including recreation, tourism, care and education. Agriculture is also a major supplier to the export-oriented food industry, alongside retail, hospitality and catering. The sector is confronted with various challenges, but it also boasts many strengths, including the professionalism and drive within family farms, high productivity, a favourable production environment with fertile soils and a temperate climate, highly developed logistics and infrastructure, advanced research and innovation, and easy access to local and international markets.

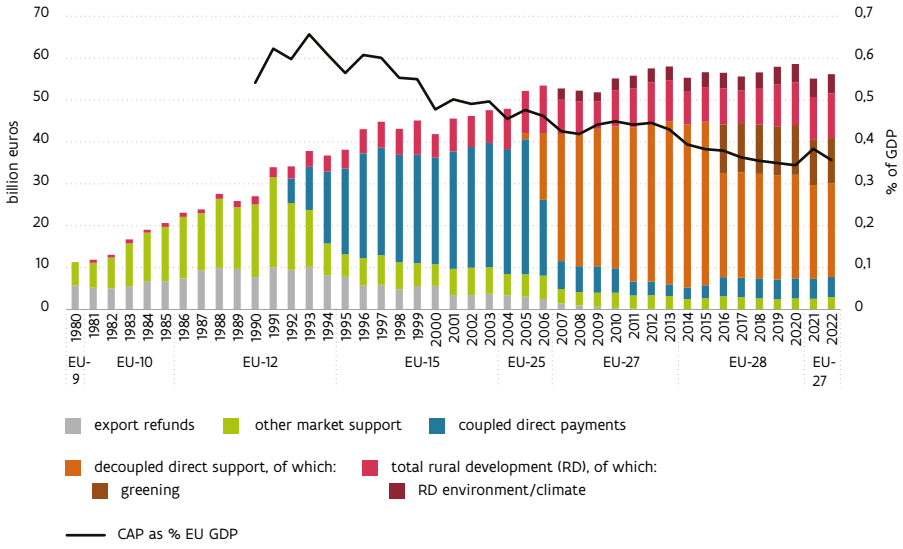
# POLICY

# EU CAP REFORM PATH: 1980–2022

In all EU Member States, the agricultural sector is supported and guided by the Common Agricultural Policy (CAP). Initially, the CAP was primarily focused on increasing production, providing cheap food to the people of Europe, and ensuring a minimum standard of living for the farmer - objectives that still apply today. However, the policy resulted in overproduction, was very expensive and increasingly created trade frictions. In addition, more and more expectations regarding agriculture were emerging within society. As a result, the CAP gradually evolved to adapt agriculture to these new challenges. This led to new objectives, which were ultimately reflected in changing expenditure for the policy instruments.

The figure below illustrates the CAP reform path based on the European Union's expenditure pattern for budget years 1980-2022. Here, calendar year X equals budget year X +1. This means that if there were major reforms to the CAP in year X, this is reflected a year later in the expenditure of budget year X+1.

Figure EU CAP expenditure and CAP reform path, budget years, 1980-2022




Source: European Commission - DG Agri

In 1991, the CAP was comprehensively reformed. Price and market support in the form of minimum prices, market interventions and export subsidies was phased out and largely replaced by direct support linked to production. It was decided in 2003 to decouple much of this income support from production, using a system of supplement and payment entitlements. This was introduced in 2005 and can be seen in the expenditure pattern starting in 2006. Farmers were also actively encouraged through a number of cross-compliance requirements to take measures in the context of environmental protection, animal welfare and food safety, as the income support was made dependent on these.

Since 2015, in addition to cross-compliance, part of direct income support has been linked to recipients meeting a number of greening requirements. Market and income support together form the first pillar of the CAP. Rural development policy was introduced in 2000 as the second pillar of the CAP. This built on a number of existing measures and brought them together into one framework. Unlike the first pillar, which is entirely funded by the EU, programmes within the second pillar are funded by EU funds as well as regional or national funds. These are not included in the figure. Rural development policy has become gradually more important, and a greater share of this support is progressively benefiting the environment and climate. The measures of the last CAP reform did not start until calendar year 2023 (budget year 2024), so the impact is not yet visible.

The figure shows that expenditure has increased from around €10 billion in 1980 for the then 12 EU Member States, to around €50 billion in 2005 for the by then 25 EU Member States. There was subsequently a slight increase to just under €60 billion in 2020 for the 28 EU Member States. The decrease in budget year 2021 is the result of Brexit in 2020. Apart from the rise in the number of Member States, the switch from price and market support to direct support did not result in a drop in expenditure. This is because, in addition to export subsidies and costs for intervention stocks, price and market support led to higher consumer prices, and this latter aspect of market and price support is not visible in public expenditure. In other words, where previously consumers were (partly) the ones paying for the policy, in addition to taxpayers, with direct support it is only taxpayers.

On the other hand, expressed as a percentage of gross domestic product (GDP), CAP expenditure has witnessed a declining trend, from about 0.60% to about 0.35%. In budget year 2021, the percentage increased due to Brexit, as the fall in GDP due to the UK's exit was greater than the fall in CAP expenditure. There has also been a continuous decline in CAP expenditure expressed as a share of total EU spending, from about 60% in the early 1980s, to 30% in 2020. The EU is now spending proportionately more money to address other challenges, including the economic recovery, digital transition, boosting innovation, migration and security.

# BUDGET FLANDERS DIRECT SUPPORT AND RURAL DEVELOPMENT 2014–2020 AND 2021–2027

The table shows the budgets for Flanders for Pillar 1 (direct support) and for Pillar 2 (rural development). Funds for direct support are presented according to calendar years, those for Pillar 2 in budget years. The direct support is entirely European. For 2014-2020, it amounted to €1,691.8 million in the baseline. There is a transfer of €96 million of funds from Pillar 1 to Pillar 2 (i.e., flexibility), thereby reducing the direct support to €1,595.8 million. For 2021-2027, before flexibility, there is a decrease in direct support of -5.1%, to €1,605.1 million. The transfer to Pillar 2 has increased by 29% to €123.8 million, meaning that €1,481.3 million is left over, which ultimately represents a decrease of -7.2% compared to 2014-2020.

Table Evolution of budget for direct payments (calendar years = campaign year submission of single application) and rural development (budget years), Flanders, 2014-2020 and 2021-2027

| calendar years / budget years | 2014-2020 | 2021-2027 | evolution 2021-2027 vs. 2014-2020 | | 2023-2027 |
|---|---|---|---|---|---|
| | million euros | million euros | million euros | % | million euros |
| before transfer P1 to P2 | | | | | |
| direct support* | 1,691.8 | 1,605.1 | -86.7 | -5.1 | 1,146.5 |
| rural total** | 575.5 | 719.0 | 143.5 | 24.9 | 502.1 |
| EU regular | 287.8 | 311.8 | 24.1 | 8.4 | 215.9 |
| EU Recovery Fund | 0.0 | 25.1 | 25.1 | | 0.0 |
| Flanders | 287.8 | 382.1 | 94.4 | 32.8 | 286.2 |
| transfer P1 to P2 | | | | | |
| amount | 96.0 | 123.8 | 27.8 | 29.0 | 123.8 |
| after transfer P1 to P2 | | | | | |
| direct support* | 1,595.8 | 1,481.3 | -114.5 | -7.2 | 1,045.6 |
| rural total** | 671.5 | 842.9 | 171.3 | 25.5 | 625.9 |
| **total EU*** ** | **1,979.6** | **1,942.0** | **-37.6** | **-1.9** | **1,362.4** |

* calendar years = campaign year single application, ** budget years, *** total EU = direct support + EU rural part
Source: Agency for Agriculture and Fisheries

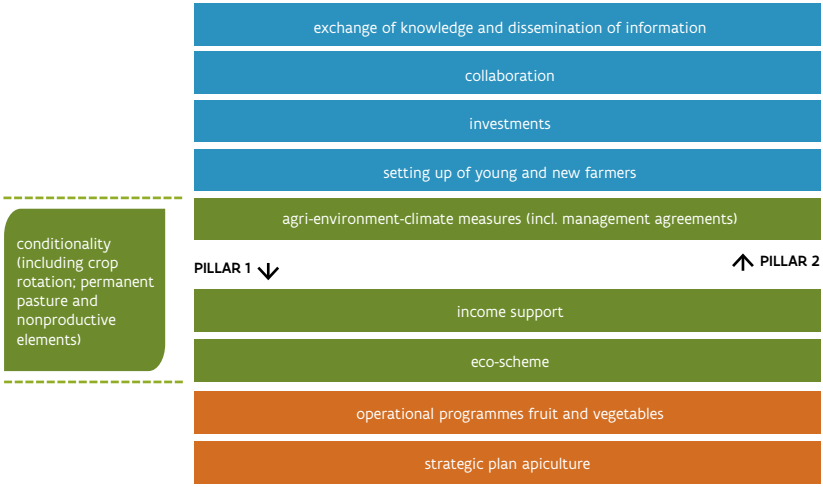
For Pillar 2, in addition to European support, there is Flemish co-financing. For the period 2014-2022, there is an equal amount of European support and Flemish co-financing, representing €575.5 million in the baseline. Including the transfer of funds from Pillar 1 to Pillar 2, €671.5 million is ultimately available. For 2021-2027, the European share has risen by 8.4%. The Flemish co-financing of the regular part of Pillar 2 has risen from 50% in 2021-2022 to 57% in 2023-2027, when the new CAP measures take effect. There was also an additional budget of €25.1 million in 2021 and 2022, through the Next Generation EU Recovery Fund, in response to the Covid-19 pandemic. This results in a total budget in Pillar 2 before flexibility of €719 million for 2021-2027, up 24.9% from 2014-2020. Including the €123.8 million from the transfer of Pillar 1 funds, there is a budget of €824.9 million, a rise of fully 25.5%. The last column of the table shows the budgets for 2023-2027, as this is the period when the new CAP measures start.

# CAP 2023–2027: A LOOK AT FLANDERS

The new CAP takes a new approach with 10 objectives, a strategic plan and a strong emphasis on results and performance. The CAP 2023-2027 sets out 9 specific objectives (three economic, three environmental and three social) and one horizontal objective. Member States need to outline in strategic plans how they will meet these objectives through Pillar 1 and Pillar 2 measures. The CAP is monitored and evaluated using output, results, context and impact indicators, an annual performance report and an evaluation plan. The new CAP is greener, with more ambition in terms of the environment and climate. Conditionality has been reinforced, there is a new eco-scheme instrument, and 'ringfencing', whereby 35% of the Pillar 2 budget is set aside for environment, climate, biodiversity and animal welfare. The strategic plans are also supposed to contribute to the Green Deal. The new CAP is also fairer, by converging the value of payment entitlements between and within Member States, a redistribution of income support, and a definition of active farmers. Finally, know-how, research and innovation have an important role in enhancing agricultural know-how and innovation systems.

The following figure shows an overview of the measures in Flanders that fall under the strategic plan. For Pillar 1, these are income support and eco-schemes, as well as the sectoral measures of the Common Market Organisation (CMO) fruit and vegetables and apiculture programme. For Pillar 2, the measures are support for agri-environment-climate measures (AECMS), investments, the setting-up of young and new farmers, cooperation and the exchange of know-how and dissemination of information. In the CAP 2023-2027, there is a new definition of 'active farmer' for a significant part of the measures, with the aim of focusing support more on this group of farmers.

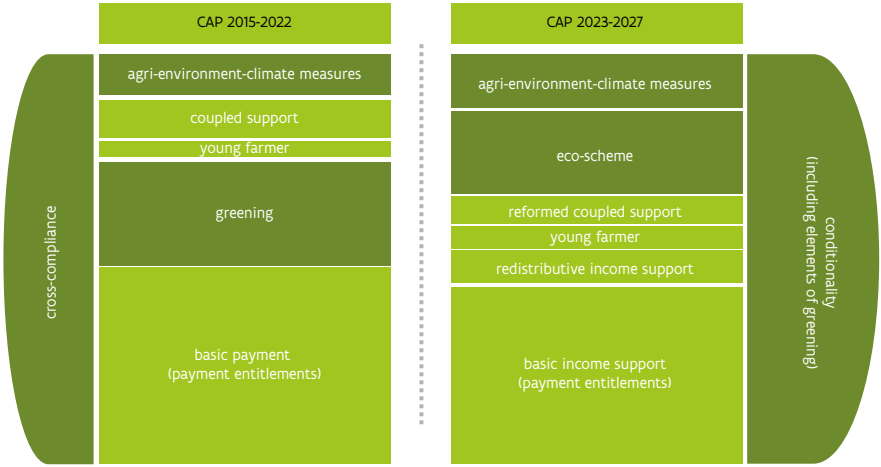
Figure Pillar 1 and Pillar 2 measures in the 2023-2027 CAP strategic plan for Flanders




Source: Agency for Agriculture and Fisheries

The following figure shows the measures that fall under the new conditionality, and makes a comparison with the previous CAP (period 2015-2022). The conditionality for 2023-2027, which farmers must meet, has been reinforced and includes a number of new elements in addition to elements of the cross-compliance and greening measures from the previous period. More specifically, the conditionality consists of a set of standards for good agricultural and environmental condition (GAEC) in the areas of climate, water, soil, biodiversity and landscapes, as well as management requirements arising from European environmental, public health, plant health and animal welfare legislation.

Figure Comparison of the previous CAP (2015-2022) with the new CAP (2023-2027) for measures falling under conditionality




Source: Agency for Agriculture and Fisheries

The basic payment will be replaced by the basic income support for sustainability. The system of payment entitlements that are activated according to the eligible surface area (one payment entitlement corresponds to 1 hectare of eligible surface area) has been retained. On top of this is a new element, redistributive income support, which is an additional payment per eligible hectare for the first 30 hectares. The aim is to redistribute the CAP support from larger to smaller and medium-sized farms. As was the case in 2014-2022, there is an additional income support for young farmers, to encourage generational renewal. The payment is per eligible hectare, with a maximum of 90 ha, and with a larger amount for the first 45 ha. There is also a suckler cow premium linked to sustainability. Compared to 2014-2022, there is no longer a suckler cow quota, and there are a number of subsidy conditions, various additional entry conditions relating to maintaining permanent pasture, sustainable pasture management and fodder production and diversification.

As of 2023, there is a new instrument within direct payments, namely the eco-schemes. There are also agri-environment-climate measures (AECMS) from the Agency for Agriculture and Fisheries and the Flemish Land Agency (VLM). The latter are better known as management agreements (MAs). Eco-schemes and AECMS are voluntary measures that support agricultural practices that are beneficial for the climate, the environment or biodiversity. Essentially, eco-schemes last 1 year and are renewable, and AECMS are multi-year commitments.

The following table shows the budget for total direct support after the transfer to Pillar 2 and the share of the different components within it for 2023-2027. 25% has been earmarked for eco-schemes. 75% will go to income support, with 54% for basic income support, 10% for the redistributive payment, 3% for young farmers and 8% for the coupled suckler cow premium.

Table Evolution of budget for the direct payment components, Flanders, in million euros, 2023-2027

| calendar years | 2023 | 2024 | 2025 | 2026 | 2027* | share |
|---|---|---|---|---|---|---|
| income support | 154.8 | 153.1 | 153.1 | 151.3 | 172.0 | 75% |
| basic income support | 111.4 | 110.2 | 110.2 | 109.0 | 123.8 | 54% |
| redistributive payment | 20.6 | 20.4 | 20.4 | 20.2 | 22.9 | 10% |
| payment for young farmers | 6.2 | 6.1 | 6.1 | 6.1 | 6.9 | 3% |
| coupled suckler cow premium | 16.5 | 16.3 | 16.3 | 16.1 | 18.3 | 8% |
| eco-schemes | 51.6 | 51.0 | 51.0 | 50.4 | 57.3 | 25% |
| **total direct payments after transfer P2** | **206.4** | **204.1** | **204.1** | **201.8** | **229.3** | **100%** |

* calendar year 2027 = budget year 2028 (1st year Multiannual Financial Framework 2028-2034), if this does not fit within the new ceiling, a discount will be applied

Source: Agency for Agriculture and Fisheries

The following table shows the committed budget for the total of the 2023-2027 period available for Pillar 2 measures according to funding source. A total of €625.92 million is available, of which €286.20 million is Flemish funds.

For agri-environment-climate measures, a total of €133.7 million is envisaged for 2023-2027, of which €71.76 million for the MAs of the Flemish Land Agency and €61.95 million for the AECMS of the Agency for Agriculture and Fisheries.

A large part of the Pillar 2 budget, €308.4 million, will go to investment support, mainly through the VLIF (Flemish Agricultural Investment Fund). Of this, €218.1 million is for (green) productive investments and for productive investments for animal welfare. There is also investment support for innovative (green) investments, worth €32.2 million. There is also €32.2 million of support for non-productive investments or investments with limited contribution to profitability and aimed at environment and climate goals. Investments for sustainable processing and marketing of agricultural products (€9.1 million) are intended for the agri-food industry. Finally, outside the VLIF, there is €16.7 million of investment support for development measures in Natura 2000 and areas with high ecological value.

€50.7 million will be allocated for VLIF support for young and new farmers setting up. This includes two measures: start-up and takeover by young farmers, and start-up or switch to a forward-looking sustainable business strategy on a farm. The latter measure supports the search for other business models that are more focused on creating added value. The 'cooperation' heading includes four measures totaling nearly €69.7 million. The majority of it, around €50.6 million, will go to LEADER (Local Development Strategy). €18.4 million will go to an innovation project call in the context of the European Innovation Partnership (EIP). Finally, there is €0.7 million to support the launch of an animal welfare label. For the last heading, the exchange of know-how and dissemination of information, €30.2 million has been made available. Of this, €24.5 million will go to training and advice, and €5.7 million to demonstration projects.

Table Committed budgets Pillar 2 measures, in million euro, European funding and co-financing Flanders, 2023-2027

| budget years 2023-2027 | European Union | | Flanders co-financing regular | Total |
|---|---|---|---|---|
| | regular Pillar 2 | transfer P1 to P2 | | |
| agri-environment-climate measures | 49.77 | 17.96 | 65.98 | 133.71 |
| AECMS Agency for Agriculture and Fisheries | 22.38 | 9.89 | 29.67 | 61.95 |
| management agreements Flemish Land Agency | 27.39 | 8.07 | 36.31 | 71.76 |
| investments | 92.71 | 92.80 | 122.89 | 308.40 |
| VLIF - (green) innovative investments | 9.61 | 9.89 | 12.74 | 32.25 |
| VLIF - productive investments | 26.78 | 28.65 | 35.50 | 90.93 |
| VLIF - green productive investments | 34.92 | 38.19 | 46.28 | 119.39 |
| VLIF - productive investments for animal welfare | 2.32 | 2.42 | 3.08 | 7.82 |
| VLIF - investments for sustainable processing and marketing of agricultural products. | 3.90 | 0.00 | 5.17 | 9.06 |
| VLIF - non-productive or investments with limited contribution to profitability with environment and climate goal | 9.60 | 9.89 | 12.72 | 32.21 |
| development measures in Natura 2000 and in areas with high ecological value | 5.58 | 3.76 | 7.40 | 16.73 |

| | | | | |
|---|---|---|---|---|
| setting up of young and new farmers | 21.81 | 0.00 | 28.91 | 50.72 |
| VLIF - start-up and take-over by young farmers | 17.92 | 0.00 | 23.76 | 41.68 |
| VLIF - start-up of, or switch to, a forward-looking sustainable business strategy | 3.89 | 0.00 | 5.15 | 9.04 |
| cooperation | 27.30 | 6.19 | 36.19 | 69.68 |
| animal welfare label | 0.30 | 0.00 | 0.40 | 0.70 |
| EIP innovation project call | 7.91 | 0.00 | 10.49 | 18.40 |
| LEADER - Local Development Strategy | 19.09 | 6.19 | 25.30 | 50.58 |
| exchange of knowledge and dissemination of information | 12.98 | 0.00 | 17.20 | 30.18 |
| demo projects | 2.44 | 0.00 | 3.23 | 5.66 |
| tailored training and advice | 10.54 | 0.00 | 13.97 | 24.51 |
| technical assistance | 11.33 | 6.87 | 15.03 | 33.23 |
| **total Pillar 2** | **215.90** | **123.82** | **286.20** | **625.92** |

Source: Agency for Agriculture and Fisheries

# CAP PAYMENTS 2015–2022

The table shows payments for Pillar 1 and Pillar 2 for the period 2015-2022. Pillar 1 has a 70-75% share, while that of Pillar 2 varies between 25-30%. Within Pillar 1, there are two major blocks: market support and direct payments. Direct payments are discussed in more detail below. The main market support is that provided by the Common Market Organisation (CMO) fruit and vegetables for implementing the operational programmes of producer organisations (POs) in the fruit and vegetable sector. The European Union covers 50% of the expenditure of an operational programme, the members of a PO co-finance the other 50%. The EU support amounts to €50-60 million annually and is calculated based on the turnover of the POs. There are also payments for crisis measures in various sectors and support for sales promotion and for milk and fruit for schools. Within Pillar 2, the largest payments are from the Flemish Agricultural Investment Fund (VLIF) and agri-environment-climate measures (AECMS). These measures are also covered in more detail below. There is also support for training and advice, rural development measures and LEADER.

Table Payments* Pillar 1 and Pillar 2, million euros, period 2015-2022

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|
| Pillar 1 | 311.6 | 301.5 | 285.3 | 296.0 | 267.0 | 290.9 | 288.6 | 282.7 |
| market support | 75.6 | 75.3 | 61.5 | 81.5 | 55.7 | 59.8 | 57.9 | 72.7 |
| CMO Regulation for fruit and vegetables | 59.2 | 56.6 | 50.5 | 59.0 | 54.2 | 53.7 | 54.1 | 60.8 |
| crisis measures** | 13.1 | 15.6 | 6.6 | 17.7 | -3.8 | 0.3 | 0.0 | 8.5 |
| other market | 3.2 | 3.1 | 4.4 | 4.8 | 5.3 | 5.8 | 3.8 | 3.4 |
| direct support | 236.0 | 226.3 | 223.8 | 214.5 | 211.3 | 231.1 | 230.7 | 210.0 |
| Pillar 2*** | 112.1 | 109.4 | 112.0 | 107.2 | 95.1 | 93.9 | 100.7 | 125.2 |
| VLIF | 74.8 | 85.6 | 83.7 | 71.1 | 57.2 | 52.7 | 60.2 | 82.1 |
| investment support | 65.9 | 76.7 | 75.7 | 63.3 | 48.6 | 43.0 | 52.5 | 70.7 |
| support in setting up | 8.8 | 8.9 | 7.8 | 7.3 | 5.8 | 7.5 | 4.7 | 7.0 |
| Other | 0.04 | 0 | 0.19 | 0.5 | 2.73 | 2.17 | 2.96 | 4.43 |
| AECMS and organic | 19.0 | 16.1 | 19.0 | 20.9 | 24.9 | 28.4 | 28.0 | 27.9 |
| organic | 0.81 | 1.08 | 1.34 | 1.49 | 1.47 | 1.78 | 1.92 | 1.97 |
| AECMS - agriculture | 5.3 | 6.41 | 7.32 | 8.2 | 9.21 | 9.68 | 9.67 | 9.13 |
| AECMS - MAs Flemish Land Agency | 12.87 | 8.64 | 10.37 | 11.21 | 14.26 | 16.94 | 16.42 | 16.75 |
| training, advice and innovation | 5.2 | 4.0 | 4.0 | 6.3 | 5.0 | 5.0 | 4.9 | 5.2 |
| rural development measures | 5.2 | 1.0 | 2.4 | 3.5 | 1.6 | 3.8 | 3.2 | 5.4 |
| LEADER | 6.9 | 1.9 | 2.0 | 4.4 | 5.2 | 3.0 | 3.6 | 3.5 |
| Other | 1.1 | 0.8 | 0.8 | 1.1 | 1.2 | 1.1 | 0.9 | 1.2 |
| **total Pillar 1 and Pillar 2** | **423.7** | **411.0** | **397.3** | **403.2** | **362.2** | **384.7** | **389.3** | **407.9** |

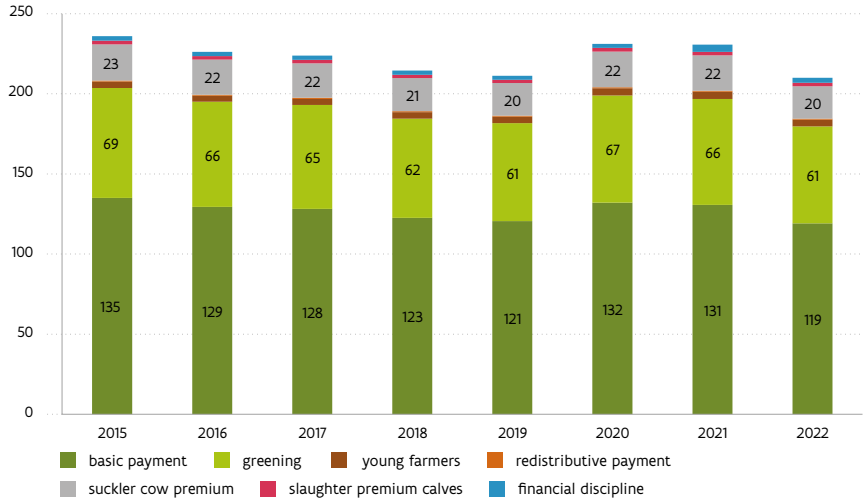
* for plot-specific measures (direct support, AECMS and organic) and for crisis measures, this is per campaign, for other measures it is per calendar year
** excluding Covid emergency fund in 2020 (€15.6 million) and crisis support for pig farming in 2021 (€8.5 million), including public and private storage, and including crisis measures for GMO fruits and vegetables
*** EU and Flemish funds

Source: Agency for Agriculture and Fisheries

# PAYMENTS 2015-2022: DIRECT SUPPORT

The figure below shows the direct payments to Flemish farmers and the share of the various components. Direct support decreased from €236 million in 2015 to €211 million in 2019, due to a redistribution between Member States and an increasing transfer of Pillar 1 funds to Pillar 2 (the flexibility). The support was higher in 2020 and 2021 due to the temporary suspension of the flexibility due to Covid. In 2022, there was another 10% transfer to Pillar 2 and the direct support was €210 million. The basic payment is the largest measure, with €119.1 million in 2022, followed by greening (€60.6 million), and coupled support for suckler cows (€20.3 million). In addition, €4.5 million went to young farmers in 2022, and €2 million to coupled support for slaughter calves. The redistributive payment is for Flemish farmers with land in Wallonia. In Flanders, this measure did not yet exist. Financial discipline is a repayment of past withheld amounts.

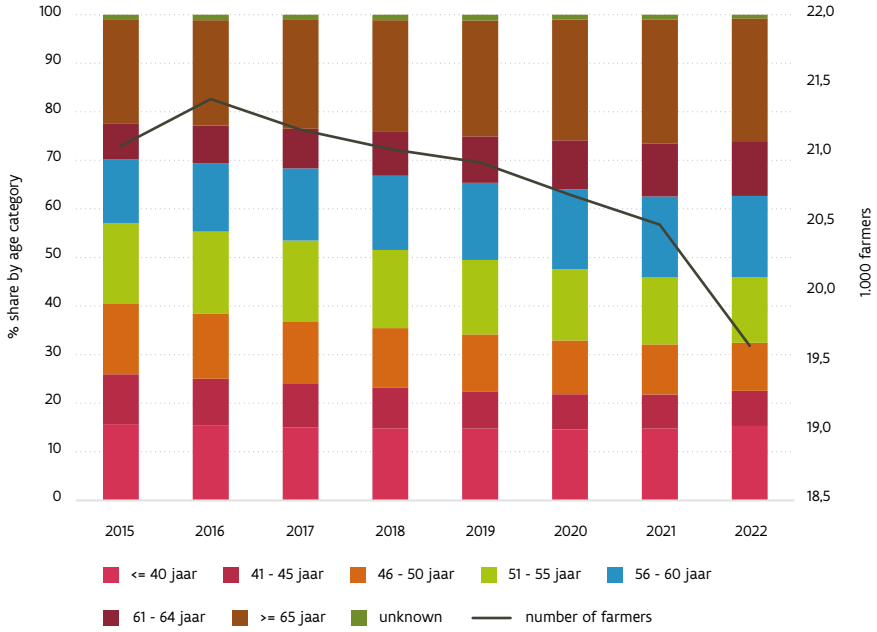
Figure Direct support payments from different direct support components, million euro, 2015-2022




Source: Agency for Agriculture and Fisheries

The following figure shows that the number of farmers aged 65 and over receiving direct support gradually increased over the period 2015-2022, to around one quarter in 2022. Overall, the share of the age categories over 55 years old increased, while that of farmers aged 41 to 55 decreased. The share of young farmers up to 40 years old remained fairly constant. The total number of farmers with direct support fell to 19,614 in 2022. The decline in 2022 was larger than previous years, and for the first time there was no increase in the share larger than or equal to 65. The amount of direct support per farm is higher on average for the younger age categories than older ones. Farmers under 40 years old (= 15% of total) receive 26% of the support, while farmers over 65 years old (= 25% of total) account for only 13% of the support. Since 2023, Flanders has made being an active farmer a condition for receiving support.

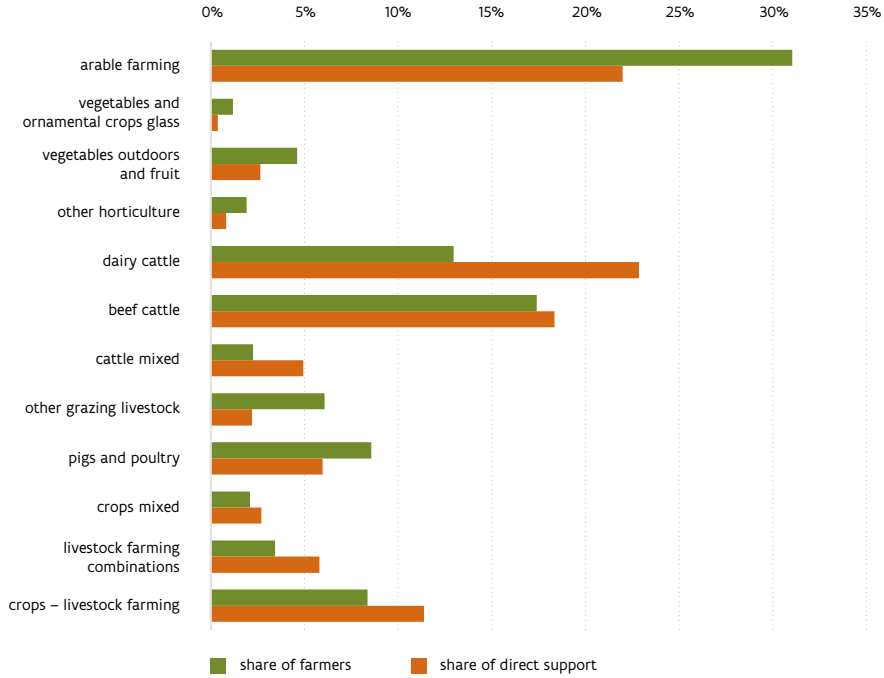
Figure Number of farmers and share (%) of farmers with direct support, by age category, 2015-2022




Source: Agency for Agriculture and Fisheries

The largest number of farms receiving direct support are in arable farming (31%), followed by beef cattle at 17.4% and dairy cattle at 13%.

Figure Share of farmers and share of direct support, by farm type, 2022




Source: Agency for Agriculture and Fisheries

The share of arable farms increased steadily over the period 2015-2022. In contrast, the largest share of direct support is in the dairy sector (22.9%), followed by arable farming (22%) and beef cattle (18.3%). As a result, the amount per farm is larger for dairy farms (19,900), than for beef cattle (12,493) and arable farming (7,469) (see next table). Arable farming, like beef cattle and other grazing animals, has many small hobby and part-time farms, and more than one-third have a managing director aged 65 or older. The age in arable farming is 60.5 years old on average - significantly higher than in the generally larger and more professional dairy farms, where the figure is 48.6 years old, and 24% of whom are 40 years old or younger.

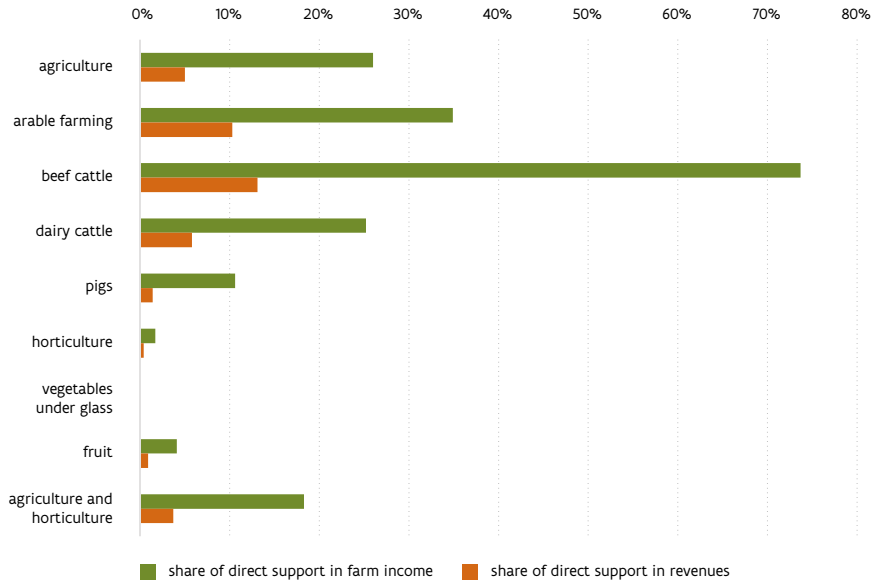
Table Direct support per farm (euro), average age of managing director, and share of managing directors younger than 40 years and 65 years and older, by farm type, 2022

| | euro / farm | average age | younger than 40 (%) | 65 and older (%) |
|---|---|---|---|---|
| arable farming | 7,583 | 59.5 | 10 | 38 |
| vegetables and ornamental crops glass | 3,351 | 49.1 | 23 | 9 |
| vegetables outdoors and fruit | 6,140 | 49.5 | 22 | 7 |
| other horticulture | 4,591 | 47.9 | 27 | 9 |
| dairy cattle | 18,880 | 48.8 | 24 | 5 |
| beef cattle | 11,287 | 58.2 | 10 | 36 |
| cattle mixed | 23,524 | 51.9 | 16 | 10 |
| other grazing livestock | 3,871 | 56.9 | 14 | 35 |
| pigs & poultry | 7,456 | 51.1 | 19 | 10 |
| crops mixed | 13,801 | 50.5 | 22 | 13 |
| livestock combinations | 18,122 | 50.0 | 21 | 7 |
| crops – livestock farming | 14,569 | 54.7 | 16 | 25 |
| **agriculture and horticulture** | **10,706** | **55.0** | **15** | **25** |

Source: Agency for Agriculture and Fisheries

The figure below shows the share of direct support in the revenue and farm income of agricultural and horticultural companies. For the period 2015-2021, this share amounted to 4% of revenue and 18% of farm income.

Figure Share of direct support in total revenue and farm income, average 2015-2021




Source: Agency for Agriculture and Fisheries based on the Agricultural Monitoring Network (LMN)

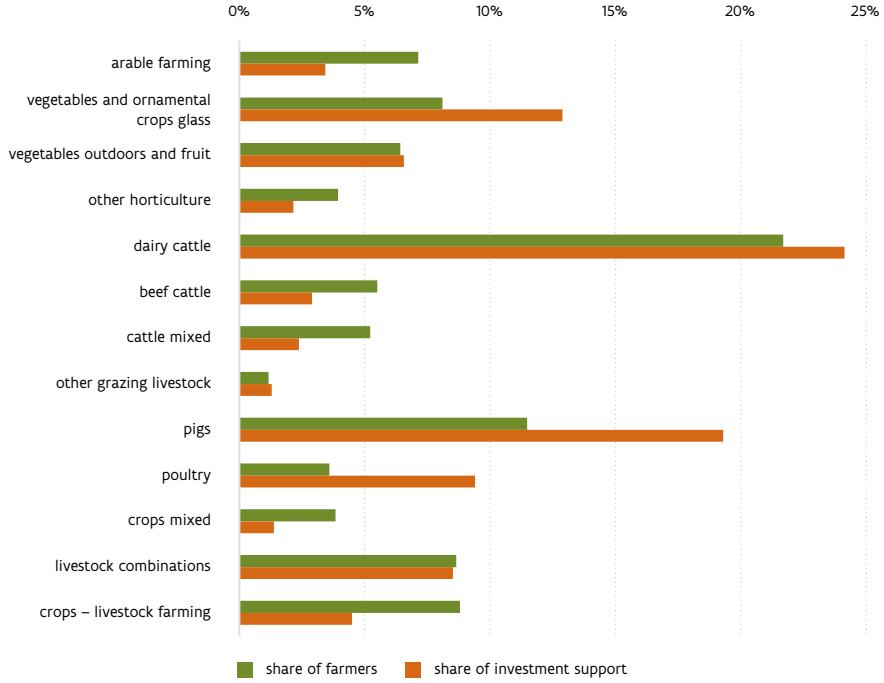
For the agriculture subsector, this share came to 5% of revenue and 26% of farm income over the period 2015-2021. The share is highest for specialised beef cattle farms, at 13% of revenue and 74% of farm income. This is due to the high amount of direct support and low total revenue and farm income at these farms. Dairy cattle farms and arable farms account for a share of direct support of 6% and 10% of revenue, for farm income the figure is 25% and 35%. Pig farming, with a percentage of 11% of farm income, is less dependent on direct support.

Finally, in horticulture, the percentage of the direct support in revenue and farm income is very low. The amount of direct support in fruit growing is low and is virtually non-existent in greenhouse cultivation, since the surface area under glass is not eligible for direct support.

# PAYMENTS 2015-2022: INVESTMENT SUPPORT

From 2015 to 2022, 9,529 farmers received a total of €496.4 million in investment support, amounting to €51,748 per farmer. However, half of the farms received less than €2,118 each. 24% of the investment support went to dairy farms, followed by 19% for pig farms and 13% for vegetables and ornamental crops under glass (see figure below). Especially for poultry, pigs and vegetables and ornamental crops under glass, their share in the number of farmers is much lower than their share of investment support.

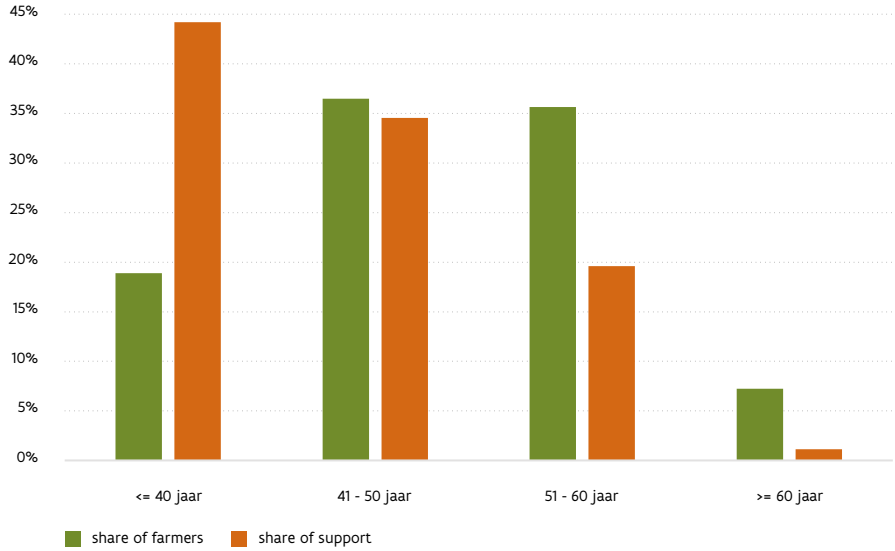
Figure Share of farmers and share of investment support, by farm type, 2015-2022




Source: Agency for Agriculture and Fisheries

The following figure shows that 44% of investment support went to farmers aged 40 and younger, and only 1% to farmers over 60. However, farmers aged 40 and under represent only 19% of the total number of farmers receiving investment support, meaning that the average amount of investment support for that group is substantially higher.

Figure Share of farmers and share of investment support, by age category, 2015-2022

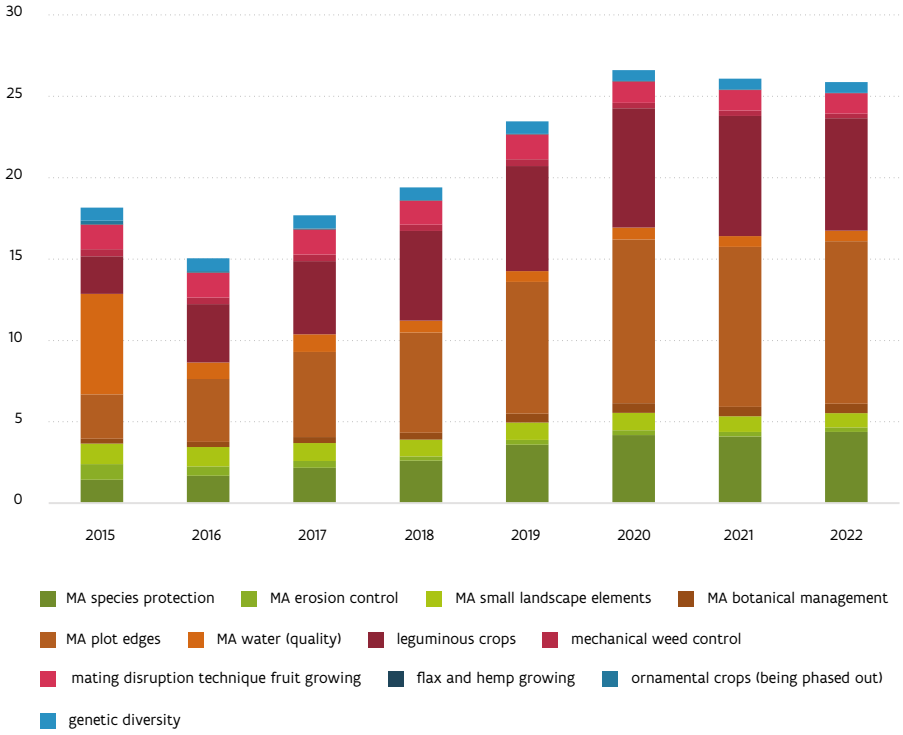



Source: Agency for Agriculture and Fisheries

# PAYMENTS 2015-2022: AGRI-ENVIRONMENT-CLIMATE MEASURES

62% of the disbursements to agri-environment-climate measures (AECMS) in the period 2015-2022 went to management agreements (MAs) of the Flemish Land Agency (VLM) and mainly to the MA plot edges (32%) and MA species protection (14%).

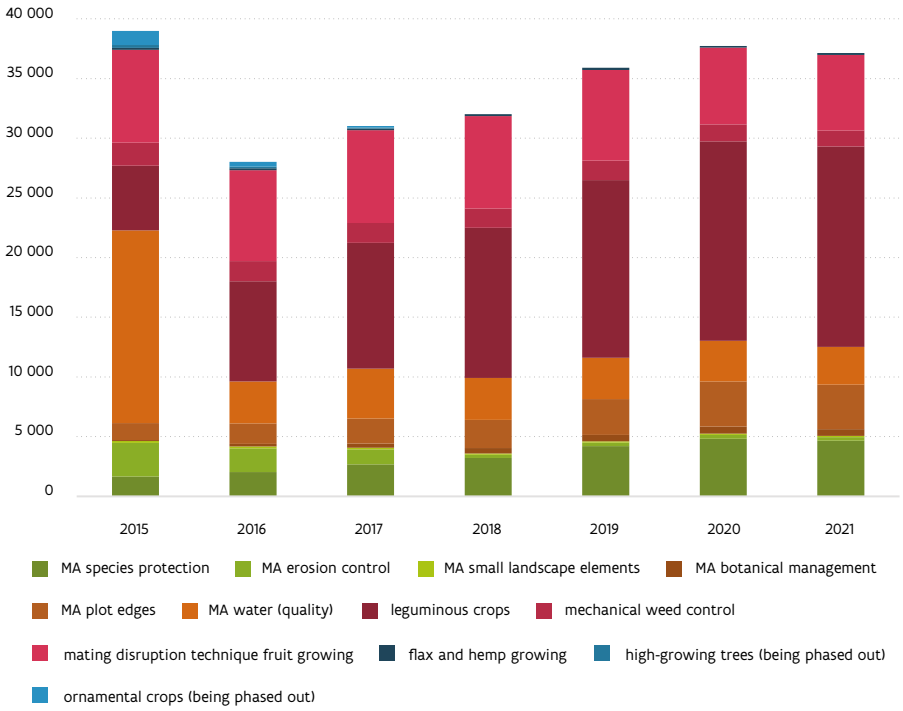
Figure Payments for agri-environment-climate measures, million euro, 2015-2022 campaign




Source: Agency for Agriculture and Fisheries

The remaining 38% went to AECMS of the Agency for Agriculture and Fisheries, of which 26% went to growing leguminous crops and 7% to mating disruption techniques in fruit growing. As the amount per hectare of the latter two measures is comparatively lower, they have the largest share of the surface area for the period 2015-2021, specifically 35% for leguminous crops and 21% for mating disruption techniques in fruit growing (see next figure).

Figure Surface area agri-environment-climate measres, ha, 2015-2021 campaign*




* for the 2015 campaign, there are still payments for contracts from the previous programming period
Source: Agency for Agriculture and Fisheries

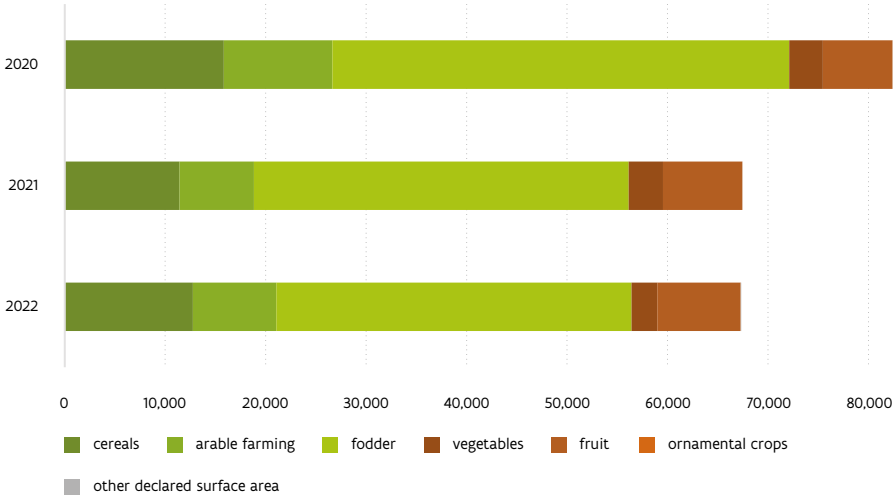
The amount per hectare of MAs is large, so they represent a smaller proportion of the surface area: 10% for MA species protection and 8% for MA plot edges. Due to a sharp decline in the MA water quality, due to changing arrangements for new contracts, the disbursements and surface area of the AECMS fell in 2016. After that was an increase from €15.0 million in 2016 to €25.9 million in 2022, and an increase from 28,031 ha in 2016 to 37,142 ha in 2021. A third of the payments went to arable farms and about 20% to dairy farms.

# FLEMISH POLICY: BROAD BAD WEATHER INSURANCE

Broad bad weather insurance means that Flemish farmers and horticulturists with open crops can insure themselves with a private insurer against crop damage caused by extreme and adverse weather events such as storms, hail, ice, rainfall, drought and frost. The Flemish government offers a premium subsidy for farmers with a recognised broad bad weather insurance policy. This subsidy was launched in 2020.

The number of farmers with broad bad weather insurance fell from 2,974 to 2,566 and 2,366 from 2020 to 2022. The insured surface area of main crops, in use on 31 May, was 82,403, 67,453 and 67,334 hectares, respectively. The total Flemish surface area is around 670,000 ha. In absolute numbers, primarily fodder (ca. 35,000 ha in 2022) is insured, followed by cereals (approx. 12,750 ha) and other arable crops (ca. 8,300 ha). The remaining insured surface area is fruit crops (approx. 8,300 ha) and vegetables (approx. 2,600 ha). In terms of percentage, around 9% of the above-mentioned crop groups are insured. There are three major exceptions in this regard. Ornamental and other crops are practically not insured. Fruit crops are insured much more often. More than half of the surface area of apples and pears is covered by broad bad weather insurance.

Figure Surface area (ha) covered by broad bad weather insurance, 2020-2022



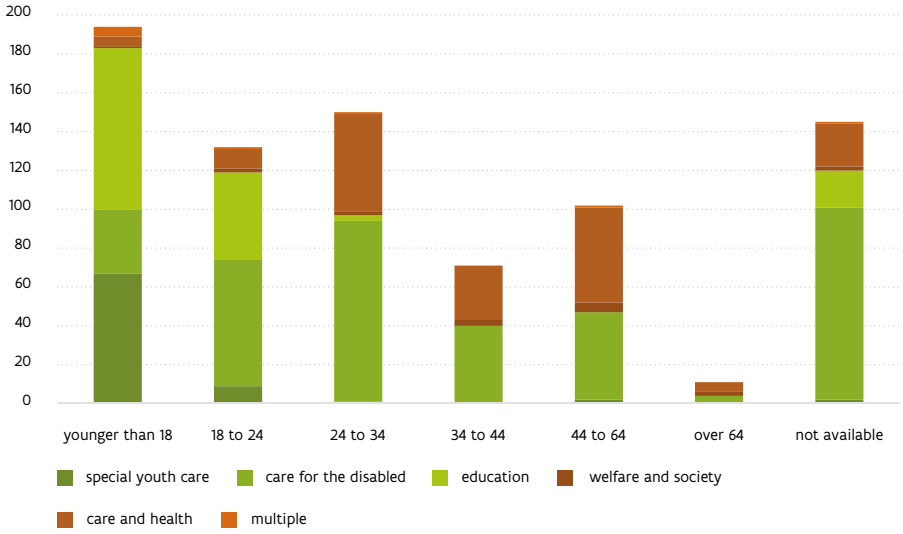

Source: Agency for Agriculture and Fisheries

# FLEMISH POLICY: CARE FARMS

Flemish agriculture and horticulture has long had a tradition of housing care seekers on farms. Helping out on a farm in a green environment and within a family setting has a calming and restorative effect on care seekers. To support farmers in this important social role, a subsidy framework was devised in 2005 for professional farms. For each care seeker, the farmer enters into a contract through the e-desk with an approved institute that monitors the quality of the care farm activities.

The subsidy is €20 for a half-day of care, or €40 for a full day. This is compensation for the loss of revenue associated with taking care of care seekers. The focus is on small-scale care, since farmers can receive subsidies for a maximum of 1 care seeker per day. In 2021 359 care farms (2% of all the farms) take advantage of this subsidy. Half of the contracts are signed with institutes in the disability care sector, followed by 20% of agreements with the education sector. Around 40% of care seekers are under 25.

Figure Number of care contracts, by age category of care seekers and type of care provision, 2021




Source: Agency for Agriculture and Fisheries

# FLEMISH POLICY: FROM GREEN DEAL TO FLEMISH FOOD STRATEGY

In 2019, the European Commission announced its ambition to make Europe the first climate-neutral continent by 2050. A series of policy adjustments should ensure that by 2030 our net emissions of greenhouse gases are 55% lower compared to 1990. Anthropogenic global warming, and its effects on people, animals and nature, calls for action to reduce the impact of human activity on the climate and make a just transition to a climate-neutral economy that ensures the long-term prosperity and well-being of citizens.

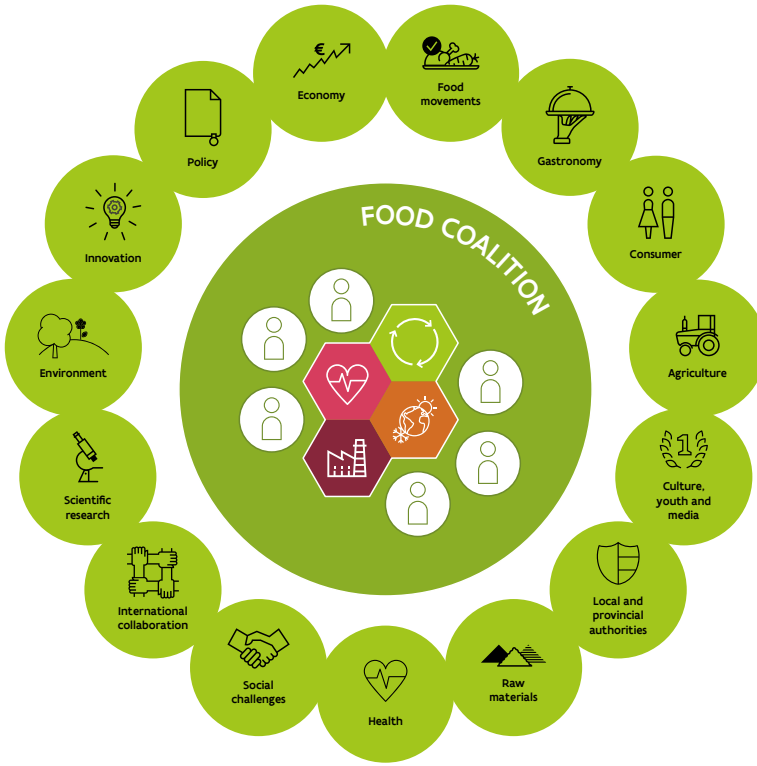
The major targets of the Green Deal are set out in the European Climate Law, which was adopted by the European Parliament and the European Council in 2021. According to the law, climate neutrality is achievable in Europe by reducing greenhouse gas emissions, investing in green technologies and protecting the natural environment. The law should ensure that all EU policies contribute to this target and that all sectors play their part.

One of the main actions of the Green Deal relates to agriculture and food. This is not surprising, since around a third of the world's greenhouse gas emissions come from food systems. Around 20% of food in the EU goes to waste. Moreover, more than 50% of adults are overweight. With the "Farm to Fork" strategy, the EU aims to offer an integrated solution to the challenges of making the European food system future-proof by 2030.

In addition to ensuring sufficient, affordable and nutritious food, the EU aims to facilitate the shift to healthy and environmentally friendly diets by reducing overconsumption, preventing food waste and shifting to more plant-based diets via the protein transition. Actions targeting the food environment, such as the information on packaging or the offering in government catering, should support this ambition. There is also a focus on climate-friendly and environmentally sustainable production, with objectives relating to organic farming and the use of pesticides and fertilizers, improving animal welfare and food safety. The Farm to Fork strategy is aligned with the EU Biodiversity Strategy: the two are mutually reinforcing.

Building on this European ambition and on the efforts already made at the international, national and local levels, the Flemish government has devised a food strategy. Since food affects us all and the many challenges linked to food are interconnected, a systematic approach is called for. That means placing food in its broader context and looking at it from different angles to understand how elements in the food system are inter-related and how they influence each other. In order to do that, broad collaboration is crucial. That is why a broad food coalition, with representatives from the agri-food chain, society, research and policy, was set up to draft and further elaborate the Flemish food strategy.

Figure The food coalition



On 29 November 2022, the Flemish Minister of Agriculture and Food unveiled the Flemish food strategy Go4Food. The strategy offers guidance for a more resilient and sustainable food system, and works to address challenges relating to food in terms of health, environment and climate, social connection, innovation and economic resilience. The strategy is built around four pillars: healthy and sustainable food for all, a food system within ecological limits, 100% towards a resilient food economy and connection from farmer to citizen. These are split up into 19 objectives. The four pillars are all connected around a heart, to emphasize the importance of a systemic approach. The strategy is fleshed out through commitments by partners, in the form of food deals relating to issues such as fair prices, healthy and sustainable food environments and agro-ecology.

Figure The four pillars of the food strategy


In addition, Flanders collaborates in other ways in the area of food. For the Flemish protein strategy 2021-2030, partners from the agri-food chain, society, research and policy are also joining forces. The aim? To achieve a more sustainable, diverse and forward-looking protein supply and consumption by 2030. Six strategic themes should help in this regard: sustainable animal feed, sustainable animal production, more vegetable proteins, more novel proteins, more product diversity and sustainable protein consumption. Within each strategic theme, the partners have set out specific, measurable objectives for 2030. These objectives reflect the level of ambition, and mean that the efforts can be measured, monitored and adjusted if necessary. The strategy has also been translated into an action programme, in which various actors are involved in initiatives for local, sustainable and healthy proteins, from farm to fork. A periodic progress report details the progress of both the actions and objectives.

Figure The Flemish protein strategy and its 6 strategic themes


Stakeholders and government agencies have also drafted the Food Waste and Biomass Action Plan 2021-2025. This plan aims to further reduce food waste in Flanders and create more opportunities for the sustainable (re)use of biomass. As regards food waste, the focus is on prevention. Specifically, this means that every link in the chain, from producer to consumer, must play their part to reduce food waste. The entire chain is striving to prevent, reprocess as food, or better valorise 30% of food waste compared to 2015. In 2023, the partners in the action plan published a monitor detailing food waste and waste food flows in the chain, and a progress report with ongoing actions.

Furthermore, there is a working agenda 'food chain' within Circular Flanders. Flanders has also turned its attention to food landscapes, while the Fit4Food 2030 Policy Lab drew up an integrated research agenda, environmentally-responsible food was integrated into the food triangle, a new strategic plan on organic food is ongoing, a Flemish Culinary Centre will be launched, etc.

In the field, many projects are already underway within the agri-food chain (from primary production to the food industry to catering, hospitality and retail), and citizens and civil society organisations are also launching initiatives to work toward a better food system. Within the food strategy, a project subsidy has been awarded to food changers who are involved in a variety of issues, from empty lunch boxes in schools to entrepreneurship in the area of sustainable food, to popular solutions to waste food streams.

# CURRENT POLICY ISSUES RELATED TO AGRICULTURE

Agriculture is not an island, subject only to agricultural legislation. Other policies also partly determine how agriculture evolves. For example, trade policy, research and innovation and the environmental policy. Implementing these various strands of legislation often poses a challenge within the Flemish context in the federal Belgian state structure. Climate and environmental policies in particular require various measures to respect the ecological capacity of the fertile Flemish agricultural delta, which is having to confront large-scale urbanisation and multifunctional spatial use.

**ENVIRONMENT**

The agricultural sector has a major challenge in reducing greenhouse gas emissions, as set out in the Flemish Energy and Climate Plan 2019-2030. The enteric emissions covenant for cattle, among others, plays an important role in helping meet these goals. The energy transition to more climate-neutral Flemish greenhouse cultivation also needs to be rolled out in the coming years.

To address the effects of climate change on Flemish agriculture, an action programme on climate adaptation in agriculture will be drafted by the end of 2024. This will involve a participatory process, to ensure feasibility and support within the sector. Soil quality and water quantity (drought/flooding) are important issues in this regard. Flanders suffers from limited water availability. By pursuing proactive policies, we intend to manage water resources sustainably, and work to increase water supply and reduce water demand. Among other things, this is possible through increased rainwater infiltration, smarter water use, climate-adaptive water resources management, attention to healthy soils, climate-robust crops, and systems-based and collective solutions. The reactive drought policy includes a focus on the socio-economic refinement of the decision-making framework for priority water use for agriculture and industry. Soil quality and monitoring are becoming increasingly important, with the proposed European Soil Monitoring Law to monitor the health of our soils, implement sustainable soil management practices and remediate contaminated sites. Carbon storage in soil is also important for climate adaptation and mitigation in agriculture.

With the Programmatic Approach to Nitrogen (PAN), the Flemish government is taking measures to significantly reduce nitrogen emissions by 2030 and restore nature in Special Protection Areas.

The water quality targets from the EU Nitrates Directive and Water Framework Directive are not being met in Flanders, and additional measures will therefore be necessary. Following an intensive process between agricultural, environmental and nature organisations, an agreement in principle was reached in March 2023. This will be used as the basis for elaborating the MAP 7. In addition, through the Coordination Committee on Integrated Water Policy, efforts are continuing to implement the 2022-2027 river basin management plans including the concept paper 'De grote stroomversnelling'. The Flemish Pesticides Action Plan 2023-2027 includes various actions to reduce contamination with plant protection products. Depending on the (shared) competences, the Agency for Agriculture and Fisheries is involved in implementing these actions.

The Nature Restoration Act was announced on 22 June 2022, with the goal of restoring degraded ecosystems by 2050. A preliminary political agreement between the European Council, the European Parliament and the European Commission was reached on 9 November 2023, which includes the restoration of agricultural and peatlands. Among other things, this will result in more peatlands needing to be protected and restored in agricultural areas.

Space for agriculture is becoming increasingly scarce and more complex. Even an agricultural designation offers little assurance of a healthy business climate for farms. Flanders lacks the instruments to protect space for agriculture and halt or counteract the snowballing fragmentation. The existing instruments and limited policy initiatives have too little impact. In the spatial implementation plans, the balance for the agricultural area is mostly negative. On the one hand, the new lease law provides opportunities for more land availability, by ensuring more legal certainty for lessors, but on the other hand, public administrations can cancel leases for afforestation purposes.

The Flemish Government approved a draft Flemish Animal Welfare Code in July 2023. The code creates an integrated legislative framework for all segments of animal welfare policy, based on existing experience, foreign regulations and new insights. Key provisions for the agricultural sector include mandatory shelter for all grazing animals, the phasing out of enriched cages for poultry by 2036, and a ban on killing day-old chicks as soon as an alternative is available.

## ECONOMIC

The early 21st century has been a period of uncertainty and change in the global trade landscape. The World Trade Organization (WTO) has had difficulties concluding multilateral trade agreements, especially after the failure of the Doha round of negotiations. This has prompted a shift in the approach to trade policy, with regional free trade agreements starting to play an ever more prominent role. When making free trade agreements, EU countries agree with a country (or group of countries) outside the EU to, for example, reduce tariffs on certain goods and services or harmonise the requirements for these goods. The European Union has a total of 41 trade agreements with 72 partners. Together, these form the largest trade network in the world. One third of total European trade falls under these agreements.

One of the main criticisms of these free trade agreements is that agriculture is often used as a bargaining chip to benefit the economic interests of other economic sectors. Certain issues such as animal welfare and the environment are not enforceable in a WTO context, which sometimes makes it tricky to bring our trading partners in line with the EU's high expectations in these areas. The free trade agreements entered into by the EU therefore also focus more on a level playing field, with themes such as trade and sustainable development gaining more importance.

In this context, there is also more and more discussion about what a fair price should be for our food. Fair prices are an important part of ethical consumption and sustainable development. This concept is backed up by various initiatives and organisations that seek to ensure that fair prices become the norm in international trade and domestic markets. In the context of the Flemish food strategy, food deals have been put in place for various themes; these are leverage initiatives with the potential to fill shortfalls and have an impact on various strategic objectives. For example, within the deal 'working together on fair pricing and real prices', a broad group of stakeholders is working on inititiaves that help achieve fair pricing for all links in the chain and 'true/real' prices that take into account external costs in terms of e.g. environment or health.

## OTHER POLICY TOPICS

The transition to a sustainable, inclusive and resilient food system requires transformative R&D and innovation policies. The government's task is to facilitate these transitions as effectively as possible through dynamic cooperation between all actors (quadruple helix). Innovation in this model is primarily a collective process rather than an individual one, with many parties involved. Especially in an economic and social world in full transition thanks to to digitisation, climate change and globalisation, we need to work towards a 'transformative' innovation model to meet the challenges.

The impact of environmental and climate objectives on food security and agricultural and fisheries incomes demands a specific focus in conducting research and applying innovation. Some crucial questions emerge in this regard. Can the objectives be achieved with the legal initiatives? How can we fairly distribute the costs of sustainability within the agri-food chain (internalising environmental and climate efforts throughout the chain to the consumer)? How can we shape the integrally sustainable elaboration of the One Health approach on plant and animal health? How can we restore biodiversity? And how can we stimulate production and diets in line with the protein shift, with a focus on reducing food waste?

The current circumstances have a serious impact on the well-being of Flemish farmers and horticulturists, and their environment. Together with the minister responsible for agriculture, actors from the agricultural sector, the supply chain, services, healthcare and government have committed to an action plan to support farmers in their well-being. CAP funds are used to bolster the well-being of farmers:

- The Flemish Rural Network has taken the initiative to build a network organisation around this topic, bringing together the know-how and experience of different actors in the area of welfare.
- Within the Agricultural Know-how and Innovation System (AKIS), the theme of well-being may also be addressed.
- Know-how is acquired and shared through EIP projects and demonstration projects. With expertise from the well-being sector and together with agricultural organisations, a curriculum was developed that can be used in the training courses at Flemish agricultural colleges.

Even outside the CAP framework, the Flemish government is committed to the well-being of farmers:

- by providing the operating funds for the non-profit organisation Boeren op een Kruispunt (Farmers at a Crossroads) to assist farmers with questions or concerns about their operations, or related elements.
- by using the existing range of tools and services as much as possible, such as career guidance tailored to farmers, with the active participation of agricultural organisations in the publication.
- by working with the Flemish Centre of Expertise in Suicide Prevention to launch initiatives to make suicide no longer taboo, including webinars for farmers and farm advisors.

The circular economy is a key feature of the European Green Deal. The objective in this regard is for companies and value chains to reduce their inputs, and thus their climate and environmental impact. Flanders aims to be the European circular frontrunner, reducing its material footprint by 30% by 2030. The Circular Flanders partnership is responsible for achieving this. The food chain is a focus theme with its own work agenda. Public and private partners work together towards the optimal use of inputs, food products and waste streams. Applying the classic R strategies (among others, rethink, reduce, reuse, repair and recycle) in the circular economy is not always straightforward within the food chain. Nevertheless, there are many opportunities to improve circularity within the food chain.

The bioeconomy covers all economic activities that use biological organisms or processes. This involves both the production of renewable biological resources and the processing of these resources and waste streams into valuable products such as food, animal feed, bio-based products and bioenergy. The bioeconomy offers potential alternative business models for the agriculture sector. For example, growers are experimenting with new crops that provide the bio-based raw materials for industry to move away from fossil raw materials. Applying circular thinking and mindful of climate goals, industry is interested in working with local raw materials or waste streams. Circular Flanders also has a bioeconomy work agenda, focusing among other things on developing the necessary value chains, cooperation and the availability of bio-based raw materials.

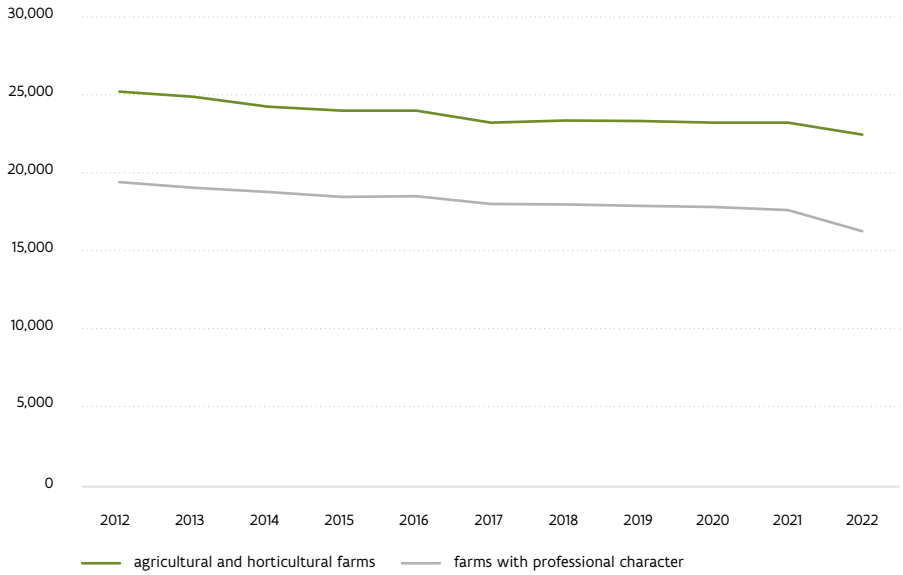
# STRUCTURE

# NUMBER OF FARMS

As of 2022, Flanders had 22,449 agricultural and horticultural farms. 72% of these are professional farms. These farms have a standard output (SO) of at least €25,000. In 2012, there were still 25,217 agricultural and horticultural farms. The number of farms has declined by nearly 11% compared to 2012, or an average annual decline of 1%.

Besides the farms that have stopped their operations, there are also new, start-up farms. More information on starters and stoppers can be found later in this book.

Figure Number of agricultural and horticultural farms, 2012-2022



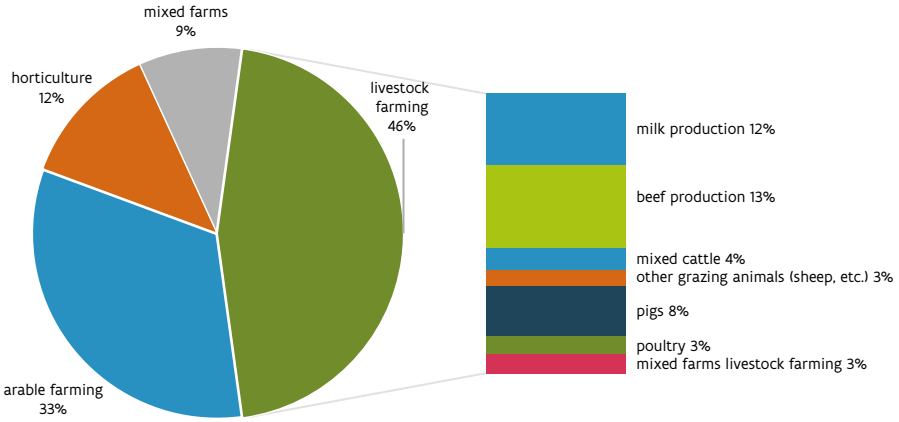

Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

# SPECIALISATION OF FARMS

Flemish agriculture and horticulture is characterised by a high degree of specialisation. 91% of the farms specialise in one of the three subsectors, with livestock farming being by far the most important specialisation (46%), followed by arable farming (33%) and horticulture (13%). Within specialised livestock farms, more than half specialise in dairy and beef cattle.

Specialisation is region-specific, as shown in the agricultural typology map (see later in this book).

Figure Specialisation of farms, 2022




Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

# AGRICULTURAL AREA

In 2022, agriculture and horticulture cultivated an area of 619,806 hectares. That is 46% of the Flemish land area. Forage crops accounted for the largest share of this at 55%, thereby illustrating the importance of livestock farming in Flanders.

The total area for Flemish agriculture and horticulture remained stable compared to 2012. At the sectoral level, the reduction in the arable surface area is notable. The surface area for cereals has shrunk by 11%, and the surface area for sugar beet has also fallen sharply, as a result of the European sugar reform. In contrast, potato growing has expanded. In horticulture, both the surface area for vegetables and fruit is growing, while ornamental crops remain fairly stable.

Table Destination of the utilised agricultural area, 2012 and 2018-2022

| | 2012 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|
| fodder | 345,847 | 352,809 | 351,445 | 351,317 | 353,633 | 343,793 |
| pastures | 228,426 | 223,144 | 224,541 | 221,389 | 223,176 | 215,901 |
| maize | 114,558 | 125,159 | 122,281 | 125,231 | 125,142 | 122,543 |
| arable farming | 221,472 | 207,957 | 212,598 | 208,799 | 204,637 | 215,800 |
| cereals | 151,486 | 127,299 | 127,163 | 123,652 | 123,624 | 134,446 |
| potatoes | 35,752 | 48,577 | 53,364 | 51,895 | 48,275 | 49,500 |
| sugar beets | 20,703 | 19,846 | 18,537 | 18,555 | 18,489 | 17,725 |
| horticulture | 49,211 | 55,737 | 54,795 | 55,692 | 57,645 | 50,987 |
| vegetables | 26,327 | 31,719 | 31,099 | 32,260 | 33,990 | 27,449 |
| fruit | 16,751 | 17,837 | 17,632 | 17,414 | 17,336 | 17,352 |
| other horticulture | 6,133 | 6,182 | 6,065 | 6,018 | 6,319 | 6,186 |
| other uses | 1,652 | 2,462 | 2,864 | 8,918 | 8,720 | 9,225 |
| **utilised agricultural area** | **618,183** | **618,965** | **621,702** | **624,727** | **624,634** | **619,806** |

Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

# LIVESTOCK

In 2022, Flanders had 1.25 million cattle, 5.4 million pigs and 45.5 million poultry. The number of suckler cows and pigs has fallen since 2012, while the number of dairy cows and chickens has risen.

Table Total livestock, 2012 and 2019-2022

| | 2012 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| number of cattle | 1,269,405 | 1,275,983 | 1,265,729 | 1,258,143 | 1,248,195 |
| of which dairy cows (in production) | 279,171 | 325,273 | 332,119 | 333,791 | 339,580 |
| of which suckler cows (in production) | 175,394 | 137,798 | 127,363 | 126,008 | 122,514 |
| number of pigs | 6,227,520 | 5,706,993 | 5,833,068 | 5,659,311 | 5,388,318 |
| of which sows | 476,120 | 385,186 | 382,741 | 374,440 | 353,540 |
| number of poultry | 30,151,029 | 41,975,955 | 45,591,377 | 45,086,613 | 45,539,253 |
| of which broiler chickens | 18,980,411 | 28,310,152 | 30,873,484 | 30,433,519 | 30,715,229 |
| of which laying hens | 10,385,011 | 13,022,203 | 14,037,120 | 14,021,932 | 14,115,736 |

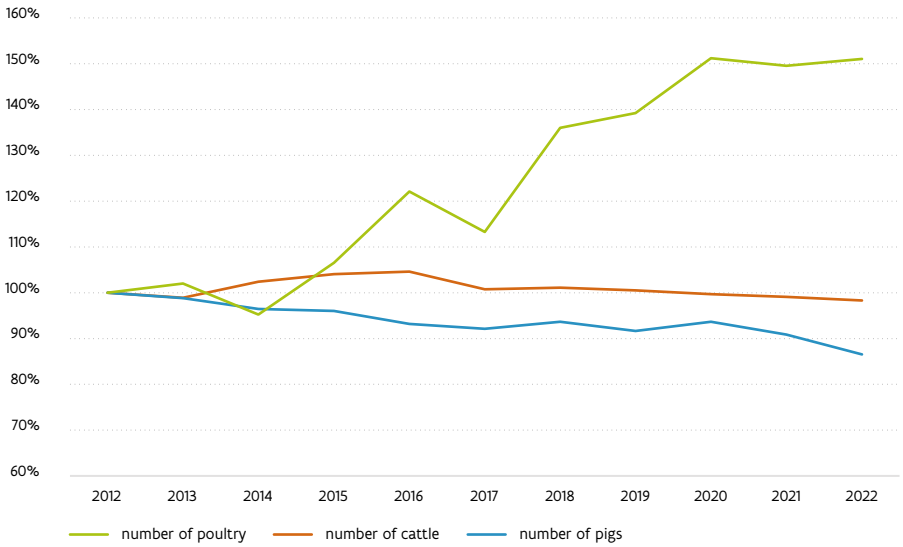
Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

Cattle numbers showed a declining trend from the 1990s, but have increased again since 2014. This trend came to an end in 2017. The number of suckler cows has fallen by 30% since 2012. In contrast, the dairy herd continues to grow. Compared to 2012, the number of dairy cows has grown by one-fifth. Since 2005, the number of pigs has fluctuated around 6 million. Due to a downward trend since 2013, the number has been lower in recent years. There has been clear long-term growth in poultry, especially broiler chickens.

The figure below shows the evolution of the total number of cattle, pigs and poultry. This evolution is shown as an index relative to 2012.

The total number of cattle remains fairly stable. The decrease in suckler cows is offset by the increase in dairy cows. The number of cattle in 2022 is down 1.7% compared to 2012. The number of pigs is being reduced year after year. In 2022, the number of pigs was 13.5% lower compared to 2012. There is clear, strong growth is poultry. The number of poultry in 2022 is 51% higher than in 2012.

Figure Evolution of the number of cattle, pigs and poultry, index: 2012 = 100%



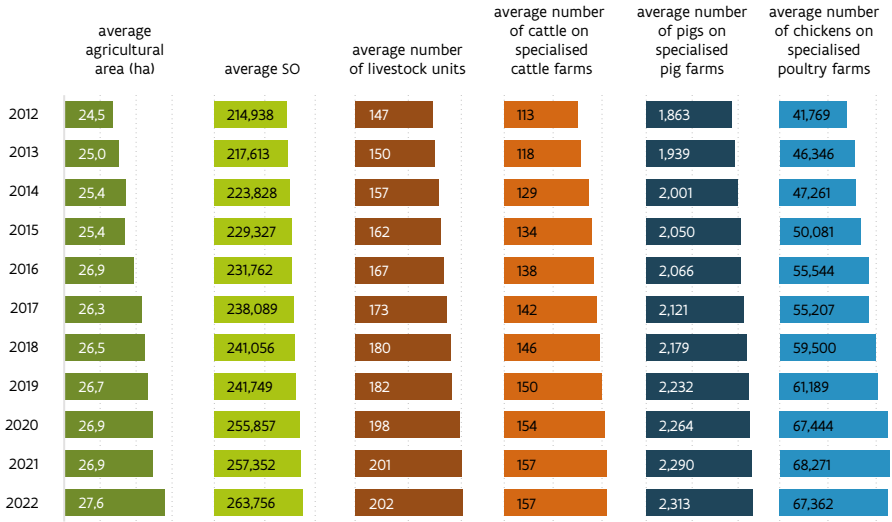

Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

# SCALE OF FARMS

In 2022, an agricultural and horticultural farm in Flanders worked an average of 27.6 hectares of agricultural land. This is 13% more than in 2012. The average standard output (SO) in 2022 was €263,756, a rise of 23% since 2012. 202 livestock units (LSU) are kept on average. This is a 38% increase over 2012.

The average herd size per farm is also continuously rising. In 2022, a specialised cattle farm kept 157 cattle, a specialised pig farm kept 2,313 pigs and a specialised poultry farm kept 67,362 chickens. This is an increase of 41%, 24% and 61% respectively over 2012.

Figure Average surface area (ha), SO and LSU per farm and average number of cattle, pigs and poultry per specialised farm, 2012-2022



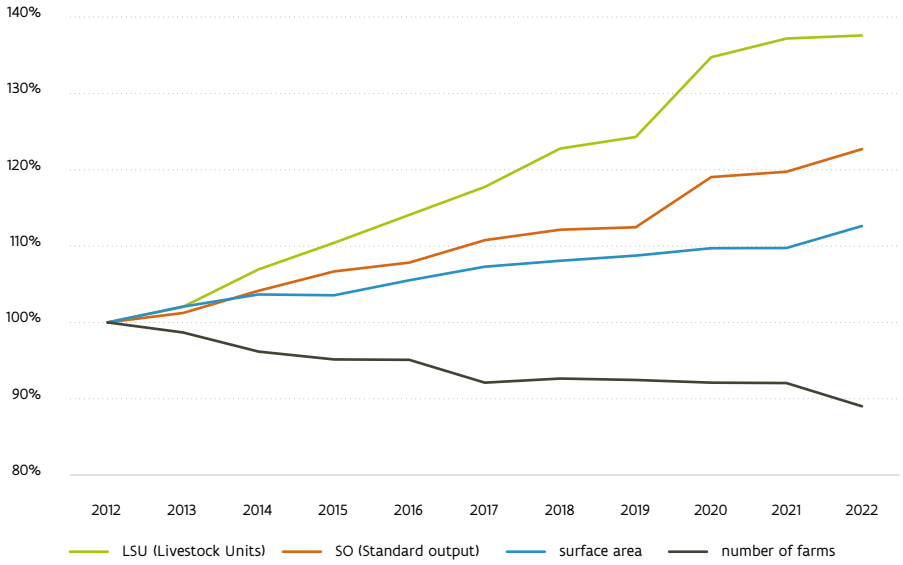

Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

# SCALING UP

The Flemish agriculture and horticulture sector is characterised by continuous increases in scale. The number of farms is steadily decreasing, while the surface area, number of animals and standard output (SO) per farm are rising.

Compared to 2012, the average agricultural area per farm rose by 13%, to 27.6 hectares. Total SO per farm has increased 23% since 2012, to €263,756 per farm. Livestock density, expressed in livestock units (LSU), has also increased compared to 2012. In 2022, an average of 202 LSU were kept on a farm. This is a 38% increase over 2012.

Figure Evolution of number of farms and scale, index: 2012 = 100%




Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

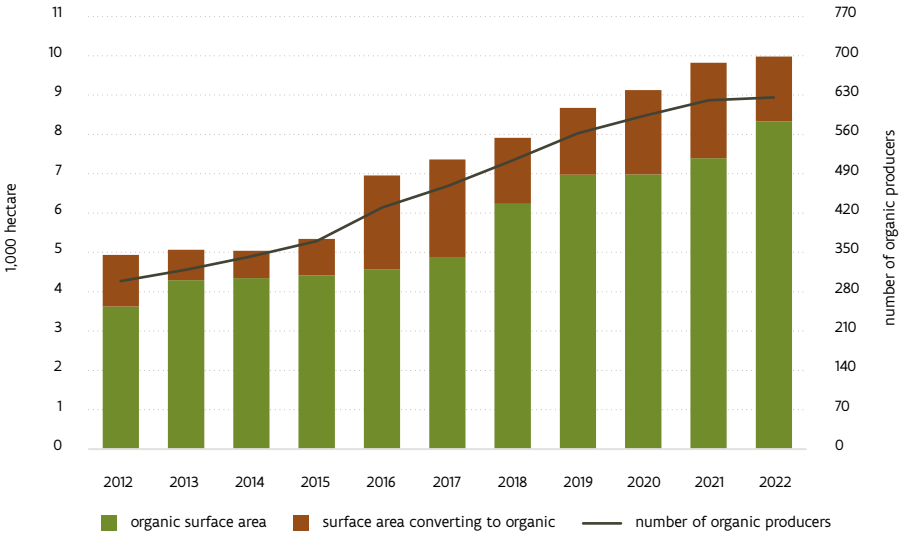
# ORGANIC FARMING

As of the end of 2022, there were 626 farms under control for organic production in Flanders. For the first time in 15 years, the annual rise in the number of organic farmers was less than 4%. However, compared to 2012, the number of organic farms has more than doubled. According to the Statbel agricultural survey, organic farmers make up 2.8% of the total number of Flemish farms.

In absolute numbers, West Flanders had the most organic farmers in 2022 (155), but it was also the province with the lowest proportion of organic farmers (2%). Flemish Brabant had the highest proportion of organic farmers, at 4.5%.

The total organic area in Flanders is 9,977 hectares. This is double the level of 2012. As of 2022, 84% of the organic area was already fully organic, the rest was surface area converting to organic. The organic surface area accounted for 1.6% of the total Flemish agricultural area. The province with the highest organic share of total agricultural area is Limburg (2%). West Flanders has the lowest percentage of organic area (1.3%).

Figure Organic area and area converting to organic, and number of producers, 2012-2022




Source: Agency for Agriculture and Fisheries based on Certisys, TÜV Nord Integra and Foodchain ID Certification

Grasslands, pastures and forests account for 37% of the total organic surface area in Flanders, while forage crops and green cover (especially clover crops) have a 25% share. In 2022, arable crops (excluding potatoes) gained ground: they accounted for 17% of the entire organic surface area. Corn and wheat are the most common crops. Potato, vegetable and herb crops take up 12% of the organic area, 9% is used for fruit growing.

By the end of 2022, livestock under organic control in Flanders numbered 6,499 cattle, 21,020 pigs, 6,745 goats, 1,798 sheep and nearly 667,000 poultry. Since 2012, the total organic cattle herd has virtually doubled. Yet the share of organic animals in total livestock remains limited: at 0.4%, pigs have the lowest organic share, organic cattle achieve 0.5% and organic poultry 1.5%.

Table Evolution of the number of animals under organic control, 2012 and 2018-2022

| | 2012 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|
| cattle | 2,797 | 5,224 | 5,706 | 5,872 | 6,211 | 6,499 |
| dairy cows | 1,271 | 3,181 | 3,364 | 3,406 | 3,437 | 3,675 |
| pigs | 2,098 | 5,518 | 6,893 | 10,932 | 13,285 | 21,020 |
| poultry | 346,731 | 601,709 | 681,365 | 705,748 | 792,460 | 666,793 |
| laying hens | 131,867 | 247,185 | 285,597 | 315,582 | 325,102 | 298,364 |
| rearing chickens | 87,810 | 172,126 | 149,648 | 102,884 | 160,759 | 138,408 |
| broiler chickens | 127,030 | 182,158 | 245,641 | 287,052 | 302,984 | 229,461 |
| sheep | 2,578 | 2,698 | 3,351 | 2,452 | 2,304 | 1,798 |
| goats | 4,180 | 5,756 | 5,662 | 6,803 | 8,462 | 6,745 |

Source: Agency for Agriculture and Fisheries based on Certisys, TÜV Nord Integra and Foodchain ID Certification

Between 2012 and 2016, the organic cattle herd fluctuated around 2,900 head on average. In 2017, the number of organic cattle jumped to more than 5,000 head. Organic dairy cows made up 58% of this on average. Their numbers have risen by nearly 190% since 2012. The number of pigs under organic control has increased tenfold since 2012. Although the organic poultry population has grown by more than 90% compared to 2012, the number of poultry fell in 2022 for the first time since 2012. With the exception of a rise in 2019, the number of organic sheep has systematically fallen over the past six years. Organic goats recorded an average growth rate of 8% from 2012 to 2021, but their numbers fell by one-fifth in 2022 compared to 2021.

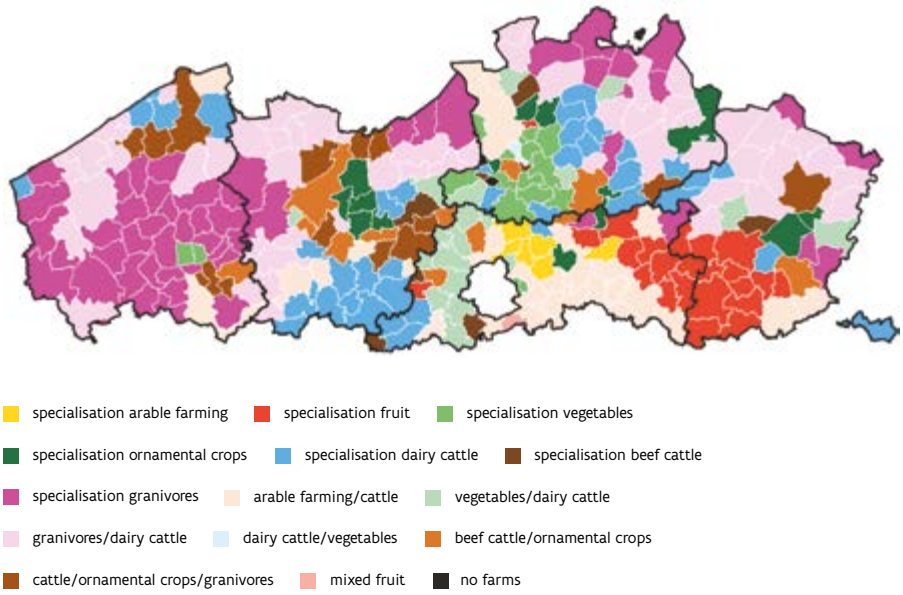
# AGRICULTURAL TYPOLOGY OF MUNICIPALITIES

The agricultural typology map was created by clustering based on the percentage breakdown of farms across farm types and the percentage breakdown of total standard output across branches of activity. The specialisation of agriculture and horticulture in Flanders is often region-specific, as can be seen in the clustering.

The regions specialised in a given activity are clearly recognisable: fruit in Haspengouw, (greenhouse) vegetables north of Sint-Katelijne-Waver, ornamental crops east of Ghent, granivores (pigs and poultry) in West Flanders, the North Kempen and North Limburg, dairy and beef cattle in the Flemish Ardennes or on the poorer sandy soils. In addition, there are combinations of cattle. Arable/cattle is mainly found in the Loam region, vegetables/dairy cattle east of Brussels, cattle/ornamental crops around Ghent and Bruges, granivores/dairy cattle is also found on the poorer sandy soils and in the Polders.

In 3 municipalities (Boom, Hemiksem and Drogenbos) there are no longer any farms.

Figure Agricultural typology of municipalities, 2020



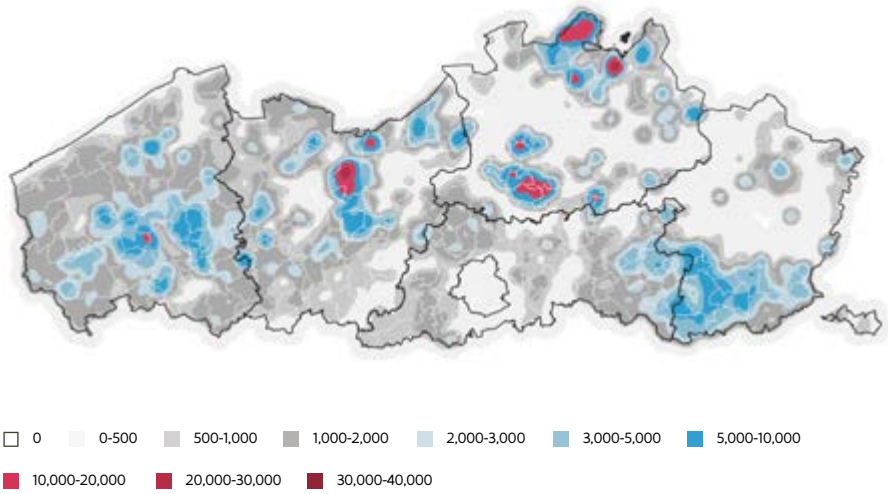

Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

# SPATIAL DISTRIBUTION OF SECTORS

These maps show the spatial distribution of the importance of the sector using standard output per hectare.

The heatmap for the vegetable sectors was created by interpolating central points of plots of arable, fruit and vegetable and ornamental crops. Each point has a weighting equal to the total standard output of the plot. The greenhouse horticultural regions around Roeselare, Sint-Katelijne-Waver, Lochristi and Hoogstraten and the regions with a lot of outdoor horticulture (South Limburg, Beveren, Jabbeke and Roeselare) stand out.

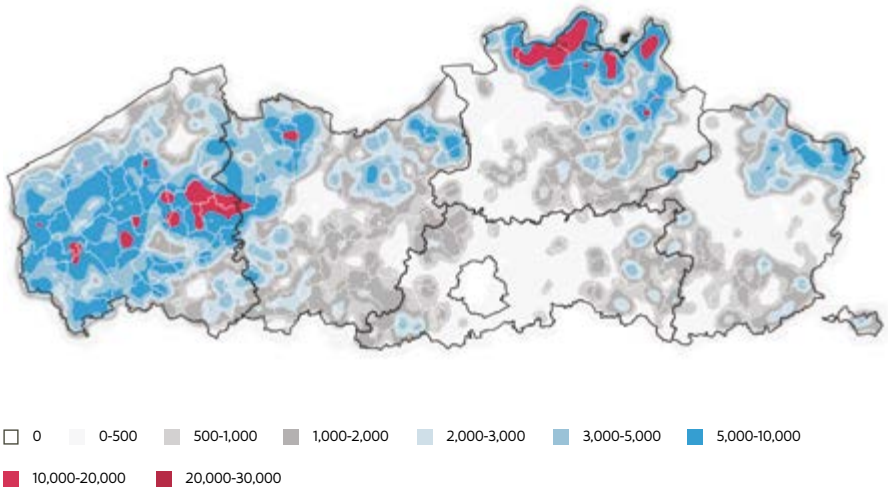
Figure Spatial distribution of crop production, standard output in euros per ha, 2022




Source: Agency for Agriculture and Fisheries based on own data

The heatmap for the animal sectors was created by interpolating the central points of the farms. Each point is given a weighting corresponding to the total standard output of the animals on the farm. The region around Tielt and the North Kempen and, to a lesser extent, the Meetjesland, the Westhoek and North-East Limburg clearly stand out.

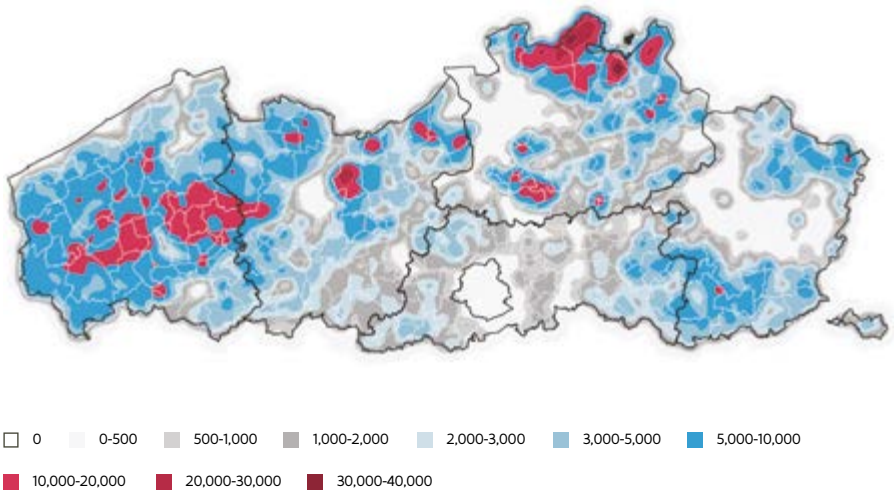
Figure Spatial distribution of animal production, standard output in euros per ha, 2022




Source: Agency for Agriculture and Fisheries based on own data and VLM (Mestbank)

The heatmap for the total agricultural sector is an interpolation of the points from the animal and crop sectors. Logically, the regions that stand out on both the crop and animal heatmap now stand out even more. This is especially the case in West Flanders and the North Kempen.

Figure Spatial distribution of total agricultural production, standard output in euros per ha, 2022




Source: Agency for Agriculture and Fisheries based on own data and VLM (Mestbank)

# OTHER GAINFUL ACTIVITIES

To hedge against a poor harvest/productive season, farmers often look for supplementary income through activities that are not directly related to the primary farming activity. These activities can be highly diverse (social, tourism, environmental, sales, etc.).

In 2020 26.3% of farms had expanded to other activities. 12% of farms even combine multiple activities.

Table Number of farms expanding into other activities, 2003-2020

| | 2003 | 2005 | 2007 | 2010 | 2013 | 2016 | 2020 |
|---|---|---|---|---|---|---|---|
| short chain | - | - | - | - | 2,133 | 2,404 | 4,329 |
| agro-processing | 275 | 258 | 242 | 325 | 457 | 571 | 733 |
| artisan activities | 93 | 83 | 88 | 142 | 152 | 64 | 50 |
| farm tourism | 184 | 190 | 223 | 286 | 401 | 361 | 564 |
| care and/or educational farms | - | - | - | - | - | 441 | 870 |
| wood working | 41 | 41 | 50 | 49 | 121 | 51 | 48 |
| generation of energy for sale | 7 | 5 | 33 | 261 | 895 | 252 | 435 |
| contractual work | 381 | 369 | 378 | 618 | 949 | 857 | 1,019 |
| aquaculture | 18 | 11 | 13 | 18 | 9 | 9 | 12 |
| forestry | - | - | - | - | 127 | 102 | 122 |
| other expansion activities | 493 | 421 | 461 | 642 | 1,189 | 367 | 1,749 |
| total number of farms | **36,577** | **34,410** | **31,984** | **28,331** | **24,884** | **23,981** | **23,225** |

Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

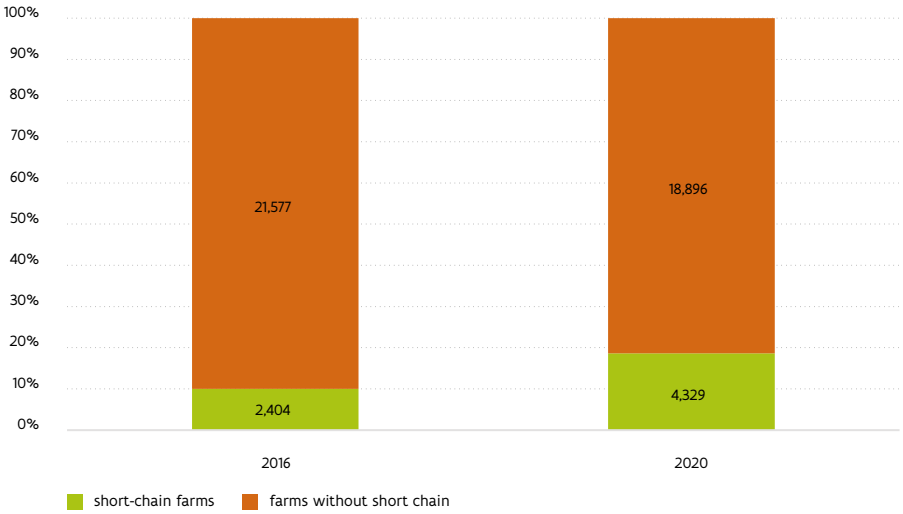
Short chain is the most common expansion activity. In 2020, 18.6% of companies indicated doing one or more forms of 'direct sales'. This is more than double the level of 2013. 3.8% of farms organise care or agricultural education on the farm. That is almost double the number of 2016. See the Short Chain and Care Farms indicators for more information.

564 farms, or 2.4% of the total, open their doors to tourists. Compared to 2010, this number has doubled. In 2020, there were just over 1,000 farms that also performed contractual work using the machinery from their own farm. This is a 65% increase over 2010. A final important form of expansion is the sale of energy: 435 farms (nearly 2%) generate energy intended for sale.

# SHORT CHAIN

The proportion of short-chain farms relative to the total number of farms in Flanders increased from 10% in 2016 to 18.6% in 2020. In 2020, there were 4,329 farms involved in one or more short-chain activities, a rise of 80% compared to 2016. At 30% of farms, short-chain sales account for at least half of the farm's total sales.

Figure Number and share of short-chain farms, 2016 and 2020




Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

Farm sales were by far the most widely practiced short-chain activity in 2020. Of all farms engaged in at least one short-chain activity, 94% sell directly on the farm (through a farm store or vending machine, pick-your-own farm or another form). In addition, 6% of short-chain farmers sell agricultural products directly to the market and 4% have a package system. 11% of short-chain companies perform another short-chain activity other than the three mentioned above.

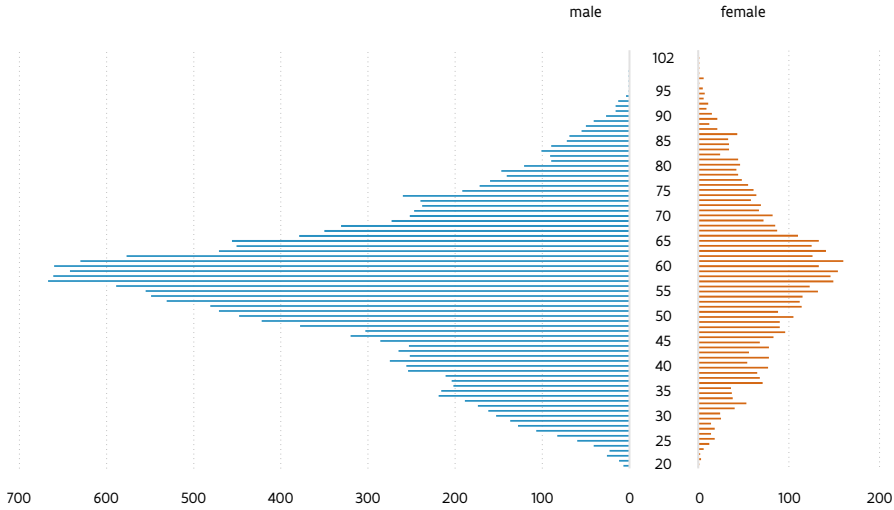
If we look within each specialisation, it is clear that above all the horticulture sector accounts for the largest percentage share of short-chain farms, at just over 30%. Furthermore, 35% of all farms with the 'mixed crop' farm type are short-chain farms, which is the highest of all farm types. Pigs and poultry (11%), beef cattle (15%) and arable (16%) score lower. It is also notable that 61% of organic farms are engaged in short chain activities.

# SOCIAL

# AGE AND GENDER

The figure shows the age pyramid for individuals subject to declaration (they have to submit a single application) listed in the Crossroads Bank for Enterprises (CBE) with agricultural activity. If there are multiple managing directors, the age and gender of the youngest managing director was looked at. If there are multiple managing directors of the same age, priority was given to women.

Figure Age pyramid of individuals subject to declaration with company registration number and agricultural activity, 2022




Source: Agency for Agriculture and Fisheries

Over the years, the male-female ratio is around 80/20. The proportion of female managing directors is growing slightly each year: from 17% in 2009 to 20% in 2022.

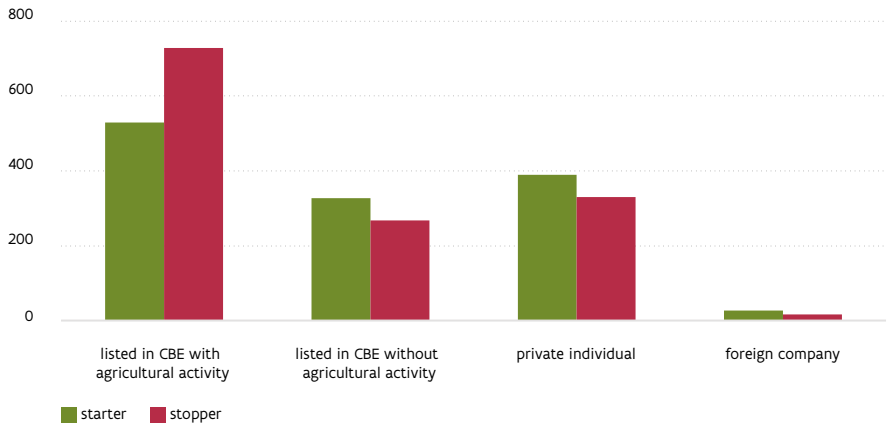
The (weighted) average age is still rising: from nearly 52 years old in 2009 to 56 in 2022. It is notable that the weighted average age is higher among female managing directors than male, but the difference is narrowing.

In 2009, 18.9% were over 65; in 2022, the figure was 25.7%. One notable aspect here is the still relatively large proportion of people over 80: 3.1% in 2009 compared to 5.1% in 2022. In 2009, 19.6% were 40 years old or younger. In 2022, 15.1% belonged to this age group. However, this share is rising again, following a decline between 2009 and 2017, with a fairly stable percentage (14.8%) between 2017 and 2021.

# STARTERS AND STOPPERS

In 2022, there were 1,273 start-ups in the Flemish agricultural sector. Of these, 529 (42%) are listed in the Crossroads Bank for Enterprises (CBE) with an agricultural activity. 327 farms (26%) are listed in the CBE but have no agricultural activity. The remaining companies are not in the CBE. In the majority of cases, the companies are private individuals (390 companies or 30%). The rest are foreign nationals (2%). Of the 529 agricultural start-ups in the CBE with agricultural activity, 62% are self-employed. The rest fall under legal forms (31%) and Partnerships or companies without legal personality (VVZRL) (6%).

Figure Starters and stoppers, by type of business, 2022




Source: Agency for Agriculture and Fisheries

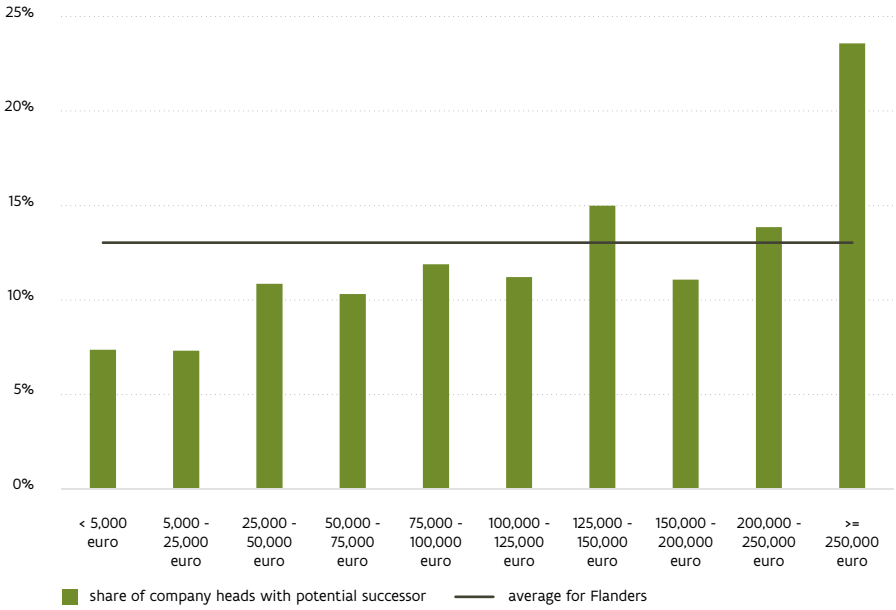
At the same time, 1,343 people stopped their activities in the Flemish agricultural sector, of whom 54% (728) were listed in the CBE with agricultural activity and 20% without agricultural activity. The remaining 26% were not in the CBE. Of the 728 companies stopping in the agricultural sector, and listed in the CBE with agricultural activity, 80% are self-employed. The rest fall under legal forms (13%) and VVZRL (7%).

If we look at the youngest manager of each company, 41% of those stopping, and 8% of the starters, are over 64, and 44% of the starters and 11% of those stopping are under 40. Among start-ups, there are 446 female managing directors and 359 among those stopping.

# SUCCESSION

Only 13% of managing directors over 50 have a potential successor. A breakdown of these businesses by economic size shows that the question of succession primarily poses problems for smaller firms. The bigger the company, the higher the proportion that has a potential successor.

Figure Share of managing directors over 50 with potential successor, by company size (standard output in euros), 2020




Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The question of succession is also sector-dependent. In 2020, among agricultural and horticultural farms in Flanders with a company head older than 50, farms specialised in milk production were the most likely to have a successor.

Only farms where the company head is a natural person older than 50 are surveyed about succession. No data are available regarding succession within companies.

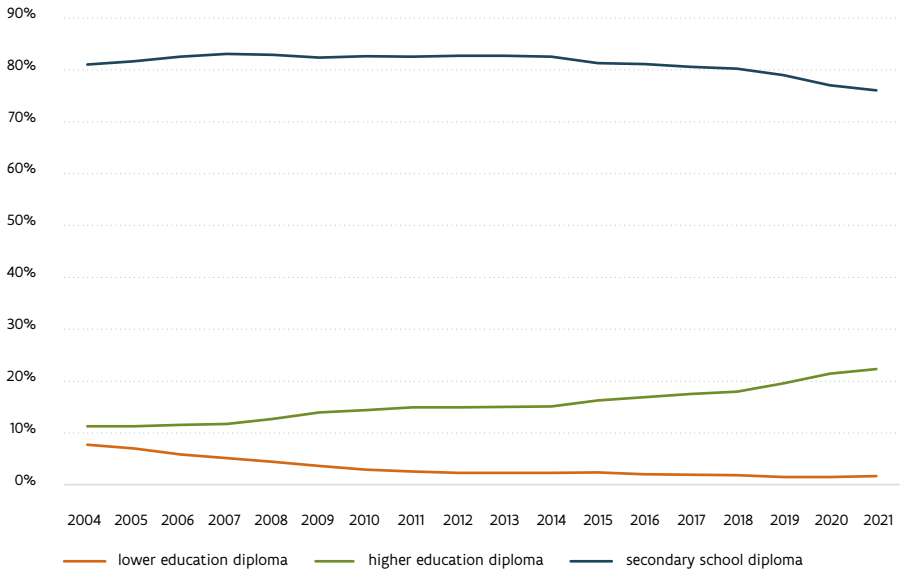
# TRAINING

The educational level of company heads taking part in the Agricultural Monitoring Network (LMN in Dutch) is higher every year. The majority of company heads have a secondary school diploma as their highest qualification obtained. The figure was 76% in 2021, and this percentage is declining. The number of farmers without a secondary school diploma has also declined in recent years, from 7.7% in 2004 to only 1.6% in 2021.

These falls are compensated by the number of company heads with higher diplomas. In 2021, 22% of the company heads in the LMN had a higher education diploma, up from 11% in 2004.

Not only is the level of education rising, but more people are choosing agriculture-related education. In 2021, 66% of the company heads in the LMB had an agriculture-related education, up from 60% in 2004.

Figure Share of company heads (from the Agricultural Monitoring Network) by highest diploma obtained, 2004-2021

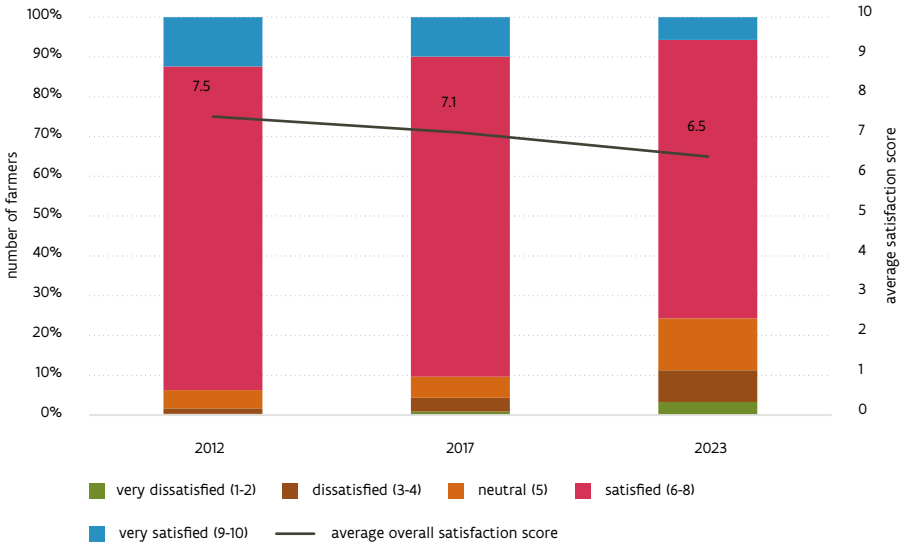



Source: Agency for Agriculture and Fisheries based on LMN

# WELL-BEING

A survey on well-being was conducted in the autumn of 2023 among farmers taking part in the Agricultural Monitoring Network (LMN). One of the questions was about general life satisfaction, and respondents had to give a score out of 10. This indicator is regularly used to measure subjective well-being in the context of positive mental health. The survey shows that only 5% of farmers are very satisfied.

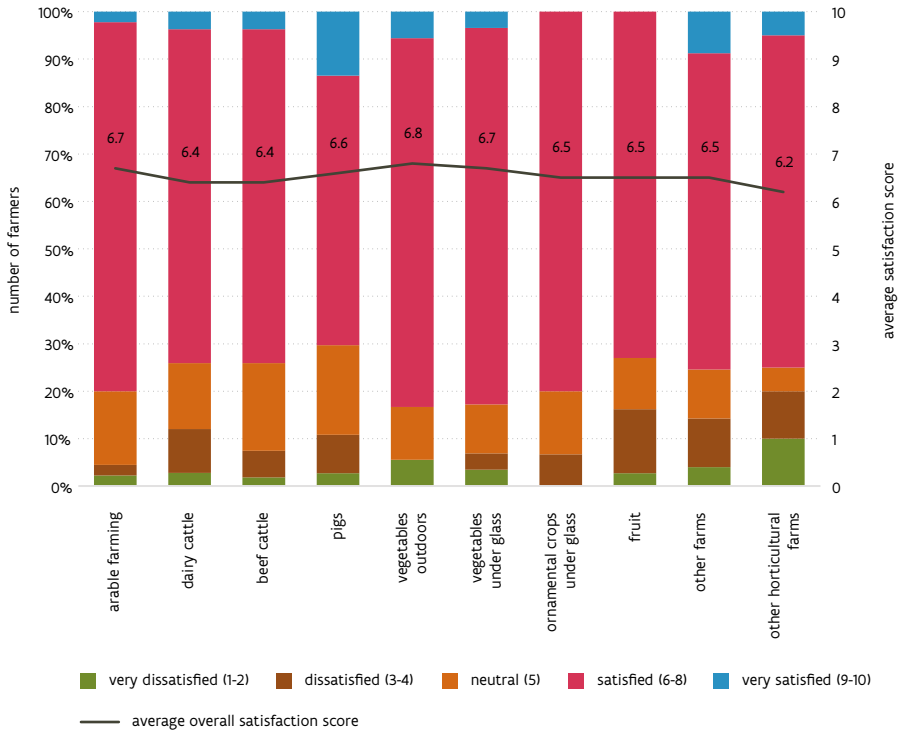
Figure Overall satisfaction with life, share by class and mean score, 2012, 2017 and 2023




Source: Agency for Agriculture and Fisheries based on LMN

29% of farmers give themselves a score of 8 or more and 11% are (very) dissatisfied. Among the general population, these percentages are 52% and 6%, respectively (Statistics Flanders). Farmers are therefore less satisfied with their lives than the general population. On average, the people of Flanders give themselves a score of 7.3, compared to 6.5 among farmers. The first figure also shows that satisfaction has been declining over the past 12 years. The second figure shows the results by sector.

Figure Overall satisfaction with life, share by class and mean score, according to sub-sector, 2023




Source: Agency for Agriculture and Fisheries based on LMN

The fact that the mental well-being of farmers is not very high is also evidenced by the number of calls made to the assistance-providing organisation 'Boeren op een Kruispunt' (Farmers at a Crossroads). This organisation assists farmers with financial, economic, psychological, technical or social problems.

In 2022, the organisation was contacted on 302 separate occasions. This number has climbed steeply since 2020. Farmers from the animal and arable farming sectors primarily contact the organisation. In the horticulture sector, the number of farmers seeking help remains rather limited. The provinces of West and East Flanders stand out in particular.

Figure Number of people seeking help from Boeren op een Kruispunt, 2007-2022

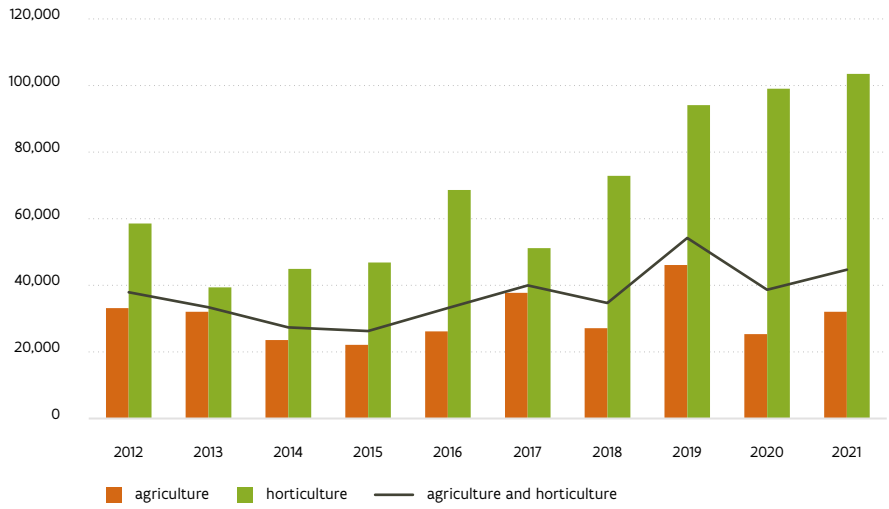

Source: Boeren op een Kruispunt

# ECONOMY

# BUSINESS INCOME

Family working income (FWI) is the compensation for the farmer's own labour (the managing director and any family members working on the farm). The factor costs paid and charged for land and working capital (notional lease and notional interest) have already been taken into account in this regard. The FWI per family worker (FW) is the compensation for the farmer's labour expressed per family worker (in euros per FW).

Figure Working income (FWI) per family worker (FW), euro, 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

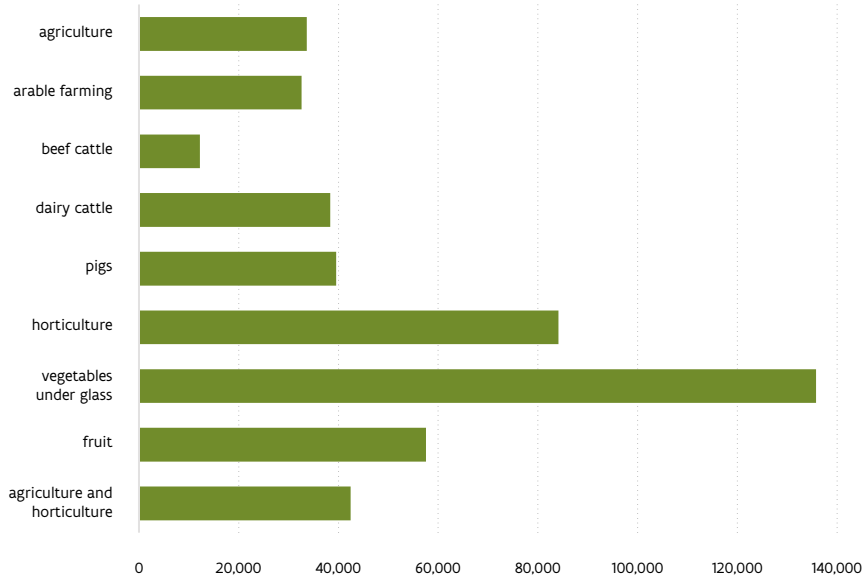
Over the period 2012-2021, total agriculture and horticulture scored a minimum FWI per FW of €26,200 in 2015, to the maximum of €54,200 per FW in 2019. Farms scored just slightly lower, but horticultural farms generally achieved a significantly higher FWI per FW. Their compensation for their own labour was a minimum of €39,400 in 2013 to a maximum of €103,500 per FW in 2021.

The figure shows significant variability across years and across sectors. It only shows averages for agriculture and horticulture per year, so it does not show the differences between different sectors and not at all between individual farms.

# BUSINESS INCOME BY SECTOR

Family labour income (FWI) is the compensation for one's own labour (of the farm manager and any cooperating family members). The factor costs paid and charged for land and working capital (notional lease and notional interest) have already been taken into account in this regard. The FWI per family worker (FW) is the compensation for own labour expressed per family worker (in euros per FW).

Figure Family Working income (FWI) per family worker (FW), euro, average 2017-2021




Source: Agency for Agriculture and Fisheries based on LMN

At €84,100 per FW, horticultural farms do significantly better than agricultural farms. Greenhouse vegetable farms score very well (€135,800 per FW). Fruit farms achieve €57,500 per FW.

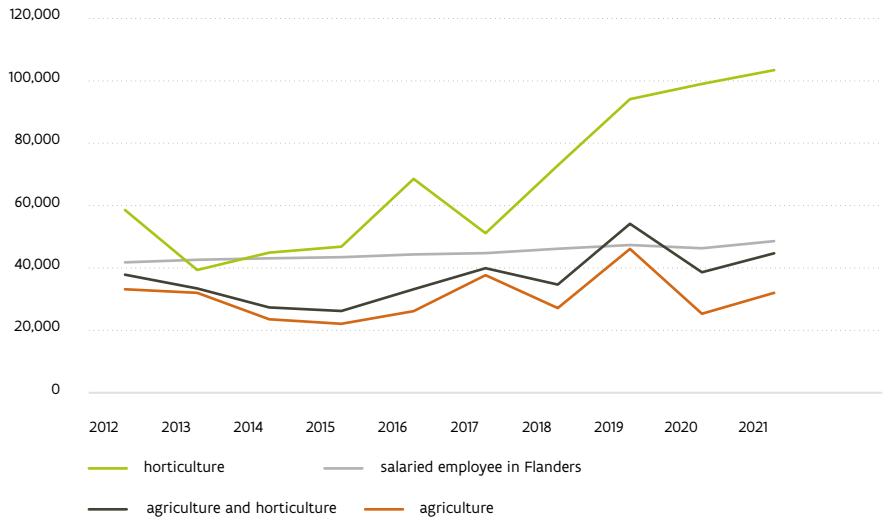
Farms record an average of €33,700 per FW. The differences are (much) smaller. Pig farms achieved the highest FWI per FW over 2017-2021, at €39,500, followed by dairy farms (€38,300) and arable farms (€32,600). Beef cattle farms hover near the bottom: on average, they only get very meagre compensation for their own labour per FW of €12,200.

# COMPARISON OF INCOME FARMER AND SALARIED EMPLOYEE

To compare the level of agricultural incomes with those of other workers in the economy, we compare the evolution of family working income per family worker (FW) with that of 'comparable income'. 'Comparable income' represents the average gross salary of all salaried employees in Flanders.

The family working income of a full-time farmer in 2021, at €44,705, was 8% lower than the income of a full-time salaried employee in Flanders.

Figure Comparison of income farmer and salaried employee in Flanders, euro, 2012-2021



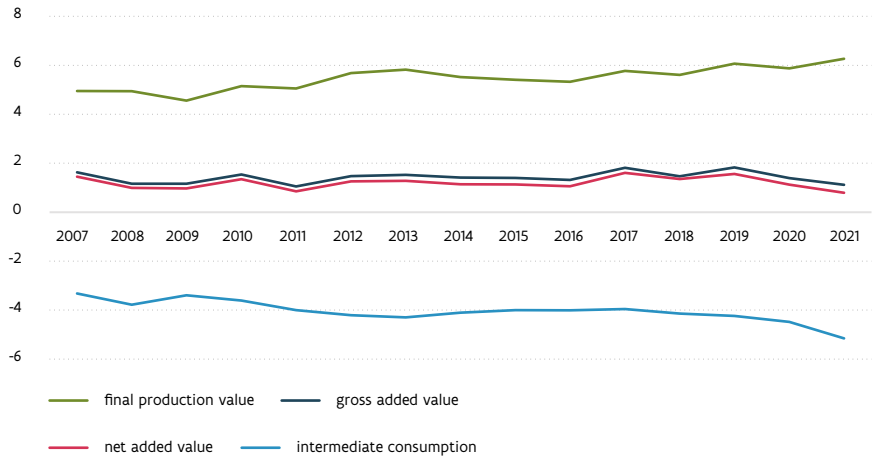

Source: Agency for Agriculture and Fisheries based on LMN, Statbel (General Directorate for Statistics - Statistics Belgium) and National Bank of Belgium

Over the entire period (2012-2021), the average income in agriculture and horticulture was 17.5% lower than the average income of a salaried employee in Flanders. If we look at the subsectors, we can see that the income in horticulture fluctuates to a significant extent and over the whole period is on average 51.4% higher than the income of a salaried employee in Flanders. This mainly occurred during the last three years. However, the average family income in the agriculture subsector is a lot lower, averaging 31.9% less than the income of the salaried employee.

# PRODUCTION VALUE

The final production value is the turnover of all agricultural and horticultural activities at market prices. In 2021, the final production value of the entire Flemish and horticultural sector was €6.29 billion. Of this, the majority comes from livestock farming (57%). Horticulture and arable farming follow with 33% and 10%, respectively. The top five subsectors in terms of production value were pigs (€1.28 billion), milk and milk derivatives (€1.11 billion), vegetables (€938 million), ornamental crop products (€579 million) and cattle (€575 million). Together, they represented 71% of the total production value. Over the period 2007-2021, the production value recorded a slight upward trend.

Figure Production value of agriculture and horticulture, billion euros, 2007-2021




Source: Agency for Agriculture and Fisheries

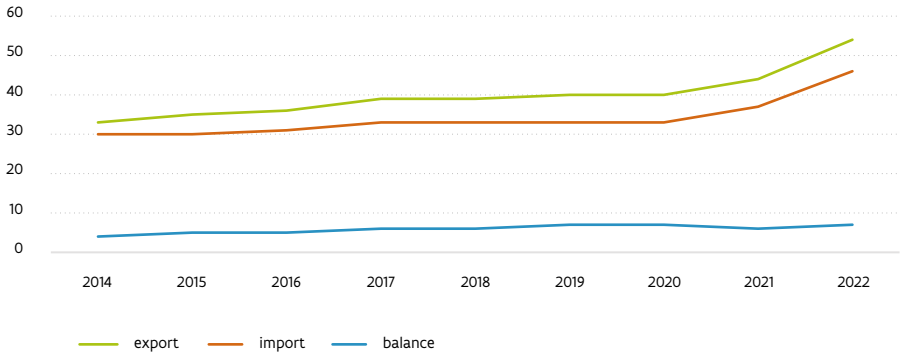
Intermediate consumption represents the value of all goods and services that serve as inputs to agricultural production. Intermediate consumption has been rising in recent years, reaching €5.15 billion in 2021. Of this, 53% is for animal feed, 12% for energy and 3% for fertilizer.

Gross value added can be calculated from the value of the final production and intermediate consumption. Net value added occurs when depreciation and net subsidies are also taken into account. In 2021, the net value added was €95 million, the lowest value over the period 2007-2021.

# FOREIGN TRADE AGRI-PRODUCTS

Flanders is a net exporter of agricultural products. In 2022, imports reached €46.4 billion and exports €53.8 billion. As a result, the trade surplus was +€7.5 billion. The Flemish share of total Belgian imports and exports of agricultural products was 86.5% and 84.6%, respectively.

Figure Flemish foreign trade in agri-products, billion euros, 2014-2022



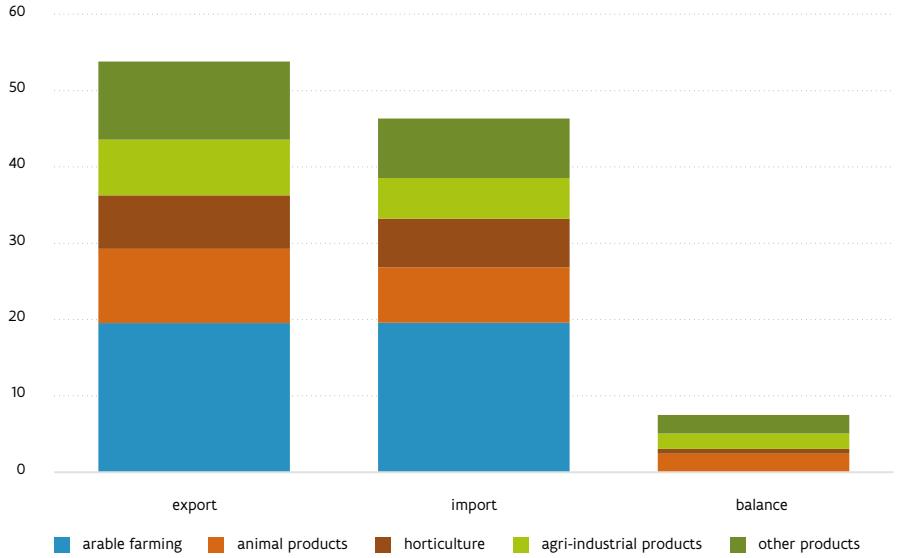

Source: Agency for Agriculture and Fisheries based on the National Bank of Belgium

In 2022, agricultural products accounted for 9.5% of total Flemish imports and 11.2% of total exports, according to the National Bank of Belgium. The rise in imports and exports in 2021 and 2022 was largely due to the strong inflation. The total volume of agri-trade has remained fairly constant, although there are differences between product groups.

Flanders is also a leading player in European agri-trade. Flanders' share in the EU is 6.4% in imports of agricultural products and 7.0% in exports of these.

Arable farmling products are by far the most important product group for agri-trade, with imports and exports of €19.6 billion. It is therefore a very broad category that includes basic products such as grains and oilseeds, which are intended for human and animal consumption, non-native products such as coffee beans, rice and cocoa, and derived products such as pasta, cookies and chocolate. For exports, other products (fish, crustaceans and molluscs, beverages, oils and fats, cattle feeds) (€10.2 billion) and animal products (€9.7 billion) are in second and third place. For imports, other products (€7.8 billion) ranked ahead of animal products (€7.3 billion).

Figure Flemish foreign trade in agri-products, by product group, billion euros, 2022




Source: Agency for Agriculture and Fisheries based on the National Bank of Belgium

Animal products in particular (with a balance of +€2.5 billion) and other products (+€2.4 billion) contribute to the Flemish trade surplus. Agro-industrial products (+€2.0 billion) and horticultural products (+€0.6 billion euros) also recorded surpluses. For arable farmiong products, the difference between import and export value is limited (balance of -€40 million), but the fact that there is a deficit in this category for the first time in years indicates rising prices in 2022 for cereals, oilseeds and other inputs for agriculture and agri-food industries.

The overall positive balance indicates that the Flemish agri-food sector creates added value. Flanders imports various unprocessed bulk products (e.g. cocoa, wheat, barley, soy and live animals) and exports processed products to a greater or lesser extent (e.g. chocolate, cookies, beer, dairy and meat). Flanders is an important transit country thanks to its central location in Western Europe and the ports of Antwerp and Zeebrugge, meaning that we also export foreign bulk products, such as bananas, coffee and tobacco.

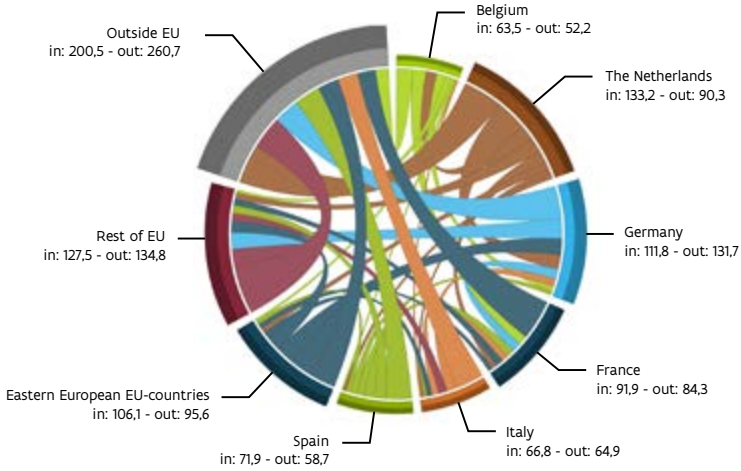
Data from the FAO show that Belgium is the world's largest exporter of frozen potatoes (French fries, croquettes and suchlike) and frozen vegetables. For chocolate products, unprocessed tobacco and malt, Belgium ranks second. Other top products include beer (3rd place), pastries and confectionery (4th place each), chicken (5th place), pork (6th place), non-alcoholic beverages (7th place) and cheese made from cow's milk (10th place).

# FOREIGN TRADE AGRI-PRODUCTS: FLOWS

Belgium has an open international economy, and this is certainly the case for the agri-food sector. Within Europe, Belgium holds a leading position in agri-trade.

The figure shows the trade flows with each flow coloured with the colour of the country achieving the largest export value in trade between the two countries in question.

Figure Trade flows of agri-products, billion euros, 2022




Source: Agency for Agriculture and Fisheries based on Eurostat (Easy Comext)

In 2022, Belgium's total agro-exports were nearly €63.5 billion, while imports accounted for €52.2 billion. The main countries from which Belgium imported agri-products in 2022 were its neighbours the Netherlands, France and Germany (together accounting for 58%) and the rest of the EU-27 (over 16%). Almost 26% of imported goods come from outside the EU. We see the same broad lines in agri-exports, with Belgium exporting 53% to neighbouring countries, followed by over 21% to the other EU-27 countries. Exports to countries outside the EU (including the United Kingdom) account for 26%.

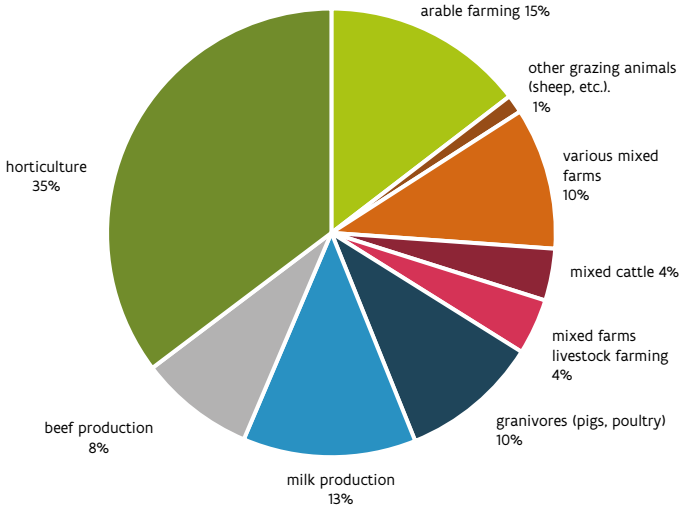
In 2022, the EU-27 countries together exported €772 billion worth of agricultural products (both inside and outside the EU) and imported €720 billion worth of agricultural products. Belgium has an 8.2% share of total agricultural exports and 7.4% of the total import value of all EU-27 countries.

# EMPLOYMENT

In 2020, 45,938 people were regularly employed in the Flemish agriculture and horticulture industries. Following a downward trend in the number of farms, the number of regularly employed persons is also continuously falling. Compared to 2010, 19% fewer individuals were in regularly employment. The workforce is predominantly family-based. As of 2020, 69% of the total number of regularly employed people were family workers, but the proportion of family workers has fallen significantly. It should be noted that individuals employed by a partnership are considered non-family.

Converted to full-time workers and taking into account persons in non-regular employment, that equates to 37,065 full-time workers (FTEs) or an average of 1.6 FTEs per farm in 2020. The number of full-time workers is also continuously falmling. Compared to 2010, there are 16% fewer full-time workers.

Figure Breakdown of full-time workers by farm type, 2020



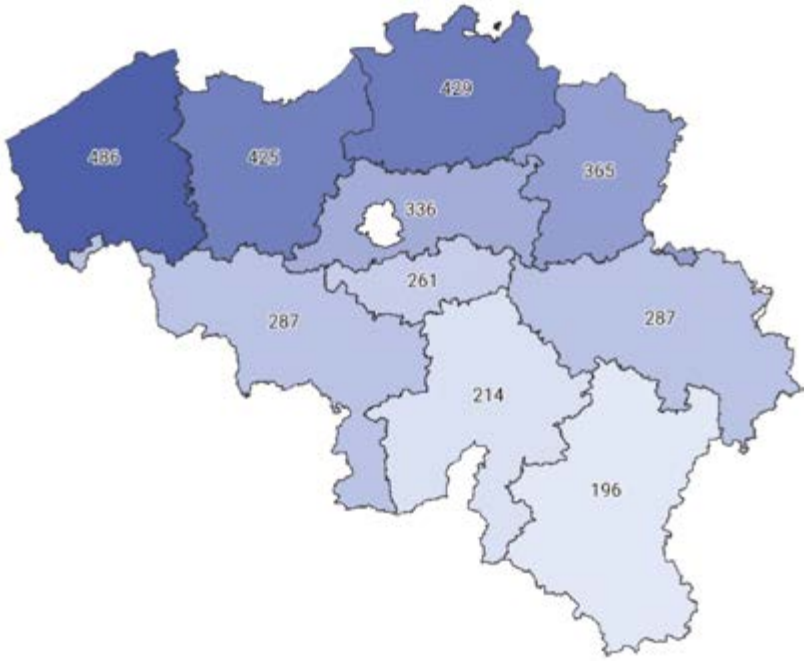

Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

Around 35% of the workforce are employed in specialised horticultural farms, 40% on specialised livestock farms and 15% on specialised arable farms.

# PRICE OF AGRICULTURAL LAND

In the space of 20 years, the proportion of agricultural land owned by farmers has risen from 33% to 40% in 2020. The proportion of land under lease fell from 66% to 58% during the same period. The remaining 1-2% is for share tenancy and other forms of tenant farming.

Figure Average lease price of agricultural land, euro per ha, 2022




Source: Statbel: Generql Directorate for Statistics - Statistics Belgium

In 2023, the average selling price of a hectare of agricultural land in Flanders was €66,288. This represents an increase of nearly 69% in 10 years. The most expensive agricultural can be found in West Flanders (€75,300) and the cheapest in Limburg (€53,747) (Notaris.be, 2022).

The lease price of cultivated land in Flanders averaged €424 per hectare in 2022, an increase of over 45% in 10 years. In terms of leasing, West Flanders (486) is also the most expensive province. Flemish Brabant, in turn, has the cheapest rent, at €336 per hectare.

# ENVIRONMENT

# DESTINATION VS. USE OF AGRICULTURAL AREA

Of the 674,500 hectares declared by persons required to submit a single application, 599,500 hectares (89%) are in an agricultural destination, 44,200 hectares (6.5%) are in a green destination (nature and reserve, forest, other green), 28,500 hectares (4.2%) are in a hard destination (residential, industrial, other) and 1,900 hectares (0.3%) are in a recreational destination.

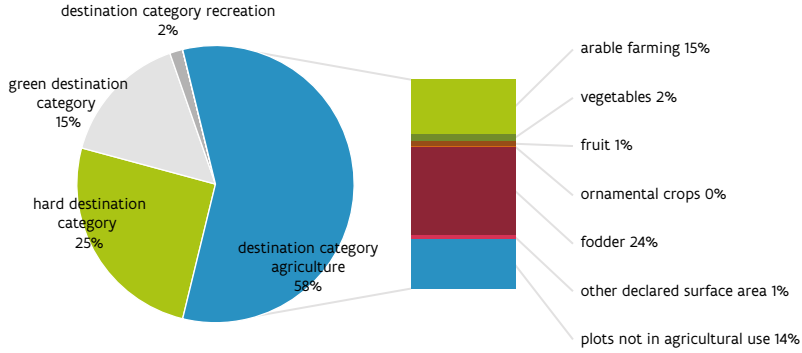
According to the Spatial accounting, 783,500 hectares (57.6%) of Flanders is coloured as an agricultural destination, 345,300 hectares (25.4%) as a hard destination, 210,200 hectares (15.5%) as a green destination and 20,600 hectares (1.5%) as a recreational destination.

Of the 783,500 hectares destined for agriculture, 599,500 hectares (76.5%) were declared by declarants. This means that 23.5% of the agricultural destination (184,000 ha) is not used for agriculture.

Whether these are non-zoned areas depends on the crop and/or the actual destination in the land use plan. Examples are heathland in nature management in a green destination, equestrian pasture in a recreational destination or agricultural buildings in a hard destination.

The spatial destination may affect the expansion possibilities of the farm, or the possibilities after the agricultural activity is stopped.

Figure Spatial accounting of Flanders and division of agricultural destination according to use, 2022

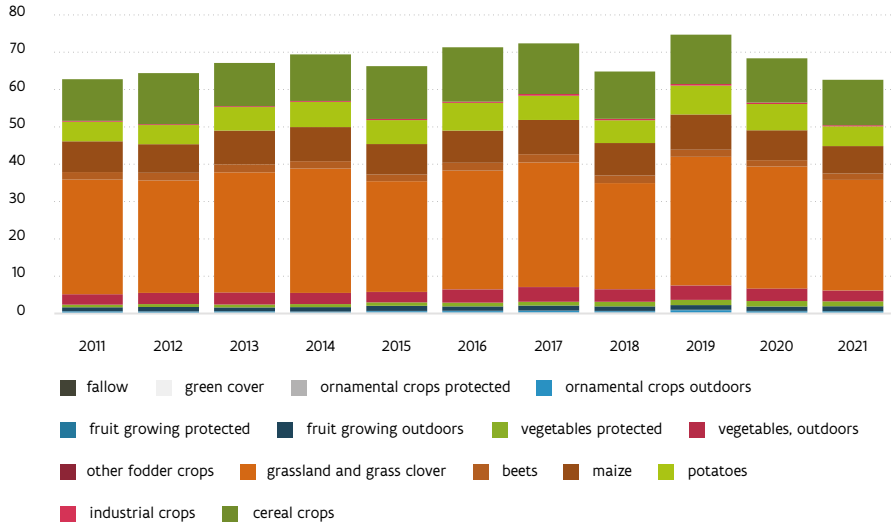



Source: Agency for Agriculture and Fisheries based on own data and the Department of Environment and Spatial Development

# NUTRIENTS

Crops and animals need nutrients, such as nitrogen (N) and phosphorus (P). They get these through fertilizer or feed. In 2021, 91.6 million kg of N and 17.3 million kg of P from manure (raw manure and processed manure products) were used on agricultural land (VLM, 2022). Based on an extrapolation of the data from the Agricultural Monitoring Network (LMN), the estimated total chemical fertilizer use by Flemish agriculture and horticulture was 62.6 million kg N in 2021. Compared to 2020, the fertilizer use is 8% lower. Most N chemical fertilizer was applied to grasslands (47%) and cereal crops (19%) in 2021. Maize accounted for 12% and potatoes accounted for 8%. The shares are fairly constant over time.

Figure Chemical fertilizer use by crop group, million kg N, 2011-2021

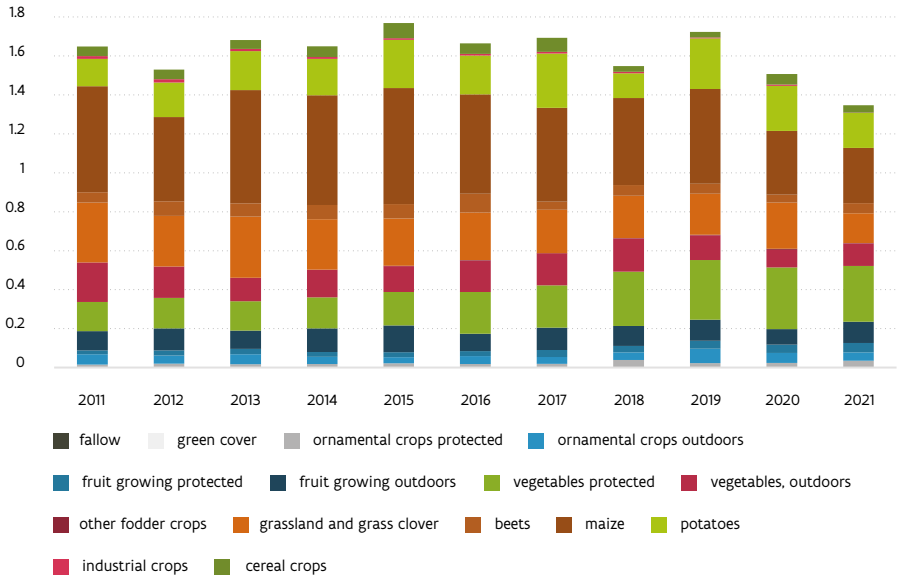



Source: Agency for Agriculture and Fisheries based on LMN and Single application

To achieve high yields, protected crops have high N chemical fertilizer use per hectare. Manure is not applied here. Tomatoes, which grow in the greenhouse for almost a year, get 1,484 kg N/ha per year. This is followed by lettuce (654 kg N/ha), other vegetables protected (640 kg N/ha), ornamental crops protected (363 kg N/ha) and fruit crops protected (207 kg N/ha). Outdoors, most N chemical fertilizer is applied to winter wheat (169 kg N/ha) and winter barley (131 kg N/ha). For sugar beet it is 82 kg N/ha and for maize it is 50 kg N/ha.

In 2021, the total estimated P chemical fertilizer use after extrapolation based on the LMN was 1.3 million kg P. The distribution of P among the crop groups gives a different picture than that of N because the crop needs are different. Most P ends up on vegetables protected (21%), maize (21%), potatoes 5% and grassland 11%. Compared to 2020, the fertilizer use is 11% lower. Compared to 2011, use on vegetables protected increased by 91% and decreased 48% on maize.

Figure Chemical fertilizer use by crop group, million kg P, 2011-2021




Source: Agency for Agriculture and Fisheries based on LMN and Single application

A lot of P is used per ha in protected crops due to high yields envisaged and the fact that it is impossible to apply manure. Tomatoes, which grow in the greenhouse for almost a year, therefore get 315 kg P/ha. This is followed by other vegetables protected (150 kg P/ha), lettuce (130 kg P/ha), ornamental crops protected (77 kg P/ha) and fruit crops protected (63 kg P/ha). Outdoors, P requirements are highest for chicory root crops (20 kg P/ha) and other fruit crops outdoors (19 kg P/ha). Storage potatoes are given 5 kg P/ha and maize 2 kg P/ha.

Since 2021, farmers as well as fertilizer producers and traders must keep a digital chemical fertilizer register. According to the farmers' register of use, 48.6 million kg N and 0.6 million kg P per ha were used in 2021. However, based on the registrations of chemical fertilizer sellers, the VLM (Flemish Land Agency) concludes that the quantities of chemical fertilizer purchased is under-reported in the digital records of farmers (VLM, 2022).

The crops and animals do not use all the nutrients supplied. Some of it disperses into the air, soil and water. This loss of nutrients means a loss of inputs for agricultural businesses and creates additional costs. Despite all the efforts made, these emissions remain a tricky challenge for agriculture. As such, agriculture is the main source of acidifying emissions in Flanders (48%) and eutrophying emissions (53%). According to the Air Policy Plan 2030, the critical load for acidification and eutrophication must not be exceeded in any ecosystem by 2050. In 2021, this deposition threshold value for acidification was exceeded on 19% of the total natural area in Flanders. For eutrophication, it is 80%. In 2021, agriculture accounted for 40% of total acidifying deposition in Flanders, making it the second largest source, after imports from outside Flanders (49%). Total emissions of potentially acidifying substances from agriculture fell by 11% in 2021 compared to 2007 and by 34% compared to 2000. Ammonia emissions ($NH_3$) accounted for 90% of the potentially acidifying emissions from agriculture in 2021. The proportion of nitrogen oxides ($NO_x$) was 9%. The proportion of sulphur dioxide ($SO_2$) was negligible. Despite a 68% reduction compared to 2000, agriculture accounted for 94% of ammonia deposition in Flanders in 2021. Acidifying agricultural emissions are closely related to the use and storage of (animal) manure, whereby $NH_3$ (and to a lesser extent $NO_x$) volatilizes. More specifically, in 2021 these were indoor livestock farming and manure storage (57%), manure spreading (21%) and grazing (7%). Chemical fertilizer use accounted for 9%. Fuel use represented only 3% of the total (VMM, 2023).

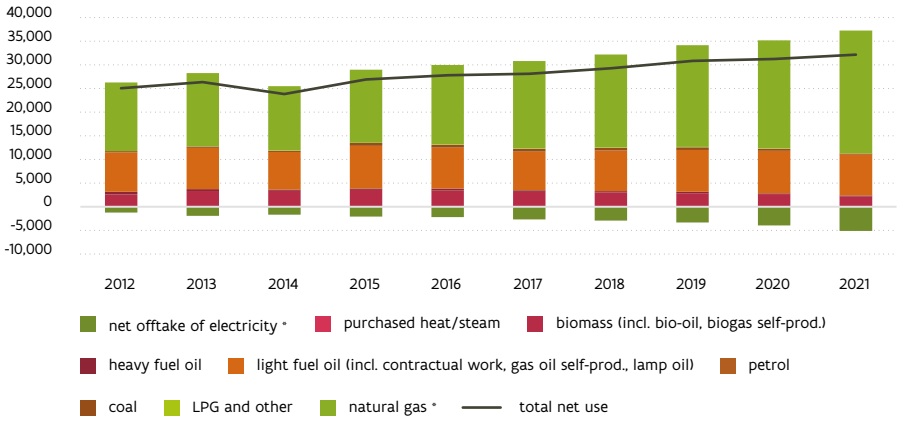
If nitrogen and phosphorus supplied by manure, chemical fertilizer or other fertilizers are not absorbed by plants during the growing season, these nutrients can leach into surface and groundwater. The various manure action plans (MAPs) focus on achieving the targets of the nitrate directive. During the last 10 years, nitrate levels in the MAP monitoring network have been fairly stable, with higher exceedance rates during the winter of 2017-2018 up to 2020-2021. This was due to the long periods of drought during the growing season over the period 2017-2020. Weather conditions in 2021 were more favourable, with a lower exceedance rate of 22% in the winter of 2021-2022. In the event of an exceedance, the threshold value of 50 mg of nitrate per litre of surface water was exceeded at least once. MAP 6 also applies a target average nitrate concentration per runoff zone of 18 mg nitrate/l. On 54% of the agricultural area, this was achieved in the winter of 2021-2022. The average nitrate concentration in area type surface water 1, 2 and 3 is 27.3 mg nitrate/l. Orthophosphate concentrations have improved since 2016, but 54% of monitoring sites did not meet the environmental quality standard during the winter of 2021-2022. An increase was observed for groundwater in 2021 compared to previous years, with an average of 35.4% of monitoring points exceeding the 50 mg nitrate/l standard (VLM, 2022).

# ENERGY

Total net primary energy consumption by the agricultural sector rose in 2021, to 31,161 terajoules (TJ). Natural gas was the most important energy vector, at 81%. The share of light fuel oil was 27% and the share of biomass 7%. Heavy fuel oil and coal each accounted for 1%. From 2010 on, Flemish agriculture became a net producer of electricity through combined heat and power plants and solar panels. In 2021, agriculture returned 5,102 TJ more to the grid than it took off.

CHP plants managed by the agricultural sector generated a net 10,610 TJ of electricity in 2021. Of this, 8,583 TJ were sold to the grid, with the remaining 2,027 TJ consumed by the farms themselves.

Figure Net energy consumption, by energy vector, terajoules, 2012-2021




* evolution largely attributable to CHP

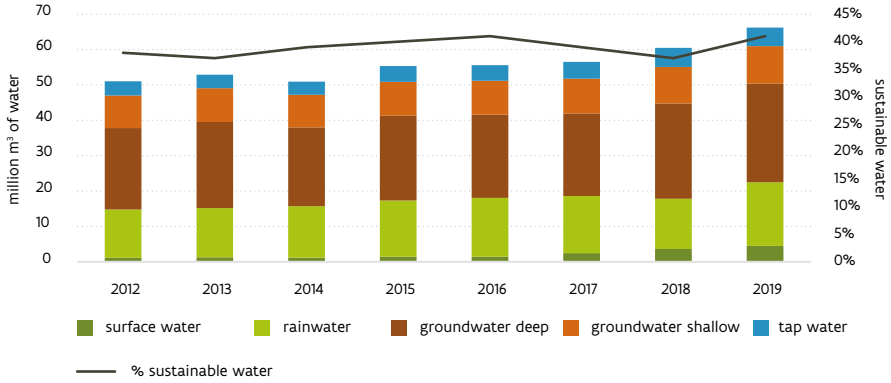
Source: Agency for Agriculture and Fisheries based on LMN and Statbel (General Directorate for Statistics - Statistics Belgium) and VEKA Energy balance

At 51%, the greenhouse vegetable sector was the largest energy user at in 2021. The ornamental crop sector under glass had an energy share of 6%. CHPs in greenhouse cultivation are primarily powered by natural gas. The energy is used mainly for heating the greenhouses, and more recently for lighting the crops. The 'other farms' account for 13%. This is followed by specialised dairy cattle farming (8%) and pig farming (7%). The arable sector accounts for 5%.

# WATER

Water use in agriculture and horticulture, excluding direct rainwater, was estimated at 66.2 million m³ in 2019. It was very hot and dry for the second year in a row, resulting in water capture bans. According to the water source, 58% is pumped groundwater (42% deep, 16% shallow), 27% collected rainwater and 8% tap water. The use of surface water depends on the proximity to a watercourse or lake, and the water quality, but due to the drought, the share rose to 7% from 2% in 2012. Given the low water availability in Flanders, sustainable water use is important. The share was 41% in 2019. The proportion of sustainable water is the sum of all rainwater, 80% of the surface water and 50% of the shallow groundwater divided by the total water use.

Figure Water use, by water source and share of sustainable water, 2012-2019




Source: Agency for Agriculture and Fisheries based on LMN and Statbel (General Directorate for Statistics - Statistics Belgium)

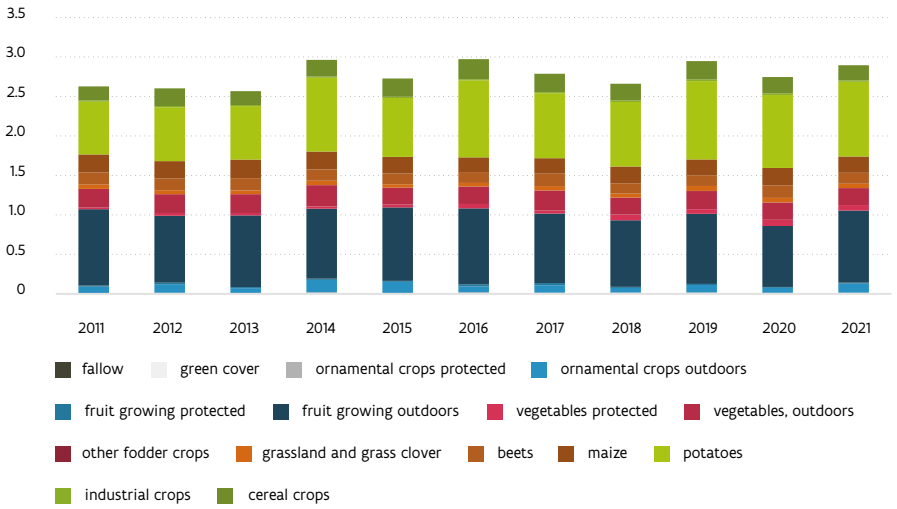
Greenhouse cultivation accounted for 20% of water use in 2019. High water needs are mitigated by drip irrigation and recirculation of drain water. By collecting rainwater in large basins, greenhouse cultivation has a sustainability rate of 72%. Over the period 2017-2022, the VLIF provided €7.8 million in support, accounting for 1,405,152 m³ of additional water collection and storage.

The Blue Deal and various project calls encourage collaboration in the reuse of residual water (rainwater, treated effluent) between farmers and industry, better water retention in the field and drought-tolerant crops.

# CROP PROTECTION

Farmers use plant protection products to safeguard their crops. The estimated use of plant protection products in 2021 was 2.9 million kg of active substance. Most PPP end up on potatoes (33%) and fruit crops outdoors (32%). A further 7% goes to vegetables outdoors, maize and cereals. Compared to 2011, PPP use has increased by 10%, but the Harmonized Risk Indicator 1 (HRI 1) shows a 44% reduction of the risk to humans and the environment. By application group, the following distribution applied in 2021: 45% fungicides, 28% herbicides, 7% insecticides and 20% others (growth regulators, soil fumigation, repellents and preservatives).

Figure Plant protection product use, by crop group, million kg active substance, 2011-2021



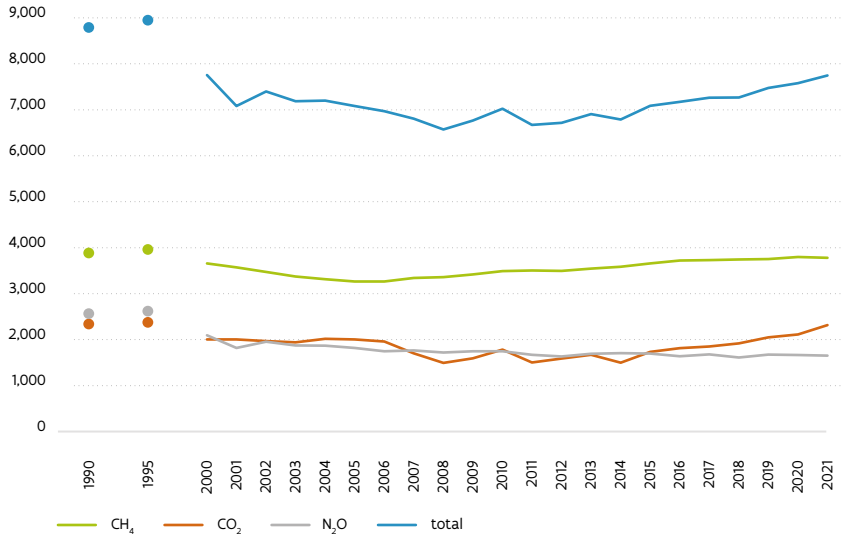

Source: Agency for Agriculture and Fisheries based on LMN and Single application

Low-stemmed pears use 69 kg of active substance per hectare (weighted average 2017-2021), mainly against the fungal diseases scab, powdery mildew, fruit rot and the insect pear psyllid. Apples are not sprayed as much (37 kg/ha). The cultivation of seed potatoes also has a high use of 55 kg of active substance per hectare, to obtain disease-free planting material. 18 kg of active substance is used on storage potatoes, and 5 kg less on early potatoes because they are in the field for less time.

# GREENHOUSE GASES

Flemish agriculture emitted 7.7 megatons (Mton) of $CO_2$ equivalents within Flanders in 2021. That represents 10% of total Flemish greenhouse gas emissions. After a fall between 1990 and 2008, agricultural emissions have been steadily rising every year since then. Agriculture is the only sector where the absolute emissions were higher in 2021 than in 2005: +9%. Compared to 1990, greenhouse gas emissions from agriculture were 12% lower in 2021.

Figure Greenhouse gas emissions, Mton $CO_2$ -eq by greenhouse gas, 1990-2021




Source: Flanders Environment Agency (VMM)

Greenhouse gas emissions from agriculture consist of energetic emissions ($CO_2$) and non-energetic emissions (nitrous oxide or $N_2O$ and methane or $CH_4$). Energetic greenhouse gas emissions are limited compared to other sectors. The heating of buildings had a 28% share in 2021 and that of mobile machinery 3%. The driver behind the evolutions in non-energetic emissions from agriculture is the size and composition of the livestock population. This is the case both for the decline before 2008 and the increase thereafter. These emissions are from digestion processes ($CH_4$) and manure storage/stables ($CH_4$ and $N_2O$). They were 32% and 20%, respectively, in 2021. In addition, agricultural soils also emit $CO_2$ and $N_2O$. In 2021, this was 17% of the total.

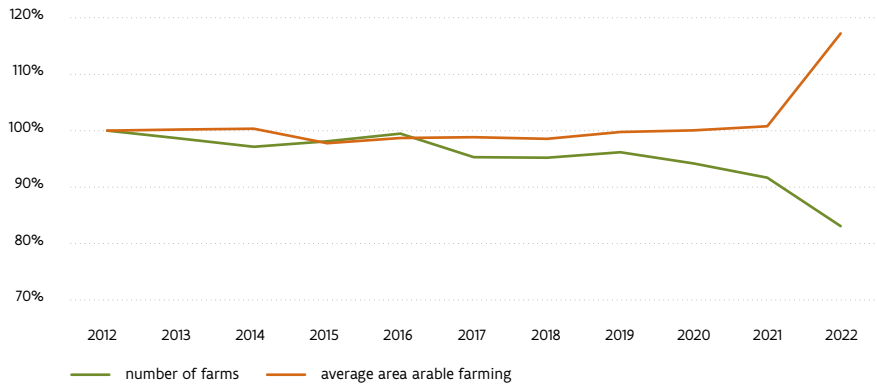
# SECTORS

# ARABLE FARMING

As of 2022, Flanders had 13,268 arable crop farms. That represents 59% of Flemish farms. The number of arable crop farms fell by 17% compared to 2012. In contrast, the average farm area increased to 16 hectares of arable crops per farm. Almost a third of all Flemish agricultural operations (7,369 farms) are specialised arable farms. Moreover, there are more and more of them. Arable land decreased by 3% to 215,800 hectares from 2012 to 2022, but still accounted for more than one third of the total area of agricultural land. Arable farming is concentrated in the Silty loam and Loam Region and in the Polders.

The figure below shows the evolution of the number of farms with arable crops and the average area of arable crops per farm. This evolution is shown as an index relative to 2012.

Figure Evolution of number of farms and average arable crop area, index 2012 = 100%

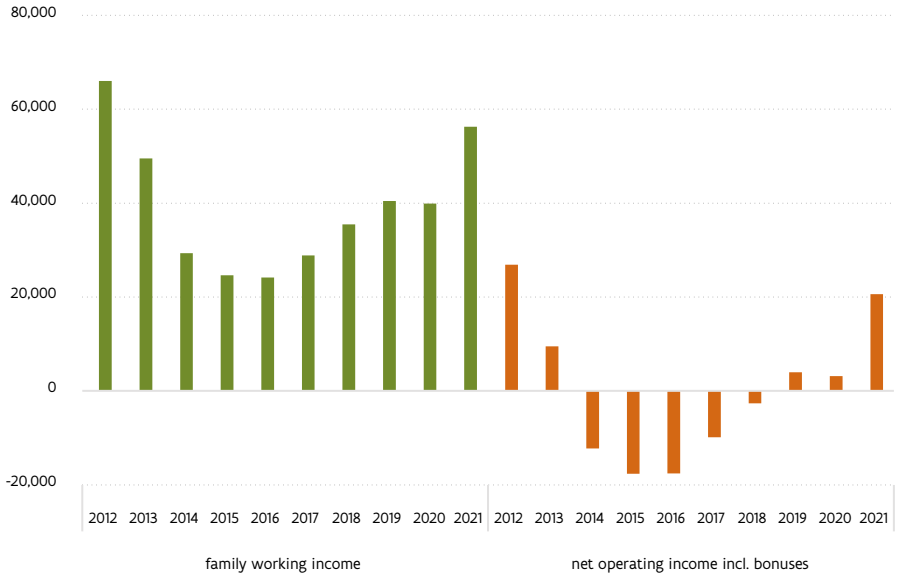



Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The final production value of Flemish arable farming has been between €457 and €668 million since 2012. In 2021, the value increased to €631 million, a rise of 25%. Potatoes were by far the most important product in 2021, with a share of 47% of the total production value of arable crops. Cereals had a share of around 25%, with wheat and barley being the main crops. Sugar beets were much further behind, at 6%.

From 2012 to 2021, family working income fluctuated between €24,100 and €66,000 per farm. Over the same period, arable farms averaged 1.2 family workers. In 2021, family working income was nearly €56,300 per farm. Net operating income was negative for arable farming on several occasions over 2012-2021. However, the second highest net operating income, €20,600, was achieved in 2021. Arable farmers could therefore cover the cost of all factors of production, with the remainder being entrepreneurial profit.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

Net energy use by specialised arable farms was 1,765 TJ in 2021. That corresponds to 5% of total use by agriculture. In 2019, arable farming accounted for less than 1% of total water use in agriculture.

Specialised arable farms used an estimated 557 tons of plant protection products containing active substances in 2021. Fungicides accounted for a 42% share, Herbicides 38%, insecticides 5% and others 15%. The estimated chemical fertilizer use by these farms in 2021 was 13.1 million kg of nitrogen (N), 209,000 kg of phosphorus (P) and 5.3 million kg of potassium (K).

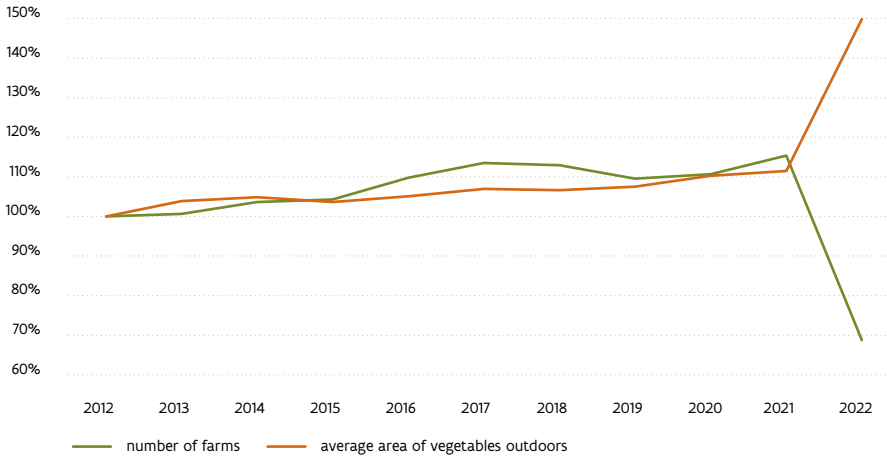
# VEGETABLES OUTDOORS

In 2022, vegetables were grown outdoors on 2,644 farms, or 12% of all Flemish farms. Compared to 2012, the number of outdoor vegetable farms decreased by 31%, mainly due to an exceptional fall in 2022 (for administrative reasons). Despite the significant fall in the number of farms in 2022, the surface area of outdoor vegetables increased by 3% to 26,216 hectares between 2012 and 2022, accounting for 4% of the total area of agricultural land. In terms of region, outdoor vegetable cultivation is highly concentrated in central West Flanders.

The average area per farm has risen by 50% since 2012, indicating strong economies of scale. In 2022, an average of 10 hectares of outdoor vegetables were grown per farm. One-fifth (541 farms) of agricultural operations growing outdoor vegetables are specialised vegetable farms.

The figure below shows the evolution of the number of outdoor vegetable farms and the average area of outdoor vegetables per farm. This evolution is shown as an index relative to 2012.

Figure Evolution of number of farms and average area of outdoor vegetables, index 2012 = 100%

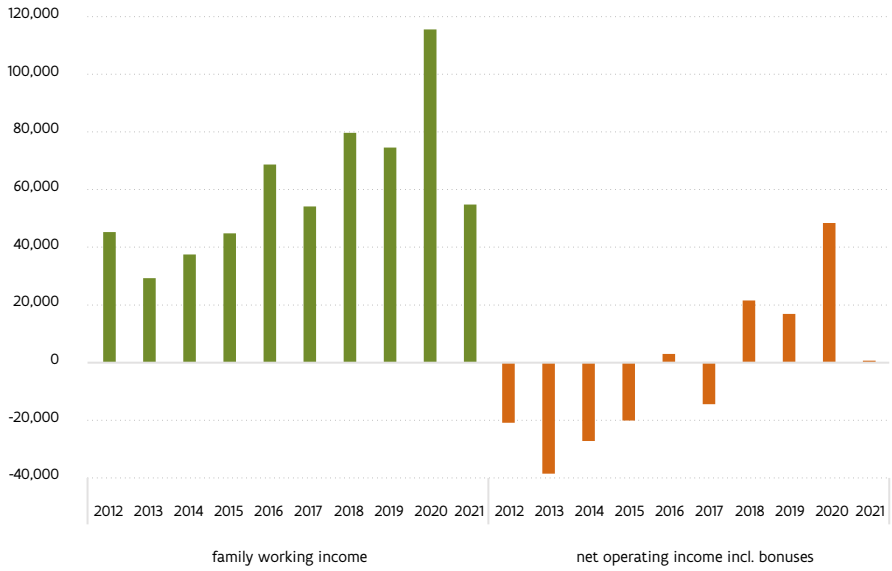



Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The final production value of outdoor vegetable cultivation rose gradually at an average annual rate of 2% between 2012 and 2020. However, the production value rose by 34%, to €463 million. The products with the largest shares of total outdoor vegetable cultivation value are leeks (26%), carrots (14%) and cauliflower (9%).

In 2021, family working income was nearly €54,700 per farm. Over the period 2012-2021, outdoor vegetable farms had an average of 1.6 family workers. In the years prior to 2018, net operating income for outdoor vegetable farms was often negative. From 2018, the net operating income became positive, but in 2021 it fell from €48,200 to €500 per farm.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

In 2021, net energy use by farms specialising in outdoor vegetables was only 115 TJ. This corresponds to less than 1% of total use by agriculture. In 2019, outdoor vegetable farms accounted for 2% of total water use in agriculture.

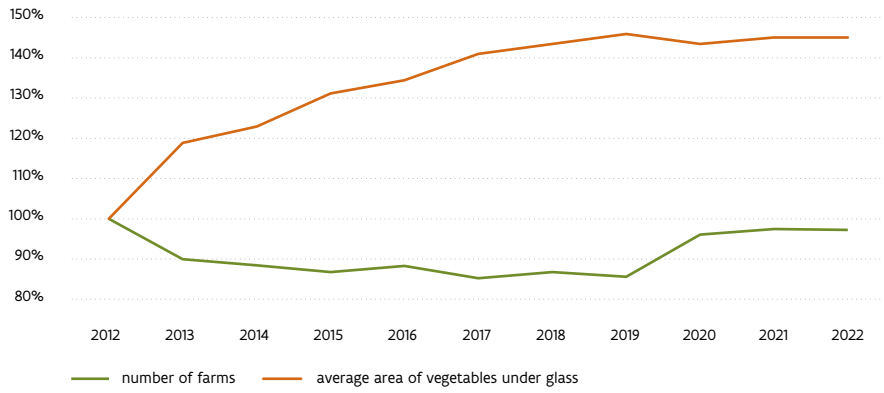
The estimated chemical fertilizer use by companies specialising in outdoor vegetables in 2021 was 853 tons of nitrogen (N), 22 tons of phosphorus (P) and 510 tons of potassium (K).

# VEGETABLES UNDER GLASS

In 2022, vegetables were grown under glass on 697 farms (3% of all farms) in Flanders. The number of greenhouse vegetable farms showed a slight downward trend after 2012, but has rebounded in the last three years. The average farm area also rose to 1.8 hectares of greenhouse vegetables per farm in 2022 - a 45% increase over ten years. Two-thirds of Flemish agricultural operations with vegetables under glass (473 farms) are specialised vegetable farms. The area of greenhouse vegetables increased from 875 to 1,234 hectares (+41%) between 2012 and 2022. In 2022, the area of greenhouse vegetables made up 0.2% of the total area of agricultural land. In terms of region, the greenhouse industry is highly concentrated in the areas of Sint-Katelijne-Waver and Hoogstraten-Rijkevorsel-Merksplas-Ravels. The region around Roeselare is also prominent. There are smaller greenhouse cultivation areas around Deinze, Beveren-Sint-Gillis-Waas and south of Bruges.

The figure below shows the evolution of the number of farms with greenhouse vegetables and the average area of vegetables under glass per farm. This evolution is shown as an index relative to 2012.

Figure Evolution of number of farms and average area of vegetables under glass, index 2012 = 100%

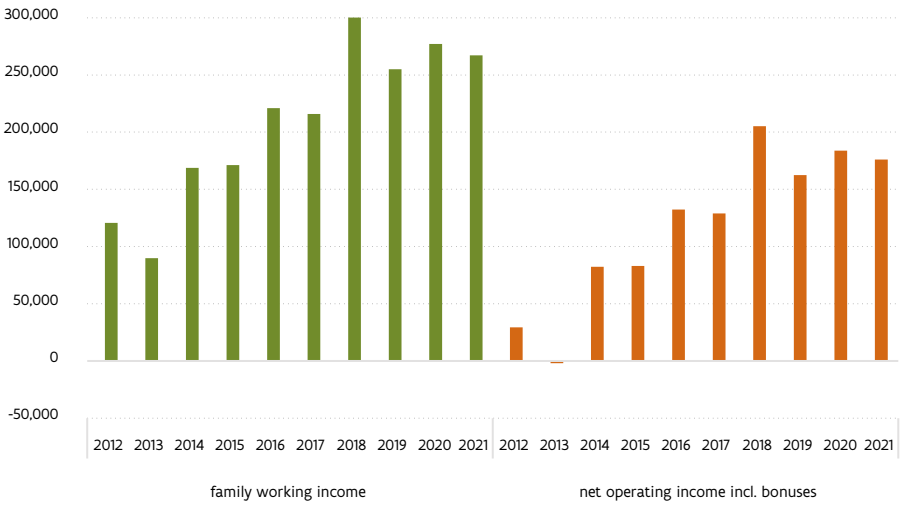



Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The final production value of Flemish vegetable growing under glass gradually increased from €316 to €475 million between 2012 and 2021. With a 65% share, tomatoes were by far the most important product in 2021. Lettuce and peppers each had similar shares, of 8% and 7% respectively.

The family working income of farms specialised in greenhouse cultivation fluctuated between €89,900 (2013) and €300,200 (2018) per farm over the period 2012-2021. During the same period, these farms averaged 2.0 family workers. In 2021, family working income was nearly €267,000 per farm. Net operating income between 2012 and 2021 was negative only in 2013. As such, except for 2013, farms could cover the costs of all factors of production in each case, and there was also room for entrepreneurial profit. In 2021, the average net operating income per farm was €91,900.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

Net energy use by specialised greenhouse farms was 16,469 TJ in 2021. With a 51% share of total energy consumption by agricultural and horticultural businesses, this subsector was the largest energy consumer. The energy was mainly used for heating and lighting greenhouses. In 2019, greenhouse vegetable cultivation accounted for 17% of total water use in agriculture.

The estimated chemical fertilizer use by greenhouse vegetable farms in 2021 was 1.7 million kg of nitrogen (N), 319,000 kg of phosphorus (P) and 2.3 million kg of potassium (K).

# FRUIT

In 2022, fruit was grown on 8% of Flemish agricultural operations (1,718 farms). The number of fruit farms has remained fairly constant in recent years. Following a slight decline over the past three years, the farm area rose again in 2022 to average 10.1 hectares of fruit crops per farm. 848 farms are specialised in fruit growing. The surface area for fruit growing grew at an average annual rate of 1% between 2012 and 2018, before slowing down between 2019 and 2021. In 2022, the surface area remained almost unchanged, at 17,345 hectares, 3% of the total agricultural land. Fruit growing is also highly concentrated in regional terms. The Hesbaye region in Limburg is home to the largest fruit growing area. This fruit region continues into the Hageland in the province of Flemish Brabant. Around Hoogstraten, Roeselare and Beveren, strawberries are the main crop grown.

The figure below shows the evolution of the number of farms with fruit crops and the average surface area of fruit per farm. This evolution is shown as an index relative to 2012.

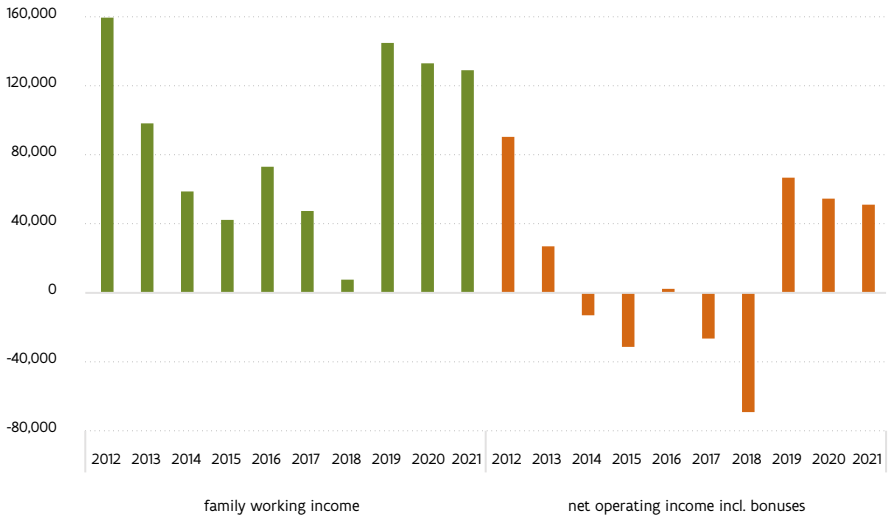
Figure Evolution of number of farms and average fruit area, index 2012 = 100%


Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

Since 2012, the final production value of the Flemish fruit sector has fluctuated between €355 and €530 million. In 2021, the production value rose by 11%, to €530 million. Pears were the most important product for Flemish fruit growing in 2021, accounting for 43% of the total production value. Strawberries were in second place, with a 32% share. Apples accounted for 14%.

The family working income for fruit farms fluctuated between €7,500 and €159,400 per farm during 2012-2021. During the same period, fruit farms averaged 1.6 family workers. In 2021, family working income was nearly €129,000 per farm. Net operating income was predominantly negative for the fruit growing sector during 2014-2018. In 2021, the net operating income was €51,000 per farm.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

Net energy use in the fruit growing sector was 639 TJ in 2021. This corresponds to 2% of total use by agriculture. In 2019, fruit growing accounted for 3% of total water use in agriculture.

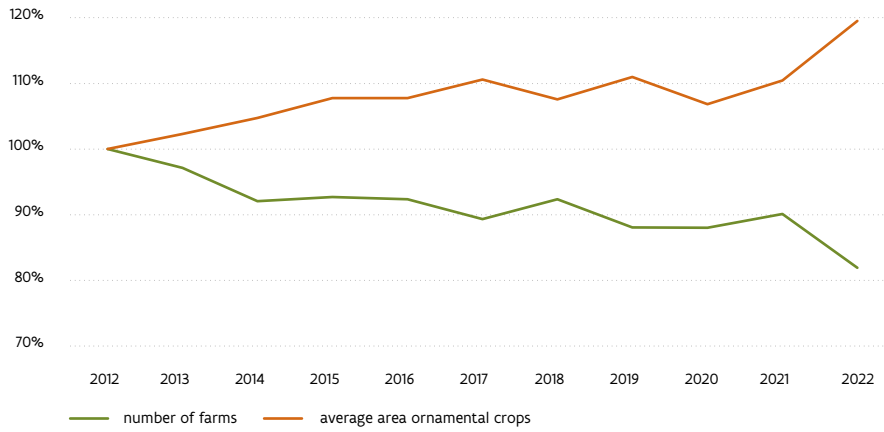
Specialised fruit growing farms had an estimated use of 0.8 million kg of plant protection products containing active substances in 2021. Fungicides accounted for a 55% share, insecticides 13%, herbicides 6% and others 26%. The estimated chemical fertilizer use by these farms in 2021 was 1.3 million kg of nitrogen (N), 91,000 kg of phosphorus (P) and 630,000 kg of potassium (K).

# ORNAMENTAL CROPS

As of 2022, Flanders had 921 farms growing ornamental crops. That corresponds to 4% of Flemish farms. The number of farms with ornamental crops fell by 18% compared to 2012. In contrast, the farm area increased to an average of 6.3 hectares of ornamental crops per farm. 72% of all Flemish ornamental crop farms are specialised ornamental crop farms. The ornamental crop surface area remained generally stable from 2012 to 2022. In 2022, the surface area was 6,186 hectares and accounted for 1% of the total area of agricultural land. Ornamental crop growing is scattered throughout Flanders, but primarily concentrated in East Flanders, east of Ghent.

The figure below shows the evolution of the number of farms with ornamental crops and the average area of ornamental crops per farm. This evolution is shown as an index relative to 2012.

Figure Evolution of number of farms and average ornamental crop area, index 2012 = 100%

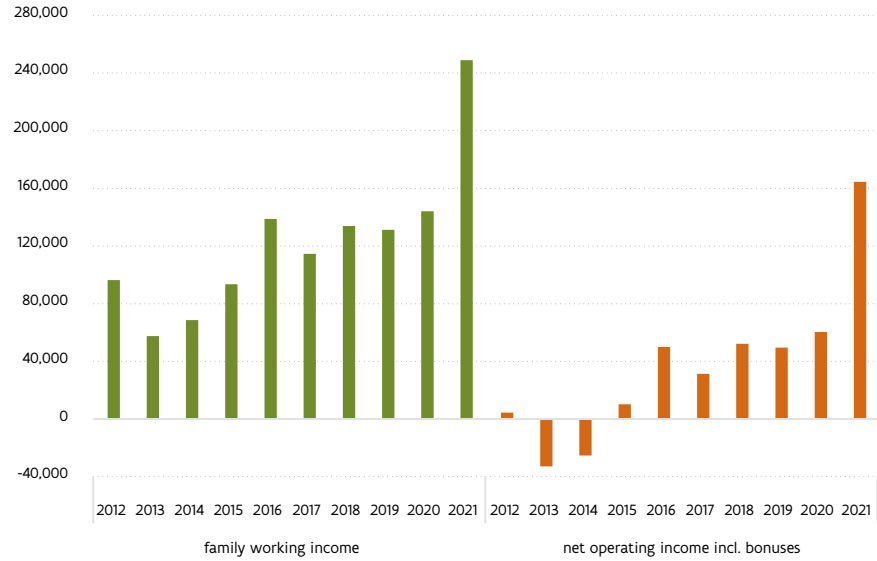



Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The final production value of Flemish ornamental plant cultivation fluctuated around an average of €522 million over the period 2012-2021. In 2021, the production value increased to €579 million, a rise of 13% compared to the previous year. Nursery products accounted for a 64% share in this regard. The share of flowers and ornamental plants is 36%.

From 2012 to 2021, family working income in ornamental crop cultivation under glass ranged from €57,600 (2013) to €248,800 (2021) per farm. Over the same period, the farms specialised in greenhouse cultivation averaged 2.0 family workers. Between 2012 and 2021, net operating income in this subsector was negative only in 2013 and 2014. For ornamental crops under glass, 2021 was the best year with a net operating income of €164,500 per farm. Except for the years 2013-2014, ornamental growers could therefore cover the costs of all factors of production, with some left over for entrepreneurial profit.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

Net energy use by farms specialising in ornamental plant cultivation under glass was 2,022 TJ in 2021. This corresponds to 6% of total energy use by agriculture. In 2019, these farms accounted for 3% of total water use in agriculture.

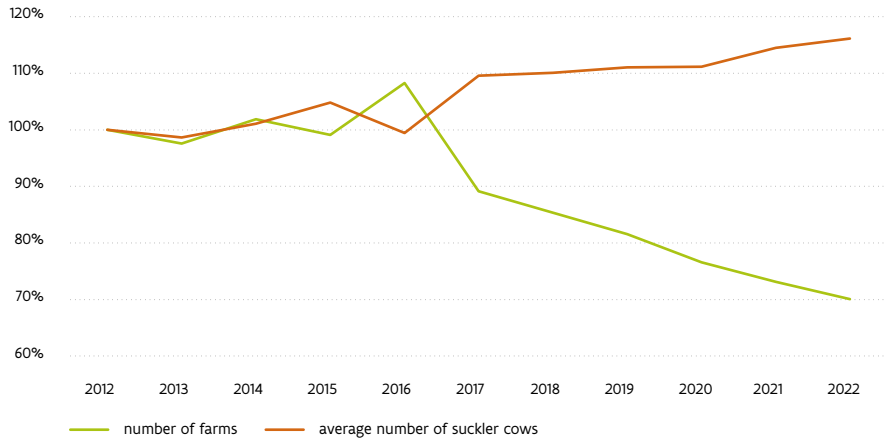
The estimated chemical fertilizer use by farms specialising in ornamental crops under glass in 2021 was 208 tons of nitrogen (N), 34 tons of phosphorus (P) and 204 tons of potassium (K).

# BEEF CATTLE

In 2022, there were 5,831 suckler cow farms in Flanders. That is roughly one quarter of all Flemish farms. The number of suckler cow farmers fell 30% compared to 2012. However, the average number of suckler cows per farm increased from 21 to 24 animals (+16%) during the same period. Around 14% of all Flemish agricultural operations specialise in beef cattle. 2,563 of these specialised beef cattle farms have suckler cows. The average number of suckler cows is higher on these farms (28 animals in 2022). The total number of suckler cows has fallen 30% since 2012 to 122,500 head in 2022. The beef cattle sector is primarily concentrated in East and West Flanders, with the main clusters around Lokeren, Tielt and west of Bruges.

The figure below shows the evolution of the number of farms with suckler cows and the average number of suckler cows per farm. This evolution is shown as an index relative to 2012.

Figure Evolution of number of farms and average number of suckler cows, index 2012 = 100%

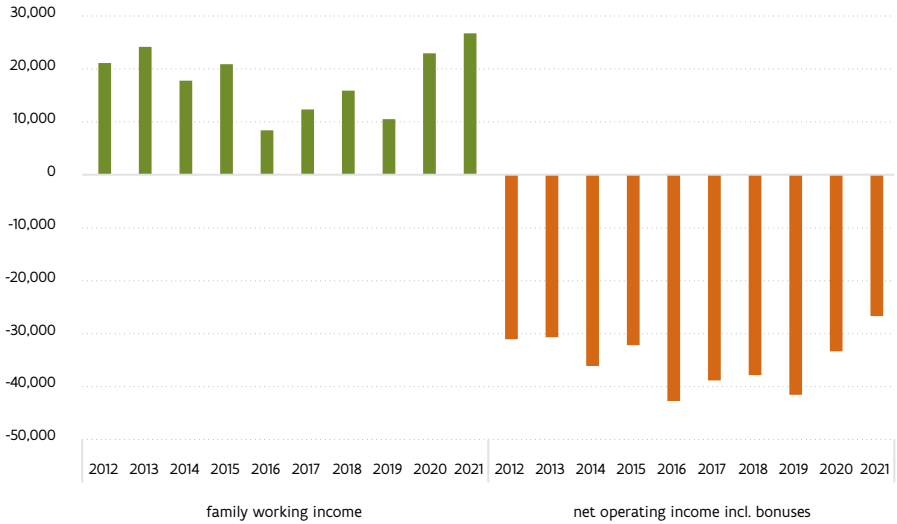



Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The final production value of the Flemish beef cattle sector has varied between €551 and €705 million since 2012. In 2021, the production value rose by 4%, to €575 million. Calves represent 36% of this total, while adult cattle have a 64% share.

In beef cattle farming, family working income fluctuated between €8,400 and €26,700 per farm during 2012-2021. During the same period, specialised beef cattle farms averaged 1.5 family workers. In 2021, family working income was nearly €26,700 per farm. Family working income for the beef cattle industry is therefore the lowest on average among the agricultural sectors. Net operating income was negative over the whole period 2012-2021. For the year 2021, we see a net operating income of -€26,700 per farm. Beef cattle farmers cannot therefore cover the costs of all factors of production, and there is no entrepreneurial profit either.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

Net energy use by specialised beef cattle farms was 1,067 TJ in 2021. This corresponds to 3% of total use by agriculture. In 2019, beef cattle farming accounted for 4% of total water use in agriculture.

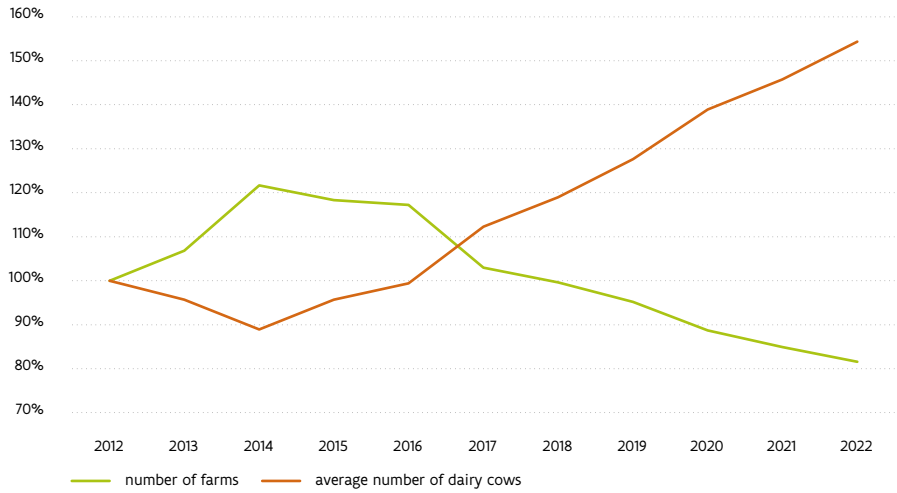
Specialised beef cattle farms used an estimated 0.1 million kg of plant protection products containing active substances in 2021. Herbicides accounted for 53% in this regard, and fungicides 32%. Overall, specialised beef cattle farms use less chemical fertilizer than dairy farms. The estimated chemical fertilizer use in 2021 was 7.6 million kg of nitrogen (N), 77 tonnes of phosphorus (P) and 1.7 million kg of potassium (K).

# DAIRY CATTLE

In 2022, one-fifth of all Flemish farms (4,593) had dairy cows. The number of dairy farmers rose in the years 2013 and 2014, before declining sharply. Compared to 2012, the number of farms with dairy cows was 18% lower in 2022. However, the average number of dairy cows per farm increased by 50%, from 50 to 77 animals during the same period. 12% of Flemish agricultural operations (2,609 farms) specialise in dairy cattle. The average number of dairy cows is higher on these farms (106 animals in 2022). Over the period 2012-2022, the dairy herd continued to grow, to 339,600 head (+22%). Dairy farms are primarily concentrated in the North Kempen and North Limburg, and scattered in West and East Flanders.

The figure below shows the evolution of the number of farms with dairy cows and the average number of dairy cows per farm. This evolution is shown as an index relative to 2012.

Figure Evolution of number of farms and average number of dairy cows, index 2012 = 100%

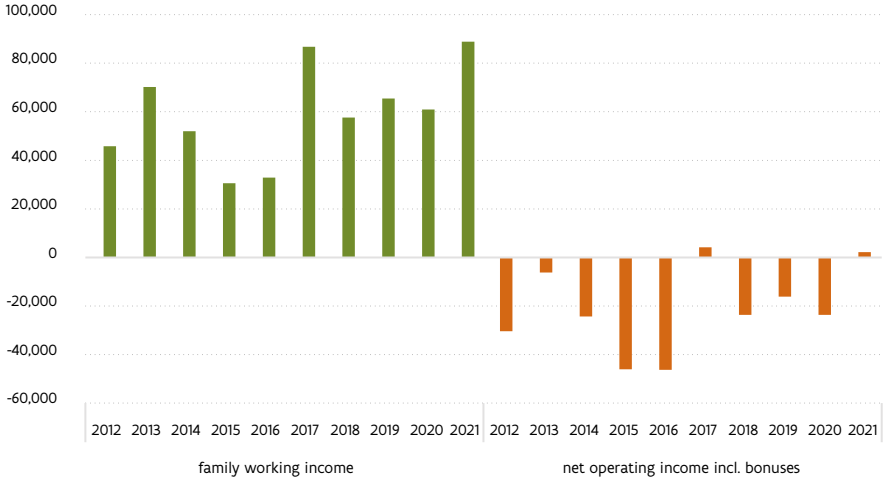



Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The final production value of the Flemish dairy sector varied between €632 million and €1.1 billion over the period 2012-2021. In 2021, the production value of milk and milk derivatives rose by 15%, to €1.1 billion. Calves and dairy cows that are slaughtered are included in beef cattle.

In dairy farms, family working income fluctuated between €30,600 and €88,800 per farm over the period 2012-2021. During the same period, specialised dairy farms averaged 1.9 family workers. In 2021, family working income was nearly €88,800 per farm. Net operating income was negative over the whole period 2012-2021, with the exception of 2017 and 2021. In 2021, the net operating income was €2,200 per farm.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

Net energy use by specialised dairy farms was 2,462 TJ in 2021. That is 8% of total use by agriculture. The energy is primarily used to power machinery. In 2019, dairy farms accounted for 13% of total water use in agriculture.

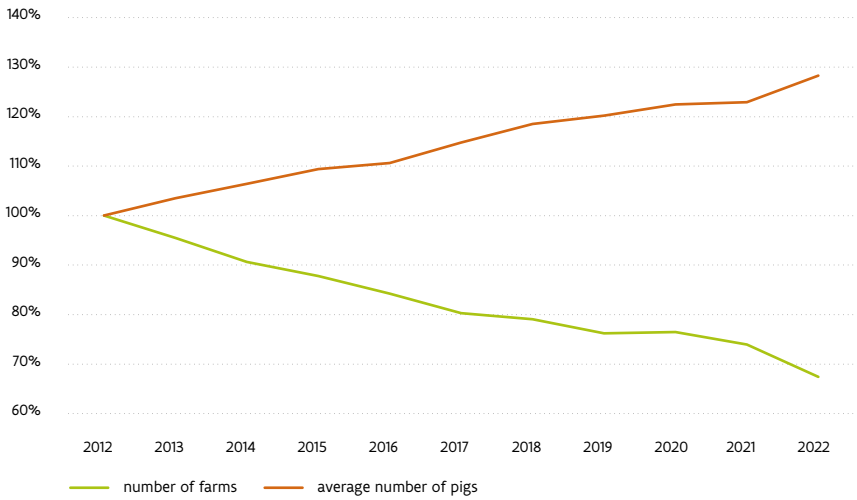
Specialised dairy farms used an estimated 0.2 million kg of plant protection products containing active substances in 2021. Herbicides accounted for 54% in this regard, and fungicides 31%. In forage crop cultivation, weed control is the main application. The estimated chemical fertilizer use in 2021 was 14.1 million kg of nitrogen (N), 175,000 kg of phosphorus (P) and 3.8 million kg of potassium (K).

# PIGS

In 2022, 3,183 farms had pigs. That corresponds to 14% of all Flemish farms. Between 2012 and 2022, the number of pig breeders fell by one third. The total number of pigs fell less sharply, meaning that the average number of pigs per farm increased from 1,319 to 1,693 animals (+28%) over the same period. Around 8% of all Flemish agricultural operations (1,847 farms) are specialised pig farms. The average number of pigs is much higher on these farms (2,313 animals in 2022). The total pig herd fell by 13%, to 5.4 million head between 2012 and 2022. In terms of region, the pig industry is highly concentrated in West Flanders. There is also an important concentration in the North Kempen, as well as in the north of East Flanders and Limburg.

The figure below shows the evolution of the number of farms with pigs and the average number of pigs per farm. This evolution is shown as an index relative to 2012.

Figure Evolution of number of farms and average number of pigs, index 2012 = 100%

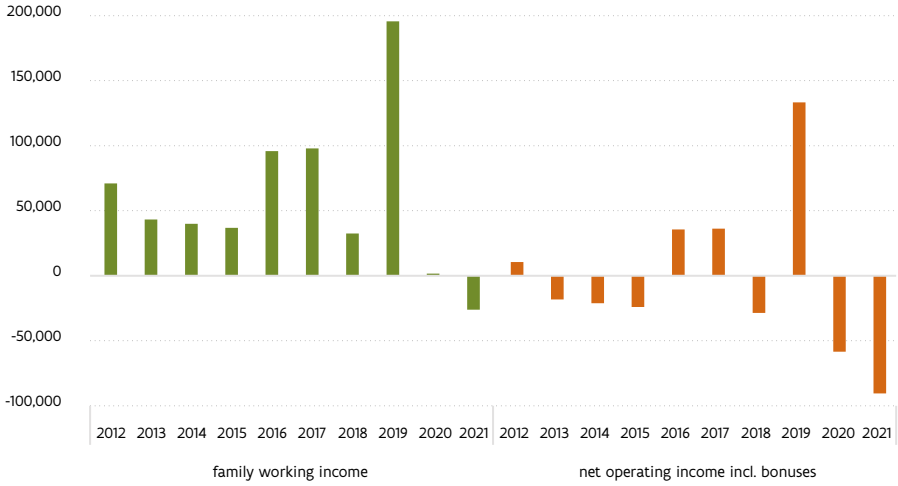



Source: Agency for Agriculture and Fisheries based on Statbel (General Directorate for Statistics - Statistics Belgium)

The final production value of the Flemish pig sector varied between €1.3 billion and €1.6 billion over the period 2012-2021. Due to the crisis in pig farming, the production value fell by 13% in 2021 to €1.3 billion. This is the lowest level over the period 2012-2021.

Family working income in pig farming fluctuated between -€26,100 (2021) and €195,500 (2019) per farm during the period 2012-2021. During the same period, specialised pig farms averaged 1.5 family workers. The years 2020 and 2021 were very difficult for pig farming, with surging non-factor costs weighing heavily on pig breeders' profitability and income. Net operating income was negative on several occasions over the period 2012-2021. For 2021, the net operating income was -€90,500 per farm.

Figure Business income indicators (euros per farm), 2012-2021




Source: Agency for Agriculture and Fisheries based on LMN

Net energy use by specialised pig farms was 2,287 TJ in 2021. That is 7% of total use by agriculture. The energy went mainly on heating and ventilation of the pig pens. In 2019, pig farming accounted for 16% of total water use in agriculture.

Specialised pig farms used an estimated 0.2 million kg of plant protection products containing active substances in 2021. Herbicides and fungicides accounted for 38% and 43% of total estimated use, respectively. The estimated chemical fertilizer use in 2021 was 3.8 million kg of nitrogen (N), 68,000 kg of phosphorus (P) and 1,700 kg of potassium (K).

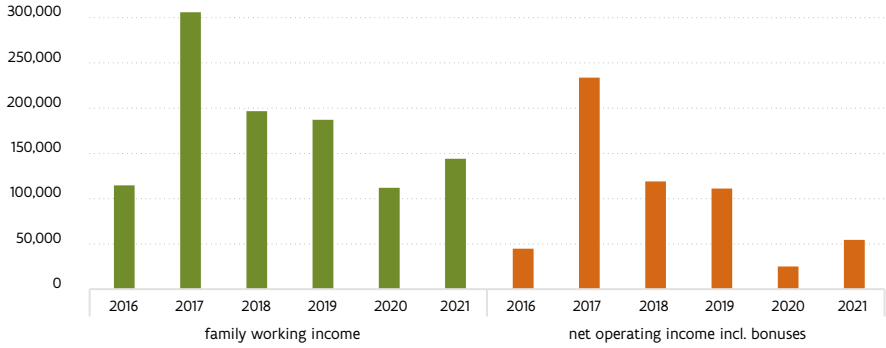
# POULTRY

Between 2012 and 2022, the total number of chickens in Flanders increased by 50%, from 30.2 million to 45.5 million birds in 2022. Broiler chickens saw particularly strong growth (+68%). The chicken industry is primarily concentrated in the Antwerp Kempen and the area around Tielt. There are a few scattered clusters in West Flanders, northern East Flanders and northern Limburg. Figures from the VLM show that in 2022 there were 177 farms with at least 100 laying hens and 522 farms with at least 100 broilers.

The final production value of the Flemish poultry sector varied between €505 million and €617 million over the period 2012-2021. In 2021, the production value rose from €594 million to €601 million, an increase of +1%. Poultry (for meat production) accounted for 64% of the total production value. Consumption and hatching eggs represented a share of 19% and 18%, respectively.

Family working income in laying bird farms fluctuated between €114,800 (2016) and €306,000 (2017) per farm over the period 2016-2021. During the same period, laying bird farms averaged 1.7 family workers. Net operating income was consistently positive during the period 2016-2021, at €54,600 per farm in 2021.

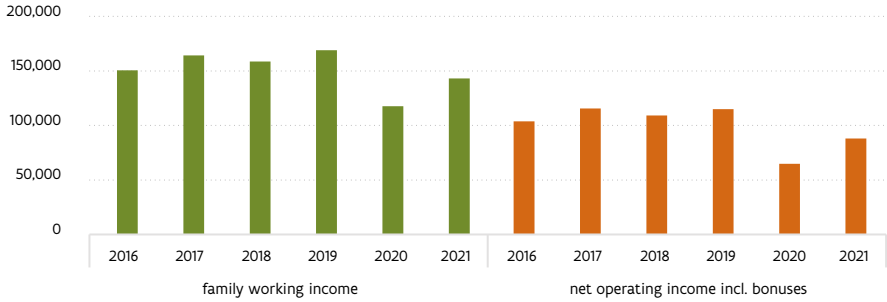
Figure Business income indicators laying birds (euros per farm), 2016-2021




Source: Agency for Agriculture and Fisheries based on LMN

Family working income on poultrymeat farms fluctuated between €117,600 (2020) and €169,000 (2019) per farm over the period 2016-2021. During the same period, specialised poultrymeat farms averaged 1.4 family workers. The net operating income of farms in this subsector was also consistently positive over the period 2016-2021, with a net operating income of €88,000 per farm in 2021.

Figure Business income indicators poultrymeat (euros per farm), 2016-2021




Source: Agency for Agriculture and Fisheries based on LMN

# EUROPEAN BENCHMARKING

# EUROPEAN BENCHMARKING

The European Union has 27 Member States. The total territory covers 4.1 million $km^2$ and it has a population of nearly 450 million. Belgium is the fifth smallest member state by area, but has the third highest population density within the EU, at 383 people per $km^2$. As a result, agriculture is organised within a small area in Belgium and is more intensive in character. In Belgium, there are still differences between the federated states. Compared to Flanders, agriculture in Wallonia is more focused on arable farming and cattle (beef and milk). By contrast, in Wallonia, the share of intensive livestock (pigs and poultry) and horticulture is much smaller.

The structure of agriculture in the various EU Member States varies widely. The agricultural structures reflect differences in geology, topography, climate and (availability of) natural resources, as do differences in regional activities, infrastructure and social norms. Nevertheless, Flemish agriculture cannot be seen in isolation from its European context, since a large part of the agricultural policy pursued is decided at the European level. Indeed, agriculture was one of the first sectors on which European policymakers focused their attention.

Flemish agriculture is therefore placed in a European perspective in this book. Since there is no room to include all EU Member States in this book, a selection has been made in the tables. Similar indicators were selected in the table to those explained above. Below each table is a graph visualising one indicator for all Member States.

We have always included the most recent data available (at the time of writing), taken from various databases. So as not to keep repeating the different tables, we list the sources of the data in the tables and figures of this chapter below. Only where no figure for Flanders was available in the (European) databases have we used our own calculations, meaning that minor variations in methodology may occur.

**SOURCES USED:**

- Agri-food Data Portal
- Eurostat Database
- Eurostat Easy Comext
- Eurostat Statistics Explained
- FADN (Farm Accountancy Data Network) Public Database
- Agricultural figures Flanders
- Statbel (General Directorate of Statistics - Statistics Belgium)
- Statistics Flanders
- VEKA (Energy and Climate Agency of Flanders)
- VMM (Flanders Environment Agency)

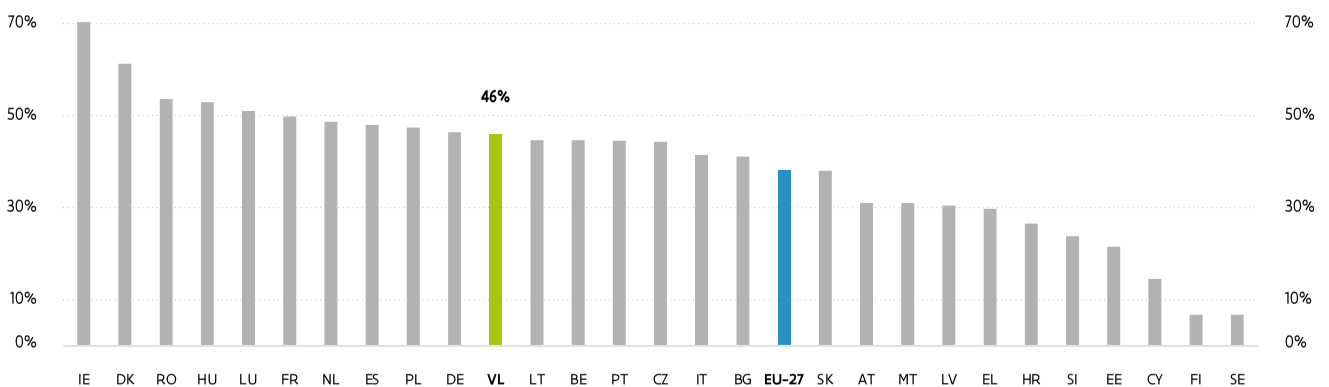
**COUNTRY LIST:**

| abbreviation | country |
|---|---|
| AT | Austria |
| BE | Belgium |
| BG | Bulgaria |
| CY | Cyprus |
| CZ | Czech Republic |
| DE | Germany |
| DK | Denmark |
| EE | Estonia |
| EL | Greece |
| ES | Spain |
| EU-27 | European Union (27 Member States) |
| FI | Finland |
| FR | France |
| HR | Croatia |
| HU | Hungary |
| IE | Ireland |
| IT | Italy |
| LT | Lithuania |
| LU | Luxembourg |
| LV | Latvia |
| MT | Malta |
| NL | The Netherlands |
| PL | Poland |
| PT | Portugal |
| RO | Romania |
| SE | Sweden |
| SI | Slovenia |
| SK | Slovakia |
| VL | Flanders |

# GENERAL CHARACTERISTICS

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total surface | km² | 2018 | 4,125,107 | 13,599 | 30,666 | 42,925 | 357,569 | 549,060 | 37,378 |
| total population | million inhabitants | 2023 | 448.4 | 6.8 | 11.8 | 5.9 | 84.4 | 68.1 | 17.8 |
| population density | number/km² | 2023 | 109 | 498 | 383 | 138 | 236 | 124 | 477 |
| GDP/inhabitant | euro/inhabitant | 2021 | 32,400 | 45,200 | 43,300 | 57,500 | 43,300 | 36,700 | 48,800 |
| mployment rate 20-64 year olds | % | 2022 | 74.6% | 76.7% | 71.9% | 80.1% | 80.7% | 74.0% | 82.9% |
| trade balance | million euros | 2022 | -25,484 | -15,100 | 17,718 | 1,703 | 81,798 | -190,908 | 64,205 |
| | | | | | | | | | |
| total agricultural surface | 1,000 hectare | 2020 | 157,414 | 625 | 1,368 | 2,630 | 16,595 | 27,365 | 1,818 |
| number of farms | number | 2020 | 9,067,300 | 23,220 | 36,000 | 37,090 | 262,560 | 393,030 | 52,640 |
| livestock | 1,000 livestock units | 2020 | 116,514 | 2,713 | 3,665 | 4,178 | 16,300 | 20,647 | 6,280 |
| production value of agriculture | billion euros | avg. 2017-2021 | 419.3 | 5.9 | 9.0 | 11.2 | 57.3 | 77.6 | 29.0 |

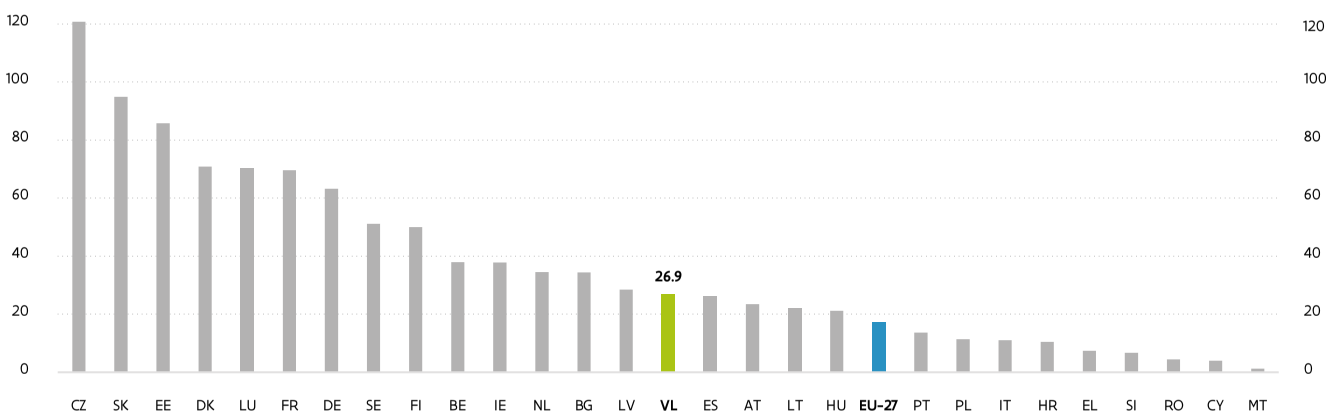
Figure Share of agricultural land in total land area, 2020



# STRUCTURE: FARMS ACCORDING TO AREA

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total agricultural surface | hectare | 2020 | 157,414,160 | 624,860 | 1,368,120 | 2,629,930 | 16,595,020 | 27,364,630 | 1,817,900 |
| number of farms | number | 2020 | 9,067,300 | 23,220 | 36,000 | 37,090 | 262,560 | 393,030 | 52,640 |
| share farms according to size | | | | | | | | | |
| 0 - 2 ha | % | 2020 | 43% | 7% | 5% | 7% | 5% | 11% | 10% |
| 2 - 5 ha | % | 2020 | 21% | 11% | 8% | 12% | 3% | 9% | 10% |
| 5 - 10 ha | % | 2020 | 12% | 16% | 13% | 19% | 17% | 9% | 13% |
| 10 - 20 ha | % | 2020 | 9% | 21% | 18% | 15% | 20% | 9% | 15% |
| 20 - 50 ha | % | 2020 | 8% | 31% | 30% | 17% | 23% | 16% | 28% |
| 50 - 100 ha | % | 2020 | 4% | 13% | 19% | 11% | 17% | 20% | 18% |
| more than 100 ha | % | 2020 | 4% | 3% | 8% | 20% | 15% | 26% | 6% |

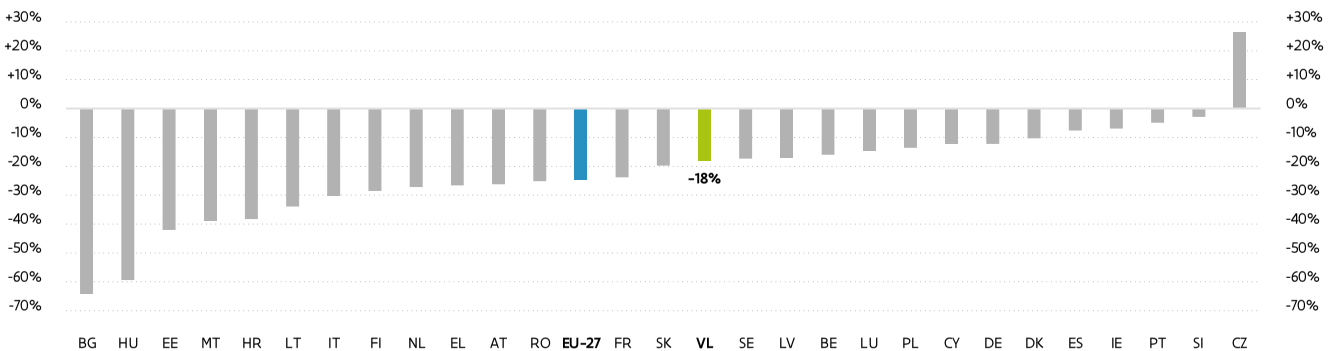
Figure Average area of agriculture per farm, ha, 2020



# STRUCTURE: FARMS ACCORDING TO SPECIALISATION

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| number of farms | number | 2020 | 9,067,300 | 23,220 | 36,000 | 37,090 | 262,560 | 393,030 | 52,640 |
| share farms specialized in | | | | | | | | | 0 |
| cereals and oleaginous crops | % | 2020 | 16% | 4% | 4% | 27% | 13% | 17% | 2% |
| arable farming | % | 2020 | 18% | 27% | 29% | 25% | 26% | 12% | 19% |
| greenhouse horticulture | % | 2020 | 1% | 4% | 3% | 0% | 1% | 1% | 5% |
| other vegetal specialisation | % | 2020 | 23% | 8% | 6% | 3% | 8% | 23% | 12% |
| dairy cows | % | 2020 | 5% | 11% | 11% | 7% | 17% | 9% | 27% |
| cattle farming | % | 2020 | 4% | 12% | 15% | 17% | 12% | 13% | 10% |
| pigs | % | 2020 | 2% | 9% | 6% | 6% | 5% | 1% | 5% |
| other animal specialisations | % | 2020 | 11% | 10% | 12% | 4% | 8% | 11% | 11% |
| combination arable farming and grazing livestock | % | 2020 | 2% | 6% | 7% | 4% | 5% | 4% | 1% |
| other combined specialisations | % | 2020 | 18% | 9% | 7% | 6% | 6% | 7% | 7% |

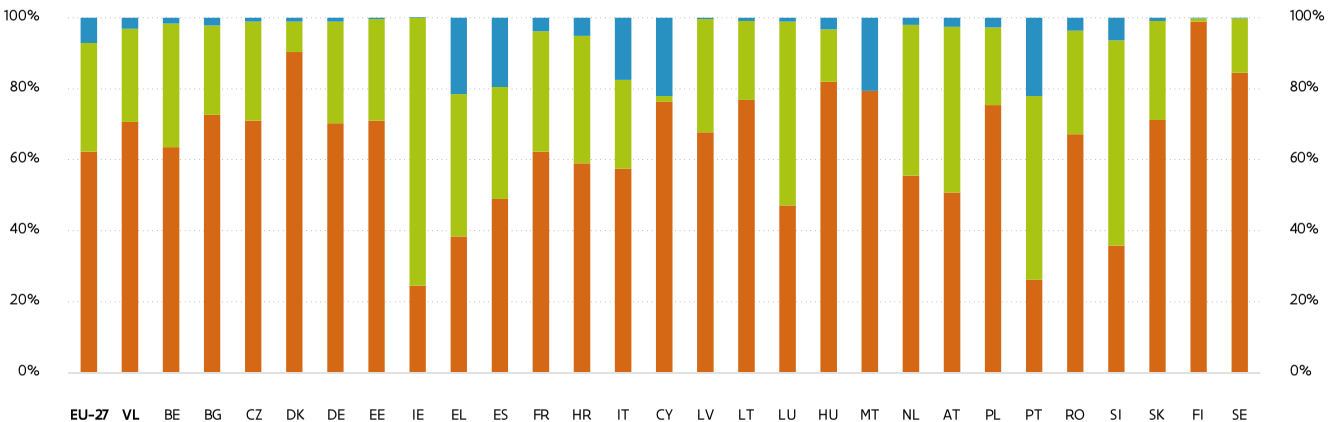
Figure Evolution of number of farms, 2020 vs. 2010



# STRUCTURE: AGRICULTURAL AREA

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total agricultural surface | ha | 2020 | 157,414,160 | 624,860 | 1,368,120 | 2,629,930 | 16,595,020 | 27,364,630 | 1,817,900 |
| permanent grassland | ha | 2020 | 47,963,710 | 164,290 | 476,120 | 227,830 | 4,730,270 | 9,291,150 | 772,410 |
| permanent crops | ha | 2020 | 11,137,950 | 19,250 | 22,530 | 28,630 | 197,030 | 1,031,440 | 37,210 |
| fruit and nuts | ha | 2020 | 306,040 | 16,000 | 17,840 | 3,150 | 62,590 | 202,610 | 19,850 |
| arable land | ha | 2020 | 98,093,810 | 441,320 | 869,280 | 2,373,420 | 11,663,810 | 17,039,400 | 1,008,180 |
| cereals | ha | 2020 | 16,841,660 | 123,650 | 304,340 | 1,365,930 | 6,074,860 | 8,922,980 | 173,550 |
| root vegetables (e.g. potatoes and sugar beets) | ha | 2020 | 1,835,720 | 75,550 | 159,090 | 99,890 | 663,050 | 664,210 | 249,480 |
| forrage crop | ha | 2020 | 8,185,030 | 183,400 | 285,000 | 524,510 | 3,093,430 | 3,872,500 | 409,590 |
| vegetables | ha | 2020 | 556,610 | 35,140 | 62,270 | 13,900 | 132,330 | 245,550 | 102,560 |
| fallow land | ha | 2020 | 916,260 | 8,920 | 16,470 | 81,970 | 357,610 | 451,360 | 8,850 |

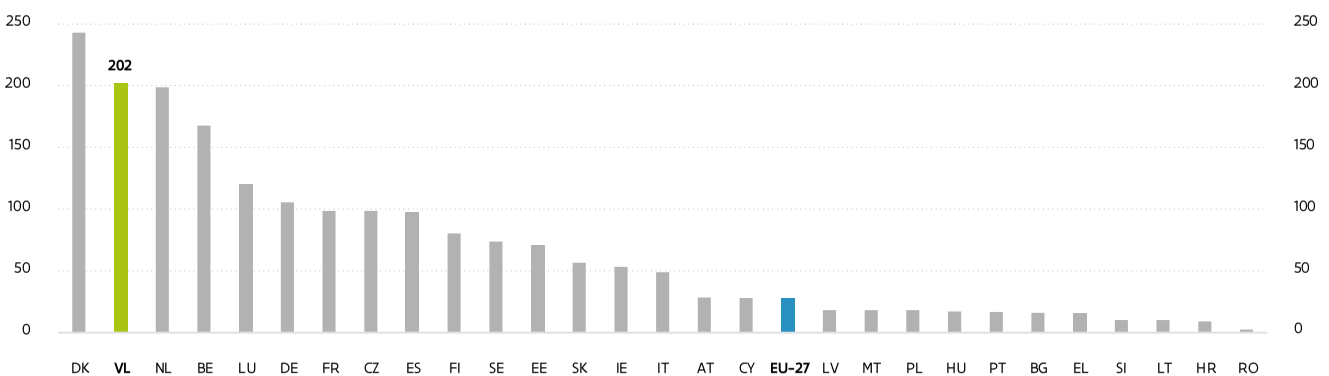
Figure Share of arable land (orange), permanent pasture (green) and other (blue) in total agricultural area, 2020



# STRUCTURE: LIVESTOCK

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total livestock | 1,000 livestock units | 2020 | 113,351 | 2,712 | 3,663 | 4,164 | 16,255 | 19,021 | 6,263 |
| number of cattle | 1,000 | 2020 | 76,977 | 1,266 | 2,335 | 1,511 | 11,275 | 17,526 | 3,838 |
| number of pigs | 1,000 | 2020 | 143,002 | 5,833 | 6,218 | 13,163 | 26,300 | 13,433 | 11,950 |
| number of sheep | 1,000 | 2020 | 63,819 | 53 | 110 | 137 | 1,809 | 6,996 | 890 |
| number of goats | 1,000 | 2020 | 11,615 | 59 | 75 | 9 | 155 | 1,412 | 633 |
| | | | | | | | | | |
| farms with livestock | number | 2020 | 4,067,830 | 13,420 | 21,840 | 17,130 | 153,910 | 192,810 | 31,490 |
| farms with cattle | number | 2020 | 1,502,520 | 9,890 | 17,540 | 12,710 | 108,030 | 146,230 | 24,020 |
| farms with pigs | number | 2020 | 1,181,040 | 3,620 | 4,230 | 2,970 | 31,850 | 14,400 | 3,560 |
| farms with sheep | number | 2020 | 574,840 | 1,640 | 2,800 | 1,840 | 19,870 | 34,010 | 8,280 |
| farms with goats | number | 2020 | 291,990 | 510 | 870 | 510 | 10,460 | 11,920 | 3,050 |
| farms with poultry | number | 2020 | 2,659,260 | 1,110 | 1,940 | 2,000 | 49,660 | 32,140 | 1,850 |

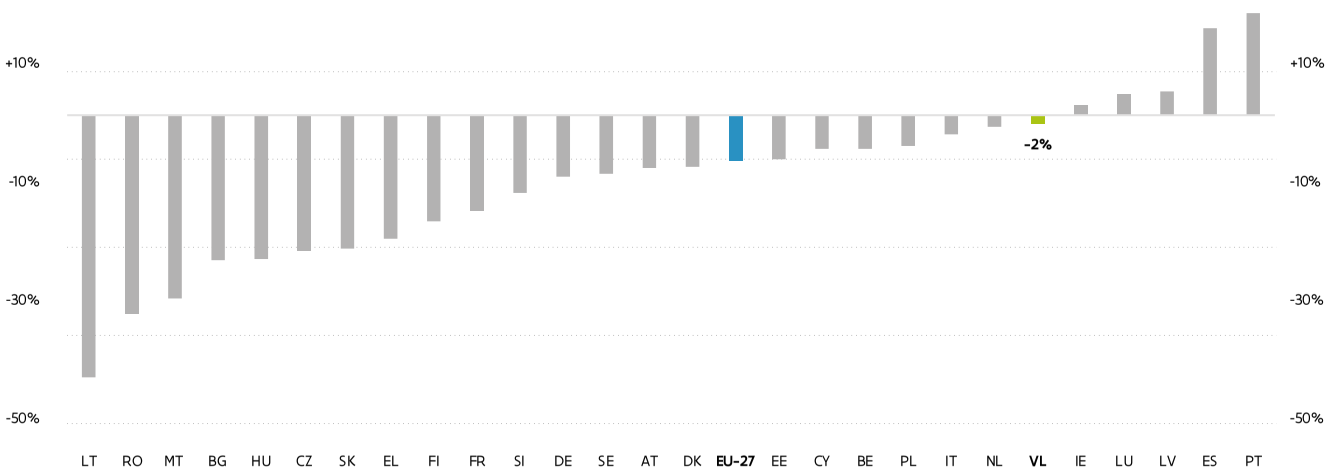
Figure Number of livestock units per farm with animals, 2020



# STRUCTURE: EVOLUTION OF LIVESTOCK

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total livestock | 1,000 livestock units | 2020 | 113,350 | 2,712 | 3,663 | 4,163 | 16,255 | 19,021 | 6,262 |
| evolution livestock (in livestock units): | | | | | | | | | |
| total livestock | % | 2020 vs. 2005 | -8% | -2% | -6% | -9% | -10% | -16% | -2% |
| cattle | % | 2020 vs. 2005 | -4% | -6% | -14% | -4% | -12% | -9% | +1% |
| pigs | % | 2020 vs. 2005 | -6% | -5% | -4% | -11% | -11% | -11% | -3% |
| sheep | % | 2020 vs. 2005 | -9% | -45% | -28% | -21% | -32% | -21% | -35% |
| goats | % | 2020 vs. 2005 | -6% | +264% | +188% | -13% | | +9% | +116% |
| poultry | % | 2020 vs. 2005 | -6% | +33% | +35% | +22% | +30% | -36% | +4% |

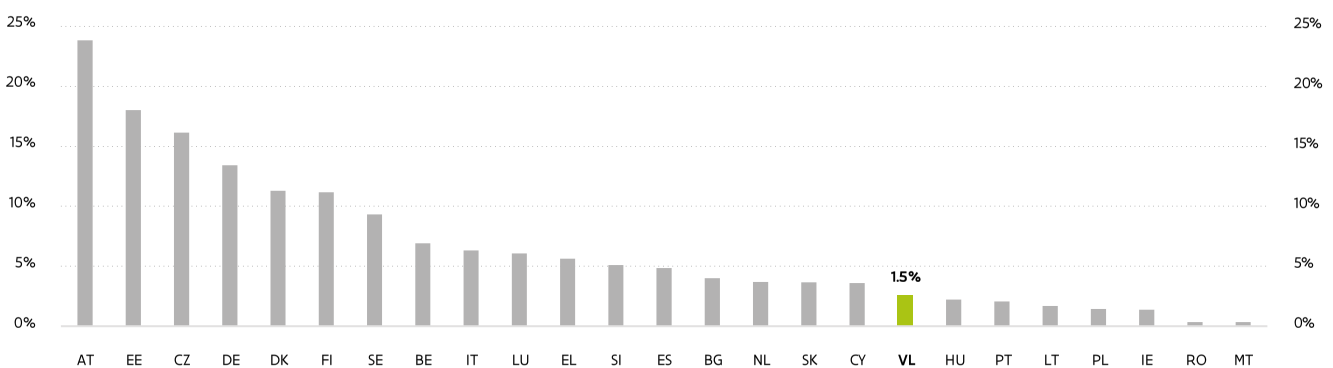
Figure Evolution of livestock (in livestock units), 2020 vs. 2005



# STRUCTURE: ORGANIC FARMING

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| organic farms | number | 2020 or 2021 | | 621 | 2638 | 4,186 | 36236 | | 1985 |
| organic area | hectare | 2020 or 2021 | 14,724,279 | 9,823 | 102,413 | 303,093 | 1,601,316 | 2,775,671 | 76,375 |
| share grassland | % | 2020 or 2021 | 42% | 36% | 61% | 16% | 51% | 35% | 58% |
| organic animals | | | | | | | | | |
| cattle | number | 2021 | | 6,211 | 115,618 | 231,472 | 896,760 | 925,800 | 79,300 |
| dairy cows | number | 2021 | | 3,437 | 24,646 | 81,633 | 240,630 | 190,894 | 41,631 |
| pigs | number | 2021 | | 13,285 | 38,033 | 484,443 | 191,955 | 492,282 | 103,184 |
| sheep | number | 2021 | | 2,304 | 28,326 | 12,614 | 203,248 | 819,373 | 16,653 |
| goats | number | 2021 | | 8,462 | 11,464 | 1,754 | 51,358 | 158,938 | 56,682 |
| poultry | number | 2020 or 2021 | | 792,460 | 5,109,020 | 3,932,411 | 8,562,076 | 23,844,564 | 3,890,171 |
| evolution organic area | % | 2020 or 2021 vs. 2013 | +55% | +94% | +64% | +79% | +59% | +162% | +56% |
| evolution organic farms | % | 2020 or 2021 vs. 2013 | | +95% | +59% | +63% | +56% | | +20% |

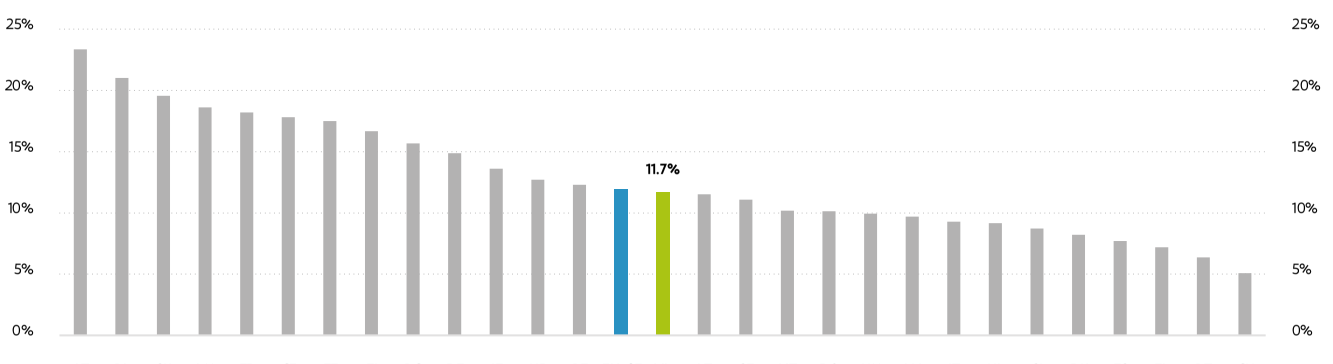
Figure Share of organic farms, 2020



# SOCIAL CHARACTERISTICS

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| age farmer | | | | | | | | | |
| younger than 24 | % | 2020 | 1% | 0% | 0% | 1% | 1% | 1% | 0% |
| 25 to 34 | % | 2020 | 6% | 6% | 6% | 4% | 7% | 9% | 4% |
| 35 to 44 | % | 2020 | 14% | 13% | 14% | 10% | 17% | 18% | 12% |
| 45 to 54 | % | 2020 | 22% | 25% | 25% | 22% | 29% | 28% | 29% |
| 55 to 64 | % | 2020 | 24% | 33% | 32% | 32% | 35% | 31% | 33% |
| 65 and older | % | 2020 | 33% | 23% | 23% | 31% | 11% | 13% | 21% |
| share female farmers | % | 2020 | 32% | 14% | 15% | 11% | 11% | 21% | 6% |
| only practical experience | % | 2020 | 72% | 47% | 48% | 49% | 33% | 35% | 18% |
| basic training | % | 2020 | 17% | 30% | 29% | 44% | 48% | 26% | 19% |
| complete agricultural training | % | 2020 | 10% | 23% | 23% | 7% | 19% | 38% | 63% |

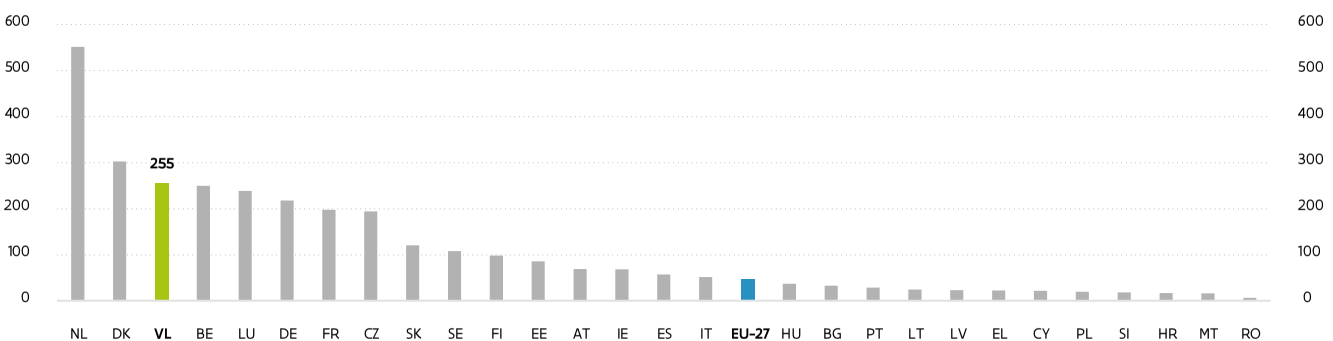
Figure Share of farmers under 40, %, 2020



# ECONOMY: PRODUCTION VALUE

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| production value | million euro | 1997-2021 | 419,316 | 5,918 | 8,982 | 11,228 | 57,276 | 77,627 | 29,016 |
| crops | million euro | 1997-2021 | 223,328 | 2,288 | 4,055 | 3,849 | 26,895 | 44,026 | 14,339 |
| cereals | million euro | 1997-2021 | 49,506 | 119 | 483 | 1,476 | 7,059 | 11,295 | 336 |
| vegetables and ornamental horticulture | million euro | 1997-2021 | 56,693 | 792 | 1,563 | 727 | 6,161 | 6,070 | 9,926 |
| potatoes | million euro | 1997-2021 | 12,334 | 254 | 524 | 249 | 2,195 | 3,544 | 1,501 |
| fruit | million euro | 1997-2021 | 29,386 | 443 | 490 | 52 | 1,015 | 3,243 | 832 |
| animal production | million euro | 1997-2021 | 159,846 | 3,630 | 4,727 | 6,611 | 27,005 | 26,403 | 11,032 |
| cattle | million euro | 1997-2021 | 28,785 | 579 | 1,047 | 437 | 3,575 | 7,529 | 1,413 |
| pigs | million euro | 1997-2021 | 37,116 | 1,438 | 1,410 | 3,280 | 7,327 | 3,279 | 2,594 |
| poultry | million euro | 1997-2021 | 19,716 | 382 | 715 | 254 | 2,510 | 3,279 | 732 |
| animal products (e.g. milk) | million euro | 1997-2021 | 66,848 | 1,200 | 1,521 | 2,608 | 12,733 | 10,868 | 5,860 |
| intermediate consumption | million euro | 1997-2021 | 238,600 | 4,394 | 6,509 | 8,183 | 36,754 | 45,389 | 17,961 |
| gross added value | million euro | 1997-2021 | 180,716 | 1,524 | 2,474 | 3,045 | 20,523 | 32,238 | 11,056 |

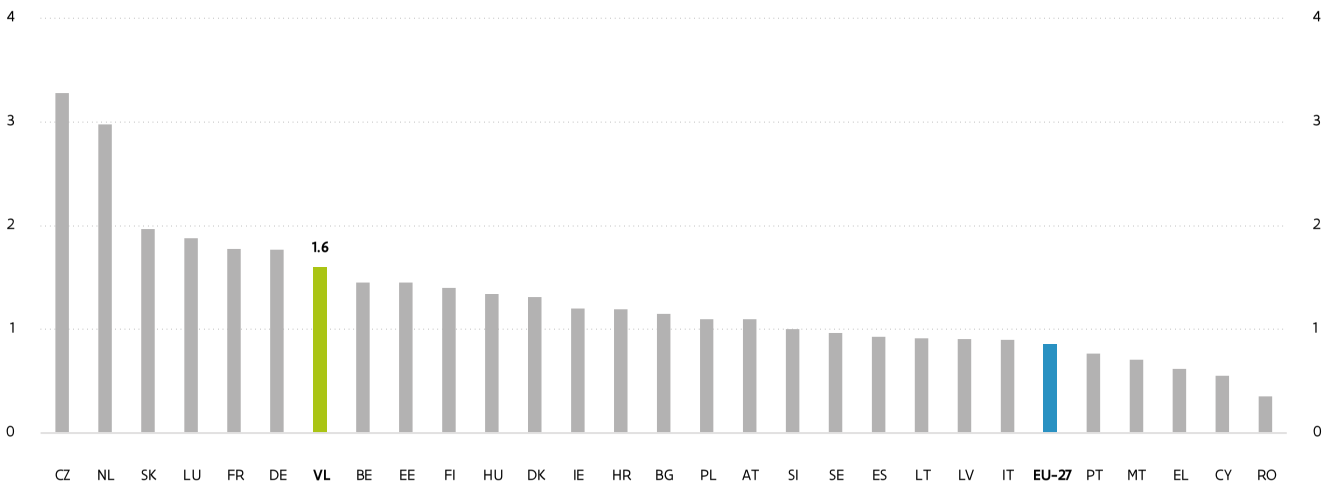
Figure Production value per farm, 1,000 euros, average 2017-2021



# ECONOMY: EMPLOYMENT

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| employment | 1,000 full time equivalents | 2022 | 7,753 | 37 | 52 | 49 | 465 | 697 | 157 |
| share of paid employment | % | 2022 | 30% | 34% | 24% | 64% | 46% | 41% | 48% |
| share regularly employed | % | 2016 | | 87% | 90% | 96% | 90% | 88% | 84% |
| share family labour (including farmer) | % | 2016 | | 56% | 63% | 50% | 60% | 41% | 57% |
| share of women in regularly employed | % | 2016 | | 29% | 28% | 21% | 30% | 27% | 26% |
| evolution employment | % | 2022 vs. 2012 | -25% | -16% | -15% | -10% | -11% | -14% | +2% |

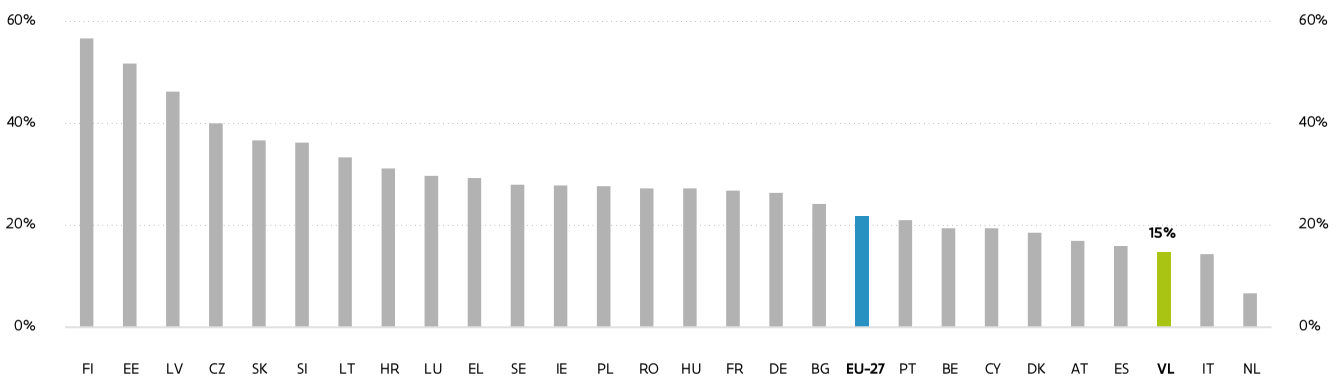
Figure Employment per farm, in full-time equivalents, 2022



# ECONOMY: OPERATING RESULT

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| number of farms in sample population | number | 2021 | 3,561,053 | 17,284 | 27,720 | 18,173 | 158,000 | 268,279 | 43,186 |
| share farms so < €25,000 in sample population | % | 2021 | 52% | 0% | 0% | 0% | 0% | 1% | 0% |
| surface arable land per farm | ha | 2021 | 72.4 | 40.8 | 54.6 | 149.5 | 103.4 | 94.5 | 40.7 |
| share of lease | % | 2021 | 62% | 71% | 71% | 40% | 67% | 85% | 44% |
| total employment per farm | fte | 2021 | 2.3 | 2.4 | 2.1 | 2.4 | 2.3 | 2.1 | 3.1 |
| unpaid labour per farm | fte | 2021 | 1.3 | 1.6 | 1.5 | 0.9 | 1.3 | 1.4 | 1.5 |
| total assets per farm | euro/farm | 2021 | 733,953 | 1,244,877 | 1,087,731 | 3,596,377 | 1,115,725 | 527,128 | 3,233,734 |
| factor income per full time worker | euro/full time worker | 2021 | 39,419 | 43,773 | 46,582 | 102,598 | 52,259 | 43,577 | 70,575 |
| farm income per family worker | euro/family worker | 2021 | 42,176 | 43,287 | 44,096 | 115,769 | 43,071 | 41,940 | 81,207 |
| share direct support in total revenue | % | 2021 | 9% | 4% | 6% | 7% | 9% | 10% | 2% |
| share direct support in factor income | % | 2021 | 22% | 15% | 19% | 19% | 26% | 27% | 7% |

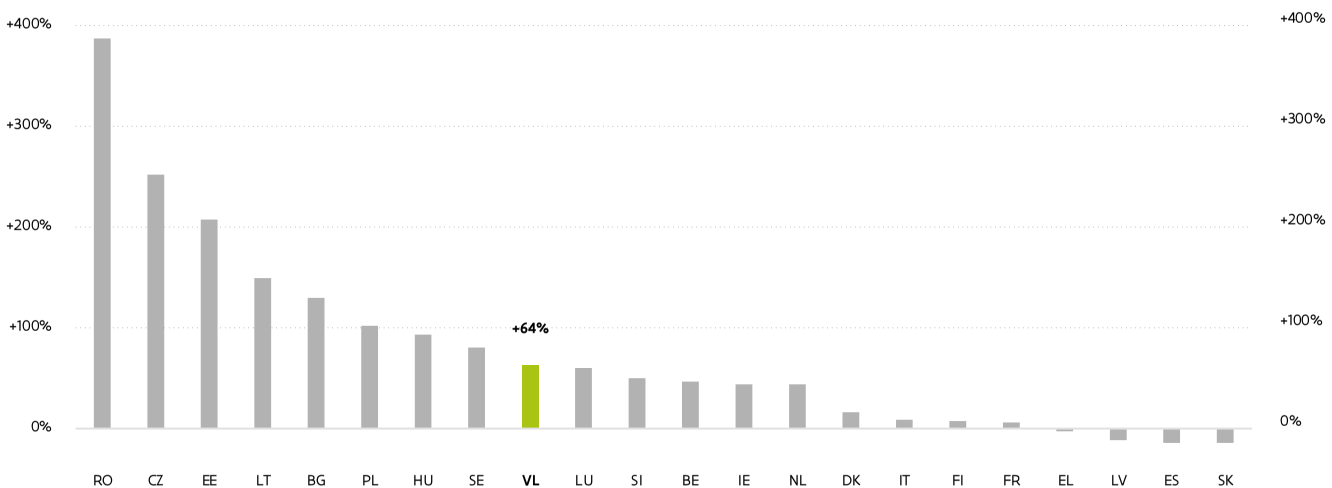
Figure Share of direct support in factor incomes, %, 2021



# ECONOMY: LAND PRICES

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| sales price of agricultural land | euro/ha | 2022 or 2021 | | 64,337 | 53,662 | 18,213 | | 6,130 | 77,583 |
| evolution of sales price of arable land | % | 2022 vs. 2013 | | +64% | +47% | +16% | | +6% | +44% |
| lease price of arable and grass land | euro/ha | 2021 | | 410 | 307 | 547 | | 149 | 836 |
| evolution lease price of arable land/permanent grassland | % | 2022 vs. 2013 | | +35% | +19% | -1% | | +10% | +22% |
| farms with other commercial activities | number | 2016 | | 4,050 | 6,100 | 27,350 | 165,400 | 113,390 | 23,610 |
| share farms with other commercial activities | % | 2016 | | 17% | 17% | 78% | 60% | 25% | 42% |

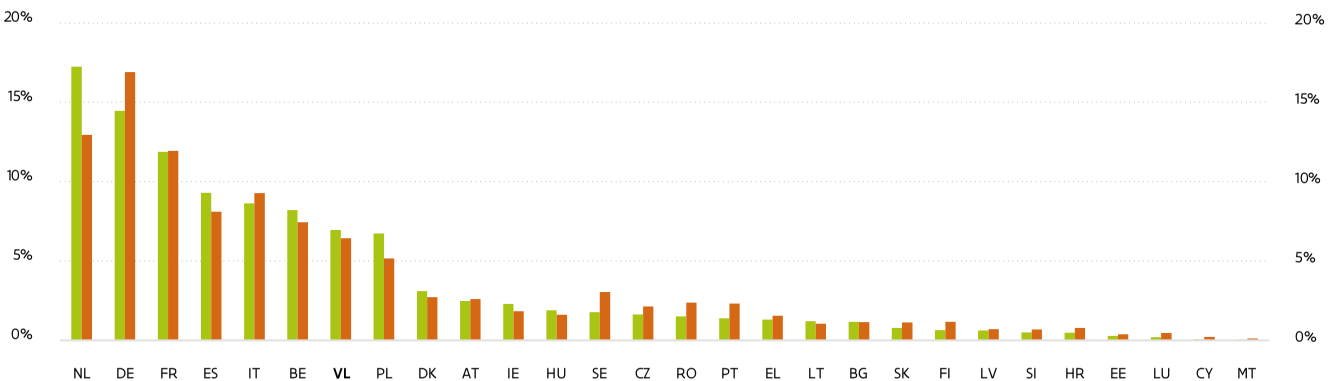
Figure Evolution of the sales price of agricultural land, 2022 vs. 2013



# ECONOMY: FOREIGN TRADE IN AGRI-PRODUCTS

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| export agri-products | million euros | 2022 | 772,711 | 53,809 | 63,471 | 24,070 | 111,827 | 91,884 | 133,225 |
| arable products | million euros | 2022 | 228,528 | 19,548 | 23,360 | 3,823 | 37,128 | 31,069 | 30,615 |
| animal products | million euros | 2022 | 175,471 | 9,704 | 11,918 | 9,893 | 27,902 | 17,730 | 33,180 |
| horticultural products | million euros | 2022 | 115,955 | 7,016 | 7,898 | 1,033 | 6,826 | 5,836 | 34,377 |
| agro-industrial products | million euros | 2022 | 79,416 | 7,325 | 8,490 | 1,349 | 20,143 | 8,586 | 7,939 |
| other products | million euros | 2022 | 173,341 | 10,217 | 11,805 | 7,971 | 19,829 | 28,663 | 27,113 |
| import agri-products | million euros | 2022 | 720,814 | 46,353 | 53,680 | 19,669 | 121,860 | 86,109 | 93,318 |
| arable products | million euros | 2022 | 246,085 | 19,587 | 21,821 | 4,984 | 42,296 | 24,438 | 33,110 |
| animal products | million euros | 2022 | 129,266 | 7,255 | 9,353 | 3,302 | 22,633 | 15,740 | 16,890 |
| horticultural products | million euros | 2022 | 120,335 | 6,387 | 7,271 | 2,162 | 26,697 | 15,822 | 19,334 |
| agro-industrial products | million euros | 2022 | 70,913 | 5,313 | 6,020 | 1,838 | 8,453 | 12,188 | 4,066 |
| other products | million euros | 2022 | 154,215 | 7,811 | 9,215 | 7,383 | 21,781 | 17,921 | 19,918 |

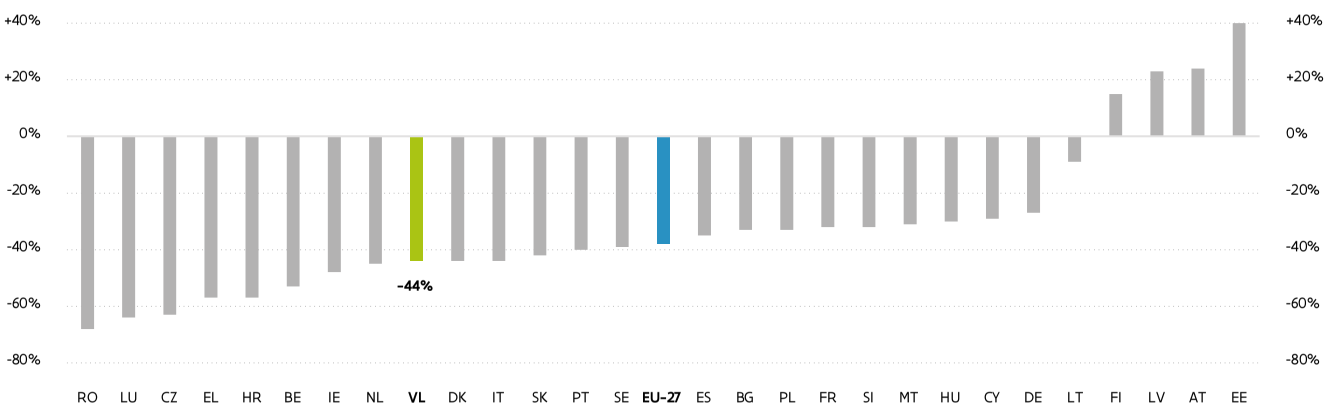
Figure Share of total EU exports (green) and imports (orange), intra-EU included, 2022



# ENVIRONMENT: CROP PROTECTION AND CHEMICAL FERTILIZERS

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total sale of crop protection in agriculture | kg | 2021 | | | 5,555,485 | 2,974,529 | 48,712,963 | 69,444,294 | 9,346,731 |
| fungicides | kg | 2021 | | | 1,999,000 | 499,475 | 9,692,799 | 28,550,533 | 3,295,622 |
| herbicides | kg | 2021 | | | 2,456,009 | 2,253,890 | 16,088,505 | 30,311,499 | 2,587,897 |
| insecticides | kg | 2021 | | | 414,788 | 36,629 | 20,575,348 | 6,271,171 | 2,611,112 |
| other | kg | 2021 | | | 685,688 | 184,535 | 2,356,311 | 4,311,091 | 852,100 |
| use of fertilisers – nitrogen | tons | 2019 | 9,870,534 | 74,721 | 153,353 | 225,240 | 1,342,284 | 2,125,147 | 214,752 |
| use of fertilisers – phosphorus | tons | 2019 | 1,151,968 | 1,724 | 5,835 | 14,767 | 87,830 | 190,283 | 4,957 |
| evolution use of fertilisers – nitrogen | % | 2019 vs. 2012 | +3% | +16% | +7% | +20% | -18% | -2% | +8% |
| evolution use of fertilisers – phosphorus | % | 2019 vs. 2012 | +12% | +13% | +5% | +15% | -19% | -4% | +8% |

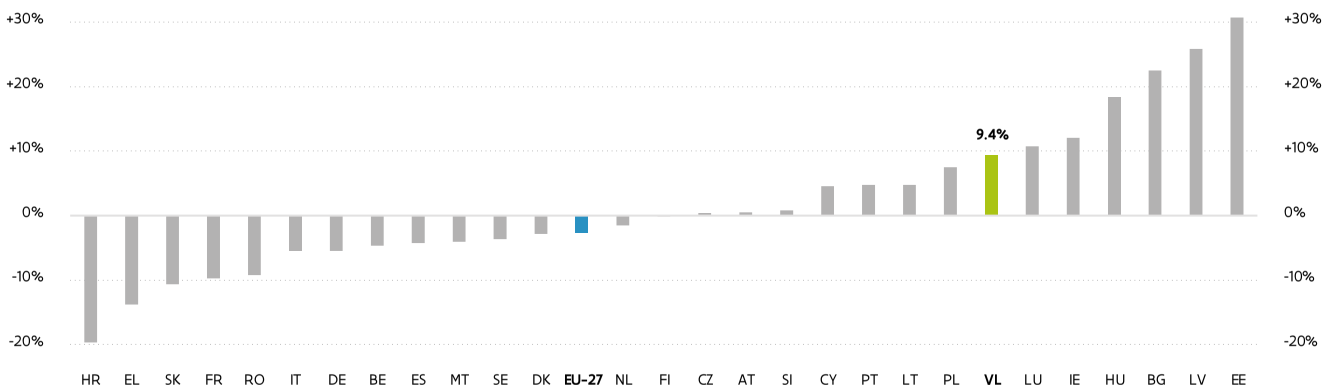
Figure Evolution of harmonised risk indicator for pesticides, 2021 vs. average 2011-2013



# ENVIRONMENT: ENERGY AND GREENHOUSE GASES

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total gross domestic energy consumption | TJ | 2021 | 59,522,315 | 1,598,120 | 2,377,861 | 712,150 | 12,388,065 | 10,125,030 | 3,112,889 |
| total energy consumption of agriculture and forestry | TJ | 2021 | 1,186,691 | 32,237 | 36,430 | 23,674 | 150,379 | 175,589 | 166,263 |
| evolution energy consumption of agriculture and forestry | % | 2021 vs. 2012 | +15% | +28% | +14% | -16% | +173% | +4% | +7% |
| share agricpulture and forestry in gross domestic consumption | TJ | 2021 | 2.0% | 2.0% | 1.5% | 3.3% | 1.2% | 1.7% | 5.3% |
| total greenhouse gas emission | million tons $CO_2$-equivalent | 2021 | 3,541 | 73 | 116 | 45 | 779 | 423 | 175 |
| greenhouse gas emission by agriculture | million tons $CO_2$-equivalent | 2021 | 378.4 | 7.7 | 9.4 | 12.1 | 56.3 | 66.2 | 18.0 |
| share of agriculture in total greenhouse gas emission | % | 2021 | 11% | 11% | 8% | 27% | 7% | 16% | 10% |
| evolution of the greenhouse gas emission by agriculture | % | 2021 vs. 2012 | -14% | -8% | -7% | -21% | -17% | -15% | -15% |

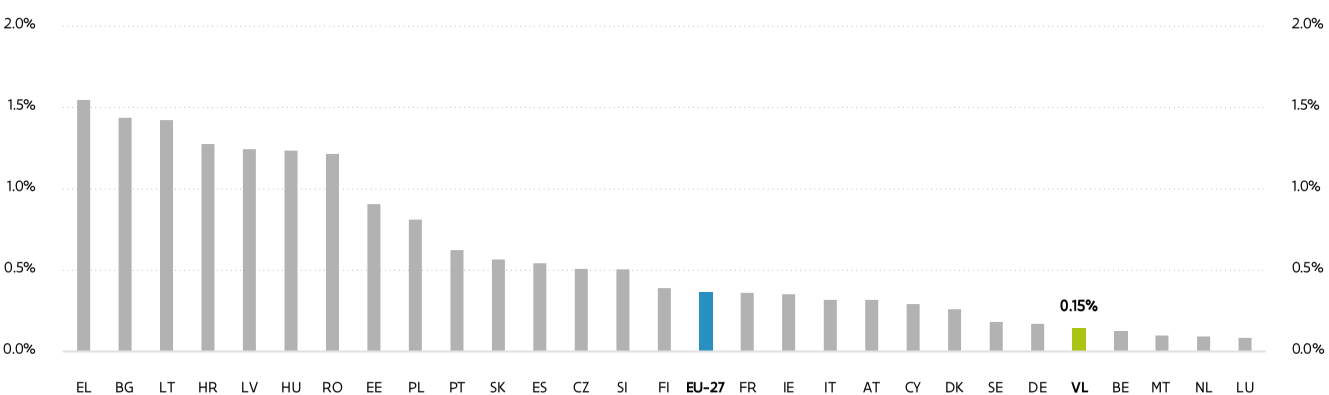
Figure Evolution of greenhouse gas emissions from agriculture, 2021 vs. 2005



# POLICY: COMMON AGRICULTURAL POLICY 2021

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| expenditure cap (eu + cofinancing + own additional financing) | million euros | 2021 | 53,925 | 389 | 655 | 890 | 6,183 | 9,045 | 808 |
| direct payments | % | 2021 | 68% | 59% | 74% | 88% | 73% | 73% | 80% |
| rural development | % | 2021 | 4% | 15% | 10% | 1% | 2% | 6% | 5% |
| market measures | % | 2021 | 27% | 26% | 16% | 11% | 25% | 21% | 15% |
| direct payments | million euros | 2021 | 36,857 | 231 | 487 | 784 | 4,522 | 6,568 | 649 |
| basic payments | % | 2021 | 40% | 57% | 44% | 64% | 62% | 44% | 69% |
| scheme on single area payment | % | 2021 | 12% | 0% | 0% | 0% | 0% | 0% | 0% |
| greening | % | 2021 | 29% | 29% | 29% | 30% | 30% | 30% | 29% |
| coupled support | % | 2021 | 11% | 11% | 16% | 4% | 0% | 15% | 0% |
| share expenditure rural development for environment and climate | % | 2021 | 54% | 49% | 48% | 90% | 57% | 62% | 62% |

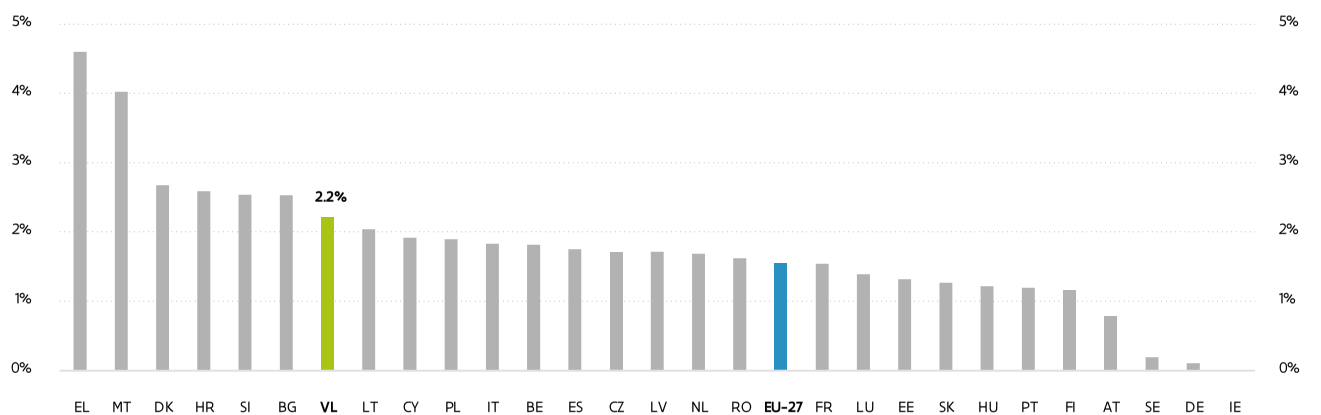
Figure Share of total CAP expenditure in 2021 relative to gross domestic product



# POLICY: COMMON AGRICULTURAL POLICY 2023-2027

| | unity | year | EU-27 | Flanders | Belgium | Denmark | Germany | France | The Netherlands |
|---|---|---|---|---|---|---|---|---|---|
| total cap budget | billion euros | 2023-2027 | 567.73 | 3.26 | 6.65 | 9.66 | 66.71 | 95.19 | 8.84 |
| direct payments | % | 2023-2027 | 66% | 64% | 71% | 85% | 67% | 72% | 67% |
| coupled support | % | 2023-2027 | 8% | 5% | 11% | 4% | 1% | 11% | 0% |
| decoupled support | % | 2023-2027 | 58% | 59% | 60% | 81% | 65% | 61% | 67% |
| eco schemes | million euros | 2023-2027 | 89,425 | 523 | 1,213 | 1,639 | 9,870 | 17,115 | 1.928 |
| rural development | % | 2023-2027 | 32% | 36% | 28% | 15% | 33% | 26% | 33% |
| investment support | % | 2023-2027 | 10% | 23% | 14% | 7% | 10% | 5% | 6% |
| environment, climate and other management contracts | % | 2023-2027 | 10% | 7% | 8% | 3% | 15% | 6% | 11% |
| young and new farmers | % | 2023-2027 | 1.6% | 2.2% | 1.8% | 2.7% | 0.1% | 1.5% | 1.7% |

Figure Share of support for young farmers, CAP 2023-2027



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