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COMMISSION STAFF WORKING DOCUMENT

Commission recommendations for Belgium's CAP strategic plan

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Recommendations to the Member States as regards their strategic plan for the Common Agricultural Policy

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Contents

1. COMMISSION RECOMMENDATIONS FOR THE CAP STRATEGIC PLAN OF BELGIUM

In the framework of the structured dialogue on the preparation of the CAP strategic plan, this document contains the recommendations for the CAP strategic plan of Belgium. The recommendations are based on analysis of the state of play, and the needs and priorities for agriculture and rural areas in Belgium. The recommendations address the specific economic, environmental and social objectives of the future Common Agricultural Policy and in particular the ambition and specific targets of the Farm to Fork Strategy and the Biodiversity Strategy for 2030. As stated in the Farm to Fork Strategy, the Commission invites Belgium, in its CAP Strategic Plan, to set explicit national values for the Green Deal targets[1], taking into account its specific situation and these recommendations.

1.1 Foster a smart, resilient and diversified agricultural sector ensuring food security

Belgian farmers face a range of economic challenges and opportunities in the transition to sustainable food systems. Agriculture in Belgium is characterised by a share of agricultural entrepreneurial income which, at close to 60% of the whole economy's average wage for 2005-2018, is above the EU-average. However, the gap between agricultural and non-agricultural income has been growing since 2012. Similarly, while the agricultural factor income per worker is well above the EU average, its evolution is following a slightly negative trend because expenses are growing faster than revenue.

The economic situation of farmers varies, with the level of income differing substantially according to physical farm size, sector, and location. The use of risk management instruments, which could help address such situations, is very limited and in need of further development in order to strengthen income stability. Income is significantly lower for farms located in areas with natural constraints. Income increases with farm size due to more efficient use of technology and economies of scale. For small and medium-sized farms, the price of arable land and feed greatly impact competitiveness.

It would therefore be advisable to improve access to land, particularly for young farmers, and help modernise farms to address the decline since 2008 in the share of the food chain value added of agriculture. Compared to other Member States, Belgium has a large number of recognised producer organisations, but they tend to be concentrated in the fruit and vegetable sector and in Flanders. The inventory of risk management instruments shows room for further development, in order to strengthen resilience. However, it should be noted that in Flanders an all-weather insurance has been developed and launched in 2020. EU quality schemes also offer advantages to improve the position of farmers in the value chain.

[1] It concerns the targets related to use and risk of pesticides, sale of antimicrobials, nutrient loss, area under organic farming, high diversity landscape features and access to fast broadband internet.

1.2 Bolster environmental care and climate action and contribute to the environmental- and climate-related objectives of the Union

The transition to a sustainable agricultural sector in Belgium is particularly pressing, as the sector is characterised by a high livestock density and widespread use of fertilisers which impact its environmental and climate footprint. Although greenhouse gas (GHG) emissions in the agricultural sector have been falling since 1990 (-18.6%), the rate of decline slowed between 2005 and 2013 (-4%), and emissions have even increased slightly since then (+1%). GHG emissions from croplands remain much higher than the EU average, with an increase of 9% between 2013 and 2018 due to increased fertiliser use. Arable land is particularly suited to improving climate change mitigation because the methods adopted can be changed annually over large areas. For example, Belgium could promote on-farm carbon assessment tools to help farmers identify the most appropriate measures to improve their climate performance. Belgium also has a wetland and peatland area of some 39.2 thousand hectares (ha), of which 24.8 thousand ha is peatland. Peatlands can be large sources or sinks for atmospheric CO2 and are ideal climate mitigation tools.

Climate change hazards to agriculture and forestry are mainly associated with the risk that extreme events, such as extreme precipitation (cloudbursts), hailstorms and heatwaves. These are likely to become more frequent in the future, thus increasing the risk of soil erosion and of new pests and diseases. Extreme droughts may pose economic risks to the agricultural sector, as has become clear in the last three years (2018-2020) with a combination of high temperatures and lack of rainfall.

The strength of agricultural land and rural areas to cope with these climate change impacts is already reduced due to the fact that the intensity of farming has resulted in a reduced absorption capacity as ground water tables have lowered and rainwater runoff from the tributaries of river basin subsystems has increased due to land drainage and diversion of streams and rivers.

On water quality, the situation is a cause for concern. Although there has been a downward trend in excess nutrients, the surplus of nutrients is still very high, with nitrate in particular significantly above the EU average. Nitrates are the top pollutant causing failure to achieve good chemical status under the Water Framework Directive, with only 41% of groundwater bodies currently achieving good chemical status. Despite some improvement on phosphorus, the level remains high. In terms of the Water Framework Directive agriculture is reported to exert the most pressure on both surface water and groundwater. Better integration of water objectives in other policy areas such as agriculture, is needed, and synergies should be optimised with the common agricultural policy (CAP).

On air quality, total ammonia emissions from agriculture decreased slightly in 2018 compared to previous years. Nevertheless, Belgium is at medium risk of non-compliance with its national ammonia emission reduction commitment for both 2020-2029 and for 2030 and beyond[1].

On biodiversity, the situation is extremely worrying, as 100% of habitats have an unfavourable status and 88% of grasslands have an ‘unfavourable-bad’ conservation status. During the previous period (2013-2019), some habitats in Flanders showed some improvement. Despite improvements in certain protected areas, in particular in Natura 2000 sites, measures should still be taken to preserve and boost biodiversity. Farmland

bird indexes point to significant decreases in the population of farmland bird species in Flanders, and especially in Wallonia (40% in 2010-2018).

For Wallonia, the prioritised action framework indicates the need to prioritise financial support for grasslands, as well as for cropland inside and outside the Natura 2000 network. Managing and restoring of heaths and forest habitats, together with the improving of freshwater habitats, are also among the priorities.

Flanders is still encouraged to explore opportunities to improve the conservation status of meadow birds.

On organic farming, the share of the agricultural area in Wallonia is well developed (11%) but remains very low in Flanders (1.3%). In 2019, over 90% of the organic area in Belgium was found in Wallonia. At national level 66% of the total organic area is permanent pasture, 34% is under arable crops and only 1% (fruit trees for instance) is under permanent crops. A shift to a larger organic area should be encouraged in particular for permanent crops.

1.3 Strengthen the socio-economic fabric of rural areas and address societal concerns

The socio-economic dynamisms of Belgium's rural areas is challenged by several factors. Like in many parts of the EU, there is a low number of new entrants in farming, due to the occupation's lack of attractiveness and the high price of land. Access to land is one of the main obstacles to becoming a farmers in Belgium. The rate of unemployment and poverty are higher in some less populated Walloon areas and these same areas face a lack of access to basic services. The bioeconomy and green economy for bio-based products, the wood sector for bioenergy and the tourism sector are in development and offer good opportunities for creating jobs.

Broadband coverage in rural areas is relatively good except for some sparsely populated areas in the south.

Societal demands on food and health play a key role in Belgium and therefore affect the development of the agricultural sector. However, despite a reduction in the use of antimicrobials, the level remains high compared to neighbouring Member States with similar animal husbandry structures. The use and risk of pesticides decreased between 2011 and 2018 (better than the EU average), more needs to be done to ensure the implementation of integrated pest management at farm level. Furthermore, Belgium should make an effort to shift towards healthier, more environmentally sustainable diets in line with the Farm to Fork Strategy.

Consumers are increasingly concerned about the welfare of food-producing animals which influences their food choices.

On gender balance, women in rural areas constitute 28% of the agricultural labour force but only 14% are farm managers, which is well below the EU average of 28%. Careful consideration of the specific needs of women in agriculture and rural areas is needed in order to deliver on gender equality and close the gender gaps in employment.

Furthermore, ensuring the protection of agricultural workers - especially those in precarious, seasonal and undeclared–employment, will play a major role in delivering on

human rights as enshrined in legislation. This is an essential element of the fair EU food system envisaged in the Farm to Fork Strategy.

1.4 Modernising the sector by fostering and sharing of knowledge, innovation and digitalisation, and encouraging their uptake

Tackling the economic, environmental and social challenges outlined in the previous sections is an important step in the transition towards sustainable food production and will also require considerable efforts to bring new practices, technology and innovation to the field.

Knowledge and innovation have a key role to play in helping farmers and rural communities meet the challenges of today and tomorrow. A well-functioning agricultural knowledge and innovation system (AKIS) should deliver plenty of knowledge to respond to the growing information needs of farmers, speed up innovation and increase the value of existing knowledge, to achieve the CAP objectives.

The Belgian AKIS has been characterised as strong. However, while it is more integrated in Flanders it is still rather fragmented in Wallonia. The links between advisers and other knowledge organisations/institutes could be strengthened. Full integration of producers within the AKIS and into innovative projects could be improved. Belgium could further promote cooperation between private and public advisers, including within the operational groups of the European Innovation Partnership (EIP). It is also essential to invest in training and skills. Advisers should be supported to help capture individual grass roots ideas for innovation and develop them by setting up and implementing EIP operational group projects. "Innovation support services" will become obligatory for Member States after 2020.

Belgium recorded a mixed performance on connectivity. However, it is advanced in deploying fast and high capacity networks and is committed to accelerating new digital technologies and investing strategically in them through EU initiatives and programmes. The country should use this potential to drive forward the digital transition, for instance through tailored digital solutions that address specific sectoral challenges, such as environmental ones, or by offering group training for small farmers.

1.5 Recommendations

To address the above mentioned interconnected economic, environmental/climate and social challenges, the Commission considers that the Belgian CAP strategic plan needs to focus its priorities and concentrate its interventions on the following objectives, while adequately taking into account the diversity of agriculture and rural areas:

Foster a smart, resilient and diversified agricultural sector ensuring food security

- **Improving the resilience of the agricultural sector and addressing the decline of income,** by improving the targeting of CAP support, in particular to small/medium physical farm size and territories in Wallonia classified as areas with natural constraints (ANC), further advancing in the internal convergence process and using, for example, the complementary redistributive income support for sustainability and the reduction of payments. The use of risk management tools should also be developed and promoted.

- **Continuing the modernisation and transformation of farms (including digital transition)** by supporting investments, directly or through financial instruments with the view of reducing production costs (e.g. feeding stuff, labour, land) and achieving higher environmental and animal welfare benefits.

- **Improving the position of farmers in the food chain** with targeted actions available under both CAP pillars, such as strengthening and developing producer organisations and cooperatives, particularly sectors where they are less active, as well as promoting innovative short food supply chains, and by focussing on higher value added products, such as organic products and bio-based products.

Bolster environmental care and climate action and to contribute to the environmental- and climate-related objectives of the Union

- **Reducing non-CO2 emissions** from the livestock sector and soil fertilisation and maintaining and improving the carbon storage capacity by supporting grassland maintenance and conservation/zero tillage via carbon farming approaches and the shift to a bio-based and circular economy. Among other things, CAP interventions should support the shift to lower emission livestock production systems by also considering sustainable manure management in line with the Methane Strategy.

- **Supporting the adaptation of agriculture to future climate changes,** which could jeopardise its capacity to deliver food and its contribution to the provision of ecosystem services which are directly dependent on the climate conditions, **by promoting adaptive farming practices, landscape-level solutions and investments (**restoring natural water retention, encouraging the production of materials using biomass from agriculture, introducing more water efficient irrigation/crops…).

- **Contributing to the EU Green Deal target to reduce nutrient losses (of both nitrates and phosphorus)**, by supporting the switch of farmers to more resilient and less intensive production models including reinforcement of pollution mitigation measures, optimisation of fertilisation practices that reduce nutrient losses to water and air.

- **Reinforcing protection of biodiversity and contributing to the EU Green Deal targets,** by regaining the favourable conservation status of protected habitats and species, by improving habitats especially high diversity landscape features, in grasslands, croplands and even in forest (inside and outside Natura 2000), with an appropriate blend of interventions and obligations under conditionality, as well as increasing the share of land under contracts supporting biodiversity and / or landscapes and by reinforcing the protection of natural reserves and extension of Natura 2000 areas according to the priorities defined in the Prioritised Action Framework.

- **Contribute to the EU Green Deal target by promoting organic farming more strongly, especially in Flanders** by accelerating the currently increasing trend of areas being brought under organic farming through adequate conversion and maintenance schemes and by developing sustainable food systems with the identification of the potential in local organic food production and food chain structures to address the constantly growing demand for organic foods, and support for research and innovation in this field.

- **Fostering sustainable forest management and afforestation**, enhancing multi-functionality, forest protection and restoration of forests ecosystems to achieve forest habitats and species in a good condition, support ecosystem services and preserve stocks, and increasing carbon sinks in forests, their soils and in harvested wood products, supporting the bioeconomy, and build resilience to threats such as climate change impacts.

Strengthen the socio-economic fabric of rural areas and address societal demands

- **Encouraging more young people, including women, to move into farming and other activities in rural areas (bio-based products, wood sector and the tourism)**, by combining interventions to remove obstacles to accessing production factors (such as access to land).

- **Contributing to achieving the EU Green Deal target of reducing the overall sales of antimicrobials**, though sales in Belgium are below the EU average, by continuing to implement measures to reduce antimicrobial use in livestock farming, for example by integrating targets into concrete and more ambitious CAP actions, including innovative techniques.

- **Contributing to the EU Green Deal targets on reducing use and risk from pesticides by 50% by 2030** via schemes fostering non-chemical pest management practices, and the full implementation of integrated pest management and continuing the downward trend in risk and overall usage of pesticides. The development of innovative techniques can help to achieve these objectives.

- **Promoting best practices in livestock husbandry and management systems** in order to improve animal welfare, in particular for pigs and dairy cows, by using available tools, including the instruments under the CAP.

Fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake

- **Enhancing integration of the Agricultural Knowledge and Innovation System (AKIS)**, in particular by fostering collaboration between actors, creation of solutions targeting farmers' needs in EIP-AGRI interactive innovation projects, ensuring an efficient AKIS coordination body and financing innovation support services able to develop grassroots ideas into innovative solutions.

2. ANALYSIS OF AGRICULTURE AND RURAL DEVELOPMENT IN BELGIUM

Belgian agriculture has undergone deep structural changes over the recent years, and its number of holdings, and livestock have declined since 2005. The total number of farms declined between 2005 and 2018 in Belgium from about 51 500 to 36 200 farms. The average farm size increased from 27 and 37 hectares during the same period. The total utilised agricultural area slightly decreased from 1.38 million ha 2005 to 1.36 million ha in 2018. Relating to main production, pig (17.7%), vegetable and horticulture (16.2%), milk (16.2%) and cattle production (12.5%) were the most important sectors in terms of production value in 2017. In 2018, the share of agriculture in the Belgian economy was 0.63%. The position of the agri-food sector in the economy is far more important. Exports of the agricultural sector account for 5.3% of Belgian exports and the agri-food sector for 14.6%. Agri-food sector trade is globally positive (negative with countries outside EU and positive intra EU). Rural areas represent 33% of total Belgian territory. The employment figures are slightly higher in rural areas and the poverty rate is lower (20.9%) than in cities (30.7%).

2.1 Support viable farm income and resilience across the EU territory to enhance food security

In Belgium, agricultural income has been on average about 59% of the average wage in the whole economy between 2005 and 2019. This share ranges from 77% in 2007 to 41% in 2018 and is generally above the EU-average (except in 2018). However, it constantly decreased between 2012 and 2018, illustrating a growing gap between farm income and the average wage (see graph below)[2].

Average agricultural factor income (period 2005-2019) has fluctuated around EUR 34,400 per worker, which is above the EU-average. It however shows a declining trend, especially since 2012[3]. Direct payments formed about 27% of the agricultural factor income in 2018 (relatively stable share over the period 2015-2018)[4]. Rural development support is on average 3.5% of the factor income[5]. It thus remains low in comparison with direct payments, but it has some importance for certain types of farming, cattle farms in particular.

The factor income broadly increases with physical farm size whereas the direct payments per hectare decreases (opposite trends)[6]. This can be related partly to the redistributive payments (applied only in Wallonia). However there are still important differences in income between small to medium farms on one hand and large farms on the other hand.

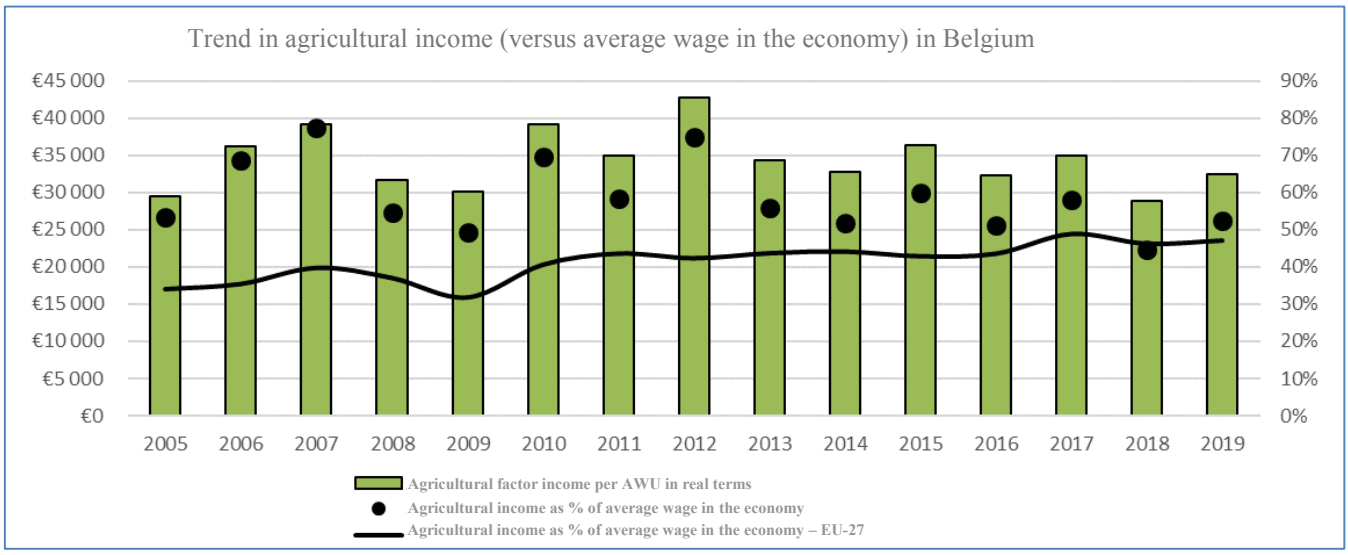
Income increases constantly with economic farm size while the direct payments per hectare increase for the low to –medium farms and decreases for higher economic sizes[8].

For sectors, the income is the highest for specialist field crops and granivores, while the direct payments per hectare are slightly lower than the average. Income is the lowest for orchards, where the direct payments per hectare are about half of the average, and for cattle and mixed livestock farms, despite the higher direct payments per hectare[8].

Income by territorial areas (i.e. Areas facing Natural Constraints (ANC)/non-ANC in Wallonia) also shows wide differences. The last two results illustrate the differences in income generated by different types of land (notably arable land / permanent crops /

permanent pasture). The income is much higher outside ANC (more than EUR 35 000) compared to ANC (slightly above EUR 25 000), but the total income support (direct payments and ANC per hectare) is not significantly different between ANC and non-ANC (close to EUR 350 per hectare)[8].

The analysis of risk management instruments[7] shows that although a series of instruments have been set-up, the coverage appears limited for some of them (e.g. crop insurance limited to standard hail coverage, absence of sanitary livestock insurance, public compensation arrangement entirely financed by private contributions in the phyto-sanitary area). Such offers could therefore be further incentivised and developed to bring more stability for farmers. It should be noted that in Flanders an all-weather insurance has been developed and launched in 2020.



Source: DG AGRI based on EUROSTAT[8]

2.2 Enhance market orientation and increase competitiveness including greater focus on research, technology and digitalisation

The importance of agriculture in the Belgian economy has gradually diminished over the years. The gross value added of the agriculture sector was EUR 2.28 billion in 2019 (EUR 1.96 billion in 2018)[9] and since 2010 has been fluctuating within the range of EUR 2 billion to EUR 2.4 billion, showing a slightly negative trend. Its share of the total gross value added of the Belgian economy represented more than 0.5% in 2019, lower than the EU 27 (1.8%).

Fruits and vegetables, together with livestock and milk, are the largest segments of Belgian agriculture according to their production value[10], but geographical disparities exist. The Northern region (Flanders) produces more livestock, as well as fruit and vegetables, whereas the South (Wallonia) is more oriented towards crop farming, cereals and sugar beet. Cereals are prevalent in the centre of the country (upper part of Wallonia). Intensive livestock farms are common in Flanders, while more traditional and smaller livestock farms are found in the South of Wallonia. Wallonia has 50% fewer large-sized farms (with a Standard Output[11] above 250 000) than Flanders. Farm specialisation is more common in Flanders, where 88% of all farms have specialised in either livestock (50%, mostly cattle), arable farming (26%) or horticulture (12%).

Overall, most of the Belgian total output value comes from Flanders, which accounted in 2017 for 67% of vegetal output and 76% of animal production[12].

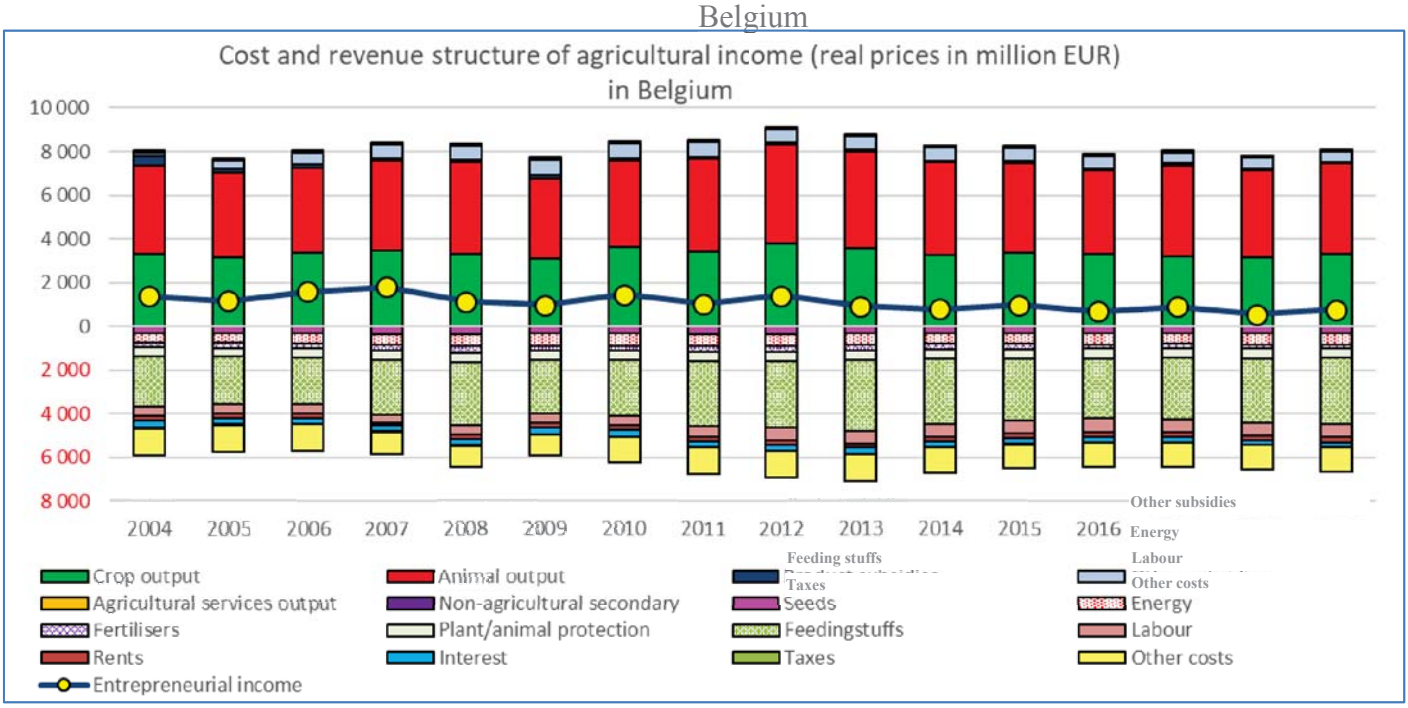
The sector has undergone a structural change during the past decade. In 2019, Flanders had 23 318 agricultural businesses, while Wallonia had 12 733 holdings. The proportion of medium-sized farms in Belgium (between 20 and 100 hectares) is above the European average (53% of farms vs 31%). The number of small-sized farms is reducing, while the average size of medium and large-sized farms is growing. About 8 270 farms disappeared between 2009 and 2019, a net reduction of about 19%, while the average size of farms increased by around 30% in the same period. This dynamic slightly varies according to regions. Between 2009 and 2019, the number of farms fell by approximately 20% compared to 2009 in Flanders and by 15% in Wallonia. These reductions occurred in the medium or small-sized farms category. The number of large-sized farms (above 50 ha) grew by 6% between 2009 and 2019. This structural change is driven by a decline in profitability (agricultural income has stagnated and even slightly decreased over the last decade), the availability of better performing farming technology and economies of scale through larger production operations[13].

In terms of agricultural productivity, Belgium stands out from the rest of the Union with the strongest growth in recent years. Since 2012, agricultural productivity in Belgium, measured by total factor productivity, has increased by 47% between 2012 and 2018, while it has increased by around 5% in EU-27 in the same period. This is mainly due to an increase in both labour and capital productivities. In 2016, there were 17 454 full time farmers in Wallonia and 10 656 in Flanders. When adding to these family members, part-time farmers, and agricultural workers, the total agricultural employment in Belgium reached 65 177 individuals in 2016. Available national statistics[14] indicate that the overall number of people employed in agriculture in Belgium has been shrinking by 10% every five years since 1990, while the relative share of labour costs slightly grew in the overall cost structure of the sector.[15] The development of the cost of land has also weighed on Belgium's agriculture, particularly in Flanders where arable land could be more than twice as expensive as in Wallonia.[16]

Investments in the Belgian agricultural sector, measured by the gross fixed capital formation, stagnated between 2012 and 2018 at a relative high value and was EUR 1.1 billion in 2018. Nevertheless, this represents 57% of the gross value added, and it is significantly above the EU 27 average (around 31%), indicating an overall positive investment attitude among Belgian farmers compared to their European peers. Overall, most of the Belgian gross fixed capital formation comes from Flanders, which accounted in 2017 for 77%. 11% of EU rural development support is dedicated to restructuring and modernisation in 2018. The demand for agricultural finance is strong, with one in three farms applying for a loan or a credit line in 2017[17]. This demand is matched by an equally strong supply of finance, addressed by specialised banks, and served by tailored financial products. Nevertheless, a financing gap in the Belgian agriculture sector is estimated between EUR 137 million and EUR 194 million in 2017[18]. This gap is the largest for small and medium-sized farms, and it concerns mostly the access to long-term loans.

The adoption of precision farming is quite high in Flanders. According to a recent study conducted in Flanders, 57% of the responding farms apply precision agricultural technologies themselves or through contractor, or will most likely do so within a period of five years. In arable farming, dairy, pig and poultry sectors, this percentage is even higher than 66%. This mainly concerns GPS in crop farming and yield registration in livestock farming. A management information system is often lacking.[19]

The sector is well integrated with international markets. Although agriculture is a minor part of the Belgian economy, many sub-sectors are well integrated with the European and international markets (e.g. cereals, sugar beet, meat, milk, oilseeds). In 2019, exports from the agricultural sector accounted for 5.3% (they reached 11.4% if exports of food products, beverages and tobacco are included) of Belgian exports[20] and the agricultural trade balance has improved over the last decade. This integration reflects an advanced development of commercialisation infrastructures, the proximity of a main European port - Antv Cost and revenue structure of agricultural income (real prices in million EUR) in Belgium



Source: EUROSTAT. Economic Accounts for Agriculture [aact_eaa01].

2.3 Improve farmers' position in the value chain

The share of agriculture in the value added in the food supply chain (FSC) in Belgium oscillates between 12 and 14%, i.e. about half the EU average of around 24%[21], and while absolute gross value added along the FSC rises, the value added by producers stagnates. Farmers cannot keep agricultural incomes in line with the increase of wages and salaries in other sectors[22]. To counteract this trend, farmers could engage in more downstream activities, i.e. integrate vertically, or innovate and develop markets for new agricultural products. Joining producer organisations (POs) that have the critical mass and the human and financial capital to do so could be one solution.

The livestock sector generates 57% of Belgium's agricultural output; in the crop sector vegetables and horticulture are the biggest contributors[23]. The Commission's Farm to Fork Strategy (F2F) calls for a more plant-based diet with more fruits and vegetables and better animal welfare. Farmers could transition to more plant-based production, further expand fruit and vegetables (F&V) production, and transition from a quantity to a quality focus regarding livestock production – with a lower environmental and climate footprint and much greater animal welfare than the EU average.

Compared to other Member States, Belgium has many recognised POs (more in Flanders than in Wallonia), many of which are also sufficiently big to strengthen the position of their members vis-à-vis downstream operators[24]. Nevertheless, given their concentration in the F&V sector, Belgium could encourage the formation and recognition of POs also

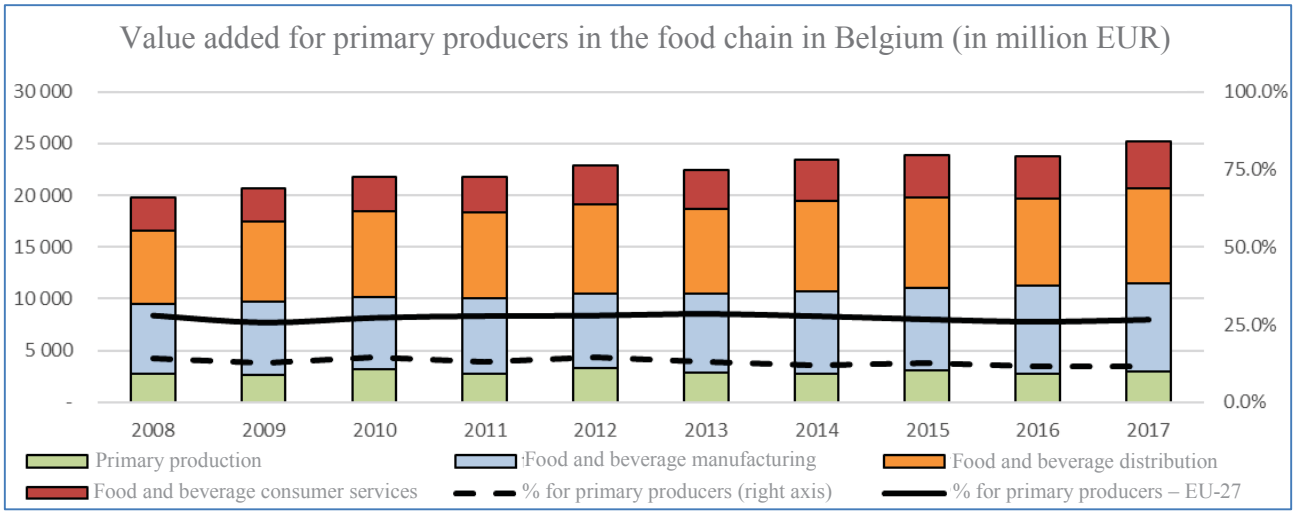
in other sectors. Belgium recognised 2 IBOs and some new IBOs are in the pipeline of being recognised: vertical cooperation could further be improved by the further development of IBOs.

The good market position of some Belgian POs in the F&V sector allows them to put in place ambitious business strategies, e.g. on research and experimental production, to defend their position leaders in vegetables production.

Belgium has only limited legislation on Unfair trading practices in place[25], which makes it the more important for Belgium to fully transpose Directive (EU) 2019/633 and to apply related measures as soon as possible. While price transmission along the FSC in Belgium seems to be fairly fluid[26,27], Belgium could improve market transparency further by notifying market information beyond the legal minimum requirements of Implementing Regulation (EU) 2019/1746.

Belgium's agricultural sector makes relatively little use of EU 'geographical indications' that target high-priced niche markets and could pay further attention to the EU quality scheme to generate more added value to farmers[28]. Belgium could focus more on these niche markets and products, or it could focus more on producing the kind of wholesome products (fruits, vegetables, animal products with reduced salt and fat levels) that F2F calls for (see above), and to do so at competitive prices that make these products accessible to everyone.

Organic farming is well developed in Wallonia compared to the EU average (11% of the agricultural area vs EU 27 average of 8%)[29]. In Flanders, organic farming covers less than 2% of the agricultural area.



Source: European Commission. *CAP indicators – Data explorer*. CAP Result indicator RPI_03 Value for primary producers in the food chain.

2.4 Contribute to climate change mitigation and adaptation, as well as sustainable energy

In 2018, Greenhouse Gas Emissions (GHG) of the agricultural sector in Belgium amounted to around 10 million tonnes of CO_2 equivalents and represented about 8%[30] of total GHG emissions in Belgium. They have decreased by 18.6%[31] since 1990, particularly due to the decrease in emissions from enteric fermentation (linked to the reduction in the herd, but also to the switch from dairy cattle to breeding cattle) and agricultural soils (reduced use of mineral fertilisers and reduced livestock numbers,

which reduces nitrogen excreta in pastures). However, this decline slowed between 2005 and 2013 (-4%) and emissions have even increased since then (+1%). In 2018, 46%[32] of emissions of the agricultural sector in Belgium related to enteric fermentation of livestock, 33% to agricultural soils (fertilisers) and 19% to the management of manure. Measured per unit of production factors, these emissions are close to the European average, with the exception of agricultural soils, which are much higher (2.42 tonnes of CO_2 equivalent per hectare against 0.94 tonnes of CO_2 equivalent per ha in the EU-27). When it comes to agricultural land, it should be mentioned that the GHG emissions from cropland increased by 8.68% between 2013 and 2018. Peatlands cover only 0.8%[33] of soils in Belgium.

Soil sealing has a strong impact on farmland carbon sinks. The Belgian utilised agricultural area (1.33 Mha) has decreased by 5% between 2000 and 2015. Permanent grasslands (35% of total utilised agricultural area) are a "hot spot" of carbon stocks that has been decreasing between 2013 and 2017 by 6%;[34] however, they remain a carbon sink in Belgium (-0.8 million tonnes of CO_2 equivalent in 2018). Finally, Land Use Change and Forestry sector is globally a carbon sink (-1.015 million tonnes of CO_2 equivalent in 2018). Forest land is the major sink (-1.252 million tonnes of CO_2 equivalent in 2018)[35].

In 2018, the share of production of renewable energies from agriculture and forestry (56% of total production of renewable energy in Belgium[36]) is slightly above the EU average (52%). 37% of renewable energy production comes from the forestry sector and 19% from agriculture. Indigenous production of energy from biogases from anaerobic fermentation per LSU (livestock unit) in 2016 (Gigajoule ha-1) is equal to 1.99 (EU 3.93)[37].

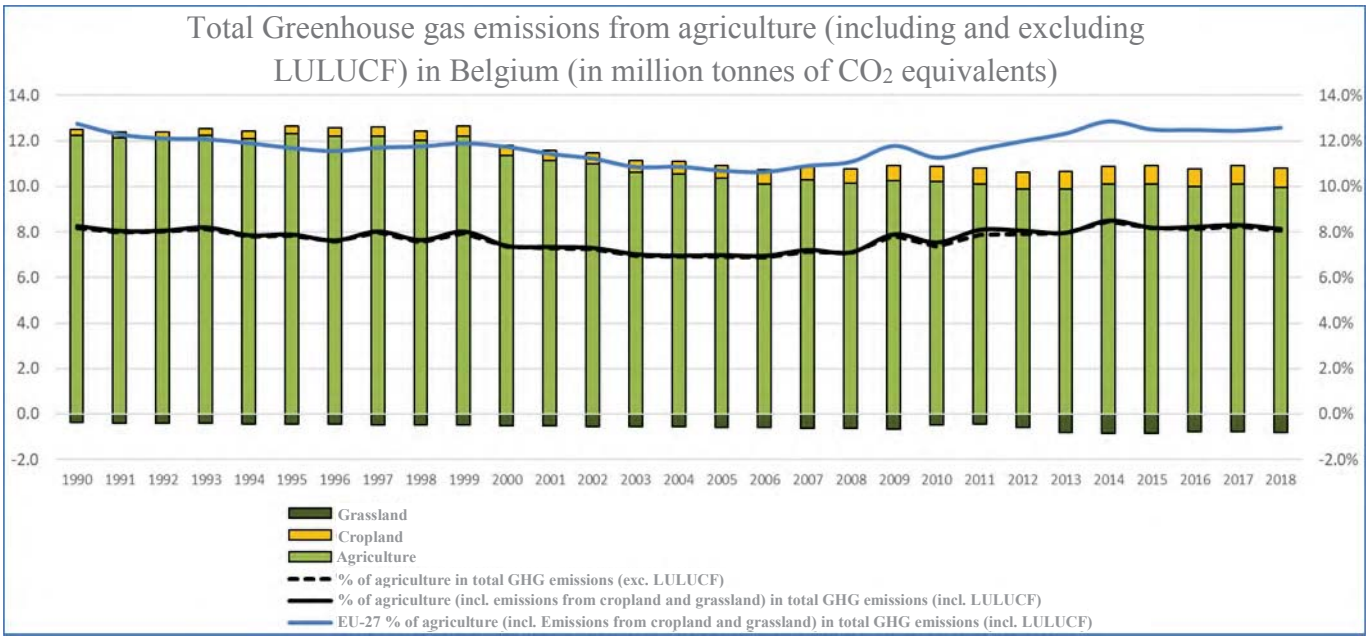
Final energy consumption by agriculture/forestry per hectare of utilised agricultural area (2018) total up to 584 GJ (EU 168 GJ)) [38]. Energy consumption in Belgium for agriculture and forestry amounts to 2.4% of total final energy consumption (2.9% in the EU). Direct use of energy in food processing represents 4.8% of total final energy consumption (2.9% in the EU)[39].

Belgium had a share of 6% of physical area under Agri-environment and climate measures in 2017 (EU average 15%) and planned to reach 12% at the end of the programming period.[40]

The Belgian Air Climate Energy Plan is developed around 4 axes of actions: 1- Sustainable management of inputs (Limiting the use of pesticides; Improving the methods of application and the use of fertilisers to reduce nitrogen emissions; Improving the conditions and storage infrastructure for livestock manure) 2- Promoting the use of more environmentally neutral fuels, renewable energy sources, renewable heat and/or cogeneration (Fostering the development of solid biomass and bio-methanisation in the agricultural sector) 3- Territorial management (Maintenance of existing carbon stocks; Promoting local production and short supply chains) 4- Improving the energy and environmental efficiency of the agricultural holding .

The Belgian Adaptation Plans recognises as fields of actions for agriculture: improving soil quality, in particular soil organic content, optimising water use, and tackling soil erosion. For forests, the improvement of management, with special attention to restoration of natural processes is recognised.

Increasing soil organic carbon will contribute to improved soil structure so that erosion is reduced and water retention is enhanced. Also hedgerows and woody margins will contribute to reduce impact of rainfall events, such as erosion. Increased infiltration will increase capacity against droughts. Woodland and forestry management helps to cope with climate change impacts by diversifying and planting new forest species.



Source: European Environmental Agency. As in EUROSTAT [env_air_gge]

2.5 Foster sustainable development and efficient management of natural resources such as water, soil and air

Soil erosion is not a major issue in Belgium. At 0.4%, the share of agricultural area at risk of severe soil erosion from water is clearly below the EU average and the rate of erosion (less than 1.3t ha^{-1} yr^{-1} in Belgium) was below than EU rate 2.5 t ha^{-1} yr^{-1}[141].

In Wallonia, the rate of soil erosion reaches 1.6 t ha^{-1} yr^{-1} in 2017. Nevertheless, some cultivated areas (above the Meuse river) present more risk of soil degradation due to their low soil organic matter level. Over the period 2004-2014, 22% of utilised agricultural area had less than 1.15% organic matter. Based on 2015 figure, in hot spot areas, the rate of erosion can be above 10 t/ha In Flanders, the impact of soil erosion has been avoided thanks to on farming practice requirements, particularly for more sensitive sandy areas in the south of the region.

Mean soil organic carbon (SOC) content of arable lands in Belgium is 24 g/kg (mean EU: 43.1 g/kg).

In Belgium conventional tillage dominates (80% of tillable area) and a shift towards conservation/zero tillage would have positive effects on nutrient management and soil quality. The impact of soil management practices may be increased by linking them to research, innovation and demonstration activities available under the forthcoming Horizon Europe Mission on soil health.

As regards water quality, the estimated nutrient balance for Belgium indicates a downwards trend since 2006 (although Belgium is not transmitting gross nutrient balances to the Commission and is encouraged to do so)[42]. Nevertheless, estimations indicate that the nutrient surplus is still very high, and significantly above the EU average (136 kg N/ ha/year, more than twice the EU average in 2015). With the Netherlands, Belgium belongs to the group of Member States with the highest level of N surplus in EU 27[43]

Despite of some improvement for phosphorus, where Belgium follows the trend in the EU, at 5kg/ha, phosphorus levels are still estimated to be one of the highest in EU. Malta, the Netherlands, Belgium, Denmark, Cyprus and Ireland have the highest livestock densities in the EU and the highest levels of manure input per ha, with over 14 kg of phosphorus per ha per year.

As regards water issues, under the WFD according to the assessment of the 2nd River Basin Management Plan (RBMP)[44] more than 70% of surface water bodies were in less than good ecological status and almost all surface water bodies were failing to achieve good chemical status. For groundwater 10% were failing to achieve good quantitative status and 59% were failing to achieve good chemical status. Diffuse agricultural pollution is highlighted as the most significant pressure on both surface and ground waters with nutrient pollution being the biggest impact affecting 65% of surface waters and 44% of ground waters and nitrate being the top pollutant causing failure to achieve good chemical status in groundwater. Chemical pollution was also a significant impact affecting 39% of surface waters and 36% of ground water.

As regards nitrate concentration in groundwater, in 2019, 20% of water bodies had a poor quality status, with measuring stations recording more than 50 mg per litre.

Also in terms of surface waters, the situation of nitrate concentration is still a cause for concern in Flanders. During the period of 2012 to 2016, the percentage of sampling points with at least one result in excess of 50 mg/l was stable at around 20%; in the 2017-2018 winter year this rose to 28% and then due to further degradation in the 2018-2019 winter year it reached 38%. [45].

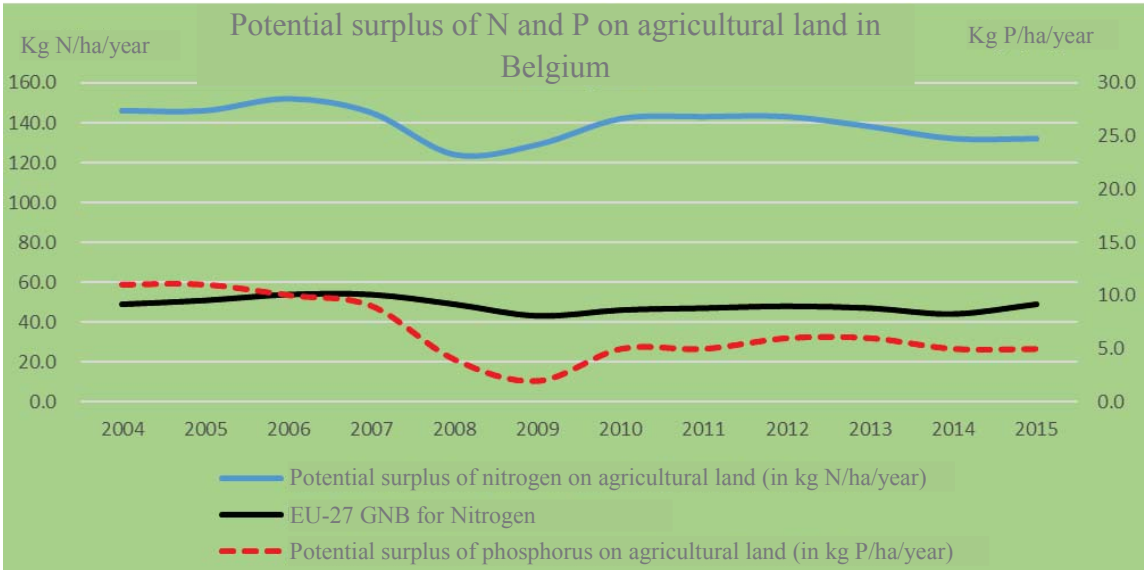
As regards water quantity, no data are available based on the 2018 water exploitation index (WEI). In 2016 only 1.8% of total UAA was irrigable[46]. Under the WFD approximately 90% of groundwater bodies are in good quantitative status with 10% failing good status. Under the assessment of the 2nd RBMP water abstraction is identified as a pressure in some river basin districts (Maas, Scheldt and the Scheldt (Brussels)).

As regards air quality, among different non-CO2 air pollutant sources, agriculture is the main source emission of ammonia (93%).

Belgium reported almost 70 kt total ammonia emissions in 2018. Ammonia emissions from agriculture slightly decreased by almost 10% in the period 2005 to 2018. This means that in 2018, Belgium reported emissions below the emission reduction commitment to be met for 2020-2029; the actual compliance with the 2020 emission reduction commitments can however only be checked once the 2020 data are reported in 2022.

In Wallonia, ammonia emissions from agricultural sector (represent 26 KT in 2017) have decreased by 20% compared to 1990 levels. In Flanders, ammonia emissions decreased

by 56% compared to 1990. This is the result of an active policy in Flanders for manure storage and treatment as well as reduction of the herd.



Source: EUROSTAT. [aei_pr_gnb][47]

2.6 Contribute to the protection of biodiversity, enhance ecosystem services and preserve habitats and landscapes

Flemish agriculture is based on a highly intensive model with direct effect on GHG emission, air, soil and water quality. The green deal aims to reduce and eliminate the impact of agriculture on natural resources. Addressing biodiversity in particular, will require special efforts.

The bird indexes still continue to show a decreasing trend, especially for the farmland bird index (1995-2004: -28%, 2004-2011: -14%, 2011-2018: -31%). Both farmland bird indices decreased significantly in Flanders and Wallonia (respectively 12% and 40% for the period 2010-2019[48]). The Wallonia's farmland bird index[49] has decreased by 3% per year between 1990 and 2017[50].

Bee mortality is still increasing but Flanders was able to limit this in recent years. (Flemish bee mortality changed favourably during the last 3 winters and is currently close to 10% while it was 32.4% in 2012-2013).

The relatively low coverage of Natura 2000 in Belgium reflects the high population density, the high level of urbanisation and the high intensity of land use, especially in the central and northern part of the country. While Natura 2000 land areas cover around 12.7% of Belgian territory (Wallonia 13%, Flanders 12%), the type of land area covered in Wallonia is very different to that covered in Flanders. In Wallonia Natura 2000 is composed of 70% forest, 14% permanent grassland, and 2% arable land, and the remaining areas are non-productive open spaces. In Flanders, on the contrary, Natura 2000 areas consist of 40% agricultural land. At national level, 7% of agricultural area and 35% of forest area is protected under Natura 2000. If the share of Natura 2000 (out of the region) areas are comparable for Wallonia and Flanders, the distribution of Natura 2000 zones within agricultural land reveals the more intensive production in Flanders and the high importance of forest in Wallonia. For Flanders in particular, due to intensity of production and isolation of sites, restoration of areas for biodiversity is needed outside Natura 2000 zones. Flanders has recently reinforced its legal framework under the habitat

and birds directive by setting specific conservation objectives for most sites, which is not the case in Wallonia[51].

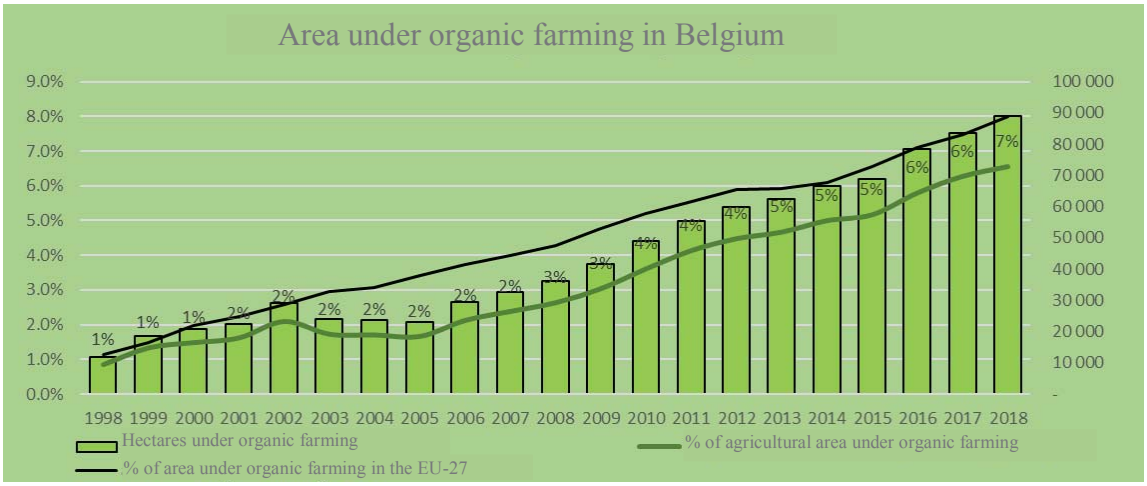
Conservation status of habitats as listed by habitat directive: In Belgium, 100% of agricultural habitats (grasslands) is in an unfavourable status and 88% of grassland has an unfavourable to bad conservation status[52]. In Wallonia (EU Habitats Directive report 2013-2018)[53]: agriculture is the main pressure on 38% of habitats in continental region and 70% in Atlantic region. The Flemish Prioritised Action Framework lists many agricultural pressures and threats as particularly significant including acidification and eutrophication via air, from livestock and desiccation and eutrophication via groundwater, drainage, artificial fertilisers or livestock. During the last few years (2013-2019) significant improvements have been made in Flanders. However, based on 2019 data, clear positive trends were not recorded for the species under habitat protection in either of the regions.

Land lying fallow and landscape features represent together a low share 1.4% of total agricultural area[54]. Under cross-compliance, Belgium has protected landscape features like hedges and tree lines, although with some regional differentiation. Even though Belgium allows that such protected landscape elements can qualify as ecological focus areas under the direct payments system, most farmers fulfil their requirement for ecological focus areas with catch crops (98%), which is not the best way to ensure maintenance of high biodiversity biotopes.

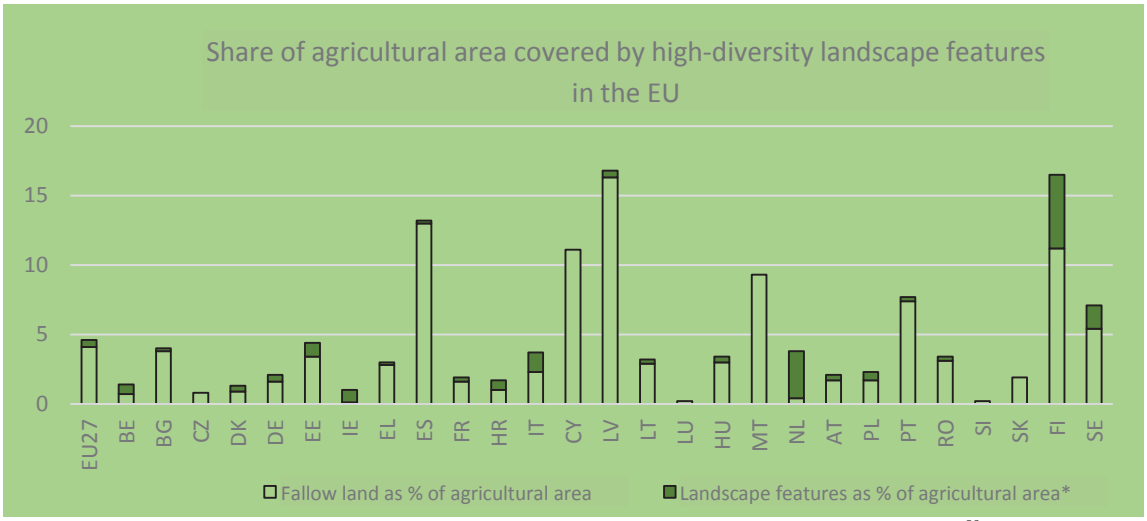
At national level, Belgium has only 37% of its permanent grasslands under Natura 2000 designated as environmentally sensitive permanent grasslands, for which full protection applies under the direct support scheme (no ploughing or conversion), while the EU average for designated permanent grasslands under Natura 2000 is 55%[55].

The area under organic farming, in Belgium is slightly below (6.6%) the EU average of 8%[56]. Taking into consideration the split between regions, the area under organic farming (certified or in conversion) in Wallonia is 81 087 ha, 11% of the total agricultural area, while in Flanders it is 7 912 ha, 1.3% of the agricultural area[57].

The share of land under contract supporting biodiversity and / or landscapes and forest is rather low in Belgium: 9% for agriculture and 2% for forest[58]. Belgium currently deploys different actions in favour of biodiversity. Wallonia is putting in place 5 000 ha of natural reserves and 4 000 km of hedges. Flanders' rural development program supports non-productive elements such as hedges, Natura 2000 areas, afforestation and reforestation, as well as agri-environment--climate measures. It remains to be assessed whether these will be sufficient to achieve the ambitious green deal objectives.



Source: EUROSTAT [org_cropar_h1] and [org_cropar]



Source: DG AGRI based on Eurostat and JRC based on LUCAS survey[59].

** Linear elements considered here: Grass margins, shrub margins, single trees bushes, lines of trees, hedges and ditches. This estimation is to be taken with caution because of methodological caveats.*

2.7 Attract young farmers and facilitate business development in rural areas

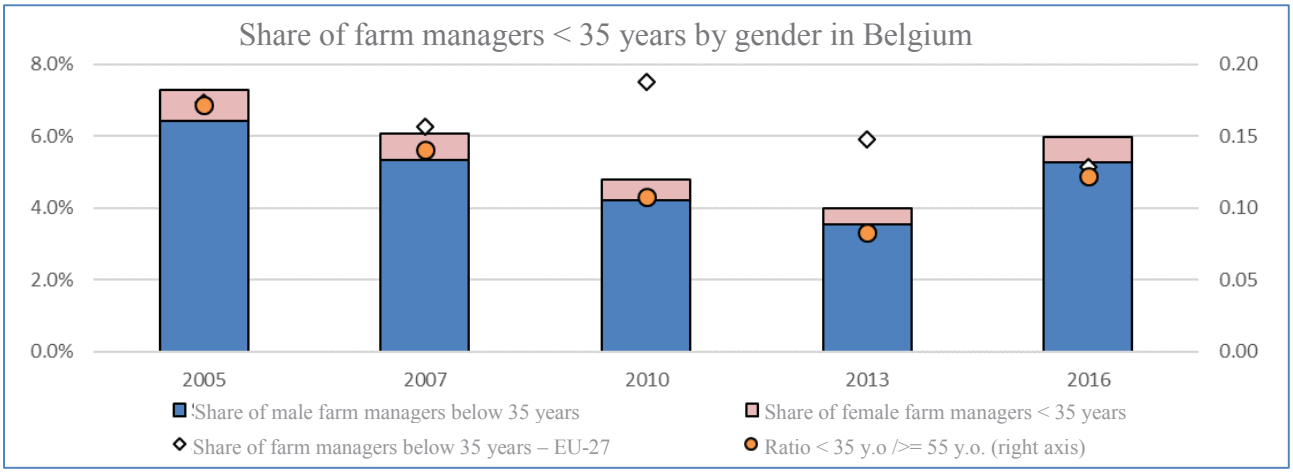
As elsewhere in the EU, Belgium is facing an ageing farmers' population. The share of young farmers (<35 years old) in the total number of farm managers stands at 6% in 2016, which places Belgium above the EU-average (5.1%)[60]. Whereas the EU-trend decreased between 2010 and 2016, Belgium shows an increase between 2013 and 2016[63]. The ratio of farm managers <35 years/farmers >55 years old stands also above the EU average (0.09), at 0.12 in 2016[65]-[66]. The young female managers accounts for 11.6% of the farm managers < 35 years in that same year[63] (see figure), which places Belgium below the EU average (23.3% in 2016). Such gender ratio does not tend to improve or worsen over the period 2005-2016 (same as for EU average ratio).

In terms of general trends for the classes <35 (2005-2016), the number of farms has decreased (roughly - 40%), the average area/farm has increased (roughly 35%) and the standard output has increased (roughly 70%). Similar trends are however observed for all age classes, but with different degree of intensity[61]. In 2018, the number of farms for the age classes <40 represents roughly 11% of the total farms (6% for class <35; 5% for class

35-40)[63]. For that year, the average area/farm stands at 48 ha for class <35 (52 ha for classes >35, the highest being for class 35-40 with 59 ha)[63]. In 2018 again, the economic farm size is the highest for classes <40 (EUR 346 000 for <35; EUR 378 000 for class 35-40). These figures place Belgium comfortably above the EU average[63].

Like in the rest of the EU, there is a general lack of new entrants into farming, due to a lack of attractiveness of the job[62]. Access to land is one of the main obstacles to entering farming in Belgium. Land sales are scarce and often farmers have made arrangements long before the land is for sale. Moreover, average land prices range from EUR 30 000 to EUR 50 000 per hectare, placing them among the highest in Europe and out of reach for most new entrants. The most common way for new entrants to access land is through renting, especially since new entrants tend to have small farms. However, new entrants and newcomers experience difficulties to rent. When farm leases come to an end, tenant farmers often already have arrangements with neighbouring farmers. In addition, the conventional farm lease contract is reported to be rigid, which makes many land owners reluctant to rent their land (leave land unused or opting for short-term/oral leases, thus placing farmers in precarious conditions)[65]. As regards educational background, the large majority of Belgian new entrants into farming go through specialised training schemes before launching their farms. The training offer is quite dynamic in Belgium, with a number of associations organising theoretical and practical courses[65]. The share of 'young' farm managers with at least a basic agricultural training in Belgium (48%) is higher compared to the EU average (32%)[67].

Belgium implements several CAP measures with effect on the generational renewal. Under pillar I, the young farmer payments (YFP) amounts to 1.9% of the Direct payments envelope in 2018, thus above the EU average share and close to the maximum of 2%[63]. The average YFP/beneficiary stands at EUR 4 886 in Wallonia and EUR 3 835 in Flanders (2018)[66], making Belgium the second MS after Luxemburg (NB: Belgium has set up the threshold of payments entitlements that can be activated for the YFP at 90 ha, i.e. the maximum authorised). In addition, the criterion for appropriate skills and training to access YFP is incentivising the increase in knowledge among young farmers. Under pillar II, generational renewal is promoted via a business start-up aid[64], accounting for 8% of the financial envelope of FEADER with a target of 6% farms with support for young farmers for the period 2014-2020. These CAP measures have been accompanied by several national measures facilitating the start-up, access to land and generational transition, in particular: networks that advise and 'sponsor' new farmers; possibility to rent land from community land trusts; organisations dedicated to facilitating access to land for organic farmers; farm incubators (i.e. small plots of land provided to people who wish to experiment farming/new farming techniques/assess their skills etc.)[67].



Source: EUROSTAT. [ef_m_farmang]

2.8 Promote employment, growth, social inclusion and local development in rural areas, including bio-economy and sustainable forestry

Predominantly rural areas represent 3% of total Belgian territory, a lower share than the EU-average (45%). Intermediate regions account for 4% (46% at EU level).

The Walloon territory is divided into 59 % of predominantly rural areas, 28.9 % of intermediate areas and 12.1 % of predominantly urban areas[65]. The Flemish territory is shared into 62.6% of intermediate areas and 37.4% of predominantly urban areas[66].

The share of population living in rural areas is lower than the EU share: 8.5% in Belgium and 19.2% at EU level. The share of Walloon population living in predominantly rural areas is 26.6% and 35 % in intermediate areas[67]

Between 2015-2019, the population in rural areas has slightly increased by 1.7% but less rapidly than in urban areas (2.1%). This is a more positive trend than the EU-average where rural regions lost a small share of their population (-0.5%). In rural areas the elderly population is increasing (1.3% in five years) while the young population is decreasing (- 0.7%).[68]

The employment rate in rural areas in 2019 is slightly higher (68.5%) than the average employment rate in Belgium (65.3%) and has been increasing: by 2 percentage points from 2017 to 2019. The employment rate in rural areas in Belgium is very close to the EU-average (68.4%). The employment rate for women is lower (66.1%) than men (70.9%)[69]. The unemployment rate for the age group 15-74 in rural areas (4.9% of active population) is below the EU-28 (6.1%).[70]

In rural areas, the education of the population reaches a relatively high level. The levels of educational backgrounds in the Belgian employment (for male population aged 20-64) are the following: tertiary education represents 87.5%; upper and post-secondary 79% and lower than secondary 57.8%. The female educational background reaches respectively 82.5%, 64.7% and 42.8%.[71] Compared to the EU, the share of farmers that attained full agricultural training is larger in Belgium. The share of managers with basic agricultural training is slightly higher in Belgium compared to the level in the EU[72].

The total GDP per capita in Belgium is above the EU-average with about 20 index points between 1995 and 2016. Also, since 2003, the GDP per capita in predominantly rural areas is slightly above the GDP per capita in the EU[73].

The economy of predominantly rural regions mainly depends on the service or tertiary sector as main field of activity with a share of 75.6% of gross value added (GVA) in Belgium against 64.6% (EU-28) in 2015. By contrast, the primary sector in the rural regions of Belgium represents less than 2% of its total GVA, and is lower than the EU-28 average (4.2%)[74]. The secondary sector (which includes the food industry) in the predominantly rural regions of Belgium (22.5%) is below the EU-28 average (31.2%). The distribution of employment by sector is 3.2% in tourism, 2.5% in the food industry and 1.1% in agriculture[75].

The rural poverty rate in Belgium in 2017 (20.9%) is below the EU-average rural poverty rate (24.4%). It should be highlighted that the rural poverty rate is significantly higher in Wallonia (26.6%[76]).

The total poverty rate in Belgium is above the poverty rate in rural areas: people living cities tends to be more exposed to poverty than the rural population (30.1% against 20.9%)[77].

In predominantly rural areas, there are also substantial poverty issues: 15 to 20% of the poorest are highly represented[78].

In Belgium, there is a partial depopulation in the villages. Essential services such as medical care and shops are missing. Mobility is also a problem in some rural areas and the lack of public transport contributes to social exclusion. The weakness in basic services is more important in Wallonia (e.g. 6 out of 10 rural towns face a scarcity of general practitioners. CAP measures through support for medical houses and multifunctional spaces, help improve the quality of life. Through a balanced territorial rural development policy, Flanders addresses a variety of social issues that have arisen in its rural areas. Social inclusion and local development are supported through the bottom-up approach of LEADER. 12 Local Action Groups draw up and execute Local Development Strategies. The approach will cover roughly 70% of the rural population, creating around 80 jobs and improving living conditions.

The Walloon Region pays great attention to the development of rural areas with LEADER, which aims to cover one third of the rural population through local development strategies developed by 20 local action groups); 83 jobs will also be created in the supported projects. 21% of the rural population benefits from better services or infrastructure.

The Belgian forest accounts for a total of 23% of the territory and for 0.3% of Europe's forests[79]. Belgium is the 20th timber-producing country in Europe. Almost 79% of the Belgian forested area is in Wallonia for less than 21% in Flanders but the wood industries in Flanders are almost the double. Currently, the share of employment in the forestry sector is still marginal. The total output of forestry and connected secondary activities reached EUR 387 million in 2017. The total amount for EU-28 reached EUR 57 788.35 million [80].Regarding the tourism sector, aging tourist infrastructure and natural and historical heritage under threat are impediments to tourism development in Wallonia.

The turnover in the bio-economy was EUR 78 044 million in 2015 and the sectors are represented as follows: 59% for bio-based textiles, 13% for bio-based chemicals, pharmaceuticals, plastics and rubber (excl. biofuels) and 10% for agriculture.[81]

The bio and green economy for bio-based products, wood sector for bioenergy and the tourism sector are in development and present good opportunities for job creations. Still in Wallonia, the agri-food sector is also expanding and providing jobs. In both regions, interconnection in rural areas (suburbanisation) enables initiatives for short supply chains.

2.9 Improve the response of EU agriculture to societal demands on food and health, including safe, nutritious and sustainable food, as well as animal welfare

In its fight against antimicrobial resistance, Belgium has attained a significant reduction in the sales of antimicrobials by 37.2% in the period 2010-2018[82]. With 113.1 mg/PCU, the sales of antimicrobials are now below the EU average of 118 mg/PCU. However, sales are still higher when compared to neighbouring Member States, such as France (64.2 mg/PCU), the Netherlands (57.5 mg/PCU) or Germany (88.4 mg/PCU) with

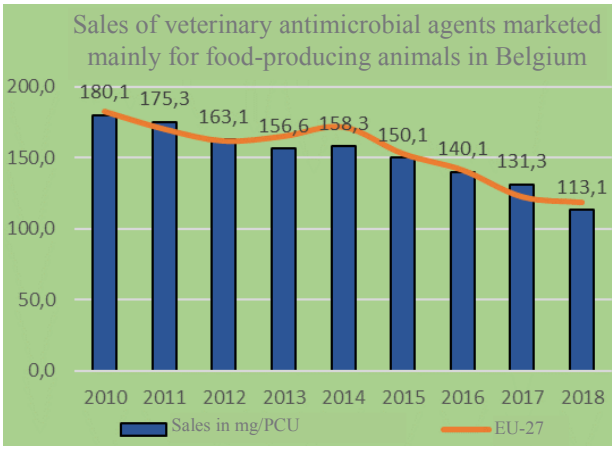
similar animal husbandry structures. In particular, in the broiler and veal sector, sales of antimicrobials need to further decrease. Awareness raising, data collection and reporting, target setting and provision of sufficient resources will foster a smooth transition for the implementation of the new legislation on veterinary medicinal products and will contribute effectively to the goal of reducing overall EU sales of antimicrobials for farmed animals and in aquaculture by 50% by 2030.

By 2018, Belgium had achieved a 28% decrease in the use and risk of pesticides, as expressed by the Harmonised Risk Indicator 1 (HRI1), compared to the 2011-2013 baseline. Although there was a slight increase to 2017, the HRI1 reduction is more substantial than the EU average of 17%[83]. Belgium still has deficiencies in enforcement to ensure implementation of integrated pest management by all professional users.

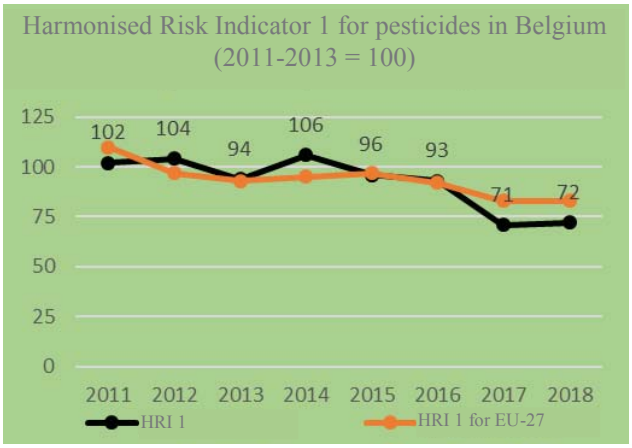
There is an increased social demand for food produced from animals kept under conditions, which respect their welfare. Poor housing conditions, such as insufficient space and enrichment material do not sufficiently discourage tail biting. The percentage of pigs reared with intact tails has barely changed since 2016 and although prohibited as a routine measure, the tail docking of pigs is therefore still common practice in Belgium[84]. In intensive farming models, the continuous pressure to increase milk production could be associated with poor welfare in dairy cows.

Health is an important component of the sustainable food system envisaged in the Farm to Fork Strategy. In that regard, Belgium reports an overweight rate of 48.7% and 14.7% for obesity as compared to EU figures of 52% and 14.9% respectively[85]. Efforts should focus on shifting towards healthy sustainable diets, in line with national recommendations, including balanced diets of plant-based foods such as wholegrains, legumes, fruit, vegetables and nuts complemented by appropriate amounts of animal-based foods as this would contribute to lower the incidence of chronic, non-communicable human disease, while reducing the impact of the food production system on the environment.

Regional policies[8687] have set ambitious targets to reduce food waste and food losses in the period 2015 to 2025 by at least 30%, thereby contributing to the Commission's commitment to halve per capita food waste measured at the retail and consumer levels by 2030 (SDG Target 12.3). Projects and initiatives to facilitate food redistribution and donations via food banks and charities are supported, as well as research into innovative technological solutions and awareness raising for changing consumer behaviour. Putting value on unavoidable food waste stemming from the important agri-food industry in Flanders plays an important role in that region. However, reducing waste in the primary sector and during food processing remains a challenge.



Source: DG AGRI after ESVAC, Tenth ESVAC Report (2020)[88]



Source: EUROSTAT [aei_hri][89]

2.10 Cross-cutting objective on knowledge, innovation and digitalisation

The functioning of the Agricultural Knowledge and Innovation Systems (AKIS)[90] [91]has been characterised as strong in Belgium, integrated in Flanders (where there are several networks of AKIS actors in which knowledge is shared and cooperation is agreed) but relatively fragmented in Wallonia.

Under the programming period 2014-2020, Belgium programmed 5% of their total rural development envelope (EAFRD + national contribution) for knowledge transfer and information actions, advisory services, farm management and farm relief services and Cooperation-EIP. This is higher than the EU-28 average of 3.7%[92].

The Flanders Rural Development Programme (RDP) aims to train 981 850 farmers and other rural businesses persons and to advise 998 beneficiaries by 2023[93]. The implementation progress of the RDP indicates that up to the beginning of 2019, the number of participants trained were 407 314[94], meaning that 41.48% of the 2023 target was reached. In 2014-2018, 26 demonstration projects received the last tranche of subsidies. The Wallonia RDP covers neither training nor advice to farmers.

In Belgium, 48% of the total farm managers attained basic or full agricultural training in 2016. Compared to the EU, the share of farmers that attained full agricultural training is larger in Belgium (21%) compared to the EU (9%). The share of managers with basic agricultural training is slightly higher in Belgium (27%) compared to the EU level (23%).[95]

Under the framework of the European Innovation Partnership, and up to 2023, Belgium (only Flanders) aims to support 53 cooperation projects (Operational groups, OG) for an overall budget of more than 598 978 EUR. On the 25 of August 2020, only 18 OG were launched and/ or finished. The themes covered by the OG are essentially pest/disease control and farming equipment and machinery. The OG involves 181 partners including farm holders (93), Research Institutes (41), other partners (19), SMEs (17) and Advisors (11)[96]. In Flanders, the budget per project is very low. In Wallonia, innovation support is missing and there is a complete absence of EIP OGs.

In Wallonia[97] there is a lack of links, exchanges and networking between advisory structures. In addition, use of digital tools is still low. Furthermore, the flow of research

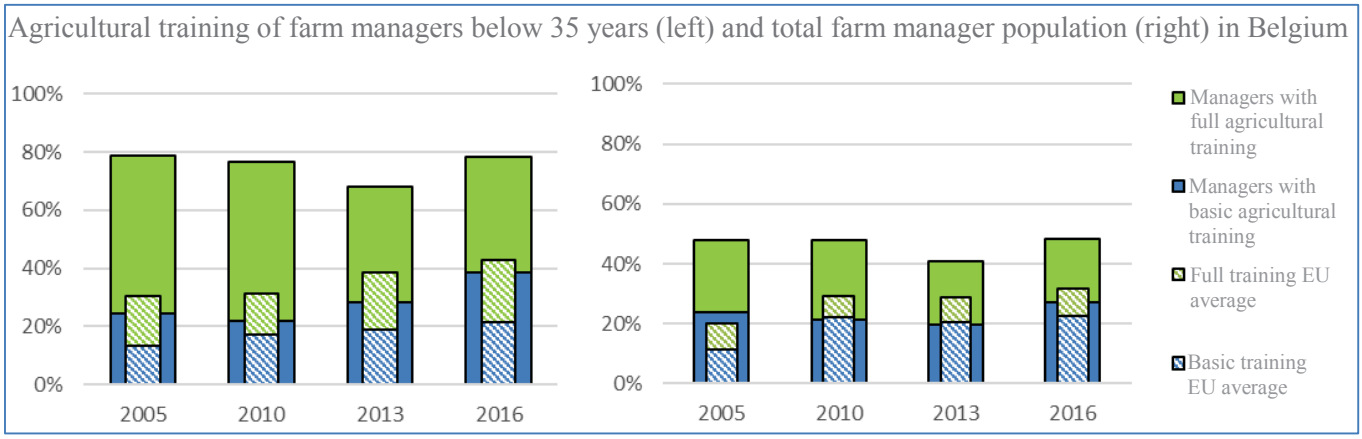
into practice can be improved making the results of research more feasible for the farmers and their implementation affordable. The producers are often insufficiently integrated into the AKIS and into research projects in Wallonia.

The National Rural Network (NRN)[98] of Belgium-Flanders is one of the NRNs that organised more than 50% of all events related to advisors and innovation in the EU-28. The NRN-Wallonia achieved the largest number of publications during the 2015-2017 period (more than 1 000 publications). This experience can be the basis for the future national CAP network to intensify such actions and play a key role in promoting synergies between the CAP and European Research Area (ERA). The best way to do so is to keep in close touch with the Horizon National Contact Point and to intensify the dissemination of the information on the EIP website. Moreover, when collecting and sharing information, the CAP can finance interventions that help to make use of up-to-date scientific information for agricultural practices, for instance through the CAP network and its knowledge platforms, and by setting up advisory back-offices where the latest knowledge and innovation is collected and shared with the field advisors.

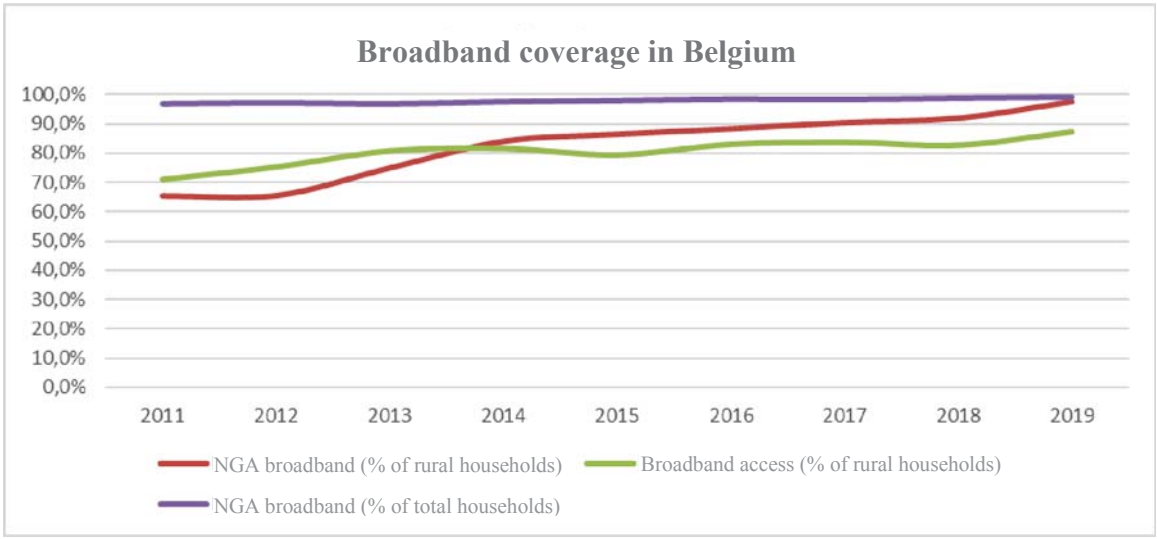
Belgium ranks 9th out of 28 EU Member States in the Digital Economy and Society Index (DESI) 2020[99]. Belgium shows a mixed performance in connectivity. While the country performs well in deploying fast and very high capacity networks, it is lagging behind in 5G readiness. Belgium, Cyprus and Malta are the leaders in NGA (Next Generation Access). Belgium is committed to advancing new digital technologies and investing strategically in digital technologies through EU-coordinated initiatives and programmes. In April 2019, Belgium also joined the new European initiatives on cooperation on advancing digitisation in cultural heritage and the digitalisation of agriculture and rural areas. For Belgium, 8 Digital Innovation Hubs in the field of agriculture, hunting and forestry have been registered.

Belgium has already made efforts to build digital capacities across sectors; the country should use this potential to continue the digital transition of the farming sector and rural areas, especially through tailored digital solutions addressing specific sectoral challenges, e.g. environmental ones or those of small farmers or target groups training efforts. Belgium-Flanders has opted for the use of satellite-based means to monitor CAP implementation[100]. Belgium Wallonia has not yet opted for the use of satellite-based means to monitor CAP implementation.

Belgian rural areas are globally well covered in terms of internet access: Broadband Next Generation Access (NGA) in rural areas is excellent with 97.5% of rural households covered in 2019, significantly above the EU average with 59.31%. 87% of rural households are covered with broadband access (compared to the EU average of 83%)[101].



Source: EUROSTAT [ef_m_farmang]



Source: European Commission, Digital Economy and Society Index (DESI) 2020.

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