



JRC CONFERENCE AND WORKSHOP REPORTS

EU commodity market development: Medium-term agricultural Outlook

*Proceedings of the
October 2019 workshop*

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2020



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EU Science Hub

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JRC119561

PDF ISBN 978-92-76-17160-7 doi:10.2760/8094

Luxembourg: Publications Office of the European Union, 2020

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How to cite this report: Pérez Domínguez, I., Gómez Barbero, M., Chatzopoulos, T., Elleby, C., Jensen, H., Fellmann, T. (2020). EU commodity market development: Medium-term agricultural Outlook, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-17160-7, doi:10.2760/8094, JRC119561.



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INTRODUCTION TO THE WORKSHOP



The EU outlook workshop is an integral part of the validation process of the 'EU Agricultural outlook for Markets and Income 2019-2930', report published by the European Commission in December 2019.



The workshop provides a forum for exchanges on preliminary projections to 2030 of EU agricultural commodity markets and for discussing in-depth the EU prospects in a global context.



The workshop was held on 23 and 24 October at the University Foundation in Brussels. The workshop was jointly organised by the Sustainable Resources Directorate of the European Commission's Joint Research Centre and the Directorate-General for Agriculture and Rural Development.



Participants in the workshop included high-level policymakers, modelling and market experts from various countries, stakeholders from the agri-food industry, and representatives from international organisations.



This report contains key messages of the presentations and discussions that took place at this workshop. Special attention is given to the sensitivity of the projections to uncertainties regarding macroeconomic conditions, specific policies, supply and demand drivers.



Three scenarios are discussed in this year's workshop: (1) a shift in EU diets from livestock to vegetable protein sources, (2) the potential market impacts of the 2019 African swine fever outbreak in China and (3) the transition of the EU milk sector to GM-free feeding sources.



Environmental footprint indicators for the EU (i.e. land, greenhouse gas emissions, water and nitrogen) are also included in this report.



Comments made during the workshop by stakeholders were taken into account to improve the final 2019-2030 agricultural market projections, published under <http://ec.europa.eu/agriculture/markets-and-prices/medium-term-outlook/>





BACKGROUND AND UNCERTAINTIES



A strengthening of the Euro vis-a-vis the USD is expected, mainly due to lower inflation in the EU than in the US. It is expected that the European Central Bank will focus more on containing inflation than the US Federal Reserve.



The CAP Reform is moving from cross-compliance into performance, including new priorities on combating climate change and promoting environmental goods (EU Green Deal).



Global real GDP growth is expected to slow down from 3.2% last year to 2.7% this year and 2.8% in 2030. Population growth is also projected to grow at a lower pace.



A 'Farm to Fork Strategy' aims at making EU agriculture and the food chain more sustainable.



Oil prices are expected to increase in the medium term due to excess-supply situation and a production plateau being reached for the US (figure 1).



Trade tensions are to be expected in the coming years (e.g. US-China trade war, WTO disputes, Russian ban). However, there is a clear engagement of the EU to open up the trade agenda, with new Free Trade Agreements expected (figure 2).



An abrupt exit of the UK from the EU could mean the facing out of direct payments by 2028, what could have severe consequences on grazing grown in UK least favoured areas.



No agreement on the BREXIT is included in this year's outlook. Therefore, the analysis presented includes the EU28 member states.



FIGURE 1
Price of Dated Brent crude oil



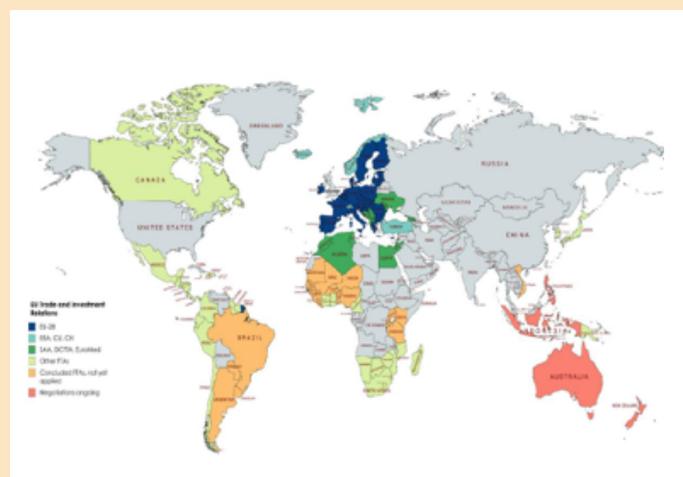
DOLLARS/BARREL
SOURCE: IHS MARKIT
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FIGURE 2
EU Trade Environment.
Recent and upcoming FTAs

CETA: trade under FTA remains low
Japan-EU in force since February 2019

Next in line

- Singapore (GIs guaranteed: Dec)
- Vietnam: early next year
- Mexico: middle of next year



Outlook: to be seen, opportunities or pressure, depending on sector

SOURCE: DG AGRICULTURE AND RURAL DEVELOPMENT



FOOD CONSUMPTION TRENDS



Origin, cost, food safety, taste and nutritional content are important factors for consumers when buying food items. However, ethics and beliefs are surprisingly less of a concern (below 20%). It might seem in contradiction with strong calls to reduce meat consumption to address animal welfare and climate change concerns, but it is coherent with the share of vegan and vegetarian young adults and the population preferring to avoid meat or fish in the EU.



Consumption of animal products is lower for younger generations, with a large share of vegan and vegetarian young adults aged between 16 and 24 (figure 1), what could have implications in the medium-term. Also diverse vegetarian consumption patterns are observed across member states (figure 2).



A scenario analysis carried out by the JRC showed that a diet shift towards more plant-based protein would certainly pose challenges to the EU meat, dairy and feed sectors within the EU.



Belief-driven buyers are in majority and will potentially increase.



Three main consumer drivers in 2030:

- Convenience: consumers search for convenient solutions in the short-term (i.e. satisfy everyday needs) and in the long-term (i.e. sustainability and health goals)
- Happiness: food stores increase their services to consumers, becoming social meeting points and places for new food experiences.
- Meaningfulness: consumers search for total transparency in the food chain, value added and climate/social positive rewards.

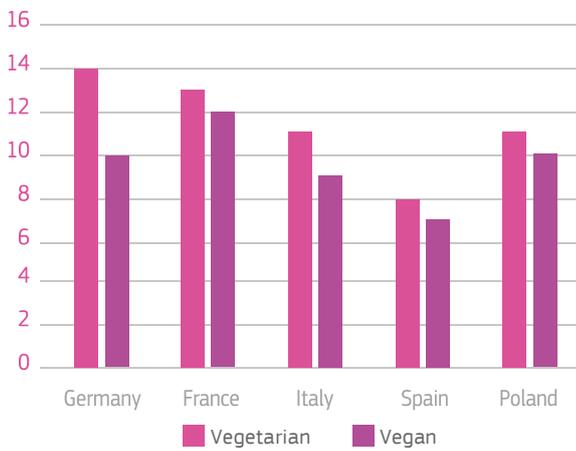


Observed consumer trends are sometimes conflicting with long-term sustainability objectives. However, healthy consumption is gaining more attraction, consumers are more conscious of ingredients and seeking cleaner products (figure 3). Partnerships along the supply chain are expected to unlock constraints.



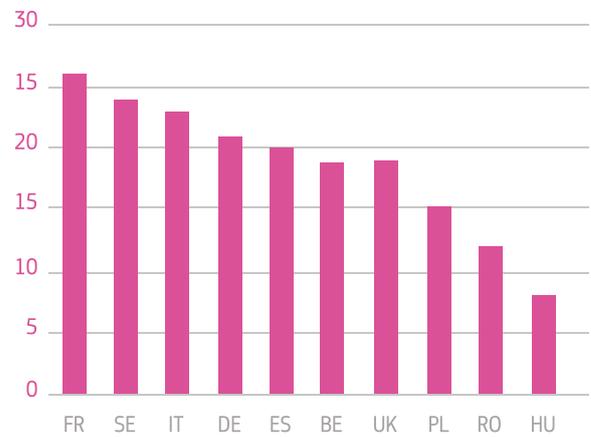
Animal products consumption. Lower for younger generations

FIGURE 1
Share of vegan and vegetarian young adults (16-24) in 2017 (%)



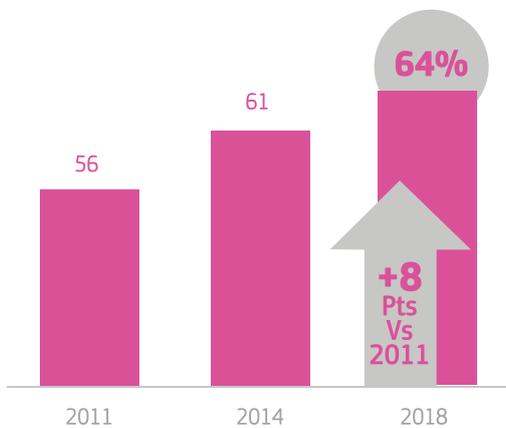
SOURCE: STATISTA

FIGURE 2
Share of respondents who prefer to avoid eating meat or fish in the EU in 2010 (%)



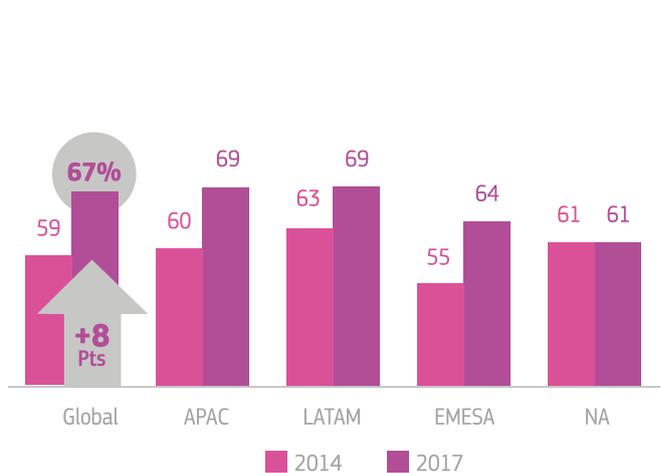
SOURCE: STATISTA

FIGURE 3
“Health and fitness is a personal value”
% agree globally



SOURCE: CARGILL

“Eat healthy, nutritious meals to maintain health”
% agree globally



MEAT MARKETS



Slow declining EU meat consumption despite climate change concerns and animal welfare issues. Increasing availability of meat alternatives and a shift to processed meat (68.7 kg/capita in 2030; -1.1 kg vs. 2018).



EU poultry production, exports (mainly to Africa and Asia) and imports (mainly from Brazil, Thailand and Ukraine) will grow due to strongly rising demand (figure 1).



EU beef production will continue to fall, following the declining cow herd, lower domestic demand, and lack of export competitiveness (figure 1). South America may be the EU's main supplier but the African Swine Fever (ASF) crisis will lead to competition between consumers in the EU and Asia.



Export growth of EU pigmeat to China already noticeable in key Member States and will remain in the short term (figure 1). Environmental regulations will limit the growth of production and exports at least in the short term.



EU meat prices will generally follow international market developments.



ASF expected to reduce China's pigmeat production at least by one third by the end of 2020 (figure 2), a loss equivalent to one-fifth of global production.



Market research outlets, including the panel participants, anticipate a sluggish recovery of China's production to pre-ASF levels that ranges from a few years to over a decade. Smaller farms will keep phasing out while vertically integrated larger units will persevere in the medium term.



A meat consumption gap may remain in the medium term despite substitution of pigmeat with poultry, red meats, and aquaculture products.



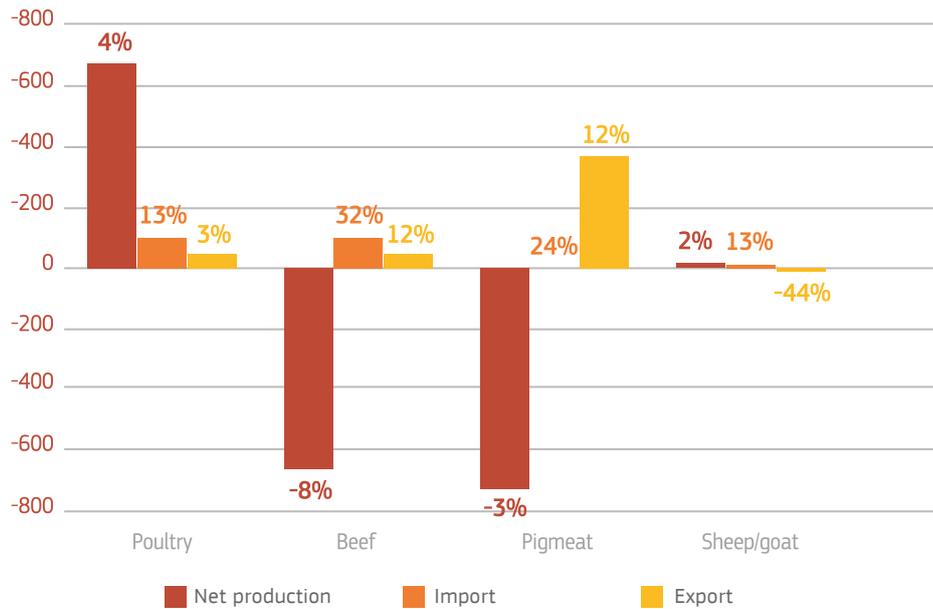
China's pigmeat imports, being led by the EU (esp. Spain), Brazil, the US, and Canada, will keep growing fast and break consecutive records within the next 2-3 years.



Transmission of higher pigmeat and lower feed prices to world markets are inevitable subject to China's national strategy for herd recovery.

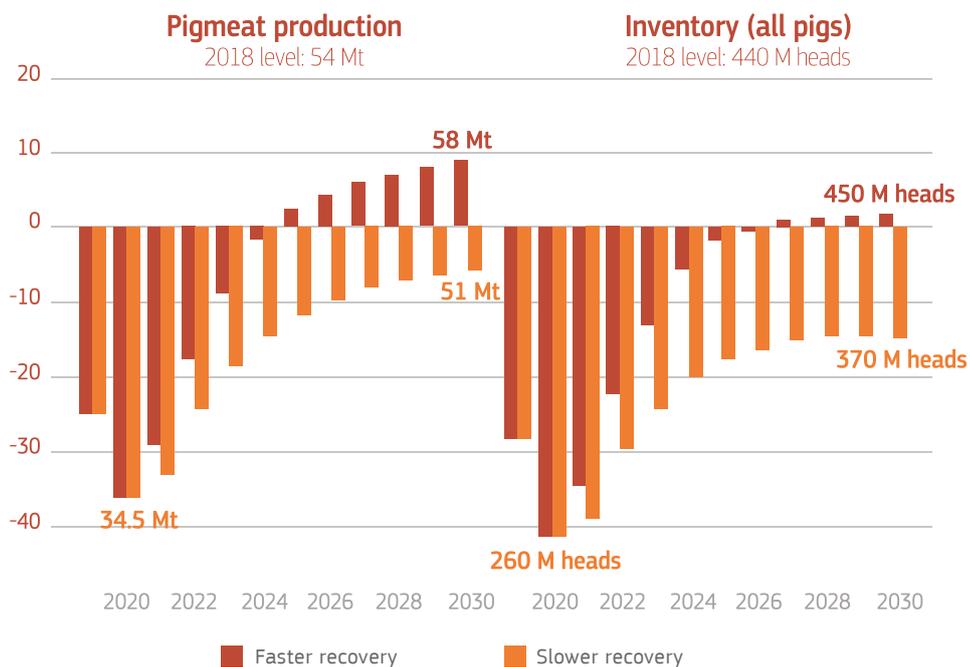


FIGURE 1
Change in EU supply and trade 2019-2030 (1000 tonnes)



SOURCE: DG AGRICULTURE AND RURAL DEVELOPMENT (PRELIMINARY BASELINE)

FIGURE 2
African Swine Fever scenarios (China): % change vs. 2018, 2019-2030



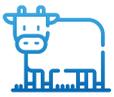
SOURCE: JRC (BASED ON OECD-FAO AGRICULTURAL OUTLOOK 2019-2028)



MILK AND DAIRY MARKETS



EU milk production is expected to increase driven by further yield growth (1.2% annually) while the number of cows could be further reduced by 1.4 million heads by 2030 (figure 1). This is positive in terms of environmental policy objectives.



The slowdown of yield growth compared to the previous decade (2008-2019), is affected by the increasing proportion of organically produced milk, which is expected to represent 7% of the EU milk production in 2030 (from 3% in 2016), as well as other production systems (e.g. pasture based).



Concerning demand, a slowdown of the dairy imports' growth is expected (as some countries are increasing their self-sufficiency). The main drivers for an increase of demand for EU products are expected to be population growth in Africa, income growth in Asia, changing consumers' preferences and habits (e.g. eating dairy), and the development of cooling systems and food supply chains in developing countries.



A scenario analysis carried out by the JRC showed that if 100% of EU milk is produced without GM feed by 2030, milk and beef prices will increase by 0.6 and 3.5%, and production will decrease by 0.5 and 1.2%, respectively.



EU prices are the lowest amongst the major exporters, which should boost further exports. EU dairy exports expected to increase by 1.4% annually until 2030.



EU domestic consumption of dairy products is affected by continued segmentation (see figure 2): less demand for fresh milk, more demand for convenience/snack products and perceived "healthier" options (e.g. high in protein, low in sugar).



Farm gate margins are expected to improve, which should drive milk production expansion globally.



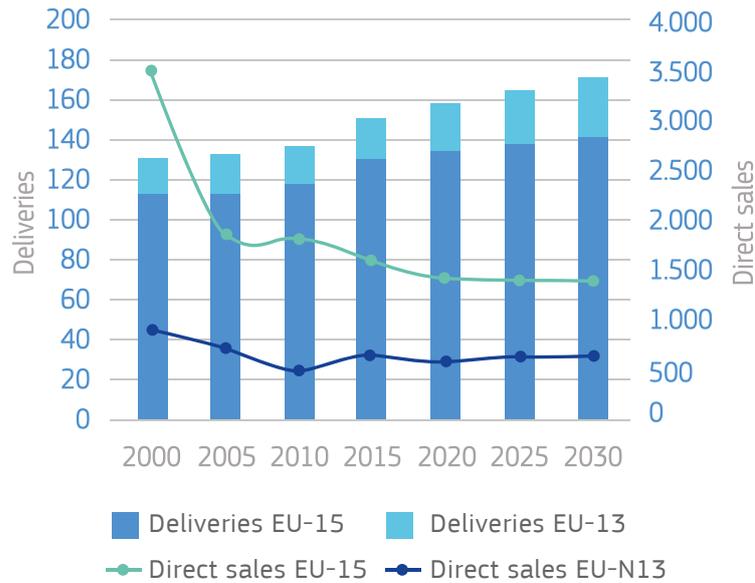
Increased environmental controls will likely constrain milk production growth particularly in Europe and Oceania.



The strong demand for vegetable fat filled powders is expected to continue although at a slower pace.



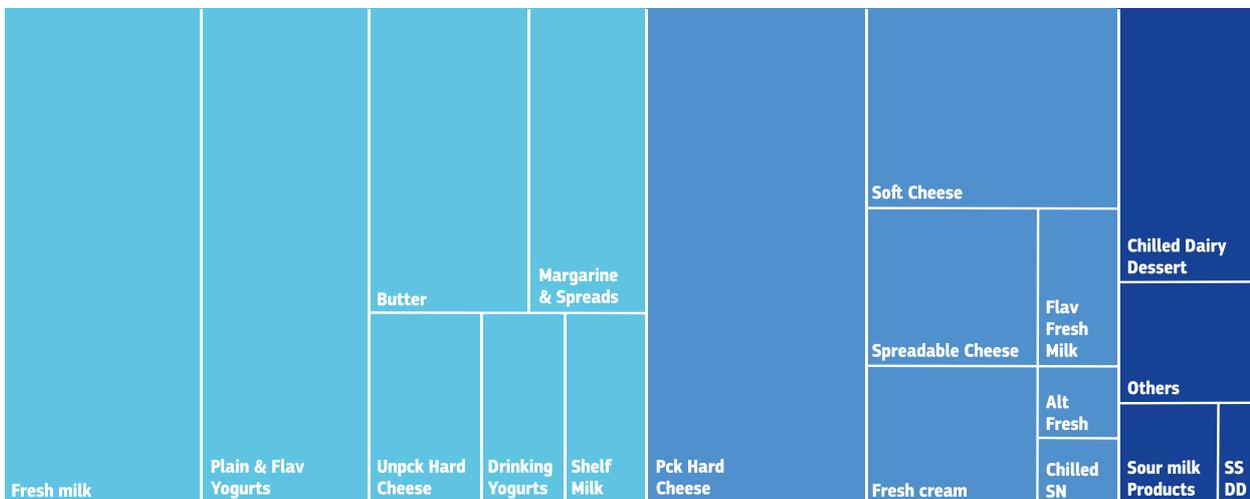
FIGURE 1
EU milk deliveries (million t) and direct sales (1000 t)



SOURCE: DG AGRICULTURE AND RURAL DEVELOPMENT (PRELIMINARY BASELINE)

FIGURE 2
The Result: Traditional Dairy Subcategories Getting Lower Share of Total Dairy

Estimates based on panel figures for UK and Germany and Europanel figures for other markets combined with Kantar Retail IQ company estimates & forecasts using Arla defined channel groupings



Alt fresh: dairy alternatives; Sn: snacks; SS DD: single serve dairy deserts



ENVIRONMENT AND CLIMATE CHANGE



Robust and easy to report nitrogen (N) indicators such as N use efficiency (NUE: output / input), N surplus (input – output) and N output (yield) can help assessing the environmental friendliness of agri environmental systems (figure 1).



It is important to consider the externalisation of N flows (i.e. N imports through feed & fodder and N exports through manure) when reporting N footprint indicators.



Intensive agricultural systems can become more environmentally friendly by adjusting their production inputs. This can be achieved through a better application of fertilisers, improved delivery equipment, incorporation of cover crops, etc.



In general, environmental policies are not limiting productivity of cropping systems but are increasing production costs, which affects economic profit and competitiveness.



The Paris climate agreement set the goal to keep the temperature rise to 1.5-2 °C compared to pre-industrial levels.



Agriculture can contribute to climate neutrality targets through available technological (supply side) and behavioural (demand side) options.



The EU Outlook projects a footprint of 0.9 t CO2e per capita per year for the EU by 2030 (nitrous oxide, methane and fertilizer production emissions included).



More than 80% of the agricultural N2O and CH4 emissions are caused by the consumption of animal products (figure 2)



Beyond greenhouse gas emissions, environmental sustainability needs to encompass multiple environmental threats: nitrogen, water, land, biodiversity, soil and marine resources pollution.



The EU Outlook indicates too high environmental footprints for GHG, nitrogen, water, and land in view of environmental ambitions.

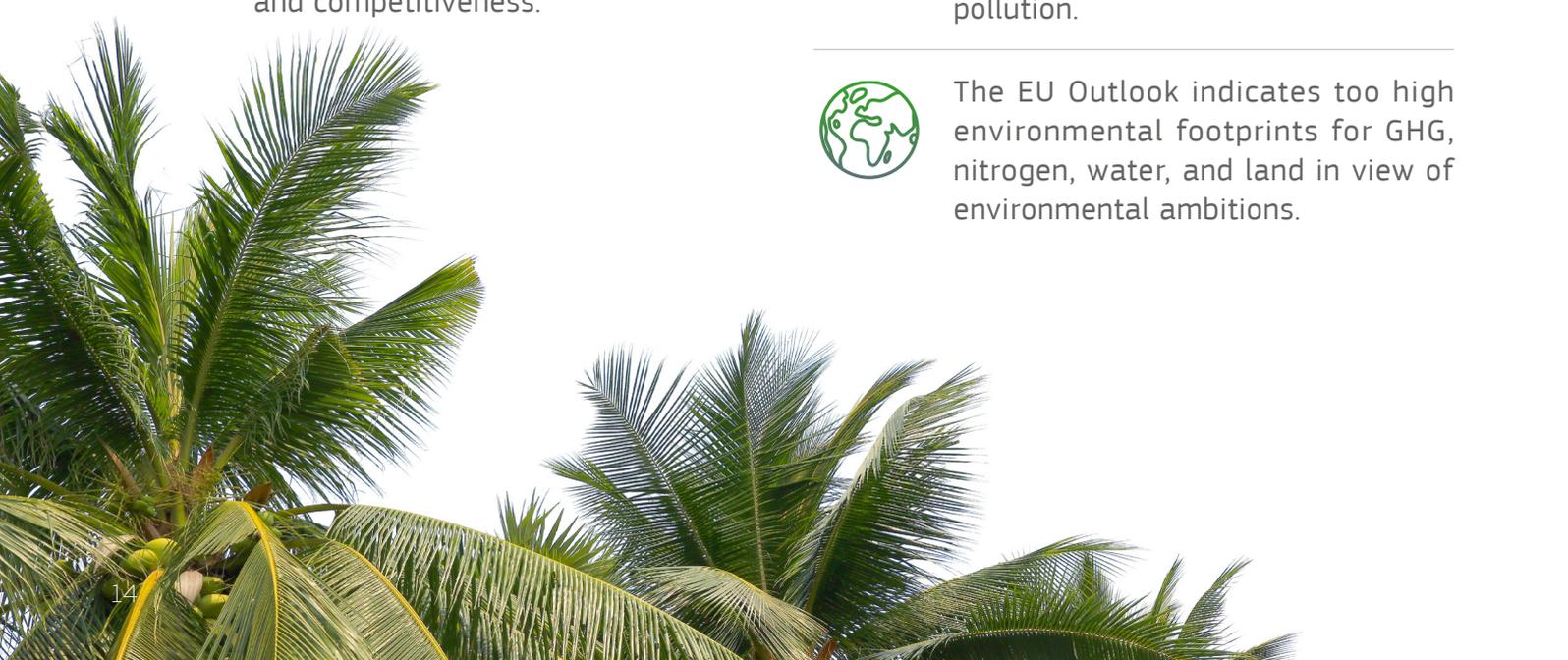
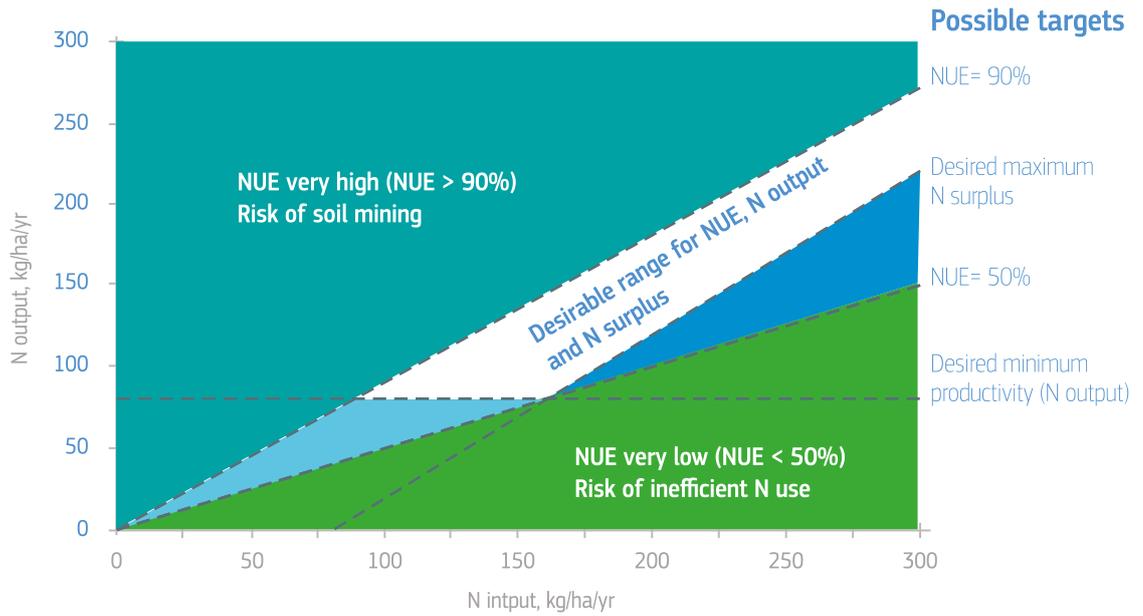
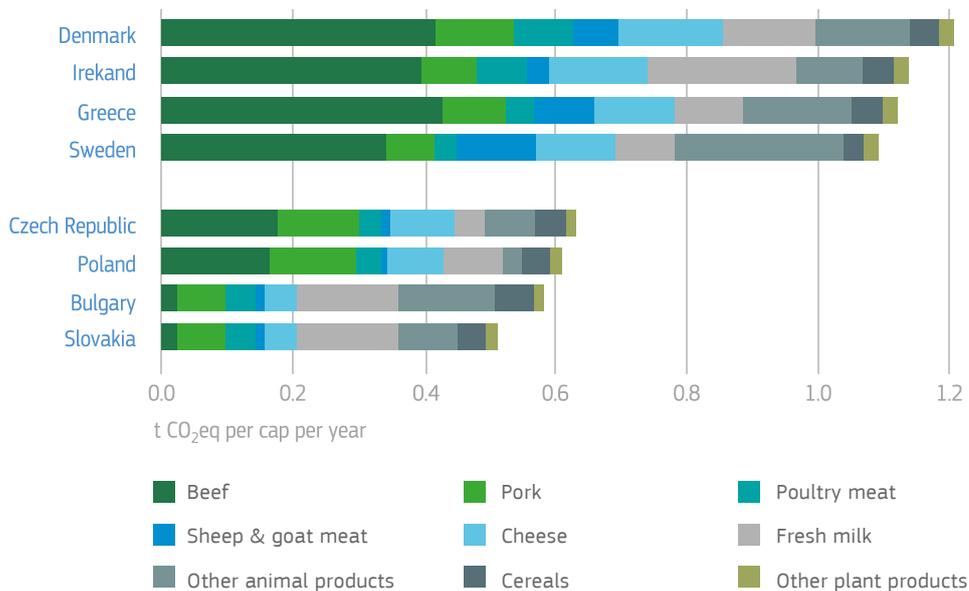


FIGURE 1
Nitrogen indicators



SOURCE: MIGUEL QUEMADA

FIGURE 2
CH₄ and N₂O emissions per capita and year



SOURCE: JRC



ARABLE CROPS, SUGAR AND BIOFUELS



Low increase in arable yields (figure 1) due to a tight regulatory environment, the increase of extreme weather events (both in periodicity and strength) and the emergence of alternative farming systems focusing more on quality. Slower outflow of land.



Technology appears as a big player, with some uncertainties on the data management side.



Increase of plant protein consumption within the EU, with pulses increasingly being used in feed rations.



Overall EU oilseeds crushing capacity expected to expand slightly, with a larger share of soya beans being crushed in the EU.



Limited area decrease for sweeteners. EU sugar producers aim at fulfilling domestic demand and have a lower exposure to global markets. Limited growth for isoglucose is foreseen and overall negative trend in sweetener consumption, although differentiated by Member States (figure 2)



Blending of biofuels increases up to 2020, driven by mandates and overall EU fuel consumption decreases. EU biofuel supply is constrained by the restriction on importing biofuels with a high risk of indirect land use change.



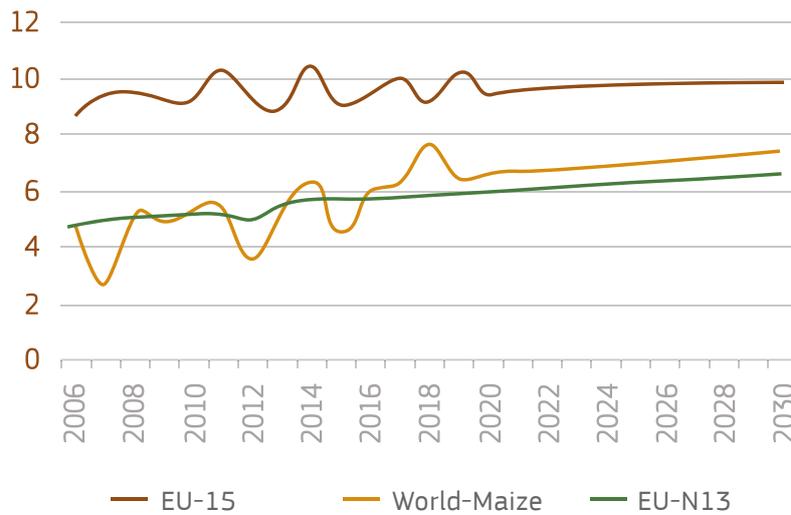
Current price volatility in grain markets is at its lowest level since 2000. However, a new form of market disruption has emerged with the US-China trade tensions, with unpredictable political-level messages that have a large impact on the economy (e.g., between 50-100 vessels are each day on their way to China, with at least 1-2 million USD at stake on each vessel).



EU sustainability requirements bring innovation in fertiliser management: improved application techniques, further uptake of best management practices and introduction of new products. Innovations for more sustainable food systems are also observed in fertiliser production.



FIGURE 1
Maize yield development 7t/ha)



SOURCE: DG AGRICULTURE AND RURAL DEVELOPMENT (PRELIMINARY BASELINE)

FIGURE 2
Sweetener Consumption at MS-level
Change in Consumption, avg. 2017-19 vs 2030, 1000 tonnes of white sugar equivalents (wse) and %



SOURCE: PRESENTATION BY MARLEN HASS. SWEETENER MARKETS DEVELOPMENT AT MS-LEVEL APPLICATION OF AGMEMOD



INCOME



Total EU value of production will increase in the medium-term (figure 1) due to higher prices, partly due to higher environmental constraints and rising weather and global trade uncertainties.



Feed costs and oil prices (including fertiliser use) will keep rising, as well as intermediate costs (e.g., plant products, veterinary and advisory services).



The decline in the EU farmers' labour force will slow down to reach 8 million farmers in 2030 (9.2 million in 2018). The loss will be stronger in the EU-N13 compared to the EU-15 due to further structural changes in the sector. The decline in the number of farms will continue due to the higher concentration, specialisation and mechanisation in the EU-N13, and land consolidation and farm-size growth across the EU.



Average farm income will benefit from higher commodity prices (1.2% in 2030) despite a drop in the value of production of bovine and pigmeat production. The gap between the EU-N13 and the EU-15 will be reduced.



Total factor productivity (TFP) in the agricultural sector has grown stronger in the EU-N13, partly due to steeper reduction of farm labour.



On-farm innovation and agglomeration are some of the main factors that will drive TFP developments in EU farms in the next decade.



Significant synergies and trade-offs between cohesion and rural policies can be highlighted depending on the specific regional characteristics (e.g., specialisation) (figure 2).



Productivity could grow through inter-sectoral linkages and by linking innovation with sustainability, fostering economic incentives.



Agricultural policy could better target risk management and structural adjustments. Long run investments, such as infrastructure, education, and research and extension services are also crucial for certain areas.

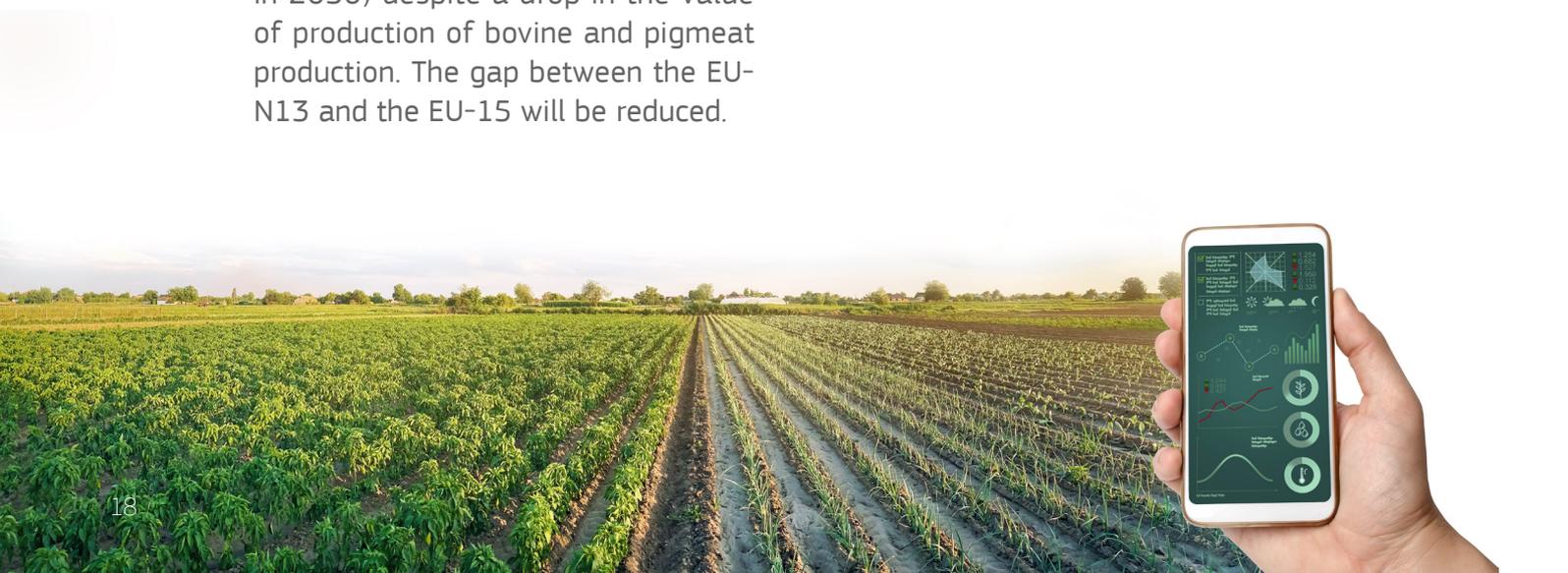
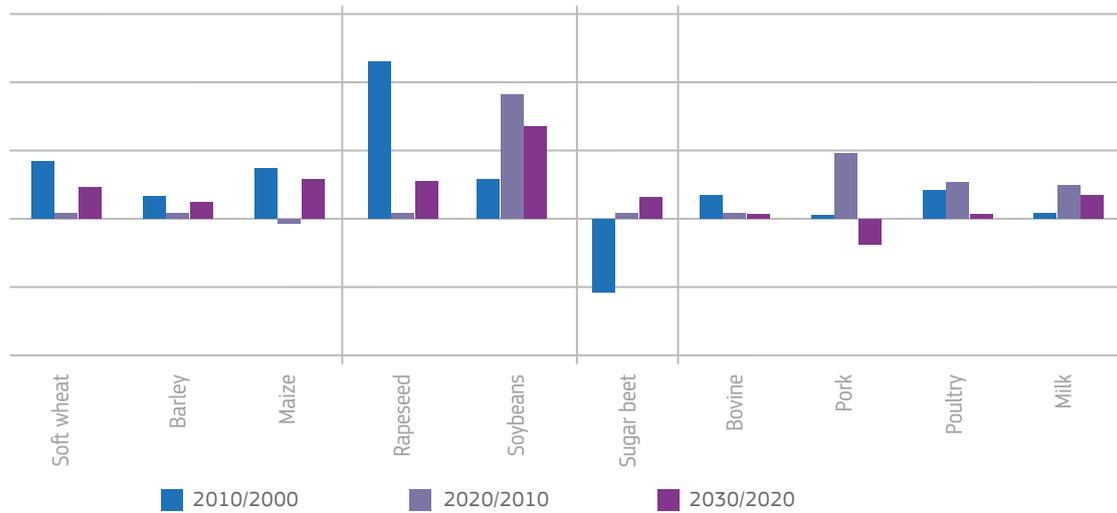


FIGURE 1
Annual growth of value of selected commodities



SOURCE: DG AGRICULTURE AND RURAL DEVELOPMENT (PRELIMINARY BASELINE)

FIGURE 2
Significant synergy and trade off between cohesion and rural policies

Cohesion policy	Rural policy
Synergies between	
Business support	
Social infrastructure	↔ Subsidies on dairying SE616
Transport infrastructure	
Other	↔ Other crops subsidies SE613
Research and technology	↔ Other subsidies SE699
Trades offs between	
Human resources	↔ Single farm payment SE631
IT infrastructure and services	↔ Compensatory payments/area payments SE611
Social infrastructure	↔ Other subsidies SE699
Urban and rural regeneration	↔ Subsidies on investments SE406
	↔ Set aside premiums SE612
	↔ Subsidies other cattle SE617
Other	↔ Additional aid SE640

SOURCE: PAWEŁ CHMIELIŃSKI ('STRUCTURAL CHANGES AND AGRICULTURAL INCOME')



WINE MARKETS



Environmental concerns are an important demand factor, sustainable wines might become a global trend.



Increasingly volatile EU production due to climate change. The notion of “normal” harvest conditions seems obsolete.



Variations in yearly production volumes can destabilise the capacity of the EU to supply external markets.



Challenges: declining consumption due to health concerns and stronger restrictions on alcohol advertising, lower yields due to climate change, need to adapt to changing tastes.



The current structure of the EU wine sector might make it more resilient to climate change and changing preferences. The capacity to innovate and adapt is high.



Decreasing consumption share of red wine in all member states, increasing share of white (except Italy), sparkling (Italy, United Kingdom) and rosé (France, Germany).



Increasing global demand, but strong competition. Exports expected to grow by 1% annually until 2030, with further focus on quality (figure 1).



Climate change may push wine production towards northern Europe.



Adaptation options/possibilities to climate change depend on the time horizon (figure 2).



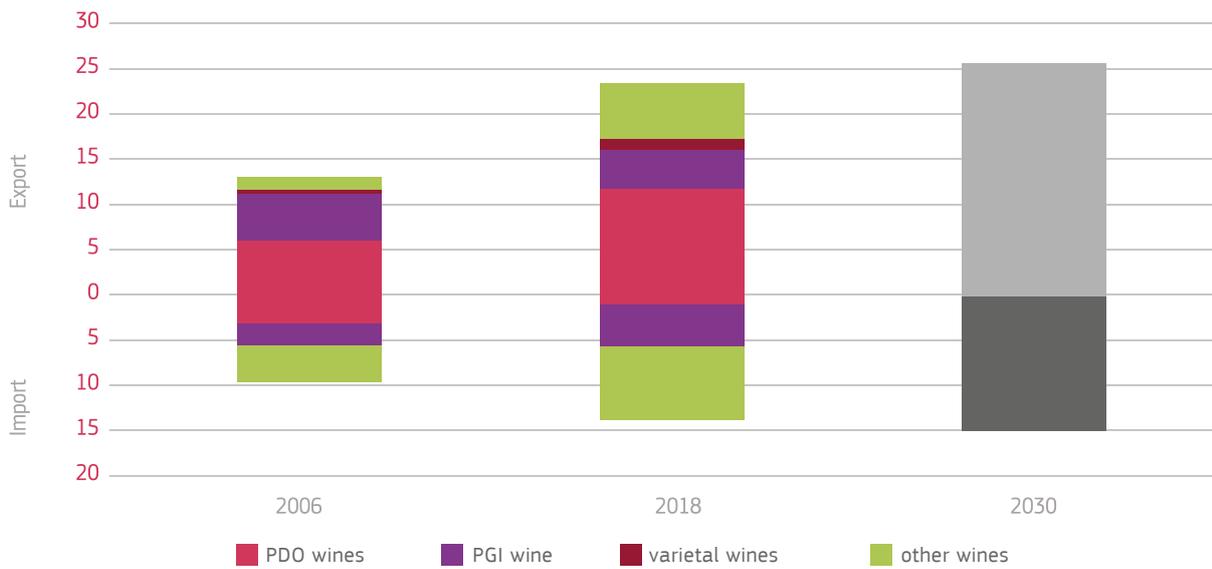
New EU trade agreements will create opportunities for wine exports.



Online wine sales increasing in popularity, especially in China.

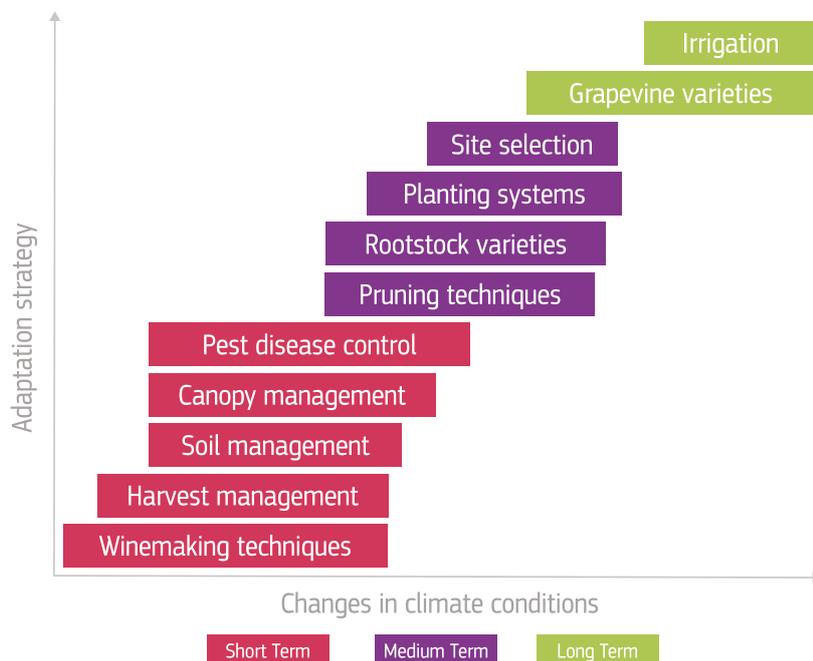


FIGURE 1
 EU exports, imports and trade balance (million hl)



SOURCE: DG AGRICULTURE AND RURAL DEVELOPMENT (PRELIMINARY BASELINE)

FIGURE 2
 Potential adaptation measures to climate change



SOURCE: WINEMONITOR.COM



OLIVE OIL MARKETS



Annual olive oil production is expected to increase by 1.2% in 2018-2030, driven by an annual yield growth of 1.4% (figure 1). The area increase is expected to slow down.



Main drivers of market developments: climate adaptation (e.g. more irrigation) and intensification of production, divergent consumption trends in the EU (decline in the main producing countries vs. rest of the EU), growing export demand.



Production (driven by yields) is becoming increasingly volatile on top of natural interannual alternance of olive trees due to weather conditions and occurrence of pests.



Production systems are adapting by increasing water efficiency in irrigation systems and mechanisation of production



Growth in the area of olive production is expected to slow down due to: large stocks, trade barriers (US tariffs on Spanish bottled olive oil = high value added product), and high yields, as well as investments in other permanent crops such as nuts (i.e. almonds, pistachio).



Demand for organic and environmentally friendly products will continue increasing. Integrated production systems are a good option to this respect.



Price drop due to intensive production, now the focus is on increasing consumption through promotion and education (see figure 2).



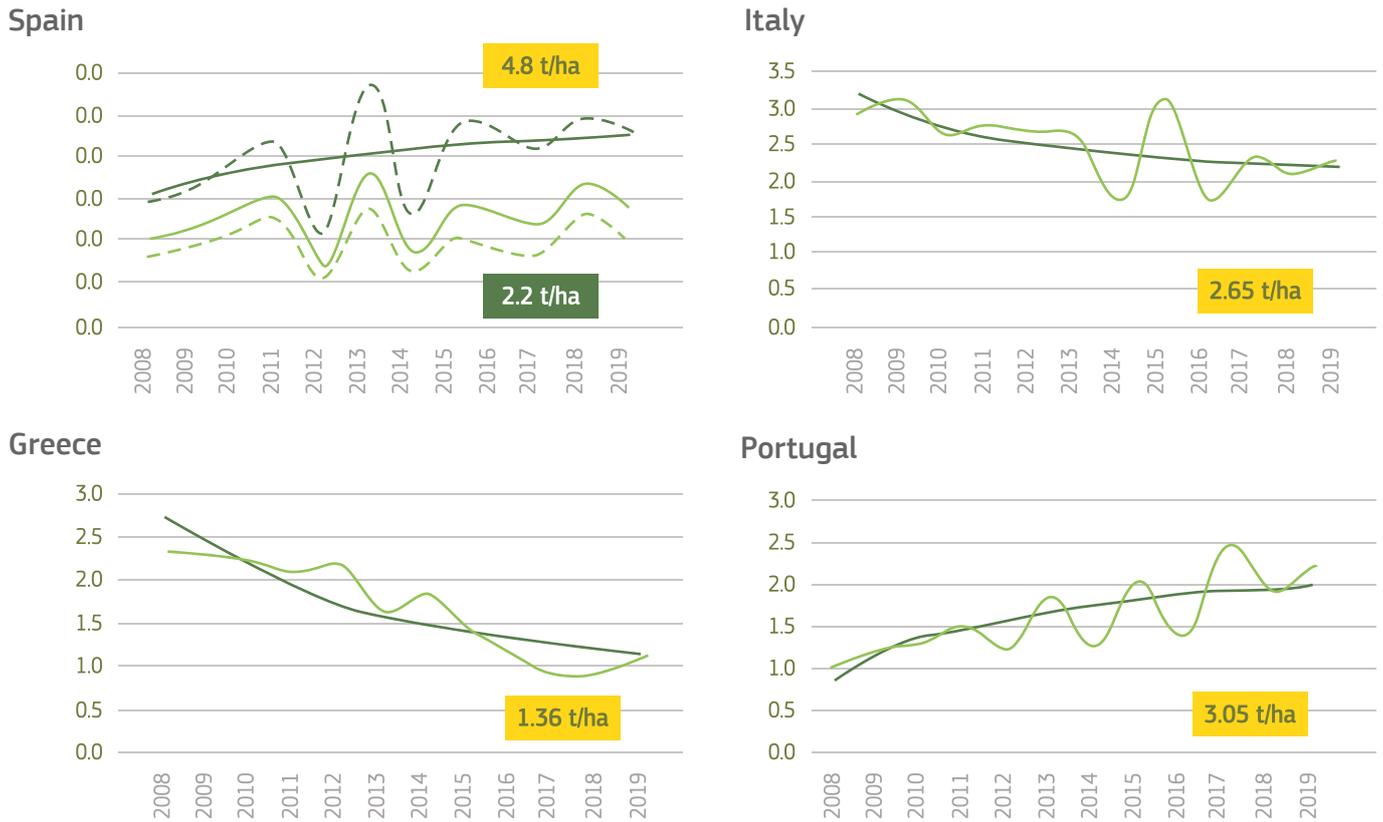
The *Xylella phastidiosa* disease remains a big problem for the Italian production capacity.



Olive oil production is generally considered sustainable but further improvements can be made (e.g. green cover, irrigation).



FIGURE 1
Olive oil yield developments for selected member states



SOURCE: DG AGRICULTURE AND RURAL DEVELOPMENT, BASED ON EUROSTAT, MS NOTIFICATION AND PRELIMINARY BASELINE

FIGURE 2
Promotion and education of olive oil consumption

Promotion & Communication

- Promoting the values for health
- Respect the tradition of new countries
- Educating the consumer to choose extra virgin olive oil compared to other vegetables oil
- Promoting education in school with OCM program as it currently exists for fruit or milk and derivatives

SOURCE: PASQUALE SCIVITTARO. ITALIA OLIVICOLA. CONSORZIO NAZIONALE

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doi:10.2760/8094
ISBN 978-92-76-17160-7