

# THINK 2030

Science-policy  
solutions for a more  
sustainable Europe

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## Feeding Europe: Agriculture and sustainable food systems

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**THINK  
2030**

Science-policy solutions for  
a more sustainable Europe

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# Contents

**EXECUTIVE SUMMARY ..... i**

**1 European Food and Agriculture ..... 1**

1.1 EU agriculture sustainability challenges impact our food system ..... 1

**2 Rationale for change ..... 5**

2.1 The importance of change ..... 5

2.2 Supporting change ..... 5

**3 Making a positive contribution to the future of Europe ..... 8**

3.1 Coherence in policy ..... 8

3.2 A new contract between farmers and society ..... 9

3.3 Governance and citizens’ participation- inclusiveness, transparency & accountability ..... 9

3.4 Towards sustainable consumption and production ..... 10

**4 References ..... 12**

# EXECUTIVE SUMMARY

The strategic importance of the agriculture sector in the EU and its potential to provide services to society is starkly contrasted by the impact that many current agricultural practices have on the environment, health and climate, as well as on the long-term resilience and competitiveness of the sector itself. This sector can and must contribute positively to the future of Europe. Achieving this requires a major transformation of the EU food and agriculture sector, particularly livestock, with efforts needed to bring about changes in both production and consumption of agricultural commodities. It equally requires the political will and courage to enable rapid and sustained change.

Agriculture policy choices have contributed to the challenges faced, but perhaps more significant is that these impacts do not directly and immediately have a bearing on production and trade decisions either as an economic cost or biophysical limitation. Exacerbating this issue is the recurrent disconnect between production and consumption in policy. A major transformation of the EU food and agriculture sector is therefore necessary and involves the development of coherent and synergistic policies; a new contract between farmers and society; appropriate governance; alongside new approaches to addressing consumption as well as production.

**Greater coherence** requires a new ex ante coherence mechanism with wider scope than what exists currently, such as a **high-level food & agriculture sustainability advisory board** to assess the coherence of new or amended EU law that affect our food system. Agriculture policy is a tool to achieve Europe's ambitions, not an end in and of itself, therefore **alignment of agriculture plans to the EU's long-term strategies is essential**, such as those to reduce greenhouse gas emissions, and the new bioeconomy strategy. This will require broader consideration of the end use of biomass produced from agriculture, including food, material and energy uses. **Removing all environmental harmful subsidies under the future CAP** should also be a priority action.

**A new contract between farmers and society** should be based on a full transition towards rewarding farmers for the public goods, not just simple compliance with EU legislation. This requires **a transition away from CAP direct support towards multi-annual and results-based payments** combined with knowledge transfer, advice and innovation. The potential subsidiarity given to Member States remains a threat to such ambition, therefore **strong accountability and robust monitoring** need to be put in place in addition to effective transparency rules around national CAP strategic plans.

**Appropriate governance** in food and farming policies would tackle society's growing concern around food and its impact on health environment and animal welfare. The right bodies and tools should be put in place at both European and national level to **allow citizens interests to be actively reflected in future policy making and monitoring**. Transparency in decision making is essential to this process.

**New approaches** to address the gap between the retail price of food where the true cost of sustainability is internalised in the price of food commodities and products. Strategic planning to tackle both food production and consumption in a sustainable way is a prerequisite to social justice and environmental sustainability. This would serve to **rebalance the cost of food where sustainable products becomes cheaper and more convenient to consumers, whilst unsustainable ones more expensive**. Determining the safe operating space for livestock production and consumption is also a priority. Fiscal measures need to be allied with **greater education about our food and farming decisions at all ages and in all sectors of society, particularly through school curriculum**.



# 1 European Food and Agriculture

Food and farming is a vital, unique and strategic sector for supporting a sustainable Europe. While its primary goal is to produce the food we eat it also plays a crucial role in sustaining rural livelihoods as well as preserving the diversity of cultural landscapes and the wildlife associated with them. Over three quarters of the EU's territory is rural, just under half of this is farm land and nearly a third forest, and is home to around half the population. Europe has 12 million farmers operating in a diversity of contexts and farm sizes and through the food chain employs more than 47 million people. The agri-food sector is also part of an increasingly globalised food system with the EU representing the largest global exporter and importer of agri-food products - valued at €275 billion in 2017 (€138 billion of exports and €137 billion of imports)<sup>1</sup>. The significant growth of trade between the EU and third countries over the last decade<sup>2</sup> is a strong reminder that agriculture, sustainability and healthy diets are not just a challenge for Europe, but how we address these issues has global consequences.

This discussion paper focuses on the contribution of agricultural land management to enable a transition towards a more sustainable food system. This involves thinking about both production and consumption, and the links between them. The concept of the food environment, for instance, considers that our choices as consumers are influenced by socio-cultural patterns and physical and economic factors, for example, how food is marketed and made available as well as policy drivers such as food taxation or production subsidies. Making informed choices over sustainable products can be challenging to the average consumer, as individual choices are often determined by structural conditions, such as price and convenience. Developments in commodity markets and their impact on producers are also particularly intertwined with these decisions (Galli et al, 2018).

Sustainability is a term common to debates about the future of EU policies, yet is often used or interpreted differently. Here we use sustainability to mean the continued and long term preservation and enhancement of the EU's environment and natural resources, to underpin the provision of ecosystem goods and services, including our production systems, and thus improve social vitality.

## 1.1 EU agriculture sustainability challenges impact our food system

European agriculture can be a provider of key economic, environmental and socio cultural benefits on which society and farming itself depends, yet many of the technical and structural developments in the agri-food sector have had a detrimental impact on the environment and social achievements of the sector. Over time, these trends have put pressure on the natural environment, increasing the footprint of production and contributing to us going beyond our planetary boundaries (Rockstrom et al., 2009 and Steffen et al. 2015). These issues are exacerbated by the fact that 88 million tonnes of food are wasted annually in the EU (the majority from households and processing), with associated costs estimated at €143 billion<sup>3</sup>. Given our dependency on a healthy natural environment for ensuring viable food production, these trends alone have serious implications for the long-term resilience our food system based on EU production (Box 1). Of course, Europe is a significant importer of food and agricultural commodities, with the potential to lead to unsustainable practices in third countries, as well as the opportunity to export good practice through new sustainability standards.

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<sup>1</sup> [http://ec.europa.eu/eurostat/statistics-explained/index.php/Extra-EU\\_trade\\_in\\_agricultural\\_goods#Agricultural\\_products:\\_3\\_main\\_groups](http://ec.europa.eu/eurostat/statistics-explained/index.php/Extra-EU_trade_in_agricultural_goods#Agricultural_products:_3_main_groups)

<sup>2</sup> [http://ec.europa.eu/eurostat/statistics-explained/index.php/Extra-EU\\_trade\\_in\\_agricultural\\_goods#EU\\_trade\\_in\\_agricultural\\_products:\\_slight\\_deficit](http://ec.europa.eu/eurostat/statistics-explained/index.php/Extra-EU_trade_in_agricultural_goods#EU_trade_in_agricultural_products:_slight_deficit)

<sup>3</sup> <http://www.eu-fusions.org/phocadownload/Publications/Estimates%20of%20European%20food%20waste%20levels.pdf>  
According to the FAO food waste has a global carbon footprint of about 8% of all human GHG emissions

### *Box 1: Agricultural production and the environment and climate challenges within the EU*

**Climate change** poses a major challenge to agriculture (water availability, overall temperature variations and the presence of pests and disease (McArthur, 2016; Kovats et al, 2014)) yet the sector itself is also a major contributor to greenhouse gas (GHG) emissions, largely from non-CO<sub>2</sub> GHGs (N<sub>2</sub>O and CH<sub>4</sub>). Reductions in emissions have slowed over the past decade and since 2012 emissions have started to rise again (Hart et al., 2017). According to projections based on the current levels of animal products consumption, agricultural non-CO<sub>2</sub> emissions are expected to triple their current share and account for a third of total EU emissions in 2050 (Matthews, 2015). Efforts to reduce emissions need to take account of both production and consumption to ensure that reductions in the EU do not simply lead to imports from third countries, leading to emission leakage.

**Biodiversity** and the EU's landscapes are profoundly affected by agriculture. Agriculture is a key driver of biodiversity loss in the EU (EEA, 2015; Beketov et al., 2013; Geiger et al. 2010). Intensification and the abandonment of low-intensity biodiversity-rich farming systems are among the main agriculture-related pressures affecting species (EEA, 2013; (Underwood et al., 2013b, Underwood et al., 2013a). Eutrophication, caused by nitrogen leaching from livestock farms and use of synthetic fertilisers, constitutes a major reason behind biodiversity loss (and GHG emissions) both in terrestrial and aquatic ecosystems (Ceulemans et al, 2013; Dise, 2011; EEA, 2010c) and requires further efforts for stabilisation and reduction of emissions (European Environment Agency, 2017a). The loss of pollinators, including bees, is of particular concern from a food security point of view as pollinator-dependent crops play an important role in our diets. Agrobiodiversity is also one of the big challenges of our time, according to the Food and Agricultural Organisation (FAO), we have lost 3/4 of the genetic diversity of plants during the 20th century and today human diet is based primarily on 12 plant species and 14 animal species. Greater efforts need to be made to maintaining and enhancing biodiversity (European Commission, 2015). Ongoing loss of biodiversity and genetic diversity will limit the ability of the agriculture sector to adapt to changing climate (Mijatović et al., 2013)

**Soil:** Inappropriate farming may lead to erosion, loss of organic matter leading to poor structure, and pollution by pesticides and heavy metals. According to recent data around 12.7 % of arable land in EU is estimated to suffer from moderate to high erosion. This equates to an area of 140 373 km<sup>2</sup> (more than entire surface area of Greece).

**Water:** Indicators relating to water quality focus on nutrient load, specifically nitrogen and phosphorus, and pesticide contamination. Although the average concentration of nitrate in EU water bodies is below that mandated by the Water Framework Directive (WFD), many rivers in particular are in intermediate or poor state. Water quality is affected by nutrients from fertilisers and livestock. Indicators for nitrogen and phosphorus surplus show the difference between the fertiliser used and that needed by the crops actually grown and thus the amount that can potentially lead to pollution of water bodies. The Commission recently reported (European Commission, 2018) that both nitrogen and phosphate balance slightly increased at EU-28 level from 31.8 to 32.5kg N/ha/year and from 1.8 to 2.0 kg P/ha/year respectively. The Commission concluded that there were more potential losses to the environment than in the previous period. Beyond water quality, scarcity is also an issue. Irrigation of crops constitutes a considerable use of water, especially in southern Member States where irrigation accounts for almost all agricultural water use, and over-abstraction remains an issue. In the spring of 2014, agriculture used 66 % of the total water used in Europe. Around 80 % of total water abstraction for agriculture occurred in the Mediterranean region<sup>4</sup>.

**Air:** Linked to GHG emissions, air quality due to ammonia emissions from livestock farming (95% of ammonia the EU releases is produced by animal farms) poses serious threats to human health and additional measures in the agriculture sector will be needed to meet the relevant objectives of the 7<sup>th</sup> Environment Action Programme<sup>5</sup> (European Environment Agency, 2017b). While emissions of most air pollutants remain on a downward trend, ammonia emissions continued to rise in 2016.

<sup>4</sup> <https://www.eea.europa.eu/data-and-maps/indicators/use-of-freshwater-resources-2/assessment-2>

<sup>5</sup> **THINK** 2030 areas of critical load exceedance with respect to eutrophication by 43% from 2000 levels

Structural changes in the farming sector have consequences for the long-term viability of farming enterprises. Over the last few decades the sector has seen significant consolidation with the number of farms falling from 13.5 to 10.8 million between 2007 and 2013. This period has also been accompanied by a significant decline in the total EU agricultural workforce. Greater concentration across the agri-food industry has also led to farmers shifting towards more specialised export-orientated systems or forcing them to exit the industry or diversify<sup>6</sup>. These changes have not necessarily led to an increase in farm incomes with the expansion of the total value added within the food chain largely concentrated in the processing and retail stages, whereas the agricultural sector's share has not increased to the same extent. Small and medium sized farms are seen to be particularly affected by Unfair Trading Practices<sup>7</sup> (UTPs) and lack of bargaining power of other actors in the Food Chain (AMTF, 2016). The EU agricultural workforce is expected to decrease in size by approximately 3.2% per year between 2017 and 2030 (Eurostat, 2010; EC, 2018). Total EU agricultural income is also expected to decrease significantly during this period, with agricultural income per worker only increasing slightly as a result of further structural change and people exiting the sector (EC, 2018).

At the same time the EU agriculture sector is represented by a prominently older age group (56% of farmers were 55 years or older in 2013) which presents challenges for long-term generational renewal. Yet access to land is one of the most significant barriers for new and younger entrants due to limited high quality land and prices. Other problems include price vulnerability, and poor access to finance and training (Zagata et al., 2017). Implementing more sustainable farming solutions, for instance, are extremely knowledge intensive, however agricultural knowledge and information systems remain largely top-down in nature and under resourced. The concept of innovation is often narrowly aligned to technological progress and commercialisation rather than considering the wider context including farmer-led as well as social innovation (Moschitz et al., 2014). In addition, research and innovation funding in EU agriculture is relatively low and threatens Europe's ability to remain globally competitive and to address the myriad challenges in the sector.

Finally, the connection between sustainable farming and land management and human health have received greater attention in recent years in terms of both direct and indirect effects. Emissions of pollutants, food borne and zoonotic diseases as well as negative impacts linked to unhealthy diets and poor nutrition are becoming increasingly acknowledged. For instance, the overuse of antibiotics in EU livestock production<sup>8</sup> remains a major concern, linked to antimicrobial resistance in humans that causes around 25,000 deaths in the EU each year (Harvey, 2016, EFSA, 2017) (Box 2). Exposure to pesticides is also a growing source of health concerns that can be linked to a range of serious illnesses and diseases in humans, from respiratory problems to cancer (WHO, 1990). The European Food Safety Authority (EFSA) recently advised that the maximum levels of certain types of pesticide residues that can be present in foods intended for infants and young children are reduced<sup>9</sup>. Agricultural production and policy drivers influence the availability and accessibility to high quality and nutritious food and as result can indirectly impact food choices and human health. Today the top risk factors for 'disability adjusted life years lost'<sup>10</sup> in the EU are almost all linked to food consumption, including high blood

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<sup>6</sup> The total number of farms declined by 17% in the EU-27 between 2005 and 2010, with farms of a 100ha or more in the EU-15 increasing in both number and average size (Eurostat, 2015).

<sup>7</sup> To strengthen the position of smaller operators (farmers) in the food supply chain, in April 2018 the European Commission presented a proposal for a directive on unfair trading practices. Co legislators are currently amending the texts

<sup>8</sup> EU/EEA countries used on average 141 mg of antibiotics per kg of livestock, ~3x higher than what experts consider as a reasonable short-term target.

<sup>9</sup> <http://www.efsa.europa.eu/en/press/news/180628>

<sup>10</sup> The disability-adjusted life year is a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death.

glucose and high cholesterol (EPA, 2016a). Global obesity has increased, associated with cardiovascular diseases, type two diabetes and other non-communicable diseases<sup>11</sup>. More than 50% of EU citizens are overweight, 5% are at risk of undernutrition and around 8% live in food poverty.

**Box 2: Confronting the long-term sustainability of the European Livestock sector**

As part of the debate on the long-term sustainability of our food and farming systems, the negative environmental and health impacts of current livestock production and consumption have come under increasing scrutiny over the last decade (FAO, 2006; Gerber et al. 2013; Godfray et al., 2018). In Europe, livestock production is identified as a major contributor to the agriculture sector's overall environmental impact - 73% in the case of water quality and about 80% in the case of climate change, biodiversity, land degradation, and air quality (Leip et al, 2015). Health issues are also emerging due to the excessive use of antibiotics on farm animals, which are seen as major factor in the growing trend of antimicrobial resistance (Review on Antimicrobial Resistance, 2015), while 75% of emerging infectious diseases affecting humans, over the last 10 years, have originated from the livestock sector (EFSA and ECDC, 2017). These trends come in the context of significant over-consumption of livestock products compared to recommended diets. In Europe, animal protein consumption is on average 70% higher than the world Health Organisation (WHO) dietary guidelines (PBL, 2011). This is not only an unsustainable use natural resources but in some cases, dangerous to health.

At the same time, livestock play a positive role in providing high quality nutrients and can help maintain important pastoral ecosystems. Due to their ingenious digestion system, ruminant livestock can utilise land otherwise unsuitable for food production and support the management of highly biodiverse grasslands. Moreover, livestock play a crucial economic role for around 60% of rural households in developing countries – including smallholder farmers, agro-pastoralists and pastoralists as well as in many rural areas in the developed world. Where positive contributions do exist they are grounded on integrated approaches between livestock, producers and land management where livestock production is in balance with the ecological carrying capacity of grassland and pastures.

Global trends, however, show a growing concentration of intensive livestock production in certain regions of the world, particularly within the pig and poultry sectors, but also increasingly in the beef and dairy sectors. This is illustrated by the rapid growth of trade in meat products over the last decade and a half (excluding dairy and live animals), which are now valued at 113bn USD representing 10% of agricultural products traded globally (Chatham House Resource Trade Database, 2016). This trend is expected to continue due to increasing demand in many developing countries with global meat and milk production projected to more than double by 2050 compared to 1990/2001 levels. In 2016, Brazil, China, the EU-28, and the United States were collectively responsible for 62.3 % of the total world meat production - average production per inhabitant in the EU-28 was approximately double the world average for meat and triple the world average for milk (Eurostat, 2018). These developments clearly point to the need for a major transformation of the livestock sector and redesign of global food and farming systems in their entirety. Both in Europe and worldwide difficult choices will need to be made which will undoubtedly produce winners and losers. As a major player in the global livestock markets, but also world leaders in the fight against climate change, European policymakers will be expected to play a key role in the transition of the sector.

<sup>11</sup> <https://www.euro.who.int/en/health-topics/noncommunicable-diseases/obesity/data-and-statistics>

## 2 Rationale for change

### 2.1 The importance of change

The strategic importance of the agriculture sector in the EU and its potential to provide a range of services to society is starkly contrasted by the impact that many current agricultural practices have on the environment and climate both in the EU and outside its borders. One of the main reasons for this disconnect is that these impacts do not directly and immediately have a bearing on production decisions either as an economic cost or biophysical limitation. Another reason is the disconnect between production and consumption in policy decision. Without this tangible link, addressing environment and climate challenges through agriculture relies on the enforcement of Regulation to provide a baseline and the use of economic incentives, advice and support to deliver additional environment and climate ambition.

Establishing clear standards to which agricultural production should abide, is therefore essential in ensuring that the damaging practices and impacts associated with farming are addressed by the farmer and reflected in the ‘true cost’ of food and commodity production. Yet in practice these standards, and thus ambition required in the sector, have been limited, and enforcement and compliance monitoring mechanisms often ineffective. *Establishing stronger ambition in the sector has been hampered by the political weight carried by the agriculture and associated sectors and the strength this plays in Member State governments which have sought to largely limit any interventions on the sector aimed at improving its health and environmental performance. Any concrete attempt to address the true costs of production has therefore failed to see the light within policy circles at EU and national level.*

Despite this, the EU is bound by international commitments related to the Sustainable Development Goals, as well as the Climate and Aichi Targets. Agriculture urgently needs to address its impacts on society and the environment. *On its current path, European agriculture will not be in a position to support these commitments and will undermine its own capacity to adapt to current and future challenges in the sector, eventually threatening food security. Both must be addressed together to ensure a long-term sustainable future for agriculture in the EU.*

### 2.2 Supporting change

There exist a range of policies and legislative tools that can support a more progressive shift towards a sustainable food system in Europe. Yet few have the necessary funding associated with them to support change on the ground. The Common Agricultural Policy (CAP) is an exception.

The CAP is one of the largest of the EU budgetary funds under the EU Multi-annual Financial Framework (MFF) (38% of the EU budget in 2018) and provides the principal source of funding for land management to deliver on a range of EU environment, climate and related policies, which themselves have only limited or no dedicated funding. As part of a broader EU goal to play a leadership role in the climate and sustainability agenda, the need to ‘*move beyond rhetoric and platitudes and focus on reality and action*’<sup>12</sup> on environment and climate via the CAP and placing farming and food production ‘*at the heart of our international commitments on climate and sustainability*’ are stated often as key factors influencing the future direction of the farming policy.

The new plans outlined in the CAP legislative proposals for the period post 2020 are rightly shifting the focus from simple compliance towards performance and results but could as well lead to

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<sup>12</sup> Commissioner Hogan’s speech at the Forum for the Future of Agriculture 2018, 27 March 2018

significant environmental impacts in farmland (Box 3). As a result of the polluter pays principle<sup>13</sup> public funds, such as those through the CAP, should not be used to support the enforcement of existing legislation relating to environment, health and animal welfare. Stronger enforcement of existing legislation in the Member States is therefore a prerequisite to any first steps towards more sustainability in food and farming.

Despite the resources available to the CAP, and the potential for it to bring within its scope measures to address consumption (as opposed to just production)<sup>14</sup>, the agri-food system is complex and influenced by many policies, at national, EU and international levels (trade) as well as consumers choices, habits and cultures. As such, the CAP alone cannot be the only driver towards a proper sustainable transition of our food system, it should always be looked at together with regional/cohesion policies, public health policies, trade agreements, public procurements but also national taxation policies and other national domains of exclusive competence. (see Table 1)

**Table 1: Non-exhaustive list of EU policies/regulations impacting food systems, beyond the CAP**

| Policy area   | EU Regulation / legal reference  |
|---|--|
| Promotional campaigns / Awareness raising of the general public | Regulation 1169/2011 on the provision of food information to consumers,  |
| Green Public Procurement  | Directive 2004/18/EC on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts   |
| <b>Novel foods, food labelling</b>                              | Regulation (EU) 2015/2283 on novel foods   |
| Trade   | Bilateral trade agreements, WTO  |
| Quality of food and origins                                     | Regulation 1151/2012 on quality schemes for agricultural products and foodstuffs<br>Commission delegated Regulation 664/2014 supplementing Regulation (EU) No 1151/2012 of the European Parliament and of the Council with regard to the establishment of the Union symbols for protected designations of origin, protected geographical indications and traditional specialties guaranteed and with regard to certain rules on sourcing, certain procedural rules and certain additional transitional rules |
| <b>Organic</b>  | Regulation on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007 (will apply from January 2021 onwards)  |
| <b>Food and feed safety</b>                                     | Regulation (EC) No 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety  |

<sup>13</sup> As set out in the Treaty on the Functioning of the European Union (TFEU), and Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability (which as subsequently transposed into Member State law).

<sup>14</sup> As enabled by Article 39 TFEU the <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN>

### **Box 3: The current CAP and proposals for reform: a response to the needs?**

#### **The CAP to 2020**

The context of the 2014-2020 reform was unique. For the first time the whole CAP was reviewed and the European Parliament acted as co-legislator with the Council. This change in the decision making procedure influenced<sup>15</sup> the outcomes of the negotiations and the shape of the resulting policy.

The identified aims of the reform were to introduce a new architecture of direct payments; better targeted, more equitable and greener; and strengthened rural development. In this way the new policy aimed to tackle future challenges by being more efficient and contributing to a more competitive and sustainable EU agriculture.

While the initial Commission proposals contained promising elements such as linking a substantial part of farm income support to environmental requirements via the greening measures<sup>16</sup>, the legislative process that followed led to a watering down of environmental ambition notably through the introduction of high level of flexibility, exemptions and equivalence. Whilst some of these changes could have been positive, the level of flexibility given to Member States meant that there were limited changes in action on the ground for environmental management. For example, CAP greening has resulted in little change on the ground as the choices of the Member States were often directed in the optics "limit the burden on farmers" rather than "to maximise the expected environmental and climate benefit" (European court of Auditors (ECA) 2017).

#### **The CAP beyond 2020**

The legislative proposals on the CAP post 2020 are meant to increase the level of environmental ambition of the policy and are presented as a tool helping the transition towards a fully sustainable agricultural sector through a new delivery model focused on results.

The Commission proposed a shift from the current compliance system towards a results-focused policy in which the EU sets the basis through an overall legal framework and objectives while the Member states, with greater subsidiarity, draft their own national strategic plans including needs assessment, targets, indicators and intervention logic. The need to place innovation at the heart of the future CAP and rural development policy features strongly in the proposals as a cross cutting objective. In various fora the EC highlighted the need for innovation in order to meet the challenges of the "megatrends" of population growth, irregular migration, resource efficiency and mounting climate and environmental pressures, along with the aspiration of people in rural areas to enjoy the same living standards as those elsewhere. Likewise, the need to respond to societal expectations feature clearly in the proposals albeit most of the instruments proposed lack a more systemic approach to food and health.

The proposed new delivery model could deliver more coherent, creative and innovative approaches to a performance-based CAP that meets the needs of farmers, citizens and the environment; however based on experience with the last reform and the risk of business as usual prevailing over environmental ambition when flexibility increases, a strong accountability, governance and robust monitoring need to be put in place in addition to strong transparency rules around the drafting of the plans at national level. As the proposals stand though these mechanisms seem to be lacking strength and content. Additionally, given that MS have little experience of programming various CAP instruments in a joined-up way, there might be gaps in current Member States' capacity with respect to the approach of the new delivery model. This is as relevant for the European Commission as it is for Member States which will also have to significantly adapt to the new culture and mission around strategic plans approval and monitoring of performance. Training and capacity should therefore not be underestimated.

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<sup>15</sup> <https://archive.intereconomics.eu/year/2015/1/the-co-decision-trap-how-the-co-decision-procedure-hindered-cap-reform/>

<sup>16</sup> Ecological focus areas, permanent grasslands and crop diversification

# 3 Making a positive contribution to the future of Europe

The food and farming sector can and must contribute positively to the future of Europe. This requires the political will and courage to enable rapid and sustained change. A major transformation of the EU food and agriculture sector is necessary, particularly the livestock sector, with efforts needed to bring about changes in both production and consumption of agricultural commodities. This involves coherent and synergistic policies, a new contract between farmers and society; appropriate governance; alongside new approaches to addressing consumption as well as production

## 3.1 Coherence in policy

The first step towards sustainable food and farming in Europe is **ensuring coherence** between those policies that influence agricultural practices (e.g. the CAP, trade policy, etc.) and the EU's international commitments (e.g. UNDP SDGs, Paris Agreement, etc.), environmental acquis, health, food and animal welfare legislation. This requires a new ex-ante coherence mechanism with wider scope than what exists currently. This could take the form of a **high-level food & agriculture sustainability advisory board** composed of independent experts that would systematically assess the coherence of new EU law, revisions or initiatives that affects our food system, given the fragmented nature of the policies surrounding farming and food choices.

A priority action under the future CAP should be to **remove all environmentally harmful subsidies**. The bold proposals for a more results-oriented policy should move in this direction, but for the time being there are clearly tensions between a real performance-based approach and a practice of maintaining a certain fixed distribution of the CAP budgetary envelope between Member States. Rewarding performance implies flexibility to direct funding towards high performers and away from others. Continuing with pre determined budget allocation per Member State without adjustment would not encourage greater ambition and will be difficult for everyone to judge Member States actual performance.

The EU has committed itself as a signatory of the UNDP SDGs. Agricultural and other policies impacting food in Europe must be **fully aligned with the Sustainable Development Goals** and accompanied by a robust monitoring mechanism and quantitative indicators allowing for a proper and timely evaluation of the EU policy contribution (notably the CAP) to SDGs in practice. As a first step, the SDG commitments should be included explicitly within the future CAP to ensure coherent and aligned objectives.

Actions taken in the food and agriculture sector must be **consistent with the EU's commitments under the Paris Agreement on climate** in particular **the EU's long-term low-emission strategies** is essential, **including coherence with the new bioeconomy strategy**. As both a victim and a major emitter of greenhouse gases (GHG), agriculture has an important role to play in addressing climate mitigation and supporting adaptation within and outside of the sector. Ensuring coherence between adaptation and mitigation actions can be achieved by mandatory climate proofing of investments or policies aiming to achieve climate action. In support of such coherence, future agriculture policy should help farmers be trained, informed and apply measures that effectively reduce GHG on their land whilst improving adaptation, in coherence with other EU policies on environment, health and animal welfare.

To ensure a proportionate contribution from the sector, **agriculture should be target-driven** in the EU's ambition to move towards net-zero emissions by mid-century or before. The perceived high-cost and 'special nature' of agriculture should be reviewed in light of the pressing need to achieve emission

reductions in the sector and its potential to develop carbon sinks needed to support action across the economy. If Europe is to achieve an 80% cut to its GHG emissions by 2050, livestock activity would have to contract by up to 74%<sup>17</sup>. Increased coherence between farming policy and climate agreements would require action both on the consumption (reduction) and production (more efficient livestock systems) side.

The **development of a circular bioeconomy** in Europe should drive sustainability in the agriculture sector through adherence to sustainability criteria for the production and use of bioresources, and reward the contribution of primary producers to increasing value-added from primary products.

### 3.2 A new contract between farmers and society

The priority of future agriculture and food policies should be to facilitate the transition to sustainable farming and a full transition towards rewarding farmers for the public goods they deliver, such as producing environmental and climate public goods beyond simple compliance with EU legislation. This includes the achievement of **a transition away from direct payments towards multi-annual and results-based payments** combined with knowledge transfer, advice and innovation. Farms and businesses should be made more resource efficient, low carbon, ecologically sound, sustainable and resilient. In turn this should enable farms to become more independent and able to align themselves with what European citizens want from their rural environment.

For the proposed CAP, there remains a significant risk that the subsidiarity given to Member States will result in a focus on lessening the burden on farmers, rather than seeking to improve the sustainability of the agri-food system. To address this, the following need to be set:

- Clear, specific and quantified targets at the EU level should set along with an adequate and transparent monitoring mechanisms;
- Safeguards linking Pillar 1 money to environment and climate goals (ring fencing);
- Capacity building at the EU and national levels, including the involvement of environmental authorities;
- Appropriate levels of accountability preventing Member states to opt systematically for the least ambitious measures.

Short supply chains are a strong component of that new contract between farmers and society. Short food supply chains and local food systems' advantages indeed include a fairer price for farmers, access to fresh and seasonal produce for consumers, a reduced environmental impact and greater social cohesion at the local level. Local economies also benefit from such schemes, such as job creation. Future EU policies directly relating to food (but not only) should establish the necessary prerequisites and conditions for such systems to be deployed, or present no obstacle to them.

In parallel to the need to further incentivise short supply chains, unfair trading practices that are imposed by retailers and are particularly detrimental to small operators should be prohibited; the European Commission's proposals on UTPs is a step in the right direction.

### 3.3 Governance and citizens' participation- inclusiveness, transparency & accountability

In line with President Juncker's' commitment to breaking through silos, decision making should be enlarged to properly involve all the societal interests that food and farming affect. Tackling society's growing concern about the food eaten and its impact on health environment, animal welfare as well as the distrust in EU decision makers urgently requires inclusiveness in decision making, more transparency and stronger accountability.

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<sup>17</sup> [https://ieep.eu/news/a-meaty-challenge-what-would-a-just-transition-for-europe-s-livestock-sector-look-like#\\_ftn4](https://ieep.eu/news/a-meaty-challenge-what-would-a-just-transition-for-europe-s-livestock-sector-look-like#_ftn4)

The right bodies and tools should be put in place at both European and national level to allow citizens interests to be fully and actively reflected in future agriculture and food policy making and monitoring. Citizens should also be increasingly empowered to hold their countries to account for the ambition of the food related policies they put in place vis a vis EU and international rules<sup>18</sup>.

For the CAP, Member states choices and justification relating to their future national strategic plans should be made available publically and online as soon as they are drafted so they can be held to account for their choices. Civil society should be actively involved and consulted on the drafting and monitoring of the Member states strategic plans and the quality of the consultation should be part of the approval process of the plans at EU level.

The existing CAP monitoring committees at the EU and national levels should be assessed against their efficiency, composition (e.g. balanced or not in terms of representation of economic vs non-economic interests), their transparency and their actual impact on policy development. These assessments should help build more inclusive, efficient and participatory groups in the future aligned to the ongoing developments in agriculture and food policy in Europe.

As innovation is increasingly featuring as a no brainer option for responding to the challenges of tomorrow in the food and agriculture sector, it is of paramount importance to ensure there is a common understanding of the kind of innovation that people want, and to have the right level of governance of, and access to it.

### 3.4 Towards sustainable consumption and production

Europe's food system is large, complex and remains largely unsustainable. There is a worrying disconnect between the retail price of food and the true cost of its production. As a consequence, environmentally and climate damaging production practices can deliver food that appears to be cheaper than more sustainably produced alternatives (FAO, 2015).

Greening our food system is a priority and requires a breakdown of the silo-based thinking that has dominated EU farming policy until now. Current policies looking to improve sustainability, mainly target production and focus on improving the resource efficiency of the food system, with some focussing on consumer awareness. This approach can improve the environmental performance of the food system, but it will not deliver the type or speed of transformation that is needed to meet the EU's sustainability goals. To enable a more systematic change requires new thinking to identify more effective actions that address both production and consumption.

To address the gap between the retail price of food and its true cost to sustainability, the environmental, climate and animal welfare impacts of producing cheap food should be internalised in the cost of food commodities and products. This would serve to *rebalance the cost of food where sustainable products becomes cheaper and more convenient to consumers, whilst unsustainable ones more expensive*. Consumers would therefore need to actively decide to purchase unsustainable products, rather than be driven to these purchases by convenience and low cost.

Tools to support such a transition will need to be developed on the basis of robust evidence, necessitating dedicated research in this area. However, one option that could be pursued immediately is through taxation and reinvestment. This could include actions from the European Commission to:

- Define sustainable food and diets through dedicated research initiatives;
- Support the development of food taxes on unsustainable and unhealthy foods in a way that ensures social justice and access to high quality and nutritious food for all. The revenue

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<sup>18</sup> **THINK** is the case for [Urgenda Foundation v. The State of Netherlands](#)

generated from taxes could be used to promote healthy and sustainable eating patterns, or subsidise sustainable production whilst new markets develop;

- Support the development of a robust methodology for applying a carbon tax to different types of food, particularly meat and livestock productions. Tax policies on the use of harmful chemicals throughout the food chain should be explored further, particularly in relation to the impact on different sectors of society. Experiences gathered from Member States (e.g. Sweden) should be expanded to others;
- Encourage Member states to use reduced VAT rates for sustainable food as a tool for keeping the purchase of healthy and sustainable food affordable for all Europeans; phase out the current reduced VAT rates for unsustainable fertilisers and pesticides and maintain those for more sustainable options.

Taxes and monetary incentives need to be supported by educating actions from an early age. Greater effort is needed to encourage more sustainable diets (e.g. reduced sugar and animal products, more fruits and vegetables) and life styles at all ages in society. A greater focus on food related measures (including promotion, information, innovation and training) within the CAP is necessary as well as complementary policies (such as green public procurement, awareness raising programmes, and integration of sustainable consumption within national curriculum). Such a shift would help to enable more sustainability-oriented market-pull to which farmers can respond. Reducing food waste - including the losses involved in feeding human-edible crops to animals - at different stages along the food supply chain is also a priority.

One area of particular focus should be that of livestock production. Currently incompatible with climate, environment and health objectives it is necessary to define the safe operating space for livestock production in the EU and at the national level which will necessarily be complemented with actions on both consumption and production with consequences for imports and exports.

Responding to this challenge of a systemic approach across silos and policies will also require a consideration of the end-use of the biomass and products produced by the EU agriculture sector beyond just food. A food policy could help to address food and consumption objectives, but it will fall short of addressing the needs of a growing bioeconomy linked to the biomass and raw primary products produced from agriculture, including timber grown in an agricultural context. Addressing this challenge will require a broader consideration of the use of agricultural bioresources in the (bio)economy, the current and expected demand for those resources and at what level this can be met through sustainable production. This could be enabled through a policy or strategy that takes a cross sectoral view of bioresource production and consumption, with dedicated focus on food, feed and biomaterials. It is therefore essential that the development of the circular bioeconomy addresses these issues in conjunction with the development of agriculture policy.

Overall the necessary education, advice, training and support to farmers and consumers for the shift to happen will be of paramount importance along with sustainable innovation policies.

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