



# European Union food system

## SUMMARY

The European Union (EU) food system is a complex and integrated structure of sectors whose governance is ensured by various EU sectoral policies. Its strengths and weaknesses became evident during the coronavirus crisis: food supplies were assured but the pandemic also revealed where action is needed to avoid disruptions threatening food supply. The recent launch of the EU 'Farm to Fork' strategy provides a first attempt at a common EU food policy, outlining the way forward for all food-related sectors. It aims to bring sustainability to the heart of each step of the food chain and constitutes a framework for any further plans. This Briefing sets out the progress to date towards an EU food system and the issues posed by the current coronavirus crisis. The table at the end of the text explores a range of ongoing or potential initiatives for a sustainable EU food system in the future.

## EU food system: Structure, governance and outcomes

### A complex and integrated structure

The EU food system delivers food from producers to consumers through a complex web of interrelations among sectors. A recent Eurostat [analysis](#) leads us on a statistical journey through some of the stages in the food chain (i.e. production, processing, distribution, and consumption), which contribute to putting food on our tables. It highlights how each stage and each passage of goods between those stages are crucial for the functioning of the food chain as a whole. This [involves](#) some 13 million enterprises and 29 million workers that produce, process, distribute, prepare and sell food and beverages in the EU. Employment in food supply represents an important share of total employment in certain EU regions, reaching [more than 10%](#) in some southern and eastern regions. Other players involved in the EU food system include producers of agricultural inputs, transport businesses and storage warehouses. Trade in agricultural products and foodstuffs with countries outside the EU is another important element of the EU food system. In 2019, EU trade in food and drink represented [8%](#) of the total EU international trade in goods. It offers new market opportunities (especially for processed food, accounting for more than half of EU exports); offers raw materials to EU food producers (such as feedstuffs, where the EU is deficient); and a wider choice of products to EU consumers (e.g. fruit and vegetables from other world regions). Finally, besides being a tradeable good essential for human survival, food has deep historical, cultural and social significance. This is particularly evident in the worldwide renown of some EU foodstuffs and [protected designations](#), and in the development of culinary tourism in many areas of Europe. Thus, the EU food system also embraces consumers' [choices](#) and attitudes towards food consumption and diets. In this sense, all citizens are actors in the EU food system.

### A food chain without an all-embracing EU policy

The [Treaty on the Functioning of the European Union](#) (TFEU) set out the legal basis and the framework of underlying values of the EU food system, from securing [agriculture](#) and [fisheries](#) supplies at affordable prices to protecting [consumers](#). The governance framework of the EU food system consists of building blocks originating from different EU sectoral policies. The [Common](#)

[Agricultural Policy](#) (CAP) has been at the core of the European integration process since its early stages. It has shaped EU agriculture and helped to boost its production, initially with a high degree of market intervention and income support. Over the years, the CAP has undergone major changes with the inclusion of rural development measures, the drastic cut in market intervention, the decoupling of income support from the amount of produces and the greening of farm subsidies to link CAP payments to the objective of safeguarding the environment and natural resources. The [Common Fisheries Policy](#) (CFP) started about 40 years ago as a structural policy to regulate the market for fisheries products and access to fishing waters, and modernise EU fishing fleets, later becoming a policy for the conservation and management of the fisheries resources in EU waters and in the wider context of international fisheries agreements. The CFP also covers market and financial measures on aquaculture and freshwater biological resources. The focus on sustainability has increased over the years, with the introduction of sustainable targets for exploitation of stocks and more stringent management in the conservation of resources.

EU rules on [consumer protection](#) ensure one of the highest levels of protection in the world, including on food safety, thanks not least to the development of EU [food law](#) following the 1990s bovine spongiform encephalopathy ('mad cow' disease) crisis. Moreover, the EU has put legislative frameworks in place on [plant](#) and [animal health](#) and on food information (such as rules on [food labelling](#) and the [quality scheme](#)), which provide consumers and producers with a high degree of assurance. These frameworks are now at the core of the debate on how to steer sustainable consumer choices. EU policy on the [environment](#) links up to the food system by regulating certain externalities of food production (such as directives on the use of water or pesticides) and offering a framework to develop new approaches (such as the [circular economy](#)). On [health](#) policy, the EU has contributed to global efforts to address [antimicrobial resistance](#) (which is a food issue when antimicrobials are used in livestock husbandry) and childhood obesity, with the objective of helping to halt the rise in numbers of overweight and obese children and young people. EU research and innovation policy dedicates part of its budget to projects related to food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bio economy (€3.9 billion from [Horizon 2020](#) for 2014-20). These funds, together with other EU funding opportunities on innovation in agriculture, food and forestry, support the European innovation partnership for agricultural productivity and sustainability ([EIP-AGRI](#)), which brings together innovation actors (farmers, advisors, researchers, businesses, etc.) to build bridges between research and practice. The EU [Food 2030](#) initiative was launched in 2015 to set up a multi-stakeholder debate on the role of research and innovation in future-proofing the EU food system and helping to build an EU food research area.

The range of EU policies that contribute to the governance of the food system also includes other key domains, from [energy](#) and [transport](#), to [competition](#) and [trade](#), along with the governance of the internal market and of global food security. Thus, a new policy encompassing the whole food chain is an [increasingly recognised](#) need for reconciling the multiple aspects of the food system.

## A system ensuring food security and self-sufficiency

The Food and Agriculture Organization (FAO) defines [food security](#) as the situation in which people have physical and economic access to sufficient safe and nutritious food, in line with dietary needs and food preferences and to allow an active and healthy life. [Food self-sufficiency](#) is defined as the extent to which a country can satisfy its food needs from its domestic production. Food security and self-sufficiency depend on the functioning of the entire food chain. Upstream, the [market for agricultural inputs](#), from seeds to energy, plays a key role, along with the accessibility of means of production, from equipment and machinery to broadband and new technology, not to forget healthy soil and skilled labour. Downstream, the degree of efficiency of the supply chain structure sets the real distance between food and consumers and the amount of food loss in supply channels.

Over the decades, the EU food system has developed its capacity to ensure a high degree of food security and self-sufficiency. Most countries in Europe [enjoy](#) large daily energy supply per capita and a low share of undernourished population. Moreover, the EU is [mostly self-sufficient](#) (also in a [long-](#)

[term](#) perspective). Thus, the concept of [insecurity](#) is linked mostly to food that leads to health issues rather than a lack of access to food, and to production and transport costs and governance more than lack of resources. However, even if there is [little](#) public concern about food insecurity, the problem does exist for the most deprived and it can suddenly [get worse](#) in times of economic crisis.<sup>1</sup>

## Coronavirus crisis: Impact on the food chain and EU response

### Impacts

The outbreak of the coronavirus pandemic earlier this year has affected the lives of millions of people across the globe. Most governments, including in the EU, have taken [containment measures](#) in the attempt to limit the spread of the virus. The EU's food system has continued to produce and supply food during the coronavirus crisis. Images of half-empty supermarket shelves resulted from temporary shortages of goods due to consumer panic-buying and stockpiling more than a real lack of food stocks. This has been seen as a proof of the system's resilience. However, producers and other actors in the food chain have faced many difficulties and the crisis has had a pronounced [impact on the EU agri-food supply chain](#), showing several weaknesses that could potentially disrupt its capacity to continue functioning in case of further or more prolonged crises.<sup>2</sup>

The reintroduction of border controls (with temporary suspension of the [Schengen rules](#) on free movement) resulted in blocked transport routes and long queues at border checks. This has been especially problematic for delivery of fresh food, transport of [live animals](#), and, more generally, for [international trade](#) in agri-food products (leading to shortages of imported inputs and surpluses of agri-food exports that could not reach third-country markets).

The restrictions imposed on the free movement of workers from one Member State to another have impacted many food production and manufacturing activities (such as fruit and vegetable harvests and meat and dairy processing) that rely on the work of foreign seasonal workers. Moreover, migrant workers often live and work in [poor conditions](#), exposed to a higher risk of contagion, as shown by [outbreaks](#) in slaughterhouses and [meat-packing plants](#) worldwide. This creates both a serious public health issue and the disruption of the food chain.

The lockdown of economic activities deemed as non-essential (i.e. all but those related to supply food and medicines) and the confinement rules have had an impact on [agriculture](#) and [fisheries and aquaculture](#) activities. Indeed, the closure of restaurants, bars and cafeterias, canteens, catering services normally offered at public and private events, food markets, and food retail related to the tourism and travel sectors, have created surpluses of unsold production and required a shift in the supply chain, with volumes of food to be sold through different channels.

### Measures taken at EU level

The EU has taken a host of [emergency response measures](#) to alleviate the impact of the coronavirus crisis on the food chain, starting from the guidelines issued by the European Commission in March 2020 to let lorries transporting goods pass through fast-track border crossings ('[green lanes](#)'), and to allow workers in [critical occupations](#) (including seasonal farm workers) to travel to their workplaces. These guidelines have brought improvements, though reported shortcomings on working conditions and safety measures have led the European Parliament to [call for](#) better protection for cross-border and seasonal workers, including farm labourers, and the Commission to issue [new guidelines](#) in July 2020.

Already in March, a [temporary framework for State aid](#) enabled Member States to secure liquidity for farmers and fishery and aquaculture companies through a range of measures, such as public loans and direct grants. Moreover, producers in agriculture, fisheries and aquaculture sectors are among the targeted beneficiaries of the Coronavirus Response Investment Initiative [packages](#). Over the past months, various [crisis support measures for EU farmers](#) have been taken to ensure their financial liquidity and simplify their business operations. These include the extension of deadlines

for beneficiaries of EU subsidies, increased advances on payments, reduction of physical on-the-spot checks, and flexibility in the use of financial instruments. In June, the [European Parliament and Council](#) adopted a regulation allowing Member States to finance a [temporary support measure](#) to farmers and small agri-food businesses through the EU rural development fund.

Following common and pressing [requests](#) from sector stakeholders, the Commission announced a series of measures to support those agricultural markets worst hit by the crisis in April. The package of proposals provides aid for the withdrawal from the market and private storage of certain products (skimmed milk powder, butter, cheese, beef, and sheep and goat meat). Derogations from competition rules allow milk, floriculture and potato sector operators to cooperate on production planning or product withdrawal. Flexibility is allowed in the management of the market support programmes for wine, fruits and vegetables, olive oil, apiculture and the EU's [school scheme](#). In June, [additional aid packages](#) were put forward in favour of the [wine sector](#), and fruit and vegetable growers, complemented by two extraordinary calls for proposals for a total budget of €10 million for [promotion programmes](#) to stimulate sales of products most affected by the crisis (fruit and vegetables, wine, live plants, dairy products, and potatoes for transformation).

On a longer perspective, the pandemic crisis has impacted on the already difficult negotiations for the future design of EU finances. On 21 July 2020, EU Heads of State or Government reached a [political agreement](#) on the 2021-27 EU budget and the post-coronavirus crisis Next Generation EU (NGEU) recovery instrument. Subject to the results of later negotiations, the NGEU should include funds to support rural areas in the face of the current difficulties and of the ambitious policy objectives ahead.

## Challenges in the aftermath of the crisis

### Environmental footprint and other enduring challenges

Cutting the environmental footprint of EU agricultural production is the challenge that dominates the debate on the future EU food system.<sup>3</sup> The statement 'business as usual is no longer an option' sounds familiar to anyone involved in this debate. There will certainly be farmers who are largely aware of the benefits of environmentally-friendly agricultural practices, from crop rotation, cover and mixed cropping, to lower livestock densities and free range grazing, just to name a few. However, [compared](#) to conventional farming, these practices, where they are undertaken, bring with them challenges related to lower profitability and/or productivity and higher costs in terms of knowledge and/or labour. Nevertheless, conventional farming practices have led to serious harms and doubts over the EU food system's long-term environmental sustainability (i.e. the ability of the system to renew itself ecologically). Agriculture is a major consumer of natural resources, such as water used for [irrigation](#), and it has a negative impact on [biodiversity](#) due, for example, to the overuse of chemicals. EU soils on which farmers rely for food production are overexploited and large areas are at risk of [desertification](#). [Climate change](#) affects agriculture, reducing crop yields and livestock productivity, but agriculture is also a driver of climate change through the release of greenhouse gas (GHG) emissions, although the shift towards more sustainable farming practices and modern technologies, and a reduction in the use of fertilisers and in livestock numbers, have led to a [21 %](#) decline in EU agriculture's GHG emissions in the past 30 years. Nevertheless, the CAP is often [accused of](#) supporting practices that contribute to the deterioration of natural resources, biodiversity loss, and climate change. Scientists have [highlighted](#) the need to use available scientific knowledge to remedy systemic weaknesses in the CAP. According to the Organisation for Economic Co-operation and Development (OECD), mandatory environmental constraints concern today [more than 60 %](#) of EU farm subsidies, with an additional 14 % dependent on voluntary conditions that go beyond the mandatory requirements. However, the results obtained are [not satisfactory](#) and much more needs to be done, including through [better use of CAP instruments](#).

The environmental sustainability challenge also concerns other links of the food chain, such as fisheries (with over-catching endangering the survival of a productive and healthy fish population), food packaging (with its contribution to the use of single-use plastic), or food trade and transport

(with the transfer of the environmental impact to other areas of the world and the pollution from fossil fuels used in transport). However, the debate has focused mostly on the primary sector, leading farmers to denounce what they call [agri-bashing](#), i.e. the systematic denigration of farming due to its harmful effects on health, the environment and animal welfare.

The socio-economic sustainability of EU food production is another major challenge, involving ensuring that agricultural productivity uses less resources, an adequate standard of living for producers (including the small-scale), and vibrant rural areas (where most of the food is produced). The level of agricultural income is [generally lower](#) than the average income in the whole economy. Small-scale producers are those who need more support, as are young farmers and new entrants, due to difficulties in accessing land and [financing](#). The OECD estimates that [19%](#) of EU gross farm receipts are the product of public policies. Agri-food businesses enjoy a better financial environment, although start-ups and innovative companies have the most difficulties in finding the necessary capital to launch or expand their operations. Rural and farming demographic trends also work against the socio-economic resilience of the EU food system. The most remote areas tend to [suffer](#) from population decline more than other rural regions, due to a number of issues (inadequate health care, school, transport and broadband services, fewer job opportunities, a lack of recreational activities, etc.), that may force rural inhabitants to leave and discourage others from moving into such areas. In this context, many areas [may experience](#) land abandonment, increased risk of forest fires and reduced attractiveness for investment. Generational renewal in agriculture, which is already a major issue with only [one out of ten](#) EU farmers under the age of 40, could therefore become even harder to achieve.

Another key challenge for the EU food system concerns food consumption and its many facets. The public health situation in relation to nutrition and dietary trends in the EU is not reassuring. [Large proportions](#) of EU adults and worryingly [high rates](#) of EU children and adolescents are overweight or obese. These conditions increase the risk of chronic and incommunicable diseases (such as hypertension and cardiovascular disease), trigger psychological problems and raise the costs of public healthcare. The downside of food overconsumption is often undernutrition (i.e. the deficiency of essential nutrients rather than of calories, due to a low consumption of healthy foods, such as [fruit and vegetables](#)). This is often related to economic reasons, as the cost of the diet increases incrementally with higher diet quality. It has been [estimated](#) that the cost of a healthy diet is 60 % higher than the cost of a nutrient adequate diet, and is almost 5 times the cost of an energy sufficient diet. Finally, food loss and waste<sup>4</sup> account for a huge amount of food (88 million tonnes in total and 173 kilogrammes per person in the EU and United Kingdom according to 2012 [estimates](#)), which is not consumed but its production nevertheless creates emissions and consumes resources. The reasons for such waste are diverse and require action at each stage of the food chain, including at consumption level, through better information provided to consumers.

The globalisation of many links in the food chain represents another challenge. The global market has created new business opportunities and multiplied the availability of food from different origins, regardless of seasonality. However, this can also create local production's dependence on inputs produced in specific areas of the globe. Agri-food multinationals [play](#) a key role on steering global food choices, especially on [ultra-processed food](#), which has received less attention in public debate but has negative impacts on health and the environment. A recurring issue during the negotiations of trade agreements between the EU and third countries is how food safety can be guaranteed while institutional and regulatory [frameworks diverge](#) widely across the globe. These agreements are at the core of [EU trade policy in challenging times](#), including the relationships with China and the United States and the negotiations of the future trade relationship with the United Kingdom.

## Unexpected turmoil: The lesson learned from the crisis

The coronavirus crisis has thrust food systems into the spotlight. While in recent months most attention has been paid to alleviating the immediate effects of the crisis, it is also important to reflect on its likely future implications for the EU food system. Despite a [drop](#) in certain activities, the short-term prospects for many agricultural sectors are positive and the reopening of food services should benefit EU

agricultural activities, according to the [Commission](#). While uncertainties remain on the extent of the overall impact of the crisis, its impact on the EU food system has been limited when compared to the [threats](#) to food production coming from the ongoing deterioration of natural resources and more frequent [extreme climate events](#). However, the crisis has revamped the debate on the primacy of food security over environmental concerns. However, such a dichotomy does not consider that environmental sustainability is a prerequisite for food production and the essential business of farmers in providing food goes hand in hand with their role as caretakers of the environment.

The International panel of experts on sustainable food systems (IPES-Food) [identifies three fronts](#) of food system vulnerabilities highlighted by the crisis. The first involves the increasing prevalence of infectious disease (zoonoses) resulting from human-animal interaction. This occurs both in the intensive livestock production model and in the increased proximity with wildlife due to the destruction of its natural habitat. A second range of underlying vulnerabilities in food chains is revealed by disruptions experienced across the globe, such as in the case of coronavirus restrictions to flows of goods and people, local lockdowns impeding the functioning of local supply chains, and the precarious situation of farm and food workers, reflecting the precarious job conditions in the food system. Thirdly, the most vulnerable population's lack of means to access food shows the incapacity of the system to provide food to those living on the edge of poverty and food insecurity.

Negative economic projections triggered by the health crisis and the lockdown measures create important vulnerabilities and risks of food crisis in [developing countries](#), although declining incomes and soaring public debts are also experienced in rich countries. In Europe, people living on the margins of society, including immigrants and the homeless that cannot access government aid, could be left [without food](#), as can low-wage and precarious workers that could normally afford their meals and are now at risk from economic disruption and [food insecurity](#). The Covid-19 crisis has shown the [importance of](#) state-led school feeding programmes (especially for low-income families relying on school meals for their children) and of food banks (despite their [disrupted activities](#) in times of raising demand), for both ensuring food supply and providing healthier food choices.

As for nutrition, the reduction of out-of-home consumption and the increase in home meals may have reverted the trend of dedicating less and less time to food preparation, which is thought to lead to [houses without a kitchen](#). Conversely, without a different [attitude towards](#) healthier food and [more sustainable diets](#), home meals may result in increased consumption of ultra-processed food, which is easier to consume and offers panic buyers a longer shelf life than fresh food.

The crisis has prompted a debate between supporters of local as opposed to global food chains. One of the key aspects to emerge from the crisis is the need to continue trading. The OECD [notes](#) that many countries have worked to facilitate trade to preserve supply chains, but even some temporary trade restrictions may jeopardise supplies. The crisis has exacerbated a tendency to [food nationalism](#), which in the long-run is [estimated](#) to become a multiplier of price spikes that would especially affect food-import dependent countries. As self-sufficiency [cannot work](#) everywhere, importing input supplies and exporting foodstuffs are vital aspects of the EU food system, as well as [preserving](#) the exchanges on the internal market. EU [agri-food trade data](#) reveal that exchanges remained strong in the opening months of 2020, despite the crisis. At the same time, many have stressed the importance of EU regionally produced food and the traditional advantages offered by [short supply chains](#) (such as lower environmental impact, delivery of fresh food to consumers with higher traceability, and fairer pricing for producer returns). Short supply chains have proven even more appealing during the crisis, with people seeking new and more direct ways to buy their food, and producers finding novel sales channels for their products.

## Moving forward: The EU 'Farm to Fork' strategy and beyond

### A sustainable food system from producer to consumer

Since 2015, the United Nations' [2030 Agenda for Sustainable Development](#) and the 17 Sustainable Development Goals (SDGs) provide a policy direction towards sustainable development in all

sectors of economic activity, [including](#) agriculture and agri-food systems. The FAO is the [custodian](#) of food and agriculture-related SDG [indicators](#). However, food and agriculture are [at the heart of all SDGs](#). The United Nations has announced a [Food Systems Summit](#) for 2021, with the aim of providing a platform for ambitious and innovative plans to transform food systems, delivering on the 2030 Agenda and the SDGs, and raising global awareness of the need to transform food systems to tackle issues related to hunger, dietary diseases and the state of the planet.

In its [commitment](#) to implement the 2030 Agenda, the EU has launched the [European Green Deal](#), an ambitious plan to make Europe the first climate-neutral continent by 2050. One of the Green Deal's [building blocks](#) is the 'Farm to Fork' strategy presented by the Commission on 20 May 2020, together with the [biodiversity strategy for 2030](#). These strategies share some objectives and targets that aim to protect nature and reverse the degradation of ecosystems. The 'Farm to Fork' strategy puts forward an [action plan](#) of 27 legislative and non-legislative measures, including elements triggered by the weaknesses in the EU food chain revealed by the coronavirus crisis, such as the need for a crisis contingency plan. Proposed actions have a timespan running until 2024 (with a review by mid-2023) and cover all steps from production to consumption:

- **Actions for the food production sectors** include quantifiable targets for 2030: i) 50 % cut in the [use and risk](#) of chemical [pesticides](#) and in the use of more hazardous pesticides; ii) at least 20 % reduced use of [fertilisers](#); iii) 50 % cut in EU sales of [antimicrobials](#) for farmed animals and in aquaculture; and iv) at least 25 % area to be [organically](#) farmed and a significant increase in organic [aquaculture](#). Other roadmaps and policy initiatives include measures for sustainable production in the [farm animal](#) and fish and seafood sectors, [animal welfare](#) and [plant health](#), and recommendations to each Member State on the [nine objectives](#) of the CAP to be included in their [CAP strategic plans](#).
- **Actions for the food value chain** include an EU code of conduct, rules on corporate governance and [circular](#) business models, food [packaging](#) and marketing, efforts to achieve a level playing field for operators, and strengthened control on [food fraud](#).
- **Actions for food consumption** include facilitating consumers in making informed food choices for healthy and sustainable diets, including through [harmonised](#) front-of-pack [labelling](#) rules, measures on [promotion](#), procurement and taxation to facilitate the shift to healthy and sustainable diets, and targets to be set for reducing food waste, including on the date marking ('use by' and 'best before' dates).

To facilitate the sustainability transition, the strategy relies on initiatives such as involving stakeholders and citizens in a broad debate on the strategy, supporting farmers and fishermen on the transition pathway, investing in [research and innovation](#) and in the use of [technology](#), and improving data use to monitor [farm sustainability](#) and other key aspects. Finally, the intention is that the EU food system should evolve from a [global](#) standard for food, to an advocate of a global sustainability transition.

## What is still missing?

The launch of the 'Farm to Fork' strategy has raised high expectations in terms of the EU's capacity to reshape its food system and has prompted a lively [debate in the agri-food community](#), stimulating diverging reactions among stakeholders and policy-makers. Much of the debate on the sustainable way forward is on how to transform agriculture into the solution to the [environmental](#) and [climate](#) crises. The EU farm policy is already undergoing a reform process, which is now to be cast [in the wider context](#) of the European Green Deal and considering the [implications](#) of the 'Farm to Fork' strategy.

The 'Farm to Fork' strategy has been criticised for lack of ambition on [reducing meat consumption](#), despite the evidence of its [beneficial effects](#),<sup>5</sup> and for the lack of emphasis on local alternative food schemes and on the links with trade policy, to avoid [trading unsustainability](#) outside Europe. Moreover, the coronavirus crisis has shown that the CAP's crisis response capacity needs to be improved. Furthermore, the future policy could do better to improve opportunities for [young people](#) in rural and remote areas and for [young farmers](#) (especially on [access to land](#)). In addition, the governance of the transition towards sustainability requires the full commitment of all actors

involved, to successfully implement what is at this stage only the strategy's draft action plan. A number of other initiatives can be identified to address the weaknesses of existing policies, which may not have been sufficiently addressed by the strategy. The following table presents a non-exhaustive list of ongoing, planned or new initiatives to make the EU food system more sustainable.

## Potential initiatives

	Project	Likely lead actor	What should be done?	
<b>Ensuring healthy and sustainable food supply and consumption</b>				
1	Crisis contingency plan	European Commission	The 'Farm to Fork' strategy envisages the development of a contingency plan by the end of 2021 for ensuring food supply and food security in times of crisis. This includes a food crisis response mechanism coordinated by the Commission and involving Member States. The coronavirus crisis indicates the safeguarding of free movement of workers and goods in the internal market and of farm labourers' health as critical priorities.	
2	Legislative framework for a sustainable food system	EU institutions	The 'Farm to Fork' strategy announces a legislative framework for a sustainable food system by 2023. This will have to consider social policy issues that go beyond food security. Indeed, while many people are willing to spend larger income amounts on sustainable healthy food, others cannot afford this choice and would benefit from financial subsidies and incentives for <a href="#">behavioural change</a> towards healthy diets.	
3	Reducing meat consumption	EU institutions / Member States	Life-threatening diseases and environmental impact could decline by reducing meat consumption. This can be achieved at both the EU and national level by promoting and supporting <a href="#">novel food</a> , alternative protein sources (such as <a href="#">insects</a> ), <a href="#">plant-based diets</a> , lower consumption of highly-processed food, vegetarian days and menus in canteens in (public) schools and offices. Public procurement and <a href="#">taxation</a> can also help to reduce meat consumption and its environmental footprint.	
4	Harmonised food labelling scheme	European Commission	To promote healthy and sustainable food consumption, the 'Farm to Fork' strategy aims at harmonising front-of-pack <a href="#">nutrition labelling schemes used in Member States</a> and at creating a sustainable labelling framework, including on origin indication, which is generally an <a href="#">important aspect</a> for EU consumers. A much <a href="#">debated</a> proposal concerns the 'traffic light' labelling, a colour-coded Nutri-Score adopted in <a href="#">certain EU countries</a> but not included in the strategy's draft action plan. However, as food labelling involves nutritional, environmental and social aspects of food, a front-of-pack label may not be enough to inform consumers. <a href="#">Exploring the potential of blockchains</a> , with their capacity to provide unlimited information on products and transparency throughout the supply chain, is a possible policy option as part of a digitalisation strategy of the agri-food sector.	
5	Halving food loss and waste	EU institutions / Member States	The 'Farm to Fork' strategy announces a proposal on EU level targets for food waste reduction and food loss and waste preventive measures, including clearer EU rules on date marking on food end of life. The World Wide Fund for Nature (WWF) has also put forward <a href="#">proposals</a> such as a requirement for larger businesses to measure and report on their food waste figures or allocation of CAP funds for preventive actions at farm level and early processing stages. Food banks can also be part of the solution, as demonstrated by <a href="#">examples of food aid</a> activities	



			helping environmental sustainability, through organised distribution of expiring food from retail to charity.	
6	Healthier vending machines	Member States	National authorities' guidance or restrictions could contribute to a more balanced offer of food and drinks in favour of healthier options in (public) schools and offices. Currently, the handling of vending machines in school premises <a href="#">varies greatly</a> across the EU. Stricter rules could reduce intakes of salt, sugar and fat.	
7	Corporate social responsibility (CSR) along the food chain	European Commission	Though CSR is a company-led initiative, the Commission <a href="#">promotes</a> responsible practices in business strategies and operations. The 'Farm to Fork' strategy aims to promote responsible business and marketing practices in the food chain through an EU Code of conduct to be developed by 2021. Other initiatives include sustainable packaging and healthier formulation of food products.	
<b>Building a resilient and innovative farming sector</b>				
8	Preventing unfair trading practices (UTPs)	Member States	The 2019 EU <a href="#">directive on UTPs</a> aims at strengthening the position of smaller operators (farmers) in the food supply chain by prohibiting or regulating certain business-to-business practices. Member States must transpose it into national law by 1 November 2021.	
9	EU Land Observatory	European Commission	In 2017, the European Parliament <a href="#">called on</a> the Commission to establish an observatory on farmland concentration and tenure in the EU. Through the collection of data on land market and prices, land use changes, soil fertility and erosion, such an <a href="#">observatory</a> would provide a full picture of land use and help to ensure land accessibility, which is a major obstacle for young farmers.	
10	Agriculture research and innovation	EU institutions / Member States	There is sound <a href="#">evidence</a> on the relationship between innovation and the performance of agriculture. <a href="#">EU agricultural innovation</a> is already a success story, with funds expected to grow in the next EU budget. The 'Farm to Fork' strategy puts forward some ideas, such as broadband access to mainstream precision farming and the use of satellite technology. Other developments in the agri-food chain could <a href="#">include technologies</a> with high impact (such as artificial intelligence and big data), medium impact (such as blockchain and virtual reality), and low impact because most are already set up (such as broadband networks and platforms for e-business).	
11	Investing in protein plants	European Commission / Member States	The EU has a <a href="#">major deficit</a> in plant proteins used for animal feed, <a href="#">especially</a> for certain products. Considering that the interchangeability between the different vegetable protein sources is limited, promoting investments in protein plant production would provide a double advantage, consisting of new business opportunities for farmers and a solution to the deficiency in EU agriculture.	
12	EU carbon farming initiative	European Commission	The 'Farm to Fork' strategy envisages new business opportunities from farming practices that remove CO <sub>2</sub> from the atmosphere. Based on a regulatory framework and transparent carbon removal accounting, such practices would be rewarded either via the CAP (e.g. CAP payments based on the carbon sequestered) or other public or private initiatives (e.g. market in certificates of carbon removals).	
13	Improving agricultural crisis management	European Commission / Member States	The CAP's financial rules provide for a reserve for crises in agriculture, based on an annual reduction of payments to farmers and subsequent <a href="#">reimbursement</a> of unused amounts. This mechanism needs to be revamped because the reserve has	

			<p>never been deployed to mitigate crises. <a href="#">Risk management tools</a> could be better implemented and targeted to farmers' needs. CAP payments could favour mitigation strategies at farm level (e.g. against drought and soil erosion) and the participation in <a href="#">producer organisations</a> that provide greater certainty for farmers through stronger contracts and price setting powers.</p>	
<b>Preserving biodiversity and the environment and helping to combat climate change</b>				
14	Greener CAP payments	EU institutions / Member States	<p>The <a href="#">proposals</a> on the future CAP include <a href="#">a host of actions</a> to make CAP payments greener. An innovative system is represented by <a href="#">eco schemes</a>. These can reward farmers for their environmental and climate commitment, based on local needs and conditions, and they are expected to boost sustainable practices, such as <a href="#">precision agriculture</a>, <a href="#">agro-ecology</a> and <a href="#">agroforestry</a>. As smaller farms need more subsidies to engage in the sustainability transition (e.g. to take up technology), a progressive shift could be envisaged from current area-based payments towards <a href="#">other distributive criteria</a>, including a shift in funding towards environmental measures and more mandatory environmental conditionality for farm payments.</p>	
15	Fewer chemicals on the fields	EU institutions / Member States	<p>Chemical pesticides and fertilisers are widely used agricultural inputs. The 'Farm to Fork' strategy proposes to enhance EU legislation (which already sets <a href="#">rules and limits</a> on the use of these inputs), to increase the use of alternative products and methods, and to measure the progresses made via quantifiable targets for 2030.</p>	
16	EU law on novel genomic techniques	EU institutions / Member States	<p>Modern genetic techniques can change the biology of plant and animal species to introduce qualities (such as resistance to pests and diseases) that could help the transition to a more sustainable form of agriculture. <a href="#">CRISPR-Cas</a> is currently the most popular technology. The Commission is preparing a <a href="#">study</a> for 2021 on the state of play on new genomic techniques in the EU.</p>	
17	Ambitious CAP strategic planning	Member States / European Commission	<p>The Commission has put forward a number of interventions (see Chapter III of the <a href="#">CAP strategic plans regulation</a>) that Member States may use in their <a href="#">CAP strategic planning</a> to increase their environmental ambition. However, there are <a href="#">concerns</a> over the risk of softening the impact of the proposals either during the legislative process or due to Member States' implementation choices. Member States' commitment to develop sustainability-oriented interventions in their CAP strategic plans is key <a href="#">to achieving both</a> EU Green Deal/'Farm to Fork' goals and CAP's national performance targets, along with Commission services' guidance and assessment during the drafting of the plans. This includes the definition of appropriate performance targets and indicators and proposals for CAP legislation improvements.</p>	
18	Sustainable EU external policies	European Commission	<p>To make the EU a global leader of sustainable food systems, the 'Farm to Fork' strategy puts forward a Green Alliance based on EU international cooperation and trade. Mainstreaming sustainability goals into such policies involves various <a href="#">actions</a>, such as strengthening the sustainability clause in trade agreements and <a href="#">due diligence</a> in supply chains, diversifying regional sourcing, avoiding products and subsidies associated with deforestation and other adverse land-use changes, etc. With the agri-food chapters that have become central in negotiations for trade agreements, another initiative which has been the subject of debate is a <a href="#">carbon tax</a> to make companies pay the cost of production externalities.</p>	
19	Organic food production	European Commission	<p><a href="#">Organic production</a> is growing in EU agriculture, fisheries and aquaculture sectors, with a positive impact on food quality and</p>	

			biodiversity. In addition to existing <a href="#">rules</a> and measures, the Commission is set to propose an action plan on organic farming to stimulate supply and demand for organic products and help to reach the targets set by the 'Farm to Fork' strategy.	
20	Stricter regulatory framework for industrial livestock farming	EU institutions / Member States	Pig and <a href="#">poultry</a> meat are the most produced and consumed meat in the EU. However, many concerns arise regarding the large-scale and intensive production methods of these sectors (such as high stocking densities and the use of antimicrobials) affecting animal welfare, the environment and human health. Other meat sectors also cause concern, and Parliament has <a href="#">advocated</a> a new EU strategy and law on animal welfare on many occasions. While the 'Farm to Fork' strategy plans to revise EU legislation, the debate is open on a <a href="#">European animal welfare label</a> . A stricter regulatory framework could prevent, not simply discourage, undesirable practices, e.g. a ban on mass killing of male <a href="#">chicks</a> and the <a href="#">long distance</a> transport of <a href="#">live animals</a> .	
<b>Supplying food in the urban and rural space</b>				
21	Supporting urban food policymaking	European Commission / Member States	Recent examples of <a href="#">urban food policy-making</a> seek to bridge the rural-urban divide and build urban food systems on a broader scale than just urban and peri-urban territories. Indeed, urban self-sufficiency through <a href="#">urban agriculture</a> could be imagined only for certain produce, including thanks to innovative methods such as <a href="#">hydroponic and vertical farming</a> . The <a href="#">Milan Urban Food Policy Pact</a> initiative includes <a href="#">over 200 cities</a> that are building more sustainable food policies. EU rural development and cohesion funds could support such spontaneous initiatives.	
22	Boosting community-supported agriculture (CSA)	European Commission / Member States	Short supply chains are already a <a href="#">reality in the EU</a> , but their share of the food market remains very limited. However, the coronavirus crisis has <a href="#">sparked demand</a> for short food supply chains. CSA initiatives are short food chains in which consumers and producers associate to share part of the risks and rewards of production. This creates a close connection between farms and the community. During the crisis, CSA offered producers the necessary <a href="#">infrastructure</a> (e.g. platform for online grocery shops) and fresh, local and seasonal food to consumers, delivered to their door or to collection points. More EU rural development funds could be directed towards supporting CSA initiatives, along with innovative public procurement on food supplies.	
23	Increased funds for local-led initiatives	European Commission / Member States	The EU <a href="#">LEADER</a> method for rural development, and more broadly the Community-Led Local Development ( <a href="#">CLLD</a> ) initiatives going beyond rural areas have proven successful over the years as local development initiatives led by local action groups and thus better targeted to local needs. Actions based on such methods receive at least 5 % of the total EU rural development funds. These initiatives could be further developed by increasing the 5 % minimum share in the final CAP legislation or by earmarking higher shares in Member States' CAP strategic plans.	
24	Food value-adding activities in rural areas	European Commission / Member States	Value-adding activities, such as local food processing facilities for small and medium-sized enterprises (SMEs) or <a href="#">mobile slaughterhouses</a> , can boost rural economies and contribute to the creation of jobs and prevent rural abandonment. EU rural development funds and cohesion policies could be earmarked to support such activities, including the <a href="#">smart villages strategy</a> . This involves a whole range of different EU policies (such as agricultural, regional, digitalisation, and transport policies) with the aim of offering access to services, skills, connectivity, and job opportunities to the rural population.	

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## ENDNOTES

- <sup>1</sup> In the EU, [more than 20%](#) of citizens are at risk of poverty or social exclusion and potentially exposed to food insecurity. In [one out of three](#) EU countries, more than 10 % of the population is unable to afford a meal with meat, fish, chicken or a vegetarian equivalent every second day.
- <sup>2</sup> A Commission Joint Research Centre (JRC) [survey](#) on the impact of coronavirus on the EU agri-food supply chain is open until end September 2020. It aims to investigate the resilience, constraints and responses of chain operators.
- <sup>3</sup> On 9 July 2020, the Commission launched a [public consultation](#), open until 22 October 2020, on the CAP's impact on natural resources. Responses will feed into a Commission report on the impact of EU farm policy on natural resources.
- <sup>4</sup> According to the [FAO definition](#), food losses occur along the food supply chain from harvest/slaughter/catch-up to distribution, and food waste at the retail and consumption level.
- <sup>5</sup> A recent consumer organisation's survey found out that [over 40%](#) of EU consumers have either reduced or halted their meat consumption and that [most consumers](#) are not concerned about the naming of vegetarian food, as long as it is clearly labelled.

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