
Safeguarding food security and reinforcing the resilience of food systems
1. **INTRODUCTION**

The unprovoked Russian invasion of Ukraine has further destabilised already fragile agricultural markets. The Covid-19 pandemic and climate change are putting agriculture all over the world under pressure. The latest IPCC report documents how threats to food security and nutrition from droughts, floods and heatwaves as well as sea level rise are already materialising and are set to grow due to global warming, especially affecting vulnerable regions.¹

Already before the invasion, commodity markets were witnessing a significant price surge, which agricultural markets felt through the increases in energy and fertiliser costs, and the consequent increase in farm prices. EU food prices have increased 5.6% compared to last February.

**Food supply is not at stake in the EU today.** The EU is largely self-sufficient for key agricultural products, being a main wheat and barley exporter and largely able to covers its consumption for other staple crops such as maize or sugar. The EU is also largely self-sufficient for animal products, including dairy and meat, with the notable exception of seafood.

However, the invasion of **Ukraine and a global commodity price boom** are driving up prices in agricultural and seafood product markets and **exposing the vulnerabilities of our food system**: our dependence on imports of e.g. energy, fertiliser and animal feed. This increases costs for producers and affects the price of food, raising concerns as regards the purchasing power of consumers, and the income of producers.

The trade disruption also raises serious concerns about global food security stemming from the short-term impact of the war and the longer-term uncertainties that surround it. Dramatic food shortages are being witnessed in besieged Ukrainian cities. Important trade flows of cereals and oilseeds from the Black Sea have practically come to a halt.

**The war in Ukraine dramatically changed market expectations**, affecting prices in all commodities, including for agro-food primary products. The global wheat market is where food security concerns are mainly concentrated. Prices in wheat futures markets have increased by 70% since the invasion. Global wheat output is at risk both from the supply shock stemming from the size of Ukraine’s and Russia’s share in wheat markets and from the shock in input costs, especially in natural gas, nitrogen fertiliser and oxygen. Up to 25 million tonnes would need to be substituted in order to meet worldwide food needs in the current and the next season².

Now more than ever is the time to demonstrate solidarity. This Communication sets out the Commission response to the invitation of the European Council in its Versailles declaration of 10 and 11 March 2022, to present options to address rising food prices and the issue of global food security. It is based on an assessment of the situation (Annex 1)

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² It is estimated that around 5 million tonnes of wheat cannot be exported by Ukraine until the end of June 2022. Moreover, in the marketing year 2022/2023 a further 20 million tonnes of Ukrainian wheat exports were expected and may not materialise. These figures do not take into account any effects on Russian wheat exports.
and builds on its vision for a fair, healthy and environmentally friendly food system laid down in the European Green Deal and its Farm to Fork Strategy. It lays out short term measures to support food security and agriculture in Ukraine, global food security, as well as producers and consumers in the EU. It also calls for addressing the deficiencies revealed by the developing crisis in ways that enhance the transition towards sustainable, resilient and fair food systems in the EU and globally.

2. GLOBAL FOOD SECURITY

The Russian invasion in Ukraine risks having serious consequences for global food security, in Ukraine but also for many food-deficit countries in Africa (including Sub-Saharan Africa), the Middle East, and the Western Balkans. Together with rising food prices, this is likely to increase poverty and instability in these countries.

Food security in war-torn Ukraine is of great concern, particularly as Russia seems to be deliberately targeting and destroying food stocks and storage locations. The UN Appeal estimates that up to 18 million people will be affected in Ukraine, including up to 6.7 million who will be newly internally displaced. Food shortages in cities and millions of refugees and displaced persons call for urgent food aid to Ukraine. Humanitarian actors, such as the World Food Programme, are providing food assistance and scaling-up operations. The EU is mobilising aid through both its civil protection and humanitarian mechanisms. EU humanitarian aid, already operational, amounts to EUR 93 million for Ukraine and Moldova including food assistance and support for basic needs.

The 2022 harvest in Ukraine, known as the breadbasket of Europe, will be substantially impacted by warfare and general turmoil. Ukrainian farmers need seeds, diesel, fertiliser and plant protection products to ensure production. The Commission is supporting Ukraine to develop and implement a short- and medium-term food security strategy to ensure that inputs reach farms where possible and that transportation and storage facilities are maintained to enable Ukraine to feed its citizens and to eventually regain its export markets. The Commission works with the United Nation’s Food and Agriculture Organisation (FAO) on the ground in Western Ukraine to support small farms and secure agricultural production. In addition, on request of the Ukrainian agricultural authorities, the Commission will ensure that access to EU markets is preserved and facilitated in a flexible way both for imports to and exports from Ukrainian markets. The Ukrainian government is planning to finance interest of loans for farmers under a programme worth 25 billion hryvnias (EUR 760 million) as part of a raft of new measures to ease the economic shock of war. And last but not least, EU farming organisations are providing assistance and support to Ukrainian farmers.

The war directly affects global food supplies (notably wheat, maize, barley and sunflower oil) and fertiliser prices, as well as energy prices. Current price hikes add to an already difficult socio-economic situation, due to COVID-19, droughts and other conflicts. In September 2021, more than 161 million people in 42 countries were acutely food insecure. Nearly one in three people in the world do not have access to adequate food and for about 3 billion people the costs of a healthy diet were out of reach. These numbers risk rising further and therewith falling further short of reaching the Sustainable Development Goals by 2030. According to initial FAO analysis, the number of undernourished people globally is projected to increase by 7.6 million people (moderate shock scenario) to 13.1 million people (severe shock scenario).
For many low-income countries and even lower middle-income countries these circumstances imply an increased (food) import bill, at a time when debt has increased and exchange rates are under stress. Countries importing a large part of their food and notably wheat, an important basic commodity, from Russia and Ukraine (e.g. in Africa, the Middle East and the Western Balkans) are heavily impacted and may see growing tensions leading to social unrest, radicalisation and instability. Countries dependent on the import of fertilisers for a significant part of their agricultural production, some of which are also wheat import dependent, will face increasing costs, which may become untenable in a vicious circle, severely threatening food production for the next few harvests.

Both humanitarian needs and costs are likely to increase and put additional pressure on humanitarian assistance. For example, the World Food Programme estimates that their operational costs will increase by of EUR 26.1 million per month compared to current levels, through the combined effect of food and fuel price hikes. When compared to pre-pandemic levels, such additional costs are EUR 63.8 million per month.

The EU, as a major humanitarian and development actor in food and nutrition security, provides substantial financial and political support. Since 2015, the EU has spent a minimum of EUR 350 million for humanitarian food assistance per year. In addition, in the period 2014-2020, the EU committed over EUR 10 billion in development cooperation to improve food security for the poorest and most vulnerable, to help eradicate hunger, and better address all forms of malnutrition. For the period 2021–2024, the EU is pledging at least EUR 2.5 billion (EUR 1.4 billion for development and EUR 1.1 billion for humanitarian aid) for international cooperation with a nutrition objective. In the 2021-27 international cooperation programme the EU will support food systems in about 70 partner countries.

The asymmetric jump in futures prices since the Russian invasion of Ukraine demonstrates that the wheat market is where global food security concerns are mainly concentrated. It is fundamental from a geo-strategic point of view that the EU contribute to covering the production gap to address the expected global shortage in wheat. The EU is not only a major net exporter of wheat, but the one with the highest yields globally. Since last summer, the EU has exported 19 million tonnes of wheat, with an additional 13 million tonnes expected until the end of June. This figure could slightly increase in response to high prices encouraging export sales. Prospects for the 2022 EU winter wheat harvest are good as the areas increased with 1% compared to last year and crops did not suffer from adverse weather conditions during winter in major producing Member States.

In the short term, the Commission regularly follows and analyses food prices and food insecurity, to be coordinated with other global actors including stock levels at country and regional level building on the Agricultural Market Information System (AMIS), where possible. It monitors the needs for those commodities where global stock levels are low to provide the right market signals for a boost in production using sustainable practices. Humanitarian assistance should be stepped up addressing food-deficit countries as well as countries affected by conflict in North Africa and the Middle East, in Asia and sub-Saharan Africa. The assistance should, where relevant have a humanitarian-development-peace nexus approach and expand the work of the Global Network against

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3 Wheat yields in the EU average 5.3 tonnes/hectare, versus 4.3 t/ha in Ukraine and close to or below 3 t/ha elsewhere in the world.
Food Crises to the national and local level. Moreover, at the first European Humanitarian Forum (21-23 March 2022), a call for action was launched to **work together as a Team Europe to address the humanitarian global food security crisis.** Leveraging their collective action, the EU and its Member States can together increase humanitarian aid for relief and rehabilitation.

The proposed **EU Emergency Support Programme** in favour of Ukraine (EUR 330 million) seeks to contribute to alleviating the suffering of the Ukrainian population caused by the Russian invasion by securing access to basic goods and services as well as protection. The Action will also contribute to strengthening the country’s resilience and resilience against hybrid threats by increasing the capacity of the government, economic actors, media and civil society to withstand the impact of the crisis and contribute to the recovery of the country. Focus will be also placed on the reconstruction of small-scale civilian infrastructure and its strategic planning as well as energy security.

This can be complemented by macro-economic support, in case where eligibility requirements are met, for mitigating measures to support those groups most affected by (food) price increases, and by elaborating social protection mechanisms. **The EU can also continue to integrate debt relief into broader policy dialogue, financing strategies and actions, in order to sustain green recovery.** Anticipatory mechanisms should be put in place, to prevent future shocks before they occur and reduce their impact where they do happen, rather than reacting to their consequences.

Moreover, the EU will continue to strongly advocate, including in international fora, to **avoid export restrictions and export bans on food** as the track record of these are disastrous as the 2007-8 crisis amply demonstrated in various parts of the world. WTO coordination will be essential. To increase resilience, importing countries are encouraged to ensure better diversification of sources of food supplies. Moreover, well-functioning global supply chains and logistics are essential for global food security.

In the **medium term**, the EU will continue to support countries in the transformation towards resilient and sustainable agricultural and aquatic food systems. This includes analytical and policy support, elaborated in the context of the follow-up to the 2021 Food Systems Summit and Nutrition for Growth Summit. In this context, the EU will step up its international cooperation on food research and innovation, including playing a leadership role in the Consultative Group on International Agricultural Research (CGIAR), with particular reference to climate change adaptation and mitigation and sustainable management and protection of natural resources, applying approaches such as agro-ecology, landscape management and agro-forestry, diversification of trade flows and production systems, and reduction of food loss and waste. Furthermore, the EU will strengthen its international cooperation on nutrition and healthy diets, including through humanitarian aid, as well as on resilient and inclusive value chains. For Africa, the African Union EU Rural Transformation Action Agenda agreed in 2019 offers a basis for enhanced cooperation.

The EU is ready to identify, with International Organisations and in the context of the ongoing G7 process, the demands of net food importing countries and respond, if necessary, through targeted aligned support to country owned agendas (aligned with the Food Systems Summit national pathways and the Comprehensive Africa Agriculture Development Programme (CAADP) plans in Africa, for example).

The EU is actively mobilising the international community to urgently scale up multilateral action beyond humanitarian assistance. This includes ensuring that UN
bodies with mandates relevant to food security are able to take the necessary actions. For example, food security is central to FAO’s mandate. It has a key role to play in analysing and addressing the impacts that Russia’s invasion of Ukraine is having on international food systems and in preventing further deterioration, with a particular focus on protecting the most vulnerable. The EU is also working to ensure that food security is integrated in the efforts of the whole UN system, including the UN Security Council and the General Assembly, to reassert international peace and security.

The Commission proposes and encourages Member States to:

- Demonstrate solidarity with Ukraine by providing food aid, humanitarian assistance and support to its agricultural and fisheries sector, in close cooperation with international partners
- Continue to integrate debt relief into broader policy dialogue, financing strategies and actions, in order to sustain green recovery.
- Ensure a regular follow-up and analysis of food prices and food insecurity, which should be coordinated with other global actors including stock levels at country and regional level and making stocks available to countries in need.
- Continue to support countries in the transformation towards resilient and sustainable agricultural and aquatic food systems
- Step up humanitarian assistance to the regions and population groups most affected by food insecurity
- Consider macro-economic support to low-income food-deficit developing countries, in cases where eligibility requirements are met, for mitigating measures to support those groups most affected by (food) price increases
- Advocate, including in international fora, against export restrictions and export bans on food and for a well-functioning single market

3. Food security in the EU

3.1. Food availability and affordability

For the EU food availability is not at stake, though food affordability for low-income persons is.

The EU is largely self-sufficient for many agricultural products and a net exporter of wheat. However, the EU is a considerable net-importer for specific products which may be difficult to (swiftly) substitute, such as feed protein, sunflower oil or seafood. There is no risk of widespread shortage for consumers. While the stable food supply in the EU is not jeopardised, these vulnerabilities together with increasing input costs in the food supply chain are driving food prices further up. If the significantly higher production costs at farm level are not compensated by higher prices, this may impact supply certainties.
Against this background, the Commission has recently established a new European Food Security Crisis preparedness and response Mechanism (EFSCM)\(^4\) which aims at improving coordination efforts by European and national administrations as well as relevant non-EU countries and private stakeholders to ensure food supply and food security in times of crisis. The Mechanism, which started its work on 9 March 2022, will carry out a thorough mapping of risks and vulnerabilities of the EU food supply chain, followed by recommendations and appropriate mitigation measure.

A well-functioning Single Market is the bedrock for EU food security and food safety, also in the current crisis. Our supply chains are interdependent and any unjustified restriction to the Single Market can have unintended consequences, that can threaten our supply of safe food. The Commission strongly opposes Member States’ measures to protect domestic food supply by preventing exports. Such trade distorting measures are a priori incompatible with the Single Market and will ultimately have a negative impact on food security. It is important that Member States coordinate measures with a view to improving trade flows and bringing commodities and food to where it is most needed. The setting up of the Single Market Emergency Instrument will further strengthen the Union’s preparedness and coordinative capabilities and reduce the risks of unjustified restriction. The Commission and Member States are screening Foreign Direct Investment (FDI) in the framework of Regulation (EU) 2019/452, pursuant to which they may consider the potential effect of FDI on the supply of critical inputs, as well as food security. New cases will be subject to an in-depth assessment in view of their possible impact on food supply and food prices.

**Particular attention should be given to the most vulnerable**, including refugees from Ukraine as well as low-income persons that are already affected by the high energy prices and are still suffering from the socio-economic shock caused by the COVID pandemic. Studies have shown that following the 2008 food price increase, households have on average bought less fruit and vegetables and switched to cheaper foods which tend to be calorie-dense, nutrient-poor foods (i.e. lacking in vitamins, minerals and fibre that are essential for health).

In a context of rising food prices, social policy measures are important to both protect the most vulnerable citizens from food insecurity and to ensure everyone can afford sufficient amounts of healthy and nutritious food, especially vulnerable groups such as families with children, elderly and low-income persons. These must be embedded in an integrated approach to target root causes of poverty and social exclusion. Moreover, the European Child Guarantee provides guidance to Member States to guarantee effective access to sufficient and healthy nutrition for children in need, including at least one free healthy meal each school day.

**Member States** can draw from EU funds such as the Fund for European Aid to the Most Deprived (FEAD) which supports EU countries’ actions to provide food and/or basic material assistance to the most deprived, reaching over 15 million people with food aid. Member States can top up their resources by mobilising the Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU) and can make best use of the additional flexibilities to their FEAD programmes provided by the Cohesion’s Action for Refugees in Europe (CARE), as recently proposed by the Commission.

\(^4\) COM(2021) 689 of 12.11.2021 “Contingency plan for ensuring food supply and food security in times of crisis”.

To alleviate the impact of high food prices on the most vulnerable, Member States may implement reduced rates of Value Added Tax and encourage economic operators to reduce the price for consumers. In December 2021, the Council agreed on a reform of VAT rates at EU level, which enables Member States to further reduce their rates, down to 0%, on certain goods and services which address basic needs, notably food. Member States may already make use of this possibility, as well as making lump-sum transfers to households as an efficient and effective solution to address affordability.

3.2. Stabilising EU agricultural markets and supporting producers

Market dynamics are influencing choices of producers. To relieve pressure from high prices, short term adjustments could reduce demand for fuel and feed use and increase supply by incentivising higher spring wheat plantings. Farmers are increasingly adopting sustainable practices, which deserve further encouragement.

The Common Agricultural Policy (CAP) and Common Fisheries Policy (CFP) provide for a range of measures, including a price safety net and the possibility to take exceptional measures. These measures can be deployed to ensure stable markets and to address exceptional circumstances. Targeted support to producers facing the input cost increase is necessary but should not undermine the long term objectives of a more resilient and sustainable food system.

The Commission is carefully monitoring the current situation based on the market intelligence tools developed since 2008. To better monitor stock levels in this environment of high prices and perceived uncertainty about supplies, the Commission will propose for Member States to communicate monthly data of private stocks of essential commodities for food and feed to be able to give a timely and accurate picture of their availability.

In light of the current exceptional situation, the Commission has proposed a support package of EUR 500 million, including by making use of the crisis reserve, to support the producers most affected by the serious consequences of the war in Ukraine. On this basis, Member States could provide financial support to farmers to contribute to global food security or addresses market disturbance due to increased input costs or trade restrictions. Support for farmers engaged in sustainable practices should be prioritised whilst also ensuring that the measures target the sectors and farmers who are the hardest hit by the crisis. To address possible cash-flow challenges this autumn, the Commission will allow Member States to pay increased levels of advances of direct payments and area- and animal-related rural development measures to farmers as of 16 October 2022.

The EU supply response is limited by the availability of fertile land. To enlarge the EU’s production capacity, the Commission has today adopted an implementing act to exceptionally and temporarily allow Member States to derogate from certain greening obligations. In particular, they may allow for production of any crops for food and feed on fallow land that is part of Ecological Focus Areas in 2022, while maintaining the

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full level of the greening payment. This temporary flexibility will allow farmers to adjust and expand their cropping plans this year.

The Commission supports Member States in using possibilities to **reduce the blending proportion of biofuels** which could lead to a reduction of EU agricultural land used for production of biofuel feedstocks, thus easing pressure on the markets for food and feed commodities.

As for fisheries sector’s operators, the Commission is considering activating the crisis mechanism of the EMFAP⁶, which is devised for exceptional events causing a significant disruption of markets. It allows Member States to grant compensation to operators for their income foregone and economic losses, and to recognised producer organisations and associations, which store fishery products⁷.

To enable Member States to remedy the serious disturbances to the economy resulting from the war in Ukraine, the Commission adopted a new, self-standing **Temporary Crisis Framework** on 23 March 2022. This framework allows support for undertakings directly or indirectly affected by the crisis, including farmers and fishers, in the form of liquidity support and aid for increased gas and electricity costs. This framework allows aid, including direct grants, to producers affected by the crisis (such as those affected by significant increases in input costs, in particular feed and fertiliser) as well as aid to energy-intensive undertakings (such as fertiliser manufacturers and the processing industry).

In the short term, **availabilities of animal feed** are also of concern. Livestock and aquaculture producers are already looking for alternative supply sources to replace the supplies lost due to the war. Some Member States have decided to make use of the existing flexibility in EU legislation⁸ for imports in duly justified cases, on an exceptional and temporary basis, that do not compromise food safety and consumer health. The Commission monitors such national measures. Finally, market safety net measures are deployed to support the market for pig meat, in light of the specific difficulties for that sector.

High fertiliser prices encourage more efficient use and drive innovation in using more sustainable alternatives contributing to the Farm to Fork Strategy target of reducing nutrient losses by 50% by 2030. Organic farming, for example, uses limited amounts of mineral fertiliser and is therefore less exposed to price increases. Nevertheless, in the short term, the **cost and availability of mineral fertilisers** must continue to be a priority, pending the transition to use of sustainable types of fertiliser or methods of fertilising. The fertiliser industry in the EU must be able to access the necessary imports, including gas to produce fertilisers within the EU itself. Fertiliser prices and supplies for farmers will be monitored to ensure that the prospects for EU harvests are not jeopardised.

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⁶ European Maritime, Fisheries and Aquaculture Fund (EMFAF) pursuant to Article 26(2) of Regulation (EU) 2021/1139

⁷ In accordance with the storage mechanism of Articles 30 and 31 of Regulation (EU) No 1379/2013 on the common organisation of the markets in fishery and aquaculture products.

4. **ENSURING FOOD SYSTEM RESILIENCE**

4.1. **Sustainable food systems**

While short term emergency support measures are important, they do not replace the importance of refocusing the food sector in the long run towards sustainability and resilience.

**Food sustainability is fundamental for food security.** Without a transition set out in the Farm to Fork and Biodiversity Strategies, food security will be severely at risk in the medium and long-term, with irreversible impacts globally. In implementing these strategies, the Commission is keen to ensure that overall productivity of EU agriculture, fish and seafood production is not undermined.

Acutely aware of the interrelations between our health, ecosystems, supply chains, consumption patterns and planetary boundaries, the Commission set out its vision for a **fair, healthy and environmentally friendly food system** in the Farm to Fork Strategy. In this strategy, the Commission underlined the importance of the resilience of the EU food system, to ensure access to a sufficient supply of affordable food for citizens under all circumstances and to undergo a transition to sustainable food systems in a fair and democratic manner, in line with the European Pillar of Social Rights.

The current crisis lays bare the dependency of the EU food system on imported inputs, such as fossil fuels, fertiliser, feed and raw materials, confirming the necessity of a **fundamental reorientation of EU agriculture** and EU food systems towards sustainability, in line with the Green Deal and the reformed CAP and facilitated by actions proposed in the Long term vision for rural areas.

Improved and reduced use of inputs (nutrients, pesticides), and organic farming (which relies less on such inputs) are pillars of the transition to sustainable agriculture. Ending wasteful discarding at sea and fighting illegal, unreported and unregulated fishing will bring fish stocks to sustainable levels. The current crisis also highlights the cost of inaction, including the urgency of addressing the challenges in terms of agricultural productivity and the environmental consequences of indirect land use change, including in third countries.

**Innovation through research, knowledge, technology, agro-ecology and adoption of best practices** can mitigate pressure on input costs without hurting production capacity, leading to long-term progress in productivity to achieve the green transition. More importantly, it will help achieve a fundamental change in society by reducing food waste, encouraging more plant-based diets and building partnerships with third countries for development of sustainable food systems. Improved information on the sustainability of our food will empower consumers to make the sustainable choice. Fighting food loss and waste reduces pressure on the limited natural resources and brings savings and the redistribution of surplus food helps those in need.

Actions that increase **yields sustainably** through both technological as well as agroecological innovation, need to be prioritised. The Commission will propose new rules to facilitate the placing on the market of **plant protection products containing**

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9 A long-term Vision for the EU’s Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040, COM/2021/345 final.
biological active substances. It is also assessing options for new rules on new genomic techniques, which have the potential to create plant varieties that are less susceptible to changing temperatures and climatic threats, more resistant to plant pests and more efficient in the use of fertiliser. To safeguard soil fertility, the Horizon Europe Mission 'A Soil Deal for Europe' aims to establish 100 living labs and lighthouses to lead the transition towards healthy soils.

The current and dramatic crisis confirms that we need to accelerate the food system transition towards sustainability to better prepare for future crises. As a follow-up to the 2021 UN Food Systems Summit, the Commission will engage in eight coalitions\(^\text{10}\) that all aim at food system transformation, resilience and sustainable productivity growth.

The role of the CAP strategic plans for the period 2023-2027 will be crucial in supporting the transition towards sustainable agricultural practices and resilient production systems, most notably through the combination of a more result-oriented policy framework and a more effective set of policy instruments and mechanisms. This will be the focus of forthcoming observations of the Commission on Member State draft plans.

The Commission calls on Member States to ensure a fairer distribution of income support to enhance in particular the resilience of small and medium-sized farms, vulnerable to volatility of markets that may threaten continuity. The Commission also encourages Member States to make more use of the rural development fund to finance risk management tools, to help farmers cope with revenue and income losses, and to support the development of short supply chains and other types of diversification of farm income. Similarly, it welcomes plans to facilitate access to credit for farmers, to be able to invest in sustainable production methods, including for example production and use of renewable energy.

In this context, the Commission also expects Member States to define and implement the new conditionality mechanism in a way that maximises the climate and environmental objectives, while minimising its potential short-term impact on production capacity. For example, the minimum share of arable land to allocate to biodiversity should rather focus on the maintenance and establishment of non-productive features such as landscape features (e.g. hedges and trees) than laying land fallow (which would constrain EU production potential).

Member States are urged to revise their CAP strategic plans with a view to support farmers in adopting practices optimising the efficiency of fertilisers, thus reducing their use. This can be done specifically through precision farming, but also organic farming, agro-ecology and more efficient use through advice and training on nutrient management plays an important role. Member States should fully exploit the possibilities of their CAP Strategic Plan in this regard, as well as optimising and reducing use of other inputs such as antibiotics and pesticides and engage in carbon farming.

\(^{10}\) The 8 coalitions in which the Commission will participate are: Food is never waste, Healthy Diets from Sustainable Food Systems for Children & all, School Meals Coalition, Aquatic and Blue foods, Agroecology, Zero Hunger, Fighting food crises along the HDP nexus, Sustainable Productivity Growth. More information: https://foodsystems.community/coalitions/.
4.2. Enhancing resilience by reducing dependence on fossil fuels and imported inputs

The resilience of the EU food sector requires diversified import sources and market outlets through an ambitious and robust trade policy, multilaterally as well as through trade agreements. The need to address the dependency of European agriculture and fishery sectors on energy and energy intensive imports was exposed by the war in Ukraine and the reaction of markets.

Reducing the reliance on mineral fertiliser produced with fossil fuel, is an especially important objective. Nitrogen fertiliser is mainly produced with natural gas (both as energy source and as reactant). Investments in the circular bioeconomy contribute to replacing fossil-based products, materials and energy, thereby helping to decarbonise the economy\(^\text{11}\). Producing mineral fertiliser with clean technology is an important area of innovation. The Commission is supporting the transition to green ammonia\(^\text{12}\), e.g for fertiliser producers through the deployment of clean hydrogen as set out in the Commission’s Hydrogen Strategy\(^\text{13}\) and supported by the Clean Hydrogen Alliance and EUR 800 million in investment.

Phosphate and potash are key nutrients to ensure good yields of high-quality arable crops. There is an acute dependence on imports of both as most reserves are in third countries, including Russia, China, Morocco and Belarus. Russia and Belarus potash exports account for 40 percent of global trade. As a result of the recently adopted sanctions, the EU will need to replace the import share of these two countries, respectively 60% for potash and 35% for phosphates, by other sources. Free trade agreement already in place can facilitate sourcing these inputs from other origins. The Commission will carefully monitor the situation to anticipate possible shortages and take, if necessary, temporary remedial action to facilitate such sourcing.

The Union, through Horizon Europe, will further invest in research and innovation to substitute the use of synthetic fertilisers and to accelerate the transition to sustainable, circular, and resource efficient food systems in the EU. Under one of the Horizon Europe work programmes for 2021-2022, a substantial budget of 268.5 million EUR will be allocated to circular and bioeconomy sectors. In addition, the Circular Bio-based Europe partnership will be endowed with up to EUR 1 billion for a period of seven years, where the position of primary producers will be reinforced. This supports promising pathways identified in the Bioeconomy Strategy, such as increasing the sustainable use of biomass, the recovery of valuable nutrients (including phosphates\(^\text{14}\) and nutrients from livestock manure) and the production of bio-based alternatives (including by using by-products, residue and waste streams) to close the nutrient cycle, while protecting water, air and soil quality. Access to the internal market of products issued from the

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\(^{12}\) Projects in the order of EUR 30-35 billion could be operational in the short to medium term in e.g. Spain, the Netherlands, Austria, and Sweden.

\(^{13}\) COM(2020)301 final.

\(^{14}\) For example: “Phos4You: deploying phosphorus recycling from wastewater in North-West Europe” Phos4You - PHOSphorus Recovery from waste water FOR YOUr Life | Interreg NWE (nweurope.eu)
circular economy will be facilitated. The Commission will continue to consider further safe regulatory steps to allow for wider possibilities for use of recovered nutrients from livestock manure. Moreover, the Commission will develop with Member States an integrated nutrient management action plan to address nutrient pollution at source and increase the sustainability of the livestock sector.

Energy use in agriculture and seafood production is already decreasing in industrialised countries due to efficiency gains. There is scope for further gains through greater **efficiency in nitrogen use, biomass valorisation** and **reducing food waste**. Targeted research and innovation will aim to further improve the efficiency of the fertiliser application at farm-level, among others by deploying **precision farming** techniques. Furthermore, EU funding promotes research into sustainable food production systems, including **mixed-farming, agro-ecology or organic**. Leguminous crops, which fix nitrogen and use less nitrogen fertilisers, play a big role in those production systems and will be given a specific attention. A decrease in use of diesel for tractors could be achieved through innovation that reduces the use of plant protection products and mechanical weeding.

**Sustainable management of fish stocks** combined with more energy-efficient fishing vessels will also contribute to a reduction in the use of fossil fuels to produce seafood.

**Accelerating production and use of renewable energy** is another priority to which CAP Strategic Plans, EMFAF as well as Next Generation EU funding contribute. On farm generation of electricity through wind, solar or biogas will not only reinforce the resilience of those particular farms, but also contribute to the security and sustainability of European energy supply. In this crisis, we must avoid that use of food and feed crops as feedstock for biofuel increases. The Commission calls on Member States to enhance investments in farm or farming cooperative based biogas from sustainable biomass sources, including in particular agricultural and aquacultural waste and residues, anchoring the value creation into the rural economy.

**Reducing dependence on feed imports** is part of the larger transformation of the EU food system, including a shift towards more plant-based diets and ensuring a more resilient and autonomous food system. In its Versailles declaration, the European Council called for boosting **EU plant protein production**.

At least 19 Member States intend to make use of the possibilities to provide ‘coupled support’ for protein crops in their CAP Strategic Plans for 2023-2027. The Commission calls on Member States to also make use of other possibilities to support plant protein production, including dedicated sectoral interventions, as part of **sustainable farming systems based on diversified feed sources**. The Commission will pay specific attention to protein crops in its summary assessment of the Member States’ CAP Strategic Plans

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15 Following the entry into force on 15 July 2022 of Regulation (EU) 2019/1009 on the making available on the market of EU fertilising products.


17 European Maritime, Fisheries and Aquaculture Fund.
as well as review the policy identified in its 2018 report on the development of plant proteins in the EU.

5. CONCLUDING REMARKS

An unprovoked war on the European continent has again brought food insecurity to Ukraine, a country with some of the most fertile soils in Europe.

The Versailles declaration of the European Council calls upon the Commission to take urgent action to present options to address rising food prices and the issue of global food security as soon as possible. This Communication outlines immediate and ongoing actions to support food security for the citizens of Ukraine as well as support for food security in food-deficit countries. It addresses food affordability in the EU and the specific short-term challenges for producers facing high input costs. It recalls the

The Commission will:

- Support through the Fund for European Aid to the Most Deprived (FEAD) EU countries' actions to provide food and/or basic material assistance to the most deprived.
- Deliver a support package of EUR 500 million to support farmers most affected.
- Deploy market safety net measures to support specific markets and allow for increased levels of advances of direct payments later this year.
- Apply a new self standing Temporary Crisis Framework (TCF) for state aid.
- Allow Member States to derogate from certain greening obligations in 2022 to bring additional agricultural land into production.

Member States are encouraged to:

- Use the new CAP strategic plans to prioritise investments that reduce the dependency on gas and fuel and inputs such as pesticides and fertilizers, e.g.:
  - Investments into sustainable biogas production, reducing dependency on Russian gas.
  - Investments into precision farming, reducing dependency on synthetic and mineral fertilisers as well as chemical pesticides.
  - Support for carbon farming, reducing greenhouse gas emissions and providing a better income for farmers.
  - Support for agro-ecological practices, reducing dependency on chemical inputs and ensuring lasting food security.
- Ensure the effectiveness and coverage of social protection systems and access to essential services for those in need.

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18 Article 141 (2) of Regulation (EU) 2021/2115.
Commission’s commitment to the Green Deal and the Farm to Fork Strategy and sets out medium-term actions to support the transition to a sustainable food system.

The Commission calls on Member States to actively engage and quickly implement the necessary actions to address pressing concerns and long-term vulnerabilities. Member States are in the position to put many of these measures into place without further regulatory framework at EU level. Specifically, the Commission urges Member States to revise their CAP plans where necessary to ensure food system resilience.

At the same time, the Commission will strengthen its efforts and increase its cooperation with international organisations and other key actors to timely and effectively address the consequences of the Russian invasion of Ukraine on global food security.