

A Healthier and More Sustainable Global Food System: What is at Stake for the EU?



by Marta Antonelli

Fixing the global food system is arguably the most powerful leverage to nurture the world's population while keeping human activity within the biophysical limits of the planet. Yet, food systems are today a threat to both human and planetary health, and thus require bold and forward-looking strategies as well as multi-stakeholder collaboration.

Up to 811 million people in the world faced hunger in 2020;¹ while for almost 2 billion people unhealthy diets cause micronutrient deficiencies and contribute to diet-related obesity and non-communicable diseases (including diabetes and cardiovascular diseases – CVDs).² The food system is

also responsible for about one third of total greenhouse gas emissions, 70 per cent of freshwater use, the majority of global eutrophication, land-use change and biodiversity loss.³ Notwithstanding the role that sustainable food systems play in mitigating climate change, these issues did not feature prominently in the negotiated texts of the recently concluded COP26 summit in Glasgow.

Such challenges are only going to increase in the future. In order to meet the food demands from a growing and increasingly urbanised global population, which is also experiencing a nutrition transition towards a

¹ Food and Agriculture Organisation (FAO), *The State of Food Security and Nutrition in the World 2021*, Rome, FAO, 2021, p. 10, <https://www.fao.org/publications/sofi/2021/en>.

² Walter Willett et al., "Food in the Anthropocene: The EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems", in *The Lancet*,

Vol. 393, No. 10170 (2 February 2019), p. 447–492, [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4).

³ FAO, *The State of Food Security and Nutrition in the World 2021*, cit.; Monica Crippa et al., "Food Systems Are Responsible for a Third of Global Anthropogenic GHG Emissions", in *Nature Food*, Vol. 2, No. 3 (March 2021), p. 198–209.

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westernised diet (high in sugar, protein and fat, but low in fruit, grains and vegetables), food production will need to increase 70 per cent by 2050 (compared to 2009), according to United Nations projections.⁴

Such an increase would put key ecosystems at risk. Greenhouse gas emissions would rise by 87 per cent, cropland use by 67 per cent, freshwater use by 65 per cent, phosphorus by 54 per cent and nitrogen application by 51 per cent by 2050 compared to 2010 levels.⁵ The realisation of a just transition towards sustainable food systems that operate within the safe operating space of humanity (the so-called “planetary boundaries”),⁶ while providing fair access to nutritious diets for all, will therefore determine whether future generations will be able to thrive in peace with their surroundings.

Europe is not immune from these challenges. Food insecurity in Europe affects 33 million people who are not able to afford a nutritious diet every second day.⁷ The adoption of poor-quality diets caused about 2.1 million

deaths in 2016, out of 4.3 million CVDs deaths in Europe.⁸ Over the past decade, overweight and obesity levels have increased by over 50 per cent in Europe, while diabetes grew by 25 per cent, contrarily to a downward trend in other CVDs risk factors (including smoking and alcohol consumption). This suggests that “a mismatch exists between the available evidence on the health-promoting potential of the diet and the relatively modest and inconsistent improvements of dietary habits”.⁹

Further concern has now emerged in the context of Covid-19, especially regarding the exposure of supply chains to sudden shocks and the effects this can have on food prices and access to food. Importantly, the future sustainability of international food systems is at the heart of the Green Deal’s promise to make the European Union the first decarbonised continent in the world, as well as to the Commission’s agenda to achieve the United Nations’ Sustainable Development Goals (SDGs), as food security is arguably a pre-condition to achieve all the targets of the 2030 Agenda.

⁴ FAO, *How to Feed the World in 2050*, paper presented at the High-Level Expert Forum, Rome, 12-13 October 2009, https://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf.

⁵ Marco Springmann et al. “Options for Keeping the Food System within Environmental Limits”, in *Nature*, Vol. 562, No. 7728 (25 October 2018), p. 519-525.

⁶ Johan Rockström et al., “A Safe Operating Space for Humanity”, in *Nature*, Vol. 461, No. 7263 (24 September 2009), p. 472-475, <https://doi.org/10.1038/461472a>.

⁷ Eurostat database: *Inability to Afford a Meal with Meat, Chicken, Fish (or Vegetarian Equivalent) Every Second Day*, https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdcs03.

⁸ Toni Meier et al., “Cardiovascular Mortality Attributable to Dietary Risk Factors in 51 Countries in the WHO European Region from 1990 to 2016: A Systematic Analysis of the Global Burden of Disease Study”, in *European Journal of Epidemiology*, Vol. 34, No. 1 (January 2019), p. 37-55, <https://doi.org/10.1007/s10654-018-0473-x>.

⁹ Gabriele Riccardi, Marilena Vitale and Olga Vaccaro, “Are Europeans Moving Towards Dietary Habits More Suitable for Reducing Cardiovascular Disease Risk?”, in *Nutrition, Metabolism & Cardiovascular Diseases*, Vol. 30, No. 11 (30 October 2020), p. 1857-1860.

Against this backdrop, a central question is how one can foster the role of food systems in the transition towards a decarbonised EU that thrives within planetary boundaries, while nourishing the health and wellbeing of citizens, in the context of Covid-19 and the economic downturn?

The answer to this question is intertwined with two recent advancements in food-related policy.

During the October 2021 plenary session, the European Parliament adopted a resolution to welcome the agenda set by the European Commission in May 2020 with the Farm to Fork Strategy as a cornerstone of the Green Deal, to make the EU food system “fair, healthy and environmentally friendly”.¹⁰ The Farm to Fork Strategy is a step towards an integrated food system strategy and governance in the EU as, for the first time, food sustainability is addressed across the entire food chain, with a set of targets to be achieved by 2030 on a wide range of topics, from the use of pesticides and fertilisers to the uptake of organic farming and the reduction of food waste.

Importantly, the Strategy’s targets require an EU-wide policy framework for implementation, binding instruments for all member states¹¹ as well as policy coherence, which

¹⁰ European Commission, *A Farm to Fork Strategy for a Fair, Healthy and Environmentally-Friendly Food System* (COM/2020/381), 20 May 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0381>.

¹¹ Heidrun Moschitz et al., “How Can the EU Farm to Fork Strategy Deliver on Its Organic Promises? Some Critical Reflections”, in *EuroChoices*, Vol. 20, No. 1 (April 2021), p. 30-36.

fundamentally includes the reform of the Common Agricultural Policy (CAP), voted on 23 November 2021 by the European Parliament to make farming systems “more friendly for our environment, our climate, and for animal welfare”.¹²

The extent to which member states will unlock the full potential of the CAP’s strategic plans to support the transition towards climate and nature-friendly agriculture will determine the opportunity to implement the targets of the Green Deal and the Farm to Fork Strategy. A recent modelling study by the Joint Research Centre has shown that CAP reform can help reduce greenhouse gas emissions from agriculture by over 28 per cent by 2030, as a result of changes in production and mitigation actions through technology and agronomic practices, but also point out that this would entail emission increases in non-EU countries (so called “leakage”).¹³

Achieving the ambitious targets of the Farm to Fork Strategy will require decisive steps.¹⁴ Firstly, it is fundamental

¹² European Commission, *Statement by Mr Janusz Wojciechowski, Following Vote by the European Parliament on the CAP Reform*, Strasbourg, 23 November 2021, https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_21_6250.

¹³ Jesus Barreiro Hurle, et al., *Modelling Environmental and Climate Ambition in the Agricultural Sector with the CAPRI Model*, Luxembourg, Publications Office of the European Union, 2021, <https://doi.org/10.2760/98160>.

¹⁴ The reader is referred to this publication to delve into the key governance challenge of the Farm to Fork Strategy: Hanna Schebesta and Jeroen J.L. Candel, “Game-changing Potential of the EU’s Farm to Fork Strategy”, in *Nature*

to clearly define what a sustainable food system is. This is important not only to make sure that all actions are consistent with this definition, but also to foster legitimacy and support from different stakeholders and interest groups, enabling a paradigm shift from a productivity to a sustainable approach that aims to realise the ultimate purpose of the food system, i.e. securing the provision of food security in the long term for all EU citizens.

Secondly, the release of an overarching legislative framework proposal for sustainable food systems has been announced in the Farm to Fork Strategy as a regulatory measure to be presented by 2023. It will be key to translate ambitious targets into concrete actions, and to ensure policy coherence at both the member state and EU level, by providing common principles and definitions, as well as addressing the needs and responsibilities of all actors in the food system.

Against this backdrop, the “Concepts for a sustainable EU food system” project was initiated in December 2020 by the European Commission, and included a participatory approach to generate strategic insights and inputs for the development of a legislative framework carried out by the Joint Research Centre EU Policy Lab (with publication expected in early 2022).

Thirdly, voluntary measures and agreements, such as the Code of Conduct on responsible food business and marketing practices (which

entered into force in July 2021),¹⁵ can be useful in the short term, but in order to accelerate the transition, the establishment and enforcement of binding rules will be necessary.

Fourthly, participatory approaches to foster food democracy can foster the commitment of actors in the food chain – from primary producers, to manufacturers, retailers and consumers – without whom the much-needed transition will not happen. The sustainable corporate governance law, planned for October 2021 and delayed to 2022, is fundamental to establish binding human rights and environmental due diligence in the EU. Last but not least, moving towards sustainable food systems will require a rethinking of our dietary choices, embracing plant-based diets with less and sustainably produced animal products.

No single policy will be capable of enabling such a system-wide change in food systems. Coherence across policy domains as well as multi-level governance and coordinated action across systems are necessary to achieve the targets of the Farm to Fork strategy. In conclusion, a globalised and interconnected world, food security and sustainability issues cannot be seen as exclusively national issues, as countries share risks related to biophysical resources, national security, financial flows, trade and much more.

Food, Vol. 1, No. 10 (October 2020), p. 586-588, <https://doi.org/10.1038/s43016-020-00166-9>.

¹⁵ European Commission website: *EU Code of Conduct on Responsible Food Business and Marketing Practices*, <https://europa.eu/!ybUQ3v>.

The EU is taking the lead in a food system transformation that has implications beyond its borders and that requires integrated policy strategies to avoid spill over effects as well as leakages. Ultimately, food security rests on trade for many countries. This points to the importance of preserving ecological assets at the global level and developing linkages between EU policies and efforts to enhance global governance of international food systems, helping to ensure food security and geopolitical stability alike.

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