EAPF Position Paper on the EU Protein Strategy

Brussels, May 2023

Food sustainability and food security are two sides of the same coin: our current food production and consumption patterns are major drivers of climate change and environmental degradation[1], with a detrimental impact on our ecosystems[2] as well as natural resources such as land and water[3]. This not only affects the sustainability of our food systems, but also their potential to withstand and recover from abrupt disruptions that may occur within increasingly connected and globalised supply chains.

We have experienced this situation first-hand with COVID-19, and then with the war in Ukraine, which led to energy and food crises that exposed the vulnerability of Europe's food systems. While food security *per se* was not an issue in the Union, food affordability (and hence, accessibility for certain segments of the population) was affected. Building more sustainable food systems is therefore a prerequisite to strengthen food security and ensure a certain level of autonomy in our food production.

Both the sustainability and resilience of food systems globally are particularly put to the test by current systems that heavily rely on animal production and consumption, especially in Western countries. For instance, Europe is highly dependent on imports of agricultural raw materials from a handful of countries (e.g., Brazil, Argentina, US), particularly for plant crops used for feed, which equal to 23% of total EU protein feed use[4]. This paradigm is at odds with the EU's ambitions of building more sustainable food systems by, among others, promoting a shift towards more plant-based diets that enhance food security and reduce the use of natural resources (e.g., land and water)[5]. We see a role for plant-based proteins in this transition.

The upcoming EU Protein Strategy provides the opportunity to address this issue, focusing on how to enhance domestic food production while staying on track with the EU sustainability objectives.

The EU Protein Strategy should support the development of protein crops and their processing for human consumption, to strengthen the resilience of the European plant protein value chain, ensure food security and contribute to the EU's climate and environmental goals.

In the long run, a more comprehensive approach to plant crops – beyond only protein crops – will be needed to fully address the resilience of food systems. This could take the form of a dedicated EU Plant Crop Strategy.

[1] Crippa, M., Solazzo, E., Guizzardi, D., Monforti-Ferrario, F., Tubiello, F. N., & Leip, A. J. N. F. (2021). Food systems are responsible for a third of global anthropogenic GHG emissions. *Nature Food*, *2*(3), 198-209.

[2] Food system impacts on biodiversity loss: Three levers for food system transformation in support of nature, Chatham House, 2021

[3] Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., ... & Murray, C. J. (2019). Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. The Lancet, 393(10170), 447-492.

[4] Commission publishes latest forecasts on EU feed protein production and trade, November 2022

[5] European Commission: Drivers of Food Security, January 2023

A future-proof European Protein Strategy must be plant-centric and food-focused

An EU-wide protein strategy provides the opportunity to accelerate the development of a sound plant-based food ecosystem – from seed production to farming, food production and processing, retailing and consumption – whose dynamics are closely intertwined and need to be addressed in parallel. As such, the Strategy should aim to:

- **Reduce Europe's reliance on imported protein crops –** especially if produced unsustainably – **and strengthen domestic production.** The EU imports about 20-25% of EU feed proteins[6], whose production is generally intensive and concentrated within a few countries (e.g. Brazil), thus increasing the vulnerability of the EU in case of disruptions affecting supply and/or trade relations with those partners. Decreasing the share of protein crop imports by supporting domestic production is therefore necessary to release pressure on EU agri-food supply chains.

  Notwithstanding efforts to improve strategic autonomy in food production, Europe cannot prescind from its trade relations, being a major trade partner in agri-food worldwide. The current situation calls for a diversified approach to trade partnerships, supporting responsible production of essential crops from different supplying countries.

- **Secure proper management of domestic production of plant protein crops.** Strengthening Europe's strategic autonomy also means rebalancing the current share of EU arable land addressed to food and feed. In the EU, around 65% of agricultural land is used for animal production, 55% of cereals are used to produce feed[7] and over one fifth of EU arable land is destined to fodder crops[8,9]. Reduced dependence on imports from third countries should not lead to an increase in domestic feed production, which is an indirect driver of GHG emissions in the EU agricultural sector and could jeopardise the sustainability objectives of the EU. On the other side, high-quality protein crops can be directed to human consumption as whole foods (e.g. pulses, soy) or used as ingredients to produce a wide range of plant-protein based foods and drinks. These products have an important role to play in enabling the transition to more plant-based diets, as they are highly compatible with existing food habits and can be easily integrated in consumers' daily consumption patterns[10]. The Protein Strategy should therefore include measures that can support farmers who are and/or want to shift towards protein crops for food consumption.

- **Explicitly recognise and exploit the potential of the plant-based food sector – from farming to production – to achieve Europe's climate and food security ambitions.** Momentum for accelerating the development of a sound plant-based food sector is there: consumer demand is increasing, with 46% of European consumers having already significantly reduced their intake

[6] European Commission: Drivers of Food Security, January 2023
[7] ibid
[8] "Arable fodder crops" includes: fodder roots and brassicas, forage plants (e.g. green maize, leguminous plants)
[9] Agri-environmental indicator - cropping patterns, Eurostat, January 2023
[10] Carmichael, R. (2019). Behaviour change, public engagement and Net Zero. A report for the Committee on Climate Change

of animal-based products[11]. At the same time, the sector is one of the most innovative and rapidly growing branches of the food industry, projected to reach €7.5 billion by 2025 in the EU[12]. Retail sales have been growing by almost 10% year on year between 2010 and 2020[13], reaching €5.8 billion in 2022[14]. However, plant-based products are still a minor share of the wider market of traditional animal-based products, respectively 0.7% of the meat market and 2.5% of the dairy. To tap into the potential of the sector, policies are necessary to provide the support and tools (e.g., technology and innovation, financial aid) to all the plant-based food chain actors (e.g. farmers, producers) to develop sustainable and nutritious plant-based products contributing to the dietary shift[15].

- **Define a supportive regulatory framework for innovation and market access of (products made from) protein crops.** The current EU framework poses regulatory hurdles that may significantly delay the production and marketing of some innovative products, as well as the uptake of historical crops already part of European diets, but whose consumption reduced over time. In view of fostering production of (products made from) plant protein crops for food consumption and promoting protein diversification, the EU Protein Strategy should address current legislative obstacles to accelerate their uptake and achieve a level playing field between plant-based products – including proteins – and animal-based products.
- **Promote dietary patterns with less resource-intensive and more cost-effective foods, such as plant-centric diets.** Consumption and dietary choices play a significant role in food system resilience as they can drive more environmentally-friendly production practices. In this context, switching towards more plant-based diets is acknowledged as a pillar in the development of more sustainable food systems[16], and should be set as a wider EU policy goal. Supply-side measures must therefore be combined with demand-side measures – including education and awareness-raising initiatives on protein diversification – that could stimulate the consumption of plant-based proteins while promoting a shift towards more protein crop farming for direct human consumption, keeping the current size of EU arable land.

The EU Protein Strategy can achieve these goals by:

- **Aligning provisions with the EU sustainability goals and ensuring policy coherence with other sustainability initiatives.** The EU Protein Strategy should not be a stand-alone document, but should be contextualised within the overarching food sustainability objectives of the EU Green Deal and the Farm to Fork Strategy, which promotes a shift towards more plant-based diets. In

[11] What do consumers want: a European survey on consumer attitudes towards plant-based foods, with a focus on flexitarians, SmartProtein project, November 2021
[12] Growth of meat and dairy alternatives is stirring up the European food industry, ING Report, October 2020
[13] Plant-based foods in Europe: How big is the market?, the Smart Protein project, 25 February 2021.
[14] Europe's plant-based food retail market insight , GFI Europe, April 2023
[15] International Panel on Climate Change. (2022). Sixth Assessment Report - Climate Change 2022: Impacts, Adaptation and Vulnerability.
[16] EU Farm to Fork Strategy, May 2020

particular, the Strategy should fit within the goals and targets which will be defined in the upcoming Sustainable Food System Framework initiative, and should be developed ensuring coherence with other sustainability policies stemming from the Green Deal, such as the Nature Restoration Law, Biodiversity and Soil Strategies etc.

- **Increasing the budget and funding allocated to plant-based food research.** Increasing the production of quality food crops and optimising the use of natural resources – including land use – requires the uptake of more sustainable agricultural practices, as well as of plant-based foods, including alternatives to meat and dairy made of EU protein crops. In this regard, research and innovation (R&I) is essential to develop new and sustainable sources of plant proteins, enabling the scale-up of plant-based food manufacturing. Innovative processes and technologies can help better valorise resources and raw materials, and can support the delivery of sustainable, nutritious, tasty and affordable products to a growing pool of consumers.

  R&I is particularly needed to e.g, develop new and more robust crops, further improve the sustainability and functionality of plant-based proteins, refine the organoleptic and nutritional properties of processed products and reduce their costs, identify additional food applications from traditional plant and new protein sources, and support the development of new processing technologies. Looking at the allocation of EU funding for food research under Horizon Europe, only 5.5% has been channelled towards alternative proteins for food, with no tailored calls for proposals on plant-based proteins. That represents an amount of around 12 M€ out of a total of 870 M€. If the EU is committed to promoting production of more alternative proteins – including plant-based products and proteins – the allocated funding should be at least 25% of the total R&I budget for food (i.e. min. 50 M€/year).

- **Repurposing other public funding instruments to support production and consumption of (products made from) EU protein crops.** Subsidies provided via EU instruments such as the Common Agricultural Policy (CAP) and the agriculture promotion programme should be adapted to support domestic production of protein crops for food consumption, which is now largely overlooked compared to the production of feed and animal-based products. In this context, the CAP is particularly important to support and incentivise the transition towards more sustainable agricultural practices (e.g., protein crops for food consumption), enabling farmers' access to tools to develop skills, expertise and knowledge, as well as financial support, making the shift an environmentally, socially and economically sound option. Eco-schemes can play a role in channelling funding towards sustainable practices, such as crop rotation with higher-value, high-protein crops (e.g. legumes) which has shown to be less resource and carbon intensive[17].

- **Promoting the environmental and health benefits of food protein crops.** The average European diet is based on overconsumption of animal-based proteins, refined sugars and saturated fats,

[17] Costa, M. P., Reckling, M., Chadwick, D., Rees, R. M., Saget, S., Williams, M., & Styles, D. (2021). Legume-modified rotations deliver nutrition with lower environmental impact. Frontiers in Sustainable Food Systems, 5, 113.

and underconsumption of plant-based foods – including plant-based proteins - and fibres. Opting for a flexitarian diet[18] – thereby rebalancing the intake of animal and plant-based foods – has shown to potentially lead to an almost 20% reduction in premature mortality in Germany[19]. At the same time, a predominantly plant-based diet is also a major pillar to address climate change, environmental degradation and biodiversity loss. The Strategy should therefore promote the implementation of education and awareness-raising activities to inform consumers about both the environmental and health benefits of plant-based foods and proteins – including products alternative to animal-based ones. Such activities can be integrated in already existing EU programmes (e.g. EU School Scheme) or foreseen in the context of upcoming measures (e.g. sustainable public procurement, development of food environments enabling sustainable and healthy food choices at point of sale).

A holistic approach to resilience of agri-food systems: towards an EU Plant Crop Strategy

The EU Protein Strategy is a good step forward to tackle the current vulnerabilities of and strengthen the EU agri-food chain. However, in a long-term perspective, Europe needs to apply a more holistic approach to agricultural resilience, looking at the role of plant crops as a whole –beyond proteins– and defining what measures are needed to increase strategic autonomy also in the supply of non-protein crops, such as grains and cereals. **As a follow-up to the upcoming Protein Strategy, EAPF calls on the European Commission and Member States to develop an EU Plant Crop Strategy,** taking into account the supply needs, economic and agricultural opportunities of the plant-based food sector.

The European Alliance for Plant-Based Foods (EAPF) brings together like-minded organisations in the plant-based value chain around a unique mission: To put plant-based foods at the heart of the transition towards more sustainable and healthy food systems. The Alliance represents the entire plant-based value chain: Food producers and manufacturers, NGOs, nutritionists, research & academia, and consumers.

[18] Nutritional values based on the "EAT Lancet Recommendations on Healthy Diets from Sustainable Food Systems."

[19] Bending the curve: the restorative power of planet-based diets, WWF, 2020