

## Establishing European leadership in protein diversification

Recent shocks such as the Covid-19 pandemic and invasion of Ukraine have foregrounded the need to strengthen the resilience of European agrifood supply chains, and increase the continent's protein sovereignty. Achieving this will require more than immediate stopgaps. It will require a long-term vision of how Europe is to rebalance and diversify its protein supply. It will also require putting in place forward-looking measures now to support protein diversification as one key element of the long-term shift to more sustainable and resilient food systems.

Alternative proteins (plant-based, fermentation-made and cultivated meat, eggs, dairy and seafood) will play a key role in the protein diversification shift. This is because most people's day-to-day food choices are ultimately based on what tastes good, what's convenient, and what's affordable. Instead of asking people to give up the foods they love, we need to offer them more choice by making their favourite foods in a more sustainable way.

The EU feeds almost as much wheat to farmed animals (42.7 million tonnes) as Russia's (32 MMT) and Ukraine's (14 MMT) exports combined. Making meat, eggs,

dairy and seafood from plants, using fermentation processes, or cultivating them directly from cells can deliver the food people want without relying on vast quantities of imported feed. These options also use up to 95% less land – meaning they can free up space for a larger proportion of European demand to be met by nature-friendly methods of farming.

However, there are still key R&D and infrastructure bottlenecks that need addressing to ensure alternative proteins can deliver the same experience as meat and dairy at a price point that is accessible to as many Europeans as possible, and can satisfy soaring demand for these sustainable options.

Establishing the EU at the forefront of protein diversification and the scale-up of the alternative protein sector will involve setting a clear policy direction, meaningfully investing in open-access research and development and industry scale-up, supporting farmers to adapt their practices, and making more data available about market dynamics.



### **Priorities for the Protein Strategy**

#### Priority 1: Explicitly recognise protein diversification as a policy goal.

The Protein Strategy should unequivocally state an ambition to move towards a more diversified protein supply in the EU, and it should set concrete targets to this effect. Within this, specific attention should be paid to the role of plant-based, fermentation-made and cultivated meat, eggs, dairy and seafood.

#### Priority 2: Ringfenced R&D funding to alternative proteins for food

As has already happened with renewable energy, open-access public R&D can play a unique role in addressing pre-competitive research challenges to drive new sustainable options to be more efficient and affordable. However, there has been woefully insufficient funding in Europe for alternative proteins for food to date. This is despite its recognition as an R&I priority in the Food 2030 Pathways for Action and the Farm to Fork Strategy.

Of the first four years of Horizon Europe Destination 2 funding (which focuses on food), only roughly 5.5% has been allocated to alternative proteins for food. This represents just €12 million a year out of a total €870 million available.

Only roughly 5.5% of Horizon Europe's food budget has been allocated to alternative proteins for food Before that, only 6% of research funding between 2007 and 2022 was allocated towards alternative proteins, of which the vast majority was directed to non-food applications (eg. feed or pharmaceuticals). This falls far short of the level of public funding needed to address foundational gaps in understanding and unlock economies of scale.

To address this shortfall, **the EU should ringfence at least €50 million each year** (25% of annual funding for food) for protein diversification in the annual Horizon Europe budget. A significant proportion of this funding should be directed towards lowering the price points and improving the taste and texture of alternative proteins, as well as enabling farmers to benefit from these new markets.

#### Priority 3: Establish Horizon Europe Partnership on Protein Diversification.

The EU should set up a Horizon Europe Partnership on Protein Diversification as a mechanism to facilitate a longer term view of how to strategically deploy R&D funds in this area, and allow for valuable collaboration with stakeholders, companies, and Member States. Doing so would follow the example of regions such as <u>Canada</u> and <u>Israel</u> that strategically deploy R&D funding in a coordinated, joined up way to align with existing policy goals.

#### Priority 4: Enabling farmers.

The next CAP should ringfence funds to incentivise farmers to transition to growing more protein crops for food. In the meantime, **Member States should be encouraged to allocate dedicated funds for this purpose**. Efforts should also be made to better disseminate information amongst farmers about opportunities to enter the alternative protein value chain – for example, by sharing research results about new protein crops that could be profitable and viable for farmers to begin cultivating.



#### Priority 5: Targeted support for infrastructure scale-up.

Meeting anticipated demand for alternative proteins will require significantly more processing capacity than is currently available. For example, it is <u>estimated</u> that the sector will need to produce 25 million metric tonnes of plant-based meat annually to meet anticipated global demand by 2030 - roughly 6x current production. Amongst other inputs, this will require 3x the current global supply of soy protein concentrate, and 10x the supply of pea protein.

In the short term, it will be crucial to build the upstream supply chain infrastructure quickly enough to match growing demand for plant-based foods to avoid bottlenecks that could reduce availability and drive up prices for consumers. In the longer term, support will be needed for ensuring sufficient biomanufacturing scale-up capacity for the fermentation and cultivated industries to unlock economies of scale. For example, by developing and supplying affordable food-grade fermentation and cell culture equipment and repurposing existing underutilised facilities from other sectors.

To meet these challenges, Member States should be encouraged to invest in agricultural infrastructure that can help farmers, businesses and local communities contribute to growing the value chain, e.g. on-farm equipment to scale cultivation and processing of protein crops. Ringfenced R&D should also be made available under Horizon Europe for optimising and innovating on processing techniques for alternative proteins, including repurposing existing infrastructure.

It is estimated that the plant-based meat sector will need to increase its production 6x over to meet anticipated demand by 2030

# Priority 6: Ensuring a clear and evidence-based path to market for new sustainable proteins.

The EU should ensure the pre-market authorisation process for sustainable proteins under the Novel Food Regulation is **as efficient and transparent as possible**, whilst maintaining existing high food safety standards. Authorisation decisions should be based exclusively on the safety of the product in question as determined by EFSA's independent scientific experts.

#### Priority 7: More available data about market dynamics.

To help crop suppliers, ingredient processors and farmers themselves to better anticipate future demand, the EU should encourage Member States to collect and share more granular data about plant protein crop prices, trade flows and production for food. To do this, the European Commission should develop **a food protein balance sheet**, similar to what has already been done with feed.

# Sfi Europe

#### **About GFI Europe**

The <u>Good Food Institute Europe</u> is an international NGO helping to build a more sustainable, secure and just food system by transforming meat production. We work with scientists, businesses and policymakers to advance plant-based and cultivated meat – making them delicious, affordable and accessible across Europe. By making meat from plants and cultivating it from cells, we can reduce the environmental impact of our food system and feed more people with fewer resources. GFI Europe is powered by philanthropy.

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