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Protein Production in the EU: Policies, Gaps, and Opportunities

Assessing the current policy landscape of
protein production across EU Member
States

-Rachel Gifford

Acknowledgement

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About the European Vegetarian Union

The European Vegetarian Union (EVU) is the umbrella association of 48 civil society organisations in 29 European countries. The EVU represents the voice of the growing number of European consumers shifting towards a more plant-based diet. As such, we advocate for a favourable food environment that makes it easier to choose as well as produce more plant-based foods.

About ProVeg International

ProVeg International is a food-awareness organisation working to transform the global food system. Its mission is to accelerate the transition to a sustainable global food system by making plant-rich foods and alternative proteins more accessible and appealing. ProVeg works with businesses, policymakers, investors, media, and the public to promote plant-based alternatives.

Cover image by DigitalShop46 [Canva], *Lentil Plant*

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Executive Summary

Why This Report?

Protein diversification is a promising path forward to strengthen Europe's strategic autonomy, reduce climate harming emissions, provide sustainable pathways for farmers, and increase competitiveness. However, progress is slow and current policy approaches do not offer the support needed to encourage diversification at a broader scale. With this in mind, a review is conducted of both CAP National Strategic Plans and dedicated Protein Strategies at the Member State level. This report identifies where the current gaps and opportunities lie in increasing protein crop production and what policy levers may be utilised at the EU level to support further diversification.

Global population growth of 8.4% by 2032 is projected to increase food demand by 15% and greenhouse gas emissions by 7.5% [1,2]. At the same time, the EU food system remains vulnerable to external shocks and continues to generate significant environmental, economic, and public health pressures [3]. Protein diversification is a strong and important lever to relieve these pressures, and opens up new strategic and market opportunities for the EU, however legume cultivation in Europe remains underdeveloped with less than 3% of arable land used for these crops [4]. Agricultural policy plays a decisive role in shaping production incentives and determining whether

diversification is supported from both a supply and demand perspective.

This policy report synthesises insights from CAP Strategic Plans (CSPs) and National Protein Strategies across selected Member States to examine how existing approaches support or constrain the diversification of protein crops in the EU, informing the development of an EU Protein Strategy and Action Plan. It distinguishes explicitly between protein crops used for animal consumption (feed) and human consumption (food) and evaluates how current policy frameworks can contribute to diversification efforts.

Key Findings

Structural Misalignment in CAP Allocations

Despite increasing political attention to sustainability and resilience, CAP financing remains structurally misaligned with food security, dietary guidance and climate objectives. A disproportionate share of support continues to flow toward emission-intensive animal farming systems [5], even though animal products provide only 35% of EU caloric intake and are consumed in excess of nutritional recommendations [3,6]. Protein crops are widely referenced in CSPs, yet primarily as a means of reducing dependence on imported feed, particularly soy [2]. While 20 Member States provide Coupled Income Support (CIS) for protein crops [2], and eco-schemes frequently incentivise nitrogen-fixing crops and crop rotations, these instruments largely maintain existing production patterns rather than supporting structural diversification [7].

Barriers to Diversification

Across Member States, economic viability remains the primary bottleneck to scaling protein crop production. Yield variability, price volatility, limited downstream capacities and underdeveloped markets constrain farmer uptake [2]. Agronomic and environmental benefits alone have proven insufficient to drive expansion. A **recurring limitation is the lack of processing, storage, sorting, and aggregation infrastructure**, particularly for food-grade protein crops. While the plant-based food sector presents clear growth opportunities [7], insufficient downstream capacity inhibits the development of stable and higher-value markets. In addition, there is a need for more knowledge sharing and support on the production side to ensure that farmers are informed and kept up to date on best practices. A central knowledge network and research development at the EU level can help avoid duplication of efforts at the member state level and support knowledge transfer of best practices and cultivation. In practice, protein diversification remains predominantly feed oriented, with limited integration of supply and demand side measures.

National Protein Strategies: A Strong Signal but more support needed

Dedicated National Protein Strategies in Austria, Denmark, Flanders, France, Germany, Ireland and the Netherlands **demonstrate growing recognition of the importance of protein diversification** for strategic autonomy and food security. Most strategies prioritise reducing dependency on imported feed. Some go further by linking protein policy to dietary shifts and sustainable consumption. Where strategies combine production incentives with value-chain development and demand-side measures, clearer pathways for scaling emerge. However approaches differ in the level of ambition, focus (i.e. feed or food focus), and implementation. CAP is widely recognised in National Strategies as a critical enabling framework, yet protein crops remain under-supported [5,7], with measures spread across fragmented instruments rather than guided by a coherent, protein-specific intervention logic.

Strategic Implications for EU Action

The central finding of this report is that protein diversification in the EU is not constrained by agronomic potential, but by structural, economic, and policy barriers. Incremental support through existing instruments will not be sufficient to deliver results at scale.

A coherent EU-level framework is required to:

- Clearly **differentiate feed and food** protein objectives
- Introduce a visible and protein-specific framework within the CAP
- **De-risk farmer diversification** through targeted income and transition support
- **Prioritise downstream infrastructure** and value-chain development
- Align supply-side incentives with demand-side instruments, including public procurement and dietary policy

Protein diversification is central to food security, strategic autonomy, competitiveness, climate mitigation, and public health [1–5; 7]. Without clearer EU direction, Member State initiatives risk remaining fragmented and predominantly feed-oriented, missing opportunities to create economic opportunities for farmers and grow premium markets, and align agricultural production and practices with environmental targets and health recommendations.

An **EU Plant-Based Action Plan** would provide policy certainty, strengthen internal coherence, and signal that diversification toward plant-based protein is a structural priority for the Union's long-term resilience.

1. Introduction

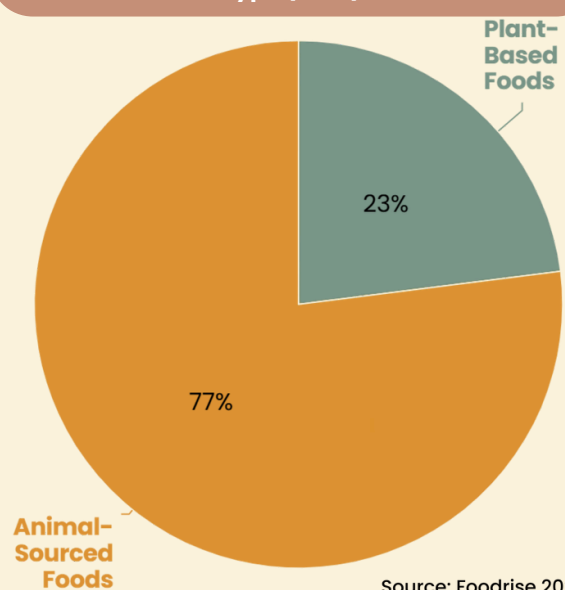
“ As land becomes increasingly scarce and environmental pressures intensify, diversifying protein sources and shifting toward more land-efficient, plant-rich diets will be essential to nourishing a growing population while preserving vital ecosystems. This shift must be supported by carefully considered policies and targeted investments to maintain farmers’ economic resilience and ensure a sustainable agricultural sector. ”

- Farm Adaptation Network

The population is predicted to grow 8.4% from the period of 2023-2032. This results in an increase in food consumption demand at 15% and subsequent increase in greenhouse gas emissions by 7.5% globally by 2032. [1,2]. Such patterns put immense pressure on our food production systems and underscore the need to adapt how food is produced and supplied. In this context, **the current EU food system remains vulnerable** to external shocks with consequences for affordability, competitiveness and resilience, while also generating significant negative environmental, social and economic impacts [3]. To meet rising demand, approaches are required that strengthen food security without sacrificing planetary and human health. Agricultural systems are central to this challenge, offering the key to unlocking a sustainable future which supports food security and offers opportunities for economic viability within geographic boundaries, such as the EU.

Current agricultural practices and policies however are misaligned with these objectives. For example, more than three-quarters of the EU’s Current Common Agricultural Policy **supports emission intensive animal farming** [5] despite these systems providing a relatively limited share of total dietary calories. This contributes to a structural misalignment between population needs, nutritional recommendations [6] and CAP allocations, while also reinforcing climate pressures, public health challenges and undermining farmers opportunities to innovate and diversify. Policies are needed to ensure that our food systems can continue to adequately feed the growing population without sacrificing farmer viability.

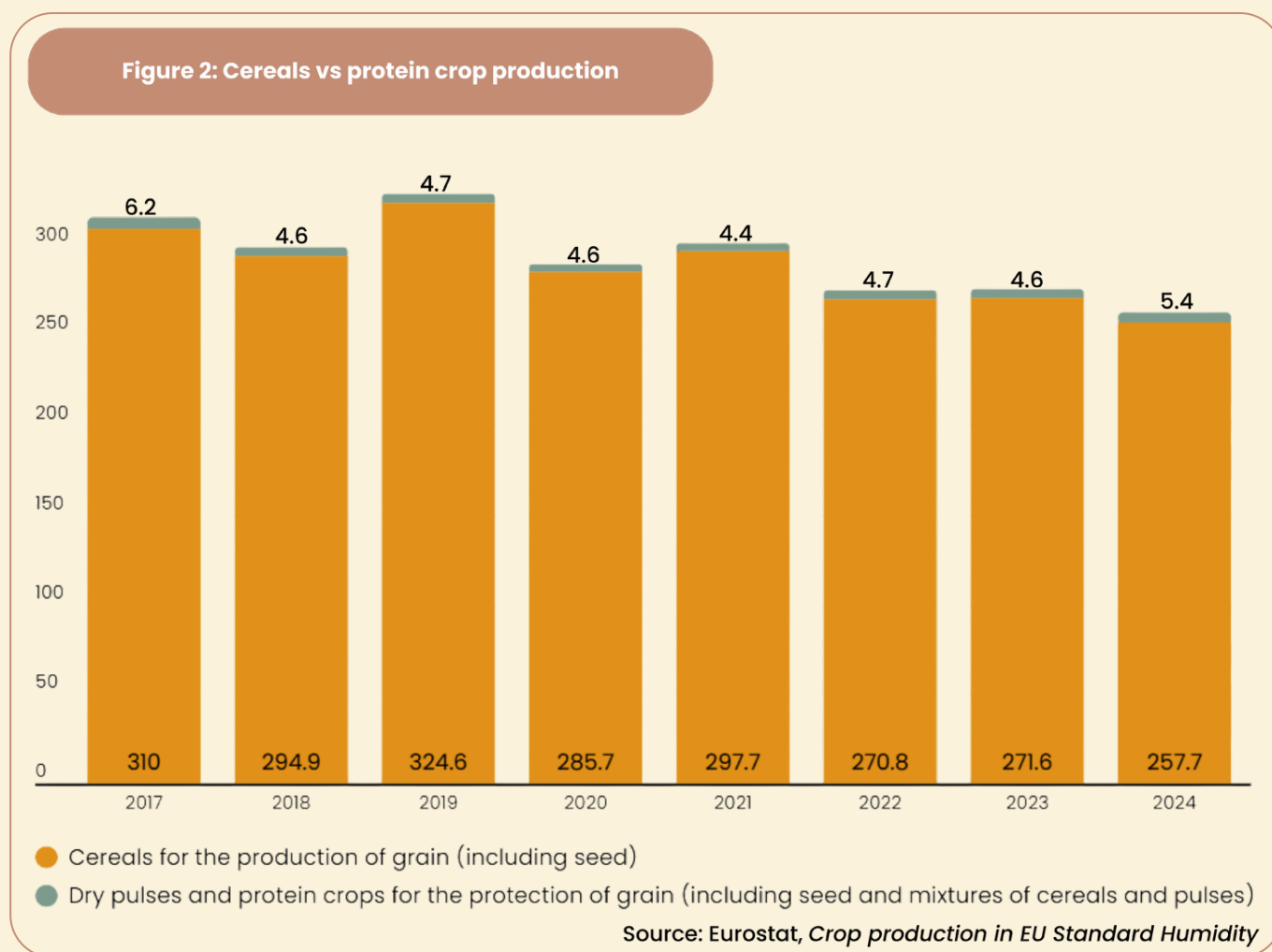
Figure 1: CAP subsidy expenditure based on food type (2020)



The persistence of this misalignment reflects both the importance and the fragmentation of the CAP. As the EU’s primary instrument shaping agricultural incentives, **the CAP plays a decisive role in influencing production systems**. Yet its objectives are distributed across multiple instruments and implemented through nationally defined CAP Strategic Plans (CSPs), resulting in uneven support for protein diversification across Member States and limited coordination between supply - and demand-side measures. Against this backdrop, **current member state initiatives offer some promising insights** into how we can reshape our agricultural policies and design incentives that support farmer viability while also helping to ensure food security by expanding the level of protein-based crops.

Crop diversification, and particularly schemes which support crop rotations offer a dual benefit for environmental goals and food security [2], providing additional dietary resources to support increased food consumption demand without further intensification of farming practices. Crop diversification and rotation are currently supported as qualifying practices under the greening measure for the CAP. The sowing of protein crops can also provide economic benefits for farmers, with crop rotations of grain and legumes helping to avoid yield losses [8] and showing increases in gross margins due to input cost reduction [9]. However **policies remain fragmented** across Member States and the CAP programming remains insufficient to support protein diversification at scale [3].

While both cereals and legumes represent important sources of plant-based protein, their environmental impact, economic performance and end uses vary greatly. In the EU, **the production of cereals is far in excess of leguminous crops** and the majority of crops produced in the EU are directed towards animal feed rather than for human consumption [10]. This report therefore distinguishes between proteins produced for feed and for human consumption (i.e. for food), analysing how CSPs and Member State initiatives support- or constrain- diversification and the expansion of protein production.



The report is structured as follows: First an overview of Member State CSPs is provided with a focus on diversification measures. Following this, a detailed review of National Protein Strategies is provided, resulting in recommendations for policy and future CAP programming.

2. CAP National Strategic Plans: The role of Diversification

The CAP Strategic plans of all Member-States were reviewed, with a particular focus on assessing what supports exist in relation to protein crop production. In addition, attention to the broader protein transition was given, whereby initiatives which support increased plant production and that attend to animal welfare are highlighted as potential indicators of strategies at the Member -State level [1].

2.1. Protein Crop Production

Member States focus on protein crops which primarily include field peas, broad/faba beans, lupins and soya beans. Soy is the primary protein crop highlighted in CSPs, mentioned across 15 CSPs [11]. 14 Member-States include pulses more suitable for human consumption such as lentils and chickpeas.

Protein crops were primarily mentioned in strategies as part of measures which address environmental targets and biodiversity. For instance, Eco-schemes which support nitrogen fixing crops are present (e.g. Belgium-Flanders, Croatia, Latvia) and crop rotations with leguminous crops to improve soil quality (E.g. Cyprus) are supported. Romania offers incentives to farmers (via ecoschemes) who go beyond legal requirements/usual practice in terms of climate and environment and offers support for farmers that want to diversify. Denmark offers an exception with mention of interventions to diversify agricultural production towards plant based proteins and details an approach to extract plant proteins from regionally produced grasses. Ireland provides a bonus scheme in Ireland for farmers growing protein crops which has been updated each year (rates increasing). Some countries operate eco-schemes based upon a points system (e.g. Netherlands) which encourages farmers to reach a minimum number of points for goals on climate, biodiversity, etc.

Coupled income support (CIS) is the primary mechanism used to support protein crop production. As noted previously, 20 CSPs implement CIS interventions to support protein crop production [11].

Focal points

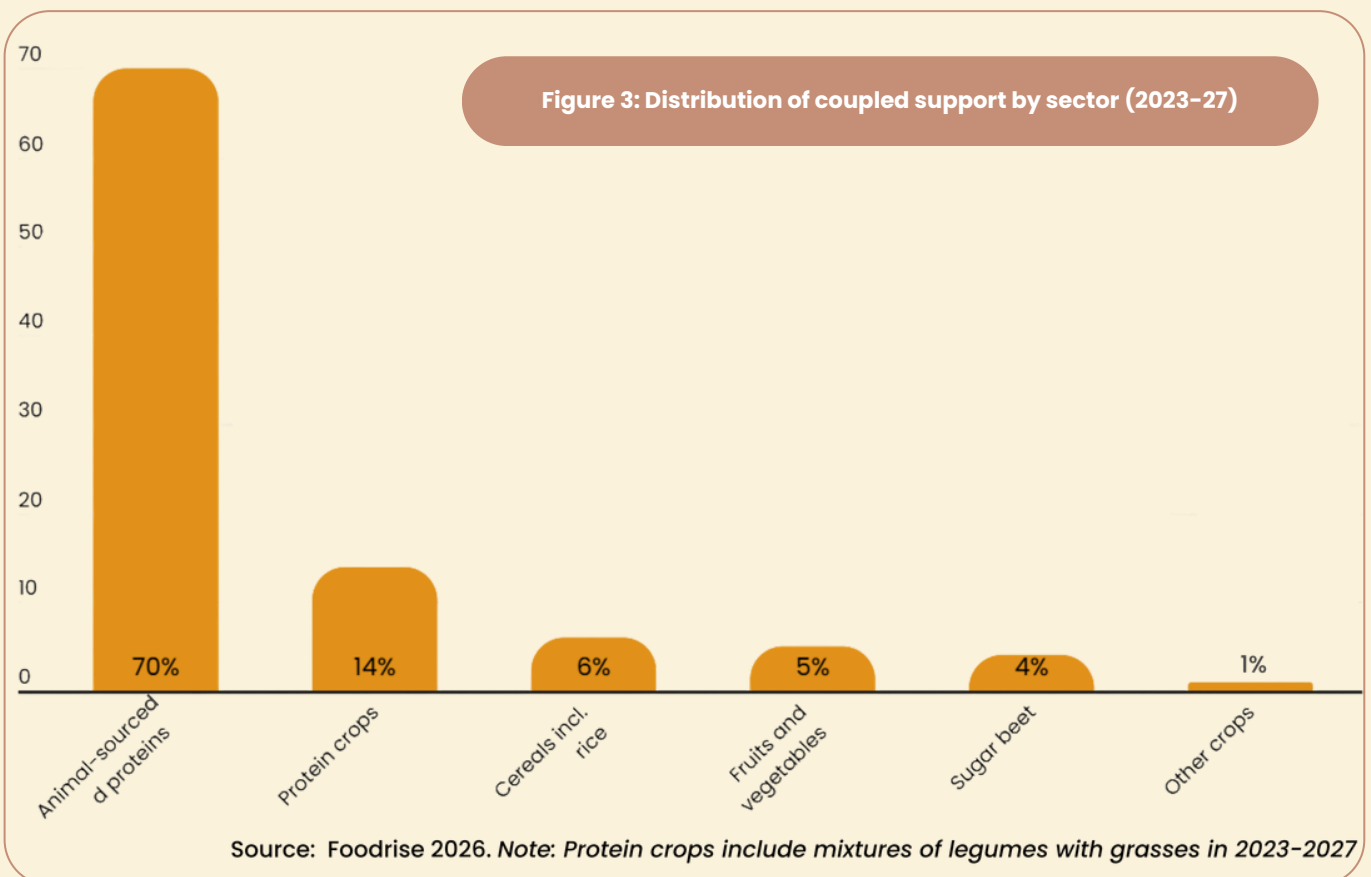
Attention **primarily focuses on growing protein crops for feed**, for example an eco-scheme in Sweden to reduce dependency on foreign imports, and there is little mention across Member-States of strategies to increase the growth of protein crops for food. This aligns with previous analyses of the CAP strategic plans by the European Commission, whereby the main goal related to support for protein crops within the CAP is increasing domestic production of feed for animal farming sectors [11].

Viability

The increase of production of protein crops is limited due to economic difficulties reported in this currently undersupported sector. Countries report **poor economic performance** of crop rotations with protein crops (e.g Belgium, Italy, Poland), risks due to unpredictable yields (Belgium, Italy, Luxembourg, Poland), price volatility and low competitiveness comparable to other protein sources (e.g. Italy, Poland, CZ, EE, ES) as key factors. Relatedly, several countries note the need for more investment and consideration of the broader value chain. For example, **the need for a more developed protein crop sector** is clear with increased research and development and innovation and knowledge sharing related to crop management, plant breeding and rotation systems. Investments in equipment and

downstream infrastructure are particularly needed as investments constitute a significant barrier to diversification efforts at the farm level.

While CIS is a key mechanism used for protein crops, it largely supports maintaining existing production [7] rather than improving long-term competitiveness. For example, while the growth in plant based foods offers a significant economic opportunity and domestic production can increase food security, funds within the CAP remain disproportionately directed at ruminant animal farming. Relatedly, there is a lack of mechanisms which could address underlying barriers such as price volatility and market access considered across CSPs.



2.2. Animal-derived protein production

There are several support schemes which offer coupled support **to boost meat and dairy production**. For instance France offers coupled income support for cattle. Several countries offer CIS to bolster sectors seen as potentially at risk for abandonment, such as the goat and sheep sector (Czech Republic, Cyprus, Germany) and bovine sector (Sweden, Spain, Portugal). In these cases, support is often justified on the basis of maintaining farm viability and preventing land abandonment in areas facing natural constraints. However, in general, across CSPs it appears that there is more emphasis on offering financial boosts to the meat and dairy sectors (Bulgaria) rather than on supporting a more diversified production or reducing animal farming. The exception here is in increasing the land area used for crops for feed. The importance of animal-derived protein production is shown in strategic plans and also explicitly mentioned in the rationale for current approaches.

Luxembourg is the only country which includes a specific target to reduce animal farming density within the CSP, however there is little information to date on whether progress on such a target is being made.

As research has shown, **the CAP continues to disproportionately support emissions-intensive animal based products**, with the majority of financing (>70%) for food production [7] spent on animal products, with a large proportion (44%) being spent on feed production [5]. Although these products received a majority of funding support, they only provide 35% of calories consumed in the EU, leading to large discrepancies between the needs of the population and CAP allocations. Furthermore, when nutritional recommendations are taken into account, citizens are overconsuming animal proteins, which has negative impacts for human health [6].

Animal Welfare

Animal welfare measures vary per Member State and in the extent of information provided. Overall measures remain vague, with targets ranging from a percentage of animals being targeted for welfare improvements to a financial sum dedicated to animal welfare more generally. The details of measures are often not provided, and it is difficult to determine if action follows from the strategic plan.

The majority of animal welfare measures included in member states CSPs relate to the reduction of antimicrobial use. Some specific initiatives show promise such as the end of caging for hens (Croatia, Cyprus). Other initiatives mentioned include increasing outside grazing, updating bedding, and increasing stable space.

Main takeaways

- Most Member States are still focusing on protein production for feed, even when food is mentioned.
- While CIS is a key mechanism used for protein crops, it largely supports maintaining existing production and is **disproportionately directed to animal farming**.

- There is a **need for a more developed protein crop** sector with dedicated funding for research and development and innovation and knowledge sharing related to crop management, plant breeding and rotation systems.
- There is a need for more standardization at the EU level for protein crop end uses with a differentiation on feed vs food.



Source: Betty Subrizi on Unsplash. *Lentils and beans*

3. National Protein Strategies: A Comparative Analysis

This report builds on a review of national protein strategies adopted by selected EU Member States. **Member State plans were included if they had an active, dedicated protein strategy at the national level, separate from CAP strategic plans or other agricultural vision documents.** Following on from the CAP strategic plans, national protein strategies were reviewed to further investigate ongoing initiatives and areas of attention at the Member State level. Several member states have a dedicated National protein plan, including: **Austria** [12], **Belgium** (Flanders) [13], **Denmark** [14], **France** [15], **Germany** [16], **Ireland** [17] and **Netherlands** [18]. This report aggregates key insights to assess how current approaches support the expansion of protein crop cultivation, and what lessons may inform an EU Protein Strategy and Action Plan.

National Protein Strategies: Blueprints for EU Action?

National Protein Strategies provide a good overview of Member-State initiatives and strategic focus in regards to the cultivation of protein crops for both feed and food. National plans offer Member States the opportunity to set ambitious targets and position themselves in regards to EU level priorities such as strategic autonomy, food security and sector competitiveness. While local variations persist for example in the area of arable land, local climate and population specific demands, what is clear is that national strategies align with EU level objectives and offer a solid basis for EU level Action in regards to protein crop cultivation and diversification more broadly. The EU may review such strategies as the means to find best practices and initiatives viable for scaling up and as input for EU level action, which supports Member State direction.

3.1. Primary Goals

Across Member States, national protein strategies converge around a set of core objectives. The most prominent goal is **promoting strategic autonomy and food security** by reducing dependence on imported protein feed, particularly soy.

“ *The security of the supply of plant-based protein will become an even greater focus in domestic and European agriculture in the future.* ”

– Austrian Protein Plan

Additional goals include improving environmental performance of cropping systems, strengthening farm resilience, and supporting the development of, and innovation in, protein value chains. Protein crops for human consumption are included in most strategies, but typically as a secondary or longer-term objective. However, some strategies are explicit in the need to shift consumption habits towards more plant based proteins (e.g Denmark, Flanders) while others call for a more balanced approach and sustainable production across animal based and plant based production (e.g France, Germany). Denmark has the only strategy which explicitly mentions **replacing** conventional protein sources such as meat and dairy with alternative proteins and puts explicit emphasis on using proteins for food rather than feed where possible. Flanders focuses on ‘sustainable protein consumption’ which includes shifting consumption towards more plant based foods, the need to change dietary behaviors, and avoiding protein overconsumption in general and the Netherlands highlights the current pattern of overconsumption of protein.

“ Eating less and more sustainable animal protein products and more vegetable protein products is regarded as an important strategy to improve the ecological sustainability of the food system. Furthermore, it is desirable within the framework of balanced and healthy diets, to reduce consumption of animal protein sources, and in particular red and processed meat. ”

- Flemish Protein Strategy

3.2. Initiatives of Note

Several initiatives recur across national strategies and appear particularly relevant for scaling protein crops. These include agronomic measures such as crop rotation requirements and support for legumes, as well as investments in downstream infrastructure including processing, storage, sorting, and aggregation. Public procurement initiatives, for example, Austria’s efforts to increase the use of regional and plant-based proteins in public canteens, schools and institutional catering through sustainable public procurement frameworks, offer a potential means to promote more sustainable production and consumption.

Sustainable Public Procurement- Driving the uptake of Protein Crops?

The **Austrian Action Plan for Sustainable Public Procurement** (naBe) endeavors to change the way we produce and consume (SDG 12). While the plan is not directly linked to protein crop production, it supports an increase in plant based protein consumption via a ‘climate plate’ with one vegetarian or vegan meal daily, promotes increase of organically produced food, regional value chains, and higher animal welfare standards. The initiative offers a supportive mechanism for promotion of plant-based proteins on both supply and consumption side by emphasizing local, sustainable and environmentally friendly production and consumption.

In addition, territorial value-chain projects (notably in France, where dedicated funding supports local legume value chains by linking primary production with processing, storage, packaging and catering markets at regional level), and cooperative-based investments (including farmer-led

cooperatives in France and Denmark investing in seed sorting, processing capacity and aggregation infrastructure) offer promising initiatives to contribute to reduced market and income risks for farmers and improve access to more stable and higher-value outlets for protein crops.

Cooperating to create plant-based supply chains: Regional initiatives

Eureden is a co-operative agri-food group from Brittany which focuses on developing agri-food value chains which promote a diverse, sustainable and competitive agricultural sector. In line with the French Protein plan, this co-operative does not explicitly focus on plant based consumption, but does emphasize the importance of diversification and sustainable practices at the supply level. The Co-operative supports member farmers to transition to more diverse practices and promote social responsibility. Importantly, Eureden has introduced a policy to encourage members to cultivate protein-rich crops in the local region, relocating production to a local source and improving the efficiency and sustainability of local value chains.

3.3. Economic Viability and Farmer Uptake

A consistent finding across strategies is that agronomic and environmental arguments alone are insufficient to drive widespread adoption of protein crops. Yield variability, management complexity, and uncertain market outlets continue to constrain uptake. Strategies should aim to address these constraints through income support, risk-sharing mechanisms, and research and development and innovation funds to make protein crop cultivation more likely to expand.

“ The dilemma facing the National Protein Strategy is finding a solution within the framework of EU agricultural policy to make the cultivation of legumes and other protein crops sufficiently profitable again and thus strengthen the business model for arable farming. ”

- Dutch Protein Strategy

Additional financial support mechanisms can be found at the National level which may hold promise to incentivize and support further diversification. For example, the Irish strategy emphasizes the creation of premium markets for protein crop production and also introduces a “Protein Aid Scheme” which is a voluntary coupled support scheme under the CAP supporting tillage farmers to sow nitrogen fixing crops, namely beans, peas and lupins. While primarily focused on feed, Ireland is one of the only member states to include measures for both crop diversification and crop rotation in the CAP strategic plan [2] and offer interesting initiatives worth further consideration at the EU level for both feed and food applications.

While several promising areas for protein diversification are noted across Member State Strategies, with mixed cropping and cover crops supporting soil health and higher yields, in general **the**

emphasis remains on feed. Protein crops for food are mentioned and incentivized, however this is largely wrapped up in broader incentives which aim to shift consumer attitudes and in R&D of the alternative protein sector. More strategies and support are needed which **create and support the value chains for proteins for human consumption** in order to create long-term stability and viability. Several Plans call for this explicitly, for example Austria has a dedicated working group for Value chain creation which is subdivided into both feed and food categories and “The Bean Deal” in the Netherlands which encourages supply chain development and collaboration.

The Bean Deal: Scaling up Protein-Rich Crops in the Netherlands

Part of the Dutch National Protein Strategy is the creation of the so-called “Bean Deal” in 2022. The Bean Deal is a voluntary public-private partnership that aims to scale up the cultivation and market uptake of Dutch-grown protein crops, particularly legumes such as field beans, lupin, soy, and edamame. It brings together farmers, government

A key objective was to **increase the self-sufficiency of The Netherlands** and the European Union in terms of protein. The focus on cultivation of Dutch-grown legumes brought together 56 initial parties representing the full legume supply chain. Underlying the deal was a goal to shift the balance of animal and plant proteins in the Dutch diet, going from a majority of animal proteins to a majority of plant proteins.

The Deal has successfully scaled up the legume supply chains, with new processing capacities and end products landing in major retailers, and breakthroughs in the market opportunities. However, cultivation of legumes is not yet profitable for many growers and scaling up of processing capacities remains slow and uncertain. The outcome report calls for **further development of stable supply chains, long-term contracts and support schemes for farmers** and chain partners, and continued investment from all stakeholders across the value chain.

3.4. Research and Innovation

All reviewed strategies place strong emphasis on research and innovation and knowledge transfer. Included measures are particularly in plant breeding (*e.g. France’s dedicated 7 million innovation funds in companies in the field of plant breeding and development of new protein forms*), varietal development (*e.g. Ireland, Denmark, Netherlands*), and alternative protein technologies (*Denmark*).

The Danish Plant Grant: funding the development of a plant based food sector

In Denmark **The Plant-Based Food Grant** supports the development of plant-based foods for human consumption. This government funded initiative supports the development of a plant based food sector and aims to support Denmark as a leader in the production and development of plant based foods.

The Plant Based Food Grant includes variety development, cultivation, processing, promotion, education and dissemination. In the period of 2023–2030, approximately

675 million DKK has been allocated. Funding is awarded to projects focusing on stimulating both supply and demand side and emphasizing knowledge exchange and collaboration across the full value chain.

While these investments are necessary, their impact on cultivation decisions depends on alignment with commercial deployment and market development, and the demand side of the value chain. In addition, more concerted effort to map and aggregate national and regional research initiatives would be welcome to avoid overlap, wasted resources and promote the scaling up of best practices.

Building networks to support cultivation and strengthen value-chains

In 2023 the **'Chickpea Ring'** was launched in Brandenburg (DE) to support the development of a local value chain for chickpeas. Researchers, farmers and value chain developers worked together to promote chickpea cultivation in North-Eastern Germany. Recognizing the potential importance of the chickpea as a drought tolerant crop, the KIWERTa project aimed to build up basic structures along the value chain such as processing, quality standards, and sales channels. Working together in an informal network, a farm community emerged to support learning, support and knowledge sharing. The cooperation supported cultivation by cooperatively ordering seeds and engaging in knowledge sharing and transfer amongst farms. Evidence was collected on cultivation, including yields and soil conditions, and farmers grew a supportive network to diversify their production by integrating the chickpea. The cooperative also tackled downstream challenges and developed regional applications for processing, and opening up marketing channels over the course of the project life.

This project offers an example of how informal networks and cooperative approaches can support farmers in diversifying by sharing knowledge, using farms as test sites, and working together to develop a value chain and create market opportunities to match demand and supply side measures. It also showcases the importance of continuation and uptake of local initiatives such as these at national and EU levels.

3.5. Forward-Looking Considerations

CAP Relevance

Several national strategies explicitly identify future CAP revisions as a critical lever for scaling protein crop production. For Example the Austrian ministry of Agriculture calls for a suitable framework for producing protein crops within the revised CAP.

“ The EU's Common Agricultural Policy (CAP) provides the essential framework for shaping agricultural policy measures. Protein crops and their beneficial effects on crop production and the environment must also be safeguarded within the context of the CAP. ”

- Austrian Protein Strategy

However, current CAP support remains fragmented across eco-schemes, investment aid, and research funding. National strategies suggest that a more coherent, protein-specific intervention logic within CAP would strengthen implementation and improve outcomes. However, what this looks like remains uncertain and ripe for further development.

Value Chain Development

National protein strategies are most coherent where protein policy is framed as part of a broader food system transition, linking agriculture with health, climate, and industrial policy objectives. Strategies that integrate production, market creation, and consumption-side measures tend to offer clearer pathways for scaling protein crops. For example, Denmark's Plant-Based Action Plan explicitly argues for combining supply and demand side measures and identifies challenges in the link from production to processing and France highlights the potential for market growth in plant-based sectors, providing support for the structuring of sectors and downstream investments. However this requires alignment and investment across the value chain. All strategies acknowledge that production incentives alone are insufficient, however differences arise in how explicitly value chain development is addressed.

Building a Protein Strategy

National strategies have several building blocks which offer clarity and feasible action. We draw upon the present examples to develop a guideline for future scalability and strategy creation. When building a Protein Strategy or Action Plan the following checklist offers useful guidance to avoid pitfalls and ensure clarity, comprehension, and concrete action.

1. Clear Ambition and Scope

- The strategy states explicitly whether it covers feed, food, or both and motivates choices
- It sets a clear vision with defined short, medium and long term horizons
- Targets are specific, measurable, and time bound (e.g. hectares under protein crops, share of plant protein in diet, self-sufficiency rate)
- Targets are differentiated with separate goals for feed and food applications
- The strategy is positioned within broader food system narrative(s) (food security, climate, health) rather than as a standalone agricultural measure

2. Concrete Funding Instruments

- Financial support tools are named and budgeted (e.g. coupled income support rates, eco-scheme payment levels, transition/adaptation payments)
- Funding is long term, supporting planning security
- Dedicated funds exist for research and innovation
- Funding streams are linked to CAP programming with clear eligibility criteria
- Collective investment models are explicitly incentivized to reduce individual entry costs

3. A Value-Chain Approach

- The strategy addresses the full chain from seed and cultivation through processing, storage, and market access
- Downstream infrastructure gaps have been mapped and targeted investments identified
- Mechanisms exist to connect farmers with processors, buyers, and retailers
- Supply and demand side measures are explicitly linked
- Demand-side tools are included (e.g. public procurement thresholds, consumer campaigns, dietary alignment)
- Supply side measures are specified and include consideration of consumer level behavior

4. Farm Level Viability

- The economic feasibility of protein crop cultivation has been assessed, including yield performance, input costs, and market prices
- Income risk during transition is addressed through bonus payments, multi-year contracts, or price stabilization mechanisms
- Technical assistance and knowledge-transfer support is accessible and practically oriented
- Administrative burden of accessing support is minimized with clear, simple eligibility criteria
- Regional variation in farming conditions and market access is accounted for

5. A Credible Measurement Plan

- A baseline has been established for key indicators (e.g. land under protein crops, production volumes, import dependency,)
- Progress indicators are defined for each strategic objective and are measurable with available data
- Feed and food applications are tracked separately
- A regular review cycle is built in (e.g. annual progress reports, mid-term evaluation)
- Funding flows are transparently reported and attributable to specific outcomes
- An independent evaluation is planned at strategy midpoint or conclusion

6. Stakeholder Engagement

- Key actors across the value chain were consulted in strategy development (e.g. farmers, processors, retailers, researchers, civil society)
- Responsibilities are clearly assigned to named institutions and consider all links in the value chain
- A mechanism exists for ongoing stakeholder input and strategy revision
- The strategy explicitly references and aligns with relevant EU frameworks (e.g. CAP, CMO)

Implications for an EU Protein Strategy

Taken together, insights from national strategies and CAP strategic plans, suggest that an EU Protein Strategy should move beyond agronomic incentives alone. Key elements include **differentiation between feed and food protein objectives** (as seen in Austria and Denmark's strategy), stronger support for downstream value chains, strategic use of demand-side instruments, and clearer alignment between CAP instruments and protein-specific goals.

In addition, since sovereignty and competitiveness appear to be key levers for protein crop production, it would be worth exploring how crops for human consumption could be promoted and leveraged in relation to food security needs.

Taken together, the strategies amplify **the need and potential benefits for protein diversification** and illustrate multiple pathways for diversification in the EU. CAP led approaches are relevant for objectives focused on land use and farmer uptake while national instruments are currently more prominent when trying to stimulate food markets, consumer behavior and develop value chains. EU level approaches such as the **creation of a dedicated protein sector** under the revised CMO and more targeted support for protein crop cultivation under the revised CAP would help to amplify diversification across Member States.

As Member States point out, the development of plant-based proteins supports a promising market outlet for farmers. Still, comparative analysis proves difficult given the diversity in instruments, framing, and objectives at the Member State level. Strategic plans offer a limited scope as **it remains unclear if and how objectives are translated into concrete actions**, and what policy instruments are being used at the Member State level. In addition, many of the National Strategies were formulated in line with the objectives and aims of The Farm to Fork strategy which promoted the cultivation of native protein crops to achieve environmental and health targets. With this strategy now largely abandoned by the EU it raises question marks for Member States of how their efforts align with current EU policies.



Source: Canva. Cereals, beans and legumes

4. Summary and Policy Recommendations

While strategies at the Member State level frequently express ambitions related to protein diversification, a critical look at national policies, funding and implementation reveals varying levels of ambition and integration.

Recurring gaps

When analysing national strategies, several gaps in supporting protein diversification emerge.

1. At the strategic level, protein crop production is primarily motivated by an agronomic or environmental basis, with additional argumentation for reducing dependence upon imports for feed crops. However, the economic risks at the farm level are often overlooked or ignored. To overcome this bottleneck in diversification, economic constraints and concerns for farmers should be addressed in all national strategies, with strategic actions linked to clear funding instruments and/or CAP programming. Strategies should consider **how to derisk diversification** on the farmer side and include viable mechanisms to stabilize income.
2. Current income support dedicated to protein crop production remains heavily feed oriented. This inhibits transitions towards higher value uses and crop production for human consumption.
3. Strategies emphasize the importance of R&D and in particular varietal development, given the uncertainty still surrounding increasing and scaling crop production. However, more support is needed to support the cultivation of protein crops via technical expertise, training, and knowledge transfer.
4. A recurring limitation across strategies is **the lack of downstream infrastructure** for food grade proteins. There is an absence of sufficient processing, storage, sorting and deployment capacities for protein crops. **Targeted investment in infrastructure development, including at farm level, is sorely needed** to make food-grade proteins attractive for uptake by farmers and to ensure they reach consumers.
5. Demand-side measures are mentioned across several strategies (Austria, France, Denmark, Netherlands) but are often decoupled from production targets or supply-side instruments. This fragmentation leaves a gap where increased demand may not translate into increased production (and vice versa).
6. The CAP is widely referenced as an important enabling framework, yet in practice protein crops are supported through dispersed instruments rather than a coherent framework. It can also be difficult to trace exactly how the CAP is supporting protein crops, as production can be linked and funded through several measures, across both Pillar I and II, dependent upon the country's approach. In the upcoming CAP revision, which allows more Member State discretion, it risks becoming increasingly opaque how diversification is funded and supported or how crops are used to meet various targets (e.g. biodiversity). Several strategies explicitly call for clearer recognition of protein crops within future CAP revisions (i.e. Austria and Denmark).

Enabling conditions

In response to these gaps, several enabling conditions can be identified:

- Targeted income support and/or bonus payments, such as in Ireland, can support an increase in acreage and production, particularly when combined with clear and achievable eligibility criteria and longer term funding.
- Investments for equipment and innovation or rural development funds may also be used to support farmers in taking advantage of such payments by helping derisk the diversification of crops.
- Investment in downstream infrastructure can reduce entry barriers for farmers and enable access to higher-value markets, particularly when aligned with localised approaches. Investments can be public or via collectives, in which entry is derisked.
- Dedicated support for protein crop cultivation within CAP Strategic Plans is critical for moving beyond pilot-scale implementation. A coherent funding framework for the protein crop sector, accompanied by minimum targets, would encourage diversification and make it economically viable on the supply side.

Enabling conditions to increase protein crop production for food:

1. Financial support at the farmer level to support derisking of diversification.
2. Investment in downstream infrastructure.
3. Dedicated support for protein crop cultivation within CAP Strategic Plans is critical. A coherent funding framework for the protein crop sector with minimum targets would encourage diversification and make it economically viable on the supply side.

The role of the EU

This synthesis demonstrates that several important levers for change remain at the EU level to support member state transitions. An overarching EU protein strategy could help direct member state resources towards the creation of sustainable and viable protein value chains, reduce duplication of effort, and centralize R&D efforts. While disparate strategies are created, there appears to be room for the EU to support member states in their existing and future efforts by providing a clear framework for setting up basic supply chains, helping to bolster protein markets via public procurement and offering coordination support. While national plans are still relevant, particularly to develop local markets, determine the most viable and appropriate varieties and crop strategies for farmers, and bridging local cultures with demand-side efforts, EU action can lead to determining financial incentives and establishing broader value chains.

Importantly, an EU Protein Strategy or Plant-based Action Plan would signal diversification as a clear priority and help to reduce the uncertainty that farmers currently face when considering if and how to diversify their crops. Overall, it is clear that EU-level policy remains the most impactful lever to achieve self-sufficiency goals and promote diversification.

“ The greatest impact on increasing EU self-sufficiency lies at the European level of decision-making, such as EU import policy and EU regulations on waste streams, insects, new breeding techniques, novel foods, and the CAP. ”

- Netherlands Protein Strategy

5. Strengthening Protein Diversification in the EU: Priorities for Action

The evidence from CAP Strategic Plans and National Protein Strategies demonstrate that protein diversification in the EU is not constrained by agronomic potential, but by structural, economic, and policy barriers. Addressing these barriers requires coordinated action across EU institutions and Member States. Below, we offer several policy recommendations which can support diversification.

Policy recommendations

- Differentiate feed and food protein objectives across EU policy instruments.
- Strengthen CAP support through a coherent, protein-specific framework.
- Prioritise support to downstream processing, storage, and aggregation infrastructure to develop EU value chains.
- Leverage public procurement and dietary policy to create long-term, stable demand.
- De-risk farmer diversification through targeted income and transition support.

1. Differentiate Feed and Food Protein Objectives

There is an absence of a clear distinction between protein crops grown for feed and those grown for food in current policy. Without a clear differentiation, support instruments default toward feed, reinforcing existing production patterns and limiting the development of value chains and higher value food markets. Introducing this distinction would enable more targeted support, clearer monitoring, and stronger alignment between protein policy and food security and sustainability goals.

2. Strengthen CAP Support for Protein Crops

Protein crops are currently supported through a dispersed mix of eco-schemes, greening requirements, and Coupled Income Support instruments designed for broader objectives rather than protein-specific outcomes. The post-2027 CAP revision offers an opportunity to introduce a more coherent framework, drawing on the precedent of the organic sector. For example, a protein-specific reimbursement that rewards active expansion rather than the maintenance of existing production; minimum allocations for protein crops within Member State CAP Strategic Plans; and earmarked funding for value-chain infrastructure.

3. Build Downstream Value Chains

Investment in primary production alone will not drive diversification. Across Member States, the absence of processing, storage, sorting, and aggregation infrastructure particularly for food-grade protein crops is a critical barrier to farmer uptake and market development. Targeted, coordinated investment is needed across the following areas:

- ➔ Processing and storage capacity. EU co-financing through rural development and CMO operational programmes should be made available for shared processing facilities and regional storage hubs, prioritising food-grade protein crops. Collective investment models, such as farmer cooperatives reduce individual entry costs and should be incentivised.
- ➔ Sector structuring. Establishing producer organisations and interbranch bodies for protein crops under the CMO would enable collective contracting, quality standardisation, and joint market development.
- ➔ Regional value-chain projects. Territorial approaches that link primary production with processing, catering, and retail markets at regional level offer replicable models for connecting supply and demand within defined geographies.
- ➔ Knowledge and innovation infrastructure: A centralised EU knowledge network for protein crops, aggregating research on varietal development, cultivation best practices, and market opportunities, would reduce duplication across national programmes and support faster transfer of proven approaches to farmers.

4. Leverage Public Procurement and Dietary Policy

Demand-side measures remain underdeveloped in most national strategies, yet offer one of the most effective tools for generating stable market signals for protein crop producers. Mandatory minimum thresholds for plant-based and locally sourced proteins in public food services such as schools, hospitals, and public institutions would create a guaranteed demand base that reduces market risk for producers and processors. Austria's naBe Action Plan offers an interesting model here for sustainable public procurement. Where dietary guidance already supports a shift toward plant-based proteins, closer alignment between nutrition policy and agricultural support would improve overall coherence.

5. De-Risk Farmer Diversification

Economic risk remains the most consistently cited barrier to diversification. Yield variability, price volatility, and upfront transition costs deter farmers from expanding protein crop cultivation even where agronomic and environmental conditions are favourable. A combination of instruments is needed: bonus payments for farmers sowing protein crops for the first time, multi-year transition payments that cover income risk during the establishment period, and access to collective risk-sharing mechanisms at the sector level. These should be paired with accessible technical assistance, on-farm demonstration networks, and structured knowledge transfer building on cooperative models such as Germany's Chickpea Ring to ensure farmers have the practical support needed to diversify successfully.

Overall, these recommendations form a mutually reinforcing package. Supply-side incentives will be more effective when downstream markets exist, infrastructure investment delivers more when demand signals are stable and farmer diversification is more likely when both income support and market access are in place. **A dedicated EU Plant Protein Strategy or Plant-Based Action Plan** would provide the overarching framework to structure and coordinate these efforts and signal that protein diversification is a structural priority for the Union's long-term food security and resilience.

References

- 1.OECD/FAO. 2023. "OECD-FAO Agricultural Outlook 2023–2032". OECD Publishing, Paris.
- 2.Merlo, M., Buckley, C., Hennessy, T., & O'Mahony, J. (2025). Assessing crop production and rotation economically, environmentally and nutritionally in the Republic of Ireland. *Irish Journal of Agricultural and Food Research*, 63(1), 101-117.
- 3.Galli, M. (2026). *Getting to the meat of protein Diversification in the EU*. European Policy Centre.
- 4.EU CAP Network Focus Group 'Production of protein crops under climate change'. Final Report. European Union.
- 5.Kortleve, A. J., Mogollón, J. M., Harwatt, H., & Behrens, P. (2024). Over 80% of the European Union's Common Agricultural Policy supports emissions-intensive animal products. *Nature food*, 5(4), 288-292.
- 6.Rockström, J., Thilsted, S., Willett, W., Gordon, L., Herrero, M., Agustina, R., ... & DeClerck, F. (2023). EAT–Lancet Commission 2.0: securing a just transition to healthy, environmentally sustainable diets for all. *The Lancet*, 402, 352-354.
- 7.Foodrise (2026), CAP At The Crossroads: Reforming EU CAP subsidies to support healthy sustainable diets. London
- 8.Marini, L., St-Martin, A., Vico, G., Baldoni, G., Berti, A., Blecharczyk, A., Malecka-Jankowiak, I., Morari, F., Sawinska, Z. and Bommarco, R. 2020. Crop rotations sustain cereal yields under a changing climate. *Environmental Research Letters* **15**: 124011.
- 9.Nemecek, T., von Richthofen, J. S., Dubois, G., Casta, P., Charles, R., & Pahl, H. (2008). Environmental impacts of introducing grain legumes into European crop rotations. *European journal of agronomy*, 28(3), 380-393.
- 10.European Commission. 2023a. "Balance Sheets by Sector". Available online: https://agriculture.ec.europa.eu/data-and-analysis/markets/overviews/balance-sheets-sector_en [Accessed 17 October 2025].
- 11.European Commission (2024). CAP Strategic Plans and protein crops. A focus on strategies developed by Member States and support provided. Retrieved from [CAP Strategic Plans and protein crops https://agriculture.ec.europa.eu/document/download/3d9d53d8-04b5-4130-8fbd-fba514168688_en?filename=cap-sprs-protein-leguminous-crops_en.pdf](https://agriculture.ec.europa.eu/document/download/3d9d53d8-04b5-4130-8fbd-fba514168688_en?filename=cap-sprs-protein-leguminous-crops_en.pdf)
- 12.Österreichische Eiweißstrategie (2021). Abschlussbericht. Bundesministerium für Landwirtschaft, Regionen und Tourismus. Sourced from <https://faolex.fao.org/docs/pdf/aut211074.pdf>.
- 13.Danish Action Plan for Plant-Based Foods. (2023). Ministry of Food, Agriculture and Fisheries of Denmark. [Danish-Action-Plan-for-Plant-based-Foods.pdf](https://www.mff.dk/da/plan-for-plant-based-foods)
- 14.Beans, Peas and Co. (2020). The Federal Ministry of Food and Agriculture's Protein Crop Strategy for promoting the cultivation of pulses in Germany. Federal Office for Agriculture and Food.
- 15.Flemish Protein Strategy (2021). Flemish Protein Strategy 2021-2030. Creating opportunities for prosperity, the environment and health together.
- 16.Ministre de l'Agriculture et de l'Alimentation (2020). La stratégie nationale protéines végétales. Ministre de l'Agriculture et de l'Alimentation. Source: [strategie_nationale_proteines_vegetales.pdf](https://www.marsp.fgov.be/fr/la-strategie-nationale-protéines-vegetales)
- 17.Teagasc. Strategic Plan to Support Native Protein Production. Irish Stakeholders Group. Agriculture and Food Development Authority.
- 18.Nationale Eiwitstrategie. (2020). Ministerie van Landbouw, Natuur en Voedselkwaliteit. open.overheid.nl/documenten/ronl-6ea7577b-85a6-425a-9dad-b9b9cf695495/pdf
- 19.Farm Adaptation Network (2025), European Strategic Blueprint for Farm Adaptation Part One: challenges & barriers to farm adaptation.

Annex:

Member State Protein Strategies, A Comparative Overview

Austria

Overview

Austria places a strong emphasis on expanding the production and supply of domestically produced plant-based proteins. Protein crop production is framed in relation to sustainability and self-sufficiency, and Austria is described as playing a leading role in protein crops due to favorable climatic conditions for soy, making Austria a key player in reducing dependence upon imported soy.

Strategic objectives

Stated goals include expansion of production of vegetable proteins, optimization of protein crop cultivation via production conditions and selection of suitable crop types, provision of suitable protein-rich harvested products for food and feed, and improving self-sufficiency with locally grown, plant-based food proteins. The Austrian plan highlights increased inclusion of protein crops in crop rotations for environmental benefits and protection, contribution to biodiversity, and cultivation of legumes to reduce GHG emissions. Austria also calls for canteens, restaurants, school cafeterias and commercial kitchens to offer more plant-based and regional/seasonal products, supported by awareness and education campaigns, a climate-friendly cookbook, and "climate-friendly plates" in schools, linked to the Austrian Action Plan for Sustainable Public Procurement.

Funding

The strategy calls for the creation of a suitable framework within the CAP for protein crops and the securing of protein crops within NSPs. Demand-side measures are linked to the Austrian Action Plan for Sustainable Public Procurement. No dedicated national budget for protein crops is specified in the strategy.

Challenges & Gaps

Lower yields of protein crops result in increased land requirements. Cultivation management of legumes is complex, and grain legumes produce lower and more unpredictable yields.

Belgium-Flanders

Overview

The Flemish Protein Strategy (2021–2030) offers a forward thinking approach to agricultural practice which incorporates strategies for increasing the production of protein crops for feed and meeting rising demand for plant-based proteins for human consumption. Emphasis is placed on the need for transformation on both the production and consumption side, highlighting the need for dietary shifts which incorporate more diverse proteins.

Strategic Objectives

The strategy aims to increase the amount of sustainably EU-produced crops for animal feed to reduce dependency, shift the protein supply in order to meet food security challenges and decrease negative impacts on environment and public health. Goals include significantly increasing the area used for vegetable proteins, noting that protein crop area is currently 27,000 ha. Flanders notes that more opportunities for farmers are available due to the growing demand for vegetable proteins for human consumption and highlights the dual environmental benefits of scaling up production of leguminous crops.

The strategy recognizes the need to develop profitable chains to achieve an earnings model for each link in the chain and calls for farmers to collectively organize to deliver a sufficient volume to processors.

Funding

A central feature of the Flemish strategy is investment in research. ILVO (Flanders Research Institute for Agriculture, Fisheries and Food) has a dedicated research program on protein diversification, covering diverse types of proteins (animal, vegetable, and innovative) for feed as well as human consumption. Additional attention for innovative proteins is given by the Flemish Aquaculture platform. The strategy also references commissioned studies that highlight the financial and ecological opportunities a protein transition could bring. No specific CAP payment mechanisms or dedicated national budget are detailed.

Challenges & Gaps

Market-side mechanisms are called for to ensure economic viability for farmers, but these are not yet developed. The strategy identifies the need for profitable chain development as a prerequisite for scaling up production, which has not yet been achieved.

Denmark

Overview

Denmark's protein strategy is seen as a leading example for the food transition and offers a strong basis to underpin a European plant-based action plan. Denmark highlights several barriers that inhibit development: consumer acceptance, legislation, and financial obstacles at consumer level. Since 2010, in Denmark, the sale of plant-based meat alternatives have increased tenfold.

Strategic objectives

Denmark emphasizes efforts to boost protein production with a focus on high-quality green proteins, and is the only strategy which explicitly mentions replacing conventional protein sources such as meat and dairy with alternative proteins, and which puts explicit emphasis on using proteins for food rather than feed where possible. The strategy is organized around three focus areas: green biorefining, protein-rich crops, and new protein sources. There is an emphasis on protein crops which are also climate-friendly such as legumes, with faba beans and peas highlighted as having potential to scale up production, including as replacements for grain and starch crops. The strategy highlights the utility of protein crops for ingredients as well, opening market opportunities for residual products, and calls for more development downstream in processing and storage.

Funding

The Plant-Based Food Grant (the Plant Grant) supports development of plant-based foods for human consumption and includes variety development, cultivation, processing, promotion, education, and dissemination, with 11 million DKK allocated annually. A further 11 million DKK is allocated annually to plant genetic resources, alongside grants for varietal development (GUDP) and a 2019 national strategy for plant genetic resources in agriculture. The Environment and Climate Technology Scheme offered under the CAP made 570 million DKK available in 2023, with 60 million DKK allocated annually through 2027, with protein crop cultivation eligible via subsidized processing. R&D on green proteins is offered via Innovation Fund Denmark. With regard to CAP financing, actions remain vague: the government will explore the possibilities of further supporting the growth of protein crops within the CAP framework, subject to conciliation group approval and Commission sign-off.

Challenges & Gaps

Consumer acceptance, legislation, and financial obstacles at consumer level are identified as key barriers. Further varietal development is needed, especially to increase production of crops for both feed and food. Limited attention is paid to payments or incentives for farmers to grow crops, and CAP-linked farmer support remains underdeveloped relative to the strategy's ambitions.

France

Overview

France offers an interesting case study as a country which has launched coordinated efforts to restrict the alternative protein sector but also one of the few countries to produce a dedicated protein strategy. The strategy was launched in December 2020 with a 10-year horizon to 2030, succeeding a previous plan.

Strategic objectives

Objectives of the French National Strategy include reducing dependence upon imports, crop rotations with legumes to support cropping systems, improving sectors with better processing and logistics, and supporting plant-based crops. France is explicit in the need to balance strategies between plant and animal sectors to avoid intersector competition. France explicitly links protein crops to future CAP strategic plans, utilizing coupled payments to enhance land area used for legumes.

Funding

"Protein sovereignty" is an initiative which supports the cultivation of domestic protein crops. In 2024, 291 million euros was made available for ecological planning in agriculture. Over 11 million euros has been dedicated as a result of the National Strategy for Plant Proteins (Projets territoriaux filières légumineuses), funding 10 projects for pulses and 7 projects in support of sovereignty and transitions. Projects mainly focus on leguminous crops and offer support for downstream investments (processing, storage, etc.), including DSLFB, Texipro, AGIL by Vivescia, CultivUp, ColeGra'm, Innov'Legumineuses, Finovaleg, Deshyouest, TP2030, and Leg4All.

Challenges & Gaps

France is explicit in the need to balance strategies between plant and animal sectors to avoid intersector competition, which constrains the scope of dietary shift ambition.

Germany

Overview

In 2012 the BMEL in Germany published a Protein Crop strategy which was followed up by a 2020 report entitled "Beans, Peas & Co". The strategy was focused on overcoming competitive disadvantages of domestic protein crops including legumes, clover, alfalfa and vetch. The report notes a steady increase in the sowing of leguminous crops since 2014. In 2020, 5.8 million euros was earmarked for the BMEL Protein Crop Strategy, resulting in over 36 million euros in support from 2014 to 2020. Agricultural holdings in Germany increasingly rely on domestic protein plants: a total of 285,000 hectares of grain legumes were cultivated in 2024, and since 2011 the area under grain legumes has almost tripled. Over the same period, the area used for the cultivation of whole-plant legumes was expanded by almost 50%.

Strategic objectives

The Protein Crop Strategy focuses on increasing the production of German/EU-grown legumes, with emphasis on reducing dependency on imports and strengthening regional value chains. The BMEL's Protein Crop Strategy strengthens supply and demand for domestically produced protein crops,

particularly legumes such as broad beans, peas, soybeans, chickpeas, and clover, and non-legume protein crops such as vetch, hemp, flax, and millet.

Funding

In 2019, EFA applications for 90,000 ha were submitted for nitrogen-fixing crops, reflecting the importance of CAP greening measures as an early policy instrument. In 2024, 38 million euros was invested for the protein transition.

Challenges & Gaps

Before the Protein Crop Strategy took full effect, legume cultivation had steadily decreased in Germany due to its low competitiveness. While cultivation has increased, the focus of the 2024 investment is on innovation and alternative proteins rather than crop strategies. This reorientation toward human nutrition is not yet reflected in a comprehensive updated strategy document.

Ireland

Overview

The Irish Protein Strategy includes a focus on promoting the growth of domestic protein crops, mainly for feed, with an ambitious target of producing 20,000 ha of native protein crops. The strategy was developed by the Teagasc-convened Irish Protein Stakeholders Group, which included all links in the protein crop chain from the farmer, seed industry, and advisory services through to DAFM and the feed industry, and set a target of 130,000 tons of indigenous protein crops from 20,000 hectares by 2030. Ireland consistently achieves the highest yields for peas and beans among EU member states, attributed to its climatic conditions.

Strategic objectives

Ireland is one of the only member states to include measures for both crop diversification and crop rotation in the CAP strategic plan. Strategies to increase domestic production of protein for feed include improving farmer profitability, creating markets and demonstrating impacts, and creating recognition of the sustainability credentials of native protein crops. Objectives include developing so-called premium markets for protein crop production, such as proteins for vegan diets. The Irish strategy emphasizes crop rotation, soil fertility, and the nitrogen fixation benefits of legumes including beans, peas, lupins, soybean, and protein/cereal mix crops.

Funding

The protein payment scheme is emphasized as a profitability measure, alongside improvement of agronomic practices and investment in overcoming knowledge gaps. Under CAP programming, Ireland works with the Protein Aid Scheme (2023–27 revision), which includes voluntary coupled support funded by the EU under Article 33 of EU regulation 2021/2115 and is linked to the Basic Income Support for Sustainability (BISS) application. The scheme supports tillage farmers to establish nitrogen-fixing crops, with a target of 14,000 ha in 2023 rising to 20,000 ha in 2027, and a total budget of €35 million over the lifetime of the plan, more than double the previous CAP period. The scheme has proven popular: in 2023 there was a 50% increase in total hectares sown to protein crops, and in 2024 the total area exceeded 21,600 ha. The U-Protein project aims to explore sustainable crop and marine-based protein alternatives to support the agriculture and food sector, with the potential to provide quality nutrition to the consumer while developing an alternative, economically viable and sustainable agricultural enterprise.

Challenges & Gaps

In Ireland, more than 85% of the cereals and pulses consumed are used for feed which significantly limits food market development. A price premium is identified as necessary to incentivize farmers to

direct production towards the food market and to hedge against the agronomic-based risks associated with legume production [2]. Knowledge and training gaps for farmers wanting to introduce protein crops persist. The protein stakeholder group that pushed forward on ambitious targets has an unclear current status.

Netherlands

Overview

The Dutch National Protein, "Self-sufficient, sustainable and healthy", is framed not only around economic challenges and environmental considerations but within a broader societal context and explicitly specifies the need for a protein transition. The Health Council supports the protein transition in line with healthy and sustainable diets, though a diet with a healthy balance between animal and plant-based proteins is called for.

Strategic objectives

The strategy is structured around three tracks: selective cultivation of protein-rich crops in the Netherlands or, via export of Dutch knowledge, elsewhere in Europe; innovation and development of new protein sources; and protein production through valorization of residual streams including kitchen waste, former foodstuffs, and vegetable processing residues. The Netherlands is positioned as a pilot country to cultivate protein crops for food or feed applications, with crops including beans, peas, quinoa, lupine, grass, clover, oats, alfalfa, duckweed, potatoes, and beets. Field beans are noted as the most promising protein crop in the Dutch context, and Dutch potatoes are noted as having a high protein percentage. On the feed side, the strategy emphasizes shifting the production and import of cattle feed towards food wastes, insects, and residual streams. The strategy includes a focus on reducing consumption-side protein intake by 10–15% and consumer education, in line with dietary guidelines.

Funding

A research call with a budget of €15 million per year was launched for new protein sources. The Bean Deal (2022) is a commitment signed by 56 Dutch stakeholders, including regional and national governments, to far-reaching objectives for protein-rich crop uptake for human consumption. The strategy identifies EU-level instruments including the CAP as the main leverage points rather than national direct payments.

Challenges & Gaps

Animal feed manufacturers want alternatives to soy but no plant-based materials currently compete with soy imports on nutritional value, price-quality ratio, or environmental impact. Residual flows of significant interest, including kitchen waste and animal meal are not permitted under current European directives, requiring the Netherlands to continue pressing for regulatory change at the EU level. Interest in using animal meal for poultry feed is noted but not currently permitted. A coalition of public-private actors has concluded that the protein transition is not moving fast enough to meet Dutch national goals for climate, nitrogen, and deforestation.