

EUROPEAN STRATEGIC BLUEPRINT FOR FARM ADAPTATION



OCTOBER 2025

PART ONE: CHALLENGES & BARRIERS TO FARM ADAPTATION



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Table of Contents

1. About FAN
2. Foreword
3. Introduction
5. Context
10. Societal and Attitudinal Challenges
13. Economic and Financial Challenges
16. Research and Innovation Challenges
20. Environmental and Technical Challenges
23. Sociopolitical Challenges
29. Conclusion
31. References



ABOUT THE FARM ADAPTATION NETWORK



The Farm Adaptation Network is dedicated to supporting farmers and stakeholders in transitioning towards resilient and sustainable agricultural productions and practices. By fostering business, policy and research opportunities, we enable the shift towards sustainable agriculture while ensuring economic viability and fairness. Our work is rooted in collaboration, innovation, and a commitment to a just agricultural transition that benefits both farmers and the global food system.

Mission: Future-proofing farmers in the agricultural transition by creating business, policy, and network opportunities.

Vision: A world where farmers are at the heart of a sustainable, resilient, and fair food system.

Our Work: We foster agricultural environments that help farms respond effectively to current and future challenges, using:

- **Business Opportunities:** Supporting farmers and entrepreneurs in accessing markets and investment for sustainable agricultural solutions.
- **Policy Engagement:** Advocating for policies that ensure a fair and inclusive agricultural transition.
- **Research and Innovation:** Facilitating knowledge exchange and partnerships between farmers, researchers, and industry leaders.
- **Network Building:** Creating strong cross-sector collaborations to drive systemic change in food production.

farmadaptation.org

Foreword

Each generation of farmers adapt to new challenges, economic, environmental and social. Yet the transformation and adaptation now demanded of agriculture is unprecedented in speed and scope, testing not only economies but imaginations. This blueprint makes a clear argument that adaptation is not a technical problem to be solved but a social process to be cultivated—one rooted in trust, equity, and that is regionally specific. It connects the hard realities of climate volatility and political polarisation with the deep capacities for cooperation and creativity that farming, at its best, is known for. This doesn't mean that farming communities be left on their own in this process, nor that they should simply respond to regulations imposed from above, but that they should be empowered and enabled by government investment and engagement.

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Introduction

The agricultural traditions and systems that have enabled us to feed a global population for decades are now buckling under the pressure of climate volatility, stricter regulatory environments and consumer expectations. This blueprint and our mission speaks to European farmers, first and foremost. They have been the architects of human progress and culture throughout history. They developed the innovations that transformed nomadic societies into large metropolises. They mastered the technologies that turned wild landscapes into productive lands and demonstrated the ingenuity that has essentially fed the world through generations of knowledge, skill, dedication and sacrifice. Across fields and farmlands, they are the cornerstone of our civilisation and toil to deliver healthy and nutritious food while balancing the demands of sustainability and profit margins. Yet, as we stand on the precipice of climate change, they are suffering from years of shifting, incoherent and impractical public policy, low profits and competition from imports. Despite this, their track record of adaptation and problem-solving ideally positions them as natural leaders of agricultural innovation as they understand both the land and the practical realities of food production better than anyone else.

The Farm Adaptation Network (FAN) and its ‘European Strategic Blueprint for Farm Adaptation’ presents a farmer-focused approach to navigating the just transition in agriculture by combining climate adaptation strategies with economic viability and technological advancements. These represent the elements that make agriculture resilient and sustainable. Resilient agriculture focuses on helping farms adapt quickly to immediate challenges like extreme weather, market shocks, or supply chain disruptions, while sustainable agriculture ensures that farming practices can continue indefinitely without degrading the natural resources—soil, water, and biodiversity—that farms depend on. FAN recognizes that these approaches work best together, supporting farming systems that can both respond effectively to short-term crises and maintain long-term productivity. FAN is future-proofing agriculture through strategic adaptation to ensure sustainability and prosperity in a changing world.

Co-created through research, collaboration and extensive stakeholder engagement, the Blueprint provides practical guidance for transforming European and UK agriculture. The framework serves multiple audiences from individual farmers implementing real-world solutions to policymakers and researchers.



This report is part one of the blueprint and primarily designed for FAN collaborators, policymakers and researchers. It is drawn from FAN's research and the results of our November 2024 roundtable in Berlin which was attended by over 25 key stakeholders from seven countries, including food systems experts, researchers, and agricultural specialists. It outlines the challenges and barriers to farm adaptation as a precursor to the final document to be published in January 2026 which will detail solutions and policy recommendations.

Part One was deliberately developed using insights from NGOs, agricultural advisors and support organisations, in addition to FAN's secondary source research to give a comprehensive, broad overview of the system-wide challenges. Part Two is currently in production and represents a collaborative effort with farmers, featuring real-world case studies that showcase the practical innovations and adaptations farmers are already implementing on the ground as well as their experiences.

Terminology

The distinction between farm "*transition*" and farm "*adaptation*" reflects fundamentally different approaches to agricultural change in response to climate and sustainability challenges. *Transition* is used by current farming bodies and governments to signify sweeping changes to farming practice to meet climate goals. This is often onerous on the farmer. By *adaptation*, we mean creating the opportunities for farmers and the industry to make whatever scale of changes they can to overcome current and future challenges. Many organisations have used the term *transition* to talk about their interventions, therefore, this document uses the term when it is applicable to the work of these organisations.

What is Farm Adaptation?

Farm adaptation means diversifying what a farm produces or changing its practices to make it more profitable, sustainable, and resilient. It involves developing future-fit farming systems and business models that reduce risks, particularly economic and climate-related ones, and shifting from resource-heavy agriculture to plant-rich approaches that support long-term farmer profitability. It is not bound by a single solution or practice but represents practical applications to meet society's need for changes in crop selection, soil management, water efficiency, protein diversification strategies, animal welfare, and emissions reduction in both incremental developments and transformational innovations.

Our network approach is foundational to farm adaptation as we address the barriers to adaptation from a whole value chain perspective. This means creating a farming and food production system that is favourable to change. Developing the adaptive and transforming capacity of farms is a collaborative, supportive process that takes the burden away from the individual farmer, supports their livelihoods and fosters community wellbeing. We recognise that successful adaptation is rooted in the business opportunities, public policy support, research partnerships and strong networks that we continue to facilitate.

We believe a just transition requires a proactive, strategic and practical plan for farmers rather than passive signposting. Our comprehensive plans will future-proof farmers in the on-going agricultural transformation.



CONTEXT

AGRICULTURAL CHALLENGES IN A CHANGING CLIMATE

As the global population continues to grow, the availability of arable land is steadily declining due to climate change, soil degradation, desertification, acidification, and other consequences of unsustainable farming practices and pollution. Ensuring food security in the coming decades will require maximizing the efficiency of food production and making the most of our limited land resources.

The global agrifood system as a whole accounts for about one third [1] of the total greenhouse gas emissions caused by humans, with emissions from animal agriculture accounting for between 11-20% [2] of the global total. Animal agriculture in particular contributes majorly to eutrophication and acidification of the oceans, rivers and lakes [3] as well as ammonia emissions [4], mass deforestation [5] and loss of biodiversity [6].

While the agricultural sector significantly contributes to the climate crisis, it is also one of its first victims. Connected to the land and with their livelihoods interlinked to that of the cycles of nature, farmers are on the first line of defence as the climate starts to shift. This is seen globally

with soil degradation and crop failures which affect arable and livestock farmers alike as yields go down and input costs go up.



This chart represents how our habitable land is used. Data is sourced from UN Food and Agriculture Organization and Poore and Nemecek (2018)

Meeting the daily protein needs of a growing global population is a central challenge for food systems. A 60 kg adult needs a daily protein intake of approximately 50g [7], which can be obtained from both animal and plant sources. Currently, about 40% [8] of the world’s dietary protein comes from livestock, and in Europe, this share is estimated at closer to 60% [9]. This imbalance

reflects decades of growth in global livestock production, spurred by rising incomes, urbanisation, and shifting dietary preferences [10]. However, not all protein sources are equally efficient in terms of resource use. Producing protein from livestock requires substantially more land than plant derived protein. This is especially true for beef and lamb. For example, producing protein from beef or lamb requires 50 times more land per gram than legumes like peas [11]. The same disparity holds for calories: producing a kilocalorie from red meat is far less land-efficient than producing it from crops [12].

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 [13].

In the European Union, the sector is responsible for roughly 11% of the EU's total greenhouse gas emissions [14], with livestock production accounting for 81-86% of it [15], particularly through methane emissions and land use [16]. At the same time, European farmers are facing growing challenges from climate-related pressures such as prolonged droughts, flooding, and shifting pest patterns—jeopardizing yields and livelihoods across the continent. Soil degradation, water scarcity, and biodiversity loss are compounding these threats, putting the long-term resilience of food systems at risk. As Europe works to adapt to these converging crises, improving the sustainability and efficiency of agricultural practices—especially by shifting toward more plant-rich food production—will be essential for safeguarding both environmental and food security in the decades ahead.

LESSONS FROM EUROPEAN FARMING UNREST

Several European countries have seen widespread farmer protests in 2023-2024 [17]. Although the triggers for these protests were local issues, they all share the same underlying tensions: unfair competition from imported foods produced with lower standards, low pay, environmental policies and a lack of recognition of their essential role as food producers. Germany, France, Belgium, The Netherlands, Spain, the UK and Poland have all seen large mobilisations of farmers with varying degrees of concessions made to the agricultural industry.

Starting in 2019, the Dutch farming protests demonstrate what happens when top-down targets are imposed on farmers who feel they have been railroaded into the current system by political pressure and new policy demands. With nitrogen emission levels violating Dutch and EU laws, the government proposed cutting livestock numbers in half, sparking outrage from the farming sector. A June 2024 study showed this caused major societal unrest due to farmers having widespread public support and a backing by the mainstream press [18]. This led to the farmer's cause being co-opted by more extreme political groups.



TA tractor rally over changes to the UK farm inheritance tax in London, April 2025.

The Dutch experience was repeated throughout Europe, with political parties in favour of de-regulation outside of agriculture using the farmer's grievances to renegotiate climate legislation. The recent protests make it clear that there is an urgent need to include farmers and the industry from the beginning to ensure solutions address their underlying problems and are co-created. Leaving farmers out of the equation violates the principles of a just transition and ignores the power farmers wield in the public imagination to be the champion of answers to biodiversity loss and global heating.

EU AGRICULTURAL POLICY EVOLUTION: THE 2025 VISION AND BEYOND

Within the EU, the current political climate is somewhat polarised when it comes to food production and agriculture. There is a definite growing momentum for change, but still some resistance and stagnation, especially from the populist movements.

Following from the EU Strategic Dialogue published in 2024 [19], the roadmap entitled "Vision for Agriculture and Food" launched in the early part of 2025 [20]. The Vision for Agriculture and Food outlines a forward-looking strategy for the EU's agri-food sector, with a strong focus on sustainability, competitiveness, and resilience. The establishment of a New European Board on Agriculture and Food suggests a more coordinated approach to policymaking, which could help guide the sector through necessary adaptations. The addition of the Annual Youth Policy Dialogues is also a promising step in potentially giving younger generations a voice in shaping the future of food and farming.

The document's 2040 vision emphasises the need for an agri-food system that is both "future-proof"

and "within planetary boundaries", reflecting a growing recognition of environmental limits. Currently, over 80% of EU subsidies support the production of emissions-intensive animal protein [21], but the proposed Common Agricultural Policy (CAP) reforms, which aims to be simpler and more targeted, will prioritize farms that contribute to food security and environmental sustainability—a shift that could support smaller and more diverse farms. While this could open doors for more plant-rich and regenerative farming approaches, the extent to which this adaptation will be actively supported remains unclear.

One of the most significant points is the recognition of the EU's protein dependency on a few key import sources [22]. Within this political context, imported animal feed represents a critical vulnerability in agricultural supply chains, particularly as geopolitical tensions intensify globally. However, while it is stated that there is a need to consider both the way protein is produced and consumed within the EU, the emphasis remains on diversifying imports rather than fundamentally reshaping protein sourcing for animal feed and human diets.

According to the Vision for Agriculture and Food, the EU promises to maintain a competitive and resilient agri-food sector while ensuring that ambitious domestic standards do not create economic, environmental, or social disadvantages. To achieve this, the EU will assess the impact of its regulations on farmers and SMEs, ensure fair trade agreements, and align import standards with EU rules on pesticides and animal welfare. Stronger import controls and food safety measures will be enforced, along with a commitment to applying equal standards to both domestic and imported products. The EU will implement protective measures in response to unfair trade practices, including a "Unity Safety Net" to safeguard its agri-food sector. The call for

a comprehensive plan to address this issue, integrating policy, research, and production shifts, signals an opportunity to increase domestic plant protein production.

Overall, the vision sets a broad framework for a more sustainable and resilient agricultural system, but further clarity is needed on how the shift away from resource-intensive practices, including industrial animal farming, will be supported. Ensuring that farmers have the resources and incentives to move toward climate-friendly, plant-rich production will be key to meeting the EU's long-term sustainability goals.

THE UK'S DIVERGENT PATH: FARMING IN A NEW REGULATORY ERA

In this section we focus on the UK as, following Brexit, the Department of Food, Environment and Rural Affairs removed agricultural policy based on the CAP with each devolved nation responsible for its own framework in these regions, resulting in a divergence on agricultural regulation between England, Northern Ireland, Scotland and Wales.

The UK is vulnerable to further climate shocks and disruption to the supply chain than it has already experienced over the last few years. It is estimated that milk and meat yields will be impacted by rising temperatures as animals suffer from heat stress and have to spend more time housed inside, and incidences of floods and drought decrease the quality of pastures. South-West England is expected to be the most vulnerable as it has a high dairy herd density and stands to lose £13.4m in good years or £33.8m in bad years by the end of the century [23]. By 2100, the average dairy farm could be losing between £2000-£6000 in an average year or £6000-£14000 in the upper estimate range. There is a significant opportunity to reduce emissions, increase biodiversity, spare land for carbon sequestration, increase food security, and encourage healthier diets by diversifying from animal based protein production. "We simply cannot reduce methane emissions to a safe level, nor free up the land we need for sequestering carbon, without reducing the amount of meat we eat" concluded the government's independent report, the 'National Food Strategy' in 2022 [24]. According to 2023 Defra figures, the UK is only 62% self-sufficient in food, with fresh vegetable self-sufficiency at a concerning 53% - the lowest since records began in 1988. Meanwhile, organic farming remains stuck at just 3% of UK farmland with heavy reliance on imports, meaning farmers are missing significant market opportunities.

England discontinued direct payments based on how much land a farmer uses in 2024 and entered into a transition phase of delinked payments until 2027. A new subsidy scheme based on a policy of 'public goods' piloted in 2021. The Environmental Land Management Scheme (ELMS) rewards farmers and land managers for providing environmental and climate goods and services alongside food production, while supporting farm productivity, innovation, and research and

GOV.UK
Department
for Environment,
Food & Rural Affairs

Policy paper

Environmental Land Management (ELM) update: how government will pay for land- based environment and climate goods and services

Updated 21 June 2023

This was published under the 2022 to 2024 Sunak Conservative government

Applies to England

Contents
The Agricultural Transition –
what we are aiming to
achieve

**The Agricultural Transition – what we are
aiming to achieve**

*Front page of the UK Government's Environmental Land
Management Scheme*

development [25]. The ELMS is divided into three schemes: The Sustainable Farming Incentive, Countryside Stewardship and Landscape Recovery. Essentially, what the government has dubbed the 'Agricultural Transition Plan', will pay for actions such as 'no-till' farming, soil assessments, advancing environmental practices and big projects for habitat restoration, increasing biodiversity and land-use change [26].

The Scottish government set out its 'Vision for Agriculture' in the "Scottish Agriculture and Rural Communities Act (2024)" [27]. Spread across four tiers, it pays for enhancing environmental measures, developing training and skills, biodiversity gain and low-emission food production. Similar support schemes in the form of Northern Ireland's 'Farm Sustainability Payments' [28] and Wales' 'Sustainable Farming Scheme' [29] both place the emphasis on improving the environment rather than simply production. These schemes mark a departure from linking subsidy payments to production, land ownership and sector payments (some subsidies still exist for beef, lamb, suckler beef and sheep farms in Northern Ireland and Scotland).

Politicians have been reluctant to mandate any targets for meat and dairy production despite recommendations from its own Climate Change Committee (CCC) and 2022's National Food Strategy for a 20-30% reduction by 2030 [30]. Rising farmer anger witnessed by the 2024 farmer protests in London, combined with the fear of alienating the electorate and media stoking the issue as a culture war divide, has led to state inaction on targets to address the emissions from the livestock sector in the UK. Fury over feed and fertiliser price inflation, low incomes, a mental health crisis, bureaucracy, government policy, the impact of the Coronavirus pandemic, and lower standard food imports, does not seem to be abating. The winter of 2023 and spring of 2024 saw double the amount of monthly rainfall leading to crop failure, soil erosion and vast flooding resulting in the second-worst harvest since 1983 [31].



Campaign group 'Save British Farming' leading a rally in protest of the changes to UK agricultural law after Brexit, March 2022



SOCIETAL AND ATTITUDINAL CHALLENGES

FARMERS BELIEFS AND ACTIONS

Farmers are a very diverse group which the media and government often present in a monolithic block as 'the farming industry'. Before looking at how to engage individuals, it is important to understand the characteristics and challenges that have shaped today's farmers by zooming in on sociology of the agricultural industry. Once seen as the bedrock of rural life, farmers were the primary local employers and community leaders. This changed in the second half of the 20th century when rural communities were disconnected from consumers by the rise of the supermarkets and farming became increasingly industrialised. Modern society is left with a void of knowledge about how our food is grown and a devaluation of food and the producer [32].



MEDIA BIAS AND MISTRUST

The clash between ‘town and country’ has been played out since the industrial revolution. Rural areas generate more revenue from tourism today than agriculture [33], while the old village institutions such as churches, pubs, and markets are in decline [34]. The disconnect between urban and rural in Western societies is manifested in the media in the form of a peculiar type of urban bias. Farming issues are on the one hand ignored by journalists who don’t often have a background in agriculture, while on the other, the farming stories that do make headlines are usually ‘fluff’ pieces to appeal to the public’s romanticised view of the countryside [35]. Certainly, this is true of Western Europe where industrialisation has pulled the population towards cities whereas in Eastern Europe, subsistence farming and proximity to the countryside mean people are more connected to the realities of farming. Farmers are deeply suspicious of the media and feel unfairly attacked on issues of environment and animal welfare. Farmers think the industry is negatively portrayed and over-simplified. This defensiveness is interpreted by the media and public as a lack of transparency and hinders constructive communication. Farmers are also not very media-savvy and struggle to communicate effectively with the public when asked to address concerns.

They feel as if these questions are not just queries on the industry but a personal threat to their livelihoods. The farm is their home and they cannot just escape at the end of the working day. Unfortunately, these knee-jerk reactions do not translate well in papers and on television

In the UK, the public narrative is dominated by farming organisations, not individual farmers, causing the latter to feel their views are not represented. In France, the FNSEA (the predominant farmers' union) has always had a privileged relationship with the government to craft agricultural public policies. As a result, they tend to dominate the narrative around farmers' protests in the public debate [36] although they do not represent the ideas and demands of all farmers [37].

THE AGRICULTURAL TREADMILL

Farmer isolation was reported in 2011 to be less of a problem of physical isolation and more accurately a result of the lowly and poor social standing of the ‘farmer’ status in the modern world. Feeling persecuted for the world’s problems, vulnerable to market shocks and alienation from the urban citizens are clear themes when we look at a 2016 study that asked farmers the question, “what is it like to be a farmer?”[38].

Despite the clear expressions of pride in their work and farming identity (rewarding, good, and enjoyable), negative feelings linked to mental health, finance and government paperwork persist. Many describe this as the 'agricultural treadmill' [39], which is a process where farmers have to keep on working just to survive. When farmers restructure their businesses to work less hours and have more leisure time, many report increased well-being and family lives, and this is particularly apparent in livestock farmers who no longer have to tend to animals at all hours of the day. Diversifying into areas such as tourism and education also demonstrate positive benefits due to the increased social connections it provides. Another aspect to this is the growing concern over succession and younger generations' hesitancy to continue in the industry due to the difficult nature of the work. A recent UK survey found that 91% of young farmers identified mental health as the biggest hidden problem, citing long hours (farmers work an average of 60 hours per week compared to the 36.4 hours for other professions) [40].

Many farmers perceive external change as a threat to their identity, business, and livelihood.

Some farmers feel targeted by environmental and activist movements. This is inevitably compounded when it comes to the questions of environmental measures and animal welfare as the media narrative favours an 'us vs them' story that is an attack on farmers. Farming traditions are deeply ingrained in rural communities and passed down through generations. Farming is often a family-run enterprise with generational tensions surfacing around the prospect of change. Transitioning away from conventional farming methods can feel like a rejection of family heritage. Younger farmers may be more open to transition, while older generations resist. The resistance to change narrative has recently been challenged and might be an incorrect stereotype of a certain subgroup of vocal farmers, for example, a 2025 survey found that 63% of livestock farmers would consider diversifying out of rearing animals if there were viable options that could bring in equal or higher income [41].

Farmers continue in the profession despite the challenges due to a strong attachment to the land, the culture and the way of life. They take pride and a sense of duty in their role as stewards of the land and food producers.





ECONOMIC AND FINANCIAL CHALLENGES

DECLINING CONSUMER DEMAND IN THE PLANT-RICH MARKET

After a period of rapid growth, the plant-based products market is now encountering significant challenges on a global scale.

In Europe, the situation presents a mixed picture. The plant-based meat market was valued at approximately €2 billion in 2023, reflecting a 3.4% compound annual growth rate from the previous year [42]. Germany led the market with sales worth €922 million. However, while the sales value increased, the volume of plant-based meat sold decreased by 3.2%, indicating that higher prices rather than increased consumption drove the revenue growth. Despite these challenges, certain segments like plant-based cheese and yoghurt experienced growth, with plant-based cheese sales increasing by 7% to €194 million [43], and yoghurt sales growing across all six surveyed countries between 2023 and early 2024.

Similarly, the UK has experienced a stagnation in sales driven by the cost of living crisis and economic pressures. Consumers cite the comparatively higher cost of alternatives as a barrier, and this is reflected in the 4-12% year-on-year decrease in sales across meat-free volumes. While this can be interpreted as a collapse of the market, many have seen this simply as a correction phase after a boom.

In the United States, retail sales of plant-based meat declined by 9% in the year leading up to late 2024, with overall volumes decreasing by 9.9% [44]. This downturn has led to reduced investments, with several companies scaling down or closing operations. Factors such as regulatory pushbacks, labeling controversies, and waning consumer interest have further dampened investor confidence. The return of the Trump administration adds further uncertainty, particularly for cultivated and plant-based meat sectors. In fact, the U.S. Department of Agriculture has indicated plans to propose new labeling requirements for cell-cultured meat, and a broader focus on traditional agriculture may shift regulatory and funding priorities away from alternative proteins.

The initial hype around plant-based products led to widespread media attention, strong market entry, and a surge in consumer trials. However, as excitement faded, many consumers found the products underwhelming, leading to declining interest—especially amid economic pressures and rising food costs. The market became overcrowded with similar products, lacking differentiation and strong fundamentals. To regain consumers, the industry must now shift focus to business fundamentals, emphasising quality, taste, and long-term value [45].

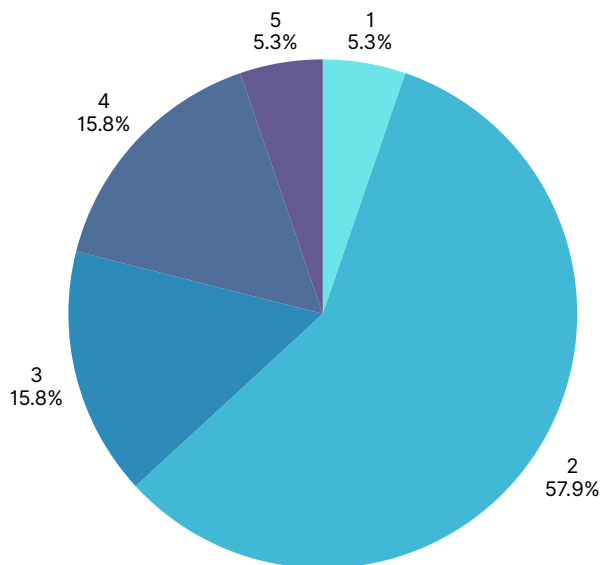
LOST OPPORTUNITIES IN THE PLANT-RICH SUPPLY CHAINS

In some cases, supply chains for vegetable products and plant-based foods are long and complex, reducing the opportunity for innovation. It can be difficult for stakeholders to meet and collaborate effectively across sectors and there may be a slower response to shifting market demands. The European plant-based food sector faces significant challenges due to a fragmented value chain with limited coordination across production stages [46]. A disconnect between consumer demand and available products, along with insufficient knowledge sharing between established food companies and startups, hinders innovation and market growth. The absence of a unified cooperation model further weakens progress, while difficulties in sourcing and processing local produce add to supply chain inefficiencies. Additionally, farmers face uncertainty due to the lack of clear pricing systems, contracts, and guidance on optimising crop cultivation for plant-based production. Strengthening collaboration across the sector is crucial to overcoming these barriers.

Due to a long history of strong cooperatives and lobbies within animal agriculture, processing rights and other existing market conditions favour these kinds of production. Arable farmers typically have fewer opportunities for on-farm processing and value addition than their animal counterparts. Their products are often sold as raw commodities, limiting their ability to capture additional value through processing. While some arable farmers can benefit from processing rights (e.g., milling grain into flour), the range of potential processed products is generally more limited compared to livestock farming.

THE UNCHARTED WATERS OF FARM ADAPTATION

How much value is a 'transitioned farm' label to food producers?



FAN conducted research with leading food producers and found that although companies feel ethical pressure to improve sustainability and animal welfare, price and convenience drive the consumer.

Success stories of farms actively transitioning away out of livestock or diversifying their outputs to include more plant-rich production, often inspired and/or supported by an external organisation, are few and far between. The vast majority, if not all, of those success stories are of small-scale farms which do not demonstrate economic viability at scale. Furthermore, since the external organisations supporting the transitions are usually ethics-driven, they often involve sending the previously farmed animals to sanctuaries. While animal sanctuaries are shown to provide increased animal welfare, the cost of maintaining the life of each animal is increased, and this cost falls to the organisation and its funders. This further exacerbates the narrative of farm transitions being very poor business cases. All of this means that in the eyes of banks, investors and other potential funders, farm transitions are, at best, uncharted territory, and at worst, a serious liability.

Farmers looking to diversify into more plant-rich production face several financial limitations and challenges related to loans. In general, there is limited access to credit and this shortage of loans particularly affects small farms and young farmers, who are often considered high-risk borrowers. There is a lack of tailored lending programs that support the transition to plant-rich production, and which supports the farmers with the potentially high initial costs such as new equipment, infrastructure, and different land management practices. As mentioned above, the markets for some crops and plant-based products are fluctuating, making it difficult for farmers to secure loans, as lenders may perceive these ventures as riskier.

FAN conducted some research on the value-add potential of a “transitioned farm” label, leveraging the narratives of animal welfare or sustainability. However, based on in-depth interviews with major food producers, data showed that such a label would likely have limited impact. Most consumers prioritize factors such as availability and price, with sustainability and animal welfare ranking lower, after considerations like taste and quality. Consequently, the sustainability narrative or the appeal of “less animals” does not resonate strongly with the typical consumer looking for convenience and value.

An alternative approach to leveraging labeling could be through ESG reporting. Farms that transition away from large-scale animal production could significantly reduce their greenhouse gas emissions, and this reduction could be reflected in their ESG reports, potentially improving their financial performance. While this approach holds promise, it faces challenges: ESG reports offer only a snapshot of a company’s impact, and without proper monitoring and assessment, there is a risk of greenwashing where claims of sustainability do not reflect the true environmental impact.



RESEARCH AND INNOVATION CHALLENGES

A MULTI-DISCIPLINARY CHALLENGE

Europe is a patchwork of regions, each shaped by its own climate, soils, traditions, economies, and social fabric. Across this rich mosaic, agriculture faces a complex web of challenges—from ensuring food security and providing sufficient income to addressing generational renewal, public health, climate change, biodiversity loss, and animal welfare. Navigating this shifting landscape calls for a deep and nuanced understanding of European farming—one that bridges disciplines and scales to grasp both the big picture and the local realities.



APPROACH TO STUDYING FARM ADAPTATION

Research and innovation on farm adaptation can take many forms. However, there is increasing evidence and consensus that adopting a food systems-based approach to Research and innovation in the combined fields of agriculture, food, environment (including climate change mitigation and adaptation), human nutrition and health is essential for effectively tackling the significant and systemic challenges facing European food systems [47]. This involves addressing technical, economic, social, environmental and political factors at scales from local to global, and integrating all linked stages of the value chain.

This food systems approach can improve our understanding of the interdependencies between key components of food systems and their outcomes in terms of food, health, farm income, environment and climate. With this knowledge, researchers can design prospective studies that explore how different future pathways might unfold. These studies often use transformative scenarios—such as a shift toward agroecological principles [48]—to anticipate possible outcomes and guide decision-making. It is also possible to run what-if simulations analysing alternative and theoretical pathways to understand how disruptive changes like adverse weather,

reduction of livestock density or climate change can affect yields, prices, farm income, trade, supply chain, food consumption, greenhouse gas emissions, nitrates leaching or other aspects of the food system.

To provide clear and scientifically sound analyses and recommendations for farm adaptation, a food systems approach should consider the entire value chain, from production and processing to packaging, distribution, and consumption. By combining a focus on biophysical factors with an understanding of the people and organisations involved, this approach can identify not only what needs to change but also how large-scale transformation can be achieved. It can also account for the diversity of farming situations and regions across Europe. To address this complexity, it can draw on different scales of analysis, from individual fields and farms to regional, national, European, and global levels.

COLLABORATION AMONG RESEARCHERS

Research and innovation on farm adaptation require a more interdisciplinary, long-term, and collaborative approach to effectively address the complexities of food systems. There is currently no structured framework for transdisciplinary

collaboration or a dedicated space for researchers to exchange knowledge on this topic, which slows progress. Building a strong community of practice and fostering diverse knowledge-sharing mechanisms are essential to accelerate learning and innovation. A broader multi-actor approach is needed, ensuring that research and innovation processes are demand-driven and inclusive of all relevant stakeholders—ranging from researchers, research funders and policy makers to farmers, processors, retailers, and NGOs. By integrating these perspectives, farm adaptation efforts can become more effective, actionable, and aligned with the needs of food systems actors.

KNOWLEDGE DISSEMINATION

Once research and innovation studies on farm adaptation are available, their impact depends on how effectively their key results are disseminated to agricultural education institutions, agricultural advisors and farmers. These stakeholders play a crucial role in translating scientific findings into practical, on-the-ground changes. Without sufficient knowledge transfer, even the most advanced research remains theoretical, failing to drive real adaptation and resilience in farming systems. Establishing clear communication channels, accessible formats, and interactive training programs can help ensure that research insights are integrated into farming practices.

One example of an effective way to disseminate agricultural knowledge is the French agroecological platform Triple Performance [49], which bridges the gap between research and practice. It provides an interactive space where farmers can access and share best practices, expert insights, and real-world case studies on agroecology and sustainable farming. Another platform, TABLE Debates [50], offers discussions, reports, and summaries on key food system issues, making complex scientific findings more

accessible to policymakers, agricultural advisors, and farmers.

Other successful methods to share agricultural knowledge include farmer field schools, which provide hands-on training, and peer-to-peer learning networks, facilitating direct knowledge exchange among farmers. Additionally, digital advisory tools and decision-support apps [51] help tailor scientific recommendations to local conditions, enabling farmers to implement research-driven innovations effectively. These diverse approaches ensure that cutting-edge agricultural research translates into practical, scalable solutions for climate adaptation and sustainability.

RESEARCH FUNDING

Adequate funding is essential to drive research and innovation on farm adaptation, enabling the development of effective solutions for climate resilience and sustainable food systems. However, there is a specific lack of funding for transformative experimentation—medium to large scale, long-term trials that test innovative adaptation strategies in real farming conditions. Indeed, testing innovations individually through trial and error is risky, time-consuming, and costly for farmers. A better alternative is for trusted agricultural advisors to assess, in advance, the potential impacts of systemic innovations on a farm's structure, operations, and performance. This requires financing researchers to work in interaction with farmers and agricultural advisors, and design innovative farming systems that are resource-efficient, low-emission and biodiversity-friendly.

Without sufficient investment, critical knowledge gaps remain unaddressed, and opportunities to develop groundbreaking solutions are missed.

Financial support is needed to facilitate interdisciplinary research, pilot new technologies, and refine adaptation strategies that can be scaled effectively. Moreover, funding fosters collaboration among researchers, policymakers, and food system actors, ensuring that innovation is demand-driven and aligned with real-world needs. By prioritizing investment in both foundational research and transformative experimentation, policymakers and funders can accelerate the transition toward more resilient and adaptive agricultural systems, securing food production for future generations.

DATA ON FARMING SYSTEMS

High-quality, shareable datasets on the technical and economic aspects of farm systems at regional,

national, and European levels are essential for advancing research and innovation in farm adaptation. Comprehensive and standardised data enable researchers to analyze trends, assess the effectiveness of adaptation strategies, and develop evidence-based solutions tailored to diverse agricultural contexts. Access to such datasets also facilitates cross-country comparisons, fostering collaboration and knowledge exchange across borders. Moreover, transparent and accessible data empower policymakers, farmers, and agricultural advisors to make informed decisions that enhance resilience and sustainability. Investing in the collection, standardisation, and open sharing of farm system data is therefore crucial to accelerating innovation and driving impactful change in agricultural productions and practices.



Farming in Protected Landscapes

ELIGIBILITY

The FiPL programme is open to all farmers and land managers (including from the private, public and charity sector) in the Lincolnshire Wolds AONB or where activity on the ground can bring benefit to the areas.



To be eligible, you must manage all the land included in the application and have control of all the activities you'd like to undertake, or you must have written consent from all parties who have this management and control. Other organisations and individuals can apply, if they do this in collaboration with a farmer or land manager, or in support of a farmer or group of farmers.

The Programme will provide funding towards projects that help to:

- Meet at least one of the outcomes of the programme's four themes that
 - mitigate the impacts of climate change
 - support nature recovery
 - provide opportunities for people to discover, enjoy and

CLIMATE

Supporting zero through nature-based communities climate change

- More carbon is stored
- Flood risk has been reduced
- Better understanding of what different habitats can do and reduced carbon emissions
- The landscape is more resilient

This could include:

- Action to reduce carbon emissions

ENVIRONMENTAL AND TECHNICAL CHALLENGES

RISK IN THE AGE OF CLIMATE UNCERTAINTY

Climate change and unpredictable weather patterns make planning and investment risky. However, given that this will only worsen with time, the sooner farms adapt the more benefits they will draw. For this purpose, soil properties, water availability and quality, landscape features, climatic conditions and disease pressures should be taken into account when considering diversification solutions. In the meantime, certain farm buildings, and especially livestock buildings such as poultry barns represent high-cost, long-term investment that limits the flexibility of farmers to change their production systems and create a technological lock-in. These barriers should be addressed together when designing a new farm system.

ENVIRONMENTAL CONDITIONS AND LIMITS

First of all, soil type, fertility, and drainage capacity can limit adaptation by restricting the types of crops that can be introduced. For example, heavy clay soils or shallow soils may not support deep-rooted perennial crops, while sandy soils may struggle to retain water, making them less suitable for crops such as soybeans or peas. Poor soil health due to erosion, compaction, or nutrient depletion further reduces flexibility.

Landscape features like steep slopes, flood-prone areas, or fragmented land can also affect adaptation by making certain farming practices unviable. For example, mechanised cropping may not be feasible on hilly terrain, while low-lying fields may be unsuitable for permanent infrastructure due to flood risks. Landscape features can also cause microclimates with strong winds or frost pockets in valleys, further restricting crop selection.

Limited access to water—whether from low rainfall, falling groundwater levels, or poor water quality—can limit the shift to high-water-demand crops like corn or soybeans. In drought-prone regions, dependence on rain-fed agriculture can be risky and irrigation infrastructure may be too costly or unsustainable, limiting diversification options. Climate change is likely to increase the frequency and intensity of both water stress and flooding, leading to significant declines in crop yields. Erratic rainfall can also disrupt pasture systems.

Climate change can also affect farming systems through rising temperatures and increased CO₂ levels [52]. Higher temperatures may either boost or reduce crop yields depending on the crop type and growing region, while also lowering livestock productivity and causing heat stress in animals.

Additionally, certain crops like wheat and rice can benefit from elevated atmospheric CO₂, a phenomenon known as carbon dioxide fertilisation.

Lastly, these shifting conditions also heighten the risk of pests and diseases, potentially undermining the long-term viability of certain adaptation strategies. For example, warmer climates may allow parasites and crop pests to spread into new areas, demanding greater investments in control measures that may be out of reach for some farmers. However, these challenges can also encourage farmers to try new practices, diversify their production, and find more resilient ways to adapt, turning problems into opportunities for change.

TECHNOLOGICAL LOCK-IN AND SUNK COSTS

Livestock buildings require significant capital investment for construction, equipment, ventilation and feeding systems, and they are usually designed for specific species and production methods (e.g. dairy barns, pig farrowing units, or broiler houses). Moreover, regulations may require specific infrastructure standards such as biosecurity in pig farms or welfare conditions for poultry, and contracts with buyers often require adherence to certain production conditions, reinforcing dependence on existing systems. In the end, the high initial investment, often requiring loans with repayment periods of 7 to 20 years, along with infrastructure specialisation and market constraints, traps farmers in existing production models and technologies. For example, a dairy farmer with an automated milking system cannot easily switch to free-range beef cattle without major changes.

Repurposing livestock buildings is often challenging due to their specialised design, requiring significant investment to modify ventilation, flooring, insulation, or drainage systems. Unfortunately, most agricultural grants and loans favor new construction rather than renovations, and farmers who are often already indebted may struggle to secure financial support. Additionally, regulatory constraints, such as zoning laws and agrifood standards, can further limit repurposing options.

If a building cannot be adapted efficiently, it becomes a sunk asset, meaning the initial investment is lost without the ability to generate new value. Agricultural equipment (e.g cages for chickens) can also become sunk assets although they can be bought and sold more easily. This can lead to uncertain social situations for farmers who have followed a strategy of building up capital in agricultural assets throughout their careers and who are counting on their resale for their retirement. For this reason, farm adaptation should be anticipated well before the planned retirement date.





SOCIOPOLITICAL CHALLENGES

THE INTERPLAY OF SUPPLY AND DEMAND

From a policy perspective, both supply-side and demand-side measures are essential for reducing emissions and creating a sustainable food system. However, each faces specific sociopolitical challenges [53]. While supply-side policies may face resistance, they are less likely to challenge cultural norms, societal values, or personal freedoms. In contrast, demand-side measures directly affect social behaviors and institutions, making them more complex to implement.

POPULIST SENTIMENT AND POLITICAL PUSHBACK

An increasingly challenging political climate in both the EU and the UK is making the advancement of farm transition policies difficult. The rise of populism and conservative backlash against climate mitigation policies demands a need for a more pragmatic approach. This approach must bring together a complex network of stakeholders, policymakers, organisations and businesses all with their own agendas and political aims. That is why it is critical to separate transition from divisive ideologies. Instead, the focus should be on innovative, practical and sustainable solutions that appeal across the political spectrum.

Recent policies on animal welfare, sustainability, and environmental stewardship have at times been perceived as part of a top-down agenda, sparking concern among those who feel left out of the conversation. As seen in the recent farming protests across Europe, even well-intentioned reforms can lead to widespread resistance if they are not grounded in local realities or communicated effectively. Addressing political polarisation means focusing on shared national values rather than partisan goals. For instance, presenting agricultural reform in terms of national food security, rural livelihoods, economic growth, and innovation can garner broader support, including from conservative and traditional communities. While political differences exist, it's essential that the farming transition incorporates a wide range of perspectives. Not all farmers will support the same strategies, and respecting that diversity is crucial. Collaborating with groups such as the Conservative Animal Welfare Foundation in the UK can help build a more inclusive and pragmatic coalition for positive change in the sector.

The Danish Plant-Based Action Plan is an example where a coalition of diverse groups can make change. The plan involved input from animal welfare and farming organisations, particularly the organic movement, to draw up a plan for Denmark to increase its plant-based market and provide support for this transition. It is a shared effort by different political parties and the farming industry to align the country's food production with its climate goals. Instead of focusing the plan on the controversial topic of farmed animal reduction, it called for an expansion of the plant-based sector.



© Fonden For Plantebaserede Fødevarer. The Danish Plant Based Fund has allocated €7.8 million to stimulating the plant-based market

SOCIETAL AND SCIENTIFIC DIVIDES OVER FARMING APPROACHES

Cultural and ideological factors strongly influence the effectiveness of sustainable agricultural policies. Many initiatives fail when they do not align with local farming traditions, belief systems, or social norms. For example, in Poland, efforts to promote agroforestry and reduce livestock intensity have met resistance from farmers who a

associate trees on farmland or reductions in animal numbers with economic backwardness or a loss of national agricultural identity.

Beyond these practical barriers, deep ideological divides in society and disagreements within the scientific community slow policy progress. Sustainable intensification seeks to increase yields while reducing environmental harm, but is criticised for favoring commercialisation, marginalising smallholder farmers and overlooking social inequalities and power dynamics. Agroecology, in contrast, integrates ecological principles and ecosystem services into farming and is often seen as an alternative to sustainable intensification. While some view it as an extension of sustainable intensification, others see the two as opposing paradigms, differing in priorities, methods, and actor involvement. Critics of agroecology claim it is unrealistic or unviable, though these arguments are increasingly challenged [54]. The clash between these approaches highlights broader tensions between commercial, high-yield models and localised, biodiversity-focused systems, making consensus hard to reach. This societal and scientific polarisation contributes to policy gridlock, delaying urgent action on agricultural emissions and sustainability.

THE NECESSARY TRADE-OFFS IN FOOD CONSUMPTION

Sustainable agricultural policies must balance emissions reduction and biodiversity preservation with food security, affordability, consumer choice and competitiveness for the producer. Poorly designed policies risk driving up food prices and worsening food insecurity, particularly for vulnerable populations. For example, pricing greenhouse gas (GHG) emissions could disproportionately harm the urban poor in food deserts. Additionally, food price shocks can trigger protests and conflicts, making food security a key

factor in sociopolitical stability.

Cultural, economic, and ideological factors drive resistance to dietary shifts, such as reducing meat consumption. Meat is often tied to status and tradition, making behavioral change difficult. Similarly, food waste in developed nations stems from socio-cultural norms, aesthetic food standards, and poor household management. Demand-side mitigation measures, such as nudging consumers toward sustainable diets, face political resistance due to concerns over state intervention in personal choices. Policies like meat taxes are often seen as an infringement on individual freedom, while cultural and economic barriers further complicate efforts to shift behaviors. These challenges make food-related climate policies particularly difficult to implement effectively.

POWER, POLITICS AND RESISTANCE IN FOOD SYSTEM REFORM

Sustainable agricultural policies in agrifood systems, such as subsidy reforms, often face political opposition due to vested interests, electoral considerations, and lobbying. Many subsidies, originally intended to support agricultural growth and food security, have persisted beyond their purpose and now contribute to environmental degradation and greenhouse gas emissions. This is particularly evident in the EU's Common Agricultural Policy (CAP), which tends to favour large-scale industrial farming, exacerbating environmental harm, poor animal welfare, and inequalities for smaller family farms.

Efforts to remove or redirect agricultural subsidies face strong resistance from farmers, politicians, and industry groups that benefit from the status quo. This resistance is particularly pronounced in

the livestock sector, where emission reduction policies encounter significant political pushback.

Market-based approaches, such as pricing agricultural emissions, have struggled to gain acceptance, as seen in New Zealand’s repeated delays in implementing an emissions trading scheme. Intense corporate consolidation in the meat industry further entrenches opposition, as large companies with vested interests in the current system wield considerable lobbying power, shaping both policy and dietary guidelines. Resistance to environmental policies can trigger large-scale protests, as seen in the Netherlands, where farmers opposed livestock reduction policies aimed at lowering nitrogen emissions. Their discontent reflected broader frustration over perceived unfair treatment compared to other polluting sectors. Overall, electoral concerns, industry lobbying, and economic dependencies make agricultural subsidy and emission reform highly contentious, delaying necessary environmental action. Yet, reform is pivotal to promote sustainable practices and support a fairer, more resilient food system. Redirecting public support toward farmers willing to transition—especially away from intensive animal farming—requires long-term, reliable incentives that make their future farm systems resilient and viable.

REGULATORY IMPEDIMENTS AND POLITICAL INERTIA

Current policies are often fragmented, complex and inconsistent, which creates confusion and barriers for farmers who wish to adopt sustainable practices. Farmers currently lack clear, accessible pathways to transition to more sustainable farming methods. Many of them feel they are left in the dark, unsure of how to navigate the complex landscape of environmental regulations, subsidies, and market demands.

Without clear guidance, the fear of financial loss and failure often prevents farmers from making the necessary changes to their operations. For this reason, a more streamlined, farmer-friendly regulatory system is necessary to facilitate the transition. In the UK context of Brexit, the new subsidy system presents both challenges and opportunities. To maximize the benefits of this new system, it is essential to involve farmers in the policymaking process, ensuring that their needs and concerns are addressed. Additionally, integrating agricultural policies into broader EU policy frameworks can help create a cohesive strategy for supporting farmers across member states.

RENT HAV, MERE NATUR, LAVT KLIMAAFTRYK OG EKSPORTINDTÆGTER

VI KAN FÅ DET HELE MED ET MERE PLANTEBASERET DANSK LANDBRUG

Hvad foretrækker verden at spise?
I store dele af verden er der interesse for plantebaserede alternativer til kød.

Kødbaserede alternativer	Plantar	Kød
56 %	34 %	Vietnam
53 %	37 %	Mexico
50 %	45 %	Brasilien
50 %	45 %	Thailand
54 %	46 %	Indien
55 %	49 %	Argentina
51 %	49 %	Kina
46 %	54 %	Indonesien
45 %	55 %	Sverige
45 %	55 %	Sydkorea

Over 4 milliarder mennesker skal spise grønere. Det vurderer FN's fødevarer- og landbrugsorganisation er afgørende for, at vi når klimamålet. Og her i Danmark påpeger Klimadatoet, at vejen til en bæredygtig dansk fødevarerproduktion er at satse på plantebaserede fødevarer.

Verdensmarkedet for plantebaserede fødevarer som havrebrød, plantebæffer, quinoa, kagefrugter, andre planteproteiner og næste generation af fermenterede produkter ventes at nå 1.800 milliarder kroner allerede i 2035. Der ventes således et enormt marked for plantebaserede fødevarer for de lande, som investerer i fremtiden nu.

Danmark har en række dygtige virksomheder, som er i fuld gang med at udvikle fremtidens plantebaserede fødevarer. Flere har vundet priser. Noget eksporterer allerede til store dele af verden. Det er den slags virksomheder, vi som samfund skal satse på. Vi skal blive førende i at dyrke og udvikle plantebaseret mad og drikke, som er sundt, velsmagende og økonomisk.

Københavns Universitet, Aarhus Universitet og Danmarks Tekniske Universitet arbejder, at Danmark investerer mindst 600 millioner kroner årligt, hvis vi skal være verdensførende. Vi kan skabe mellem 20.000 og 40.000 nye bæredygtige danske arbejdspladser, hvis vi kan få blot en til to procent af markedet.

Danmark er før på flere områder som vindenergi og økologi. Nu har vi mulighed for at gøre jorden for endnu en grøn vækstbucce. Hvis vi ikke tænker langtidsigt nu, bliver omstillingen dyrere for danskere og resten af dansk erhvervsliv.

Vi opfordrer indtrængende regeringen og Folketinget til at vise handekraft og sætte en ny retning for landbruget. Danmark skal producere mere mad til mennesker - frem for foder til dyr.

Hvordan vi, naturen, klimaet eller dyrevelfærd kan vinde.

Der skal investeres milliarder i fremtidens løsninger - nu.

Logoer: Green Vegetarisk Forbrug, FORBRUGERBÅST, MATA, DYRENE BESKYTTELSE, GREENPEACE, Rødt for Grøn Omstilling, Yeluvit, PLANTERKØBEN, Alliance for Bioeconomics, ØKOLOGISK LANDSFØRSEL, planton, DRØK, NATURLI', VERDENS SKOVET, DANSK ERHVERV, PURE PLANT, MERKUR, Soris, COOP, LÊ TRANG, KRAVE, JORDANSKE, RØD, Organic Plant Protein, MEYERS, Tæmpeh, corner vegan, AGRAIN.

“Clean oceans, more nature, lowered emissions ad more export revenue” advert about the Danish Plant Based Action Plan which was only able to succeed by working with farming organisations and lobbies.

More generally, conflicts of objectives, interests, and values can arise among actors at any point along the value chain and at all levels (communal, regional, national and international). This lack of coordination hinders the emergence of positive tipping points. To address this, it is necessary to define a pathway for policy transformation grounded in a comprehensive perspective of the food system [55]. In this context, the gradual and transparent introduction of incentive-based taxes and effective regulatory measures can provide actors with greater reliability and predictability. Additionally, any costs incurred by specific actors in this process, such as farms involved in animal or feed production, should be socially amortised and compensated in a targeted and fair manner.

The absence of strong political will to push through farming transition policies is another major barrier to progress. While there is widespread recognition of the need for change, political leaders often lack the motivation or courage to take bold action. This political inertia is mainly due to shortcomings in food governance, which is the way in which various actors in the food system collaborate and negotiate. Another reason is the lack of public discourse on farming transition issues, which gives policymakers little incentive to act. Strengthening this discourse through public campaigns, media outreach, and events that highlight the benefits of sustainable farming, such as food security, economic opportunities, and improved public health, can help bridge the ideological divides and build the political will needed for change.

INTERNATIONAL TRADE AND AGRIBUSINESS INTERESTS

As the EU seeks to secure major trade agreements like the proposed EU-Mercosur pact, significant economic challenges arise for European farmers. These agreements often intensify power



French villages show support for farmers against the Mercosur trade deal by turning their signs upside down

imbalances, exposing EU farmers to competition from large-scale producers in countries where environmental, animal welfare, and pesticide regulations are less stringent or less enforced. While EU farmers must comply with strict standards on pesticide use, climate mitigation, and environmental protection, imports from countries such as Brazil or Argentina may contain products produced with chemicals and practices banned in Europe, driving down market prices and raising concerns about unfair competition. This dynamic has sparked widespread protests and deepens farmers' sense of vulnerability, as many fear that the power of multinational corporations and the push for global market access threaten their livelihoods and undermine the EU's high social and ecological standards. Moreover, critics argue that these deals not only risk collapsing prices for European family farmers but also contribute to environmental harm both in Europe and abroad, as expansion of export-oriented agriculture abroad can drive deforestation and greater pesticide use.

The influence of large agribusinesses present further challenges to efforts toward sustainable agriculture. Indeed, the global dominance of large agribusiness and food corporations hinders environmental reforms by prioritizing commercial interests over sustainability. Their influence over pricing, product standards and trade agreements, combined with their control of retail markets that help shape dietary policies and consumer preferences, promotes emissions-intensive diets and limits governments' ability to implement climate-friendly measures.

One example is the opposition by major dairy and meat industry groups to France's proposed climate labeling system, which delayed implementation of transparency measures intended to inform consumers about the

environmental impact of their food choices. More generally, food labelling laws have become one of the battlegrounds for agribusiness, particularly regarding plant-based alternatives. In the EU, food labeling laws for plant-based alternatives are evolving, with a recent proposed ban on 29 meat-related terms to protect consumer transparency and traditional meat terminology. Meanwhile, restrictions on dairy-related terms like "yoghurt-style" and "cheese-alternative" are already tightening across member states. These legal battles highlight how corporate interests can shape dietary norms and slow the transition to more sustainable food systems, further complicating global efforts to mitigate the impacts of agriculture.



Conclusion



**The choice is clear:
empower our
farmers now or face
a future where we
struggle to feed our
nations**

THE SOLUTIONS ARE FOUND IN OUR FIELDS



This analysis has demonstrated that successful agricultural transformation requires more than policy mandates or technological solutions applied uniformly to our farming systems. What is needed is a thorough recognition of the interwoven challenges destabilizing agricultural systems: political pushback, economic vulnerability intensified by market turbulence, social fragmentation within rural networks, and technological lock-in.

Without sustained, targeted funding for interdisciplinary research, technology development, and scalable adaptation strategies, the agricultural sector remains vulnerable to climate and societal disruption. Strategic investment in collaborative research networks, plant-rich value chains and practical applications are essential for fostering evidence-based solutions that address real-world implementation challenges.

Ultimately, the change we need can only be delivered by farmers and food producers. The choice is clear: empower them now or face a future where we struggle to feed our nations. The success of our farmers is vital to all, and the solutions are found in our fields.



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