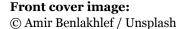


About WWF

WWF is one of the world's largest and most experienced independent conservation organisations, with over 5 million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature by conserving the world's biological diversity, ensuring the sustainable use of renewable natural resources, and promoting the reduction of pollution and wasteful consumption.

About this report and acknowledgements

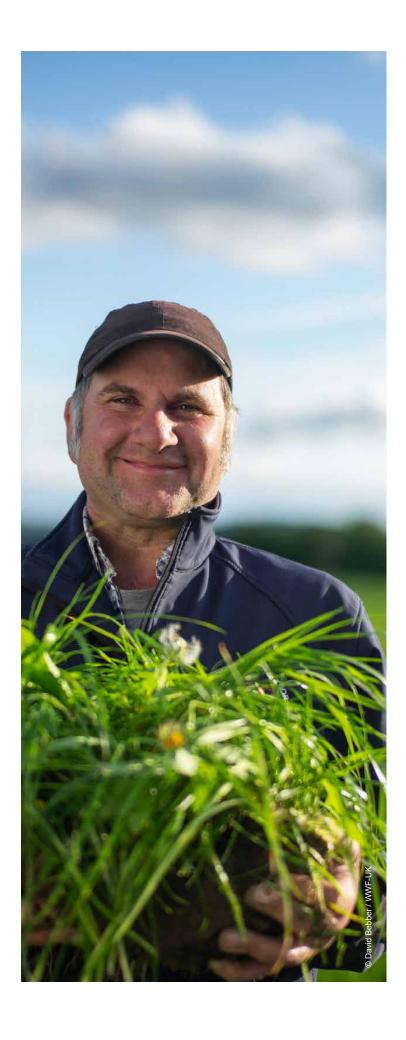
We would like to sincerely thank the organisations and experts across the food value chain that contributed to the development of this roadmap, from which so much good practice has been identified. Their views were collected through a series of workshops that WWF-UK and NatWest Group co-hosted, and bilateral dialogues between WWF-UK and experts from across the UK food value chain, including banks, retailers, processors, manufacturers, farmers, insurers, asset managers, farm representatives, food services, NGOs, and policymakers. We thank NatWest Group for sponsoring this work.



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WWF-UK Living Planet Centre Rufford House, Brewery Road Woking, GU24LL wwf.org.uk



INTRODUCTION

We are already in the midst of a fundamental agricultural transition, with farmers across the country facing unprecedented levels of change and uncertainty. Farming is operating in a system vulnerable to shocks, stresses, supply chain disruptions and price pressures, many of which are directly caused or made worse by climate change and the loss of nature. In the meantime, the UK remains one of the most nature-depleted countries globally, with nearly one in six species are threatened by extinction ¹. The food system is simply not working for people or planet.

ANY STRATEGY FOR SHIFTING FINANCIAL FLOWS TOWARDS SUPPORT FOR REGENERATIVE PRACTICES AND BUILDING A RESILIENT FOOD SYSTEM WILL NEED TO ADOPT AN 'ALL HANDS ON DECK'

APPROACH

Recent polling shows that the public want to see major changes to the ways in which we produce food, in ways that protect, not harm our nature, but actions to make this a reality are severely lagging ². At the same time, the UK Government has rightly recognised the pivotal role farming will play in meeting our climate and nature goals, while continuing to produce the food we need for a healthy and nutritious diet. Addressing the nexus of climate, nature and food together will be the "triple challenge" of the coming decade.

Getting this transition right is critical not just to support farmers on this journey, but also investor and citizen movements who seek access to healthier food produced in a way that improves the health of the ecological systems and the climate. These stakeholders are putting ever greater pressure on businesses to align their operations with net zero and nature recovery, including financial institutions and food businesses who are prepared to support and enable their farming customers to transition. At the same time, reporting disclosure processes for climate and nature at global and national levels are also bringing food and farming up the list of priorities for action, recognising that supporting farmers to be resilient to future shocks can reduce threats to supply chains and investments.

The UK Government, in recognising the need to mobilise private finance for the transition, announced their ambition to publish a nature positive investment roadmap for key sectors, including agriculture³. To support this endeavour, WWF-UK has collaborated with experts from across the food value chain* to explore how all actors in the value chain can accelerate and finance a regenerative and just agricultural transition in England. This resulting roadmap outlines both the opportunities and limitations of private sector finance, as well as where strong ambition, policy, and funding from government can unlock further financing potential to accelerate a transition in farming that delivers for farmers and works for the planet. Actions and policy recommendations relate to England, though many themes will be common to Wales, Scotland and Northern Ireland, and many supply chain actors operate across the UK.

This is not a roadmap to kick off a process, but to support, guide and accelerate it so that farmers receive the support they need at each stage of their journey, receive a fair market return for producing healthy and nutritious food, and are rewarded for tackling climate change and restoring nature. Importantly, this is also a roadmap focussed on action, where all parts of the financial ecosystem surrounding farming work together to take the steps they can. Any strategy for shifting financial flows towards support for regenerative practices and building a resilient food system will need to adopt an 'all hands on deck' approach across the value chain. There are many ways forward, but no way back.

- 1 State of Nature Report State of Nature Partnership, 2023
- 2 <u>Citizens are Hungry for Change</u> Food, Farming & Countryside Commission, 2023
- 3 <u>Mobilising Green Investment</u> Green Finance Strategy, HM Government, 2023
 - * Throughout this report we refer to both the 'supply chain'. and the 'value chain'. When using 'supply chain', we are specifically referencing food retailers, manufacturers, processors, and service providers. When using 'value chain' we are referencing the supply chain, as well as financial institutions, Government, NGOs, and farming more broadly.

A SHARED VISION FOR FARMING

LAND OF PLENTY

This roadmap is intended to support a vision, as set out in WWF's *Land of Plenty* report, for a just and equitable transition towards a low-emission, high-nature model of farming fit for future generations. ⁴ It is a vision of resilient, diverse, mixed landscapes rich in nature, where insect life recovers and fish return to rivers, where rural communities have agency in decisions affecting their landscapes, and where farmers are profitable, happy, and healthy.

At the heart of this vision is the reorientation of the food system as a whole to support agroecological and regenerative forms of production as a first principle, reducing dependence on artificial and costly inputs that not just cause pollution and climate impacts in the UK but drive impacts overseas. This shift in turn requires a fundamental shift in the financing of food from both public and private sources.

Implementing this vision recognises that farmers, and farming in general, are not a single entity, and that the economic circumstances and challenges involved in moving towards such a future will vary by landscape, farm type and geography. Therefore, the scale, type, and timing of financial interventions from both the public and private sector will also need to be tailored to the individual transition journey facing farmers and their farm in helping to achieve this vision.



WHAT IS 'REGEN'?

Whilst its definition is evolving, we approach regenerative agriculture for the purposes of this roadmap as a set of farming principles that foster healthy ecosystems, particularly within soils, rather than relying on chemical processes. This includes practices such as minimising soil disturbance, crop diversification, efficient nutrient management, and livestock integration.

Regenerative agriculture should focus on five key impact areas of soil health, water, biodiversity, air quality, and climate. It is widely acknowledged that to be successful, a regenerative agricultural transition must also acknowledge social impact, such as on livelihoods and wellbeing, placing it as part of a journey towards agroecology more broadly.

DELIVERING A NATURE POSITIVE PATHWAY TO NET ZERO:

Figure 1.Ten key recommendations from WWF's Land of Plenty report for a nature-positive food and farming system



WHERE ARE WE NOW?

In the process of developing this roadmap, WWF hosted a series of workshops and bilateral dialogues involving experts from across the UK food value chain, including banks, retailers, processors, manufacturers, farmers, insurers, asset managers, farm representatives, food services, NGOs, and policymakers. These constructive discussions unearthed many existing initiatives for promoting more sustainable ways of farming to build on.

FINANCIAL INSTITUTIONS (BANKS, INSURERS, INVESTORS)

Financial institutions are increasingly investing in the sustainable food systems transformation. Certain UK banking groups now offer favourable rates and term lengths for farmers who adopt regenerative practices. These preferential terms may include capital repayment holidays, increased overdraft limits, reduced interest repayment rates, and no-fee lending. Banks are also increasingly equipping their farm relationship managers with knowledge on climate risks and providing financial advice to encourage the adoption of climate-friendly practices. Some banks have even collaborated with other sectors in the value chain through pilot programs, offering support for data collection or providing reduced rates towards the costs of new equipment.

Asset management companies are increasingly exploring the potential impact of climate and nature risks as an element of fiduciary duty in reporting to their clients. With the publication of frameworks from the Task Force on Climate-related Financial Disclosures (TCFD) and Taskforce on Nature-related Financial Disclosures (TNFD), financial institutions will have to disclose their climate- and nature-related risks and opportunities, and assess how these can be factored into their business operations and future investments. While asset managers are not yet prescribing specific targets or criteria for listed companies, they are facilitating dialogues with companies regarding environmental, social and governance (ESG) strategies, disclosures, and reporting frameworks to enhance their understanding in these areas.

Insurance companies are investigating ways to assist farmers in future-proofing their businesses. This largely involves pilot schemes for parametric insurance, a type of coverage that pays out a fixed amount against the occurrence of a specific event, such as extreme weather events, without requiring a detailed assessment of the insured's actual losses. Such pilots include the provision of parametric insurance for yield loss caused by flood risk and heat stress. Insurers are also increasingly conducting modelling exercises to assess potential future climate- and nature-related risks to inform the development of new insurance products.

THE SUPPLY CHAIN (RETAILERS, MANUFACTURERS, PROCESSORS, FOOD SERVICES)

Actors across the food supply chain are increasingly assuming accountability for the environmental impacts of operations within their supply chains. As signatories to WWF's Retailers' Commitment for Nature 5, seven major UK food retailers representing over 70% of the UK grocery market, have committed to working with WWF towards its goal of halving the environmental impact of UK shopping baskets by 2030. This is measured through the WWF Basket 5, which focusses on seven areas where the food system has a significant environmental impact: climate, deforestation and land conversion, agriculture, marine, diets, food waste, and packaging.

Pilot schemes to encourage more sustainable farming practices have become commonplace for many businesses across the food supply chain. These pilot programmes explore alternative pricing models related to on-farm regenerative actions and outcomes. This often includes setting baseline standards for production and entry into the programme, covering aspects like environmental impact and animal welfare. They often also establish tiers for continuous improvement that align with increased payment rates for the product supplied.

Manufacturers and processors are amongst those in the food supply chain that are exploring various pricing models for regenerative produce. This includes setting a baseline payment standard, attached to a continuous improvement scheme, where farmers can earn percentage increases from the base payment rate per yield. Manufacturers can also offer a percentage contract indexation to help mitigate cost volatility for farmers.

Supply chain actors have also been effective in providing training for farmers to transition their practices aligned with the company's procurement criteria. Manufacturers and processors provide on-farm advisors, and these advisors increasingly offer insights into more sustainable farming practices. In some cases, these advisors also assist farmers in accessing tools and resources needed for environmental footprint assessments, and create reward programmes for farmer participation in learning groups.

In addition to training, supply chain actors are also increasingly exploring the impact that raising consumer awareness on healthy, sustainable food can have on supporting a regenerative transition. Some retailers and manufacturers with vertical supply chains have been organising farm visits for the public, rewarding farmers for hosting visits. Whilst others have created marketing campaigns to help connect consumers with how their food is produced. Initiatives in the food services sector primarily centre on enhancing traceability, improving animal welfare, and mitigating climate impacts within their supply chain. Numerous companies are actively investigating methods to guarantee that their imports, including commodities like soy for use in pork and poultry production, are deforestation and conversion risk free. The food services sector is also placing significant emphasis on strengthening collaborations with their suppliers, fostering a co-creative approach to establish criteria for regenerative sourcing.

DRIVING IMPACT

Whilst interventions to facilitate a regenerative transition should be championed, it is paramount that any scheme or intervention actively contributes to achieving positive outcomes for nature, the climate, and the long-term livelihoods of farmers and farm workers.

Stakeholders acknowledged the challenges that arise from the absence of a universally agreed definition of regenerative, as it can lead to the dilution of the term and, consequently, a loss of credibility due to "greenwashing".



SHARING THE COST AND RISK - THE VALUE OF COLLABORATIVE ACTION

Cross-sector collaboration is fundamental to getting this transition right, so that farmers don't face the burden of transition on their own. Each sector in the food value chain provides unique insight, influence and access, which should be harmonised to reduce siloes and risk.

To illustrate how collaborative action can lead to more significant impacts, WWF, alongside workshop and interview participants, collectively explored existing and potential support mechanisms for supporting farmers in this transition, ways to share the costs and risks across the value chain, and the government policies needed to underpin this transition. These involve actors from different sectors working together to address one or more of the key themes of **Finance**, **Education** and **Resilience**, using a selection of the practices shown below.

Many of these initiatives were being implemented at the individual business level, but stakeholders also shared examples of blended pilot support mechanisms involving two or more sectors, which have helped distribute costs and risks between more than one business, and optimised initiatives to lead to greater impacts for nature, climate, and the viability of farm businesses.

Preferential lending Premium or longer-term procurement contracts Grants i.e. for habitat creation Certification schemes Building consumer awareness Knowledge sharing of regenerative practices Upskilling corporate staff on nature and climate Research and development Business resilience planning Greenhouse gas and biodiversity footprinting Supporting farmer peer learning

The exact nature of cross-sector initiatives to date has been in part determined by the stakeholders involved and the level of data and interest of particular farm sectors. Some involve working in bilateral or trilateral relationships for particular products, while others involve more cooperative-based approaches. All, however, provide a firm basis for further expansion.

Figure 2.

The power of collaboration - all parts of the food system need to work together, through initiatives and policy, in ways that reduce complexity and add value to farmers seeking to invest in regenerative practices.

- Creates continuous improvement incentive scheme
- Assists farmers with environmental/footprinting
- Provides on-farm advisors across cluster
- Sources from a cluster to account for yield volatility
- Provides a long-term (5-10 year) contract
- Requires participation in learning groups in contract

- Campaigns to build awareness of the benefits of regen
- Disseminates research from academia/think tanks
- Supports the facilitation and convening of farmer discussion groups
- Supports with defining 'regenerative' standards
- Works with water companies and Rivers Trust to measure land/water impact and to pool resources



length of the contractSupports on-theground testing of

solutions

collection for the

- Advises on potential financial opportunities incl. public funding
- Aggregates data for supply chain
- Works with water companies and River Trusts to measure land/water impact



- Provide harmonised data standards
- Enforce robust regulation
- Create high-integrity markets for carbon and nature
- Target public funding and investment
- Provide long-term strategic policy

- Offers preferential lending terms to farmers in cluster
- Lending term linked to length of procurement contract
- Matches contribution to the interest payable
- Require baseline data as a condition of loan
- Support with financial planning

- Provides support for research and development
- Provides a long-term (5-10 year) contract
- Contribute to the cost of data collection
- Increased marketing for regen products
- Offers a contribution towards the interest payable on bank loans
- Align procurement with suppliers with high minimum standards

CASE STUDY 1

McCain Foods and NatWest are collaborating to reduce financial barriers for potato farmers who are transitioning to sustainable agricultural practices.

NatWest offers McCain farmers preferential asset finance support terms. McCain will make an additional contribution towards the interest payable for assets that support sustainable farming.

This supports McCain farmers as they work to implement regenerative agriculture practices across 100% of their potato acreage by 2030.



CASE STUDY 2

Arla, the UK's largest dairy cooperative, has combined all its onfarm sustainability measures in a newly developed Customer Sustainability Program (CSP). The CSP is aimed at creating value for Arla's retail and foodservice customers, who are all looking for ways to lower their Scope 3 emissions. By giving customers the opportunity to collaborate with farmers to reduce their Scope 3 emissions faster along with more accurate reporting, Arla has signed new agreements that create deeper farmer and customer collaboration through projects to deliver progress towards shared climate targets.



CASE STUDY 3

Lloyds Bank has partnered with the Soil Association Exchange, a new service aimed at supporting UK farmers in their transition to more sustainable practices. It focuses on six key areas: biodiversity, soil health, carbon, animal welfare, water quality and wider social impacts. Farmers can identify actions to improve their sustainability credentials and profitability through the service, which also signposts how they might access funding to reward any transition. There is a bespoke monitoring and advice service available on farm and a free, self-serve digital version where farmers can add their own data via the app. The partnership underscores the need for shared responsibility among the supply chain, finance, and wider industry to support farmers in this crucial transition, both in terms of knowledge and finance.



THE ROADMAP

The following sections set out ambitious but deliverable actions for different actors collaborating in the regenerative transition. The primary focus is on the actions that the UK Government can deliver in order to unlock wider system change, broken down by themes of data, regulation, markets, policy and funding. In describing the actions in each of these themes, the roadmap then sets out what wider changes these actions can unlock throughout the food and finance value chain. It also sets out actions that, alongside government action, financial institutions and the supply chain can and should be taking now to lead the way in the meantime.

ACTIONS FOR POLICYMAKERS AND GOVERNMENT

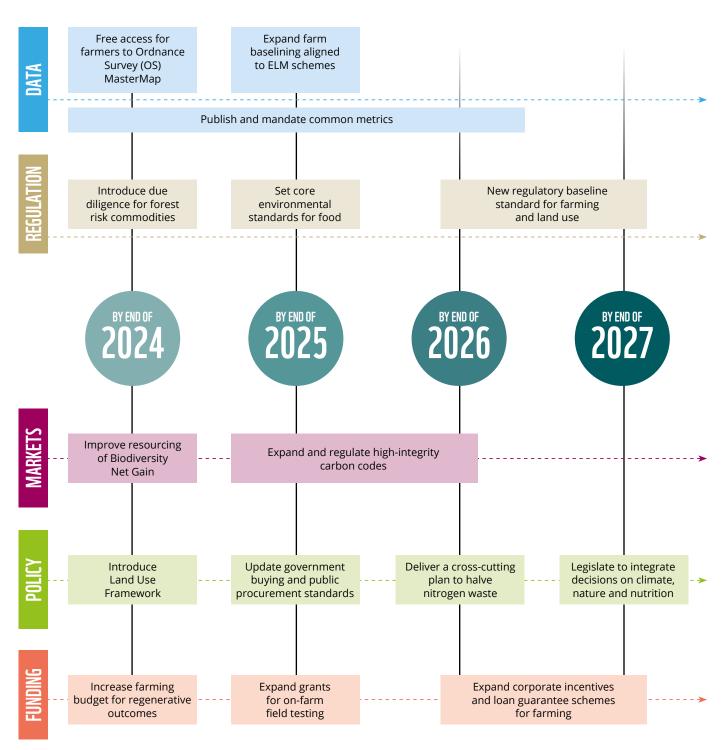
While there are many important initiatives underway, the resounding message from businesses operating across the food value chain is the same: the transition to a sustainable food system at the pace and scale required will not be achievable without active government intervention. All stakeholders agree that targeted government policies and public funding will allow them to leverage their efforts to much greater reach and impact.

The following recommendations outline how actions by government unlock the capacity for action in other sectors across the food value chain. Seeing the potential of these actions taken together offers an optimistic view of how a just and regenerative agricultural transition in England can be achieved through collaborative action.

It is worth noting that as this roadmap is a response to a UK Government policy commitment for England, it does not explore the necessary policy and regulatory instruments for Scotland, Wales or Northern Ireland, though many themes and issues are common across all UK nations, and many, if not most, food businesses and financial institutions operate across the UK.



Figure 3. A roadmap for Government to drive forward the regenerative agricultural transition and leverage private investment.



HARMONISED DATA STANDARDS

A lack of standardised metrics is a widely recognised barrier for unlocking private finance for the transition. For government, an effective baseline is the foundation for value for money and assurance of outcomes, ultimately reducing the costs of environmental improvements through public farm payment schemes.

While there is a plethora of tools to facilitate on-farm data collection, the absence of a consistent and harmonised reporting framework makes the aggregation of data for use across the value chain 6 near impossible. Meanwhile, farmers are facing the impending burden of having to produce multiple, costly audits for food value chain businesses who will soon need to disclose their Scope 3 emissions and nature dependencies. It is imperative that any approach to addressing on-farm data requirements be co-developed with farmers, ensuring farmers also benefit and that co-design will result in a system that does not penalise them.

ORDNANCE SURVEY MASTERMAP (BY 2024)

Provide free and complete access for farmers and landowners to high quality spatial data, such as Ordnance Survey (OS) MasterMap, making field and environmental data more easily accessible across the value chain. This should provide a single access point for field parcel data, and facilitate the sourcing of accurate data for the integration of natural capital into businesses and decision-making processes. This must include adequate provision of training, to ensure that farmers are equipped with the digital skills to utilise the platform. The Rural Payments Agency and Natural England should ensure the processing and assessment of eligibility for agri-environment schemes uses this same source of data.

FOOD DATA TRANSPARENCY PARTNERSHIP (BY 2024)

Publish a set of proposed metrics through the Food Data Transparency Partnership (FDTP) to incentivise and effectively measure progress towards healthier, sustainable diets (by 2024). These proposed metrics must span across environment (including GHGs, biodiversity, food loss and waste, and water impact), health (including sales of healthy and unhealthy food), and animal welfare (including lifecycle, health, and quality of life). Both the framework and reporting of these metrics must be made mandatory for all food businesses (by 2027), and the remit of the FDTP should seek to provide harmonised measurement standards across these metrics.

FARM BASELINING (BY 2025)

Support the baselining of farms, by requiring it as a prerequisite for entrance into the Government's Environmental Land Management schemes (ELMS), with payments to undertake testing and sampling, such as those received under the Moorland and Rough Grazing Standard. Farm baseline data must be aggregated by a trusted independent body and must be adaptive to ensure that any future advancement or requirement for data doesn't lead to penalisation of farmers or devaluation of land.

WITH GOVERNMENT ACTION ON HARMONISED DATA

Farmers could gain a greater understanding of the natural capital assets of their farms and build bespoke farm and land management plans to attract private financial investment. Harmonised data would also relieve farmers from the burden of providing multiple data sets to the supply chain, enabling more effective collaboration with businesses and organisations to monitor on-farm improvements and activity.

Financial institutions could better assess the climate and nature risks and opportunities of their investments and lending, and therefore make better informed investment decisions based on these impacts. Insurers and banks efficiently allocate capital to farmers that are further along their regenerative transition, as well as create specialist insurance and lending products that can best support farmers at the beginning of their journey.

The supply chain could better work with farmers in their supply chain to provide favourable procurement terms, as they would have access to data that provides insight into food production, greenhouse gas emissions reductions, and land impact. This transparency would also facilitate the scaling of regenerative pilot schemes, as they would be able to demonstrate the impact and feasibility of the trials.

The value chain collectively could also collaboratively share data service expenses to optimise data collection efficiency and cost-effectiveness. This could occur at a catchment or cluster scale, reducing the need for redundant data collection, individual reporting frameworks, and simplifying data aggregation. For example, banks could subsidise the costs of collection whilst retailers pay services for aggregated data access.

ROBUST REGULATION

A robust and effective regulatory baseline is key for instilling confidence within the farming sector, supply chain businesses, and financial institutions. At present, there is no level playing field, with risks of providing the worst producers with an unfair competitive advantage, both domestically and internationally. This, along with lack of enforcement, stands as a major inhibitor to transition efforts.

Additionally, the costs of pollution are not pragmatically shared across the value chain, and the cost of diffuse pollution is often carried by farmers or taxpayers. The establishment and proper enforcement of regulatory instruments building on and improving existing performance would not only address these issues, but also create a conducive environment for businesses to transition their practices and facilitate supply chain transparency. Enforcement, advice and incentives all need to enable and motivate good practice, and failing that hold those who wilfully or repeatedly pollute to account for undermining positive progress.

DUE DILIGENCE ON FOREST-RISK COMMODITIES (2024)

Urgently table secondary legislation on due diligence for forest-risk commodities as part of implementing the Environment Act 2021. The Government recently recommitted to doing this at the COP28 Climate Conference in December 2023. These regulations must align with the European Deforestation Regulation to eliminate deforestation and conversion in supply chains and ensure the UK does not become a backdoor market for destructive animal feed and food products. This must also require commodity traders to supply verified deforestation and conversion risk free commodities into UK markets and lay a path to extend due diligence to cover legal deforestation.

CORE ENVIRONMENTAL STANDARDS FOR TRADE (BY 2025)

Implement core environmental standards for trade, so that agri-food imports are not undermining the environmental standards of UK farming. The need to strengthen trade rules around food was highlighted in the "COP28 Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action", signed up to by 134 countries at COP28 7. These standards must be set in domestic legislation to apply to all trade and comparable to the production standards of UK farmers. In the first instance, a commission could be set up to analyse how such standards could be designed, and run consultations with relevant stakeholders (2024), preparing a pathway for the implementation of such standards (by 2025).

A REGULATORY BASELINE STANDARD FOR FARMING AND LAND USE (BY 2027)

Reform farming regulation by 2027, as committed to in the Agricultural Transition Plan 2021-2024. This reform must introduce a regulatory baseline standard for farming and land use that provides protections for soil multifunctionality, coherent regulations on nutrient and agrochemical pollution and efficiency, a comprehensive approach to ammonia and greenhouse gas emissions, and biodiversity. The creation of balanced incentives, support, advice, clear guidance, enforcement and firm timelines should be central to any new regulatory approach.

WITH GOVERNMENT ACTION ON REGULATION

Farmers could shift practices with confidence, knowing that there is a level playing field, with a clear direction of travel, and they won't get undercut by harmful production standards. They would also have increased access to expertise from regulatory bodies, supporting their transition away from harmful practices.

Financial institutions could ensure that any future investments in climate and nature friendly farming are not being compromised by poor practices.

The supply chain could provide fairer payment terms and procurement contracts, which represent the true cost of production, knowing that they aren't going to get priced out by lower production standards domestically or internationally. Regulation will help improve supply chain transparency and agree credible pathways to protect vital habitats. This would also provide the supply chain a level of quality assurance that is desirable for consumers.

HIGH-INTEGRITY MARKETS FOR CARBON AND NATURE

The increasing demand for the maturation of climate and nature markets is undeniable. While some farmers and landowners are already trading carbon, many are apprehensive in engaging with these markets due to uncertainty around future developments. Selling a credit prematurely may impact the value of a farm or potentially restrict market access for their produce, as a farmer may have sold off a valuable future asset. The lack of regulation in this environment is fertile ground for the creation of poor-quality credits that have little or adverse effects on climate and nature.

Any future trading environment for carbon and nature credits must be highly regulated, outcome-based, transparent, data-backed, and with guardrails put in place across both social and environmental considerations to ensure effectivity. Government must work with the private sector to develop the institutional and regulatory frameworks and create conditions that enable private financial investment to flow equitably to farmers and landowners. Equivalent frameworks should also be applied to ensure robust support for regenerative agriculture in the reduction of companies' supply chain emissions.

BIODIVERSITY NET GAIN (BY 2024)

Improve Biodiversity Net Gain (BNG) requirements, by increasing the net gain requirement to at least 20%, and up to 100% on larger greenfield sites. The implementation of BNG must be properly resourced, providing further funding to Local Planning Authorities to enable them to successfully monitor and enforce delivery.

HIGH-INTEGRITY CARBON CODES (BY 2025)

In addition to the British Standards Institution's development of an overarching standard for high-integrity environmental markets, the Government must deliver on equivalent codes (as they have done with woodland and peatland) for salt marshes, farm soil, and grasslands. This must include robust guidance on blending and stacking.

WITH GOVERNMENT ACTION ON HIGH-INTEGRITY MARKETS

Farmers could make informed land use decisions in response to development of standards and codes, or effectively engage with landowners to develop long-term plans with greater clarity and security, ensuring that the rights are balanced between landowners and tenants. These markets can offer an additional source of income for farmers and growers, whilst delivering environmental outcomes alongside food production.

Financial institutions and the supply chain could better invest in nature recovery, with the confidence that their investments contribute towards regulated and voluntary environmental obligations. Engagement in these markets must align with the principles of the mitigation hierarchy.

LONG-TERM STRATEGIC FOOD AND LAND USE POLICY

There is clear evidence that climate, nature, and food systems challenges are interlinked and need to be addressed together to avoid trade-offs, maximise co-benefits and accelerate progress. However, current policy frameworks address these areas independently, with disjointed laws, targets and frameworks. Our land is facing increasing pressures, and there is much uncertainty on how to make best use of it.

Businesses across the value chain are approaching the transition with caution, due to the lack of clear government direction or vision on the trajectory of UK food systems or land and sea use in general. The implementation of the policies presented below will provide businesses with much-needed assurance and clarity that regenerative agriculture is a secure investment.

IMPLEMENTATION OF A LAND USE FRAMEWORK (BY 2024)

Implement a cross-departmental, Land Use Framework that provides a clear long-term vision for how best to use our limited land resources to meet the 'Triple Challenge' of mitigating and adapting to climate change, reversing biodiversity loss, and meeting the nutritional needs of the population, and placing a just and regenerative transition for farmers at its heart. This must account for the need to avoid offshoring impacts overseas and allow for meaningful co-design and decision-making at the local level.

HEALTHY, SUSTAINABLE PUBLIC SECTOR PROCUREMENT (BY 2025)

Mandate that all public sector meals supports a wider diet shift that enable a nature-positive net-zero transition in the UK. Meals should as far as possible be made with regenerative produce and update mandatory and best practice requirements and procurement standards to serve more legumes, pulses, fruit and vegetables in support of an uptake of healthy diets within planetary boundaries in line with the WWF 2030 Livewell Plate ⁸ and recommendations from the Climate Change Committee ⁹. Mandatory buying standards should apply across all public sector bodies including local councils, schools, NHS services, care homes, prisons, and Government departments.

A CROSS-CUTTING PLAN TO HALVE NITROGEN WASTE BY 2030 (BY 2026)

Introduce a cross-cutting nitrogen strategy, based on a full-cycle approach to inputs and emissions affecting water, air quality, climate, ecosystems, and soils. The Government must commission nitrogen budgets that set a vision and pathway, underpinned by nitrogen balance sheets. This framework needs a cross-government mechanism to avoid 'pollution swapping' and ensure the efficient and integrated delivery of Environment Improvement Plan targets and the global Convention on Biological Diversity target to at least halve nutrient losses to the environment by 2030.

A LEGALLY BINDING FRAMEWORK FOR INTEGRATING NATURE, CLIMATE, AND NUTRITION SECURITY (COMMITMENT BY 2026, WITH THE BILL PASSING BY 2027)

Introduce legislation for a long-term framework and process to hold current and future governments to account to manage land and sea in an integrated way for climate, nature, and nutrition security. Such a process, assessed and backed by an independent Commission, would ensuring farmers and communities have clarity and agency on the future of their landscapes, businesses, and health. It would also explicitly seek to manage our domestic resources in a way that does not offshore our impacts, which would require wider food system change.

WITH GOVERNMENT PROVIDING LONG-TERM POLICY IMPLEMENTATION

Farmers could confidently invest in the future of their businesses with certainty over their role in wider land use decisions, without the fear of disruptive changes or rollbacks, as seen during and since the industrial food revolution. This would also empower farmers in revitalising our food system, providing the nation access to nutritious food while preserving and restoring nature.

Financial institutions could strategically direct investments to supportive industries and emerging technologies that facilitate a regenerative transition, with the confidence that it is a secure future investment. This would involve reducing the potential for future investments in harmful sectors like fossil-fuel-based agrochemical production, therefore mitigating significant future fiduciary risks related to nature and climate.

The supply chain could offer longer term procurement contracts, secure in the knowledge that future demand for regenerative and healthy produce is guaranteed. In addition, the supply chain can play a pivotal role in consumer education, championing the promotion of regenerative produce, and actively contribute to large-scale landscape and waterway recovery projects, aligning with a Land Use Framework. This heightened clarity would enhance collaboration with other supply chain stakeholders, addressing common challenges evident, across the River Wye and beyond.

⁸ The LiveWell Plate - WWF-UK

⁹ The Sixth Carbon Budget Agriculture and land use, land use change and forestry - Climate Change Committee







FURTHER PUBLIC FUNDING AND INVESTMENT

The introduction of the ELM schemes in England, with established targets and funding for farmers to adopt 'nature-friendly farming' practices on farm and across wider landscapes, is a clear change for the better. However, Government must do more to target public money on the most impactful net zero and nature outcomes, integrating regenerative principles and driving necessary scale and investment from the private sector.

Creating the right incentives is critical for catalysing action throughout the value chain. Farmers need assurance that they will be fairly rewarded for their efforts to reverse the decline of biodiversity, restore the environment, whilst producing nutritious food. Simultaneously, businesses that contribute to a regenerative transition of our food systems should be celebrated and recognised.

INCREASE AGRI-ENVIRONMENT PAYMENT RATES FOR REGENERATIVE PRACTICES (BY 2024)

Enhance options and payment rates to create more integrated change across English farms in support of regenerative outcomes. This should include payments for all farm types for low input farming, for leguminous break crops, development of holistic grazing plans, advanced nutrient efficiency, and funding for carbon baselining. A clear articulation of how options can be bundled and stacked to lead to greater outcomes, and blended with private finance should be prioritised.

GRANTS FOR ON-FARM FIELD TESTING (BY 2025)

Provide farm and field scale grants for on-farm field testing, in which the costs and income lost from taking land out of traditional production to undertake novel and regenerative practices are cushioned with public funding. Sharing of data and results should be a stipulation of the grant, to provide an evidence base to scale successful field trials.

CORPORATE INCENTIVES (BY 2027)

Actively support and recognize corporates adopting ambitious sustainable food system practices and commitments. Such behaviour could be incentivised through financial rewards, such as tax breaks and tax-free investment in sustainable farming, or disincentives for more polluting, fossil-fuel using forms of production. Other financing mechanisms could also be used, via the UK Infrastructure Bank and British Business Bank. Government could also support businesses through the transition period, when yields and profitability may fall, and in turn ability to service debt, by acting as a guarantor, adopting similar initiatives to the Small Firms Loan Guarantee Scheme or Bounce Back Loan Scheme.



WITH GREATER PUBLIC FUNDING

Farmers could better develop whole farm management plans and collaborate either individually or through clusters, with corporates to co-create and identify private financial investment opportunities. Farmers would be empowered to be experimental, knowing they won't bear the full cost burden of testing novel or innovative practices, and that their actions are fairly rewarded.

Financial institutions could expand their product offerings to support farmers during their transition. For example, Insurers could expand insurance protection for regenerative farmers and warranties against short-term yield variability. This approach also may not be suitable for all products but would be effective in reducing volatility for some products such as dairy. In such cases, financial institutions and the Government could collaborate to establish a framework, such as a Small Firms Loan Guarantee Scheme to reduce some of the risk associated with debt service coverage.

The supply chain could develop initiatives that are harmonised with agri-environment schemes, scaling pilot programs and targeting support for operational costs not covered by the Government's ELM schemes. This equips the value chain to adapt support initiatives in ways that complement existing programs and mitigate risks associated with additionality.

FOOD VALUE CHAIN ACTIONS ACTIONS FOR FARMERS

There are no direct actions for farmers in this roadmap, as the collective consensus from workshops and interviews is that the burden of action needs to sit with government and the supply chain first, and secondly that each farm will have its own circumstances and needs. We also recognise that farmers themselves are best placed to tell us what they need to invest in change. WWF already works with farmers across the country who are making great progress, and sharing their wisdom and experience with other farmers as part of networks and clusters. This collaboration also enables greater access to future financial advice and options, and should be supported much more by both the public and private sector.

To realise the benefits of a transition to regenerative agriculture and agroecology at scale, there will need to be a significant and sustained increase in adoption, and for this to happen many farmers will need a variety of support and incentives. With support from the public and private sector as set out in this roadmap, regenerative farming can be a profitable and rewarding form of producing healthy and nutritious food. There are excellent farmer-led resources, for example through the Nature Friendly Farming Network and Groundswell, that offer guidance and support to farmers in undertaking this journey, from farm business planning to engaging with the value chain.

ACTIONS THAT FINANCIAL INSTITUTIONS CAN START TAKING (BANKS, INSURERS, INVESTORS)

- 1. Collaborate with regenerative agricultural experts to support upskilling of relationship managers. With this knowledge, relationship managers could help farmers identify key interventions to achieve regenerative outcomes. Develop sector-specific climate training programmes for regenerative agriculture to support relationship managers to build their knowledge, skills and confidence to speak to farmers about key interventions farmers can implement to achieve positive outcomes for nature, the climate, and the long-term livelihoods of farmers and farm workers. These sector specific programs should draw from the expertise of academia, regenerative farmers, NGOs, and agronomists to agree criteria for regenerative farming that will ensure their interventions actively contribute to achieving regenerative outcomes.
- 2. **Increase lending to support agricultural customers' transitions.** As noted, certain banks are providing preferential lending for farms able to demonstrate positive environmental performance or plans related to a range of indicators. However, this must be scaled across all banks. Lending terms could include capital repayment holidays, increased overdraft limits, reduced interest repayment rates, and no-fee lending.
- 3. **Critically evaluate of regenerative claims within the sector.** Companies should undertake due diligence to ensure that initiatives branded as "regenerative" are both action and outcomes oriented, as well as measure up against criteria such as Regen 10 ¹⁰ or SAI Platform ¹¹. Investors can also challenge the transparency of disclosures and actively work to improve them. This involves assessing whether claims align with global frameworks such as Task Force on Climate-/Nature-Related Financial Disclosures, International Sustainability Standards Board, or Science Based Targets Initiative/Network.
- 4. **Join forces with other value chain actors.** This could involve aligning lending terms with the duration of supplier procurement contracts or sharing the cost of supply chain contributions toward the interest payable on loans for regenerative activities. Banks and insurers could also collaborate to offer a package of financial planning advice, including guidance on risk reduction and insurance accessibility.
- 5. Showcase best practices and positive impacts from their peers or adjacent sectors. Financial institutions should ensure that risks and opportunities are adequately considered, and credible action plans are developed. Asset managers can act as intermediaries, facilitating the sharing of industry best practices among companies through their networks.
- 6. **Raise the transparency and tracing of agri-food products.** Asset Managers should actively engage with their agri-food clients and the corresponding supply chain to comprehensively understand their environmental impacts. They should also promote the tracing of raw materials and encourage the adoption of sustainable practices.
- 7. Back emerging data and technology startups that facilitate this transition. Banks could achieve this through preferential lending terms to support emerging technologies seeking investment, like those converting agricultural byproducts into nutrient-rich, low-emission fertilisers are actively seeking investment. Insurers are also uniquely placed to offer risk management and data capabilities, which could be of great use when measuring the effectiveness of these technologies.

ACTIONS THAT THE FOOD SUPPLY CHAIN CAN START TAKING (RETAILERS, MANUFACTURERS, PROCESSORS, FOOD SERVICE PROVIDERS)

- Ensure fair procurement practices. Buyers can provide farmers with greater stability through honouring
 purchasing commitments, frequent and regular payments, provide fair specifications that reduce on-farm food waste,
 and commit to a fair price that reflects the true cost of food ¹².
- 2. Extend the term of procurement contracts. Longer-term procurement contracts spanning 5-10 years are essential to enable farmers to invest in their businesses with confidence and maintain a stable income throughout the transition. These extended contracts can also increase supply chain transparency by fostering closer relationships between buyers and farmers. Contract lengths should align across the value chain, including with green finance packages, such as loans, offered by financial institutions.
- 3. Coordinate the provision of farm advice. Suppliers could collaborate with farming experts, regional networks, NGOs, and agronomists, to create advisory packs for farmers who share fields or are in the same farming sector, for example combining advisory packs for arable and dairy farmers looking to diversify.
- 4. Support farmer peer learning. Farm cluster models are essential for empowering farmers through knowledge exchange. As well as the supply chain, financial institutions and NGOs can support these efforts by providing funding and facilitating these clusters, including organising discussion groups and teach-ins. This could also promote farm-to-farm connectivity and exchange of products and by-products where they cannot be used on-farm. Coordinating efforts across farms and catchment areas is critical for effective landscape regeneration and protection.
- 5. Support the reduction of food surplus and waste on farms. Retailers and suppliers must explore causes of food surplus and waste within their own supply chain to inform internal policy and practice changes, including supporting farmers in identification of accessible secondary markets for surplus food ¹³.
- 6. **Demonstrate leadership in combatting water pollution.** Identify water risks in supply chains and the priority catchments for action by mapping producers, applying water risk tools, and reporting against targets. Provide and strengthen consistent guidance and standards for supply chains that incorporate the best practices needed to deliver positive environmental outcomes ¹⁴.
- 7. Expand and reorient third-party certification schemes. These play a crucial role in verifying high production standards and that farmers are fairly rewarded for their produce. These schemes could establish a baseline standard for entry and set up tiers for continuous improvement that correspond to higher payment rates.
- 8. Collaborate with others in the value chain to deliver on the actions set out in the WWF Basket.

 Retailers should actively engage with the actors referenced in this report to accelerate the delivery of the actions set out in the WWF Basket. The blending of these approaches will be beneficial to actors across the value chain.
- Build consumer awareness and engagement in regenerative produce. Consumer-facing firms can
 enhance their efforts through marketing campaigns or educational initiatives, emphasising the health benefits of
 sustainable diets.

¹² As set out for example in Riverford's Fair to Farmers Charter

¹³ Hidden Waste Roadmap - WWF-UK, 2023

¹⁴ A roadmap towards water security for food & drink supply - 2023





