Strengthening Farm Resilience in Wales

The issue

Farmers are facing unprecedented challenges. Rising global instability has exposed the vulnerability of our food system, especially for farms reliant on imported fertilisers and animal feed. Increasingly severe weather compounds this, through damaged crops and heat-stressed livestock.

A truly resilient farm has healthy soils that hold water during dry periods and drain better in heavy rain, grows a wider diversity of crops to reduce the risk of total crop failure, and doesn't rely on expensive fossil-fuel derived inputs vulnerable to price shocks and supply disruption.

An 'agroecological' approach, built on soil health to restore circular systems of nutrient and energy flows, is increasingly understood to help farmers cope with climate change and geopolitical instability. Farm systems that work with, rather than against, nature will also restore the biodiversity, soil health, and clean water on which farming itself ultimately depends.

Why it matters to Wales

Farming is highly vulnerable to climate change, particularly in upland areas where thin soils amplify extreme weather. Welsh summers are projected to become significantly drier - rainfall could decrease by up to 15% by 2050 and 26% by 2080 - threatening grazing and crop production. Wetter winters increase flood risk and soil degradation, with structural damage estimated to reduce soil water storage capacity by 10–20%[1]. Warmer, wetter conditions also favour new pests and pathogens, raising further risks to food security[2].

These pressures interact with existing vulnerabilities. Grassland covers nearly two thirds of Wales, much of it converted from species-rich swards to agriculturally improved, low-diversity grassland, often stocked beyond its capacity to fully regenerate. This leaves soils exposed, compacted, and prone to erosion, storing less water and fewer nutrients, and creating greater dependency on inputs that further degrade soil health and long term productivity.

Alignment with Welsh policy context

An agroecological farming approach directly supports delivery against several of the Wellbeing of Future Generations Act's National Indicators, contributing to A Resilient Wales, including soil health (13), greenhouse gas emissions (41), healthy ecosystems (42), biological diversity (44), water quality (45) and farm business innovation (11).

Several Sustainable Land Management (SLM) targets under the Agriculture (Wales) Act 2023 relate to climate change mitigation and adaptation - including farmland subject to prolonged flood or drought and sustainable soil management – with related indicators for agricultural business resilience[3].

The Environment (Principles, Governance and Biodiversity Targets) (Wales) Act 2026[4] requires Welsh Ministers to keep environmental principles and protections central to all policy-making.

Evidence/references

1 Summary for Wales (CCRA3-IA) - UK Climate Risk
2 Summary for Wales (CCRA3-IA) - UK Climate Risk
3 Sustainable Land Management Indicators and Targets Statement
4 Environment (Principles, Governance and Biodiversity Targets) (Wales) Act 2026

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Our perspective

Resilience at the national level depends on maintaining the broadest possible base of farms farming sustainably: consolidation and intensification that reduces farm numbers and the diversity of farm types, or displaces nature-positive management undermines Wales's collective capacity to adapt to climate change.

On-farm resilience requires action to rebuild soil structure and biology using agroecological practices (cover cropping, composting, and incorporating natural fertility using legumes) and incorporate more trees to stabilise soils, store carbon, retain water, provide habitat and maintain livestock productivity by providing shade and shelter. The use of synthetic fertlisers should be reduced as these can degrade soil health and destroy organic matter and beneficial soil microbes. Farm advice should take a whole-farm approach to identify where outputs from one part of the farm can become inputs in another.[5]

Resilience also depends on action beyond the farm gate: shortening and diversifying supply chains, building local and regional food infrastructure, securing fairer prices and longer-term contracts for farmers, strengthen public sector procurement of Welsh, agroecologically produced food, and growing the market for organic food and farming.

What we're doing about it

- Our Head of Policy Cymru, Andrew Tuddenham represented Wales Environment Link on the SFS Ministerial Roundtable and Carbon Sequestration Evidence Review Panel (2024-25) and continues to sit on the SFS Stakeholder Group and other SFS working groups.
- Our farming advisors provide advice and training to help farmers in Wales adopt nature-friendly practices.
- Soil Association Exchange works with more than 140 farmers in Wales to measure the environmental and social impact of their farming practices, improving resilience. 78% of users are reporting increased profitability.
- We led a Welsh government-funded partnership to identify positive livestock welfare actions for the SFS[6] - high welfare contributes to farm resilience.

What we want Welsh policy makers to do:

- **Introduce a legally binding soil health target and strategy**
- **Set a reduction target for fossil fuel-based nitrogen and commit to 10% organic land by 2030 via SFS and an Organic Action Plan**
- **Scale up whole-farm advice and planning through the SFS and Farming Connect**
- **Deliver the Timber Industrial Strategy's commitment to research local supply chains**
- **Support agroecological research and innovation as key approaches to improving farm resilience.**

Evidence/references

5 Planning for change: the role of Whole Farm Plans in the agricultural transition
6 "Good Life" for farmed animals challenge - Innovate UK Business Connect

No Drought about it: Farming Ecologically for Climate Resilience (report)

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