



Introducing The Agricultural Resilience Impact and Innovation Hub (AGRIIH):

Cultivating collaborative research to enable agriculture to respond to a changing world

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Why Agricultural Resilience, Why Now?

Agriculture sits at the heart of human civilisation. It nourishes over 8 billion people, supports livelihoods globally, and fundamentally influences biodiversity, rural economies, and planetary health. Our current agricultural systems are under increasing strain from multiple, converging risks—climate change, market volatility, geopolitical uncertainty, biodiversity loss, and more.

Making agriculture more resilient – able to adapt, recover, and thrive in the face of disruption, without harming the systems it relies on—is now a global priority. Resilience goes beyond sustainability. It is dynamic and systems-based, and forward-looking, addressing both immediate shocks and long-term pressures. It recognises that agriculture operates within interconnected supply chains, policy frameworks, ecological contexts, and financial systems.

This is where the University of Oxford can play a transformative role. With world-leading strengths in plant science, ecology, food system, social science, and policy influence, Oxford is uniquely positioned to catalyse collaborative research and drive systemic innovation that strengthens agricultural resilience—at home and abroad.



AGRIIH: A Hub for Agricultural Resilience Impact and Innovation

Oxford is developing a new interdisciplinary initiative: the Agricultural Resilience Impact and Innovation Hub (AGRIIH). AGRIIH will act as a catalyst for agricultural resilience research and innovation at Oxford—bringing together diverse disciplines, external partners, and global stakeholders to drive practical, system-informed solutions.

AGRIIH's mission is to enable strategic, co-created research, real-world partnerships, and systems-based innovation that increase the resilience of agriculture to rising global risks—social, environmental, and economic.

AGRIIH will:

- Bridge disciplinary boundaries across Oxford and beyond
- Engage with industry, policymakers, investors, and civil society to co-develop relevant research
- Address barriers to the uptake and application of resilience-oriented innovations
- Use systems thinking to understand cascading risks and opportunity spaces
- Stimulate collaborations that deliver meaningful and measurable impact

Geographical scope: UK and Global South, with Global Relevance

AGRIIH has a dual geographic focus on the UK and the Global South—two regions that present contrasting but complementary challenges and opportunities for building agricultural resilience.

In the UK, agriculture faces growing regulatory shifts, labour shortages, supply chain complexity, biodiversity-depleted landscapes, and the urgent need to respond to climate pressure. It operates within a higher-income, policy-intensive context, yet remains vulnerable to climate shocks and economic disruptions.

In the Global South, agriculture faces greater structural vulnerability. Farmers and food systems must contend with limited infrastructure, constrained access to finance and technology, more extreme climate volatility, and a heavy reliance on agriculture for livelihoods and national development. At the same time, the Global South is home to the highest densities of biodiversity globally, as well as critical natural carbon sinks. However, these regions are also sites of innovation under constraint, with diverse agroecological knowledge and increasing experimentation with low-input, sustainable practices.

These regions present distinct but interconnected challenges—and valuable opportunities for learning. While the UK and Global South are our strategic focus areas, the systems-based approach and collaborative model that AGRIIH promotes are designed to be adaptable and globally applicable. We welcome partnerships that extend this impact across regions.

Findings of a commissioned analysis of the research landscape.

We commissioned consultancy firm, Red Kite, to conduct a research landscape analysis. Their research involved extensive interviews and landscape analysis across the UK, Europe, and the Global South. They consulted universities, research institutes, farmer organisations, policymakers, funders, and agribusiness leaders. Several key themes emerged:

1. Resilience Is the Right Focus

Red Kite found broad consensus that agricultural resilience is recognised as an urgent, enduring and long-term imperative. Stakeholders across sectors highlighted the growing volatility in agriculture's operating environment. Resilience provides a powerful organising principle for aligning funding, research, investment, and innovation.

"Instability is going to increase, shocks are going to get worse—and we need to get ready for that."
-- anonymous interviewee

AGRIIH will use resilience as our core lens, embedding this theme across disciplines—from plant science and behavioural economics to systems modelling and policy analysis.

2. A Systems Approach Is Essential

Red Kite's research highlighted that agricultural resilience isn't just a scientific or technical challenge - it is a systemic issue and emerges from interactions between natural, technical, economic, and social systems, touching on diverse topics including supply chains, farmer

incentives, policy design, biodiversity, behavioural change and many more. Resilience cannot be addressed in silos—it requires systemic perspectives and integrated responses.

“We need to instil systems thinking, because currently much agricultural research in the UK is very silo-based, not helped by lack of awareness withing Government of the broader complex system.”
-- anonymous interviewee

Oxford brings strong systems thinking capabilities across disciplines. AGRIIH will focus on bridging researchers from different fields and identifying cross-cutting work streams that help address the complexity of agricultural resilience. Rather than working on every part of the system, we aim to create the connections that enable more integrated, impactful research. One area underemphasised in the landscape is the role of ecosystem function as a foundational component of agricultural resilience. AGRIIH will make this explicit, positioning ecological integrity not only as an environmental outcome, but as a central pillar of resilient production systems, and as a source of resilience innovation.

3. The Innovation Gap Is Structural

While the UK produces world-class research, Red Kite’s interviews with businesses and research users identified persistent challenges in translating science and innovation into impact. These include:

- Fragmented research ecosystems
- A lack of engagement with stakeholders throughout the research process
- Misalignment between research agendas and user needs
- Underinvestment in communication, commercialisation, and integration



AGRIIH will help close this gap by working with stakeholders from the outset—identifying problems, co-creating solutions, and enabling pathways for real-world uptake. We will engage key sector stakeholders, including farmers and practitioner groups, industry, NGOs and the public sector. AGRIIH will support participatory processes to ensure research responds to users’ priorities and constraints from the start, building trust in, and engagement with, the research process, and developing productive relationships with research users.

4. Interdisciplinarity Is Necessary to Create Holistic Solutions

Red Kite’s interviews confirmed that agricultural resilience demands knowledge from across disciplines to solve complex challenges in agriculture, but while the value of interdisciplinary collaboration is widely recognised, it remains difficult to achieve in practice—due to differences in language, priorities, and working cultures.

“You don’t need to be an expert in the whole system—but you do need to understand there are links.”
-- anonymous interviewee

AGRIIH is designed to cultivate interdisciplinary work by bringing researchers together early in the process to identify shared challenges and opportunities. We do this through dedicated workshops, informal convening, and structured dialogue that helps researchers connect across disciplines. Our aim is to create the space and momentum for integrated, collaborative initiatives to emerge.



The Red Kite team identified a particular gap in the integration of economics and business research with other agriculture-related research areas, as well as being a priority research area for stakeholders, that could help bridge the gap between innovation and uptake. Oxford's strengths in economics, business, and innovation position AGRIIH to lead work that connects resilience research with these enabling conditions.

AGRIIH's Proposition: What We Add to the Landscape

The Hub is not to replicate existing agricultural research centres, but to connect Systems Expertise, amplify Convening Power, and accelerate Strategic Partnerships. AGRIIH will:

- Apply systems thinking to reveal leverage points and trade-offs across complex systems
- Leverage and integrate Oxford's core research strengths including biology, food systems, ecology, climate science, and economics
- Enable collaborations with industry and civil society grounded in trust, mutual understanding, and shared purpose
- Act as a gateway to Oxford's research for external stakeholders seeking expertise and partnership
- Harness Oxford's global networks and profile, as well as its experience in scaling innovations, including policy frameworks and spinouts, to drive impact.

"Oxford could play a lead role in defining the levers to effect lasting change in UK or global agricultural systems."
-- anonymous interviewee

AGRIIH will build on existing networks including the Oxford Martin School Future of Food programme, to drive impact that resonates across sectors and borders.

Looking Ahead

The path to resilient agriculture is complex, and urgent. Addressing it requires integrated approaches that cross disciplinary and institutional boundaries—and engage the people and systems to shape real-world outcomes. But through partnerships, inclusive dialogue, and integrated research, we can make progress. AGRIIH aims to help lead this transformation—connecting knowledge with action, and people with purpose.

Through AGRIIH, Oxford will contribute to this global challenge by generating practical insight, fostering innovation, and supporting transitions to more adaptive and inclusive agriculture. We welcome interest from collaborators, research users, and funders who share this ambition. To learn more, get involved, or explore partnerships, please visit our website agriih.web.ox.ac.uk, sign up to our [mailing list](#) or contact: agriih@biology.ox.ac.uk.