Farming Futures: Environmental Resilience Competition Q&A & Consortium Building Event

8 June 2023

Caroline Griffin, Simon Baty and Cathryn Lambourne
Knowledge Transfer Managers - AgriFood

UKRI Innovate UK KTN

https://iuk.ktn-uk.org

Housekeeping

- Please stay on mute throughout the talks
- Please put any questions in the chat and use it to network
- During the breakout room session turn your camera and microphone on

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Agenda

10:00 - 10:05	Welcome and Introduction (Caroline Griffin, Innovate UK KTN)
10:05 - 10:10	Farming Innovation Programme (Joss Wallace, DEFRA)
10:10 - 10:20	Farming Futures: Environmental Resilience Scope (Chris Lyons, Innovate UK)
10:20 - 10:45	Q&A
10:45 - 10:55	Coffee Break
10:55 - 11:05	What makes a strong consortium (Caroline Griffin, Innovate UK KTN)
11:05 - 11:25	Thematic Breakout rooms
11:25 - 11:35	What makes a good application (Simon Baty, Innovate UK KTN)
11:35 - 11:55	Random Breakout rooms (2x 10 min)
11:55 - 12:00	Closure

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About Us

Innovate UK KTN exists to connect innovators with new partners and new opportunities beyond their existing thinking – accelerating ambitious ideas into real-world solutions.

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Innovate UK KTN Team

We have deep expertise in AgriFood

Livestock & Aquaculture

Crops

Food

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How we can help

Make powerful connections

Secure funding

Get expert insight

Keep up to date

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Collaboration Document

- Document containing all the participants from today who agreed to be included
- Helps to make collaboration and consortium building easier
- Should be out early next week

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Farming Innovation Programme

Joss Wallace (DEFRA)

Farming Futures: Environmental Resilience

Chris Lyons (Innovate UK)

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Eligibility criteria

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Farming Innovation Programme – Farming Futures R&D Fund: Environmental Resilience

Applicant Q & A

Competition opens: **8th June 2023**

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Agenda

- **1) Farming Innovation Programme** – **Joss Wallace, Defra**
- **2) Scope -** Farming Futures: Environmental Resilience – **Chris Lyons, Innovate UK**
- **3) Q & A**

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Farming Innovation Programme

Environmental Resilience – May 2023

Joss Wallace
Agri-Innovation Team - Defra

Environment Agency

Forestry Commission

NATURAL ENGLAND

Why are we supporting innovation?

Productivity: The UK has seen lower productivity growth than our neighbours over the last 30 years

Environment: Agriculture accounted for 10% of UK greenhouse gas emissions in 2018

Fragmentation: many fantastic researchers, innovative businesses and promising ideas, but players don't necessarily collaborate effectively

Coordination: failures in the current innovation system result in poor translation of public spending into real life impacts on productivity/sustainability

Adoption: Low levels of uptake of innovation by farmers, growers, businesses in large part due to capital risk & ineffective knowledge sharing

Previous Programmes

2013 - Agri-Tech Strategy
£70m Agri-tech Catalyst
£90m for 4 Agri-tech Centres

2018 - Industrial Strategy Challenge Fund (ISCF) £90m Transforming Food Production Challenge.

2021 - £14.5m **Farming Innovation Pathways** fund.

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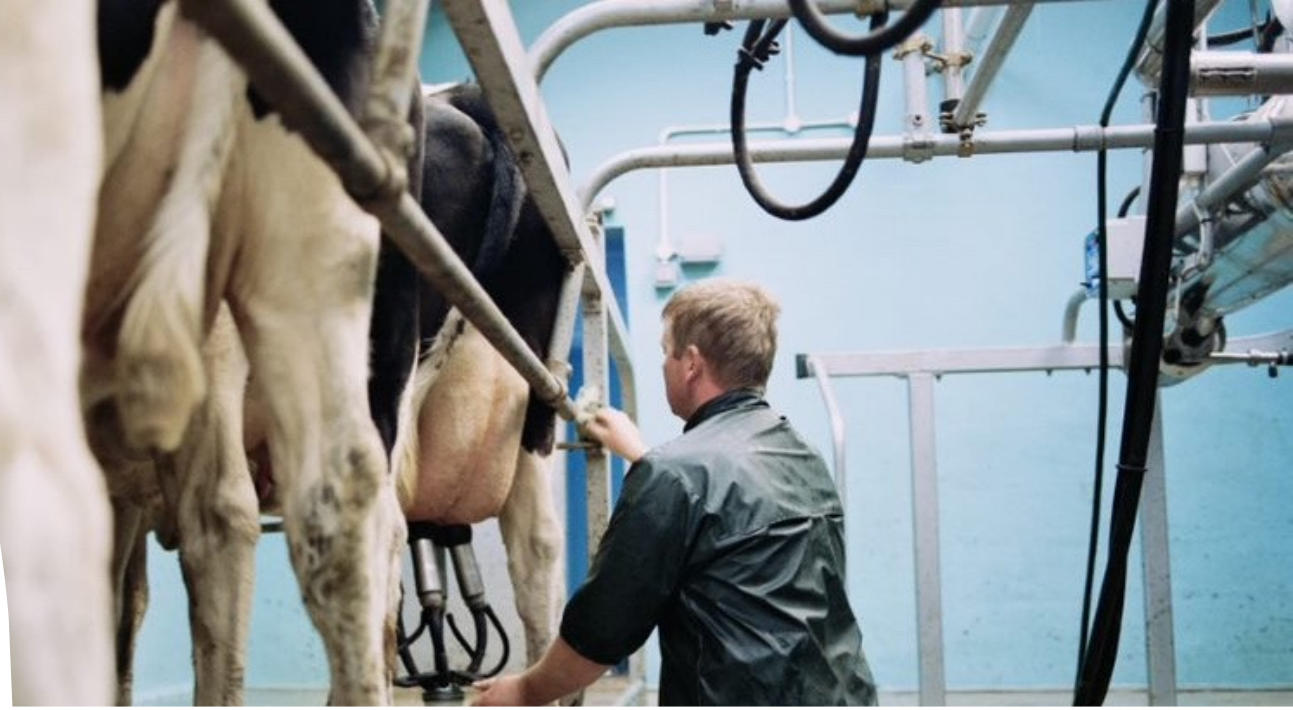
https://farminginnovation.ukri.org/

The Farming Innovation Programme

- Part of Defra's Agricultural Transition Plan
- £270M of grant funding for R&D through to 2028/29
- To enhance productivity, environmental sustainability and resilience in England's farming sectors
- Funding is awarded on a competitive basis to high quality, innovative projects
- Collaborative projects must benefit farmers and growers in England



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The **Farming Innovation Programme** offers a range of opportunities for farmers, growers, businesses and researchers to collaborate on industry-led research and development:

Small **Research Starter Projects** where farmers, growers & foresters can explore a new idea, or **Projects to Accelerate Adoption** (coming soon) where farmers and growers can trial new innovation on their farms.

Small/Large Partnership Projects, where businesses can further develop a new farming product or service towards commercialisation.

Feasibility projects where businesses can check if a research idea works in practice.

Themed projects, where businesses and researchers can work on longer-term innovation focussing on issues like **Climate-Smart Farming**, or **Sustainable farm-based Proteins**.

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Farming Innovation Programme Timeline

October 2021
- £1M - Research Starter Projects (round 1)
- £8M - Feasibility Projects (round 1)
- £11M - Small Partnership Projects (round 1)

March 2022
- £8M - Large Partnership Projects (round 1)
- £12.5M - Climate-smart farming

May 2022
- £1M - Research Starter Projects (round 2)

July 2022
- £12.5M - Sustainable farm-based Proteins

Autumn 2022
- £5.5M Feasibility Projects (round 2)
- £11M Small Partnership Projects (round 2)

January 2023
- £12.5M - Automation and Robotics
- £1M Research Starter Projects (round 3)

February 2023
- £8M – Large Partnerships Projects (round 2)

Why is Defra interested in on farm Environmental Resilience?

- Domestic food production is vital to national resilience, but we are exposed to a range of threats:
  - Significant losses in crop yields occur due pests, diseases and weed competition, which may be exacerbated by climate change.
  - Climate change and water security: Droughts are expected to become more frequent which can have a significant limiting effect on crop yields and quality.
  - The need for food security has been highlighted by the war in Ukraine: A challenging geopolitical outlook may threaten supply chain integrity, access to inputs and markets.
- As the shocks and stresses triggered by these exogenous threats grow, ensuring a continued supply of nutritious food becomes ever more important.

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Why is Defra interested in on farm Environmental Resilience?

- By enhancing efficiency and productivity, we can improve environmental impacts (air, soil, water, biodiversity), reduce greenhouse gas emissions, help the sectors to grow, and become more resilient to future challenges.
- To support recommendations from recent Defra reviews including the Genetic Technology (Precision Breeding) act 2023 and the Government Food Strategy
- Resolve key issues affecting the sector, where sustainable and resilient farming solutions can mitigate climate challenges and increase productivity

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Farming Innovation Programme Projects

ARWAC
(FIP Feasibility)

This project lays the foundation for next-generation robotic vehicles powered by renewable energy and tooled to control blackgrass. It drives productivity by increasing yield through weed eradication.
This project will push the technology from laboratory stage to full testing in multiple farm environments.

CowView
(FIP Small R&D Partnerships)

CattleEye is developing a novel way to gaining insights into dairy cows. The completely hands-free solution will monitor a cow's welfare and performance without the need for wearable devices. The new version CowView will advance the product, to enable lesion detection, increase accuracy and offer data so intervention can be timely.

Muddy Machines - Robotic Courgette Harvester
(FIP Feasibility)

Developing a novel class of agricultural machine that can reliably replace manual labour. Building from their autonomous asparagus harvester, Muddy Machines are focussing on Courgettes, which present more complex challenges for imaging, software, and gripping.

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Farming Futures
Environmental Resilience

Scope

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Farming Futures R&D Fund

Key Aims

- Defra sets the overarching research agenda into areas of strategic importance through **themed competitions**
- Stimulate industry focus on longer-term **societal and economic challenges**, which are further from market than would be typical of current R&D focus
- Accelerate development of **novel, disruptive and transformational** solutions
- Facilitate industry and researchers to **work collaboratively** around a common strategic challenge
- Join up early-stage research, applied R&D and translational activities

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Work on longer-term farming innovation projects → Farming Futures R&D Fund

- **Feasibility**
- **Industrial Research**

Total budget	Total project costs	Duration
£12.5 Million	**FS:** £200k-£500k **IR:** £500K-1M	**FS**: 12 - 24 months **IR**: 24 - 36 months (or up to 60 months for breeding projects)

If you have **primary producers** receiving grant funding, **a min of 50%** of those funds, **must** be **allocated to** primary producers **based in England**

For **collaborative** applications led by **UK businesses**

Competition deadline
19 July 2023
11:00
Projects to start by
1 January 2024

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- farminginnovation.ukri.org

In Scope

Projects developing ambitious new solutions for Environmental Resilience

Your project must:

- demonstrate **environmental benefits and societal impact**
- include clear project **deliverables for measuring the sustainability** of the solutions, and how they are **preventing negative impact** upon the sector
- be able to demonstrate how the solution and output will **benefit farmers, growers or foresters in England**
- ensure your solutions are closely aligned with industry priorities to deliver business-orientated and transformative opportunities
- consider how it will encourage dissemination and knowledge exchange to the wider sector

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Scope

In Scope:

Solutions must address identified major on-farm challenges or opportunities in agricultural and horticultural practices, and significantly improve:

- ✓ productivity
- ✓ sustainability and environmental impact
- ✓ progression towards net zero emissions
- ✓ resilience
- ✓ food security

Out of Scope:

- × are equine specific
- × are focused specifically on financial resilience
- × are specific to non-food or ornamental plants
- × involve wild caught fisheries
- × involve aquaculture for fish production or human consumption
- × involve cellular expression of proteins or cultivated meat
- × involve acellular production systems, fermentation systems for bacteria, yeast or fungi for human consumption
- × are for the production of crops or plants for medicinal or pharmaceutical use
- × do not benefit farmers or growers in England
- × involve post gate processing and packaging

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In Scope

For **Industrial Research**, you must accelerate collaborative R&D to develop innovations for environmental resilience.

For **Feasibility Studies**, you must evaluate emerging solutions of innovations for environmental resilience.

For either strand the innovative technologies in your proposal could include one or more of the following biological (biotic) and physical environmental (abiotic) challenges:

- integrated pest management
- detection, prevention and management of diseases
- agro-ecology
- gene editing and breeding
- regenerative cropping, livestock and mixed systems
- livestock housing, nutrition, health and management
- innovative fertiliser practices
- soil resilience
- water management and innovation
- **This list is not exhaustive.**

Specific Themes

Focus on **one or more** of the following **agricultural** and **horticultural production sectors**:

Farmed animals

- Monogastric
- Ruminant

Forestry

- Agro-forestry

Cross-sector

- Bioeconomy

Plants

- Broadacre: cereals, root crops, grassland
- Horticulture: field based and specialist growers
- Fruit: top fruit, stone fruit and soft fruit
- Vineyard
- Protected cropping: glass and polytunnel systems
- Controlled Environment and Vertical Farming Systems

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Hints and Tips

Preparation is Key

- Do not leave until last minute

Eligibility and Scope

- Check carefully to avoid missing out before assessment

Build up your partnership

- Get the skills and capabilities you need
- Get to know and understand your partners
- Know who you are planning to work with before you commit and make sure all partners are aware of their role and responsibilities

Use available support

KTN Agri-food Team

- Consortium Building Event – 10am 8th June: Competition Q&A and consortium building event
- https://ktn-uk.org/agrifood/
- On-to-one support meetings: Book via the consortium building event above

Innovate UK Customer Support

- Email: support@iuk.ukri.org

Farming Innovation Programme website

- https://farminginnovation.ukri.org/

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Q&A Session

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What makes a good consortium

Caroline Griffin, Innovate UK KTN

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Networking is normal

How do you find a plumber or a restaurant?

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“Networking is more about farming than it is about hunting”

Ivan Misner - BNI

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What makes a strong consortium?

- Read the competition brief, collaboration is required
- Projects with partners that cover a supply chain are generally stronger
- Think about how you will engage English farmers

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You have a great consortium – what could go wrong?

- **Who owns what?** You will need a consortium agreement, so start early https://www.gov.uk/guidance/university-and-business-collaboration-agreements-lambert-toolkit
- **Collaborate in all aspects of the bid.** No passengers, use tools and functionality of IFS – check everyone knows what they get and how much they have to contribute
- Check the number of bids you can be part of
- Too many or too few partners
- Subcontracts

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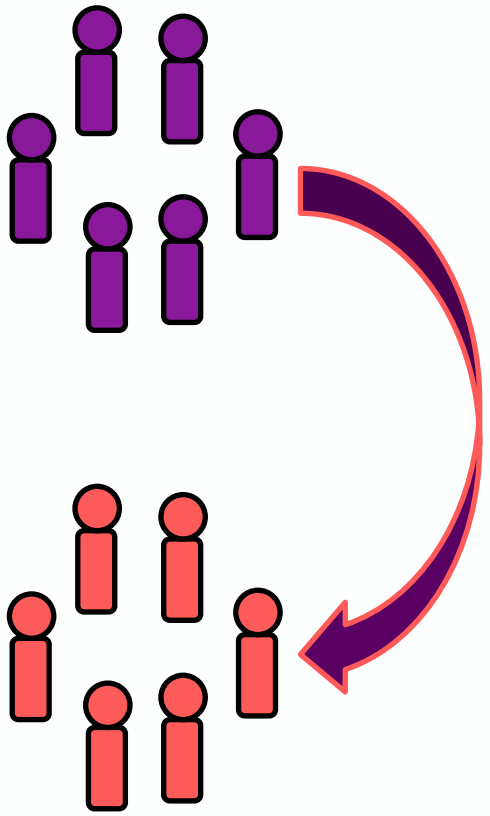
Thematic breakout room session (20 min)

Themes:

- Livestock
- Crops
- Agro-forestry
- Cross-sector/Bioeconomy



Introduce yourself: Name and organization

Give a brief description of what you are looking for

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What makes a good application

Simon Baty (IUK KTN)

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From start to finish be prepared

Key Dates:

- **Competition closes** 19th July 2023 - 11:00am
- **Applicants notified** 13th September 2023
- **Projects to start** 1st January 2024

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Start preparing now

Your written application needs all the usual hallmarks of great bid.

https://iuk.ktn-uk.org/investment/good-application-guide/

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Eight Hallmarks of a Good Application

1. Alignment to the competition scope
2. Innovation
3. Strong business case
4. Convincing value proposition
5. Credible R&D plan
6. Right consortium
7. Clear need for support
8. The right kind of risk

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Tops tips – part one

Agree key points of the collaboration EARLY

Explicitly answer all sub-questions

Use appendices where available

Don’t assume assessors are experts in your area

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Top tips – part 2

Quantify and justify assertions

Check all deadlines and event dates

Start discussing, planning and writing ASAP

Remember risk and innovation – you need both

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Write an exciting and compelling bid

Get in touch if you want our help

Caroline Griffin
Livestock
caroline.griffin@iuk.ktn-uk.org

Pedro Carvalho
Plants and Crops
pedro.carvalho@iuk.ktn-uk.org

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Random breakout room session (2x 10 min)

Introduce yourself: Name and organization

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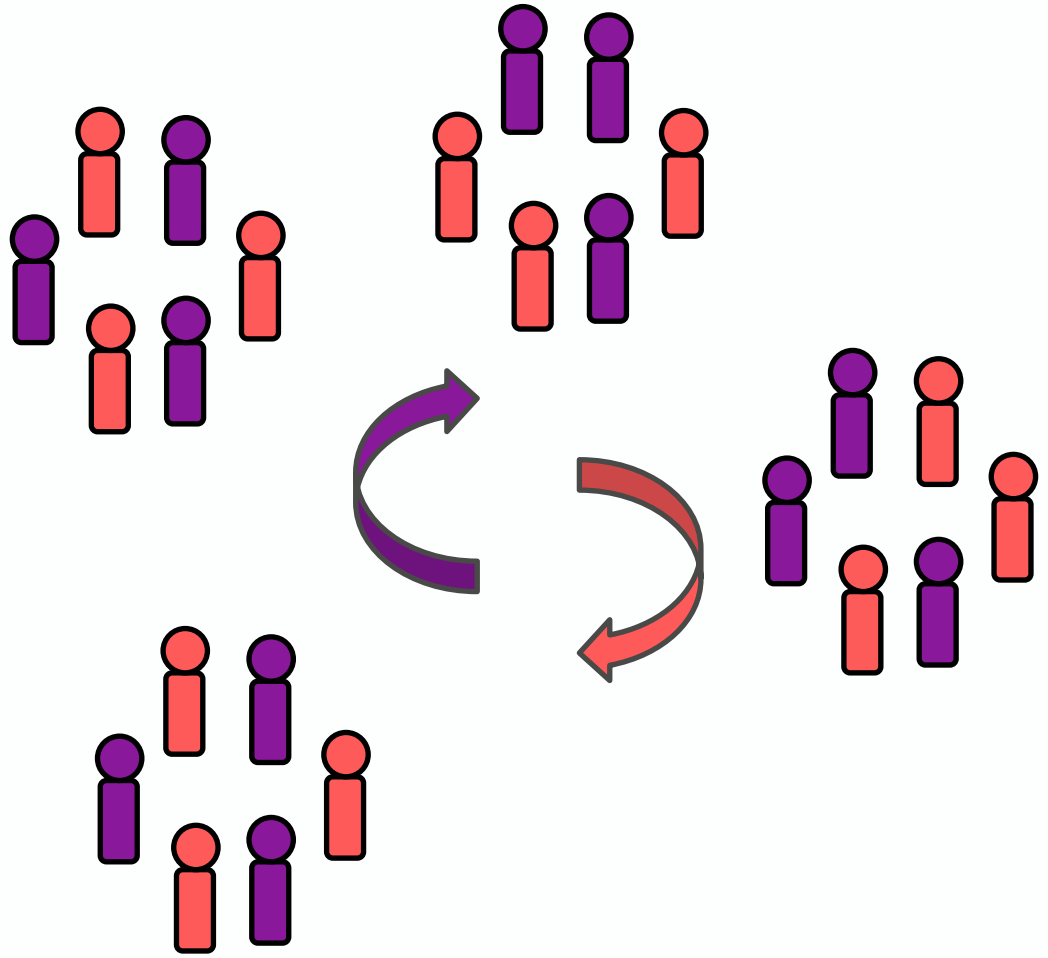

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Available support

Join our Farming Innovation Programme: Finding Information and Partners

Book a 1:1 meeting with a member of Innovate UK KTN's AgriFood
9 and 12 June 2023

Caroline Griffin
Livestock
caroline.griffin@iuk.ktn-uk.org

Pedro Carvalho
Plants and Crops
pedro.carvalho@iuk.ktn-uk.org

Find out more
https://iuk.ktn-uk.org
https://iuk.ktn-uk.org/agrifood/
Why not get the KTN AgriFood Newletter each month?

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