

Engaging farmers & growers in innovation projects

A guide

Centre for Effective Innovation in Agriculture

Partners

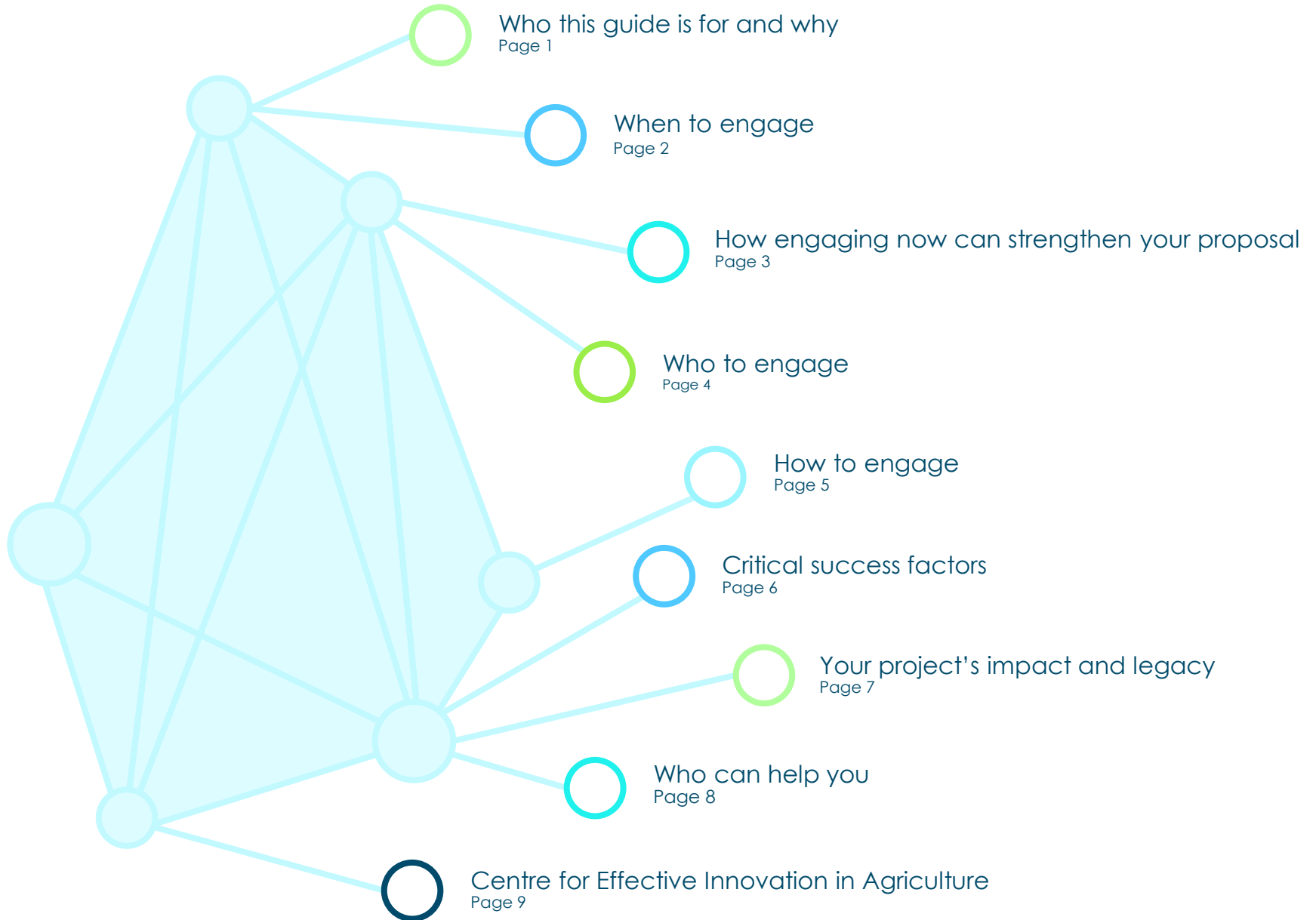


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Contents



Who this guide is for and why

Looking to engage farmers or growers in an innovation project but not sure where to start? Then this guide is for you!

Maybe you work in a tech start-up or research institution, or your business is looking to agriculture as new market. Involving farmers or growers ('producers') directly in your project is a way to increase the relevance of your innovation to users, make sure it suits their needs, and ultimately help ensure that it gets used.

Innovation funders such as Innovate UK increasingly expect or require producer engagement in agricultural projects. This is because they are interested in the adoption of innovation, and user engagement in design or development is a key factor. This is about actively engaging users in the innovation process, going beyond basic market research.

This guide is intended to help applicants from research or solution providers plan producer engagement in innovation projects effectively and appropriately. You may also find it useful if you are assessing innovation project proposals that include producer engagement.

The guide introduces key concepts and approaches, with links to in-depth resources. It has been developed by experts at the Centre for Effective Innovation in Agriculture, informed by practical experience of farmer-centred innovation.

The key points in a nutshell? Engage early. Get specialist help.



Why engage producers?

A new concept or tool only amounts to innovation if it gets put into practice. "The value of idea lies in using it", as Edison said. Engaging users in development won't always achieve this. But not doing so is a recipe for failure.

The context is concern that agricultural R&D has been disconnected from farmers and growers and misaligned with their priorities, hindering innovation.^a

Engaging producers in the innovation process has significant potential benefits but also brings challenges.

Benefits include

- Understand user needs and increase relevance
- Harness producers' knowledge and ingenuity
- Develop ambassadors to support dissemination

Challenges include

- Leaving room for co-innovation makes it harder to specify the end product or route to adoption up-front
- Requires facilitation and other specialist skills

a. [Agricultural Productivity Working Group \(2020\)](#); [Klerkx, L. & Rose, D.C. \(2020\)](#).



Photo credit: Innovative Farmers

When to engage

Your project and innovation process will benefit most from engaging producers if you start early.

One factor limiting the adoption of new technologies or other solutions in agriculture is that they are not sufficiently relevant to their intended users' practical and business needs. Their development has been solution-driven, rather than problem-, goal- or need-driven from the outset.

Engaging producers in **co-innovation** mitigates this risk.^a It is most effective if you engage at the **initial** step of identifying problems, needs or goals, and continue engaging through ideation and planning.

If you are applying for funding, those stages largely happen before you submit your proposal. Unless you have already engaged producers in your prior work, this is challenging, because it takes time and adds complexity. But it is still valuable and doable.

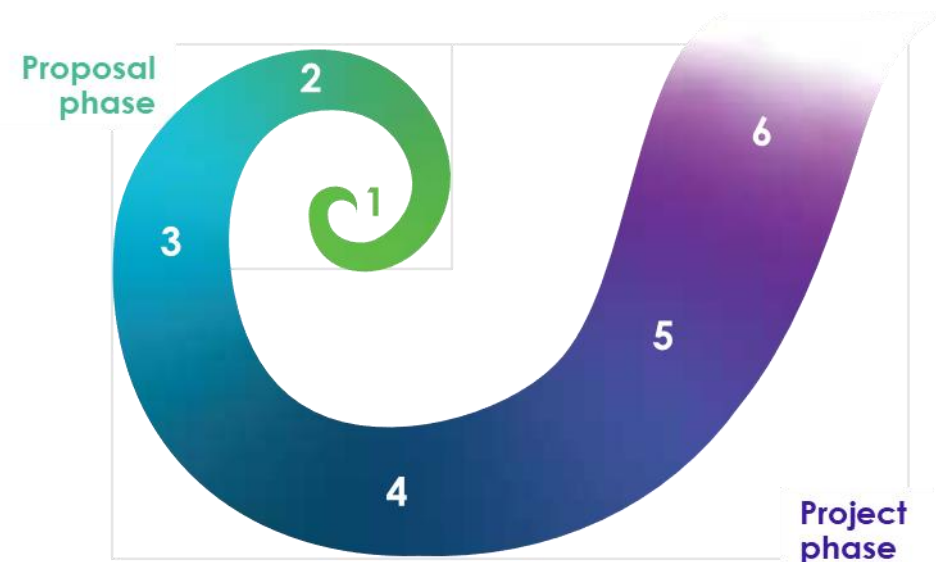
You may well already have an idea or prototype solution in development, and are looking to engage producers in testing. You may not be able to go back to step one or two shown here.

But even in that case, engaging sooner rather than later with producers can strengthen your proposal, and identify challenges and opportunities early. This guide is intended to help you devise a practical approach that works for you and your producer stakeholders, and to find any help you need. The table on the next page shows how this can support your proposal.

a. Rose, D. C., et al. (2018); MacMillan & Benton (2014).

b. Adapted from: Wielinga, E., et al. (2008); van Dijk, L., et al. (2019).

The innovation spiral ^b



Proposal phase

1. Identify problems
2. Generate ideas
3. Plan & resource

Project phase

4. Test & develop
5. Implement & scale
6. Spread & embed

How engaging now can strengthen your proposal

Application question ^a

How engaging producers in developing your project can help you develop a strong proposal

1 Need or challenge

Clarify and strengthen your account of the problem, need, challenge and impact, providing evidence and examples. Established producer groups may have benchmarking data that helps you project the potential impact on productivity and sustainability.

2 Approach and innovation

Show that you are already meeting any requirement to engage producers. Understand what forms and terms of engagement will suit them during the project. Illustrate how your project complements the existing technologies they use. Sense-check assumptions about how your project outputs will lead to real-world benefits.

3 Team and resources

Producers can contribute creatively to the innovation process and may bring entrepreneurial skills and experience. Some will be experienced in designing and running trials on farms. They can play an active part as project partners, not only as external parties, though subcontracting may be the most appropriate way for them to get involved in some projects.

4 Market awareness

Provide direct evidence of market demand and drivers.

5 Outcomes and route to market

Clarify how producers fit into the future business model for your innovation. Are they customers, end users or indirect beneficiaries? Test and develop your assumptions about routes to adoption. Strike the right balance between context-specific and transferable learning, to ensure your project outputs are practically relevant to your target users.

6 Competitors

How do producers see the market? Is the key competition from other similar innovations, or from other developments, such as producers changing their farming systems or exiting that sector? Do they prefer your potential solution?

7 Outcomes and wider impacts

Make realistic estimates of the economic and other benefits of your project and show that you have sense-checked these with producers. Benchmark your projections against previous real-world innovations that have transformed producers' businesses or impacts.

8 Project management

This guide references tried and tested producer engagement processes that can support your project management process. Some are light touch and others are in-depth. Check that the approach you will use is going to suit the producers you are working with.

9 Risks

Poor adoption is a major risk for agricultural innovation projects. Funding competition requirements may highlight producer engagement as crucial to mitigating that risk.

10 Added value

Identify where producers are already testing ways to solve the problem, or wanting to do so, but without the resources to do so reliably. If they are partners in your project then they can share experimental risk and boost the quality of such R&D.

a. These are the main application questions used in a typical Innovate UK call.

Who to engage

Some innovation funding competitions require you to engage farmers, growers or other producers. But should you engage one business or many? Should you limit engagement to a closed group that only shares information confidentially, or open it up, so more people can get involved and contribute?

Engaging other stakeholders in addition to farmers and growers may further strengthen your project by making it more likely your innovation is adopted. For example, involving other supply chain businesses may help you develop demand for your innovation, and involving NGOs or even members of the public may allow you to test and develop the social licence for new technology.

You can tailor engagement at each stage to balance the benefits of direct producer and other stakeholder input, with practicalities and confidentiality. For example:

- A feasibility study may suit an approach where a group of producers is engaged in co-designing the solution from an early stage, and learning is shared openly.
- Industrial research projects may suit working with a closed group (e.g. suppliers), and engaging producers mainly in the later stages of development and testing.

The template below shows how you can engage diverse stakeholder communities to different degrees at each stage. It has been filled in for an illustrative project.

Degrees of engagement (example)

Community	1 Identify problems	2 Generate ideas	3 Plan & resource	4 Test & develop	5 Implement & scale	6 Spread & embed
Tech companies	●	●	●	●	●	●
Researchers	▲	●●	●●	●●	▲	▲
Producers	●●●	●●	●●	●●	●●●	●●●
Supply chain	●	●	●	●	●	●
Other (e.g. NGO)	●	●	●	●	●	●
Public	▲	▲	▲	▲	▲	●●●

▲ = None ● = One ●● = Closed group ●●● = Open group

NB. The level of engagement does not determine the stakeholder's role in the project (whether partner, subcontractor or other external).

How to engage

Starting to engage producers can be as easy as picking up the phone. Simply sense-checking your plans with one or more farmers and growers at this stage can help your project be more relevant to potential users. This will be most valuable if you invite challenge, and are willing to adjust your plans.

But the benefit engaging producers brings to your project will depend in part on how far you engage them in the process. There are tried and tested tools available to help you structure such engagement strategically, from the earliest stages of developing your project through to completion. These range from simple frameworks like the 'innovation spiral' introduced above, to in-depth methodologies drawing on theories of 'social learning', 'experiential learning' and 'user-centred design'.

Some of these methods have been developed through working with farmers and growers in the UK or internationally, while others have come from other sectors but have been tried and tested in agriculture. A few are listed here as examples but many other approaches exist.

A simple approach will often suffice – most of these methods rely on workshops with groups of producers at key decision points. But understanding such methodologies can help you make the most of such activities, decide the terms on which farmers and growers are involved (e.g. are they partners) and avoid common pitfalls.

Examples of co-innovation methods developed with farmers:

- [Field Labs](#) – simple, flexible process developed by Innovative Farmers
- [Stable Schools](#) and [Farmer Action Groups](#) – developed to reduce antibiotic use in dairy
- [Hennovation](#) – developed to support innovation in egg production but transferable to other sectors
- [Free Actors in Networks \(FAN\)](#) – detailed methodology from the people behind the 'innovation spiral'
- [Reflexive Interactive Design \(RIO\)](#) – another detailed methodology from livestock scientists at Wageningen

Examples of generic approaches that have been used to engage farmers and growers:

- [Design Thinking](#) – “a human-centered approach to innovation that draws from the designer's toolkit”
- [Living Labs](#) – “user-centred, open innovation ecosystems... in real life communities and settings”



Photo credit: Lee Hawley/Farm491



There is growing body of experience, research and evaluation of innovation projects that engage producers. Across the diverse approaches people have tried, two factors stand out as consistently critical to success.

Fair shares

Trust is vital to an effective partnership. Sharing risk, opportunity and power fairly is a foundation for trust.

Some existing power dynamics may be obvious (e.g. retailer-supplier) but others less so (e.g. expert-non-expert). By talking directly with partners and stakeholders about any potential concerns, you can surface and plan for these differences. Being sensitive to these can help you design a project that is valued by all involved, keeps producers engaged and ensures you benefit from producers' insights and ingenuity.

In practice, this may affect: who you involve as partners vs subcontractors; project governance and decision protocols; the balance of match funding contributions across partners; process design details such as specific steps to ensure weaker partners have a say at key points; and confidentiality and intellectual property arrangements.

Great facilitation

The more partners and stakeholders you involve in your project, the more important facilitation is to success. For innovation projects that involve groups of producers working together and with others (e.g. researchers, tech providers, retailers, NGOs), good quality facilitation is vital.

Including one or more specialist facilitators in your project team (e.g. as subcontractors) can help most if you choose:

- A *dedicated* facilitator rather than bolting this onto another role (e.g. researcher or project manager).
- Someone with specific experience of facilitating *farmer groups*, who understands the practicalities and dynamics.
- A specialist in facilitating *for innovation* (much facilitation focuses on general knowledge exchange or negotiation).

Understanding the skills required and tools available can help you identify a suitable facilitator. For a taste, see:

- [General multi-stakeholder facilitation](#)
- [General farmer group facilitation](#)
- [Facilitating innovation with farmer groups](#)



Your project's impact and legacy

Effective dissemination and evaluation are crucial to your project's impact and legacy. Engaging producers in co-innovation can support this.

Dissemination

If you involve a group of farmers or growers throughout your project, does that meet the need to disseminate learning? After all, one of the key ways producers learn is peer-to-peer.

It can certainly be helpful but is unlikely to be sufficient. Think of the producers who are actively involved in your project as **ambassadors**. They can tell their stories and share information in a way that can engage other farmers. You can support this directly, through events and visits, and indirectly, through videos and materials.

You can plan your dissemination the same way you plan your other producer engagement: talk to producers about what will actually be useful to their peers rather than making assumptions; involve knowledge exchange experts in your project. It pays to be strategic and to understand the market segments you are trying to reach. Producing good content like videos or case studies will not be enough on its own.

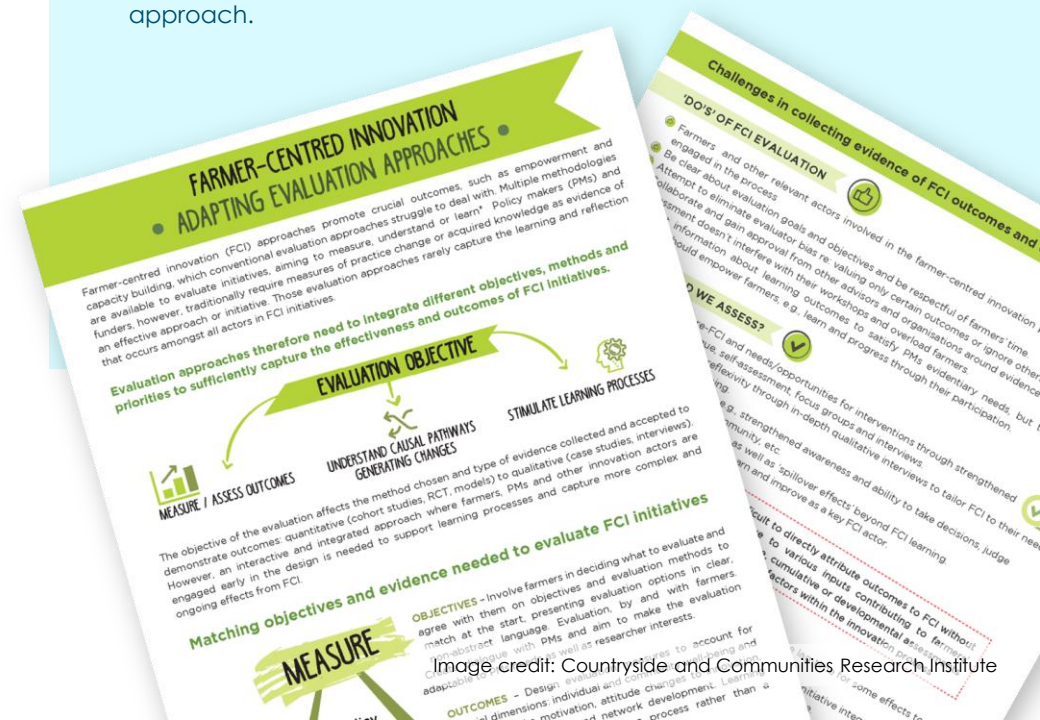
The most impactful projects include significant dissemination campaigns that have been carefully developed with end users, and/or collaborate with existing initiatives (see next page) to develop and promote best practice.

Evaluation

The potential of engaging producers in innovation projects goes beyond simply drawing on their knowledge and experience to develop a product, service or method. It can empower them, build capacity within their sector, and build the momentum for change.

These can be crucial to the long-term impact of a project and to whether innovations are adopted. But they are hard to measure and even harder to attribute.

Experts in evaluating producer-centred innovation projects have put together [a simple guide](#) that can help you develop a sound approach.



Who can help you

One way to engage producers effectively in your project is to work with an existing farmer **innovation network or innovation support service**. They may be able to:

- Support your project planning and recruit relevant producers to be involved at this stage.
- Provide experienced facilitators specialised in co-innovation.
- Manage dissemination via existing programmes, platforms and media relationships.

Such networks are producer-centred, and have developed in response to concerns that agricultural innovation processes have often been more “push” than “pull”. So they are likely to steer your project towards a co-innovation approach where producers have an active say, rather than simply providing a technology testing service. This may feel like a step backwards if you have a well-developed idea, and is challenging for assessors as it introduces uncertainty into your project plan. But it presents an opportunity to increase user relevance and the potential uptake of the innovation.

The largest dedicated innovation support services in the UK are members of the Farmer-Led Innovation Network (FLIN). FLIN also brings together evaluators and facilitators specialising in producer engagement, and the people at key sector bodies (e.g. AHDB, NFU) supporting innovation. FLIN can circulate partner/subcontractor inquiries to its members.

The largest innovation networks in FLIN are:

- Innovative Farmers – over 100 farmer-led projects to date.
- Yield Enhancement Networks – run by ADAS, arable focus.
- Farming Connect EIP network – Wales focus.

There are dozens of other innovation-oriented networks in and outside FLIN that can support you in engaging producers. These include farmer-led networks such as BOFIN and BASE UK, initiatives linked to research groups, like FarmInn (Rothamsted) and NIAB TAG (NIAB), best practice initiatives such as IFA, LEAF and GWCT, and producer groups associated with particular sectors (especially in horticulture, where many are connected to British Growers) or retailer supply chains.

The levy boards (AHDB) coordinate research and run knowledge exchange activities across most agricultural sectors, and are also an important gateway to networks of producers.



Photo credit: Innovative Farmers

Centre for Effective Innovation in Agriculture

This guide has been developed by the Centre for Effective Innovation in Agriculture, which aims to strengthen the impact and benefit of agricultural research at scale.

The new Centre, launching in April 2021, is a partnership of England's leading agricultural universities, founded with five years' funding from the Elizabeth Creak Charitable Trust.

The Centre will:

- Grow a community of funders and researchers who become passionate about the practical impact of agricultural research and the uptake of innovation by farmers.
- Collate the extensive research evidence on innovation, uptake and adoption into practical guides for policy makers about effective research and innovation funding.
- Advise and support agricultural research and innovation funders, including government, to ensure their programmes are accessible to farmers and well-placed to yield results on the ground.

To find out more and discuss working with us, contact Prof Tom MacMillan (tom.macmillan@rau.ac.uk).

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Founding funders of the Centre. The trust supports projects that help farmers survive and thrive in a challenging modern environment.



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