

Farming Innovation Programme launched to boost the future of farming

A new long-term funding programme to support farmers, growers, foresters and other businesses to embrace innovative ways to maximise productivity and drive sustainability has opened for applications today, 20 October.

The Farming Innovation Programme, one of the new measures set out in the Government's [Agricultural Transition Plan](#), will support ambitious projects to transform productivity and enhance environmental sustainability in England's agricultural and horticultural sectors, whilst driving the sectors towards net zero.

In partnership with UK Research & Innovation (UKRI), Defra is today making £17.5 million available for the first round of the three funds which make up the Programme. The first fund to open is the 'Industry-led R&D Partnerships Fund', where farmers, growers, foresters and businesses can bid for funding to develop new technologies and practices that will help them overcome challenges and exploit new opportunities in the sector such as the use of artificial intelligence and low-emission machineries to optimise the production process, and the development of climate-resilient crops.

Early next year, Defra will launch the 'Farming Futures R&D Fund', for strategic projects aimed at tackling climate change by reducing the environmental impact of farming. The third of the funds, called 'Projects to Accelerate Adoption Fund', will launch later in 2022 to support farmer-led projects to trial the viability of new innovations on farm.

Parliamentary Under Secretary of State, Jo Churchill, said:

Innovation is vital to address the challenges facing the agricultural and horticultural sectors. New ideas, technologies and processes will play a key role in helping farmers, growers and businesses to become more productive.

The Farming Innovation Programme will enable the sector to be more environmentally sustainable and resilient, whilst helping it achieve its net zero ambitions. I encourage all eligible businesses and individuals to apply.

The Farming Innovation Programme expands on Defra's partnership with UKRI for the recent [Farming Innovation Pathways competition](#), which saw huge demand from the sector and attracted many high-quality applications to innovate the horticulture and farming industry, when launched earlier this year.

Defra announced today the new projects that have won a share of this £14.5

million Farming Innovation Pathways funding. The awarded projects will contribute to helping businesses and researchers transform food production, meet the growing demand for British food, and help the sector to move towards net zero emissions. Winning applicants are now able to develop their ideas, which include:

- a fruit-scouting robot that monitors the growth-stages of crops, up to determining fruit ripeness, size and optimal picking time, to allow farmers to maximise production and yields
- a model to use soldier flies to create a low-cost, protein-rich animal feed from farm waste, enabling farmers to recover value from otherwise unusable waste. This also promotes circular farming practices in which resources are turned into new products at the end of their life
- a new approach to protect vegetable seeds against parasites and pathogens without the use of pesticides. This would help farmers improve vegetables germination, growth and yield through a combination of techniques such as laser treatment and natural disinfectants
- a fruit and vegetable growing method which harnesses natural daylight to boost the nutritional and flavour characteristics of crops. This would enhance the sustainability, productivity and competitiveness of domestic fruit and vegetable growing, compared to conventional glasshouse production. It will also extend the production season and remove the need for pesticides in production

UKRI Challenge Director for the TFP challenge, Katrina Hayter, said:

As the UK gets ready to host COP26 in November, it is timely that we can unveil so many great projects in the vital area of agriculture that will help meet our net zero goals.

Working closely with farmers in the innovation process means that pressing challenges are identified. Solving these challenges will result in maximising productivity, reducing emissions, and making our farms more resilient and sustainable.

Further information on Defra's new funds is available at the [Future Farming Blog](#) and at the dedicated [UKRI webpage](#).

From October 2021:

- [Research Starter Projects](#) – To help farmers and growers with bold, ambitious early-stage ideas develop them further and build a collaborative team – for those who haven't previously received Innovate UK funding
- [Feasibility Projects](#) – To test the feasibility of early-stage solutions and to inform decisions on subsequent larger scale R&D projects
- [Small R&D Partnership Projects](#) – To carry out R&D for innovative solutions that have the potential to substantially improve overall productivity, sustainability and resilience of the sector

From Spring 2022:

- Large R&D Partnership Projects – Launching early 2022, this will provide funding for larger-scale R&D and demonstration of solutions that have the potential to substantially improve overall productivity, sustainability and resilience of the sector
- each competition within the R&D Partnership Fund will offer different scales of funding. Project teams will be able to apply for grants towards the total project costs, while providing some of their own match funding.
- the competitions will be open to applications for 5-6 weeks, with different closing dates for each competition.
- video recordings of applicant briefing events are available on the competition pages.
- more information on the new competitions and how to get involved can be found on the [UKRI website](#)
- further information will follow in the coming months on the other funds available in the Programme, including the Farming Futures R&D Fund, and the Projects to Accelerate Adoption Fund