

Work with China to transform food production: apply for funding

World demand for food is expected to grow by 60% to feed a rising and more prosperous global population.

Food producers in the UK and China need to supply what we eat in a more sustainable and efficient way, reducing pollution, minimising waste and improving soil conditions.

The UK is a global leader in the technologies that will help to achieve this including in:

- environmental management
- earth observation
- sensors
- big data
- artificial intelligence
- robotics

The UK Government's Industrial Strategy Challenge Fund Transforming Food Production Challenge has up to £90 million to help businesses invest in new data-driven precision-agriculture technologies that could transform food production.

Innovate UK, as part of UK Research and Innovation, has up to £5 million from the fund to invest in UK businesses undertaking joint projects with Chinese partners to develop new integrated precision farming technology that helps towards achieving a sustainable position of net-zero emissions.

The Ministry of Science and Technology of the People's Republic of China is investing a similar amount to support the work of Chinese partners.

Projects must drive UK growth and exports

Projects must be in line with the aims of the Transforming Food Production Challenge to improve agricultural productivity and reduce emissions, to drive growth in UK precision agriculture companies, and to develop export opportunities.

They could cover:

- remote sensing of crop growth and nutrients, soil health, weather, crop yields, water stress and pests through satellites, drones and sensors
- smart pasture production including animal feeding systems, analysis of herds and individual animals, environmental control systems, methane reduction and improved animal welfare
- precision technologies for indoor farming such as for planting, transplanting, harvesting, watering or applying fertiliser

- exploitation of big data to improve productivity
- robotic systems for agriculture including for detecting pests and diseases, making precision applications of agrochemicals and planting and transplanting

Projects must show equal effort on the UK and Chinese side and must work with commercial end users, which could be demonstration sites, farms, laboratories or other research and development facilities in one or both countries.

Competition information