Knowledge Sharing and Mutual Learning 知识共享 互学互鉴

Scoping a Crop Intelligence System for China

Brief Profile

Developing, demonstrating and disseminating 'best practice' crop management advice for China's 200 million farms is a major challenge. However, it is central to transforming Chinese agriculture to produce the higher yields required whilst reducing the environmental impact. The Science & Technology Backyard (STB) programme was established by CAU to provide technology transfer and knowledge exchange at a local level using a participatory approach. The STB has been highly successful at minimising the yield gap & increasing efficiency, and it is now to be expanded more widely across China. To support the broadening of the STB tools are required to widen the interactions with farmers, especially to target advice to growers in surrounding areas. Earth Observation (EO) provides opportunities to monitor crop performance within and between fields, farms, villages, regions and years. Areas that perform differently can be delineated at different scales and causes identified. Canopy sensing by EO can provide assessment of nutrient status and algorithms could be developed to inform nutrient management. This proposals scopes out the development of a 'Crop Intelligence System' to provide integrated EO solutions to the STB, farmers, researchers and other extension workers, utilising the ISAAC mobile app. The work will seek opportunities to integrate and exploit outcomes from other STFC and Newton Fund projects.

Partners

ADAS, Lancaster University, AgSpace, UEA, Assimila

Project web-link

Project status

On-going (2017)

Outputs

Funder

STFC Newton Fund via ATCNN

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