

GLOBAL RESEARCH ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Country report : UK

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Presentation to IRG Annual Meeting
Cali, 5 February 2019

Specific contributions to IRG

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Contributions of UK to IRG:

Space scale

Projects/studies

national to global

SOILS-R-GREAT

watershed

iCASP

farm

Smart agriculture farm observation

field

**Quantification of potential SOC
mitigation in UK**

soil aggregates

Locked up

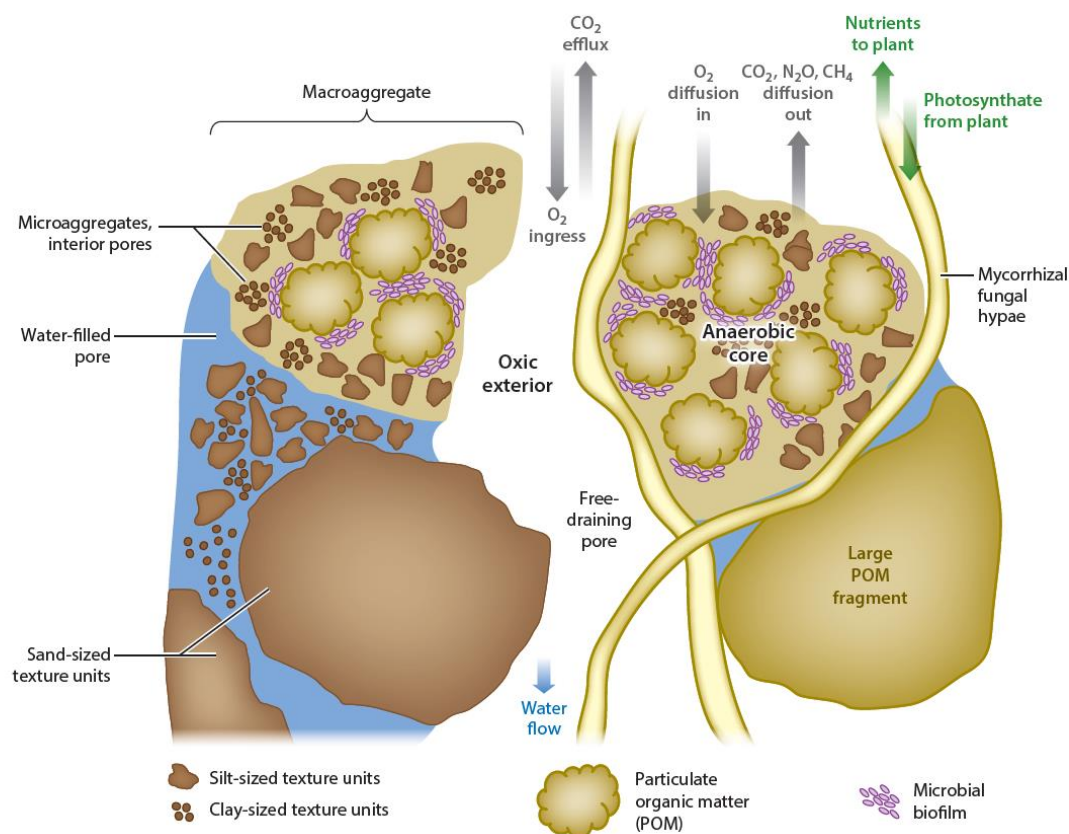
Projects, initiatives and contributions to IRG's topics

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Locked Up – £1.8 million grant from NERC to investigate biotic and abiotic interactions in SOC stabilisation and persistence. Involving: NERC Centre for Ecology and Hydrology, Lancaster University, and University of Leeds.

The research will focus on the aggregate scale to understand biological and mineralogical interactions with dissolved and particulate organic carbon.

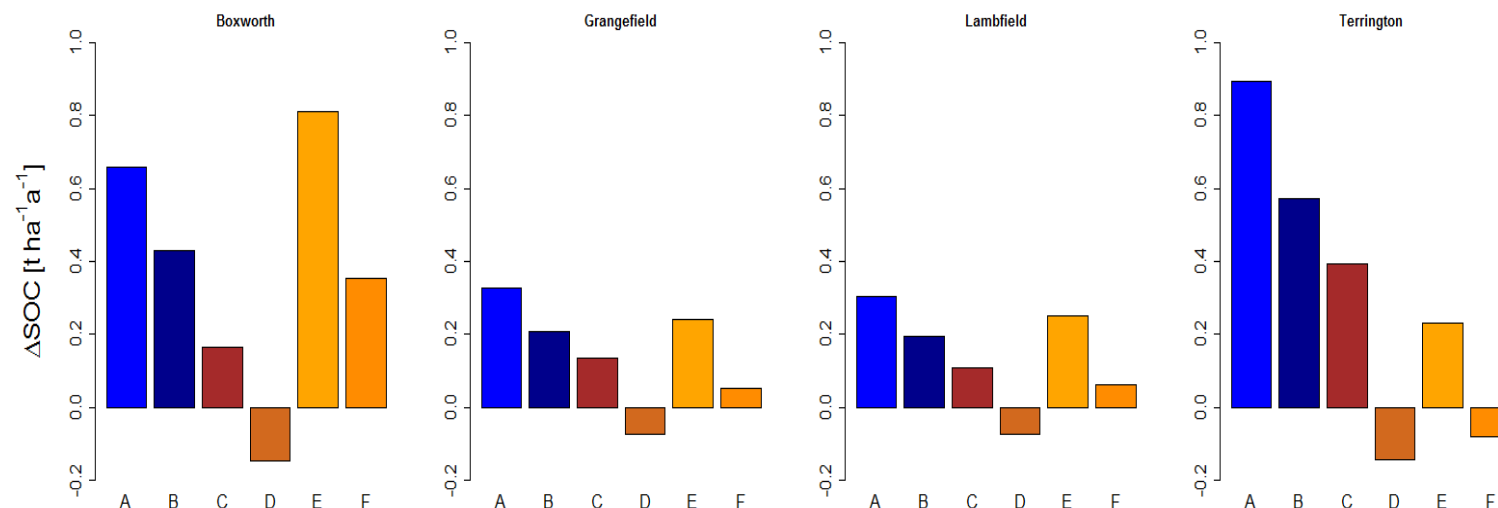


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Quantifying potential SOC mitigation options for wheat fields in UK. This study aims to detect the potential of different mitigation options to increase SOC. The impacts will also be tested for changed climate conditions.



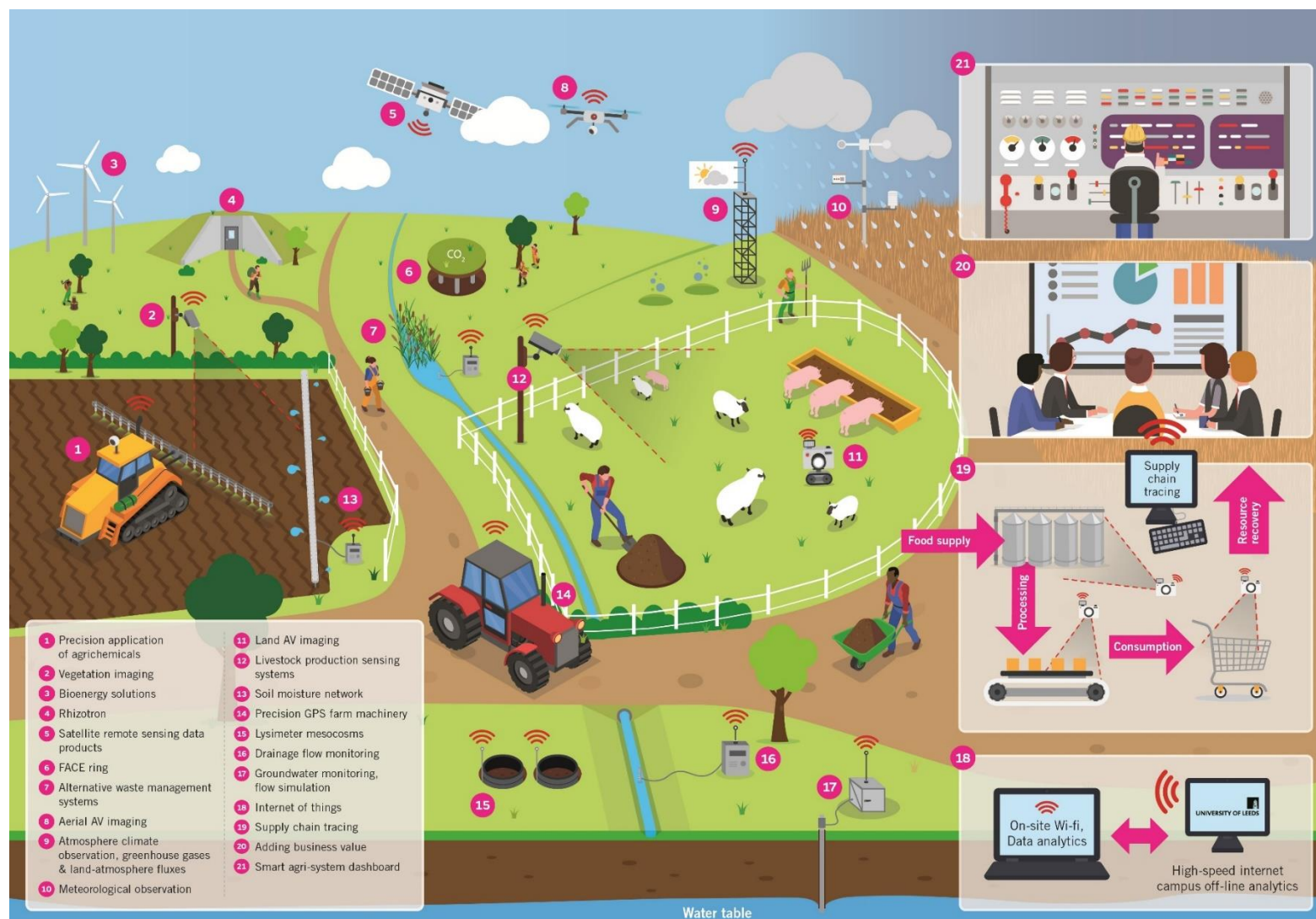
70 % **residues** left in the field (A), 50 % **residues** left in the field (B), **low tillage** (C), **reduced fertilizer** application (D), **manure** application (E) and reduced N application as manure (F).

Projects, initiatives and contributions to IRG's topics

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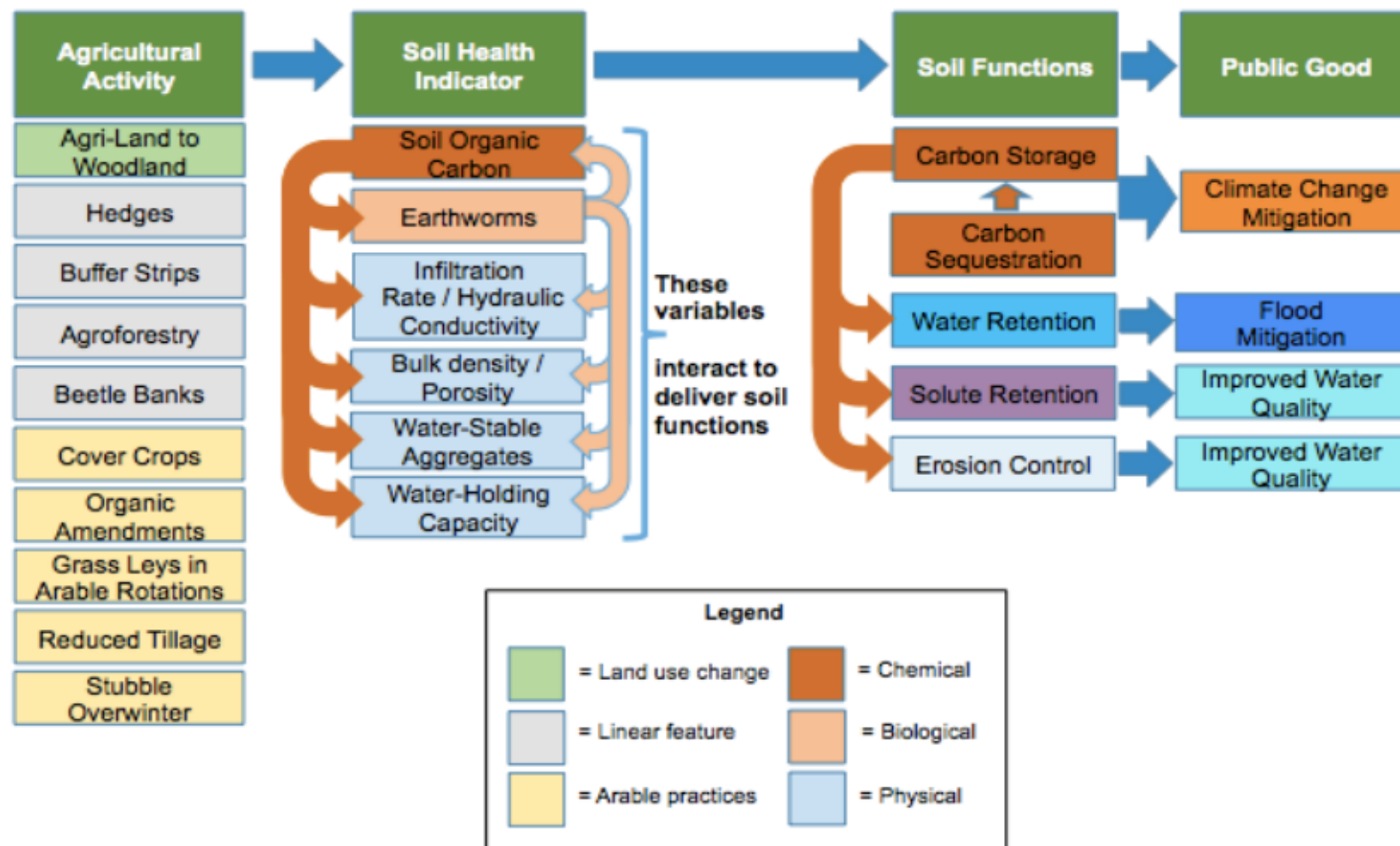
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University of Leeds Global Food and Environment Institute (GFEI):



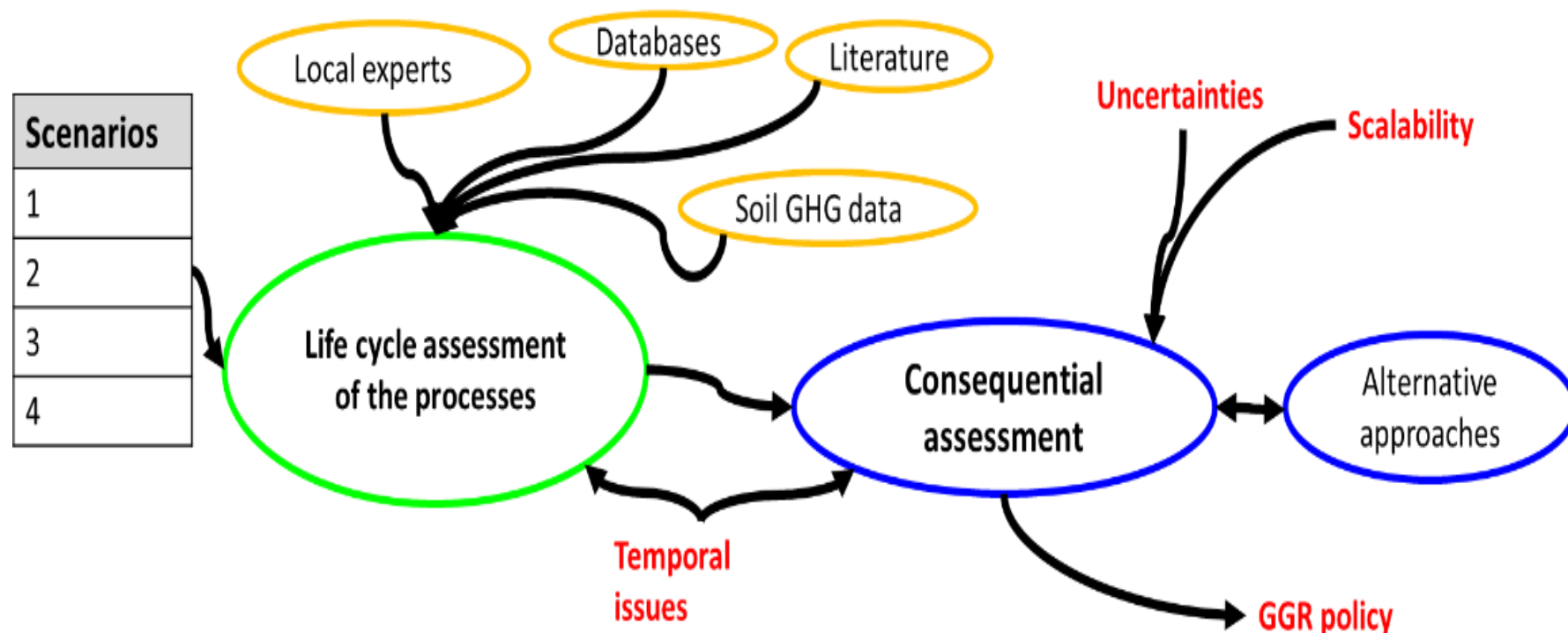
Projects, initiatives and contributions to IRG's topics

iCASP: Yorkshire Integrated Catchment Solutions Programme Public Goods Review on Soil Health <https://icasp.org.uk/resources/public-goods/>



Projects, initiatives and contributions to IRG's topics

Soils-R-GRREAT: Soils research to deliver technologies and approaches for greenhouse gas removals (GGR). The project assess, identify and analyse the impact of different GGR options. Beside a life cycle assessment, the approaches will be additionally analysed for economic impacts



Opportunities, future actions and funding

- Ongoing calls on soils, land use and climate change from UK research councils (mainly BBSRC and NERC – now all under UKRI) – through standard research projects and focal topics (such as the NERC Soil Security Programme and the Greenhouse Gas Removal Programme)
- Many possibilities through the Global Challenges Research Fund (GCRF) – mainly targeting projects in developing countries. More GCRF funding expected in the coming years
- ~~European Funding~~

Future EU funding depends on the negotiations about the new status of UK in Europe

Thank you!