RURACTIVE

Solutions Factsheets

# Digitalisation of monitoring and reporting of soil characteristics, to inform tackling climate change

Glensaugh Farm, Aberdeenshire, United Kingdom

Hilly, Flat; Predominantly rural, both remote regions and close to a city

**Led by:** James Hutton Institute
**Dynamo partner**: D4 - North-East Scotland

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**Sustainable agrifood systems and ecosystem management**

**Ecosystem management; Agroecosystem management; Automation and IT for production; Food supply, distribution and food waste reduction**

## Aim

The aim of the digitalisation of characteristics on-farm is to provide farmers with information to inform the selection and implementation of land management interventions. The observations are at field level to inform management actions within field.

Glensaugh landscape

## Story

The project started with a need identified with land managers and policy teams with a view to achieving climate change targets and in particular mitigation measures which could be taken by farmers. The project has evolved with the development of modelling for improving the estimates of greenhouse gas emissions for different types of farming systems. The prototype has proven the proof of concept and formed one part of a company spinout.

The digital solution was developed to enable land managers to monitor the soil characteristics of their land, and how they change through the day and year. The impacts are being explored with farmers in different farming systems to streamline the approach to implementation and interpretation of the data being generated.

### CROSS-CUTTING PRIORITIES

Biodiversity

Climate change mitigation and adaptation

### INNOVATION

Social, organizational and governance

Financial and business models innovation

Digital and technological innovation

Technical innovation

**Website:** https://glensaugh.hutton.ac.uk/

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