Agrimetrics Data Platform; Harnessing and merging big data

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Agrimetrics Data Platform: Harnessing & Merging Big Data

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Who we are

A Big Data Centre of Excellence

Agri-Tech Strategy
Innovate UK
£12m

Collaboration

Rothamsted Research
University of Reading
NIAB
SRUC

A team of experts

Data Science
Crop & plant health
Livestock production
Sustainability

Independent, Not for Profit Broker

Trusted and secure
Across the agri-food system
Our vision

To be the most reliable and innovative evidence base for the sustainable agri-food system, which users trust and value
Delivered via the world’s first agri-food big data exchange

01 Inputs to the data platform
- Agri-food system datasets

02 Products and services
- Data access
- Agri-food system projects
- Consultancy
- Training
- Sustainability metrics

03 Additional value creation
- Technological innovation
- New partnerships and collaborations
- Supporting growth of UK plc

Creating a market in agri-food data and insights that is open to all
Delivered via the world’s first agri-food big data exchange

Agrimetrics platform

- Weather
- Crops
- Soil
- Pests & Disease

- Syngenta
- Data Combine
- Potato Yield Model
- P&D project
- Defra Natural Capital dashboard
Agrimetrics’s three aims

- Make disparate data more accessible
- Facilitate the sharing of data
- Make data more valuable
The value

- Independent, trusted way of connecting data across the Agri-food system
- An evidence base for the interconnected challenges of growing, sourcing & selling food
- A common framework that can be processed by machines allowing data to be shared and reused across applications, enterprises, & locations
  - Insights provided in real time
- Used to enhance the productivity, safety, quality & sustainability of agri-food production
  - Now and in the future
Case studies

Confidential benchmarking

Connected cow

Potato yield model
Other agri-food data-sharing success stories

- **Sedex (Supplier Ethical Data Exchange)** - Shares data on ethical treatment of workforce
  - Across 40,000 organisations and 150 countries

- **Food Hygiene Rating Scheme** - Identifies hygiene standards across 99% UK food businesses
  - Encourages businesses to improve hygiene standards & reduce incidence of foodborne illness

- **Cool Farm Tool** - GHG, biodiversity and water assessment on farm
  - Shared anonymised information used for analysis of crops & regions
By sharing data together you could

- Better connect supply and demand for different livestock sectors
- Create confidential benchmarking processes that enable farmers to become more productive and profitable
- Develop an evidence base that enables better understanding, measurement and management of interconnected issues
  - e.g., animal welfare, GHG emissions, carcass quality, nutrition
- Compare performance across different production systems and geographies
  - e.g., UK lamb vs. NZ lamb
- Connect world leading science on sustainability of livestock production
The challenges to overcome

- Trust
- Identification of win:win
- Data as a currency to trade for better insights
- Shift from ‘thinking you can do it on your own’ to ‘needing to work with others’ to find the solutions to complex agri-food related problems
End
Industry-led application of UK’s World Class science across the Agri-food system, measured through:

- Efficiency
- Sustainability
- Food Security
- Quality

To deliver an enhanced contribution to UK wealth creation
Centres tackling identified UK weaknesses

- Excellent basic science, but
  - Too fragmented to address strategic challenges
  - Mostly not addressing real industry needs
  - Lacking investment in translation
- Best practice not being shared or driven
Centres tackling identified UK weaknesses

Three Centres linked to defined industry sub-sectors
Working together
Underpinned by sector-wide metrics