



## All-Party Parliamentary Group on Science and Technology in Agriculture

**Notes of a Hybrid Meeting held on Monday 26 February 2024**

**Meeting Room C, 1 Parliament Street and via Zoom**

### **Harnessing the power of farm-level data**

**In attendance:**

Earl of Leicester  
Lord Carrington  
Lord Taylor of Holbeach  
Baroness Young of Scone  
Earl of Devon  
Earl of Caithness

**Guest speakers:**

George Freeman MP, former Minister of State for Science, Research and Innovation  
Professor Tina Barsby OBE, Chair, Farm Data Principles Ltd  
Dr Helen Ferrier, Chief Science Adviser, NFU  
Andrew Loftus, Loftus Farms  
David Webster, Chief Executive, LEAF

**Stakeholder attendees:**

Prof Jane Langdale, University of Oxford; Dr Craig Lewis, Genus; Dr Julian Smith, Rothamsted Research; David Flanders, Agrimetrics; Jim Godfrey, NIAB/RASE; James Green, G's; Dr Julian South, MAGB; Prof Paul Wilson, University of Nottingham; Jim Orson, BCPC; Calum Murray, Innovate UK; Marco Winter, AHDB; Luke Cox, NFU; Tom Scrope, Soil Benchmark; Kim Matthews, AHDB; Nick Hogervorst, agriplace; Stuart Maclennan, Peacock Tech; James Warner, United Oilseeds; Gordon McKechnie, Hutchinsons; Vicky Robinson, AIC; David Hutchinson, Hutchinsons; Chris Gooderham, AHDB; Julie Pierce, FSA; Gareth Davies, Yagro; Judith Batchelar, Food Matters Intl; Chris Baker, Rothamsted Research; Saskia Hervey, Earlham Institute; Dr Richard Harrison, WUR; Dr Louise Ball, Defra; Doug Wanstall, Bank Farm; Prof Helen Sang, Roslin Institute; Prof Dale Sanders, ex-JIC; Dan Geerah, LandApp; Olivia Seccombe, British Sugar; Martin Collison, Collison Associates; Simon Jarvis, British Sugar; Prof Richard Napier, University of Warwick; Dr Lydia Smith, NIAB; Helen Hague, Rothamsted Research; Nick Major, CIEL; Megan Bryant, Map of Ag; Ken Boyns, AHDB; Prof Louise Manning, University of Lincoln; Nicholas Corker, CEH; Michele Wiles, Future of Biogas; Rupert Harlow, Yagro; Dr Susannah Bolton, SRUC; Ellena Andrews, FDF; Paul Temple, SSA/GFN; Helen Strong, Defra; Rosie Taylor, Defra; Philippa Wiltshire, Red Tractor; Dave Hughes, Syngenta; Susan Twining, CLA; Lindsay Hargreaves, LH; Ian Mace, AB Foods; Anthony Hopkins, BSPB; Dan Green, British Sugar; John Wallace, Wallace Daniels; Juan Antonio Martinez Leon, G's; Dave Skirvin, ADAS; Steve Anthony, ADAS; Runxuan Xhang, JHI; Darren Houghton, Korn Ferry; Raymond Jongschaap, WUR; Tamme van der Wal, WUR; Paul van Zoggel, WUR; Ruud Borgart, WUR; Nancy Podevin, Corteva; Chris Jackson, UK TAG; Ian Beecher-Jones, JoJo's Vineyard; Jill Hewitt, NAAC; Anna Powell, Map of Ag; Tim Coates, Oxbury Bank; James Wallace, IAR Agri; Richard Simpson, Kingshay; Ben Makowiecki, Lloyds Bank; John Giles, Promar Intl; Natalie Gaibani, Promar Intl; Eliot Dixon, Agri-EPI Centre; Duncan Rawson, EFFF; Peter Wortman, EFFF; Elizabeth Warham; Sarah Clarke, ADAS; Andrew Richardson; Alison Wray, Defra; Paul Rooke, British Coffee Assn; Graham Ramsbottom,

Greensphere; Evalyn Drake, Defra; Poul Hoversen; Ed Knight, Red Tractor; Tracey Curran, Red Tractor; Agna Chungbang, Henham Strategy; Rose Riby, AIC; Michael Cummins, Defra; Daniel Pearsall, Group Co-ordinator.

## **1. Keynote Introduction**

Providing a keynote introduction to the session via video link, former science minister George Freeman MP, also a former chair of the All-Party Group, described his longstanding conviction that more effective use of farm-level data and metrics holds the key to driving sustainable gains in agricultural productivity, and to providing information to consumers about the sustainability impact of different foods.

He described how the penny had dropped for him on this issue at a meeting of the APPG back in the coalition days, when the US Field to Market initiative presented their ground-breaking work to measure the environmental footprint of each agricultural product.

He highlighted the importance of such data in moving the agri-environmental sustainability debate on from emotive 'GM - bad, organic - good' arguments, towards a more science-based understanding of what actually helps improve biodiversity and the sustainable intensification of food production.

This was why, when he launched the UK Agri-Tech Strategy 10 years ago, it envisaged a pivotal role for agrimetrics and the need for underpinning, rigorous science behind it. Having announced plans last autumn for a consolidation of the agri-tech centres into a single catapult he noted that, if supported by government and matched by private sector investment, this would represent a significant commitment to agri-tech innovation for at least seven years. Having the right data and metrics in place to measure and guide policy development and R&D investments would be fundamental, he said.

Finally, he highlighted the importance of science-based sustainability metrics in agriculture to provide consumer confidence, linking to food labelling and how we empower and support a new generation of consumers to understand the environment footprint of their food choices.

## **2. Guest speakers**

(Copies of guest speakers' slides are available to download via the Meetings section of the All-Party Group web-site [www.appg-agscience.org.uk](http://www.appg-agscience.org.uk))

### **Professor Tina Barsby OBE**

As chair of Farm Data Principles (FDP), Professor Tina Barsby (TB) described the background to the initiative, formerly the British Farm Data Council, which brings together an independent grouping of leading figures across the sector, all contributing different perspectives and expertise.

TB explained that FDP's aims were to:

- Accelerate the digitisation of the industry, and associated benefits in productivity, sustainability and performance, by building trust and participation - especially at farm level;
- Enable clear recognition for farms, companies, and organisations across the agricultural industry who champion fair and appropriate data rights, leading the industry forward.

As a group, FDP agreed that the potential value of farm data was not being unlocked because current approaches are fragmented and non-standardised, with little or no safeguards, and as a

result the agri-food sector was wary of data sharing and participation due to concerns over trust and confidentiality.

FDP determined that a voluntary 'gold standard' for data governance was needed in this space to progress the sector and unleash its potential.

TB described the process leading to the launch of the certification scheme, which included surveying the current landscape, developing the principles of good data governance and from these developing the certification principles and then seeking endorsement for these principles across the agrifood sector. This led to the certification of individual companies and organisations, which has just started. The ultimate goal of this journey was to build trust in digital agriculture.

TB explained that the survey of what work has been done in farm data governance nationally and internationally helped the FDP group to understand and shape 'what good looks like'. She noted that the model which probably came closest to meeting FDP's overall objectives was the voluntary Ag Data Transparent scheme in the US.

TB described FDP's four key principles for good farm data governance, through a series of clear statements relating to the ownership and use, value, security and accessibility of data. She added that these principles had already been fully endorsed by key industry organisations such as the NFU, AICC and BIAC, and their development had been supported by extensive engagement and consultation with government and industry organisations across the agrifood sector.

TB explained that the original British Farm Data Council was recently incorporated as Farm Data Principles Ltd, an independent not-for-profit company, which was in the process of applying for a certification mark which certified companies and organisations would be able to use on their websites and elsewhere.

A register of companies signed up to the principles via a self-declaration questionnaire would be published. A certification fee of £950 is payable.

TB added that FDP had contracted Communagator, a digital services company led by Julian Gairdner, to oversee the operation of the certification scheme, which would include promoting and raising awareness of the scheme, reviewing applications and providing support for applicants, and carrying out the initial handling of complaints and disputes.

At this point of formally launching the certification scheme, TB noted that FDP already had around 10 companies and organisations signed up, with more applications coming in daily. After just over 18 months' work, the process of delivering an industry-wide standard for good data governance was finally in prospect, and TB encouraged attendees to get in touch via the website at [www.BritishFarmDataCouncil.org](http://www.BritishFarmDataCouncil.org) to find out more.

### **Dr Helen Ferrier, Chief Science Adviser, NFU**

Helen Ferrier (HF) welcomed the launch of the FDP certification scheme, applauding the time and effort that had helped reach this point. She signalled the NFU's full support for the process, as the voice of over 45,000 farmers and growers in England and Wales.

HF described farm data policy, an issue she had worked on since 2016, as a largely unexplored area of policy development for the NFU and the wider industry, despite the development and introduction of more and more digital tools in agriculture. This highlighted potential concerns over the widening gap in knowledge and power between farmers and tech companies collecting and using data from farms. There has been a lot of talk and excitement about the potential value

of this data to government, banks, supply chain companies etc., but with no one really taking action on the critical, but challenging, question of good farm data governance.

HF suggested that this imbalance in power and knowledge was leading some farmers to avoid using potentially valuable digital tools and technologies because of concerns and lack of trust over how their data would be used.

In such a risk averse, fragmented and heterogeneous sector, HF noted that it was therefore a remarkable achievement for FDP, as a 'coalition of the willing,' to have reached the point of launching a common set of good governance principles for farm data, and to have developed an accompanying certification process for responsible companies and organisations to demonstrate transparency and compliance with those principles.

HF encouraged all attendees to keep talking about data governance principles, and to keep challenging and asking questions about the responsible use of farmers' data, so that the sector could really reap the benefits of digital agriculture for society, the economy and the environment.

### **Andrew Loftus, Loftus Farms**

Endorsing the FDP initiative from a grass-roots farmer perspective, livestock farmer Andrew Loftus (AL) thanked those involved for their hard work in developing such a timely and greatly needed initiative.

AL explained that, every day, farmers like him were asked, encouraged, sometimes required to put data into different pieces of software – he counted 10 that he currently uses. A dairy farmer he knows uses 20 different programmes, many of which are not compatible with each other.

He noted that farmers simply do not know what happens to their data, citing concerns over the British Cattle Movement Service (BCMS) database which only offers options for farmers to provide full read and write access to their data with no way of knowing how that information might be used.

AL indicated that the establishment of a common set of farm data principles helps provide an environment in which farmers can share data with confidence, secure in the knowledge that they are in control of who they are sharing data with, and how the information is being used.

AL pointed to the enormous productivity and sustainability benefits which could be achieved through more effective use and application of digital tools, and he encouraged all the software owners and operators that he interacts with to sign up and endorse the FDP scheme as soon as possible.

### **David Webster, Chief Executive, Leaf UK**

David Webster (DW) briefly introduced the three pillars of Leaf UK's work, which ranged from children's education and public outreach, probably best known for Open Farm Sunday which welcomed over 100,000 people onto working farms last year, through to knowledge exchange and peer-to-peer learning, sharing best practice through a network of demonstration farms, and finally to the Leaf Marque assurance standard which is now used by most UK food retailers in relation to fresh produce.

DW also explained that Leaf was going through an exceptional period of growth, going from 16 to 40 employees.

Announcing Leaf UK's full and public backing to the Farm Data Principles initiative, DW highlighted the importance of rigour and trust in handling farmers' data, indicating that only by having the confidence to engage and share their data will farmers realise the full potential of

embracing potentially transformational changes in sustainable farm management. He also underlined the importance of trust working both ways – from the consumer at one end of the chain to the primary producer at the other.

In such a period of change, transition and uncertainty for UK agriculture – in the context of unprecedented climate impacts, shifts in government support systems, changes in technology including more use of AI, and with more and more farmers exploring new farming approaches such as regen ag and agroforestry – DW underlined the importance having trusted anchor points to help navigate change, and he described the FDP scheme as one such framework.

DW indicated that while Leaf UK fully supports and endorses the FDP principles, it cannot yet as an organisation comply with them fully and it will take some work to do so, but he stressed that it was a journey Leaf is prepared to go on for all the reasons previously discussed. He welcomed the FDP launch as a foundation for building confidence and trust.

### **Questions and discussion**

The following key issues were raised during questions and discussion:

FDP is keeping government informed of progress in the scheme's development via both the Agricultural Productivity Task Force reporting into Defra, and the Food Data Transparency Partnership overseen by both Defra and the Food Standards Agency.

Engagement between FDP and food retailers to date has been limited.

FDP is not a data provider or collector of data, but rather focuses on the certification of good farm data governance among those organisations collecting, analysing and using farmers' data.

Provisional certification is possible for companies and organisations who commit to put in place arrangements to ensure full compliance with the FDP principles within 12 months.

It is a requirement of FDP certification for companies and organisations collecting or using farm data to be transparent with the originators of that data, primarily farmers, about how it will be used.

FDP does not currently have plans to be involved in the standardisation of farm data exchange to support compatibility and inter-operability between systems, although it is something potentially for the future. The launch of the certification scheme is just the beginning.

A full list of the companies and organisations which have achieved FDP certification is available on the website.

The importance of providing information and education to farmers about how their data is being used was highlighted, including how it might potentially be used in the future, for example with changes in technology.

If farmers do not understand or have concerns about how their data is being used by an FDP certified organisation, a route exists either directly with that organisation or via FDP for them to raise those concerns.