

To: George Freeman MP, Minister for Science, Innovation & Research, DSIT Rt Hon Mark Spencer MP, Minister for Farming, Fisheries & Food, Defra

10 November 2023

BY EMAIL

Dear George and Mark,

Following the recent announcement that three of the four Agri-Tech Centres established under the 2013 UK Agri-Tech Strategy could be merged into a single Catapult, and amid reports that the fourth centre, Agrimetrics, faces an uncertain future without continued Government support, I am contacting you on behalf of the Science for Sustainable Agriculture (SSA) <u>advisory group</u> to suggest an evidence-led re-set of the Strategy, with a renewed focus on genetic innovation and data.

We would urge the Government not to push ahead with the creation of a new Catapult before considering other, potentially more efficient R&D approaches to deliver the sustainable agricultural productivity gains originally projected for the UK Agri-Tech Strategy.

With a return on investment of just 60p per £1 invested, the Agri-Tech Centres have not delivered value for money, constrained by a 'risky' capital-only funding model, and without a core focus on genetic improvement, the single most important factor driving on-farm productivity gains. This compares with an equivalent return from other UK research institutes of £18 per £1 (NIAB), £15 per £1 (John Innes Centre), and £13.50 per £1 (Roslin Institute).

SSA is concerned that the Agri-Tech Centres have essentially become convenors of resource, adding a layer of administrative bureaucracy rather than focusing on the Agri-Tech Strategy's core objectives of identifying and plugging gaps in the existing R&D landscape, and developing new models of working between Government, academia and industry. By simply consolidating the existing Centres, the proposed Catapult model risks perpetuating that situation.

We would urge the Government to consider alternative solutions based on evidence of existing, damaging gaps in the research landscape.

For example, while genetics has not been a core focus of any of the Agri-Tech Centres, economic impact research confirms that genetic improvement is by far the main driver of UK agricultural productivity growth. In May 2021, a <u>study</u> by HFFA Research GmbH concluded that improved crop varieties accounted for two-thirds of the productivity gains in UK arable crops from 2000-2020. Without plant breeding, UK crop yields would have been 19% lower, and 1.8 million hectares of additional land would have been required to meet our food needs.

Despite this, two separate Government reviews of plant science have highlighted the need for a more joined up R&D pipeline to transfer promising early-stage genetic discoveries from lab to field.

The most recent review, in 2021, led by Professor Jane Langdale of the University of Oxford, concluded that *"the current system for financing near-market and applied R&D is not working, and opportunities to exploit major advances in our understanding of plant science are being lost."*

In response, SSA is calling for a renewed policy focus to address this widely acknowledged and potentially dimension-changing gap in translational research effort, through the establishment of a strategic, long-term Crop Genetic Innovation Research Fund.

Evidence also points to genetic innovation in farmed animals as a major driver of productivity and resource-use efficiency gains, alongside improvements in animal health, welfare and climate impact. A parallel Government-led review of UK livestock science would appear to be long overdue.

It is equally frustrating that the Agri-Tech Strategy has not delivered on its objective to embed farmlevel data and sustainability metrics at the heart of the policymaking and R&D agenda.

The original vision of Agrimetrics was as a pivotal hub of the Strategy, collating and analysing farmlevel data, measuring progress against Government policy objectives, disseminating advice on best practice throughout the industry, and providing meaningful information to consumers about the environmental footprint of their food choices.

Instead, Agrimetrics appears to have focused on developing a commercial operation, one aspect of which is to collate, re-purpose and sell on access to publicly-owned data. This does not appear to have succeeded, however. Eight years on, Agrimetrics' most recently filed accounts indicate that the centre remains at least 85% dependent on government grants to continue as a going concern.

This contrasts starkly with Agrimetrics' original ambition to become self-financing, stating in its 2016 accounts that: "During the period the Company has invested in development of the data platform in order to generate revenue from data products and services in the future. The Company received government funding from the Department for Business, Innovation and Skills (BIS) to cover the costs of establishing the company and the data platform. The Company has a Grant Funding Agreement with BIS to provide funding for the first 4 years of its operation to allow the company time to achieve financial independence."

We believe this represents a major missed opportunity to harness the potential value of farm-level data at an industry-wide level, and to strengthen the evidence base behind a transition to more sustainable and productive farming systems.

Defra has already funded a significant body of work on agricultural sustainability indicators and metrics, led by the University of Nottingham, as part of the 2014-18 Sustainable Intensification Research Programme (SIP). This includes the prototype development of innovative benchmarking software, allowing farmers to assess their performance against a range of sustainability indicators over time and in comparison with a weighted average of their peers.

Disappointingly, and like other outputs from the SIP, however, this important research has not been taken forward in the policymaking process.

Alongside a revitalised R&D pipeline for crop genetic innovation, therefore, we would also urge the Government to re-set the objectives of Agrimetrics as a national resource for the development and adoption of consistent, industry-wide metrics for sustainable agriculture, focused on measuring resource use and environmental impact per functional unit of output, and building on the metrics and sustainability work already funded by Defra as part of the SIP project.

This will provide a critical evidence base to evaluate the impact of farm policy, to understand and drive improvements in best practice at farm level, and to help inform consumers about the sustainability impact of their food choices.

We believe it is important that we learn lessons from the first 10 years of the Agri-Tech Strategy, because the challenges facing global agriculture are becoming more urgent all the time, and Britain, with its world-class research base in biological, engineering and data sciences, has a significant contribution to make.

We would welcome the opportunity to discuss these issues in more detail. Perhaps one option might be for the APPG on Science & Technology in Agriculture, which was instrumental in calling for the Agri-Tech Strategy and of which you are both former chairs, to convene a high-level roundtable of leading stakeholders from the research and agri-food sectors, many of whom share the reservations outlined in this letter?

We look forward to discussing this further with you.

With best wishes

Daniel

Daniel Pearsall Co-ordinator Science for Sustainable Agriculture (for and on behalf of the <u>SSA Advisory Group</u>)