



The focus has to be science

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Science for Sustainable Agriculture

Following the closure of Defra's SFI scheme, recent advice from York-based Fera Science that farmers in England should continue to set their sights on reducing food production, for example by considering other government-led agri-environment schemes, or by relying on the future promise of Biodiversity Net Gain and carbon credit payments, is deeply misguided, warns Yorkshire mixed farmer Paul Temple. A bold new vision is needed for farmers in this country to produce more from less, by harnessing the latest advances in agricultural science and innovation. Applied research organisations such as Fera Science should be at the forefront of this agenda, with a laser focus on equipping the nation's farmers with the knowledge, technologies and practical advice they need, he suggests.

After reversing a pre-election position on agricultural property relief, the sudden closure of the Sustainable Farming Incentive (SFI) scheme, and being told by Defra Secretary Steve Reed MP that farmers must do more with less together signal a disengagement from farming.

Ministers have said they want farmers to be more profitable in their own right, but have shown little vision to enable this, or to address our fragile position as major food importers.

Against a backdrop of climate change and pressure on the world's natural resources, farmers everywhere must step up to the urgent challenge of producing 'more from less' to feed a global population set to exceed 10 billion by 2050, without wrecking the planet.

Defra food security minister Daniel Zeichner MP has told the farming industry that the Government wants the country to produce more food, but this is entirely meaningless when not backed up with how.

Britain is certainly well-placed to produce more food, with our good soils, temperate climate and sustainable water. We are also home to world-class agri-science, hopefully to be enabled with new legislation. We are though at risk of losing our highly-skilled farming sector if we do not step up our focus on productivity and subsequent reward.

It is imperative that we reduce our dependence on food imports, bolstering domestic security at a time of heightened geopolitical instability.

But the hypocrisy of offshoring our environmental responsibility continues. As our population grows and some of the planet's finest soils are built on, pursuing policies which encourage farmers to produce less simply loads the pressure of our food system onto countries potentially more vulnerable to the impacts of a changing climate, or whose biodiversity is more sensitive to the effects of habitat loss.

Hopefully there is nothing contentious in the above analysis.

So, I was concerned to read a [recent column](#) urging farmers not to 'give up hope' following the closure of SFI in the *Yorkshire Post* from Neill Hogg, business development manager at York-based Fera Science, one of the UK's leading centres of applied crop science.

His advice that farmers in England should continue to set their sights on reducing food production, for example by considering other government-led agri-environment schemes, or by relying on the future promise of Biodiversity Net Gain and carbon credit payments, is deeply misguided.

It reflects a failure to understand economic impact and the distortion caused for example to land rents when suggesting that continuation of lower-yielding farming practices can be supported by borrowing from "many banks now offering green finance options with decent terms".

Rather than championing Fera Science's crop health capabilities, which according to the organisation's website are focused on helping farmers and growers 'minimise yield loss and maximise margins', or highlighting the organisation's longstanding expertise in supporting the safe registration and use of vital crop protection products, Mr Hogg seems more concerned that recent policy developments might encourage some farmers to 'pivot towards more intensive production to maintain financial stability'.

He warns that if this happens at scale it could have "unintended environmental consequences", including the industry missing its 2040 Net Zero target. Which I find astonishing, with a Government paving over some of the finest soils on the planet and extending airports everywhere.

Agriculture is not the problem: and the mad plethora of 'green' schemes are not the solution. But the appliance of good science which Fera is part of certainly should be.

Formerly an agency of Defra, Fera Science is now a joint public/private partnership between Defra (25%) and venture capitalists Bridgepoint Group plc (75%).

As a leading 'market growth investor', I'd be interested in Bridgepoint's take on this. Given Fera's longstanding scientific strengths in helping farmers improve their productivity, by managing crop pests and diseases, and reducing harvest losses while minimising input costs, how can it make sense to point farmers down a path towards less productive farming systems, or towards non-farming options such as re-wilding and tree planting?

Has the wider damage to the rural economy and likely reduction in a skilled workforce been considered?

Because that way lies not only increased dependence on imported food supplies at a globally precarious time, but also the potential dismantling of productive agriculture in

this country, and with it the vital ancillary sectors which support the industry, from seed breeders and input suppliers to agronomists and machinery dealers. Nobody ever asks the question: “so whose land should we be using?”

Mr Hogg is also wrong to imply that greater intensification of farm-level production cannot be delivered without adverse environmental impacts. Or that it cannot support the farming industry’s goal of delivering Net Zero by 2040.

The scientific evidence from leading conservation scientists, including Professor Andrew Balmford FRS and colleagues at the University of Cambridge, indicates that switching from our current land-sharing policies to more of a land-sparing approach – yielding more on a smaller area - will free up more land for intact nature and carbon sequestration. Such an approach will increase, not decrease, prospects for hitting biodiversity and Net Zero targets, while producing more of our own food and reducing the environmental impacts of our food system elsewhere.

The Government is currently consulting on a farming roadmap, a land use framework, and a new national food strategy. These combined policy initiatives offer an unprecedented opportunity for the farming industry to get on the front foot, and set a bold new vision to produce more from less, by harnessing the latest advances in agricultural science and innovation.

The All-Party Parliamentary Group on Science and Technology in Agriculture, chaired by former science minister George Freeman MP, has led the way in setting out a 30:50:50 vision to increase domestic agricultural production by 30% by 2050, while reducing farming’s environmental footprint by 50% per unit of output, in terms of greenhouse gas emissions, land use, water use and soil health.

30:50:50 is the central goal of a new [Innovation Agenda for UK Agriculture](#) launched by the All-Party Group earlier this year.

It is a forward-looking, progressive vision for our industry which I fully support.

Applied research organisations such as Fera Science should be at the forefront of this Innovation Agenda, with a laser focus on equipping the nation’s farmers with the knowledge, technologies and practical advice they need to produce more from less.

It is so important that we look to long-term, science-based solutions in the challenges we face, rather than engage in the current half-baked mishmash of paper-based schemes that have neither science nor measurement behind them.

Paul Temple manages a mixed arable and livestock farm on the East Yorkshire Wolds, producing cereals for seed, oilseed rape, vegetables and beef. He is a past vice-president of the National Farmers Union, former chairman of the Copa Cogeca Cereals, Oilseeds and Protein Group, and founder of the European Biotech Forum. Paul is also a board member of the Global Farmer Network, which brings together strong farming leaders from around the world to amplify the farmers’ voice in promoting trade, technology, sustainable farming, economic growth, and food security.