21 March 2024

ELMS: Defra not heeding the multiple warning signs from their own science on land-sharing vs land-sparing. Is this a leap in the dark for Britain's farmers?

A pro-innovation think tank is calling on MPs to investigate the impact of the Government's environmental land management schemes (ELMS) on domestic food security after a Defra-funded scientific review identified multiple risks to both food production and the environment from its land-sharing policies.

Science for Sustainable Agriculture (SSA) has written to EFRA Committee chair Sir Robert Goodwill MP to raise concerns that Defra Ministers are failing to follow even their own science in the development of ELMS, let alone take account of the accumulating body of scientific evidence which supports a predominantly land-sparing approach as the most effective policy option to produce enough food sustainably while leaving room for nature, biodiversity and climate action.

Research commissioned by Defra to ensure that its environmental land management schemes (ELMS) reflect 'the very latest and best possible evidence' does not in fact support the land-sharing approach on which the policy is based, but instead provides clear evidence of the need to move towards a predominantly land-sparing approach, according to an analysis by SSA advisory group members, supported by UK economist Dr Derrick Wilkinson.

A Defra farming blog described the recently published Qualitative Environmental Impact Assessment (QEIA), a £0.5m multi-partner project led by the Centre for Ecology and Hydrology (CEH), as an important source of evidence to ensure the Government's ELMS policies provide value for money and support the delivery of environmental targets and climate commitments, while maintaining food production and supporting resilient rural communities.

But the QEIA report highlights a host of unknown risks and uncertainties with a land-sharing approach, and clearly identifies multiple red flags in terms of potential risks to food production and the environment posed by the 741 potential land management actions included in ELMS. For example, the report states that "literature shows that connectivity is complex, and can also have disbenefits. For example, new corridors may allow pathogens to spread", which would affect food production beyond land under the ELMS scheme.

More widely, the report identifies a high risk of displacement of food production as a result of yield-reducing ELMS options, with unknown effects on either domestic food security or the environment.

For action after action, the Defra-funded report indicates that achieving environmental benefits in land managed under ELMS actions can be expected to be offset by potentially more significant disbenefits elsewhere – both in terms of environmental and food production impacts. In simple terms, it recognises that land under ELMS will be less productive, which will require the missing food to be produced on other land, including in other countries, which could result in an overall environmental and food security disbenefit.

This aligns with the findings of leading conservation scientists such as Professors Andrew Balmford and Rhys Green of the University of Cambridge, whose extensive research has shown that the localised environmental benefits associated with land-sharing measures, such as reduced input use and creating small-scale habitats and woodland, risk exacerbating problems of biodiversity loss, climate change and environmental degradation on an even a greater scale elsewhere.

The CEH report also highlights the enormous complexities and uncertainties associated with a land-sharing approach. For example, the report comments on "the need for more widespread advice and guidance to be made available to land managers as many actions have contextual dependencies and/or need to be done according to best practice."

But is it credible to anticipate widespread advice and guidance to be made available to land managers on contextual dependencies when the report covers almost 40,000 interactions as part of the impact assessment, when most are expressed as uncertainties rather than clear guidance, and when the report acknowledges that most expert external reviewers were unable to review the assessments due to its complexity?

And why are these uncertainties and concerns not being reflected in the development of the environmental land management schemes?

To make the best choices for the environment, while providing food security, Science for Sustainable Agriculture believes farmers need simple incentives to produce food as efficiently as possible where it is most viable to do so, and to receive support for purely environmental measures where other farmers or other parts of the farm can better produce the food we need.

This is the essence of a land-sparing approach, which also requires a policy environment that supports access to innovation, technologies and advice which will enable agriculture to become ever more productive and sustainable on land that is farmed, so freeing up more space for nature and carbon sequestration.

Commenting on the QEIA report, former NFU and CLA chief economist Dr Derrick Wilkinson said:

"Government Ministers must account for the significant red flags and uncertainties raised in this report. It certainly does not provide the evidence base to confirm or even suggest that ELMS policies will deliver on the Government's environmental, climate and food production objectives. In particular, the report highlights a real risk of displacement of food production. However, the extent to which any such

displacement could occur would of course be determined largely by the availability of suitable alternate land and other commercial factors, such as land prices and transport costs. This suggests that there might be little displacement in many areas and the impact on food production would be all the greater. That such potential effects on domestic food production and security have not been given due attention amounts, in my view, to an appalling dereliction of duty by Defra."

ENDS

Notes

A copy of the letter sent by email to EFRA Committee chair Sir Robert Goodwill MP on 18 March 2024 is available here.

Science for Sustainable Agriculture (SSA) is a new policy and communications platform, offering a focal point for information, comment and debate around modern, sustainable agriculture and food production. Supported by an independent advisory group of political, scientific and industry leaders from a range of sectors and backgrounds, SSA's aim is to promote a conversation rooted in scientific evidence, rather than ideology. Science for Sustainable Agriculture provides a platform for like-minded individuals and organisations to champion and explain the vital role of science and technology in safeguarding our food supply, tackling climate change and protecting the natural environment, as well as to expose, comment on and challenge unscientific positions or policy decisions in relation to sustainable agriculture.

Further information about Science for Sustainable Agriculture is available here.