

**Westminster Hall debate – Sustainable Intensification and metrics in agriculture**

**Tuesday 22 February 2012 – 11.00am**

**General**

The world needs to increase food production and availability by 70% by 2050 to keep pace with the food needs of a rapidly expanding global population, in the face of climate change and increasing pressure on the world's finite natural resources.

With its good soils, temperate climate, professional farming sector and world-leading R&D, Britain is ideally placed not only to optimise its capacity for sustainable efficient food production, but also to become a global hub for agri-science excellence and innovation.

Britain has a unique opportunity to put scientific rigour and evidence at the heart of UK policy development. As a nation, we have a responsibility to optimise sustainable food production here, and not to offshore our food system impacts to regions of the world which may be much more vulnerable to the production-limiting effects of climate change.

**Context - Foresight report on global food security**

In 2011, Sir John Beddington's Foresight report urged governments to pursue a policy of 'sustainable intensification' in agriculture – optimising the balance between food production, resource use and environmental impact - to meet future food needs in the context of a 'perfect storm' of population growth, climate change and finite natural resources of land, water and fossil fuels.

One of the primary UK Government responses to the Foresight Report was the Defra Sustainable Intensification Research Programme (SIP), a major (£4.5m over 4 years, 2014-18), multi-partner research programme led by some of our leading research institutes - NIAB, ADAS, Rothamsted Research, Fera, CEH and leading agricultural universities such as Exeter, Nottingham and Bangor.

None of the global pressures identified in the Foresight report have disappeared, in fact they have probably intensified. As the UN FAO Food Prices Index nudges levels similar to the food price spikes of 2008, it is not a question of 'if' there will be another global food security crisis, but 'when'.

And yet the outputs, recommendations and advice generated as part of the Defra SIP platform appear to have been quietly shelved and forgotten in favour of a transition to support for less productive farming systems. There are mounting concerns that without a clear vision for agricultural policy, guided by the science, the UK is at risk of sleepwalking into its own food crisis.

**'Whatever happened to sustainable intensification?'**

Last September, a meeting of the APPG in Science and Technology in Agriculture entitled 'Whatever happened to Sustainable Intensification?', included contributions from leading UK experts in the fields of crop science, agricultural economics, rural policy and conservation science.

The meeting highlighted serious concerns that current farm policy development lacks scientific rigour, is over-reliant on voluntary and campaigning NGOs, and that the policy focus on 'sustainable intensification' has diminished.

The weight of scientific evidence points to a need to optimise production on existing farmland. Professor Andrew Balmford, a conservation scientist at Cambridge University, told the All-Party Group that the most effective way to keep pace with increasing human demands for food while protecting habitats and preventing further biodiversity loss is through hi-tech, high-yield production on land that is already farmed, mirrored by explicit policy incentives and regulations to make sure other land is set-aside for nature. It also turns out this is the most efficient way to meet climate change objectives through increased opportunities for carbon sequestration and storage.

As a matter of urgency, the Government must restore the policy focus on sustainable intensification as the most effective way - perhaps the only way - to feed an increasingly hungry, warming planet.

### **Sustainability metrics**

As a Group we have long advocated the need to embed data science and sustainability metrics at the heart of a policy agenda focused on securing the optimum balance between food production, resource use and environmental impact.

We believe access to metrics will be essential to set targets and measure progress for sustainable efficient production, to develop coherent R&D programmes, to understand and disseminate advice on best practice throughout the industry, and to provide meaningful information to consumers relating to the sustainability impact of each unit of food produced, whether a litre of milk or a kg of potatoes.

And yet, here again, Defra appears to be moving away from the science towards an over-reliance on campaigning NGOs to support the Government's vision of sustainable agriculture.

Professor Paul Wilson, an agricultural economist at the University of Nottingham who leads the Government's Farm Business Survey programme, led the metrics component of the Defra SIP project. This included a significant amount of work on sustainability metrics and indicators, including the prototype development of a farmer-friendly benchmarking dashboard allowing producers to assess and compare their performance against those indicators and against a weighted average of their peers. According to Professor Wilson, this important work is not feeding into the Government's thinking.

Instead, Defra appears to be throwing its weight behind one particular model, the Sustainable Food Trust's Global Farm Metric. According to expert scientists, this model is designed to reward less productive farming systems by favouring a whole farm, or area-based approach to measuring resource use and environmental impact.

Professor Balmford told the All-Party Group that meaningful sustainability comparisons between different farming systems require an assessment of resource use and external impacts per unit of food produced, rather than per area farmed.

To ensure food production is not side-lined in future policy development, we will be asking:

- (i) Will the Minister agree, in view of the concerns raised, to submit the Global Farm Metric model to a process of independent scientific scrutiny and validation with leading academic experts in the field?**
- (ii) Will the Minister commit to facilitate a joint roundtable with our All-Party Group to take forward discussions on the development of robust and meaningful metrics for sustainable agriculture, including consideration of the work already funded by Defra as part of the Sustainable Intensification Research Programme?**