



## Notes of a Zoom Meeting held on Wednesday 2 September 2020

Hosted by NIAB, Cambridge

### National Food Strategy – the role of science and innovation

#### In attendance:

##### Members:

Julian Sturdy MP (Chair)  
Sir Paul Beresford MP  
Baroness Jones of Whitchurch  
Earl of Lindsay  
Lord Inglewood

##### Stakeholders:

Prof Brendon Noble, Univ of Westminster; Ian Munnery, SESVanderHave; Prof Sir David Baulcombe, Univ of Cambridge; Paul Billings, Germinal; Prof Huw Jones, Aberystwyth Univ; Jack Ward, British Growers Assn; Catherine Barrett, AIC; Robert Sheasby, AIC; Jane Salter, AIC; Susan Twining, CLA; Judith Batchelar, Sainsburys; Prof Steve McGrath, Rothamsted Research; Prof Angela Karp, Rothamsted Research; Prof Wayne Powell, SRUC; James Clarke, ADAS; Prof Ian Graham, Univ of York; Helen Riordan, Defra; Liz Scott, NIAB; Susannah Bolton, AHDB; Sarah Blanford, Sainsburys; Prof Lin Field, Rothamsted Research; Helen Munday, FDF; John Walsh, Univ of Warwick; Prof Jane Langdale, Oxford Univ; Rosana Verza, Embassy of Brazil; Dr Geoff Mackey, BASF; Graham Brookes, PG Economics; Tom Allen-Stevens, Farmer; Mark Buckingham, Bayer CropScience; Tom Bradshaw, NFU; Dr Julian Little, Bayer CropScience; Prof Chris Tapsell, KWS; Caroline Drummond, LEAF; Prof Mario Caccamo, NIAB; Richard Harrison, NIAB; Dr Tina Barsby, NIAB; Emma Green, British Sugar; Connie Burdge, Royal Society; Samantha Brooke, BSPB; Alex McKinlay, Defra; Adam Speed, CPA; Al Meghji, DfID; Lucy Redmore, LEAF; Ian Cox, Innovate UK; Dave Ross, Agri-EpiCentre; Robin Wood, Elsoms Seeds; Martin Collison, MC Associates; Mark Tinsley, CFG/Farmer; Norman Coward, CFG; Prof Dale Sanders, John Innes Centre; Saskia Hervey, Earlham Institute; Sarah-Jane Osborne, AHDB; Laura Marshall, Royal Society of Biology; Dr Julian South, MAGB; Rebecca Nesbit, writer and ecologist; Prof Nick Talbot, The Sainsbury Laboratory; Bill Clark, NIAB; Jim Godfrey, NIAB; Caroline Povey, Defra; Tim Mordan, Defra; Sam Hoste, DIT; Ros Lloyd, NIAB; Ed Barker, AIC; Jonny Hazell, Royal Society; Daniel Pearsall, Group Co-ordinator.

#### 1. Welcome & Introduction

Julian Sturdy (JS) welcomed Members and Stakeholders to the All-Party Group's second virtual session conducted via Zoom, and introduced guest speaker Henry Dimbleby who was commissioned by Defra in June 2019 to conduct a review to help the Government create its first National Food Strategy for 75 years.

#### 2. Guest speaker

**Henry Dimbleby (HD)**

HD welcomed the opportunity to address the APPG, which he hoped would mark the beginning of an ongoing conversation.

He set out his credentials in leading the National Food Strategy review, which included a background in science and a deep knowledge and understanding of the commercial food chain.

HD studied physics as an undergraduate and worked in management consultancy before founding fast food chain Leon restaurants. This led to an interest in sustainability, and in 2009 he founded the Sustainable Restaurant Association, a not-for-profit, membership organisation which aims to help food-service businesses work towards sustainability in their sector and guide customers towards more sustainable choices. In 2013 he was asked by the Government to put forward a plan for school food, which led among other things to compulsory cookery lessons on the curriculum up to age 14.

HD explained that before the Covid-19 outbreak he had been planning to publish an interim report drawing on expert input from a wide range of sources, setting out the diagnosis of the existing goods and harms of our food system, and providing the basis to develop a strategy to improve public health, restore the environment, and maintain a beautiful countryside while supporting jobs and economic activity – intentionally a broad canvas.

When Covid struck it was clear that the NFS team should be deployed elsewhere within Government to deal with food insecurity issues, for example among those shielding from the virus. The pandemic also meant changing plans for Part One of the Strategy to focus on Covid and the lessons learned as well as examining the food-related issues associated with preparing for Brexit.

Published in July 2020, Part One therefore focused on issues of food insecurity, with an estimated 4.5 million unemployed by the end of the year and food bank use on the increase, including by people who would never have imagined themselves in that position, the report highlighted in particular the risk that some disadvantaged children could get left behind. It included four main recommendations in relation to expanding eligibility for free school meals, extending the holiday activity and food programme, increasing the value and availability of Healthy Start vouchers, and extending the work of the Government's Food to the Vulnerable Task Force. HD noted that these recommendations had recently received a boost and widespread media coverage after they were highlighted and supported by Manchester United and England footballer Marcus Rashford.

HD explained that the second theme of Part One focused on grasping the opportunity presented by Brexit to determine what kind of trading nation we want to become, and to recognise that trade should not just be about increasing wealth, but also about encouraging higher standards and ensuring trade deals do not promote lower environmental or animal welfare standards elsewhere. HD indicated his view that any high standard food system needed to be built on three legs: high standards of farming here supported by public money for public goods and strong regulation; protection of those standards being undercut by imports through trade deals; and protection of farmers here against farmers who are directly subsidised overseas.

Specific recommendations included: a licensing scheme to certify farmers in other countries to meet our standards; establishing an independent body to scrutinise the detail of trade deals and lay an assessment before Parliament with a Government response; and a new statutory duty for select committees to be able to scrutinise trade deals prior to sign off.

HD added that Part One also included recommendations on health and advertising which had already been acted upon by Government.

Turning to preparations for Part Two of the Strategy, HD explained that this would include a much more systematic examination of the food system, including health, climate, biodiversity,

data and science, and would also include recommendations on how Government procurement could be used to ensure public money is only spent on healthy and sustainable food.

Of particular relevance to the APPG, HD noted that Chapter 6 of Part One emphasised that core to any successful shift in the food system was the need to redefine what was meant by productivity – not just calories per £1 or per hectare but taking into account sustainability and potentially health – and then to establish metrics to measure that productivity and build externalities into the system. HD indicated that a keystone of making that work would be getting the right approach to research, innovation and data, and having read some of the material produced by the APPG he indicated that there was considerable alignment in thinking on this issue, eg in terms of building negative externalities into the system.

HD suggested that the food system was riven with negative externalities – eutrophication, health, climate impact – which were not being measured, costed or reported systematically, yet this should be one of the most basic functions of Government in a free market economy

To reverse the decline in productivity and become a world leader in productive and sustainable farming would need a change in approach to research and innovation – not just hi-tech genetic innovation and robotics but also basic ways of extending best practice, sharing research more effectively into the field.

HD indicated that his team would be consulting widely on Part Two but had already held a workshop the previous day with a handful of people from the food sector, Government, farming and academia which, in line with the APPG's own thinking, had confirmed the need to improve access to data, a more unified approach to research into new technologies to convert photons into food more efficiently, including vertical and controlled farming, as well as getting the basics right in terms of behavioural science and transferring knowledge – to understand why we have such enormous variability in productivity on farms.

He also suggested the need for much better alignment between research organisations, not necessarily forcing them together like Wageningen in the Netherlands, but working better towards shared challenges. Indeed, HD indicated that just getting better access to data in the first place would in itself begin the process of building improved connectivity across the research sector.

HD concluded by emphasising that he was keen to make the review process as inclusive and accessible as possible, and would be back in touch specifically to canvass views from the Group on the role of science and technology, research, innovation and data.

### 3. Questions and discussion

**Q1. The UK has the opportunity to take a completely fresh look at the regulations covering agricultural biotechnology. Will the National Food Strategy embrace the opportunities presented by new breeding technologies, which successive Defra Ministers have indicated have the potential to make our agricultural and food sectors more productive and sustainable?**

HD indicated that the Strategy would definitely address this issue in Part Two. He suggested that one role the Strategy could play would be to unpick some of the concerns, for example around monopolistic behaviour on the part of companies using these technologies, concerns which could actually be greater than over the technologies themselves. The Strategy would aim to get deliberative dialogues going with citizens to understand their responses to some of these issues. But looking at the technologies themselves, and taking the approach of former Defra chief scientist Ian Boyd who framed the idea of turning photons into sustenance, it was clear in HD's

view that CRISPR can offer a way of shortcutting the enormous trial and error, to-ing and fro-ing process of traditional plant breeding. He also highlighted other exciting technologies he had learned about on a recent visit to Cambridge to meet scientists from the Sainsbury Laboratory and NIAB, including shining UV light onto strawberry leaves to activate their immune systems in the face of pest or disease challenge, so removing the need for pesticides, and he suggested that the UK could become world-leading in these areas of research.

**Q2. The All-Party Group has repeatedly heard from expert speakers about the urgent need to harness the data available across the agricultural sector to develop consistent, meaningful metrics (or key performance indicators) to benchmark and measure improvements in sustainable efficient production. Is this a potential role for the National Food Strategy?**

HD agreed that it was absolutely fundamental, and that it was extraordinary quite how bad the availability of data is, particularly within Defra. As a businessman he understood the nervousness around sharing data, but suggested that particularly within the agricultural sector the Government had been historically timid on this given the level of subsidy it provides to the industry, and that there should be a much greater expectation of data sharing in response. Experience of visiting Wageningen and the Dutch food and farming sector revealed much greater sharing of data up to the centre and then valuable insights from that data disseminated back throughout the industry.

**Q3. The marketing slogan of Leon restaurants is ‘Naturally Fast Food’. What does the term ‘natural’ mean to you in relation to food and agriculture?**

HD indicated that in respect of Leon it was a bit of a joke because at the time Leon started all other fast food was basically very high sugar, high fat, and ‘natural’ simply meant that it was packed full of veg and fibre and better for you.

In relation to food and agriculture, he asked ‘why would you want to define it?’ noting that the term ‘natural’ is used in a range of ways, and that everything, from the earliest development of agriculture has been part of a long tradition of taking things from nature and making them more efficient to feed more people and make fewer people responsible for food production.

He suggested it was quite a dangerous term to be bandied about without a specific reason to define it. Instead he suggested it was important to talk about what improves the environment and our health, and what makes them worse, and that clearly putting Nitrogen into rivers harms the environment and one solution to that might be to have vertical farms – and there was nothing very natural about growing crops under LED lights. So in general HD indicated that he would be resistant to trying to define the term natural unless there was a reason to do so.

**Q4. Declining nutrient status in UK raw materials used for food has been observed. How can the UK correct this issue and ensure that those materials are intrinsically more nutritious in future?**

HD highlighted interesting work taking place at Fera in collaboration with Kitemark to be able to provide an assurance of good nutritional density of particular foods, eg carrots. Initially this would lead to a premium market in high nutrient foods but HD believed there would very quickly be levelling up across the sector so this was a promising development. HD also referred to research taking place at the University of Nottingham to develop a hand-held device capable of measuring the nutrient density of certain fruit and vegetables.

HD indicated that the other question related to the current lowest-cost formulation approach to highly processed foods, and whether there was a role for Government in improving the nutritional profile of our food, or whether it should be an issue for industry self-regulation.

**Q5. Is there a role for farmer-led innovation to front up and develop some of the new technologies that will drive the productivity improvements identified by the National Food Strategy?**

HD suggested that there was an emerging gap between research advances (eg genetics) and the farmers themselves and he believed there was definitely a role for farmers to be more involved not only in determining the kind of innovations they want but also in helping to develop those new technologies.

**Q6. How will the National Food Strategy build in the need for individuals to have personal responsibility for having a healthy, balanced diet?**

HD suggested that food-related decisions were made both in response to our material environment as well as in response to our individual characteristics and preferences, and social mores. So action to improve the food system does not take away personal responsibility.

**Q7. Research funding needs to be on a much longer timescale to enable plant and livestock breeders to respond effectively to new challenges or directions for our food system.**

HD indicated that timing of research expenditure was not an issue raised with him before and he would feed that point back into discussions in relation to the Strategy's impact on funding and the Comprehensive Spending Review.

**Q8. How will the National Food Strategy use participatory research to meet the needs of people from all diversities and backgrounds?**

HD indicated that a number of steps were being taken to ensure as wide an engagement as possible, including two citizen representatives on the advisory panel. The review was about to start a national conversation including talking to customers at leading supermarkets, McDonalds and Iceland, and then moving on to deliberative dialogues engaging with people chosen to represent the population.

**Q10. How can technology help us to manage the footprint of international sourcing of food so we don't export sustainability problems overseas?**

HD indicated his view that for various reasons, farmland prices being one, the UK's food system future is not as a provider of commodities to the world, but in becoming leaders in both sustainable intensification and land-sharing initiatives. He suggested the UK should be ambitious about the food system we create and the export opportunities not only for food but also the technologies involved.

**Q9. How does the National Food Strategy relate to global demands in the next decade?**

HD indicated that one of the NFS workstreams was trying to dig down into national food security as well as the UK's role in feeding the world – being prepared for some of the worst-case

scenarios on climate change and setting out what resilience looks like in that context. It has to include sustainable intensification in this country and that will probably lead to us producing more food but also being able to give more land back to nature, but in terms of how the UK would respond to a simultaneous harvest failure in China, the US and Russia we don't yet have the answer. However, if Covid has taught us anything it is to expand our possible horizon of negative events and make sure our food system is as robust as possible.

HD concluded by highlighting the alignment between the work of the APPG and the ongoing work of the National Food Strategy team, and his hope of finding a way of working with those interested in doing so within the All-Party Group going forward.

Concluding the meeting, JS thanked Officers and Members for their attendance and contribution to an extremely well-attended and productive session.