

**Notes of the ninth Annual General Meeting held on Tuesday 30 October 2018,
Committee Room 20, Palace of Westminster**

Defra vision for agricultural science and innovation

Present:

Members

Julian Sturdy MP
Lord Haskins
Lord Cameron of Dillington
Duke of Montrose
George Eustice MP
Jack Richardson (pp Scott Mann MP)
Lord Willoughby de Broke
Lord Trees
Baroness Jones of Whitchurch

Stakeholders

Martin Collison, Collison Associates; Emma Fletcher, Smithson Hill; Garance Hadjidj, BASF; Ian Munnery, SES VanderHave; James Wallace, IAR Agri; Prof Leon Terry, Cranfield University; Sarah Blanford, Sainsburys; Dr Belinda Clarke, Agri-Tech East; Susan Twining, CLA; Dr Bill Parker, AHDB; Jonny Hazel, Royal Society; Paul Rooke, AIC; Mark Buckingham, Bayer; Alessandro Coatti, RSB; Adam Dyster, National Trust; Mark Jacob, Defra; Prof Jim Dunwell, Reading University; Calum Murray, Innovate UK; Daniel Kindred, ADAS; Prof Lin Field, Rothamsted Research; Dr Penny Maplestone, BSPB; Prof Mario Caccamo, NIAB; Nancy Bailey, GO-Science; Rebecca Nohl, GO-Science; Ian Collins, NYorks LEP; Oliver Hill-Andrews, BBSRC; James Elliott, Green Alliance; Fiona McLoughlin, BEIS; Helen Shaw, BEIS; Hannah Smith, Defra; Jon Clarke, JIC; Andrew Swift, Fera; Chris Warkup, KTN; Dr Richard Summers, RAGT; Dr Julian South, MAGB; Richard Harrison, NIAB; Adrian Bell, Agromavens; Vicky Foster, BBRO; Alistair Griffiths, RHS; Prof Chris Atkinson, University of Greenwich; Saskia Hervey, Earlham Institute; Daniel Pearsall, Group Co-ordinator

1. Annual General Meeting

1a. Election of Chair and Officers

The nomination of Julian Sturdy MP to continue as Chair of the Group was approved with the agreement of all Members present.

Nominations for the Earl of Selborne, Lord Haskins, the Earl of Lindsay, Lord Cameron of Dillington and Angela Smith MP to continue as Vice-Chairs of the Group were approved with the agreement of all Members present.

An income and expenditure statement for the Group (attached as an appendix) covering the period 6 July 2017 to 5 July 2018 was approved by all Members present.

Members also welcomed and approved the publication of the All-Party Group's Annual Report for 2017/18.

2. Introduction

Re-elected chair Julian Sturdy (JS) welcomed members and stakeholders to the meeting, and briefly introduced the topic for discussion – the *Defra vision for agricultural science and innovation* – with Defra Minister George Eustice MP as keynote speaker.

JS observed that the UK policy environment for agri-tech was at its most supportive for decades. Building on the Agri-Tech Strategy, the Industrial Strategy had confirmed the Government's ambition for Britain to be '*at the forefront of a global move to high efficiency agriculture*', and the Agriculture Bill currently going through Parliament included a commitment to support research and innovation. But with growth in UK agricultural productivity reported to be lagging behind other countries, and Britain's farmers facing not only a reduction in production-based support post-Brexit but also the prospect of competing on increasingly open global markets, this meeting offered an important and timely opportunity to consider how Defra's vision for science and innovation would deliver the required step-change in agricultural productivity.

Prior to the Minister's arrival, JS invited Dr Belinda Clarke, director of Agri-Tech East, to provide an insight into her organisation's work in providing a pioneering hub for agricultural innovation. JS explained that Dr Clarke had originally been due to address the Group's meeting in February 2018, focusing on policy priorities for UK agri-science, but that the extreme weather on that day had prevented her from attending.

3. Guest speakers

[Please note that all speakers' slide presentations are available to download via the meetings section of the All-Party Group web-site at www.appg-agscience.org.uk]

Dr Belinda Clarke, Agri-Tech East

Belinda Clarke (BC) introduced Agri-Tech East as a networking organisation supporting the growth of a world-leading cluster of innovative farmers, food producers and processors, scientists, technologists and entrepreneurs with a shared vision of improving the productivity, profitability and sustainability of agriculture.

BC explained that while the organisation's focus was on the east of England - one of the most fertile agricultural regions of the UK and home to many progressive farmers, ground-breaking technologists, innovative companies and centres of world leading research – its membership and reach extended across the UK and internationally.

Since its launch in 2014, Agri-Tech East had sought to catalyse and drive innovation in agriculture by showcasing new research, technology and innovation of relevance to farmers, producers and processors, by encouraging the development of early-stage business ideas in agri-tech, by fostering disruptive new approaches and thinking within the innovation process, and by helping farmers and growers to clearly articulate their priorities and requirements to those within the research and technology communities.

BC described Agri-Tech East as a connecting hub, brokering links and bringing in fresh thinking from other disciplines and non-traditional sources. An Agri-Tech East report produced last September entitled '*From Grass Roots to Blue Skies: A vision for agri-tech*' discussed the need for changing models of innovation management, presenting the case for a more holistic, multi-disciplinary approach to driving improvements in farm-level performance and productivity. The report highlighted examples across the farm where innovative R&D can deliver significant improvements in productivity and profitability while

also working better with the environment, eg through: better understanding of natural mechanisms that promote soil and crop resilience; land management techniques that retain and build fertility and encourage diverse habitats; and improved resource conservation within the production system through improved forecasting, better crop establishment, and use of precision applications.

BC also described some of the initiatives led by Agri-Tech East to showcase new research and technology and to build links between innovators and end-users across the agri-tech supply chain.

The 48-hour 'Hackathon' brings together expertise from diverse sectors in a weekend of inspirational thinking, problem solving and prototype development to create impactful new solutions to some of the most challenging areas facing the agricultural industry, including: making food systems more consumer-centric, supporting and enhancing traditional approaches to weed control, and integrating data for crop management.

The Young Innovators Forum seeks to bridge the gap between research and production by providing opportunities for PhD students to engage with commercial producers. BC noted that this has demonstrated that farmers welcome more opportunities to interact in a meaningful way with scientists, as well as having input into the research process and to understand what research is being undertaken, while young scientists and innovators can better understand the value and impact of their research and be better connected with the practical needs and issues facing end-users.

Meanwhile Agri-Tech Week taking place the following week would include Agri-Tech East's flagship REAP conference and eight other activities, offering an "open-doors" opportunity for future partners, collaborators and customers to engage with the UK agri-tech market. Working alongside colleagues in local and national Government, Agri-Tech Week also provided a key opportunity to host delegations from overseas – this year including visitors from Australia, New Zealand and South Africa – and to connect them with the UK's innovators, investors and idea-generators.

BC noted that recent policy developments offered a number of positive opportunities to establish a new, multi-disciplinary innovation model for agri-tech – including the creation of UKRI, the Industrial Strategy's Transforming Food Production call, and the Agriculture Bill's renewed focus on farmer-led and participatory R&D in supporting farm-level productivity.

She suggested that the challenge now was for industry and the research community to harness and exploit these opportunities.

George Eustice MP, Minister of State for Agriculture, Fisheries and Food, Defra

George Eustice (GE) opened by apologising and explaining that his late arrival was due to the painstakingly slow progress on the Agriculture Bill in the Public Bill Committee – in session since 9.30am that morning and having only just completed Clause 1.

However, GE emphasised the importance of getting this legislation right, as the UK Government's first major reform of farm policy for almost 50 years. He observed that Clause 1 was particularly significant since it sets out the purposes for which farmers should be paid public money in the future, marking a move away from arbitrary payments based on the area farmed and towards a modern agricultural policy based on rewarding the delivery of public good outcomes, for example in terms of air and water quality, habitats, soil health, biodiversity, public access, animal health and welfare.

GE added that Clause 2 of the Bill was of particular relevance to the APPG's area of interest since it conferred new powers to provide grant assistance or Government-backed loans to help farmers invest. The Government's view was that the way to deliver a vibrant and

competitive food and farming sector was by supporting businesses to become more profitable – whether by investing in capital infrastructure, equipment or the adoption of new technology, or by helping to form R&D syndicates enabling groups of producers to invest in areas such as plant breeding, agronomy or livestock genetics.

GE indicated that this support would complement the Government's other R&D activities through the Agri-Tech Strategy, UKRI and the Industrial Strategy, but added that the focus would not be on funding academic institutions but on farmer-led and participatory R&D - putting more money in the hands of commercial businesses and groups of producers operating as syndicates. He suggested that this approach would drive knowledge transfer and uptake of new technology because decision-making powers would be in the hands of the producers themselves and their advisers.

GE described the Agriculture Bill as a move towards a different system in which farmers are genuinely and generously rewarded for what they deliver – not subsidies which implies propping up inefficiency but payments focused on delivering public good outcomes and supporting improved productivity and profitability across the industry.

GE emphasised that the changes would not happen overnight and that a 7-year transition period was envisaged in the Bill – not trading water but gradually reducing payments, at the same time removing unnecessary red tape. The objective was to make the existing system work better from day one with reduced reporting and administration requirements, with grants rolled out over time to help farmers invest to make their businesses more productive.

In seeking to improve the overall profitability of the sector, GE added that support would be provided to help groups of farmers come together to form Producer Organisations, and the legislation would also include provisions to improve transparency in the market place and to tackle unfairness in the supply chain.

Questions and discussion

The following key points arose during discussion:

GE indicated that the UK Government wholly disagreed with the July 2018 ECJ ruling that gene editing techniques should be regulated under GMO rules. While still a member of the EU or during any transitional period the UK would remain bound by the ruling, but he suggested that this would be an early candidate for divergence post-Brexit.

Asked how the UK could ensure imported livestock products met UK standards of animal welfare in the context of WTO rules preventing the use of non-tariff barriers, GE insisted that the UK would not allow its own high standards to be watered down. He indicated that the WTO was ultimately a dispute resolution process – different from supranational controls. He added that there were precedents for ethically based decisions under WTO rules, and that as an independent WTO in its own right post-Brexit the UK would be pressing for reform and modernisation of WTO standards.

In relation to the UK's future trading relationship with the EU, GE noted that the Government's Chequers Plan sought to reduce cross-border issues to an absolute minimum. Some areas such as phytosanitary controls were likely to require a common approach, whereas others could be based on recognised equivalence, and others still where regulatory divergence could be possible.

Asked about the prospects for introducing Phage testing for Bovine TB, GE agreed that current TB testing was far from perfect, with skin testing only 70% effective. He indicated that the Phage test was one of a number of tests in development capable of testing for the TB bacterium, but it was some way of being authorised for use. GE added that the Holstein Society had also been supporting work on breeding genetic resistance to TB in cattle.

Recognising the importance of effective IP protection to reward and promote investment in locally-based plant breeding, GE indicated that post-Brexit UK plant breeders could expect the same level of protection for their IP as under the current system. He indicated that the UK had no desire to diverge from existing EU provisions in this area and the Government's preference was for continuity as part of the CPVO system. In the event of no-deal the UK would need to develop a national PVR system based on existing arrangements but with its roots in UPOV, the internationally agreed convention on Plant Breeders Rights.

Asked how the Government would ensure support for productivity improvements would pull in the same direction as environmental and animal welfare outcomes, GE indicated that the Agriculture Bill included powers to apply specific conditions to payments which would ensure both objectives could be met.

Asked about departmental control of R&D funding, GE indicated that UKRI would still be responsible for fundamental and pre-competitive research in this area, but that the types of R&D schemes being considered by Defra under the Agriculture Bill would focus more on bringing together groups of farmers or businesses in syndicates to conduct commercial-scale research.

Asked how a payment system based on rewarding positive environmental outcomes would be measured and benchmarked, GE agreed that there was a need to develop yardsticks for environmental improvement, while acknowledging that applying natural capital accounting principles posed a number of challenges. He suggested that in relation to larger collaborative projects, eg peat bog restoration, this could form part of the tendering process.

Asked about the future regulatory status and application of the Precautionary Principle (PP), for example in relation to pesticide authorisation, GE insisted that there was nothing inherently wrong with embedding this approach in future UK regulation. The PP had been correctly designed and intentioned but wrongly applied by the EU. He suggested that an enabling approach to innovation required self-confident regulation to engage with the science, for example by applying the PP to risk-based assessment not hazard-based assessment.

Appendix

DRAFT INCOME AND EXPENDITURE STATEMENT

Name of group: All-Party Parliamentary Group on Science & Technology in Agriculture

Period covered by this statement: 6 July 2017 to 5 July 2018

Income and Expenditure

The group receives no direct income from membership subscriptions, monetary donations, trading income or interest and therefore incurred no direct expenditure over the course of the year.

Value of benefits in kind

Source	Description	Value £s	Received
Front Foot Communications Ltd	<p>Front Foot Communications Ltd provides the secretariat to the APPG: primarily this involves organising meetings, liaising and corresponding on behalf of the group, producing the group's annual report and maintaining the group's web-site.</p> <p>Front Foot Communications Ltd is paid by the following organisations to act as the APPG's secretariat: National Farmers Union, National Institute of Agricultural Botany, National Association of British and Irish Millers; British Society of Plant Breeders; Agricultural Biotechnology Council; Crop Protection Association; Agricultural Industries Confederation</p>	16,501 - 18,000	06/07/2017 – 05/07/2018