



All-Party Parliamentary Group on Science and Technology in Agriculture

Notes of a Zoom Meeting held on Monday 10 January 2022

Hosted by NIAB, Cambridge

Minister for Exports Mike Freer MP launches Agri-Tech exports initiative

In attendance:

Members:

Julian Sturdy MP (Chair)
Katherine Fletcher MP
Lord Waverley
Earl of Devon
Lord Carrington

Guest speakers:

Mike Freer MP, Minister for Exports, DIT
Dr Elizabeth Warham, DIT
Ruth Bailey, AEA
Spencer Claydon, Claydon Drills
Pat Flynn, CHA
Gavin Lishman, Martin Lishman
Chris Jackson, UK TAG
Nigel Overend, Deerpark Pedigree Pigs

Stakeholders:

Paul Billings, Germinal Seeds; Calum Murray, Innovate UK; Graham Teakle, Warwick University; Martin Collison, Collison Associates; Jonathan Snape, James Hutton Institute; Dave Rose, farmer; Joss Wallace, Defra; Saskia Hervey, Earlham Institute; Daniel Kindred, ADAS; Emma Green, British Sugar; Stephen Fell, Commercial Farmers Group; Neil Bragg, GMA; John Shropshire, G's; Simon Crawford, Burpee; Ali Capper, NFU; Arvind Chudascama, IHS Markit; Luke Gibbs, Syngenta; Nigel Jenney, Fresh Produce Consortium; Craig Lewis, Genus PLC; Prof Tina Barsby, Cambridge Univ; Prof Brendon Noble, Westminster Univ; Sarah-Jane Gratton, Agri-Tech Future; Tim Mordan, Defra; Judith Batchelar, Food Matters International; Sarah Middleton, BASF; Lindsey Chapman, CIEL; Nick Major, ForFarmers; Liliya Serazetdinova, Earlham Institute; Roger Vickers, PGRO; Nik Johnson, SECO; Garlich von Essen, Euroseeds; Dave Ross, Agri-EPI Centre; Jon Williams, BASF; Belinda Clarke, AgriTech E; Paul Temple, Global Farmer Network; Samantha Brooke, BSPB; Peter Hewett, STET; Dan Nye, CN Seeds; David Flanders, AgriMetrics; Gordon Ahara, Tozers Seeds; Adrian Hayler, Elsoms Seeds; Joe Brennan, UK Flour Millers; Jonathan Clarke, John Innes Centre; Casey Woodward, agri-sound; Hilary Charman, DIT; Sarah Dudley, DIT; Stephen Muir, Trade NE; Karen Knight, DIT; Fiona Chamberlain, DIT; Donal Murphy, NOAH; Kayleigh Holden, AEA; Colin Smith, DIT; Alison Avery, DIT; Oli Kaberry, Jones Food Company; Dr Geoff Mackey, BASF; Ed Barker, AIC; David Perry, Perry of Oakley; Claire Perry, Perry of Oakley; Dr Julian South, MAGB; Gareth Ford, AEA; Phil Broek, DIT; Nicola Yates, Rothamsted Research; Damien Doherty, Doc&Tee Ltd; Jonathan Eckley, AHDB; Steven Winterbottom, Tozer Seeds; Annabelle Gardner, Agri-Epi Centre; Robert Shepherd, Sumo; Paul Anderson, Genesis; Phil Stocker, NSA; David Rogers, Tozer Seeds;

Charlie Guy, Lettus Grow; Keely Watson, Elsoms Seeds; Fjolla Krasniqi, FTI Consulting; Joanna Rufus, SW Agri-Tech; Rob Hill, Rothamsted Research; Marcus Bates, UK TAG; Fraser Black, CHAP; Noemie David-Rogeat, Nottingham Univ; Gary Shiels, DIT; Jack Farmer, Lettus Grow; Jane Smernicki, Agri-EPI Centre; Juliette Cattell, DIT; Jane Matthews, Patchwork Pig; Bethan Postle, NIAB; Daniel Pearsall, Group Co-ordinator.

1. Introduction

Welcoming guest speakers, members and stakeholders to the All-Party Group's first meeting of 2022, the chair thanked Minister for Exports Mike Freer for joining the session to mark the launch of a significant new initiative aimed at boosting international trade in the Agri-Tech sector.

He noted that Britain has a unique opportunity to strengthen its position as a global hub of agricultural science and innovation, developing and exporting technological solutions to improve food production around the world, and attracting inward investment to support jobs and economic activity at home.

Communicating those capabilities effectively to overseas markets, showcasing what the UK has to offer, is absolutely critical to realising those opportunities, he said, inviting Minister Freer to open proceedings.

2. Guest speakers

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

Mike Freer MP, Minister for Exports, DIT

Mike Freer (MF) noted that as farmers across the UK respond to demands for increasing quantities of nutritious food with the need to protect and enhance the environment, there has never been a more important time for Agri-Tech. The United Nations Food and Agriculture Organisation (FAO) estimates that at current consumption levels, global demand for food will increase by 60% by 2050.

MF observed that British farmers are using advances in science and technology to improve soils, save water and reduce carbon emissions, with 60% of our farmland farmed using precision technologies.

In farming, as in other parts of the economy, MF suggested that the UK and our businesses are stronger and more innovative when we work with international investors and export more. Trade is vital for farmers around the world. And particularly in less developed countries, they must be able to access the innovations they need to adapt to and fight against climate change.

MF explained that DIT is using Free Trade Agreements to share UK expertise, technology, and best practice, and to make the UK a partner of choice for trade, investment, and scientific collaboration. Some FTAs already negotiated have investment provisions to help UK companies establish a presence in partner markets. For example, with Australia, Canada, and Switzerland.

DIT's "Made in the UK – Sold to the World" campaign offers a wide range of support for businesses who want to start exporting or expand into new markets. These include our GREAT.gov.uk digital services and the UK Export Academy.

Agri-Tech underpins quality British food and drink exports. The barley varieties that makes Scotch whisky special, the aquaculture systems used to farm mussels, or the robotic milking equipment for used to produce cheddar cheese, all are examples of the power of Agri-Tech.

MF noted that DIT's agriculture, food and drink team champions the role of Agri-Tech in UK exports and investment, drawing on the expertise of the DIT's global network in over 100 markets to address barriers to trade and accelerate routes to market.

Working in partnership with the DIT Agri-Tech Sector lead Dr Elizabeth Warham, MF welcomed the initiative by UK Technology for Agriculture and Genetics, the Commercial Horticultural Association, and the Agricultural Engineers Association to develop the AGRITECH UK Directory, an online portal to boost exporting opportunities for British companies.

MF explained that the website provides a searchable directory of UK Agri-Tech companies exporting overseas, supported by case studies showcasing the UK's world leading capabilities across the agricultural economy. Featuring companies and products from across the UK, the portal is searchable for use by overseas farmers, breeders, growers, and the agricultural industry.

MF added that it will also enable overseas embassies and government trade departments to identify the UK companies and specialist services that meet their needs.

By signing up to the platform, UK companies will gain access to 'Meet the Buyer' and will be able to communicate directly with international buyers through an internal messaging system.

Further inward investment will support UK jobs and our economy. And as the website is further developed, it will attract investment by highlighting High Potential Opportunities across the country and signposting other initiatives to overseas investors.

In seeking to strengthen its position as a global hub of agricultural science and innovation, MF said it was vital to tell the world what we're good at, and the new portal has been designed to do just that.

Elizabeth Warham, Agri-Tech Sector Lead, DIT

Elizabeth Warham (EW) briefly introduced her role as Agri-Tech sector lead for DIT, working with DIT commercial officers in Embassies worldwide and with trade associations, International Trade Advisers, Local Enterprise Partners, Agri-Tech Innovation Centres and other key partners here in the UK.

She described Agri-Tech as an incredibly diverse sector covering any technological or science-based innovation or practice utilised to improve the productivity and sustainability of agriculture, horticulture, aquaculture and forestry, as well as on-site storage and processing of food and non-food products; and animal health/ welfare of farmed livestock and fish, companion animals and horses.

EW highlighted three factors combining to make the UK open to more trade and investment in the sector: a world-class science ecosystem; a progressive farm and food supply chain driving adoption of innovation; and a dynamic business environment enabling collaboration between industry and the science base to drive innovation.

Under the DIT High Potential Opportunity (HPO) Programme, EW identified five HPOs for Agri-Tech, which profile the opportunities for overseas investment in the UK across different regions, but also highlight our strengths in the sector for exports. These are Controlled Environment Agriculture in Yorkshire; Plant Science for Nutrition in Suffolk and Norfolk; Animal Health in Surrey and North Hampshire; Aquaculture in Dorset and Precision Farming in Telford. A sixth HPO is currently in development related to Smart Crop Protection based in the Berkshire, Hertfordshire and Oxford region.

EW explained that the Agri-Tech Sector Team at DIT was established in April 2014 as a result of the Strategy for Agricultural Technologies launched in July 2013. The Strategy also established four Agri-Tech Innovation Centres in 2015/16 with whom DIT and partners work closely on International Engagement.

These are:

- **Agri-EPI** - Engineering Precision Innovation.
- **Agrimetrics** – the world's first Agrifood Data Marketplace
- **CIEL** (Centre for Innovation Excellence in Livestock).
- **CHAP** (Crop Health and Protection).

EW noted that with £90m capital investment from the Strategy, the Centres now have over 55 new facilities to support commercial research, and are helping businesses develop, adopt and exploit new agricultural technologies with over 440 funded projects. Some of these technologies are being trialled across the satellite farm network in the UK and 3 smart farms overseas.

With over 370 members, the Agri-Tech Innovation Centres work through consortia of industry and academia to address challenges that no one part of sector can address alone, with a total £120m funding and £42m match funding. The Centres provide a return on investment of 13:1 to the UK economy and play a key role in supporting the UK bioeconomy sector worth £220 bn, 13.6% GVA and 5.2M jobs.

EW explained that since 2014, DIT has grown its support for the sector, with overseas commercial officers based in Embassies now supporting Agri-Tech exports in over 56 countries.

As a result of the pandemic, Governments overseas have focused more on their national food security programmes, and look to the UK for capability in the technology.

A key mechanism to support companies in accessing this demand is a physical UK presence at the national agriculture events for focus countries and those in the UK for inward missions. In addition, DIT is working with the Agri-Tech Innovation Centres to develop an International Smart Farm Network, building on the existing three farms in China, Paraguay and New Zealand, where UK technology can be integrated and demonstrated on farm, as a showcase to local farmers and distributors for adoption.

EW concluded by emphasising that Britain has a strong opportunity for Agri-Tech exports, whether vertical farms for Europe or the Middle East, grain silos and storage for Africa, veterinary medicines for India or precision farming for Latin America - just a few of the examples of exports directly supported by DIT commercial officers in over £260m worth of exports last year.

EW then introduced guest speakers representing the three trade associations behind the new portal, as well as case studies from three successful agri-tech exporters from the UK.

Ruth Bailey, Chief Executive, Agricultural Engineers Association (AEA)

Ruth Bailey (RB) introduced the AEA, established in 1875, which represents UK manufacturers and importers of agricultural and outdoor power equipment, including horticultural and forestry equipment.

The sector exports £1.63bn worth of equipment from the UK, made up of £463m in agricultural machinery and implements, and just over £1bn in tractors each year (which compares to £693m in tractors imports to the UK).

RB explained that for several decades AEA has helped companies to export, through inward and outward missions, support at overseas exhibitions, and more recently through webinars in helping companies with new post-Brexit trading arrangements.

As a Trade Challenge Partner with the DIT, AEA has worked closely with EW and her team to build the profile of the sector and its capabilities in manufacture of UK Agri-Tech products.

AEA has also collaborated with CHA and UK-TAG to develop a toolbox to showcase the UK's strengths in Agri-Tech to overseas markets, including through the new portal and sector capability brochures, in AEA's case outlining the UK's strengths in tractor production, in sprayer and cultivation equipment, in cereals and crop production, in dairy equipment and livestock technology, in forestry, robotics and precision farming equipment. Together these materials demonstrate the UK's strengths in Agri-Tech, and that the sector is a significant contributor to UK plc.

Gavin Lishman, Martin Lishman Ltd

Gavin Lishman (GL) introduced his company Martin Lishman Ltd as a family-owned company, founded in 1975, and dedicated to the manufacture and supply of specialist agricultural equipment, with an emphasis on crop storage and quality monitoring, potato and fruit quality control, and compact sprayers.

GL explained that many of the post-harvest technologies developed by his company in the arable, potato and fruit sectors started out as niche products, but a growing awareness of the need to cut food and energy waste, and improve food quality, had led to these technologies being used much more widely.

Martin Lishman sells products worldwide, with about 60% of exports to the EU, the rest to markets around the globe, especially where there is growing awareness of the need to improve food quality and conserve soil. The company's export sales have also grown in markets where an emerging potato industry has grown in response to changing food preferences.

GL explained that the company's export strategy included automatic translation of its newly developed website into the language of the country it is viewed in, and with support from DIT the company has also translated product literature into the main European languages.

Pre-Covid, GL noted that overseas exhibitions provided a key route to meet customers and distributors face to face, and that local representatives in nearly 20 countries were essential ambassadors for the company's products, especially where there were significant language barriers.

Rebuilding the website had resulted in a 700% increase in web enquiries, and a growth in demand for quality control equipment in the potato and fresh fruit sectors in developing countries, and with more local agents in more countries the company returned a 50% increase in export sales during 2021.

Pat Flynn, Trade Association Manager, Commercial Horticultural Association (CHA)

Pat Flynn (PF) introduced the CHA, representing manufacturers and suppliers of plants, services and products to the commercial horticulture sector around the world, covering ornamentals, arboriculture and fresh produce.

PF explained that a key role for CHA is to help its members promote their products and services, and the UK industry as a whole, throughout the world at trade exhibitions and via embassies and consulates, working closely with DIT.

As an accredited trade partner to DIT, CHA helps UK companies explore overseas markets, as well as assisting overseas partners to establish trade relationships with British suppliers.

PF outlined the four international trade events in Germany, Netherlands and Spain at which CHA organises a trade pavilion for UK exhibitors.

She explained that CHA also produces literature to highlight the UK's capabilities in the sector, as well as serving as advisers on horticultural projects, and assisting with trade and border issues to facilitate exports.

PF expressed confidence that the new Agri-Tech exports portal would help close the information gap for overseas growers wishing to access the expertise available from UK suppliers in the commercial horticulture sector, so enabling CHA members to realise their full export potential.

Spencer Claydon, Commercial Director, Claydon Seed Drills

From a fifth-generation family farming background, Spencer Claydon (SC) introduced his family-owned company, established in 1981 by his father to develop the technology needed to measure yields in the cab on combine harvesters, so providing farmers with the information they needed to improve production and input use efficiency.

SC noted that all the company's equipment was designed on the family farm – by farmers for farmers – adding that 20 years ago his father developed and patented the direct seed drill, removing the need to plough or cultivate soils before planting - at one fifth of the time and one third of the cost of a full cultivation system and with tangible benefits for soil carbon sequestration, soil health and reduced fuel use.

SC explained that he joined the family firm 10 years ago after graduating from university and working in the finance sector and in marketing with SAB Miller, the world's second largest brewer. He quickly recognised that although his father had developed a superb product, it was not being marketed to its true potential.

SC developed a marketing and export strategy – based on identifying a network of trusted distributor partners overseas - and the company is now exporting to over 30 countries globally, with distribution throughout most of Europe, Ukraine, China and most recently Australasia.

Exports now account for 60-70% of turnover, and overseas sales are expected to increase significantly over the coming years as new markets continue to develop. This in turn allows multimillion pound investment in production and staff here in the UK.

But despite the company's plan to grow turnover by tens of millions of pounds, SC noted that it was still a small player in a fiercely competitive multibillion pound sector dominated by huge European manufacturers.

He welcomed the support from DIT and the creation of the exports portal, highlighting the critical importance of the agricultural industry in feeding the world, and the manufacturing sector in supporting vital jobs, skills and export earnings for the UK.

SC concluded by urging the UK Government to support companies like his, as well as DIT and the trade associations, to be properly resourced to make exporting easier and more lucrative for team Great Britain.

Chris Jackson, Export Manager, UK-TAG and British Pig Association

Chris Jackson (CJ) explained UK-TAG's role in the collaborative effort alongside CHA and AEA to develop the new website aimed at helping UK businesses in Agri-Tech to expand and export.

With genetics representing the first limiting factor of life, CJ noted that the UK was home to some of the world's major livestock genetics companies, backed up by world leading R&D capabilities.

Getting that message out to the world is a key priority, he said, based on a long-term strategy to support British companies by providing expert market and industry knowledge, and growing export sales through presence at overseas exhibitions and sector specific seminars.

In addition to growing new and existing markets with established exporters, CJ explained how UK-TAG takes a mentoring role in helping new companies in the livestock genetics sector to identify suitable countries and trade partners to begin their exporting journey.

CJ thanked the UK Government and DIT for their support for this export initiative, adding that alongside developing and hosting the new portal, UK-TAG had produced a capability brochure highlighting UK technical expertise in R&D and commercial livestock genetics, covering dairy and beef cattle, sheep, pigs, poultry and goats.

Nigel Overend, Partner, Deerpark Pedigree Pigs

Nigel Overend (NO) introduced his company Deerpark Pedigree Pigs as a family partnership formed in 1958 and now spanning three generations.

The company specialises in pig Artificial Insemination (AI) and exporting pig genetics using fresh and frozen semen from pigs with the highest genetic merit and health status produced using environmentally friendly systems to supply the world.

NO explained that his company has expanded significantly over the past 20 years from a small business operating locally to an international exporter, with export sales increasing over the past five years from 5% of turnover to over 60% today, with key export markets now including the Philippines, Thailand, Vietnam and China.

NO emphasised that the company's export growth was in large part due to working with UK-TAG to identify and develop new markets (eg India and Africa) and with support from DIT to attend exhibitions and speak at seminars, backed by a long-term commitment to relationship building.

NO added that export success has also enabled the company to reinvest in the business, including a recent £300k investment in new lab facilities, so safeguarding future business activity and jobs in the UK, while also helping importers improve their livelihoods and reduce carbon footprints with better genetics.

3. Questions & discussion

The following key points arose during discussion:

The main purpose of the new portal is to make UK expertise in Agri-Tech more available and accessible to overseas markets, including sector by sector case studies for use by embassies and international partners to showcase what the UK has to offer.

The portal is hosted by UK-TAG and has been developed with the support of a steering group including CHA, AEA and the four UK agri-tech innovation centres: CHAP, CIEL, Agri-EPI Centre and Agrimetrics.

In terms of searchability, the new website is designed to enable users to search by key word, eg livestock genetics, which then returns a list of UK companies active in that sector.

The aim is to have as many UK Agri-Tech companies as possible listed on the website directory – this will also enable DIT to share information relating to missions, events and specific enquiries from overseas buyers.

DIT indicated that support is also offered to new and established Agri-Tech companies seeking to export through the Export Academy and other services in relation to general issues such as export credit guarantees and currency fluctuations, with the DIT agri-tech team working closely with specialists in the DIT's export finance team. This support is reinforced by mentoring and information provided by the individual sector trade associations.

The Steering Group is also looking at the next phase of the portal's development, which dependent on funding could include additional areas including opportunities to showcase and demonstrate the UK's strengths in early stage R&D taking place in research institutes and universities.

Seed-funding for the portal was provided by DIT and this has been supported by contributions from the trade associations and the four agri-tech innovation centres and LEPs.

Concluding the session, Julian Sturdy MP thanked the Minister, guest speakers and attendees for their contribution to a highly informative session on a very exciting and important initiative to raise the profile and drive export sales of UK Agri-Tech products and services.