

BRIEFING PAPER

The need for a new approach to training and skills provision in the agri-tech sector



The combined challenges of global population growth, volatile food prices, climate change and pressure on finite natural resources have brought a renewed focus on the importance of scientific and technological innovation in agriculture.

Meeting future food security and sustainable development goals will increasingly depend on primary producers having access to the latest technologies, products and practices to optimise the productivity and resource-use efficiency of their farming systems.

To support this process, a number of recent high-level reports and policy reviews have highlighted the need to strengthen industry-level training and skills provision in agriculture, and in particular to make the knowledge transfer process more integrated, accessible and responsive to the needs of farm businesses and their customers.

Agri-Tech Strategy

The UK Agri-Tech Strategy, launched jointly by BIS, Defra and DfID in July 2013, reflects a renewed policy emphasis within Government on measures to support a productive and efficient farming industry.

Part of a broader industrial programme focused on key opportunities for economic growth and recovery, the Agri-Tech Strategy positions agriculture as a strategically important sector of the UK economy, the starting point in a food supply chain worth £100bn, and the provider of raw materials to Britain's food and drink processors, our largest manufacturing sector.

The Agri-Tech Strategy brings renewed recognition of the UK's world-class strengths in agricultural science, and highlights the critical importance of increased investment in applied and translational research, supported by improved collaboration between public and private sector, as the platform to drive a competitive, resilient and innovative farm sector.

The Strategy also acknowledges that this increased emphasis on applied, industry-facing research must be matched by investment in industry-level training, knowledge exchange and skills development to realise the full on-farm potential of new technologies, products and practices:

*"Supporting the take-up of new technologies requires new and improved skills in the agri-tech sector and mechanisms to help businesses exchange knowledge."*¹

Noting that the proportion of UK agricultural businesses currently providing training to their staff is below average compared to other sectors, the Agri-Tech Strategy also states that:

*"...skills delivery is fragmented, which means there is limited collective work or agreement about likely future needs."*²

Food and Farming Review

Defra's *Food and Farming Review Report*, also published in July 2013, notes that while better research, technology and regulation have a key role to play in boosting agricultural productivity, increasing resilience to climate change and effectively managing the countryside:

*"...nothing is more critical to farming's success than ensuring that those who work in it are ambitious and skilled."*³

The Defra review focuses primarily on the barriers to attracting, training and recruiting new entrants to the farming industry, but also highlights the need for greater co-ordination of existing knowledge transfer initiatives to deliver the skills that farming needs.

Feeding the Future

The industry-led *Feeding the Future* report (commissioned by NFU, AHDB, RASE and AIC, published June 2013) points to fragmentation in the provision of training and skills development as a major barrier to improving the performance of the UK agri-food sector, calling for a more coherent and demand-led approach.

In particular, the report highlights a shortage of appropriate skills in the UK farm workforce to address the increasingly technological and commercial challenges of modern agriculture, noting that this is an industry-wide issue, as even the largest farming organisations lack the resources to develop and run effective training programmes on their own.

*"There needs to be a greater integrated approach to providing advice, training and skills – both for producers and the R&D and consultancy base – that acknowledges the increasing policy emphasis given to land-based issues of food production, alternative land use, climate change, adaptation and mitigation and the protection of natural capital."*⁴

Agri-Skills Strategy – Professionalism in Agriculture

The most recent strategy document produced by the UK Agri-Skills Forum, entitled *Professionalism in Agriculture – People, Progression, Profit*, was published in November 2013.

It focuses on the compelling need for a skilled and professional industry to realise the full potential of renewed investment in applied research and investment, noting that gaps in relevant practical research, and a lack of appropriate knowledge transfer mechanisms, are among the key factors preventing producers

from applying innovation at the farm level or performing at maximum efficiency.

*“It is highly unlikely the potential of existing knowledge, facilities, genetics and, most importantly, the people employed is currently fully realised.”*⁵

The report calls for a more integrated and co-ordinated approach to skills delivery, highlighting the importance of providing relevant, accessible, ‘bite-sized’ learning that is specific to business needs as the key to moving on from perceptions of training as a cost and compliance issue rather than an investment in future business success.

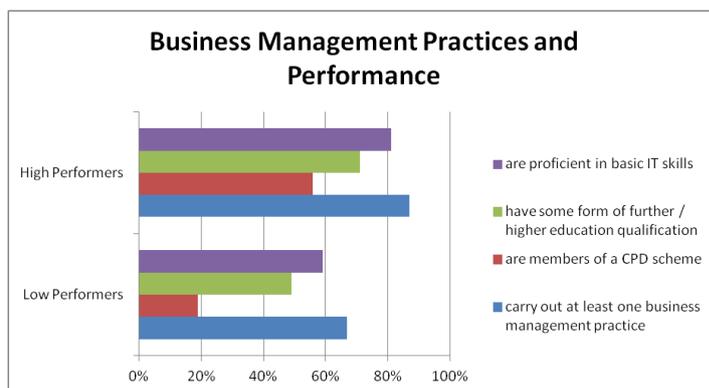
Current Status of UK Agri-Skills

Key Facts

1. Agricultural employers provide 2.5 days of training per employee per year, compared to a national average of 4.2 days per year;⁶
2. Fewer employees in agriculture received training over the past 12 months (41%) than in any other sector, compared with a national average of 65%;⁷
3. In agriculture, 73% of skills shortage vacancies (when an employer finds it difficult to fill a vacancy due to a lack of skills in applicants) occur because of a lack of technical, practical or job-specific skills;⁸
4. Fewer employers in the agriculture have training plans or budgets – 26% of employers in the agricultural sector in England have a training plan (vs. national average of 37%) and 21% have a training budget (vs. national average of 28%);⁹
5. Some 56% of high-performing farm businesses are in Continuous Professional Development Schemes, although 24% of all farm businesses claim not to be aware of CPD training opportunities;¹⁰
6. Low-performing farms are less likely to rate the value of training – 53% of low-performing farms identified no areas in

which they would like to improve their knowledge or skills, compared to 41% of high-performing farms;¹¹

7. Despite a relatively low level of engagement with training and skills development within the agriculture sector, the Farm Business Survey shows clear benefits of higher skills and qualifications, use of training and adoption of better business practices:¹²



8. According to the UKCES Sector Skills Assessment, knowledge and appreciation of the sciences and application of ICT are key future skills needed to deliver sustainable intensification and precision farming, particularly in the face of concerns over food security and a growing global population;¹³
9. Crop agronomy, pest and disease identification and control, and practical conservation techniques are among the specific skills identified by UKCES as high priority areas required to address the future challenges for the UK farming sector;¹⁴
10. The agricultural workforce is ageing, with 55% of individuals in the sector aged over 45, compared with 38% across all sectors. The number of individuals in the sector aged over 60 increased from 57,000 in 2002 to 84,000 in 2010. The under-25 age group declined over the period by 1.9% per annum on average compared with 1% growth across the whole economy.¹⁵

¹ A UK Strategy for Agricultural Technologies, HM Government, July 2013

² Ibid

³ Food and Farming Review Report, Defra, July 2013

⁴ Feeding the Future Report, Joint Commissioning Group, June 2013

⁵ Professionalism in Agriculture, Agri-Skills Forum, November 2013

⁶ UK Commission’s Employer Skills Survey 2013, UKCES, February 2014

⁷ Climbing the ladder: skills for sustainable recovery, UKCES, July 2014

⁸ UK Commission’s Employer Skills Survey 2013, UKCES, February 2014

⁹ Farm Business Survey Management Practices Module 2011/12, Defra

¹⁰ Ibid

¹¹ Farm Business Survey Management Practices Module 2011/12, Defra

¹² Ibid

¹³ UKCES Sector Skills Assessment for Agriculture, Forest and Fishing 2012

¹⁴ Ibid

¹⁵ Ibid

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