



Cheshire and Warrington
Local Enterprise Partnership



Worcestershire
Local Enterprise Partnership

Stoke-on-Trent
& Staffordshire
Enterprise Partnership

Scoping Study - Agri-Tech West



Executive Summary

Final Report

November 2016

EXECUTIVE SUMMARY

- ES.1 This Agri-Tech West Scoping Study has been prepared on behalf of four Local Enterprise Partnerships (LEPs) – Stoke and Staffordshire, The Marches, Cheshire and Warrington and Worcestershire – to examine the support for and outline of a united identity for the agri-tech sector across the four LEP areas, to be known as Agri-Tech West.
- ES.2 Agri-tech is a broad sector, encompassing significantly more than on-farm activities. This report does not set out an industry SIC Code based definition or an exhaustive list of technologies – but uses an umbrella definition of the **‘use of technology to achieve sustainable productivity growth in agriculture and processing.’** All four LEPs have Strategic Economic Plans that include agri-tech to some degree – some with strong emphasis on food and drink and some concentrating on advanced engineering and its links with the rural sector.
- ES.3 The agriculture, food and drink processing and related technologies sectors were reviewed to provide an understanding of the Agri-Tech West area’s asset base, including subarea strengths and comparative advantages. This asset base review determined that the Agri-Tech West area has a solid and diverse agri-tech sector, with a **broad-based agricultural industry, a variety of small and large food processors, an established engineering sector and a network of land-based and/or engineering education institutions.** There are subarea differences and niches throughout the Agri-Tech West area, as well as several commonalities.
- ES.4 The Agri-Tech West area’s broad agriculture base is complemented by the breadth of the support or downstream industries, including:

Food Processing	Beverage Processing	Agricultural Supplies	Services
<ul style="list-style-type: none"> • Meat processing • Prepared meals • Salad and fresh products • Dairy products • Desserts and confectionery • Gourmet products 	<ul style="list-style-type: none"> • Cider • Milk • Ale 	<ul style="list-style-type: none"> • Machinery and componentry • Fertiliser production • Animal feed 	<ul style="list-style-type: none"> • Land-based education • Livestock breeding • Engineering and maintenance

- ES.5 The West Midlands is an important **engineering** centre with a broad base. There are established businesses serving the technical needs of the rural sector. However, the engineering base in the region is far broader than just that applied to agricultural machinery. There are opportunities for engineering firms in the region to apply their skills to the agri-tech sector. A higher profile of the technical needs and applications for agriculture and processing through an Agri-Tech West structure will help to take advantage of this engineering base.
- ES.6 The **education** sector is a key strength of the Agri-Tech West area, with a network of FE and HE institutions with specialisms in the land based economy and/or engineering. This network of education sites across the area is undertaking research and trials into a wide range of innovative technologies and practices (e.g. advanced engineering, machinery, sensors, genetics, data and weather forecasting) that can be applied to agriculture. These facilities will be a key on-going resource for further integration of the agri-tech sector.
- ES.7 The agri-tech sector in Cheshire and the West Midlands is mostly characterised by the application of technology by end users, rather than the production of new technologies by large research firms. That is not to say that there were no new technologies being developed in the area, but that the largest component of the agri-tech sector is the end user – the large and broad agricultural and food and beverage sectors. This suggests that supporting the access to appropriate technology that improves productivity in the sector should be a key focus of any support programme.
- ES.8 Take-up of technology is dependent on the size of the firm, with smaller firms less able to increase productivity through technology than larger firms, due to capital costs and opportunities for research and development. However, a coordinated, supply chain approach towards improving productivity has more capacity to access new technologies.
- ES.9 Representatives of the agri-tech sector, including businesses, industry organisations, public sector and education, were consulted to gauge the local appetite for an Agri-Tech West identity and to gain further insights into the mix of sectors. It was firmly established that there was **broad support for Agri-Tech West** to represent the West Midlands and Cheshire area and to provide an agri-tech information portal.
- ES.10 It is recommended that the four LEPs form Agri-Tech West as a **flexible alliance**, joining resources on particular projects as appropriate to promote agri-tech in the area,

but retaining independence and control of strategic planning at the LEP level. The table below outlines the priority projects and key actions recommended to establish and roll-out an Agri-Tech West programme.

Table E1 – Priority Projects

Project	Actions
<i>Initiating Agri-Tech West</i>	
Establish the Agri-Tech West entity	<ul style="list-style-type: none"> • Agree on a structure for Agri-Tech West. • Confirm areas within Agri-Tech West area, including a commitment of the 4 LEPs and enquiries to neighbouring areas. • Assemble a board/steering group for Agri-Tech West and a reporting structure • Commit LEP funding • Develop a Business Plan for Agri-Tech West
Financing	<ul style="list-style-type: none"> • Development of a list of key funders willing to operate in this sector and the likely terms of support. • Examine the possibility of a soft loan fund to assist in the take-up of the technology. • Through the LEPs, lobby government agencies for funding, including devolution of central funding • Through the LEPs investigate options and apply for EU funding. • Investigate other funding sources, such as paid services or membership fees
<i>Skills and Education</i>	
Promote further collaboration between educators/researchers	<ul style="list-style-type: none"> • Identify areas of duplication and overlap in training provision. • Prepare a agri-tech skills audit for the Agri-Tech West region to identify gaps in knowledge and training. • Identify areas of apprenticeship need and prioritise these areas in further support of the education sector. • Support and encourage cross collaboration of FE/HE courses spanning different institutions.
Promote agri-tech as a career in the region.	<ul style="list-style-type: none"> • Prepare an agri-tech promotional programme to be disseminated to schools and colleges. • Prepare a programme of jobs fairs for agri-tech, to be held throughout the Agri-Tech West area and in conjunction with and support from FE/HE and industry bodies. • Investigate options of incentivising agri-tech apprenticeship take-up, including encouraging public sector apprenticeship programmes, targeted support for agri-tech SMEs to take apprenticeships and scholarships or similar for students.
<i>Application of Innovation – LEPs and Networks</i>	
Promotion of Agri-Tech West as an information/signposting portal for the sector	<ul style="list-style-type: none"> • Establish and maintain an Agri-Tech West website and social media presence • Use LEP resources to establish a physical presence/desk within each LEP area. • Launch event for Agri-Tech West • Prepare a detailed compilation of information on programmes, resources, funding, support, networking, etc., at the Agri-Tech West area and UK levels.

Project	Actions
	<ul style="list-style-type: none"> Establish working links with existing programmes of business support (e.g. Growth Hubs, Catalysts, local authorities, etc.)
Applying technology to agriculture	<ul style="list-style-type: none"> Prepare a programme of regular information events (both physical and web-based) that have the objective of exposing participants to emerging technologies and technology providers. In concert with other industry organisations (e.g. AHDB, NFU) develop a common platform for dissemination of information and research into emerging agri-tech technology and practices
Strengthening supply chain links	<ul style="list-style-type: none"> Provide a go-between for small primary producers to develop supply relationships with processors, cooperatives and markets. Investigate software/website options for primary producers to promote their products as they are ready to harvest.
Brexit position – strategy, lobbying and guidance	<ul style="list-style-type: none"> Prepare a positioning paper for the UK Government that outlines key items that need to be addressed and clarified for the agri-tech sector and Agri-Tech West's position on behalf of the industry. Liaise with other industry organisations, particularly agricultural and manufacturing bodies to explore opportunities to present a united position for lobbying.
Opportunity for New Products and Innovations	
Network of best practice operations	<ul style="list-style-type: none"> Compile a network of leading businesses and operators in the region that would be willing to showcase their operations Encourage industry operators to visit the network of best practice operations through Agri-Tech West promotional material and events. Encourage visitations to the research centres and trial farms within the network of FE and HE institutions.
Evaluation of technologies	<ul style="list-style-type: none"> Development of fact sheets setting out the relevance of technological improvements to different sectors, the likely costs and the benefits achieved by adopters.
Sectoral support – dairy, horticulture, food and drink production, advanced manufacturing, genetics, etc.	<ul style="list-style-type: none"> Establish sectoral committees as appropriate. Sectoral committees to prepare and present a plan for the support and growth of each sector. Investigate options for a 'business mentoring' programme where start-up/SMEs are paired with established firms/business leaders in the area for support and
Long Term Options	
Long term option – centres of excellence, pilot plants, model farms, etc.	<ul style="list-style-type: none"> Review the asset base within education facilities and the established network of best practice options to identify gaps. Consult with the agri-tech sector to identify areas of need in terms of demonstration facilities. Identify a site(s) for such facilities, with it being recommended that any facilities collocate with existing assets (e.g. FE/HE) to minimise costs. Undertake a feasibility analysis on such facilities, which will examine capital costs, land acquisition, on-going costs, revenue streams and benefits to the industry.

Source: BE Group and Mickledore