



Invest in Dorset's Agri-Tech Sector

‘Dorset is committed to improving the productivity of its land based sectors, to provide skilled jobs, and contribute to better food security for the UK’

DORSET has a very long, productive and proud tradition of farming that has shaped Dorset’s beautiful landscape. Altogether 77% of the land is farmed; the land use reflects upon the varied geology including arable farming on the rolling chalk hills and productive grass in the clay river valleys. Dorset dairy farming is of national importance providing significant quantities of milk for London and the south east. Beef and sheep grazing maintain the landscape. Wheat, barley and rape are the key arable crops grown.

Definition of Agri-Tech in this proposition

“Any technology on the farm, or that crosses the threshold of the farm, for use in agriculture, horticulture, or aquaculture.”

Dorset’s Agri-Tech worth £108m, currently employing about 700, an important contributor to the South West’s Agri-Tech which is worth £1.03billion, currently employing about 3,800 with over 200 SMEs



Why invest in UK/Dorset in Agri-Tech?

Dorset is the home of Kingston Maurward College which specialises in agricultural and horticultural practise.

Dorset is home to Livestock Improvement Corporation, Danisco, Netzsch Pumps and many other foreign owned companies

The UK is a global centre of excellence for Agri-Tech R&D and innovation offering overseas businesses that benefits from access to:

- A fully integrated agricultural food supply chain worth £96 billion annually
- Dorset Gross Output £306 million, GVA £112 million
- 197,009 ha of Dorset's land area is farmed under a commercial farm holding (74% of Dorset's land area).
- With an area of 2,653 km², Dorset covers 11.1% of the South West's land area
- 61.4% of Dorset's farmed land is owned by the farmers managing it
- There are 2,241 commercial farm holdings in Dorset *(8.8% of those found in the South West)
- World leading researchers across all disciplines relevant to Agri-Tech with a track record of delivering for business
- A launch location for global networks
- A fair and transparent regulatory environment
- An internationally competitive tax regime
- A business environment that encourages and rewards R&D through generous tax credits
- Robust IP protection and tax relief for patents developed in the UK
- Government financial support to de-risk projects
- A highly skilled and flexible workforce
- 5,974 directly employed in agriculture in Dorset, that is 9.8% of the South West's farm workers
- UK universities generate an astonishing 13.8% of the world's most highly-cited scientific papers (second only to the US)
- Big Data – the UK has some of the world's best and most complete data-sets in healthcare, demographics, weather reports, agriculture and the environment and the ability to integrate, interrogate and utilise these
- The UK also has a well-established infrastructure for testing and certification



What are the benefits?

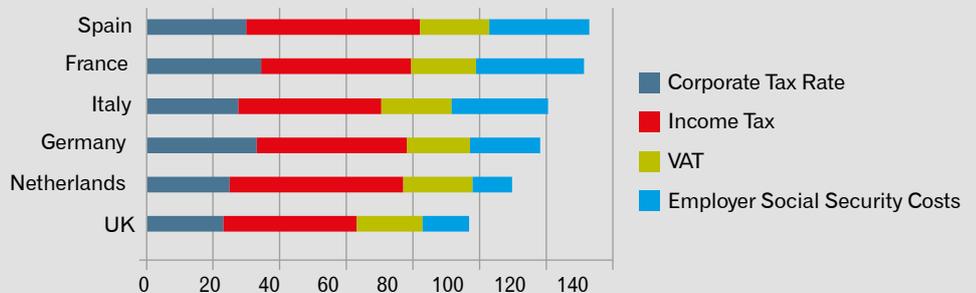


Companies collaborating with the UK's world leading centres have:

- Developed unique products that have given them competitive advantage and long term revenue streams
- Added new value to their reputation through new innovative products
- Overcome technical barriers to improve products and processes
- Discovered new talent and developed existing staff.
- Great quality of life
- The Dorset LEP Inward Investment Team aims to support Dorset's Agri-Tech offer in
 - The Science Base
 - Food & farming supply chain
 - Seeking global markets

Lowest Headline Corporation Tax in G7

- 24% in 2013
- 21% in 2014
- 20% in 2015





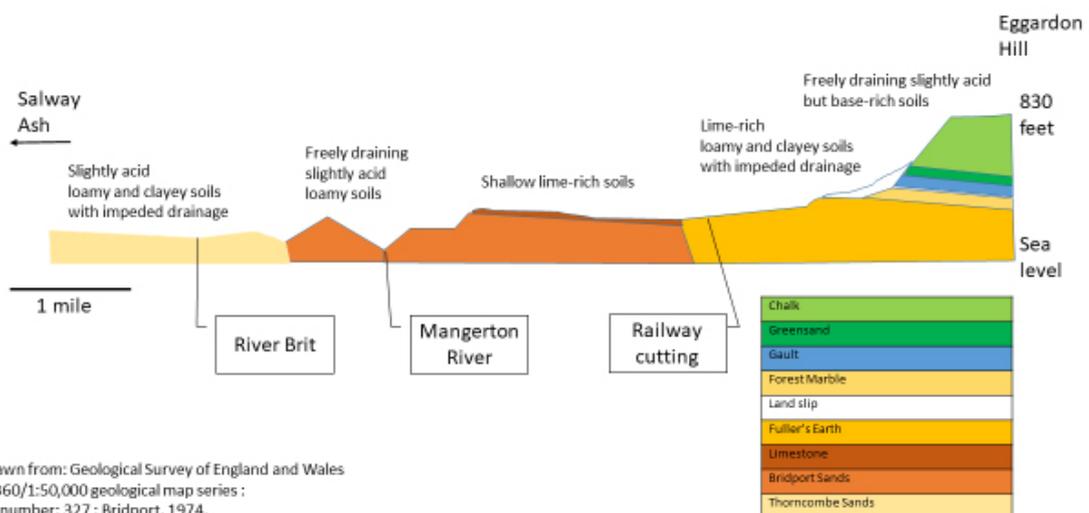
CASE STUDIES

MK SOIL SCIENCE LTD

MK Soil Science Ltd is a micro business based in Beaminster, Dorset, specialising in strategic support for protection of soil resources and the management of soil health - at local, regional and global levels. Its international clients include the United Nations Economic Commission for Europe, the European Environment Agency and the European Commission. Its principal, Mark Kibblewhite, is an Emeritus Professor at Cranfield University, an Emeritus Research Associate at Landcare Research New Zealand and a Past President of the Institution of Agricultural Engineers.

Current advances in Agri-technology provide opportunities to increase agricultural productivity while enhancing soil health and reducing the damage to the wider environment caused by soil degradation. Key to harnessing these advances is being smart about which types and forms of production are done where in the farmed landscape. This requires careful and informed assessment of soil capabilities, choice of agricultural systems, land allocation and machines. The result is an effective platform to exploit rapid advances in information technology and semi-autonomous machines for a more productive and resilient agriculture. MK Soil Science offers its clients strategic insights about emergent soil management options and supports business planning at single farm to global levels."

SOILS FROM EAST OF SALWAY ASH TO EGGARDON HILL



Re-drawn from: Geological Survey of England and Wales
1:63,360/1:50,000 geological map series :
Sheet number: 327 : Bridport. 1974.
Soil descriptions from: Soils for England and Wales,
National Soil Resources Institute (NSRI), Cranfield University.

CASE STUDIES

SYNERGY VETS

Synergy Farm Health deliver excellent clinical solutions to farmers through a committed and motivated team of Veterinary Professionals. Covering Dorset, Somerset and East Devon, Synergy provides a complete veterinary service for all farm animals, striving to provide the most current veterinary techniques and advice for animals under our care, focusing on prevention as well as cure. Synergy are proud to provide farmers with a proactive progressive service from our local veterinary teams providing continuity and consistency and building that all important trust between farmer and veterinary surgeon.

We continue to focus on innovation, new technology and more efficient use of data in tandem with our particular interests in research and education. As an example of this we have over the last five years been monitoring our antimicrobial data during which time this has shown a constant reduction in antibiotic use. Our clients are now below the government target set for 2020, and we will continue to work with our farmers to deliver health rather than treat disease. We are very active within the food production chain being advisers to retailers and processors as well as producers and through data analysis and education we are committed to making a palpable difference going forward.

Synergy has always been proud to invest in the future and see our veterinary student training programme with the Royal Veterinary College, University of London as an important strand of our strategy to create great vets of the future. We take this teaching experience into our farmer education courses, which are very much hands on and experiential to deliver great value and practical learning experiences for our attendees.

We have been involved in a great number of research projects and are proud to boast that all our teams are viewed among the country's leading experts in their fields with particular reference to the current activities of the Lameness, Youngstock, Beef and Sheep teams at recent conferences and events. We continue to recruit highly skilled and ambitious people to further enhance our services to our innovative and progressive client base.



CASE STUDIES

DORSET CLEANERFISH LIMITED

The Scottish salmon industry produces 170,000 t/yr of salmon in sea cages along the west coast of Scotland and in Orkney and Shetland. In recent years, the industry has had recurring problems with sea lice infestations that weaken the salmon making them more susceptible to other diseases. This issue has been highlighted in the press and media recently and is causing concern within the industry and environmental groups.

In the past, the industry used various chemical treatments to reduce lice populations but the lice have become resistant to these chemicals and there are also environmental issues resulting when the chemicals and their residues are released into the sea.

Recently the industry has turned to using biological methods of control in the form of 'cleanerfish' which co-habit with the salmon and feed on the lice. The 2 main species used are ballan wrasse and lumpfish.

Dorset Cleanerfish Ltd is a joint venture company between the largest salmon farming company in the world, Marine Harvest and a local company Native Marine Centre Ltd. The company was the first lumpfish producer in the UK and has been producing lumpfish since 2013.

Today the company has production units in Portland Port and Castletown and employs 7 people and produces 750,000 fish/yr.



Lumpfish eggs



Lumpfish and consumed lice



DCL's nursery building in Castletown



Nursery tanks

CASE STUDIES

CEFAS

National Lobster hatchery, Padstow, Centre for Environment Fisheries & Aquaculture Science, Weymouth, Exeter and Falmouth universities and Westcountry Mussels of Fowey.

THE LOBSTER GROWER 2 PROJECT – AN EXAMPLE OF COOPERATION FOR GROWTH FROM THE UK

Lobster Grower 2 (LG2) is a three-year collaborative project (funded by Innovate UK, BBSRC and the Worshipful Company of Fishmongers) that will establish a pilot scale marine lobster (*Homarus gammarus*) farm, whilst addressing key areas for the growth and development of this specific sector and de-risking environmental impact concerns. The project involves a registered charity and tourist attraction, a government agency, two universities and a commercial aquaculture business. Industrial oversight and inputs are provided by a steering group consisting of fish processors, supermarkets, NGO's, shellfish producers, local fishermen, fisheries management and the Crown Estate. This project follows on from LG1, a successful early stage proof of concept Agri-tech catalyst project.

Key Deliverables

Key deliverables during the three-year project will be:

- Field testing of the on-growing container systems developed as part of the Lobster grower 1.
- Development and testing of new innovations relating to anchoring systems
- Optimisation of stocking and husbandry protocols
- Production of an aqua-economic model for prospective new lobster farmers
- Screening and investigating lobster health in brood-stock, the hatchery and the on-growing system.
- Investigating and monitoring for environmental impacts
- Developing an understanding of the markets and economics
- Clarification of the regulatory framework.
- A road map for further development of Lobster Aquaculture.



Why Dorset is right for you



- ✓ Dorset lies within the South West of England, a very rich region for agriculture.
- ✓ The excellent water quality of Dorset's inshore waters has enabled a diversity of aquaculture to develop. There is significant potential for this sector to expand at sea and on land.
- ✓ Dorset is already the UK base for Livestock Improvement Corporation Ltd of New Zealand, Danisco Beaminster Ltd, Netzsch Pumps Ltd, Pearce Seeds LLP, Ryvita, Dorset Cereals, Badger Beers, Palmers Ales, Chococo and many more businesses involved in the sector
- ✓ Agriculks, Portland Port is home to 3 large animal feed sheds for the import of product from South America, North America, North Africa and the Middle East and Europe. The product serves the agricultural markets of south west England and in 2016 the port handled around 180,000 tonnes of animal feeds and grains.
- ✓ Synergy Vets in Dorset lead with Bishopton Vets of North York with RAFT Solutions and the Cattle Lameness Academy
- ✓ A skilled and experienced workforce
- ✓ Easy access to major HE centres of excellence and world class and Russell Group universities:
 - University of Reading
 - University of Bristol and the Veterinary Investigation Service for the South West of England
 - Bristol Robotics Laboratory, University of West of England
 - University of Southampton
 - University of Exeter
 - Plymouth University
 - Royal Agriculture University
 - Harper Adams University
- ✓ The National Centre of Animation at Bournemouth University
- ✓ Bournemouth University leading in cyber security
- ✓ The South West's National Catapult, the National Composite Centre, near Bristol
- ✓ In easy reach of major air and sea ports

- ✓ Over 90% coverage of Superfast Broadband, and investment secured for the roll out of Ultrafast broadband
- ✓ A Great Place to do business situated on the central south coast of England
- ✓ UNESCO designated World Heritage Site – the Jurassic Coast, England's first and only Natural World Heritage Site
- ✓ Protected landscapes: Areas of Outstanding Natural Beauty with South Dorset Ridgeway Projects in environmental management with sustainable economy
- ✓ The Dorset Enterprise Zone near Dorchester to be opened April 2017 and focusing on advanced engineering and manufacturing, with access to Ultrafast broadband
- ✓ Dorset Food & Drink is a membership organisation for everyone proud to be growing, making, selling, serving, supporting and buying Dorset food and drink, including both larger and artisan producers.
- ✓ The thriving local food sector, supported by Dorset Food & Drink, delivers local, sustainable food from 'plough to plate'.
- ✓ Great chefs in Dorset: Mark Hix's Oyster & Fish House, Lyme Regis and Lesley Waters famed Cookery School at Halstock
- ✓ Home to the original River Cottage TV series with Hugh Fernley-Whittingstall
- ✓ 2 family owned breweries – Hall & Woodhouse (Blandford St Mary) and Palmers (Bridport)
- ✓ Local Farmers' Markets
- ✓ Thriving festivals such as the Sturminster Newton Cheese Festival, Weymouth Seafood Festival, Poundbury Foods, Dorset Knob Throwing and Frome Valley Food Fest and many other local fairs



Dorset at a glance



- Total expenditure on environmental stewardship schemes in Dorset in 2011/2012 amounted to £7.2 million.
- 250 foreign owned businesses are established in Dorset including world leaders: JP Morgan, Sunseeker International, Atlas Elektronik UK, Siemens, Sharp, Honeywell, Merck, Hitachi, Manitou, Deutsche Bank, Dupont and Caterpillar Marine.
- 1 International Airport and 2 Ports in Dorset providing strong links to mainland Europe and Channel Islands, and the Port of Poole with a long history of handling agricultural bulk products. The Port of Southampton Container Terminal within 1 hour's drive time.
- Excellent road connections to London, the Midlands and the North
- Dorset is home to Bournemouth Airport and both Exeter and Southampton Airports are easily accessible within 1 hour's drive time. Bristol, London Heathrow and Gatwick Airports are within 2 hours drive time.
- CEFAS in Weymouth is a world leader in marine science and technology, collecting, managing and interpreting data on aquatic environment biodiversity and fisheries.
- The Freshwater Biological Association have had R&D facilities on the River Frome near Wareham since the late 1960s primarily to conduct research on rivers.
- The Rivers Community Group of Queen Mary's College, University of London, is also based with the Freshwater Biological Association on the River Frome at East Stoke and seeks to advance understanding of freshwater ecosystems such that they can be better protected and managed sustainably in a changing environment.
- The Game Conservancy & Wildlife Trust have their own R&D facilities also on the River Frome. On the River Frome in Dorset the total number of adult salmon returning to spawn has been monitored since 1973 by a fish counter at East Stoke. These long-term records represent the most comprehensive record of salmon movement in England and Wales.



Assets



Key sub sectors:

- 🐄 Dairy (178,895 cows) 10% of the South West's cows
- 🐄 Dorset is home to the largest number of goats in the South West (50%)
- 🐄 67,697 pigs, 17.% of the South West's pigs
- 🐄 176,238 sheep, 6% of the total in the South West
- 🐄 1,829,027 poultry, 9.4% of the South West's poultry
- 🐄 69,310 Hectares of arable farmland, 60.4% (41,846.4ha) is cereal crops, that is 21.2% of Dorset's farmed area and 13.9% of all the South West's cereal production
- 🐄 Dorset's farmed area
 - Grassland 58%
 - Arable 35%
 - Farmed woodland 4%
 - Other 3%
- 🐄 Dorset's horticulture sector contributes 4.7% of the South West's fruit and vegetable production
- 🐄 Aquaculture, supported by a strong marine engineering sector in Dorset
- 🐄 Leading veterinary services
 - Welfare
 - Hygiene
 - Genetics
- 🐄 A strong advanced engineering & manufacturing sector with close links to Agri-Tech
- 🐄 A leading Creative/Digital Sector
- 🐄 Contracted supermarkets

Examples of Dorset's key assets:

- 🐄 The Kingston Building, Kingston Maurward College
- 🐄 Cosy Calf
- 🐄 Crop Desk
- 🐄 Danisco (Dupont)
- 🐄 Livestock Improvement Corporation of New Zealand
- 🐄 MK Soil Science
- 🐄 Moowell
- 🐄 Quill Productions
- 🐄 Silclear
- 🐄 Symms Fabrications
- 🐄 Tractors UK
- 🐄 ABP Food Group
- 🐄 C J Cox Agricultural Engineers
- 🐄 GCS Crook Agricultural Engineers
- 🐄 Highwood Agriculture
- 🐄 Philip Trim Contractors
- 🐄 C Smart Agriculture Services

Special Events

- 3 Dorset County Shows – Gillingham & Shaftesbury, Melplash at Bridport and the Dorset Show held near Dorchester
- Royal Bath & West Show, Somerset
- Royal Cornwall Show, Cornwall
- Royal Three Counties Show, Worcestershire
- Devon County Show, Devon
- Honiton Show, Devon
- The Livestock Event, National Exhibition Centre, Birmingham
- The Cereal Event, Lincoln
- Smithfield Show, London



Key organisations and associations working within Dorset:

National Farmers Union
Country Landowners Association
British Grassland Society
Kingshay Dairy Consultants
Farming & Wildlife Advisory Group (FWAG) South West
The Soil Association

Dorset's Talent



Kingston Maurward College near Dorchester - 2,000 students

As a place of learning 40 Apprenticeship courses are supported by the college with a particular emphasis on Agri-tech and other associated land based operations.

The College also runs many other Part-time, Full-time and also Higher Education courses in:

- Veterinary Nursing
- Agricultural Science
- Para Veterinary Science and
- Animal Behaviour & Welfare

The 18th century house is situated within a 300 ha mixed farming estate which includes a 120 cow dairy herd, 400 sheep flock and an arable enterprise. All of which are farm assured.

The College works in collaboration with the international company Velcourt to manage these enterprises, with their world class technology. This supports Kingston Maurward's role of improving the skills available in the fast moving Agri-tech industry using new on-site Agritech facilities on the estate.

The College works with schools countywide and beyond and over 300 employers constantly forging links with young people and employers.

The formal gardens of the historic house are looked after by the Horticulture department who have state of the art glass houses installed.

The Royal Veterinary College, University of London has its southern base here at the College.

Kingston Maurward is also an excellent venue, already hosting many knowledge transfer events for practitioners and businesses, where new animal health topics, arable & grassland strategies etc are discussed and rolled out.

www.kmc.ac.co.uk



National Centres of Excellence...

- Industry-focused Food Research Association Campden BRI
- Leatherhead Food Research
- Plant Science – John Innes
- Animal Science – Pirbright Institute
- The Cattle Lameness Academy, Synergy Vets, Dorset

UK Centres for Agri-Tech Innovation in Agronomics

Centre for Crop Health and Protection (CHAP),
Centre for Innovation, Excellence in Livestock (CIEL) and
Agricultural Engineering Precision Innovation Centre at
Edinburgh
York
Harper Adams and Cranfield

The Centres for Agricultural Innovation are a new collaborative model between the agri-tech sector and government. The centres will help the UK:

- Turn agricultural innovation into commercial opportunities for UK businesses
- Encourage inward investment
- Improve farming practice

University of Reading – Big Data

A new multi-million-pound world-class environmental science 'big data' research and analysis centre was opened at the University of Reading in 2015. The cutting-edge centre will unlock huge, complex and growing environmental datasets and the latest computational modelling, satellite and earth observation research – turning them into commercially viable ideas. The facility aims to bridge the gap between the UK's world-leading researchers and decision-makers handling the biggest societal challenges facing the world – from dealing with declining global food security from climate change to predicting and mitigating the impact of extreme weather events on global finance.



Dorset is Great for...



Housing, Education, Health Services, Shopping, Leisure and Sports Facilities



World renowned natural environment historic sites and buildings and UNESCO World Heritage Site "Jurassic Coast"



'Outdoors Lifestyle' walking, cycling, diving, windsurfing and sailing and many other sports available for participation



Local foods and hospitality from fashionable restaurants to rural pubs and local farmers markets



We can assist with...



Location information



Commercial Property search, introductions to land agents and real estate agents, residential property market agents



A tailored introduction service to Dorset is offered to help meet your various site visit requirements and relocation information to support staff and families



Local general information and economic intelligence



Information on local financial support and national schemes



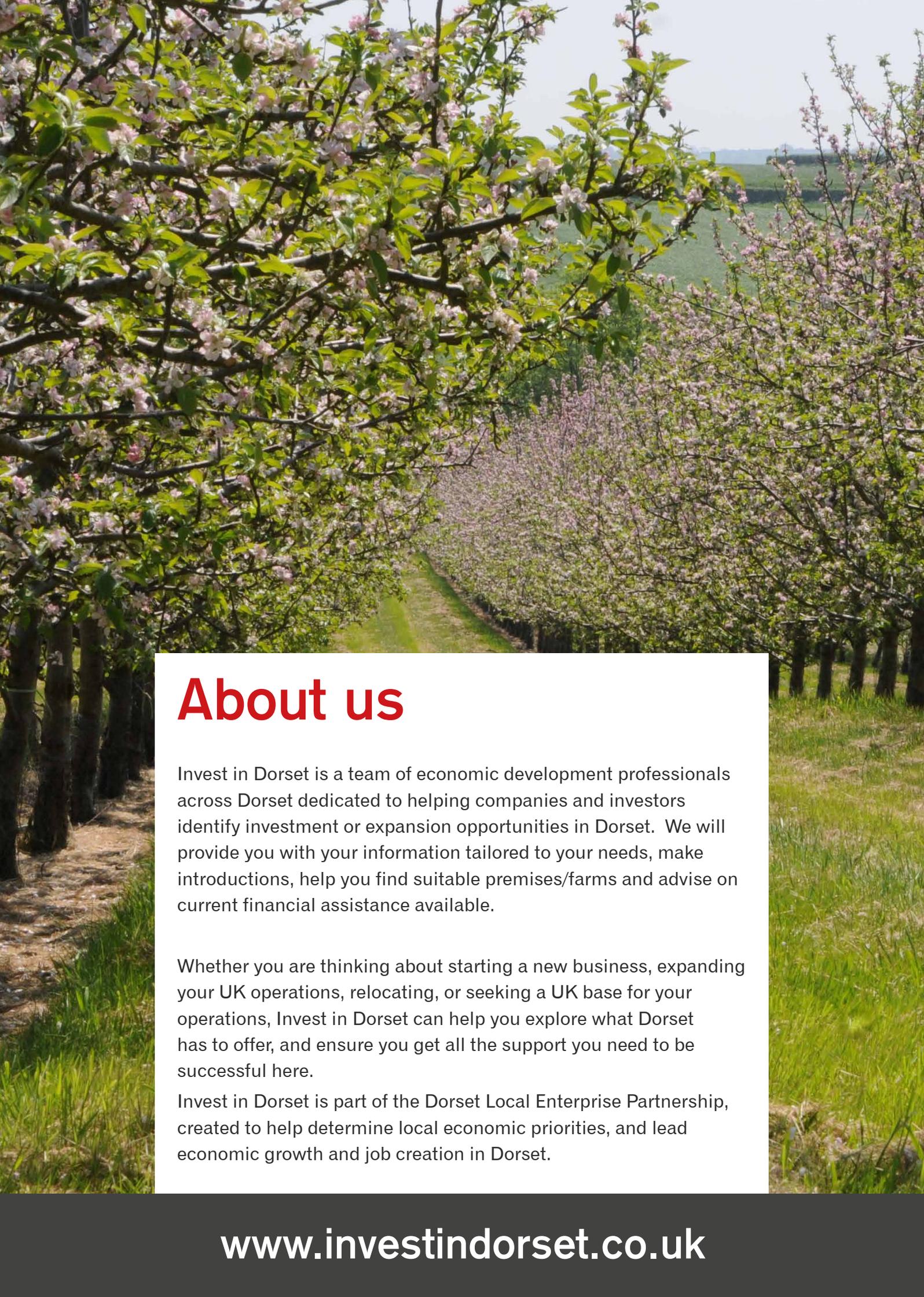
Introduction to local and sector networking groups



Find out more at www.investindorset.co.uk



Contact us at www.investindorset.co.uk



About us

Invest in Dorset is a team of economic development professionals across Dorset dedicated to helping companies and investors identify investment or expansion opportunities in Dorset. We will provide you with your information tailored to your needs, make introductions, help you find suitable premises/farms and advise on current financial assistance available.

Whether you are thinking about starting a new business, expanding your UK operations, relocating, or seeking a UK base for your operations, Invest in Dorset can help you explore what Dorset has to offer, and ensure you get all the support you need to be successful here.

Invest in Dorset is part of the Dorset Local Enterprise Partnership, created to help determine local economic priorities, and lead economic growth and job creation in Dorset.

www.investindorset.co.uk

