

### Land-based and environmental industries

Businesses in the land-based and environmental sector enhance the quality of life for everyone in England. They improve well-being, supply quality assured food production, ensure the health and welfare of animals, provide leisure activities, enrich the rural environment and urban green space and protect our natural heritage.

#### Overview

##### Business figures

- Official statistics estimate that there are 116,690 (5.3%) businesses in the sector in England
- As official data excludes many land-based and environmental businesses, Lantra estimates there are about 158,660 businesses in the sector in England
- Estimated figures are 36% greater than the figure obtained through official data sources.

##### Businesses by size<sup>1</sup>

- The sector is dominated by micro-businesses
- 97% of businesses in the sector have a workforce of ten staff or fewer, compared with 83% across all sectors in England.

##### Employment figures

- Official statistics estimate that there are 478,600 (2%) people employed within the sector in England
- As official data excludes many land-based and environmental employees, Lantra estimates there are about 905,500 employees in the sector in England
- Estimated figures are 89% greater than the figure obtained through official data sources.



#### Size of the sector

Industry	Businesses 1,4,5,7,8		Employment 2,4,5,7,8,9	
	Count	%	Count	%
Agricultural crops <sup>3</sup>	23,230	15%	57,150	6%
Agricultural livestock <sup>3</sup>	36,530	23%	223,450	25%
Animal care	17,060	11%	189,650	21%
Animal technology	n/a	n/a	n/a	n/a
Aquaculture	240	<1%	1,500	<1%
Environmental conservation	2,000	1%	61,400	7%
Equine	18,500	12%	36,550	4%
Farriery	2,220	1%	2,200	<1%
Fencing	3,600	2%	16,800	2%
Fisheries management	120	<1%	350	<1%
Floristry	8,200	5%	12,600	1%
Game and wildlife management	11,460	7%	24,000	3%
Horticulture, landscaping and sports turf	13,760	9%	111,200	12%
Land-based engineering	1,660	1%	8,500	1%
Production horticulture	14,100	9%	106,100	12%
Trees and timber	2,080	1%	13,150	1%
Veterinary activities	3,940	2%	40,850	5%
<b>Total<sup>12,13</sup></b>	<b>158,660</b>	<b>100%</b>	<b>905,500</b>	<b>100%</b>

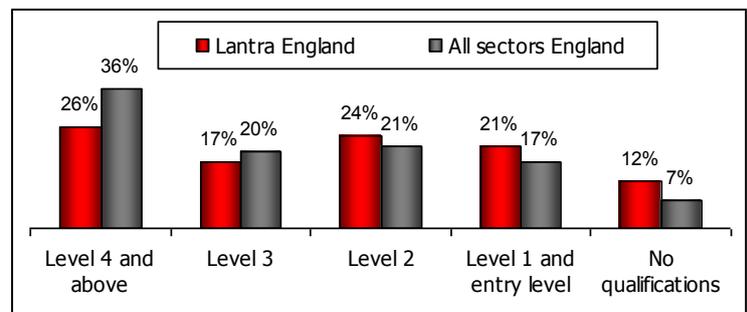
## Workforce demographics<sup>9,12</sup>

<b>Gender</b>			
Male	65%	Female	35%
<b>Age band</b>			
16-24	14%	45-54	24%
25-34	17%	55-64	16%
35-44	22%	65+	8%
<b>Employment</b>			
Full-time	75%	Part-time	25%
<b>Self-Employment</b>			
Self-employed	42%	Employee	56%
Unpaid family worker			2%
<b>Occupations</b>			
Managers and senior officials (e.g. farm, forest, shop, zoo or practice managers)	12%		
Professional occupations (e.g. veterinary surgeon, manufacturing service engineer)	6%		
Associate professional and technical occupations (e.g. community ranger, head green keeper)	4%		
Administrative, clerical and secretarial occupations (e.g. farm secretary)	6%		
Skilled trade occupations (e.g. farmer, tree surgeon, florist)	43%		
Personal service occupations (e.g. veterinary nurse)	4%		
Sales and customer service occupations (e.g. pet shop assistant)	7%		
Transport and machine operatives (e.g. tractor/machine/chainsaw operative)	4%		
Elementary occupations (e.g. fruit picker)	16%		



## Qualifications<sup>9,12</sup>

- The sector workforce is highly skilled but is often developed through non-accredited training methods, rather than full-accredited qualifications and is frequently not officially recognised
- Official statistics show 26% of the workforce are qualified to Level 4 and above (graduate level) compared to 36% for the national average and 12% have no qualifications (compared to 7% for all sectors).



## Learning supply

- The sector is served by approximately 270 providers of training and qualifications
- 34 of these are specialist land-based providers and are members of Landex (a membership organisation)
- An estimated 109,000 learners undertook sector qualifications or training courses in 2008/09.

## Employment projections 2010-2020<sup>10,13</sup>

- In the next ten years (2010 to 2020) the sector will need a minimum of 194,000 more people
- The largest need for people is expected to be for sales and customer service occupations (38,000), managerial occupations (35,000) and skilled trade occupations (29,000)
- Over the period 2010-2020, the following number of people will be needed:
  - 8,000 people at qualification Level 5 (postgraduate)
  - 34,000 people at Level 4 (graduate)
  - 44,000 people at Level 3 (A Level)
  - 47,000 people at Level 2 (GCSE A-C)
  - 40,000 people at Level 1 (GCSE D-G)
- Forecasts suggest that 21,000 people without qualifications will also be needed.

### Incidence of skills shortage vacancies

- Of the sector employers, 7% had a vacancy at the time they were surveyed. This is compared with 12% for all employers and highlights the low level of vacancies within the sector
- The most common reason for vacancies was due to skills shortages.

	Lantra England	All England
% with a vacancy	7%	12%
% with a hard-to-fill vacancy (HtFV)	3%	3%
% with a skills shortage vacancy (SSV)	2%	3%
HtFVs as a % of vacancies	43%	22%
SSVs as a % of vacancies	32%	16%

### Incidence of skill gaps

- 15% of businesses in the sector reported a skills gap (i.e. the extent to which employees are work ready) compared to 19% overall in England.

	Lantra England	All England
% of establishments reporting skill gaps	15%	19%
Number of employees with a skill gap	26,500	1,702,500
Skill gaps as % of employment	6%	7%

The sector has undergone several changes in recent years which has led to an increase in demand for highly skilled staff. The current skills that employers feel are important to the sector in England are:

- Technical skills (e.g. animal handling and care; disease identification and control; implementing new technology including genetic engineering)
- ICT skills (e.g. robotics)
- Leadership/management skills (e.g. succession planning; entrepreneurial skills)
- Essential skills (i.e. literacy, numeracy and communication).

### Economic conditions

- Impact of the recession
- Understanding and responding to changing consumer demand
- Urban/rural regeneration
- Sustainability/globalisation of markets.

### Impact on skills

- Business advice, guidance and support
- Business management skills
- Sales and marketing
- ICT and commerce.

### Labour supply

- Attracting skilled new entrants of all ages
- Succession planning by industry
- Providing opportunities for career progression and development
- Influencing migration policy.

### Impact on skills

- Effective marketing of careers
- Better careers advice and guidance for all
- Proper recognition of competence for all
- Integrated frameworks to support lifelong learning and Continued Professional Development (CPD)
- Entrepreneurial education.

### Climate change

- Reduction in greenhouse gas (GHG) emissions
- Voluntary action plans to reduce GHG
- Need to adapt to changing climate in the longer term
- Increased incidence of flood events.

### Impact on skills

- Adoption of methods to mitigate climate change, such as sustainable business practice
- Businesses having to respond to climate change
- Respond to specific skills/re-skilling issues.

### Energy and fuel security

- Cost to business of fuel and energy
- Use of waste as a resource, e.g. anaerobic digestion
- Sector as a supplier of bio-mass and bio-fuel.

### Impact on skills

- Research community to provide knowledge
- Knowledge of new agronomy techniques
- Development of bio-mass supply chains.

## Food safety and security

- Food 2030 strategy, increased Government interest in food security and continuity of supply
- Food quality, traceability and quality assurance
- Proposals on food information for consumers
- Consumer behaviour with demands for greater convenience and healthy lifestyles
- Developments in trade markets and supply chains
- New approaches to land management i.e. conflicting priorities for land use, water framework directive.

### Impact on skills

- Business management skills
- Risk management
- Business advice, guidance and support
- Information and communications technology
- Supply chain management
- Contract management and negotiation
- Production methods and animal welfare
- Sales and marketing
- Catchment sensitive land management.

## Animal health and welfare

- Higher standards required of all people handling animals
- Legislation relating to animal transport.

### Impact on skills

- Development of integrated CPD across all practitioners
- Recognition of competence
- Skills relating to animal handling and care, disease identification, control and bio-security.

## Technology change and knowledge transfer

- Increasing business efficiency through technology
- Environmentally sustainable businesses
- Better integration of knowledge transfer into skills programmes.

### Impact on skills

- Research into new methods and processes, e.g. soil science, animal nutrition, advanced agronomy and pathology
- Technology transfer
- Business development
- New technologies
- Higher level technical skills for new production methods
- More flexible employer focused training.

## Health and safety

- Legislative requirements
- Safer working environment
- Reduction in occupational hazards to minimise ill health.

### Impact on skills

- Awareness raising, knowledge of requirements and how to comply
- Improved learning provision in terms of CPD
- Recognition of health and safety competence.

## Sources and information

### Sources

- <sup>1</sup> Inter-Departmental Business Register (IDBR) 2010
- <sup>2</sup> June Survey of Agriculture and Horticulture 2009
- <sup>3</sup> Figures for Agriculture Services have been incorporated into these categories
- <sup>4</sup> Experian National Database 2010
- <sup>5</sup> Institute of Animal Technology (IAT) 2008
- <sup>6</sup> Lantra primary research 2010
- <sup>7</sup> Farriers Registration Council 2010
- <sup>8</sup> The British Association for Shooting and Conservation (BASC) 2006
- <sup>9</sup> Labour Force Survey (LFS) 2009-2010
- <sup>10</sup> Lantra Model for Employment Forecasting 2010. Figures represent estimates of minimum job openings to satisfy replacement and expansionary demand. This may be higher or lower depending on future conditions
- <sup>11</sup> National Employer Skills Survey 2009
- <sup>12</sup> Figures and percentages may not add up due to rounding
- <sup>13</sup> Percentages are calculated from unrounded figures.

More information about Lantra research can be found at:

[www.lantra.co.uk/research](http://www.lantra.co.uk/research)



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