The 2003 CAP reforms removed the direct link between subsidies and production. This indicator monitors the number of livestock in England.

Dairy herd
Chart B12a shows the changes in the dairy herd in England.

Between 2013 and 2014:
- the dairy herd increased by 3% to 1,143 thousand head;
- this equates to a 3% increase on both lowland farms and on farms in the LFA.

There has been an overall long-term decline in the dairy herd since the introduction of milk quotas in 1984. Most of this decline has taken place on lowland farms, where the majority of dairy cows are found.

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(a) 1975 definition of LFA before widening to include Disadvantaged Areas, excludes minor holdings.
(b) Current LFA, excludes minor holdings.
(c) In 2006, the method of assigning LFA markers to holdings was revised and retrospectively applied from June 2000. All holdings.
(d) Commercial holdings only.
Between 2013 and 2014:
• the beef herd decreased by 1% to 710 thousand head;
• this equates to a 1% decline on lowland farms and a 2.6% decline on farms in the LFA.

Following the decoupling of subsidies in 2005 with the introduction of the Single Payment and poor underlying profitability of many beef cow enterprises, it was anticipated that there would be a subsequent reduction in beef cow numbers. Whilst there has been little overall change for England as a whole, numbers have reduced on LFA farms.

Between 2013 and 2014:
• the breeding flock increased by 0.3% to 7,115 thousand head;
• this equates to a 1.2% increase on lowland farms which was offset by a 1% decrease on farms in the LFA.
Sheep numbers in England rose throughout the 1980s as headage based subsidy payments encouraged producers to increase numbers of breeding ewes. National quota limits forced a ceiling on ewe numbers during the 1990s, before changes to subsidy eligibility rules in 2000 and Foot and Mouth Disease in 2001 resulted in a sharp decline in ewe numbers; although the rate of decline was much greater on lowland farms. Agri-environment agreements are also likely to have resulted in a significant reduction in the number of moorland and fell ewes, especially in winter. Ewe numbers continued to decline until 2009. Recent increases in ewe numbers are linked to stronger market returns.

Regional data

**Dairy herd**
Chart B12d shows the changes in the regional dairy herd in England.

Between 2013 and 2014:
- there were increases in all regions with the exception of the Eastern and the South East region that remained similar to 2013.

Since 2009:
- there have been decreases in all regions with the exception of North West (+2%) and the South West (+1%).

**Beef herd**
Chart B12e shows the changes in the regional beef herd in England.

Between 2013 and 2014:
- the only region to have an increase was the Eastern;
- four regions experienced declines, North West (-3%), North East (-2%), West Midlands (-2%) and South West (-2%);
- the remaining regions saw no change from 2013.

Since 2009:
- there have been decreases in most regions.
Chart B12f shows the changes in the regional sheep breeding flock in England.

Between 2013 and 2014:
- there were increases in three regions: Eastern (+10%); South East (+2%) and South West (+1%);
- the North East saw a decrease of 1%;
- the other regions saw little change.

Since 2009:
- there have been increases in all regions.

This indicator was updated in September 2015. The next update will be in 2016.

Further information and contact
Background information can be found in the accompanying fact sheet.

For further queries or information on this indicator contact Defra’s Observatory team on +44 (0) 1904 455058 or email Observatory@defra.gsi.gov.uk
Process: Farm Business

Indicator B12: Livestock numbers

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Changes in livestock populations</th>
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<tbody>
<tr>
<td>Data</td>
<td>Dairy herd, beef herd and sheep breeding flock populations</td>
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<td>Geographic coverage</td>
<td>England, English regions</td>
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<tr>
<td>Years</td>
<td>1980-2014 (England)</td>
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<td>1992-2014 (English regions)</td>
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<td>Source</td>
<td>Defra</td>
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<tr>
<td>Origin of data</td>
<td>June survey</td>
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<tr>
<td>Updates</td>
<td>Provisional results for England from the June survey are usually published in September each year with final results released in November. More detailed data at a regional or farm type level are usually available in the spring of the year following the survey. This indicator was updated in September 2015. The next update will be in 2016.</td>
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Background

Livestock have a range of impacts on the environment both beneficial and detrimental. Grazing is essential in the maintenance of certain habitats of high biodiversity value, and both the presence of livestock and the effects of grazing contribute to the landscape. However, overgrazing is detrimental, and livestock can cause problems of soil compaction, erosion and nutrient pollution. Cattle, in particular, are a major source of methane, a greenhouse gas.

Since June 2007, cattle data are no longer collected from farmers as part of the June survey. Data are now sourced from the Cattle Tracing System. The accompanying fact sheet gives further details.

Other key factors include stocking densities, timing of grazing and production systems. Some information on the timing of grazing and livestock housing is available from Defra’s Farm Practices Surveys.

Statistical & methodological information

Until 1994, there was an annual census of all main holdings in England. In 1995 sampling was introduced in order to reduce the burden on farmers and growers. However a full census was held in 2000 and 2010 to meet EU requirements.

The sample is stratified by farm size with the sampling rate increasing with farm size (measured by standard labour requirement (SLR)). In 2006, holdings of less than 0.25 SLR were sampled at a rate of just 10% whilst all holdings over 5 SLR received a form. The overall sampling rate has decreased over time (see table below).

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Response rates in recent years have tended to be approximately 70%. Results for each question are produced using ratio raising techniques. Since June 2007 cattle data have no longer been collected from farmers as part of the June survey. Data are now sourced directly from the Cattle Tracing System (CTS), from which comparable data are available from 2004. The total number of cows recorded by the June survey was similar to the total number of cows recorded by CTS, however the split between the dairy and beef herd was slightly different. This is because for the June Survey farmers were asked to record cows according to their main use on the farm. The data available from CTS allow classification only by the breed of the cow. Dual purpose breeds recorded on CTS have been split between the dairy and beef herds.

Survey threshold
A survey threshold was introduced in June 2010 in order to exclude holdings with small levels of farming activity and meet the requirements of the EU Farm Structure Survey Legislation. From 2010 onwards, holdings will only be included in the June Survey if they exceed any of the following criteria (as defined by EU Farm Structure Survey Regulation EC 1166/2008):

- >5 hectares of agricultural land
- >1 hectare of orchards
- >0.5 hectares of vegetables
- >0.1 hectares of protected crops
- >10 cows
- >50 pigs
- >20 sheep
- >20 goats
or >1,000 poultry.

Whilst this removed more than 40% of farms from the survey register, it has had little impact on total estimates of land use and livestock numbers, reducing national estimates of total land area by 2%.

Register Cleaning
In advance of the full census in 2010, a number of holdings were identified with whom no contact had been made for many years and that did not appear recently on any other Defra administrative system. There were a further substantial number of responses to the 2010 census for holdings that had not recently been surveyed indicating that they now had little or no agricultural activity. It is very likely that these holdings have been inactive for a number of years.

In order to derive comparable results for June 2010, the 2009 June Survey results have been revised to reflect both the survey threshold and the register cleaning exercise.
Further information

Defra June Agricultural Survey information and data can be found at: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/structure-of-the-agricultural-industry

Information and data from Defra’s Farm Practices survey can be found at https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-practices-survey