

Observatory monitoring framework – indicator data sheet

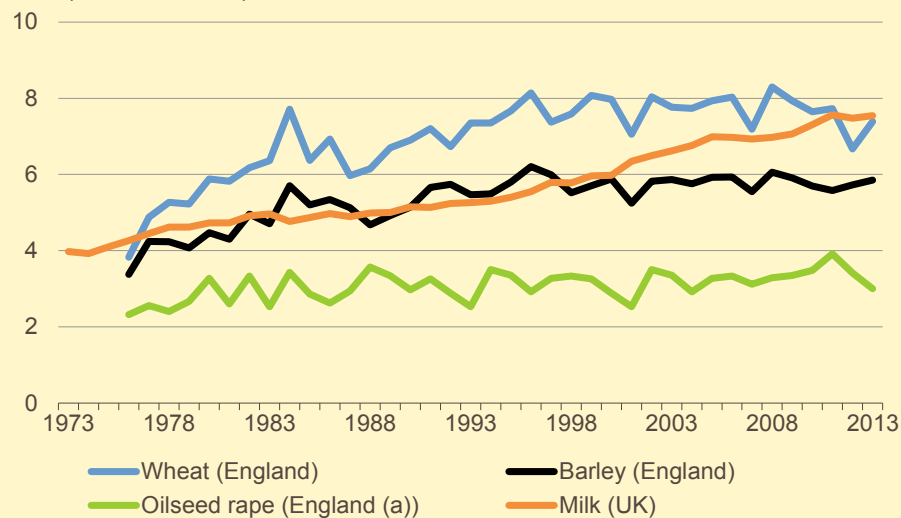
Process: Farm Business

Indicator B11: Crop and Milk Yields

This indicator shows the final production yields to 2013 for the main crops and milk.

B11 Average commodity yields

tonnes per hectare/th. litres per cow



Source: Defra

(a) Includes yields of OSR grown on set-aside land between 2004 and 2007. Set-aside requirements ended in autumn 2007.

Compared with 2012, in 2013:

- oilseed rape yields decreased by 12%;
- wheat yields increased by 11%;
- barley yields increased by 2%;
- milk yields increased by almost 1%.

On average, over the last 15 years:

- milk yields have increased by 33%;
- oilseed rape yields have increased by 5%;
- wheat yields have decreased by 2%;
- barley yields decreased by 1%.

Compared with 2012, in 2013:

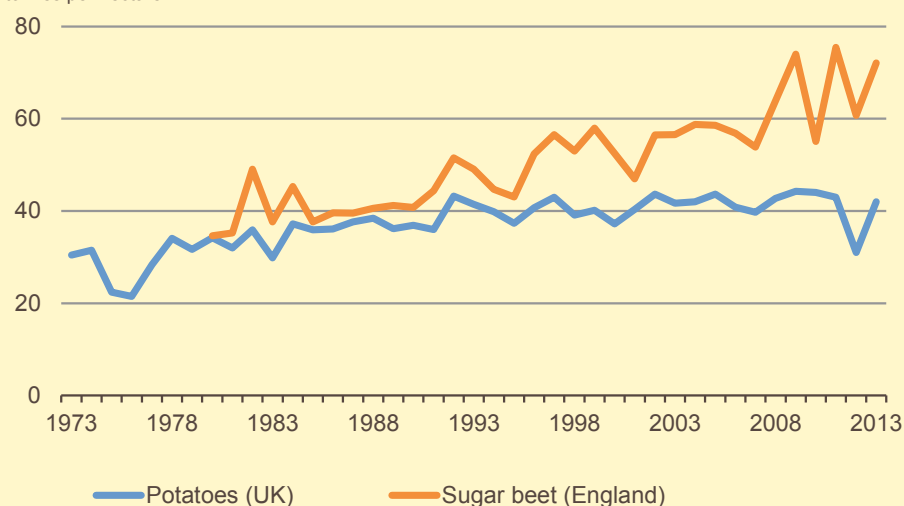
- potato yields increased by 35%;
- sugar beet yields increased by 19%.

On average, over the last 15 years:

- sugar beet yields have increased by 35%;
- potato yields have increased by 2%.

B11 Average commodity yields

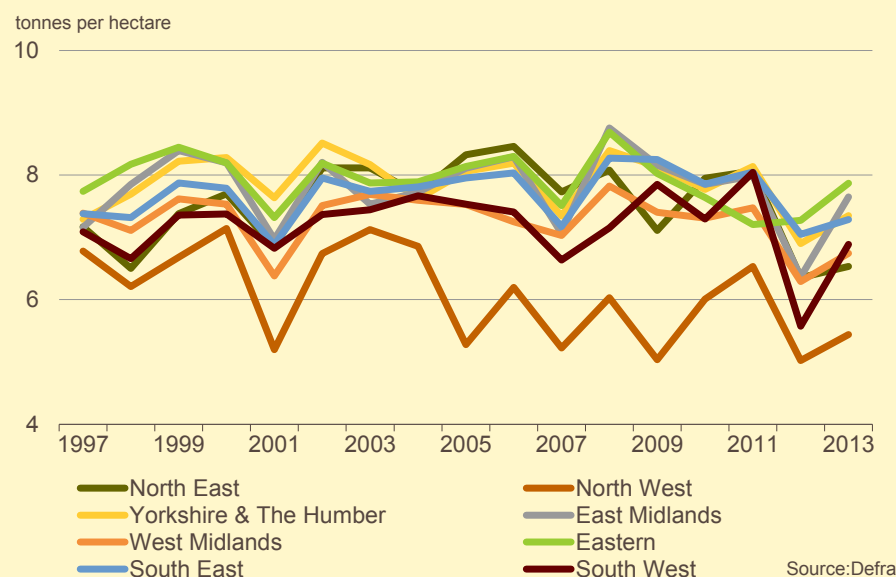
tonnes per hectare



Source: Defra

Consistent regional yields are available from 1997 on the basis of the former Government Office Regions (GORs).

B11a Average wheat yields by English Region



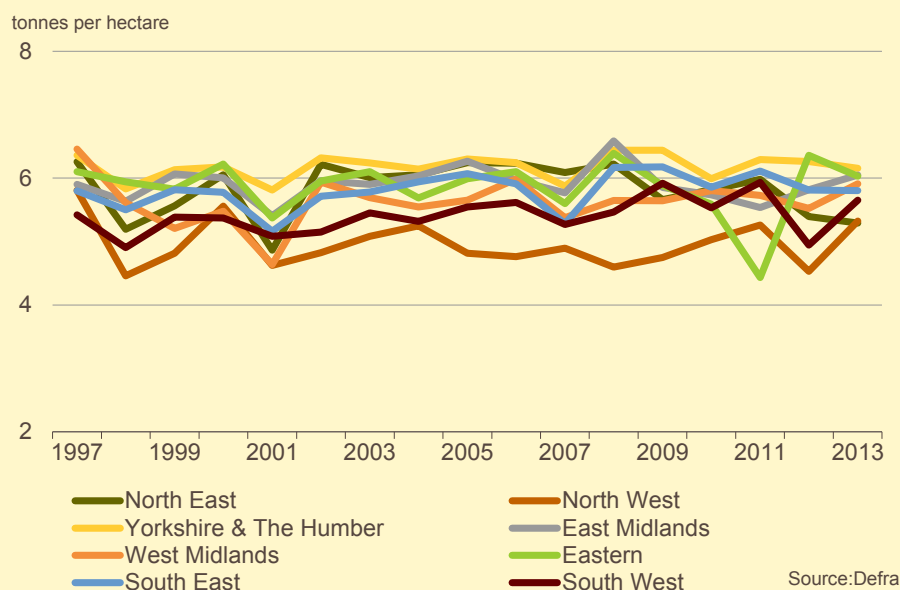
Compared with 2012, in 2013:

- average wheat yields are highest in the east of the country and lowest in the North West;
- all regions recorded an increase in wheat yields compared to 2012, due to better growing conditions;
- the largest percentage increase was in the South West (+24%);
- the lowest percentage increases were in the North East and South East regions (+3%).

Compared with 2012, in 2013:

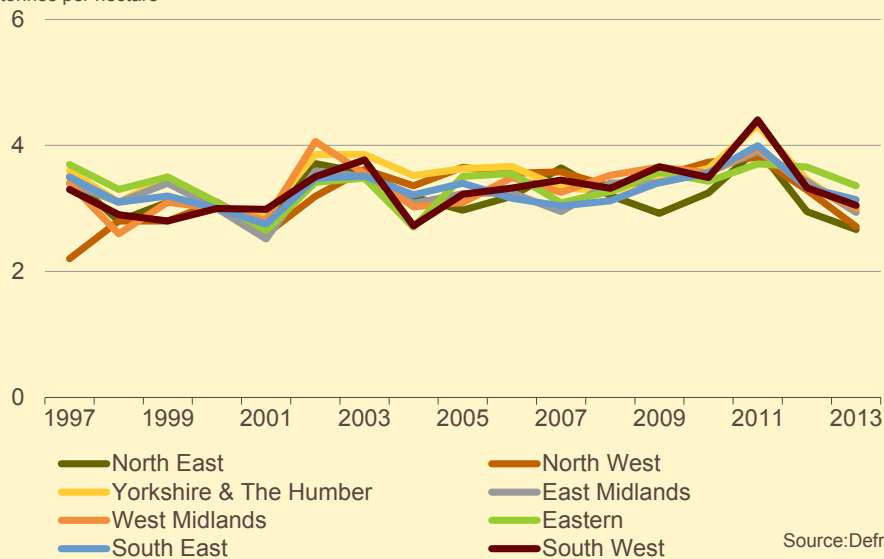
- average barley yields were highest in the east of the country and lowest in the North West;
- barley yields increased in the North West (+18%), South West (+14%), West Midlands (+7%) and the East Midlands (+4%);
- the largest percentage decrease was in the Eastern region -5%).

B11b Average barley yields by English Region



B11c Average oilseed rape yields by English Region (winter sown only)

tonnes per hectare



Source: Defra

Compared with 2012, in 2013:

- all regions recorded a decrease in yields for winter sown oilseed rape;
- the largest percentage decrease was in the North West (-18%);
- the smallest percentage decrease was in the South East (-6%).

This indicator was updated in September 2015 to include final 2013 yields. The next update will be in June 2016.

Further information and contact

Background information can be found in the accompanying fact sheet.

For queries or information on this indicator contact Defra's Observatory team on +44 (0) 1904 455058 or email observatory@defra.gsi.gov.uk

Observatory Monitoring Framework – indicator fact sheet

Process: Farm Business

Indicator B11: Crop and Milk Yields

<i>Indicator</i>	Crop and milk yields
<i>Data</i>	Yields for wheat, barley, oilseed rape, sugar beet, potatoes and milk
<i>Geographic coverage</i>	England for wheat, barley, oilseed rape. UK for milk and potatoes, and sugar beet (sugar beet grown in England only). Regional data for wheat, barley and winter sown oilseed rape.
<i>Years</i>	1973-2013 (milk) 1976-2013 (wheat, barley and oilseed rape [national only]) 1980-2013 (sugar beet) 1973-2013 (potatoes) 1997-2013 (regional wheat, barley, winter sown oilseed rape)
<i>Source</i>	Defra
<i>Origin of data</i>	Defra, Rural Payments Agency, British Sugar, Potato Council, Agriculture in the United Kingdom
<i>Updates</i>	This indicator was updated in September 2015 to include 2013 yields. The next update will be in June 2016 to include final 2014 yields.
<i>Background</i>	<p>Commodity yields are major determinants of profitability. For arable and dairy farming, the trend has been expansion and intensification to increase yields over the last few decades. In recent years yield optimisation has been the favoured approach for arable crops.</p> <p>The data are for England except for milk and potatoes for which only UK data are available. They show the trends in yields of arable crops in tonnes per hectare for: wheat, barley, oilseed rape, sugar beet and potatoes. For milk, the yield is shown as thousands of litres per cow per year. Oilseed rape yields exclude production on set-aside land.</p> <p>Cereal yields are standardised to 14.5% moisture content. Oilseed rape yields are standardised to 9% moisture content. Sugar beet yields are adjusted to a standard sugar content of 16%.</p> <p>One of the main influences on yields is the weather, either seasonal variation or during harvest. The weather can also affect the quality of animal feed such as silage which in turn could affect milk yields. Quotas have also had an effect on milk yields as production is usually kept below that which would incur the milk superlevy. In 2014, milk production increased by around 1%. Poor weather conditions impacted on the quality and quantity of forage resulting in lower yields. Improved weather in the second half of the year helped to offset the low production in the first half of the year.</p> <ul style="list-style-type: none"> • In 2001, most crops were adversely affected by flooding in late 2000; • In 2007, yields of all crops (apart from spring barley) suffered due to a dry spring, lack of sunshine and a wet summer with some localised flooding; • In 2009, difficult winter planting conditions in 2008 and a wet harvest for some parts

- of the country (particularly the North West) influenced lower crop yields;
- In 2010, dry conditions affected most regions resulting in reduced yields for wheat and barley;
- In 2013, the wheat harvest was affected by poor planting condition in 2012 and a cold spring in 2013, Autumn drilling conditions particularly impacted oilseed rape planting and establishment. Barley production in England was up by 36% due to an increased area and yield.

Statistical & methodological information

Cereal and oilseed yields are calculated directly from annual sample surveys of growers conducted by Defra each autumn.

Information on potato production is sourced mainly from the Potato Council – yields are derived by dividing production by June Survey areas. Sugar beet data are from British Sugar.

Milk production data are provided by Rural Payments Agency (RPA) from administrative returns relating to the milk quota system. Yields are derived by dividing production by the average number of dairy cows.

The crop yield increases presented represent the change in the longer term trend and have been calculated using a centred five year moving average.

Regional yields

Until 1996 data were presented on the basis of the basis of Standard Statistical Regions (SSRs). From 1997 data were presented using the Government Office Region (GOR) classification. SSRs were the primary classification for English regional statistics prior to the adoption of GORs. They are now rarely used and are certainly no longer “standard”. After the Comprehensive Spending Review, it was confirmed that the GORs would close on 31 March 2011, shifting focus away from regions to local areas. However, there is still a requirement to maintain regional-level geography for statistical purposes. The GSS Regional and Geography Committee agreed that from 1 April 2011, the former GORs would simply be referred to as 'regions'.

The 8 SSRs were also based on whole administrative units, but do not have any administrative function. Most GORs have the same names and boundaries as the SSRs, but there are the following differences:

- The North East GOR was formed from the North SSR with the exception of Cumbria.
- The North West GOR is the same as the North West SSR but also includes Cumbria (previously part of the North SSR).
- The East of England GOR did not exist as an SSR. Norfolk, Suffolk, Cambridgeshire and Peterborough formed the East Anglia SSR; the remainder of this GOR was formally part of the South East SSR.

Further information

Further data on commodity yields can be found in Agriculture in the UK, chapter 7, <https://www.gov.uk/government/organisations/departments-for-environment-food-rural-affairs/series/agriculture-in-the-united-kingdom>

Cereal and Oilseed Rape Production data can be found at: <https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june>

Further information on GORs and SSRs can be found at: <http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/administrative/england/government-office-regions/index.html>