

Supply & Demand

25 November 2015



Key points

- Reductions in Human and Industrial demand for wheat more than offset higher animal feed demand, contributing to an increased exportable surplus for the second year in a row
- A third consecutive large barley crop, coupled with lower overall demand, contributes to another substantial barley surplus
- The current pace of maize imports is expected to reduce due to lower total consumption

Introduction

1. This release covers the first official estimates made by Defra of UK cereal supply and demand for 2015/16 (Appendix I). Comparisons are made in this note with 2014/15 and also the [AHDB Early Balance Sheets](#) (hereafter EBS) that were released on 13 October. The next official review of 2015/16 supply and demand is due to take place on 27 January 2016.

Wheat

2. **UK wheat availability is forecast at 19.820Mt, 1% higher than that estimated in the 2014/15 final balance sheet** and 66Kt higher compared with the EBS, due to upward revisions for production and imports. Provisional results from [Defra's Cereal and Oilseed Rape Production Survey](#) indicated record average wheat yields, at 8.82t/ha, contributing to the second successive crop of over 16Mt, despite a reduced area. Opening stocks, at 2.426Mt, are 56% higher than in 2014/15.

3. **Wheat imports in 2015/16 are forecast at 1.223Mt, 26% lower than in 2014/15.** According to HM Revenue and Customs (HMRC), wheat imports until September totalled 433Kt, 29% lower than the corresponding period in 2014/15. It is expected that a reduced need for imports will continue throughout the remainder of the season, given the quantity and quality of the domestically grown crop. In addition, home grown wheat used by millers, starch and bioethanol producers is 5% higher so far this season (July-September), compared with the same period last year.

4. **Human & Industrial (H&I) consumption of wheat is estimated at 7.176Mt in 2015/16, a reduction of 8% compared with 2014/15** but 78Kt more than the amount estimated for the EBS. The latest cereals usage data indicates that flour production by millers (excluding starch and bioethanol producers) for the season to date (July-September), remains at a similar level to last year. The [AHDB Cereals & Oilseeds Cereal Quality Survey](#) results revealed improved wheat quality

in 2015 and recorded the highest average GB specific weights since 2011. This suggests improved extraction rates, i.e. it is assumed that millers will not need to mill as much wheat in order to maintain the same level of flour production as last year. Wheat usage in distilling is forecast lower year-on-year, due to a general slowdown in demand, as well as temporary reductions in capacity due to scheduled maintenance. The bioethanol industry is also expected to require less wheat this season, owing to temporary reductions in capacity for the sector in the UK, although presently favourable ethanol prices might suggest future changes in output.

5. **Demand for total cereals in animal feed is forecast slightly lower (-2%) than in 2014/15**, based on the assumption of comparable weather conditions, forage availability and other competitive raw materials. Slight growth in animal feed production in the pig and poultry sectors is expected to be mostly offset by reductions for the cattle and sheep sectors. **Wheat demand for animal feed production is estimated at 7.230Mt, 2% higher year-on-year.** The wheat inclusion in animal feed rations is expected to rise during 2015/16, due to its current price competitiveness with other feed grains. Wheat usage in compound feed production was 9% higher in the first quarter of this season compared with 2014/15. It should be noted however, that some of this may be attributable to revisions made by Defra on the splits between integrated poultry units (IPU) and compound feed, which has resulted in an increase in compound poultry feed and a decrease in IPU feed.

6. **The balance of availability and domestic consumption in 2015/16 is 5.049Mt, 16% higher than 2014/15.** Wheat exports for the season to end September totalled 314Kt (HMRC), 9% more than at the same point last year. After taking into account the operating stock requirement of 1.500Mt and exports to date, this leaves 3,235Mt which could be either exported or carried forward in 2016/17; the second year in a row that this surplus has increased.

Barley

7. **Barley availability in 2015/16 is forecast 5% higher than last year, at 8.833Mt.** Record average yields (6.62t/ha) contributed to an increase in UK barley production, which is provisionally estimated at 7.276Mt, 5% higher than 2014/15 and the highest since 1997. Opening stocks are also estimated 6% higher year-on-year, at 1.457Mt. As a consequence, imports are forecast 21% lower than 2014/15, at 100Kt.

8. **H&I consumption of barley is estimated at 1.859Mt, 5% lower than in 2014/15, a year that included a small quantity for ethanol production.** This estimate is slightly lower (26Kt) than the amount projected for the EBS. The latest usage data published for September indicated that brewers, maltsters and distillers (BMD) have used 7% less barley in the first three months of this season than in the same period last year. It is expected that lower demand for barley by the BMD sector will continue throughout the remainder of the season, driven by temporary reductions to capacity due to planned maintenance.

9. **Barley usage in animal feed production is forecast at 3.264Mt, 1% lower than in 2014/15** and slightly lower than that estimated in the EBS. Defra's cereal usage statistics for the first quarter of this season show that barley usage in both compound and IPU feed production has declined so far this season compared with the same period last year.

10. **The balance of availability and domestic consumption is 3.497Mt, 18% higher than last year.** Barley exports for the season to end September are 24% higher than last year, at 366Kt (HMRC). After taking into account the operating stock requirement of 750Kt and current exports, this leaves 2.381Mt available to either export or carry forward into 2016/17.

Maize

11. **At 1.624Mt, maize opening stocks and projected imports are forecast 23% lower in 2015/16 than the previous year.** While opening stocks are estimated 19% higher at 309Kt, this is expected to be more than offset by reduced imports. While maize imports for July to September, at 433Kt are 44% higher than the same period last year, this pace is expected to decline and will be reviewed on an ongoing basis. Maize imports are forecast 29% lower year-on-year at 1.315Mt.

12. **Total domestic consumption of maize is expected to be 20% lower than last year, at 1.370Mt.** Reduced demand for maize is expected for the starch/bioethanol sectors, and by distillers. In addition, with domestic feed grains currently priced at more competitive levels than imported maize, it is expected that maize inclusion rates in animal feed production will continue to decline throughout the remainder of the season.

Oats

13. **The availability of oats in 2015/16 is expected to be 11% lower than 2014/15, at 909Kt.** This is driven by reductions to both opening stocks and production, as well as lower imports forecast for this season. Defra provisionally estimates UK oats production at 779Kt, 5% lower than in 2014, as a result of a lower area and lower reported average yields year-on-year. Imports are also forecast 24% lower than last year, at 25Kt.

14. **Total consumption of oats is expected to decline by 9% in 2015/16,** compared with a year earlier, driven by reductions in demand from the animal feed sector. In contrast, human and industrial demand of oats is expected to be up by 4% year-on-year, at 518Kt in 2015/16. Cereals usage data to date shows that oat millers used 6% more oats during the first quarter of this season than the same point in time a year ago.

15. **At 148Kt, the balance between availability and demand is 18% lower than 2014/15.** Exports are forecast at 55Kt; by the end of September, 19Kt of oats had been exported (HMRC). It is currently forecast that 94Kt of oats will be carried forward into 2016/17, 11% lower than the previous season but higher than the five-year average.

Additional data

16. Appendix II shows cumulative usage and trade data to end-September. This release and related information can be found at cereals.ahdb.org.uk/markets. Monthly cereals usage data can be found on the Defra website at <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics>

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DEFRA ANNUAL UK CEREAL SUPPLY AND DEMAND ESTIMATES (a)

Estimates made in November

000 tonnes

Defra have now completed a review of how it uses survey estimates to achieve consistent cereals balance sheet estimates. The outcome of the review was the introduction of the reliability scores method used to allocate identified residuals across the balance sheet as and when required. The allocation method was applied retrospectively to the wheat and maize balance sheets for 2013/14 and to the wheat balance sheet for 2014/15. Cereals balance sheets are published by AHDB Cereals and Oilseeds on behalf of Defra at <http://cereals.ahdb.org.uk/markets/supply-and-demand.aspx>.

(JULY - JUNE YEARS)

Links connect to relevant Defra/AHDB data pages

	WHEAT						BARLEY					
	2010/11 2014/15 average	2012/13 estimate	2013/14 estimate**	2014/15 estimate**	2015/16 Nov-15	% change on 14/15	2010/11 2014/15 average	2012/13 estimate	2013/14 estimate	2014/15 estimate	2015/16 Nov-15	% change on 14/15
(1) Opening Stocks	1,761	1,495	2,186	1,559	2,426	56%	1,157	940	997	1,379	1,457	6%
(2) Production	14,331	13,261	11,808	16,450	16,171	-2%	6,054	5,522	7,092	6,911	7,276	5%
(3) Imports	1,740	2,956	2,191	1,643	1,223	-26%	148	235	100	126	100	-21%
(4) Total Availability	17,832	17,712	16,186	19,652	19,820	1%	7,360	6,697	8,189	8,416	8,833	5%
(5) Human and Industrial Consumption	7,374	7,572	7,461	7,820	7,176	-8%	1,863	1,844	1,960	1,948	1,859	-5%
(5a) (of which home grown)	6,161	5,723	5,913	6,616	6,200	-6%	1,847	n/a	n/a	n/a	n/a	*
(6) Usage as Animal Feed (b)	6,584	6,847	6,372	7,084	7,230	2%	3,252	3,263	3,495	3,304	3,264	-1%
(6a) (of which home grown)	6,095	6,064	5,635	6,635	6,980	5%	3,120	n/a	n/a	n/a	n/a	*
(6b) (of which Compounders)	3,497	3,592	3,384	3,640	4,019	10%	1,001	1,020	1,169	1,077	1,019	-5%
(6c) (of which Integrated Poultry Units)	1,510	1,505	1,394	1,433	1,261	-12%	66	70	86	48	45	-6%
(7) Seed	297	304	293	293	284	-3%	163	182	162	177	177	0%
(8) Other	75	66	66	91	81	-11%	30	28	35	35	36	3%
(9) Total Domestic Consumption	14,329	14,789	14,192	15,287	14,771	-3%	5,309	5,317	5,652	5,464	5,336	-2%
(10) Balance (4) - (9)	3,503	2,923	1,994	4,365	5,049	16%	2,051	1,380	2,537	2,952	3,497	18%
(11) Exports (c)	1,662	737	434	1,939	-	*	923	384	1,158	1,495	-	*
(12) Intervention Stocks (c)	-	-	-	-	-	*	-	-	-	-	-	*
(13) Commercial End-Season Stocks (c)	1,841	2,186	1,559	2,426	-	-	1,129	997	1,379	1,457	-	-
(14) (of which Estimated Operating stock requirement) (d)	1,432	1,450	1,450	1,500	1,500	0%	718	713	713	750	750	0%
(15) (of which free stock) (e)	409	736	109	926	-	*	411	284	666	707	-	*
(16) Surplus available for either export or free stock (10)-(12)-(14)	2,071	1,473	544	2,865	3,549	24%	1,333	667	1,824	2,202	2,747	25%

	MAIZE						OATS					
	2010/11 2014/15 average	2012/13 estimate	2013/14 estimate**	2014/15 estimate	2015/16 Nov-15	% change on 14/15	2010/11 2014/15 average	2012/13 estimate	2013/14 estimate	2014/15 estimate	2015/16 Nov-15	% change on 14/15
(1) Opening Stocks	159	149	216	259	309	19%	92	63	69	167	105	-37%
(2) Production	-	-	-	-	-	*	742	627	964	820	779	-5%
(3) Imports	1,578	1,693	2,334	1,856	1,315	-29%	53	109	46	33	25	-24%
(4) Total Availability	1,737	1,842	2,550	2,115	1,624	-23%	886	799	1,079	1,020	909	-11%
(5) Human and Industrial Consumption	512	522	679	566	483	-15%	486	491	508	499	518	4%
(5a) (of which home grown)	-	-	-	-	-	*	435	375	465	461	496	8%
(6) Usage as Animal Feed	926	1,036	1,398	1,144	883	-23%	244	198	345	317	221	-30%
(6a) (of which home grown)	-	-	-	-	-	*	244	198	345	317	221	-30%
(7) Seed	-	-	-	-	-	*	19	25	19	18	18	0%
(8) Other (f)	4	4	5	4	4	0%	4	3	5	4	4	0%
(9) Total Domestic Consumption	1,443	1,562	2,083	1,714	1,370	-20%	753	717	877	838	761	-9%
(10) Balance (4) - (9)	294	280	467	401	254	-37%	133	82	202	182	148	-18%
(11) Exportable surplus	86	64	208	92	45	-51%	39	13	36	77	55	-29%
(12) Commercial End-Season Stocks	209	216	259	309	209	-32%	94	69	166	105	94	-11%

(a) These are revised during the year. Figures rounded to the nearest 1000 tonnes

(b) Animal feed usage has been split by sector. Note, other users are only included in the total.

(c) Split of exports, intervention and total commercial end-season stocks only published for historical seasons

(d) Estimated Operating Stocks Requirement is a calculated estimate of the minimum tonnage that users of grain require to get through to a point at which new crop can be utilised

(e) Free stock is the stock available after both exports and estimated operating stock requirements have been fulfilled

(f) 2014/15 new format: Maize demand in "Other food use" has been added to the H&I total for maize. This was previously included in the "Other" category

* Percentage change not meaningful

** The 2013/14 balance sheets for wheat and maize and the 2014/15 balance sheet for wheat have been adjusted retrospectively as per Defra's reliability allocation method

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		OTHER CEREALS (g)					
		2010/11 2014/15 average	2012/13 estimate	2013/14 estimate	2014/15 estimate	2015/16 Nov-15	% change on 14/15
(1)	Opening Stocks	5	5	5	5	5	0%
(2)	Production	119	105	107	131	246	88%
(3)	Imports	2	7	3	1	1	0%
(4)	Total Availability	126	117	115	137	252	84%
(5+6)	H&I and Animal Feed	117	109	107	129	244	89%
(5a+6a)	(of which home grown)	115	102	104	128	243	90%
(7)	Seed	3	3	3	3	3	0%
(8)	Other	-	-	-	-	-	*
(9)	Total Domestic Consumption	120	112	110	132	247	87%
(10)	Balance (4) - (9)	6	5	5	5	5	0%
(11)	Exportable surplus	1	0	0	0	0	*
(12)	Intervention Stocks	0	0	0	0	0	*
(13)	Commercial End-Season Stocks	5	5	5	5	5	0%

		TOTAL CEREALS					
		2010/11 2014/15 average	2012/13 estimate	2013/14 estimate**	2014/15 estimate**	2015/16 Nov-15	% change on 14/15
(1)	Opening Stocks	3,174	2,652	3,473	3,369	4,302	28%
(2)	Production	21,246	19,515	19,971	24,312	24,472	1%
(3)	Imports	3,521	5,000	4,675	3,659	2,664	-27%
(4)	Total Availability	27,940	27,167	28,119	31,340	31,438	0%
(5)	H&I (wheat, barley, maize, oats) (g)	10,235	10,429	10,608	10,833	10,036	-7%
(6)	Animal Feed (wheat, barley, maize oats) (g)	11,007	11,344	11,611	11,849	11,598	-2%
(5a +6a)	Other cereals (H&I and Animal Feed)	117	109	107	129	244	89%
(7)	Seed	482	514	477	491	482	-2%
(8)	Other	113	101	111	134	125	-7%
(9)	Total Domestic Consumption	21,953	22,497	22,914	23,436	22,485	-4%
(10)	Balance (4) - (9)	5,987	4,670	5,205	7,905	8,953	13%
(11)	Exports	2,711	1,198	1,837	3,603	-	*
(12)	Intervention Stocks	-	-	-	-	-	*
(13)	Commercial End-Season Stocks	3,277	3,473	3,368	4,302	-	*
(14)	Estimated Operating stock requirement (wheat & barley only)	2,150	2,163	2,163	2,250	2,250	0%
(15)	Free stock for wheat and barley	820	1,020	775	1,633	-	*
(16)	Surplus available for either export or free stock (all)	3,838	2,507	3,042	5,655	6,703	19%

(g) Includes mainly rye, triticale, mixed grain and sorghum

Source: DEFRA

** The 2013/14 balance sheets for wheat and maize and the 2014/15 balance sheet for wheat have been adjusted retrospectively as per Defra's reliability allocation method

APPENDIX II

CUMULATIVE MONTHLY STATISTICS
Usage of Cereals by Processors,
External Trade and Stocks

Situation as at end of September 2015

Thousand tonnes

			2010/11 to 2014/15 Average	2008/09 13 weeks	2009/10 13 weeks	2010/11 13 weeks	2011/12 13 weeks	2012/13 13 weeks	2013/14 13 weeks	2014/15 13 weeks	2015/16 13 weeks	% Change 2015/16 on 2014/15	Actual Change 2015/16 on 2014/15
WHEAT													
(1) Usage	Human and	-Flour Millers	325	307	314	220	175	248	587	395	244	-38%	-151
(2)	Industrial	-home-grown	1269	1239	1225	1407	1316	1351	984	1289	1357	5%	69
(3)	Processors	-Total	1594	1546	1539	1627	1490	1599	1571	1683	1601	-5%	-82
(4)		-Distillers	168	145	124	118	138	180	206	195	167	-14%	-28
(5)		-Others	43	40	41	42	41	41	48	43	46	7%	3
(6)	Animal Feed Processors (a)		731	652	689	693	696	744	775	745	810	9%	65
(7)	Poultry Integrated Units		383	361	374	398	398	395	369	355	330	-7%	-26
(8) Imports	From July (b)		493	315	387	213	218	590	829	612	433	-29%	-180
(9) Exports	From July (b)		404	723	441	862	537	289	44	288	314	9%	26
(14) Intervention	-Actual		0	0	0	0	0	0	0	0	0	*	0
(15)	-Projected		0	0	0	0	0	0	0	0	0	*	0
BARLEY													
(1) Usage	Maltsters/Distillers	-imported	-	-	-	-	-	-	-	-	-	-	-
(2)		-home-grown	-	-	-	-	-	-	-	-	-	-	-
(3)		-Total	444	430	361	411	433	438	460	480	447	-7%	-32
(4)	Animal Feed Processors (a)		219	186	170	229	192	212	213	250	223	-11%	-27
(5)	Poultry Integrated Units		19	32	24	19	21	18	17	19	12	-37%	-7
(6) Imports	From July (b)		32	30	31	24	42	39	26	29	54	85%	25
(7) Exports	From July (b)		234	215	263	222	191	203	258	295	366	24%	71
(11) Intervention	-Actual		1	62	106	5	0	0	0	0	0	*	0
(12)	-Projected		1	140	40	5	0	0	0	0	0	*	0
MAIZE													
(1) Usage	Human and Industrial		84	81	83	76	73	77	90	101	97	-5%	-5
(2)	Animal Feed Processors (a)		47	44	27	27	24	47	64	74	69	-7%	-5
(3) Imports	From July (b)		271	227	213	221	203	242	386	301	433	44%	132
(4) Exports	From July (b)		9	2	3	3	9	7	13	13	19	48%	6
OATS													
(1) Usage	Human and Industrial Processors		116	101	105	112	115	114	120	118	125	6%	7
(2)	Animal Feed Processors (a)		19	12	14	27	15	14	17	21	13	-38%	-8
(3) Exports	From July (b)		13	32	11	30	5	2	7	22	19	-14%	-3

n/a - Not Available/Applicable (a) Great Britain only. (b) HM Customs/Intrastat

* Percentage changes not meaningful.

There were 53 weeks in the Statistical year 2010. In order to incorporate the change January 2010 was increased to a 5 week period compared to 4 weeks in 2009.
Note: This Appendix reflects the position as at 12 November 2015. The figures above may differ slightly from the most recent published data.

Survey data for GB Compounders and Cereals Usage by Millers, Brewers and Maltsters can be found using the following link:
<https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics>