Supply & Demand

29 November 2017

Introduction

This release covers the first official estimates made by Defra of UK cereal supply and demand for 2017/18 (Appendix 1). These estimates follow from the annual AHDB Cereal & Oilseeds Early Balance Sheets for UK wheat, barley, maize and oats for the 2017/18 marketing season.

Comparisons

The first official estimates for 2017/18 are compared in this note with 2016/17.The Defra reliability scores method has been applied to the 2016/17 balance sheets for wheat and barley to apportion residuals identified after the full season official statistics were taken into account, click here to read more about the Defra reallocation method. Please note that the first official wheat and barley supply and demand estimates for 2017/18 have been compared with the allocated end of season 2016/17 balance sheets. Unallocated 2016/17 end of season balance sheets are also available with a stated residual for wheat and barley – click here.

Wheat

- **Availability** - UK wheat availability is forecast at 18.530Mt, 2% or 470Kt lower than in 2016/17, predominately due to smaller opening stocks, and to an extent a reduction in estimated imports, offsetting a larger crop in 2017. Provisional results from Defra's Cereal and Oilseed Rape Production Survey revealed that a higher average yield in 2017, outweighed a year on year reduction in planted area, leading to a rise in wheat production. The provisional estimate for 2017 output is 6% higher than in 2016, at 15.163Mt. Note that 2016 wheat production was adjusted as per Defra's reliability scores system so differs slightly from official estimates, read more on this here. Opening stocks of wheat are estimated at 1.767Mt, 37% (1.020Mt) less than in 2016/17.
- **Imports** - UK wheat imports in 2017/18 are forecast at 1.600Mt, 14% (266Kt) lower than in 2016/17. Season to date (July – September), the UK has imported 419.1Kt of wheat, 2% down on the same period in 2016/17.
- **Usage** – At 15.882Mt, total domestic consumption of wheat is forecast to increase by 1% (96Kt) on the year in 2017/18. While human and industrial wheat usage is expected to remain relatively stable at 8.132Mt, demand for wheat in animal feed is estimated to increase by 1% (88Kt) compared to 2016/17 to 7.396Mt. A temporary reduction in UK bioethanol capacity is assumed in these estimates.
- **Balance** - The balance of availability and domestic consumption in 2017/18 is estimated at 2.648Mt, 18% less than in 2016/17. The minimum operating stock requirement is estimated at 1.6Mt, leaving a surplus available for either export or free stock of 1.048Mt, 35% lower year on year. UK exports of wheat between July and September have totalled 147.16Kt, 78% lower than the same period in 2016/17.

Barley

- **Availability –** Total availability of barley in 2017/18 is estimated to increase by 6% on 2016/17 levels to 8.621Mt, due to a rise in production outweighing a fall in opening stocks. Defra's provisional estimate of UK barley production for 2017 is 11% (753Kt) higher compared with 2016 at 7.360Mt, driven by a rise in planted area as well as yields. As is for wheat, 2016 barley production was adjusted as per Defra's reliability scores system so differs slightly from official estimates. Barley opening stocks in 2017/18 are estimated at 1.121Mt, 18% (246Kt) lower than in 2016/17.

- **Imports –** In 2017/18 UK barley imports are estimated to decrease by 11% (18Kt) on year earlier levels to 140Kt.

- **Usage** - Total domestic consumption of barley in 2017/18 is forecast at 6.138Mt, 3% higher than in 2016/17. Demand for barley by the human and industrial sector is expected to remain relatively unchanged on the year at 1.878Mt, while usage of barley in animal feed is estimated to increase by 5% on 2016/17 levels to 4.033Mt.

- **Balance** – In 2017/18 the balance between total availability and total domestic consumption is estimated to increase by 14% year on year to 2.483Mt. Taking into account an estimated operating stock requirement of 770Kt, the surplus available for export or free stock is forecast at 1.713Mt, 21% higher than in 2016/17.

Maize

- **Availability –** In 2017/18, total availability of maize is estimated at 2.220Mt, 1% higher than in 2016/17, with a fall in forecast imports, partially offsetting a rise in opening stocks. Opening stocks of maize in 2017/18 are estimated at 271Kt, 83% (123Kt) higher year on year.

- **Imports –** UK maize imports are forecast to fall by 5% on the year in 2017/18 to 1.949Mt.

- **Usage –** Total domestic consumption of maize is expected to increase by 5% on the year to 1.840Mt in 2017/18. Usage of maize by the human and industrial sector is estimated to remain relatively unchanged on the year at 570Kt, however animal feed demand is expected to increase by 7% to 1.266Mt.

- **Balance** – The balance of availability of maize in 2017/18 is forecast at 380Kt, 15% lower than in 2016/17.

Oats

- **Availability –** Total availability of oats is estimated at 1.076Mt in 2017/18, 12% higher year on year, predominately driven by a rise in production. In 2017 UK oat production is provisional estimated at 933Kt by Defra, up 14% year on year, due to a rise in area planted. UK opening stocks of oats in 2017/18 are forecast to have increased by 18% on year earlier levels to 110Kt.

- **Imports –** In 2017/18 UK oat imports are expected to fall by 38% on the year to 33Kt.

- **Usage –** At 896Kt, estimated total domestic consumption of oats in 2017/18 is 8% higher than in 2016/17. Usage of oats by the milling industry is expected to rise by 1% on the year to 525Kt and demand from the animal feed sector is forecast to rise by 19% to 340Kt.

- **Balance** – The balance of total availability and domestic consumption is forecast to rise by 8% on year earlier levels in 2017/18, to 896Kt.

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Appendix I

DEFRA ANNUAL UK CEREAL SUPPLY AND DEMAND ESTIMATES (a)

Estimates made in November

000 tonnes

In 2015, Defra reviewed 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. Cereals balance sheets are published by AHDB Cereals & 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					
		2012/13 2016/17 average	2014/15 estimate**	2015/16 estimate**	2016/17 estimate**	Nov-17 estimate	% change on 16/17	2012/13 2016/17 average	2014/15 estimate	2015/16 estimate	2016/17 estimate**	Nov-17 estimate	% change on 16/17
(1)	Opening Stocks	2,092	1,559	2,434	2,787	1,767	-37%	1,236	1,379	1,497	1,367	1,121	-18%
(2)	Production	14,457	16,363	16,506	14,347	15,163	6%	6,700	6,911	7,370	6,607	7,360	11%
(3)	Imports	2,038	1,669	1,509	1,866	1,600	-14%	158	139	159	158	140	-11%
(4)	**Total Availability**	**18,588**	**19,591**	**20,449**	**19,000**	**18,530**	-2%	**8,095**	**8,429**	**9,026**	**8,132**	**8,621**	6%
(5)	Human and Industrial Consumption (b)	7,669	7,831	7,360	8,120	8,132	0%	1,892	1,949	1,833	1,874	1,878	0%
(5a)	(of which home grown)	6,374	6,640	6,416	7,178	7,181	0%	n/a	n/a	n/a	n/a	n/a	*
(6)	Usage as Animal Feed (c)	6,923	6,991	7,094	7,308	7,396	1%	3,501	3,276	3,613	3,856	4,033	5%
(6a)	(of which home grown)	6,194	6,501	6,444	6,436	6,803	6%	n/a	n/a	n/a	n/a	n/a	*
(6b)	(of which Compounders)	3,701	3,632	3,845	4,052	4,194	4%	1,104	1,079	1,108	1,144	1,305	14%
(6c)	(of which Integrated Poultry Units)	1,350	1,427	1,210	1,213	1,211	0%	61	47	49	53	69	30%
(7)	Seed (d)	290	291	281	284	278	-2%	178	177	182	188	190	1%
(8)	Other	75	88	79	74	76	3%	34	35	37	36	37	3%
(9)	**Total Domestic Consumption**	**14,956**	**15,201**	**14,814**	**15,786**	**15,882**	1%	**5,605**	**5,437**	**5,665**	**5,954**	**6,138**	3%
(10)	**Balance (4) - (9)**	**3,631**	**4,390**	**5,635**	**3,214**	**2,648**	-18%	**2,490**	**2,992**	**3,361**	**2,178**	**2,483**	14%
(11)	Exports (e)	1,485	1,957	2,848	1,447	-	*	1,217	1,495	1,994	1,056	-	*
(12)	Intervention Stocks (e)	-	-	-	-	-	-	-	-	-	-	-	-
(13)	**Commercial End-Season Stocks (e)**	**2,147**	**2,434**	**2,787**	**1,767**	**-**	*	**1,272**	**1,497**	**1,367**	**1,121**	**-**	*
(14)	(of which Estimated Operating stock requirement) (f)	1,500	1,500	1,500	1,600	1,600	0%	739	750	760	760	770	1%
(15)	(of which free stock) (g)	647	934	1,287	167	-	*	533	747	607	361	-	*
(16)	Surplus available for either export or free stock (10)-(12)-(14)	**2,131**	**2,890**	**4,135**	**1,614**	**1,048**	-35%	**1,750**	**2,242**	**2,601**	**1,418**	**1,713**	21%
(17)	Residual (10)-(11)-(13)												

		MAIZE						OATS					
		2012/13 2016/17 average	2014/15 estimate	2015/16 estimate**	2016/17 estimate	Nov-17 estimate	% change on 16/17	2012/13 2016/17 average	2014/15 estimate	2015/16 estimate	2016/17 estimate	Nov-17 estimate	% change on 16/17
(1)	Opening Stocks	216	259	309	148	271	83%	100	168	107	93	110	18%
(2)	Production	-	-	-	-	-	*	805	820	799	816	933	14%
(3)	Imports	1,937	1,856	1,742	2,059	1,949	-5%	57	37	39	53	33	-38%
(4)	**Total Availability**	**2,153**	**2,115**	**2,051**	**2,207**	**2,220**	1%	**962**	**1,025**	**945**	**962**	**1,076**	12%
(5)	Human and Industrial Consumption	538	566	465	569	570	0%	507	492	525	521	525	1%
(5a)	(of which home grown)	-	-	-	-	-	*	449	450	499	455	495	9%
(6)	Usage as Animal Feed	1,215	1,144	1,310	1,186	1,266	7%	279	326	239	286	340	19%
(6a)	(of which home grown)	-	-	-	-	-	*	279	326	239	286	340	19%
(7)	Seed	-	-	-	-	-	*	20	18	19	20	26	30%
(8)	Other (h)	27	4	9	4	4	0%	4	4	4	4	5	25%
(9)	**Total Domestic Consumption**	**1,780**	**1,714**	**1,784**	**1,759**	**1,840**	5%	**810**	**840**	**787**	**831**	**896**	8%
(10)	**Balance (4) - (9)**	**373**	**401**	**267**	**448**	**380**	-15%	**151**	**184**	**158**	**131**	**180**	37%
(11)	Exportable surplus	132	92	120	177	139	-21%	42	77	65	21	65	210%
(12)	**Commercial End-Season Stocks**	**241**	**309**	**148**	**271**	**241**	-11%	**109**	**107**	**93**	**110**	**115**	5%

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

(b) Defra updated the registry for the UK flour millers survey in spring 2016, the wheat H&I usage has been adjusted to take account of this change.

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

(d) Seed numbers have been updated based on a number of assumptions, calculated for the purposes of the balance sheet only

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

(f) 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

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

(h) 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*

*** These balance sheets have been adjusted as per Defra's reliability allocation method*

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		OTHER CEREALS *(i)*					
		2012/13 2016/17 average	**2014/15 estimate**	**2015/16 estimate**	**2016/17 estimate**	**Nov-17 estimate**	**% change on 16/17**
(1)	Opening Stocks	5	5	5	5	5	0%
(2)	Production	115	131	121	110	105	-5%
(3)	Imports	3	1	3	3	3	0%
(4)	**Total Availability**	**123**	**137**	**129**	**118**	**113**	-4%
(5+6)	H&I and Animal Feed	115	129	121	110	105	-5%
(5a+6a)	(of which home grown)	112	128	118	107	102	-5%
(7)	Seed	3	3	3	3	3	0%
(8)	Other	-	-	-	-	-	*
(9)	**Total Domestic Consumption**	**118**	**132**	**124**	**113**	**108**	-5%
(10)	**Balance (4) - (9)**	**5**	**5**	**5**	**5**	**5**	0%
(11)	Exportable surplus	0	0	0	0	0	0%
(12)	Intervention Stocks	0	-	-	-	-	0%
(13)	**Commercial End-Season Stocks**	**5**	**5**	**5**	**5**	**5**	0%

		TOTAL CEREALS					
		2012/13 2016/17 average	**2014/15 estimate****	**2015/16 estimate****	**2016/17 estimate****	**Nov-17 estimate**	**% change on 16/17**
(1)	Opening Stocks	3,649	3,370	4,352	4,400	3,274	-26%
(2)	Production	22,078	24,225	24,796	21,880	23,561	8%
(3)	Imports	4,193	3,702	3,452	4,139	3,725	-10%
(4)	**Total Availability**	**29,920**	**31,297**	**32,600**	**30,419**	**30,560**	0%
(5)	H&I (wheat, barley, maize, oats) (h)	10,606	10,838	10,183	11,084	11,105	0%
(6)	Animal Feed (wheat, barley, maize oats) (h)	11,917	11,737	12,256	12,636	13,035	3%
(5a +6a)	Other cereals (H&I and Animal Feed)	115	129	121	110	105	-5%
(7)	Seed	492	490	485	495	497	0%
(8)	Other	140	131	129	118	122	3%
(9)	**Total Domestic Consumption**	**23,271**	**23,325**	**23,174**	**24,443**	**24,864**	2%
(10)	**Balance (4) - (9)**	**6,650**	**7,972**	**9,426**	**5,976**	**5,696**	-5%
(11)	Exports	2,876	3,621	5,027	2,701	-	*
(12)	Intervention Stocks	-	-	-	-	-	*
(13)	**Commercial End-Season Stocks**	**3,773**	**4,352**	**4,400**	**3,274**	**-**	*
(14)	Estimated Operating stock requirement (wheat & barley only)	2,239	2,250	2,260	2,360	2,370	0%
(15)	Free stock for wheat and barley	1,179	1,681	1,894	528	-	*
(16)	Surplus available for either export or free stock (all)	**4,410**	**5,722**	**7,167**	**3,616**	**3,326**	-8%
(17)	Residual (10)-(11)-(13) (i)						

(i) Includes mainly rye, triticale, mixed grain and sorghum **_Source: DEFRA_**

*** These balance sheets have been adjusted 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 2017 **Thousand tonnes**

	2012/13 to 2016/17 Average	2010/11 13 weeks	2011/12 13 weeks	2012/13 13 weeks	2013/14 13 weeks	2014/15 13 weeks	2015/16 13 weeks	2016/17 13 weeks	2017/18 13 weeks	% Change 2017/18 on 2016/17	Actual Change 2017/18 on 2016/17
WHEAT											
(1) Usage Human and -Flour Millers -imported	339	220	175	248	587	395	242	220	241	10%	21
(2) Industrial -home-grown	1306	1407	1316	1351	984	1289	1370	1539	1565	2%	26
(3) Processors -Total	1645	1627	1490	1599	1571	1683	1612	1759	1807	3%	48
(4) -Distillers	186	118	138	180	206	195	172	179	212	19%	34
(5) -Others	44	42	41	41	48	43	46	42	42	0%	0
(6) Animal Feed Processors (a)	791	693	696	744	775	744	814	880	888	1%	8
(7) Poultry Integrated Units	348	398	398	395	369	355	319	302	304	1%	2
(8) Imports From July (b)	582	213	218	590	829	612	449	428	419	-2%	-9
(9) Exports From July (b)	325	862	537	289	44	288	325	676	147	-78%	-529
(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	454	411	433	438	460	480	448	447	466	4%	19
(4) Animal Feed Processors (a)	221	229	192	212	213	253	226	200	284	42%	84
(5) Poultry Integrated Units	16	19	21	18	17	19	11	13	17	35%	4
(6) Imports From July (b)	39	24	42	39	26	29	61	38	41	8%	3
(7) Exports From July (b)	297	222	191	203	258	295	370	357	342	-4%	-15
(11) Intervention -Actual	0	5	0	0	0	0	0	0	0	*	0
(12) -Projected	0	5	0	0	0	0	0	0	0	*	0
MAIZE											
(1) Usage Human and Industrial	109	76	73	77	90	101	92	183	165	-10%	-17
(2) Animal Feed Processors (a)	63	27	24	47	64	74	69	61	72	17%	11
(3) Imports From July (b)	353	221	203	242	386	301	438	395	416	5%	21
(4) Exports From July (b)	16	3	9	7	13	13	21	26	35	33%	9
OATS											
(1) Usage Human and Industrial Processors	121	112	115	114	120	118	125	126	129	2%	3
(2) Animal Feed Processors (a)	15	27	15	14	17	21	14	10	10	6%	1
(3) Imports From July (b)	15	5	10	10	23	13	19	10	13	40%	4
(4) Exports From July (b)	11	30	5	2	7	22	18	8	17	120%	9

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.
There were 53 weeks in the Statistical year 2016. In order to incorporate the change April 2016 was increased to a 5 week period compared to 4 weeks in 2015.
Note: This Appendix reflects the position as at 28 November 2016. 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