SUPPLY AND DEMAND

05 June 2019



KEY POINTS

- Lower UK wheat production has given the tightest wheat balance in five years; however, with minimal
 exports and competition from other grains, closing stocks are set to increase.
- Despite a fall in domestic usage, barley closing stocks are estimated at the lowest level since 2012/13.
- Maize imports are estimated to grow further, on the back of strong demand, to a new high in 2018/19.
- Demand for oats by millers continues to be robust in 2018/19.

INTRODUCTION

- 1. This release covers the third official estimates made of UK cereal supply and demand for 2018/19 (Appendix I).
- 2. On Friday 31 May 2019, Defra published revisions to the June survey crop areas for 2018 and associated datasets. The revisions have been included in these UK Cereals Supply and Demand Estimates. Find out more about the revisions to the June crop areas here. Please note that the Defra cereal production estimates are standardised to 14.5% moisture content, with production tonnages being adjusted accordingly. Defra are assessing different options available, regarding production and moisture content to take account of the varied climate conditions.
- 3. In 2018/19, total cereals demand for animal feed is estimated at 12.771Mt, 513Kt lower than that forecast in February and 293Kt (2%) lower than 2017/18. The overall decline in animal feed usage compared with previous estimates is largely driven by a decline in ruminant feed production, with demand expected to return to more usual levels, following the adverse conditions in 2018. While poultry feed production in the UK is expected to be higher year on year, the scale of the increase is projected to be less, driven by a slight slowdown in broiler feed demand. Pig feed production is expected to remain relatively stable on the year.

WHEAT

UK wheat availability is estimated at 17.003Mt in 2018/19, 368Kt lower than February's estimate and 1.383Mt (8%) less than in 2017/18. Following the publication of revised June survey crop areas by Defra on 31 May 2019, estimated production has been reduced. UK wheat output is now estimated at 13.555Mt, 398Kt lower than the previous estimate published by Defra on 20 December 2018. Full season wheat imports are forecast at 1.730Mt, 30Kt higher than February's estimate, but 63Kt lower than the volume imported in 2017/18. From July 2018 to March 2019, the UK imported 1.508Mt, 24% more than the same period in 2017/18. While the pace of imports during the first half of the season was strong, since January it has slowed somewhat. During the last quarter of the season imports are expected to continue to slow, driven by a reduction in bioethanol and animal feed demand. Furthermore, demand for imported wheat by UK flour millers is expected to be lower than year earlier levels.

- At 6.996Mt, human and industrial (H&I) 5. consumption of wheat is slightly lower (28Kt) than that forecast in February and 820Kt (10%) less compared with 2017/18. The annual decline in wheat usage is largely driven by a fall in bioethanol demand. Compared with February's estimates, demand for wheat by the bioethanol sector is also slightly lower due to a projected rise in maize demand as a result of its relative price and availability. It is assumed for these estimates that Vivergo Fuels will remain offline for the remainder of the season. While flour production is expected to remain relatively stable on the year, a projected increase in extraction rates has led to a slight reduction in wheat usage. Wheat usage by the brewing, malting and distilling (BMD) sector is estimated to be slightly higher than February's estimates, but remain lower than year earlier levels, with some plants switching from wheat to maize usage, due to its relative price
- 6. Wheat usage in animal feed is estimated at 7.384Mt in 2018/19, 231Kt less than that forecast in February, and 131Kt lower than in 2017/18. While wheat usage by the animal feed sector was higher for the first part of the season, since December it has slowed, with usage of the grain by GB compound and integrated poultry units (IPU) falling on year earlier levels since February. This decline is expected to continue in the last quarter of the season, driven partly by a projected slowdown in overall animal feed production as well as a higher inclusion of maize in rations at the expense of wheat.
- 7. The balance of availability and domestic consumption in 2018/19 is estimated at 2.284Mt, 99Kt less than that forecast in February and 427Kt lower than in 2017/18. The estimated operating stocks requirement remains unchanged from the previous estimate at 1.550Mt. From July 2018 to March 2019 the UK exported 275Kt, 28% lower than the same period in 2017/18. Full season exports are currently forecast at 300Kt, 33% lower than the same period last season. While the balance of total availability and domestic consumption is expected to be tighter this season, a reduction in projected exports has led to an estimated commercial end-season stocks of 1.984Mt, 266Kt higher than in 2017/18.

BARLEY

- 8. At 7.666Mt, total availability of barley in 2018/19 is 109Kt less than that forecast in February and 712Kt lower than 2017/18, driven by a reduction in estimated output. Defra's revised UK production estimate is 111Kt lower than that published in December 2018 and 659Kt less than 2017/18 at 6.510Mt. UK barley imports are relatively unchanged from February's estimate at 80Kt, but are 25Kt lower than last season.
- 9. In 2018/19, H&I consumption of barley is 30Kt higher than previous estimates and 21Kt more than 2017/18 usage at 1.903Mt. From July 2018 to March 2019, the UK BMD sector used 1.411Mt of barley, 1% more than the same period last season. During the last quarter of the season barley usage by the BMD sector is expected to remain at similar levels, with no unscheduled closures or capacity changes expected.
- 10. The amount of barley used for animal feed is estimated at 3.592Mt for 2018/19, 310Kt less than February's forecast and 455Kt down **compared with last season.** A combination of tighter supply and relatively higher prices of feed barley during the first half of the season led to a fall in its inclusion in feed during the first half of the season. From July 2018 to March 2019 barley inclusions in GB compound and IPU feed production was 16% lower year on year at 791Kt. With the discount of feed barley to feed wheat widening since mid-January 2019, more barley is expected to be included in some rations in the latter part of the season. However, this increase is expected to be capped by an overall decline in animal as well as manufacturer's production commitments to other grains such as maize. The amount of barley fed on farm is also expected to be lower on the year in 2018/19, due to the smaller size of the crop and its relative price at the start of the season.
- 11. The balance of barley supply and demand is estimated at 1.955Mt, 175Kt higher than February's forecast, but 276Kt lower than in 2017/18. From July 2018 to March 2019, the UK exported 737Kt, 24% less than the same period last season. Full season exports are estimated to reach 910Kt, 17% less than 2017/18. Commercial endseason stocks are forecast at 1.045Mt, 3% lower than 2017/18.

MAIZE

12. In 2018/19, total availability of maize is 149Kt higher than that forecast in February and 442Kt more than 2017/18. The increase in supply compared with the previous estimate is driven by a 149Kt (23%) rise in maize imports to 2.490Mt. So far this season (Jan-Mar) the UK has imported 2.132Mt of the grain, 37% higher than the same period last

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- season. The pace of imports for the last quarter of the season is expected to slow somewhat.
- At 777Kt, H&I usage of maize is 78Kt higher than February's forecast and 134Kt more than in **2017/18.** The increase on the previous estimate is largely driven by an expected increased demand by the bioethanol sector, outweighing a slight reduction in BMD usage. Compared with 2017/18 maize usage by the bioethanol and BMD sector is expected to increase due to the relative price of maize to other cereals this season. Usage of maize by the cereal breakfast food industry is also expected to record an increase. In 2018/19, maize usage in animal feed is estimated at 1.516Mt, 31Kt higher than the previous forecasts and 286Kt up on the season. In the season to date (Jul-Mar) 477Kt of maize was used in GB compound and IPU feed production, 80% more than that used from July 2017 to March 2018. Likewise, usage of maize by feed manufacturers in Northern Ireland has increased by 12% over the same period to 423Kt. While maize usage in feed is expected to remain relatively strong, it is anticipated to slow slightly from its current inclusion rate during the last quarter of the season.
- 14. The balance of availability and consumption of maize in 2018/19 is estimated at 440Kt, 40Kt higher than February's estimate and 22Kt up on last season. Taking account of the export pace to date (Jul-Mar) of 144Kt, full season exports of maize are estimate to be 173Kt. At 267Kt, commercial end-season stocks are 42Kt higher than that estimated in February and 21Kt up on 2017/18.

OATS

- 15. The availability of oats is estimated at 1.020Mt, 6Kt lower than February's estimate, but 16Kt up on the year. While oat imports have been revised up 4Kt from previous forecasts to 32Kt, taking account of the pace to date, Defra's revised production estimate is 10Kt lower than the December 2018 estimate at 850Kt.
- 16. In 2018/19 H&I usage of oats is 12Kt lower than that forecast in February and relatively unchanged from 2017/18 at 535Kt, with no capacity changes expected. At 280Kt the amount of oats used in animal feed is estimated to be marginally lower (3Kt) than previous estimates, but slightly higher (7Kt) than last season.
- 17. At 177Kt, the supply and demand balance of oats is 5% up on February's estimates and 6% up on 2017/18. Taking account of the 32Kt shipped to end-March, full season exports are forecast at 37Kt, 9Kt more than in 2017/18. End-season stocks are estimated at 140Kt, relatively unchanged from previous estimates and 2017/18.
- 18. Appendix II shows cumulative usage and trade data to end-March. This release and related information can be found at ahdb.org.uk/cereals-oilseeds-markets

UK CEREAL SUPPLY AND DEMAND ESTIMATES (a)

Estimates made in May

Background note: On Friday 31 May 2019, Defra published revisions to the 2018 England crop area data (and associated datasets). The revisions have been included in these UK Cereal Supply and Demand Estimates.

Find out more about the revisions to the June survey crop areas here.

(JULY - JUNE YEARS)

Links connect to relevant Defra/AHDB data pages

Thousand tonnes

		WHEAT							BARLEY								
		2013/14						Absolute	%	2013/14						Absolute	%
		2017/18	2015/16	2016/17	2017/18	2018/19	2018/19	change	change	2017/18	2015/16	2016/17	2017/18	2018/19	2018/19	change	change
		average	estimate**	estimate	estimate	Feb-19	May-19	Feb-19	on 17/18	average	estimate	estimate	estimate	Feb-19	May-19	Feb-19	on 17/18
(1)	Opening Stocks	2,144	2,434	2,787	1,755	1,718	1,718	-	-2%	1,269	1,497	1,367	1,105	1,076	1,076	-	-3%
(2)	<u>Production</u>	14,779	16,506	14,383	14,837	13,953	13,555	-398	-9%	7,039	7,370	6,655	7,169	6,621	6,510	-111	-9%
(3)	<u>Imports</u>	1,804	1,509	1,855	1,793	1,700	1,730	30	-4%	122	159	106	105	78	80	2	-24%
(4)	Total Availability	18,727	20,449	19,025	18,386	17,371	17,003	-368	-8%	8,430	9,026	8,128	8,379	7,775	7,666	-109	-9%
(5)	Human and Industrial Consumption (b)	7,715	7,360	8,110	7,816	7,024	6,996	-28	-10%	1,897	1,833	1,863	1,881	1,873	1,903	30	1%
(5a)	(of which home grown)	6,585	6,416	7,169	6,787	5,992	5,968	-24	-12%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6)	Usage as Animal Feed (c)	7,042	7,094	7,236	7,515	7,615	7,384	-231	-2%	3,617	3,613	3,655	4,047	3,902	3,592	-310	-11%
(6a)	(of which home grown)	6,358	6,444	6,523	6,794	6,905	6,636	-269	-2%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(6b)	(of which Compounders)	3,825	3,845	4,034	4,232	4,370	4,144	-227	-2%	1,153	1,108	1,132	1,279	1,143	1,182	38	-8%
(6c)	(of which Integrated Poultry Units)	1,297	1,210	1,211	1,241	1,204	1,158	-45	-7%	59	49	53	59	50	48	-1	-18%
(7)	Seed (d)	283	281	278	271	279	271	-8	0%	177	182	189	183	186	183	-3	0%
(8)	Other	76	79	72	74	70	68	-2	-8%	35	37	33	36	33	33	-	-8%
(9)	Total Domestic Consumption	15,117	14,814	15,696	15,675	14,988	14,719	-269	-6%	5,727	5,665	5,740	6,147	5,994	5,711	-283	-7%
(10)	Balance (4) - (9)	3,610	5,635	3,329	2,711	2,383	2,284	-99	-16%	2,703	3,361	2,388	2,231	1,781	1,955	175	-12%
(11)	Exports (e)	1,425	2,848	1,438	448	-	300	*	-33%	1,355	1,994	1,026	1,101	-	910	*	-17%
(12)	Intervention Stocks (e)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<u> </u>
(13)	Commercial End-Season Stocks (e)	2,051	2,787	1,755	1,718	-	1,984	*	15%	1,285	1,367	1,105	1,076	-	1,045	*	-3%
(14)	(of which Estimated Operating stock requirement) (f)	1,522	1,500	1,560	1,600	1,550	1,550	-	-3%	751	760	760	770	780	780	-	1%
(15)	(of which free stock) (g)	529	1,287	195	118	-	434	*	268%	534	607	345	306	-	265	*	-13%
(16)	Surplus available for either export or free stock (10)-(12)-(14)-(17)	1,954	4,135	1,633	567	833	734	-99	30%	1,889	2,601	1,371	1,408	1,001	1,175	175	-16%
(17)	Residual (10)-(11)-(13)			136	544							257	53				

		MAIZE							OATS								
		2013/14						Absolute	%	2013/14						Absolute	%
		2017/18	2015/16	2016/17	2017/18	2018/19	2018/19	change	change	2017/18	2015/16	2016/17	2017/18	2018/19	2018/19	change	change
		average	estimate**	estimate	estimate	Feb-19	May-19	Feb-19	on 17/18	average	estimate	estimate	estimate	Feb-19	May-19	Feb-19	on 17/18
(1)	Opening Stocks	241	309	148	271	247	247	-	-9%	109	107	93	110	138	138	-	25%
(2)	<u>Production</u>	-	-	-	-	-	-	-	-	855	799	816	875	860	850	-10	-3%
(3)	<u>Imports</u>	1,993	1,742	2,007	2,024	2,342	2,490	149	23%	35	39	32	19	28	32	4	66%
(4)	Total Availability	2,233	2,051	2,155	2,295	2,588	2,737	149	19%	999	945	941	1,004	1,026	1,020	-6	2%
(5)	Human and Industrial Consumption	585	465	570	643	699	777	78	21%	517	525	521	537	547	535	-12	0%
(5a)	(of which home grown)	-	-	-	-	-	-	-	-	482	499	476	519	519	503	-16	-3%
(6)	Usage as Animal Feed	1,244	1,310	1,135	1,230	1,485	1,516	31	23%	290	239	263	273	283	280	-3	2%
(6a)	(of which home grown)	-	-	-	-	-	-	-	-	290	239	263	273	283	280	-3	2%
(7)	Seed	-	-	-	-	-	-	-	-	20	19	23	24	24	24	-	0%
(8)	Other (h)	5	9	4	4	4	4	-	0%	4	4	4	4	4	4	-	0%
(9)	Total Domestic Consumption	1,833	1,784	1,709	1,877	2,188	2,297	109	22%	831	787	811	837	857	843	-15	1%
(10)	Balance (4) - (9)	400	267	446	418	400	440	40	5%	168	158	130	166	169	177	8	6%
(11)	Exportable surplus (e)	153	120	175	171	175	173	-2	1%	45	65	21	28	30	37	7	31%
(12)	Commercial End-Season Stocks	247	148	271	247	225	267	42	8%	123	93	110	138	139	140	1	2%

Due to rounding, totals may not agree with the sum of individual items

- (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 Sheets 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.
- * Change not meaningful
- ** These Balance Sheets have been adjusted as per Defra's reliability allocation method

			OTHER CEREALS (i)								
		2013/14						Absolute	%		
		2017/18	2015/16	2016/17	2017/18	2018/19	2018/19	change	change		
		average	estimate	estimate	estimate	Feb-19	May-19	Feb-19	on 17/18		
(1)	Opening Stocks	5	5	5	5	5	5	-	0%		
(2)	Production	118	121	110	119	177	169	-8	42%		
(3)	Imports	3	3	3	4	4	4	-	0%		
(4)	Total Availability	125	129	118	129	186	179	-8	39%		
(5+6)	H&I and Animal Feed	117	121	110	121	178	170	-8	41%		
(5a+6a)	(of which home grown)	115	118	107	116	174	166	-8	43%		
(7)	Seed	3	3	3	3	3	3	-	0%		
(8)	Other	-	-	-	-	-	-	-	-		
(9)	Total Domestic Consumption	120	124	113	124	181	173	-8	40%		
(10)	Balance (4) - (9)	5	5	5	5	5	5	-	7%		
(11)	Exportable surplus	-	-	-	-	-	-	-	-		
(12)	Intervention Stocks	-	-	-	-	-	-	-	-		
(13)	Commercial End-Season Stocks	5	5	5	5	5	5	-	0%		

					TOTAL C	EREALS			
		2013/14 2017/18 average	2015/16 estimate**	2016/17 estimate	2017/18 estimate	2018/19 Feb-19	2018/19 May-19	Absolute change Feb-19	% change on 17/18
(1)	Opening Stocks	3,768	4,352	4,400	3,247	3,184	3,184	-	-2%
(2)	Production	22,791	24,796	21,964	22,999	21,611	21,085	-527	-8%
(3)	Imports	3,955	3,452	4,003	3,945	4,152	4,336	184	10%
(4)	Total Availability	30,515	32,600	30,366	30,191	28,947	28,605	-342	-5%
(5)	H&I (wheat, barley, maize, oats) (h)	10,714	10,183	11,064	10,876	10,143	10,211	68	-6%
(6)	Animal Feed (wheat, barley, maize oats) (h)	12,192	12,256	12,288	13,065	13,284	12,771	-513	-2%
(5a +6a)	Other cereals (H&I and Animal Feed)	117	121	110	121	178	170	-8	41%
(7)	Seed	485	485	493	481	492	481	-11	0%
(8)	Other	120	129	113	118	111	109	-2	-8%
(9)	Total Domestic Consumption	23,629	23,174	24,068	24,661	24,209	23,743	-466	-4%
(10)	Balance (4) - (9)	6,886	9,426	6,298	5,531	4,738	4,862	124	-12%
(11)	Exports	2,979	5,027	2,660	1,749	-	1,420	*	-19%
(12)	Intervention Stocks	-	-	-	-	-	-	-	-
(13)	Commercial End-Season Stocks	3,710	4,400	3,247	3,184	-	3,442	*	8%
(14)	Estimated Operating stock requirement (wheat & barley only)	2,273	2,260	2,320	2,370	2,330	2,330	-	-2%
(15)	Free stock for wheat and barley	1,063	1,894	541	424	-	700	*	65%
(16)	Surplus available for either export or free stock (all)	4,041	7,167	3,587	2,563	2,408	2,532	124	-1%
(17)	Residual (10)-(11)-(13)			392	598				

Source: AHDB, Defra

Due to rounding, totals may not agree with the sum of individual items

(i) Includes mainly rye, triticale and mixed grain.

** These Balance Sheets have been adjusted as per Defra's reliability allocation method



CUMULATIVE MONTHLY STATISTICS Usage of cereals by processors, external trade and stocks

Situation as at end of March 2019

Thousand tonnes

Source: AHDB, Defra, HMRC

	us at ena of March 2019		2013/14 to 2017/18 Average	2012/13 39 weeks	2013/14 39 weeks	2014/15 39 weeks	2015/16 39 weeks	2016/17 39 weeks	2017/18 39 weeks	2018/19 39 weeks	% Change 2018/19 on 2017/18	Actual Change 2018/19 on 2017/18
WHEAT												
Usage	Human and -Flour Millers [†]	-imported	825	1183	1149	914	707	677	681	838	23%	157
	Industrial	-home-grown	<i>4</i> 228	3808	3642	<i>4</i> 270	4125	4679	4424	3844	-13%	-580
		-Total	5053	4990	4790	5183	4831	5356	5104	4681	-8%	-423
	-Distillers		570	602	619	584	465	546	635	527	-17%	-108
	Animal Feed Processors (a)		2470	2314	2192	2326	2472	2631	2729	2778	2%	49
	Poultry Integrated Units		965	1150	1045	1055	893	905	927	913	-1%	-14
<i>Imports</i>	From July ^(b)		1315	2090	1677	1253	1169	1260	1214	1508	24%	294
Exports	From July ^(b)		1119	582	353	1580	1966	1315	383	275	-28%	-108
	Intervention -Actual		0	0	0	0	0	0	0	0	*	*
	-Projected		0	0	0	0	0	0	0	0	*	*
BARLEY												
Usage	Maltsters/Distillers	-imported	-	-	-	-	-	-	-	-	-	-
3 3 3		-home-grown	-	-	-	-	-	-	-	-	-	-
		-Total	1387	1361	1414	1398	1346	1372	1401	1411	1%	9
	Animal Feed Processors ^(a)		787	669	786	746	775	736	891	753	-15%	-138
	Poultry Integrated Units		45	54	63	38	38	39	48	38	-21%	-10
<i>Imports</i>	From July ^(b)		75	159	66	77	86	74	70	56	-20%	-14
Exports	From July ^(b)		1113	348	1033	1174	1536	860	964	737	-24%	-228
	Intervention -Actual		0	0	0	0	0	0	0	0	*	*
	-Projected		0	0	0	0	0	0	0	0	*	*
MAIZE												
Usage	Human and Industrial		300	221	275	365	312	289	257	**	*	*
	Animal Feed Processors ^(a)		223	164	260	214	211	200	232	439	89%	206
Imports	From July ^(b)		1517	1240	1896	1473	1285	1380	1551	2132	37%	581
Exports	From July (b)		124	36	187	70	83	141	137	144	5%	6
OATS	· 											
Usage	Human and Industrial Proces	ssors	388	364	384	362	392	394	410	410	0%	0
-	Animal Feed Processors (a)		55	58	89	74	41	30	43	53	23%	10
Imports	From July (b)		22	53	34	21	22	19	16	28	81%	13
Exports	From July (b)		41	9	32	70	61	18	23	32	38%	9

⁽a) Great Britain only.

Footnotes:

Due to rounding, totals may not agree with the sum of the individual items.

There are 53 weeks in the Statistical year 2016. In order to incorporate the change, April 16 was increased to a 5 week period compared to 4 weeks in 2015.

Figures in Appendix II were updated on 05 June 2019. The data above may differ from the most recent published data.

⁽b) HMRC

^{*} Changes not meaningful

^{**}Insufficient sample to produce robust figure

[†] Includes bioethanol and starch usage