SUPPLY AND DEMAND

29 November 2024

KEY POINTS

- A significantly smaller wheat crop outweighs increased imports and heavier carry-in stocks. Despite a fall in domestic consumption, these tighter supplies leave a tighter wheat balance for the 2024/25 season.
- For barley, while a larger crop outweighs fewer imports and carry-in stocks, an uptick in domestic consumption leads to a tighter than average balance this season.
- For the 2024/25 season, maize usage is expected to increase in both the human and industrial sector and animal feed production.
- Despite increased consumption on the year, the oat balance is heavier than average, due to a larger oat crop.

INTRODUCTION

1. This release covers the first official estimates made of UK cereal supply and demand for 2024/25 (Appendix 1).

2. Defra were unable to publish provisional UK cereal and oilseed production estimates for 2024, due to reduced data availability from UK regions. Official provisional estimates are for England and Scotland only. Following Defra's methodology from when a UK provisional figure was last released in 2021, the AHDB have assumed no change for Wales and Northern Ireland area and production figures from 2023. These have been combined with the provisional England and Scotland production figures to produce UK wheat and barley production estimates for these Balance Sheets. Production for previous seasons is based on the results from the Defra Cereals and Oilseed Rape Production survey.

3. **At 12.632 Mt, total cereals demand for animal feed in 2024/25 is forecast down 282 Kt on the year.** Following a significant decline in demand in 2022/23, in 2023/24, we saw some recovery in overall feed production. This recovery is expected to continue into 2024/25. Cereal inclusion rates are expected to rise and demand from compounders and Integrated Poultry Units (IPU) is forecast to climb year on year. However, due to the reduced availability of domestic cereals, and competitively priced maize imports, the decline in the amount of grain fed on farm is expected to outweigh that increase. This season we are experiencing firm demand from the cattle and sheep sectors, due to improved milk, beef and lamb prices. Although pig and poultry feed production remains sluggish, with cost of production and avian flu in focus for future recovery in herd and flock numbers.

4. **Human and Industrial (H&I) total cereals usage is estimated to fall 131 Kt on 2023/24 levels to 10.705 Mt.** This decrease is largely driven by a fall in demand by the bioethanol industry, with neither UK plant expected to run at full capacity, with margins under pressure. Demand for cereals from the brewing malting and distilling (BMD) sector is also expected to fall compared with last season, with the steady start forecast to continue throughout the remainder of the marketing year.

WHEAT

5. **Total availability of wheat in 2024/25 is estimated at 16.788 Mt, down 1.581 Mt on year earlier levels, with a smaller crop far outweighing a rise in carry-in stocks and imports.** Opening stocks this season are estimated at 2.987 Mt, the highest since at least the turn of the century and up 1.034 Mt on the year. The UK wheat crop is provisionally estimated at 11.051 Mt, down 2.929 Mt on the year, due to a smaller planted area and varied yields. At 2.750 Mt, full season imports are forecast up 313 Kt on the season. Season to date (Jul-Sep) wheat imports are double the level imported at the same point last season at 887 Kt. However, the pace is expected to slow later in the marketing year.

6. **In 2024/25, H&I wheat consumption is estimated at 7.328 Mt, down 171 Kt from 2023/24 levels.** This yearly decline is largely due to reduced demand from the bioethanol and starch sector, with steady production levels and a shift to more competitively priced maize. Concerns remain over the resolution of the renewable energy directive (RED II) requirements following the UK's exit from the EU. The status of domestic feed wheat under these requirements is uncertain, and as such, current estimates assume we may see an increase in imported wheat and maize to allow for these regulations. This will remain a key watchpoint for UK demand this season. Despite expectations of a slight pull back in flour production, lower extraction rates compared to last season mean demand by flour millers is forecast up slightly on the year. Due to the significantly smaller crop, flour millers are expected to use a higher proportion of imported wheat in 2024/25. Wheat usage in BMD is forecast up on the year, with a firm start to the season for the sector.

7. **Usage of wheat in animal feed is estimated at 6.457 Mt, down 675 Kt on the year.** While total feed production is anticipated to rise year on year, and cereal inclusion is expected to increase, the proportion of wheat used in rations is forecast to decline. Due to its competitive price, we are instead expecting to see greater barley and maize usage. Although with a rising imported maize price, we are expecting a shift back to domestic cereals towards the

end of the season. This change in cereal splits also applies to IPU's. The amount of wheat fed on farm is forecast down due to tighter availability and the relative price of selling feed wheat over other grains, the leading contributor to the decline in wheat usage in animal feed.

8. **The balance of total availability and domestic consumption in 2024/25 is 2.711 Mt. This is 21% lower than year earlier levels, and below the five-year average of 3.214 Mt.** Reduced availability due to a smaller crop, far outweighs a decline in domestic consumption. An estimated operating stock requirement of 1.550 Mt (up 50 Kt on the year) is taken into account, leaving 1.161 Mt of wheat available for either export or free stock, down 585 Kt on the year, and below the five-year average of 1.360 Mt.

BARLEY

9. **In 2024/25, total availability of barley is estimated at 8.527 Mt, up slightly (94 Kt) on year earlier levels due to a rise in production.** A decline in opening stocks, and an estimated fall in imports, is outweighed by a 3% increase in production. UK barley production is provisionally estimated at 7.199 Mt, up 236 Kt on the year, with a larger planted area outweighing below average yields. Full season imports are estimated at 110 Kt, down 91 Kt on the year. Given increased availability of domestic barley this season, the import pace is expected to weaken over the coming months.

10. **At 1.862 Mt, H&I barley consumption is estimated to fall 55 Kt on year earlier levels, but relatively in line with the five-year average.** Usage by the brewing, malting and distilling (BMD) sector is forecast to decline on the year, with the steady start to the season expected to continue. Demand for both brewing and distilling is said to be sluggish as a result of the rise in cost of living, fewer young people drinking, and maintenance being carried out on sites across the industry.

11. **In 2024/25, usage of barley in animal feed is forecast up 197 Kt on the year, to 4.385 Mt.** Due to its availability and therefore relative price against other cereals, the use of barley in feed rations is expected to remain firm for the rest of the season. The amount of barley fed on farm is also expected to rise from 2023/24 levels.

12. **At 2.051 Mt, the barley supply and demand balance in 2024/25 is 49 Kt or 2% lower on the year, driven by an overall increase in consumption.** The barley balance remains below the previous five-year average of 2.299 Mt. When allowing for an operating stock requirement of 800 Kt (unchanged on the year), the exportable surplus is estimated at 1.251 Mt, up 54 Kt on the year, but below the five-year average of 1.528 Mt.

MAIZE

13. **At 2.820 Mt, total availability of maize in 2024/25 is estimated up 33 Kt on the year.** Heavier opening stocks outweigh the expectation of a slight decline in imports. Full season imports of maize are forecast at 2.620 Mt, back 22 Kt on year earlier levels. This season to date (Jul-Sep), the UK has imported 643 Kt of maize, up 20% on the same period last season. It is therefore estimated that the pace of imports will slow over the coming months with its relative price expected to be less competitive later in the season.

14. **In 2024/25, maize usage by H&I sectors is estimated at 1.021 Mt, up 103 Kt on year earlier levels.** Following a strong start, maize usage by the bioethanol sector is expected to remain firm for the rest of the season, with wheat remaining less competitive, and concerns over the RED II status of domestic supplies. **The use of maize in animal feed is forecast up 97 Kt on the year at 1.440 Mt, which would be the highest level since 2020/21 and above the previous five-year average.** Maize has priced competitively compared to domestic wheat and barley season to date. However, this is expected to shift with new crop barley becoming available. As such, while usage is expected to remain historically firm, it is estimated to ease later in the season.

15. **At 355 Kt, the balance of maize supply and demand in 2024/25 is 167 Kt lower than year earlier levels.** Exports are estimated at 135 Kt, down 32 Kt on the year, while closing stocks are forecast at 220 Kt, up 20 Kt from 2023/24 levels.

OATS

16. **Total availability of oats in 2024/25 is forecast at 1.139 Mt, up 154 Kt on the year, due to a larger crop.** UK oat production this season is provisionally estimated at 999 Kt, up 169 Kt year on year. Full season imports are pegged at 15 Kt, unchanged on year earlier levels.

17. **H&I oat consumption in 2024/25 is estimated to decline by 7 Kt on the year to 493 Kt.** Steady demand for oat products, combined with a good quality crop and therefore reduced hulling losses sees a decline in demand for milling oats. As the season progresses, the impact of increased capacity will continue to be assessed. **Usage of oats in animal feed is forecast up 99 Kt on the year, at 350 Kt.** This is driven by an increase in fed on farm usage with increased availability this season compared to last. Demand by compounders however is expected to fall.

18. **In 2024/25, the balance of oat supply and consumption is 62 Kt heavier on the year at 264 Kt and above the five-year average.** Full season exports are forecast to fall by 41 Kt on the year, at 75 Kt. With this slower export pace, end-season stocks are therefore forecast up 65 Kt on the year at 189 Kt.

19. Appendix II shows cumulative usage and trade data to end-September. This release and related information can be found at ahdb.org.uk/cereals-oilseeds-markets.

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Appendix I

UK CEREAL SUPPLY AND DEMAND ESTIMATES (a)

Estimates made in November 2024

July to June crop years — Thousand tonnes

		WHEAT						BARLEY					
		2019/20 2023/24 average	2021/22 estimate	2022/23 estimate	2023/24 estimate	2024/25 Nov-24	% change on 23/24	2019/20 2023/24 average	2021/22 estimate	2022/23 estimate	2023/24 estimate	2024/25 Nov-24	% change on 23/24
(1)	Opening stocks	1,901	1,413	1,788	1,953	2,987	53%	1,148	1,058	964	1,268	1,218	-4%
(2)	Production†	13,878	13,988	15,540	13,980	11,051	-21%	7,495	6,961	7,385	6,963	7,199	3%
(3)	Imports	1,856	1,994	1,360	2,437	2,750	13%	108	89	88	201	110	-45%
(4)	**Total availability**	**17,634**	**17,394**	**18,688**	**18,369**	**16,788**	**-9%**	**8,750**	**8,108**	**8,437**	**8,433**	**8,527**	**1%**
(5)	Human and industrial consumption	7,106	7,156	7,326	7,499	7,328	-2%	1,857	1,885	1,983	1,917	1,862	-3%
(5a)	(of which home grown)	6,017	6,407	6,407	6,320	5,734	-9%	n/a	n/a	n/a	n/a	n/a	n/a
(6)	Usage as animal feed (b)	6,991	7,242	6,906	7,131	6,457	-9%	4,364	4,237	3,941	4,188	4,385	5%
(6a)	(of which home grown)	6,367	6,486	6,486	6,381	5,657	-11%	n/a	n/a	n/a	n/a	n/a	n/a
(6b)	(of which compounders)	3,917	4,043	3,771	3,800	3,837	1%	1,516	1,553	1,342	1,396	1,437	3%
(6c)	(of which integrated poultry units)	1,147	1,143	1,104	1,225	1,214	-1%	88	83	74	92	98	7%
(7)	Seed (c)	256	280	267	238	238	-	192	178	183	192	192	-
(8)	Other	68	70	70	70	55	-21%	38	35	37	35	36	3%
(9)	**Total domestic consumption**	**14,420**	**14,748**	**14,569**	**14,938**	**14,078**	**-6%**	**6,451**	**6,335**	**6,144**	**6,333**	**6,476**	**2%**
(10)	**Balance (4) - (9)**	**3,214**	**2,646**	**4,119**	**3,431**	**2,711**	**-21%**	**2,299**	**1,773**	**2,293**	**2,101**	**2,051**	**-2%**
(11)	Exports (d)	754	511	1,586	258	-	*	1,150	764	1,123	780	-	*
(12)	Intervention stocks (d)	-	-	-	-	-	-	-	-	-	-	-	-
(13)	**Commercial end-season stocks (d)**	**2,116**	**1,788**	**1,953**	**2,987**	**-**	*****	**1,173**	**964**	**1,268**	**1,218**	**-**	*****
(14)	(of which estimated operating stock requirement) (e)	1,510	1,500	1,500	1,500	1,550	3%	794	800	800	800	800	-
(15)	(of which free stock) (f)	606	288	453	1,487	-	*	379	164	468	418	-	*
(16)	**Surplus available for either export or free stock (10)-(12)-(14)-(18)**	**1,360**	**799**	**2,038**	**1,745**	**1,161**	**-34%**	**1,528**	**928**	**1,592**	**1,197**	**1,251**	**5%**
(18)	**Residual (10)-(11)-(13)**		**347**	**581**	**186**				**45**	**-98**	**103**		

		MAIZE						OATS					
		2019/20 2023/24 average	2021/22 estimate	2022/23 estimate	2023/24 estimate	2024/25 Nov-24	% change on 23/24	2019/20 2023/24 average	2021/22 estimate	2022/23 estimate	2023/24 estimate	2024/25 Nov-24	% change on 23/24
(1)	Opening stocks	228	211	248	145	200	38%	133	147	157	140	125	-11%
(2)	Production†	-	-	-	-	-	-	1,013	1,123	1,007	830	999	20%
(3)	Imports	2,441	2,207	2,123	2,642	2,620	-1%	18	17	18	15	15	-3%
(4)	**Total availability**	**2,669**	**2,417**	**2,371**	**2,787**	**2,820**	**1%**	**1,164**	**1,287**	**1,182**	**985**	**1,139**	**16%**
(5)	Human and industrial consumption	878	859	801	919	1,021	11%	516	501	492	501	493	-1%
(5a)	(of which home grown)	-	-	-	-	-	-	499	483	474	486	478	-2%
(6)	Usage as animal feed	1,329	1,172	1,234	1,343	1,440	7%	364	476	350	252	350	39%
(6a)	(of which home grown)	-	-	-	-	-	-	364	476	350	252	350	39%
(7)	Seed	-	-	-	-	-	-	26	24	23	26	26	-
(8)	Other	4	4	4	4	4	-	5	6	5	4	5	25%
(9)	**Total domestic consumption**	**2,211**	**2,035**	**2,039**	**2,266**	**2,465**	**9%**	**910**	**1,007**	**870**	**782**	**875**	**12%**
(10)	**Balance (4) - (9)**	**457**	**383**	**332**	**522**	**355**	**-32%**	**254**	**280**	**312**	**203**	**264**	**30%**
(11)	Exportable surplus	141	134	131	167	135	-19%	114	123	172	116	75	-36%
(12)	**Commercial end-season stocks**	**205**	**248**	**145**	**200**	**220**	**10%**	**135**	**157**	**140**	**125**	**189**	**52%**
(13)	**Residual (10)-(11)-(12)**		**0**	**56**	**154**				**0**	**0**	**-38**		

Links connect to relevant Defra/AHDB data pages

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

* Change not meaningful

†Defra were unable to publish provisional UK cereal and oilseed production estimates for 2024, due to reduced data availability from UK regions. Defra published provisional estimates for England only. AHDB have consulted with industry and Defra to produce production estimates for Wales, Scotland, and Northern Ireland. These have been combined with the provisional Defra England production figures to produce UK wheat, barley and oat production estimates for this release. For 'other cereals', 2023 production has been used in these balance sheets. Production of all crops for previous seasons is based on the results from the Defra Cereals and Oilseed Rape Production survey.

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

(d) Split of exports, intervention and total commercial end-season stocks only published for historical seasons. Due to the highly unusual nature of the 2023/24 season, an adjusted comerical end-season stocks figure has been used in the wheat and barley bala

(e) 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.

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

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		OTHER CEREALS (i)					
		2019/20 2023/24 average	2021/22 estimate	2022/23 estimate	2023/24 estimate	2024/25 Nov-24	% change on 23/24
(1)	Opening stocks	6	5	10	6	9	57%
(2)	Production†	247	297	330	271	271	0%
(3)	Imports	5	11	4	5	13	183%
(4)	**Total availability**	**258**	**313**	**345**	**282**	**293**	4%
(5+6)	H&I and animal feed	237	289	300	262	273	4%
(5a+6a)	(of which home grown)	231	279	290	256	268	5%
(7)	Seed	7	10	10	10	10	0%
(8)	Other	-	-	-	-	-	-
(9)	**Total domestic consumption**	**244**	**299**	**310**	**272**	**283**	4%
(10)	**Balance (4) - (9)**	**14**	**14**	**35**	**10**	**10**	8%
(11)	Exportable surplus	7	4	29	0	1	153%
(12)	Intervention stocks	-	-	-	-	-	-
(13)	**Commercial end-season stocks**	**7**	**10**	**6**	**9**	**10**	5%

		TOTAL CEREALS					
		2019/20 2023/24 average	2021/22 estimate	2022/23 estimate	2023/24 estimate	2024/25 Nov-24	% change on 23/24
(1)	Opening stocks	3,416	2,834	3,167	3,512	4,539	29%
(2)	Production†	22,633	22,369	24,262	22,044	19,521	-11%
(3)	Imports	4,426	4,318	3,594	5,300	5,508	4%
(4)	**Total availability**	**30,475**	**29,521**	**31,023**	**30,856**	**29,568**	**-4%**
(5)	H&I (wheat, barley, maize, oats)	10,357	10,402	10,602	10,836	10,705	-1%
(6)	Animal feed (wheat, barley, maize oats)	13,048	13,126	12,431	12,914	12,632	-2%
(5a +6a)	Other cereals (H&I and animal feed)	237	289	300	262	273	4%
(7)	Seed	481	492	483	466	466	0%
(8)	Other	114	115	116	113	100	-12%
(9)	**Total domestic consumption**	**24,237**	**24,424**	**23,932**	**24,591**	**24,176**	**-2%**
(10)	**Balance (4) - (9)**	**6,238**	**5,096**	**7,091**	**6,265**	**5,391**	**-14%**
(11)	Exports	2,166	1,537	3,041	1,321	-	-
(12)	Intervention stocks	-	-	-	-	-	-
(13)	**Commercial end-season stocks**	**3,636**	**3,167**	**3,512**	**4,539**	**-**	**-**
(14)	Estimated operating stock requirement (wheat & barley only)	2,304	2,300	2,300	2,300	2,350	2%
(15)	Free stock for wheat and barley	985	452	921	1,905	-	
(16)	**Surplus available for either export or free stock (10)-(12)-(14)-(18)**	**3,934**	**2,404**	**4,253**	**3,560**	**3,041**	**-15%**
(17)	**Residual (10)-(11)-(13)**		**392**	**539**	**405**		

Source: AHDB, Defra

Links connect to relevant Defra/AHDB data pages
Due to rounding, totals may not agree with the sum of individual items
(i) Includes mainly rye, triticale and mixed grain.
* Change not meaningful
†Defra were unable to publish provisional UK cereal and oilseed production estimates for 2024, due to reduced data availability from UK regions. Defra published provisional estimates for England only. AHDB have consulted with industry and Defra to produce production estimates for Wales, Scotland, and Northern Ireland. These have been combined with the provisional Defra England production figures to produce UK wheat, barley and oat production estimates for this release. For 'other cereals', 2023 production has been used in these balance sheets. Production of all crops for previous seasons is based on the results from the Defra Cereals and Oilseed Rape Production survey.

AHDB

Appendix II

CUMULATIVE MONTHLY STATISTICS

Usage of cereals by processors, external trade and stocks

Situation as at end of September 2024

Thousand tonnes

		2019/20 to 2023/24 average	2019/20 13 weeks	2020/21 13 weeks	2021/22 13 weeks	2022/23 13 weeks	2023/24 13 weeks	2024/25 13 weeks	% Change 2024/25 on 2023/24	Actual Change 2024/25 on 2023/24
WHEAT										
Usage	Flour millers [1]	1,507	1,444	1,477	1,488	1,506	1,619	1,507	-7%	-112
	of which home-grown	1,233	1,238	1,165	1,131	1,283	1,346	1,111	-17%	-235
	of which imported	274	206	312	357	223	273	396	45%	123
	Brewers, maltsters and distillers	218	192	180	209	246	262	294	12%	32
	Animal Feed Processors [2]	1,128	1,194	1,130	1,111	1,101	1,104	1,097	-1%	-7
	of which feed compounders	842	917	840	836	814	803	795	-1%	-7
	of which intergrated poultry units	286	276	290	275	287	301	302	0%	1
Imports	From July [3]	490	303	744	632	356	416	887	113%	471
Exports	From July [3]	184	417	73	94	247	91	27	-71%	-64
BARLEY										
Usage	Brewers, maltsters and distillers	451	470	400	443	461	479	437	-9%	-42
	Animal Feed Processors [2]	340	292	371	429	297	313	311	-1%	-2
	of which feed compounders	316	281	344	391	279	283	286	1%	3
	of which intergrated poultry units	25	11	27	38	18	30	24	-18%	-5
Imports	From July [3]	26	16	25	40	21	27	58	114%	31
Exports	From July [3]	346	671	279	268	288	225	99	-56%	-127
MAIZE										
Usage	Human and Industrial [4]	**	**	**	**	**	**	**	*	*
	Animal Feed Processors [2]	116	125	119	103	**	**	**	*	*
	of which feed compounders	98	106	105	91	109	81	102	26%	21
	of which intergrated poultry units	**	19	14	12	**	**	**	*	*
Imports	From July [3]	539	561	640	324	631	537	643	20%	106
Exports	From July [3]	34	31	35	20	31	53	27	-49%	-26
OATS										
Usage	Human and Industrial [5]	129	128	139	128	129	124	120	-3%	-4
	Animal Feed Processors [2]	17	12	14	25	19	13	6	-54%	-7
Imports	From July [3]	4	2	6	4	3	4	3	-9%	0
Exports	From July [3]	24	26	16	6	49	24	3	-89%	-21

Source: AHDB, Defra, HMRC

[1] Includes bioethanol and starch usage
[2] Great Britain only
[3] HMRC
[4] Data no longer available. For quarterly data to end of 2017/18, please access using historic balance sheets.
[5] Oat milled data published quarterly. Data displayed as at end-September (13 weeks).

* Changes not meaningful
**Insufficient sample to produce robust figure

Notes

Due to rounding, totals may not agree with the sum of the individual items.
There are 53 weeks in the statistical year 2024. In order to incorporate the change January 2024 was increased to a 5 week period compared to 4 weeks in 2023.
There are 53 weeks in the statistical year 2020. In order to incorporate the change January 2020 was increased to a 5 week period compared to 4 weeks in 2019.
Figures in Appendix II were updated on 29 November 2024. The data above may differ from the most recent published data.

Disclaimer