



# Supply & Demand

**DECEMBER 2007 UPDATE**

**11<sup>th</sup> December 2007**

## INTRODUCTION

1. This note contains revisions to the Defra cereal supply and demand estimates for 2007/08. Appendix II contains cumulative usage data to end-September. The next review of the annual supply and demand estimates will be on 4<sup>th</sup> March 2008. Results will be posted at [www.hgca.com](http://www.hgca.com)

## APPENDIX I REVISIONS TO 2007/2008 CEREAL BALANCE

### SUPPLY

2. UK total cereal availability in 2007/08 is estimated at 24.519Mt, down 1.499Mt (6%) on 2006/07. The UK provisional cereal production figures show that the UK harvested a smaller wheat crop (down 9%), a smaller barley crop (down 2%) and a marginally smaller oats crop (down less than 1%). Final production estimates will be published on 10<sup>th</sup> January 2008.

3. UK wheat availability is estimated at 16.291Mt, down 1.210Mt (7%) on last season. Opening stocks are 1.856Mt, up 58,000t (3%) on 2006/07. The crop is smaller, at 13.362Mt, down 1.373Mt (9%). Imports are estimated at 1.073Mt, up 105,000t (11%).

4. UK barley availability is estimated at 6.036Mt in 2007/08, down 0.2Mt (3%) on last season. Opening stocks are estimated at 0.779Mt, down 0.108Mt (12%) on 2006/07. Production this

season is 5.149Mt, down 90,000t (2%), while imports are estimated down by 2,000t on last season, at 0.108Mt.

5. Maize and oat availabilities are placed at 1.211Mt and 0.794Mt, down 11% and up less than 1% from last season respectively.

6. Sorghum has now been included in other cereals along with rye, triticale and mixed grain, as more sorghum has been imported this season. Other cereals' availability is estimated at 0.187Mt, up 43% on 2006/07. Of this, imports are placed at 65,000t, 1,200% higher than last season's 5,000t.

### DEMAND

#### Human and Industrial (H&I)

##### Processors' Usage

7. The balance sheets take into account an estimate for wheat usage by a new production plant coming on line.

8. H&I usage in the wheat sector is estimated at 6.755Mt, up 0.363Mt (6%) on last season. Home-grown wheat usage is estimated at 5.763Mt, up 0.233Mt (4%) on last season.

9. H&I usage in the barley sector is estimated at 1.737Mt, up 22,000t (1%) on last season. Usage of maize for H&I purposes is estimated at 0.575Mt, down 0.192Mt (25%) on last season. H&I oat usage, at 0.424Mt, is up 18,000t (4%) on last season.

## **Animal Feed Usage**

10. The animal feed mix and the use of imported grains are particularly dynamic this year and a detailed utilisation from future survey data will clarify these trends.

11. Animal feed usage of wheat is estimated at 6.364Mt this season, down 0.413Mt (6%) on last season. Of this, home-grown wheat is forecast at 6.290Mt, down 0.373Mt (6%) on last season.

12. Animal feed usage of barley is estimated at 3.011Mt, down 40,000t (1%) on last season. Maize usage in the feed sector is placed at 0.469Mt, up 32,000t (7%) on last season, while oat usage is placed 0.255Mt, down 11,000t (4%) on last season. The greater intake of sorghum this season has been reported in the other cereals usage as "H&I and animal feed" which is set at 0.179Mt, up 56,000t (46%) on 2006/07.

## **Seed and other Usage**

13. Until official planting estimates are available, the forecast continues to assume no change in crop areas. Based on typical seed sowing rates, seed usages of wheat and barley are estimated at 0.275Mt and 0.133Mt respectively.

## **End-Season Stocks and Exports**

14. Wheat exports and intervention stocks are seen at 0.942Mt, down 1.206Mt (56%) on last season. Commercial closing stocks are set at the three-season average of 1.888Mt, up 32,000t (2%) on last season.

15. Barley exports and intervention are estimated at 0.278Mt, down 0.252Mt (48%) on 2006/07. Closing stocks of

barley are estimated at 0.851Mt, set at the three-season average which is 72,000t (9%) up on last season.

16. Oat exports are seen at 48,000t, down 4,000t (8%) on last season. This figure reflects trade estimates rather than customs data. Oat closing stocks are placed at 45,000t, down 1,000t (3%) on 2006/07. Maize exports are seen at 17,000t, up 1,000t (7%) on last season, while closing stocks are estimated at 36,000t, up 11,000t (46%) on 2006/07. Closing stocks of maize and oats have also been set at the three-season average.

## **APPENDIX II SEPTEMBER SURVEY RESULTS**

17. Since trade data are not available for October, the latest Appendix II refers to September. However, usage data for October are now available and can be found at:

<http://statistics.defra.gov.uk/esg/statnot/agri.asp>

## **H&I Processors' Usage**

18. Usage of wheat by the flour milling sector, including starch and glucose producers, to end-September was 1.436Mt, up 26,000t on last season. Within this total, imported usage was 32,000t higher, while home-grown usage was 6,000t lower. Distillers' wheat usage, at 151,000t, was up 10,000t (7%) on last season.

19. Maltsters' and distillers' barley usage, at 0.423Mt, was 24,000t (6%) higher than last season. H&I maize usage was 0.180Mt, down 19,000t (9%), while H&I oat usage was 106,000t, up 11,000t (11%).

## Feed Processors' Usage

20. Retail compounders' usage of wheat was 0.682Mt, 22,000t higher (3%) to end-September. Poultry integrated units' wheat usage was 0.403Mt, down 11,000t (3%).

21. Barley usage by retail compounders was 0.172Mt to end-September, up 3,000t (2%) on last season. Poultry integrated units' barley usage was 41,000t, up 1% on last season.

22. Maize usage by retail compounders was 28,000t to end-September, up 7,000t (37%) on last season. Oat usage by retail compounders, at 14,000t, was also higher than last season, up by 6,000t (82%) by end- September.

## Grain Fed-on-Farm

23. The Cambridge University Rural Business Unit's Fed-on-Farm Model is being re-calibrated using the Defra Farm Business Survey. Please see the "Supplementary note on Fed-on-Farm" that follows Appendix II.

## Imports & Exports

24. Official trade figures (HM Revenue and Customs) are available to end-September. Wheat exports to end-September were reported at 0.539Mt, compared to 0.448Mt last season. Wheat imports to end-September were 0.330Mt, with the total at the same point last season being 0.282Mt. Barley exports totalled 0.117t, compared to 0.127t in 2006/07. Barley imports totalled 19,000t, down from 33,000t last

season. Maize imports were 0.306Mt, up from 0.247Mt last season. Oat exports reached 27,000t at the end of September, compared to 25,000t last year.

## Stocks

25. The on-farm stock survey is not run until March.

26. Millers' wheat stocks at end-September were 0.253Mt, down 9,000t (4%) on last season. Maltsters' barley stocks stood at 0.800Mt, down 96,000t (11%) on last season.

27. Wheat and barley intervention stocks were zero. This compares to 0t and 30,000t respectively at the same point last season.

## SUMMARY FOR CEREALS

28. This is the second estimate of the 2007/08 balance sheets. The current estimates reflect the latest information available. The next review will be published on 4<sup>th</sup> March when 6 months of usage data become available. Monthly usage data can be monitored at the Defra website at the following address:

<http://statistics.defra.gov.uk/esg/statnot/agri.asp>

## Appendix I

## ANNUAL UK CEREAL SUPPLY AND DEMAND ESTIMATES (a)

(JULY - JUNE YEARS)

Estimates made in December

000 tonnes

		WHEAT					BARLEY				
		2002/03 2006/07 average	2005/06 estimate	2006/07 estimate	2007/08 Dec 2007	% change on 06/07	2002/03 2006/07 average	2005/06 estimate	2006/07 estimate	2007/08 Dec 2007	% change on 06/07
(1)	Opening Stocks	1,941	2,010	1,798	1,856	3%	985	932	887	779	-12%
(2)	Production	15,064	14,863	14,735	13,362	-9%	5,804	5,495	5,239	5,149	-2%
(3)	Imports	996	1,003	968	1,073	11%	79	76	110	108	-2%
<b>(4)</b>	<b>Total Availability</b>	<b>18,002</b>	<b>17,876</b>	<b>17,501</b>	<b>16,291</b>	<b>-7%</b>	<b>6,868</b>	<b>6,503</b>	<b>6,236</b>	<b>6,036</b>	<b>-3%</b>
(5)	Human and Industrial Consumption	6,339	6,347	6,392	6,755	6%	1,819	1,714	1,715	1,737	1%
(5a)	(of which home grown)	5,453	5,425	5,530	5,763	4%	n/a	n/a	n/a	n/a	-
(6)	Usage as Animal Feed	6,812	7,045	6,777	6,364	-6%	3,207	3,094	3,051	3,011	-1%
(6a)	(of which home grown)	6,692	6,960	6,663	6,290	-6%	n/a	n/a	n/a	n/a	-
(7)	Seed	269	254	254	275	8%	144	143	135	133	-2%
(8)	Other	78	74	74	67	-9%	29	27	26	26	0%
<b>(9)</b>	<b>Total Domestic Consumption</b>	<b>13,499</b>	<b>13,720</b>	<b>13,497</b>	<b>13,461</b>	<b>0%</b>	<b>5,200</b>	<b>4,978</b>	<b>4,927</b>	<b>4,907</b>	<b>0%</b>
<b>(10)</b>	<b>Balance (4) - (9)</b>	<b>4,503</b>	<b>4,156</b>	<b>4,004</b>	<b>2,830</b>	<b>-29%</b>	<b>1,668</b>	<b>1,525</b>	<b>1,309</b>	<b>1,129</b>	<b>-14%</b>
(11)	Exports	2,586	2,358	2,148	942	-56%	784	638	530	278	-48%
(12)	Intervention Stocks	0	0	0	0	-	38	30	0	0	-
<b>(13)</b>	<b>Exports / Intervention Stocks (b)</b>	<b>2,586</b>	<b>2,358</b>	<b>2,148</b>	<b>942</b>	<b>-56%</b>	<b>822</b>	<b>668</b>	<b>530</b>	<b>278</b>	<b>-48%</b>
(14)	Commercial End-Season Stocks	1,917	1,798	1,856	1,888	2%	847	857	779	851	9%

		MAIZE					OATS				
		2002/03 2006/07 average	2005/06 estimate	2006/07 estimate	2007/08 Dec 2007	% change on 06/07	2002/03 2006/07 average	2005/06 estimate	2006/07 estimate	2007/08 Dec 2007	% change on 06/07
(1)	Opening Stocks	37	40	43	25	-43%	46	46	42	46	9%
(2)	Production	0	0	0	0	-	678	532	728	726	0%
(3)	Imports	1,429	1,298	1,316	1,187	-10%	26	54	21	22	5%
<b>(4)</b>	<b>Total Availability</b>	<b>1,467</b>	<b>1,338</b>	<b>1,359</b>	<b>1,211</b>	<b>-11%</b>	<b>749</b>	<b>632</b>	<b>791</b>	<b>794</b>	<b>0%</b>
(5)	Human and Industrial Consumption	895	755	767	575	-25%	347	352	406	424	4%
(5a)	(of which home grown)	0	0	0	0	-	322	298	385	402	4%
(6)	Usage as Animal Feed	406	405	437	469	7%	253	204	266	255	-4%
(6a)	(of which home grown)	0	0	0	0	-	252	204	266	255	-4%
(7)	Seed	0	0	0	0	-	17	17	17	18	7%
(8)	Other	114	114	114	114	0%	4	3	4	4	0%
<b>(9)</b>	<b>Total Domestic Consumption</b>	<b>1,414</b>	<b>1,274</b>	<b>1,318</b>	<b>1,158</b>	<b>-12%</b>	<b>620</b>	<b>576</b>	<b>693</b>	<b>701</b>	<b>1%</b>
<b>(10)</b>	<b>Balance (4) - (9)</b>	<b>53</b>	<b>64</b>	<b>41</b>	<b>53</b>	<b>31%</b>	<b>129</b>	<b>56</b>	<b>98</b>	<b>93</b>	<b>-5%</b>
(11)	Exports	17	21	16	17	7%	83	14	52	48	-8%
(12)	Commercial End-Season Stocks	35	43	25	36	46%	46	42	46	45	-3%

		OTHER CEREALS (c)					TOTAL CEREALS				
		2002/03 2006/07 average	2005/06 estimate	2006/07 estimate	2007/08 Dec 2007	% change on 06/07	2002/03 2006/07 average	2005/06 estimate	2006/07 estimate	2007/08 Dec 2007	% change on 06/07
(1)	Opening Stocks	5	5	5	5	0%	3,015	3,033	2,775	2,711	-2%
(2)	Production	113	115	121	117	-3%	21,659	21,005	20,823	19,354	-7%
(3)	Imports	4	5	5	65	1200%	2,535	2,436	2,420	2,455	1%
<b>(4)</b>	<b>Total Availability</b>	<b>122</b>	<b>125</b>	<b>131</b>	<b>187</b>	<b>43%</b>	<b>27,208</b>	<b>26,474</b>	<b>26,018</b>	<b>24,519</b>	<b>-6%</b>
(5+6)	H&I and Animal Feed	114	117	123	179	46%	20,192	20,033	19,934	19,769	-1%
(5a+6a)	(of which home grown)	110	112	118	114	-3%	17,777	17,737	17,615	17,464	-1%
(7)	Seed	3	3	3	3	0%	433	417	409	429	5%
(8)	Other	0	0	0	0	-	225	218	218	211	-3%
<b>(9)</b>	<b>Total Domestic Consumption</b>	<b>117</b>	<b>120</b>	<b>126</b>	<b>182</b>	<b>44%</b>	<b>20,850</b>	<b>20,668</b>	<b>20,561</b>	<b>20,409</b>	<b>-1%</b>
<b>(10)</b>	<b>Balance (4) - (9)</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>0%</b>	<b>6,358</b>	<b>5,806</b>	<b>5,457</b>	<b>4,110</b>	<b>-25%</b>
(11)	Exports	0	0	0	0	-	3,470	3,031	2,746	1,285	-53%
(12)	Intervention Stocks	0	0	0	0	-	38	30	0	0	-
<b>(13)</b>	<b>Exports / Intervention Stocks (b)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>3,508</b>	<b>3,061</b>	<b>2,746</b>	<b>1,285</b>	<b>-53%</b>
(14)	Commercial End-Season Stocks	5	5	5	5	0%	2,850	2,745	2,711	2,825	4%

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

(b) (11) + (12). A split of export and intervention stocks is not published during the current year.

(c) Included rye, triticale, mixed grain and sorghum.

\* Percentage change not meaningful

Source: DEFRA

## APPENDIX II

**CUMULATIVE MONTHLY STATISTICS**  
**Usage of Cereals by Processors, Grain Fed**  
**on Farm, External Trade and Stocks**

**Situation at the end of September 2007**

**'000 tonnes**

				2002/03 2006/07 average	2004/05 13 weeks	2005/06 13 weeks	2006/07 13 weeks	2007/08 13 weeks	% change 2007/08 on 2006/07	act'l change 2007/08 on 2006/07
<b>WHEAT</b>										
(1)	Usage	Human and	-Flour Millers	234	186	280	229	261	14%	32
(2)		Industrial	-home-grown	1180	1213	1156	1181	1175	-1%	-6
(3)		Processors	-Total	1414	1399	1436	1410	1436	2%	26
(4)			-Distillers	136	145	133	141	151	7%	10
(5)			-Others	41	41	45	44	42	-4%	-2
(6)		Animal Feed Processors (a)		673	638	700	660	682	3%	22
(7)		Poultry Integrated Units		397	414	439	413	403	-3%	-11
(8)	Imports	From July (d)		302	172	458	282	330	17%	48
(9)	Exports	From July (d)		613	611	610	448	539	20%	91
(10)	Stocks	On Farm (b) (e)		n/a	871	524	530	n/a	n/a	n/a
(11)		Processors	-Flour Millers	279	234	268	262	253	-4%	-9
(12)			-Distillers (a)	11	10	12	9	9	-1%	0
(13)			- Other (c)	50	47	50	51	64	25%	13
(14)	Intervention	-Actual		0	0	0	0	0	*	0
(15)		-Projected		0	0	0	0	0	*	0
<b>BARLEY</b>										
(1)	Usage	Maltsters/Distillers	-imported	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(2)			-home-grown	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(3)			-Total	443	459	416	399	423	6%	24
(4)		Animal Feed Processors (a)		159	187	123	169	172	2%	3
(5)		Poultry Integrated Units		41	44	25	40	41	1%	0
(6)	Imports	From July (d)		25	22	24	33	19	-42%	-14
(7)	Exports	From July (d)		270	252	199	127	117	-8%	-10
(8)	Stocks	On Farm (b) (e)		n/a	84	56	61	n/a	n/a	n/a
(9)		Processors	-Maltsters & Distillers	940	862	930	896	800	-11%	-96
(10)			-Animal Feed (a)	17	17	15	15	21	41%	6
(11)	Intervention	-Actual		54	0	15	30	0	*	-30
(12)		-Projected		53	0	15	30	0	*	-30
<b>MAIZE</b>										
(1)	Usage	Human and Industrial		237	236	220	199	180	-9%	-19
(2)		Animal Feed Processors (a)		21	24	18	20	28	37%	7
(3)	Imports	From July (d)		285	228	325	247	306	24%	59
(4)	Stocks	Processors(c)(f)		15	24	10	18	17	-3%	-1
<b>OATS</b>										
(1)	Usage	Human and Industrial Processors		82	78	82	96	106	11%	11
(2)		Animal Feed Processors (a)		8	12	7	8	14	82%	6
(3)	Exports	From July (d)		40	44	12	25	27	8%	2
(4)	Stocks	Processors	- Millers	17	12	16	21	18	-12%	-3
(5)			-Animal Feed (a)	1	1	1	1	1	14%	0

n/a - Not Available/Applicable

(d) HM Customs/Intrastat

(a) Great Britain only.

(e) June data from biannual survey

(b) England and Wales only.

(c) Stocks with UK cereal breakfast food manufacturers and GB animal feed processors.

(f) Includes stocks from distillers

\* Percentage changes not meaningful.

**Note: This Appendix reflects the position as at 7th December 2007. The figures above may differ slightly from the most recent published data.**

Survey data for GB Compounders, Flour Millers, Brewers Maltsters and Distillers can be found using the following link:  
<http://statistics.defra.gov.uk/esg/statnot/agri.asp>

SOURCE: Defra Agricultural Statistics and Analysis, HM Customs and Excise/Intrastat, HGCA

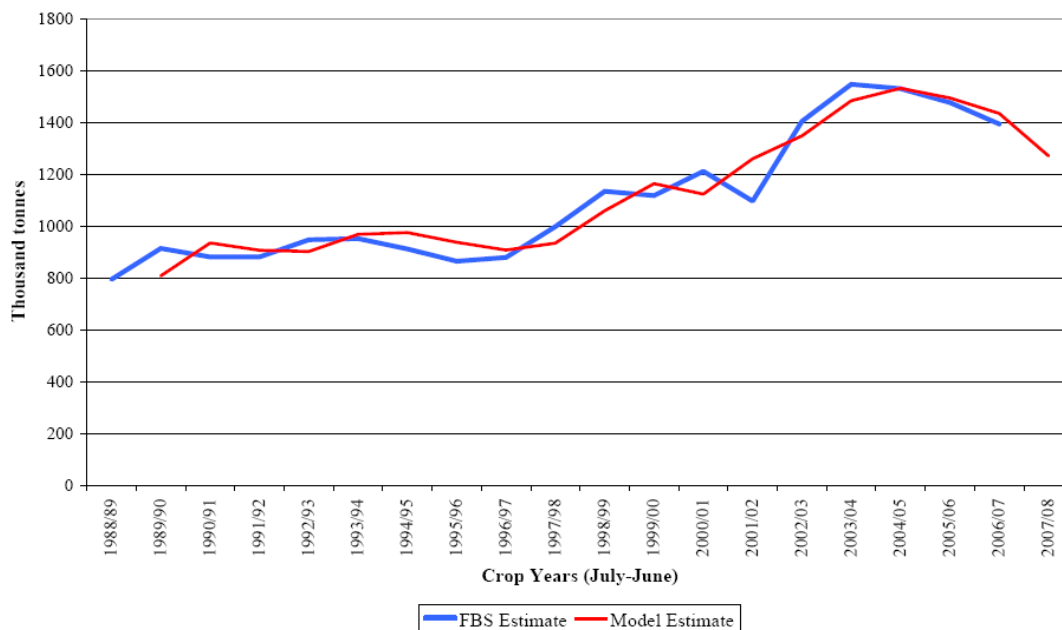
## Supplementary Note on Fed on Farm

Grain Fed on Farm, i.e. grain fed to animals on a farm that does not trade on the market, represents around 10% and 45% of total wheat and barley home disposals respectively. In the absence of comprehensive survey data regarding Fed on Farm usage, an econometric model is used to estimate usage levels, using data on livestock numbers and feed grain prices. The model has been developed over a period of four years. Note, where relevant, FBS refers to the Defra Farm Business Survey.

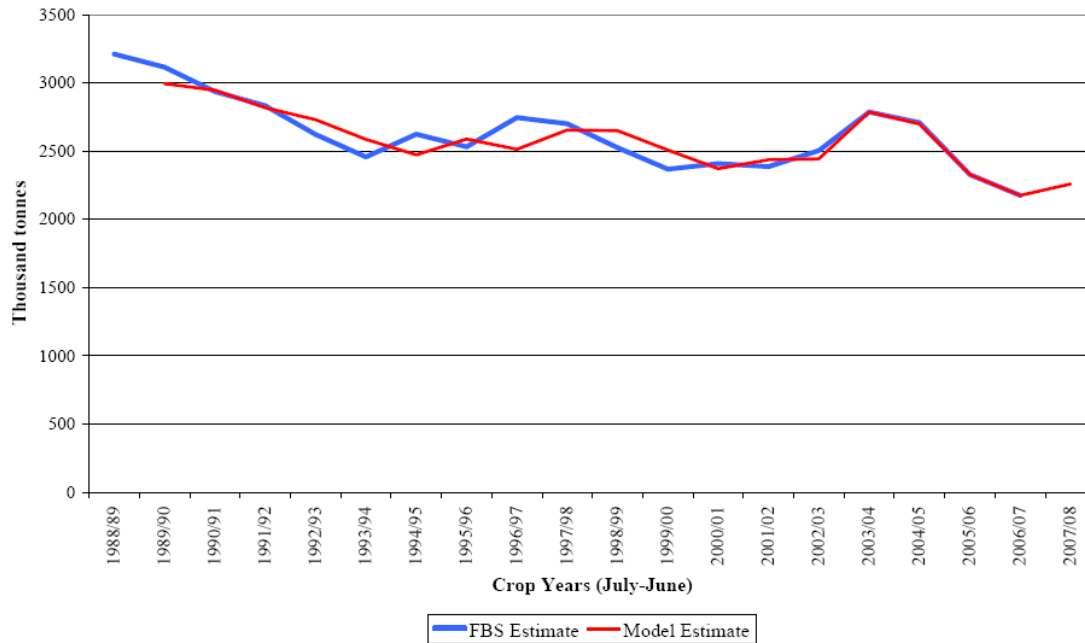
	Wheat (Thousand Tonnes)					Barley (Thousand Tonnes)				
	FBS Estimate	Model		Difference between current and previous		FBS Estimate	Model		Difference between current and previous	
		Previous Estimate	Current Estimate	Thou. Ton.	%		Previous Estimate	Current Estimate	Thou. Ton.	%
2004/05 1/	1,529.1	1,522.9	<b>1,530.8</b>	7.91	0.52	2,708.3	2,714.1	<b>2,698.6</b>	-15.46	-0.57
2005/06 1/	1,475.6	1,485.3	<b>1,493.1</b>	7.84	0.53	2,327.7	2,327.7	<b>2,327.7</b>	-0.03	0.00
2006/07 2/	1,392.9	1,425.9	<b>1,433.6</b>	7.72	0.54	2,175.1	2,002.0	<b>2,175.1</b>	173.16	8.65
2007/08 3/		1,242.9	<b>1,269.8</b>	26.90	2.16		2,181.2	<b>2,258.8</b>	77.63	3.56

The latest model projections estimate that wheat used as Fed on Farm in 2007/08 will amount to 1.270Mt. This figure is higher than the previous estimate for 2007/08 of 1.243Mt. It also represents a decrease of 0.164Mt or 11% on the 2006/07 estimate and 0.219Mt below the previous three-season average. For barley, the current 2007/08 estimate is 2.259Mt, up by 77,000 tonnes compares to the previous estimate. The results show an increase of 4% on the latest 2006/07 estimate, but fed on farm usage below the previous three-season average of 2.4Mt.

**Wheat as Feed: Comparison between UK FBS Fed on Farm Estimates and Model  
Forecasted Figures**



**Barley as Feed: Comparison between UK FBS Fed on Farm Estimates and Model Forecasted Figures**



The Fed on Farm Model calculates projections for wheat and barley usage as fed on farm by incorporating data from the Defra Farm Business survey. This data is only available on a lagged basis, meaning it can only be used to amend historical estimates. Projections for the current season are calculated from these historical figures plus the latest livestock numbers and feed grain price data. The model estimates follow the historical figures very closely, as can be seen in the previous graphs.

The model estimates do not form part of the official UK supply and demand balance sheets. However, the estimates and the way they evolve over the season can provide useful insights into the demand-side of the UK cereals market and may provide a basis for manipulation of private UK cereals balance sheets that are maintained within the industry.

For more information, please contact Icaro Rebolledo, HGCA Economist on 02075203912 or [icaro.rebolledo@hgca.com](mailto:icaro.rebolledo@hgca.com)