Feed Protein Balance Sheet

CROPS Market Observatory

5 October 2020

EU+UK Feed Protein Balance Sheet 2019/20

September 2020

EU Feed Protein Balance Sheet

2019/20	Million tonnes						Protein content (feed use) (G)	Million tonnes (crude protein)			
Protein source	Total EU production (A)	EU imports (B)	EU exports (C)	Total EU domestic use (D)	EU total feed use (E)	Feed use EU origin (F)		EU total feed use (H) = (E) * (G)	Feed use EU origin (I) = (F) * (G)	% feed use of EU origin (I) / (H)	% of total feed use
CROPS					181.7	162.0		18.32	16.59	91%	22%
CO-PRODUCTS					84.6	45.4		25.32	9.49	37%	31%
OILSEED MEALS	30.1	23.0	1.4	51.7	51.5	14.3		20.53	4.96	24%	25%
OTHERS CO-PRODUCTS	34.1	3.8	1.3	36.6	33.1	31.1		4.80	4.52	94%	6%
NON-PLANT SOURCES					8.2	8.0		2.15	2.02	94%	3%
ROUGHAGE					1302	1302		37	37	100%	45%
TOTAL								83	65	79%	

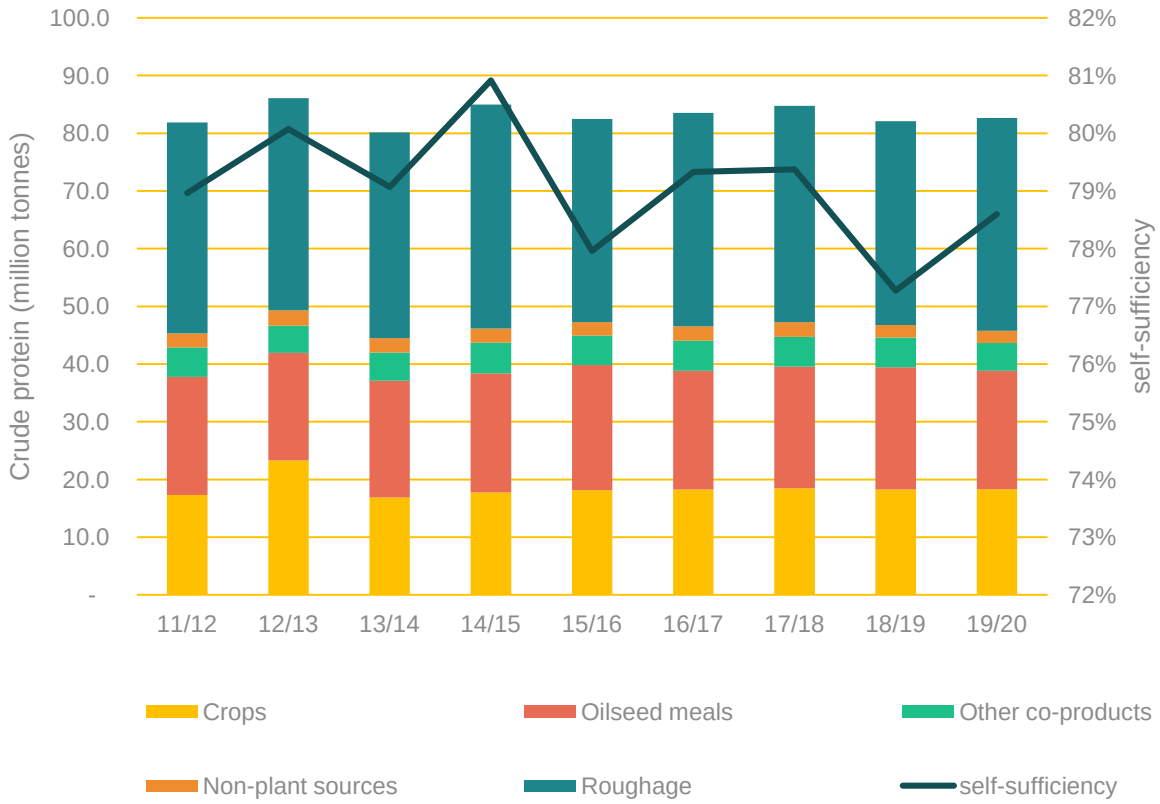
Legend

Low-Pro: Less than 15% protein content	55.36	53.64	97%
Medium-Pro: 15-30% protein content	4.41	3.89	88%
High-Pro: 30-50% protein content	20.65	5.51	27%
Super-Pro: Over 50% protein content	2.24	1.92	86%

There is only limited inter-changeability between proteins from different categories, for instance between proteins from cereals and proteins from soya meal (due to its amino acid pattern, soya protein is used more efficiently than other plant proteins in animal nutrition).

European Commission

EU+UK Feed Protein Balance Sheet 2019/20



Mainly linked with other DG AGRI balance sheets (cereals, oilseeds, protein crops, sugar)

Updates needed for:

- Starch products
- Non-plant sources
- Dried fodder

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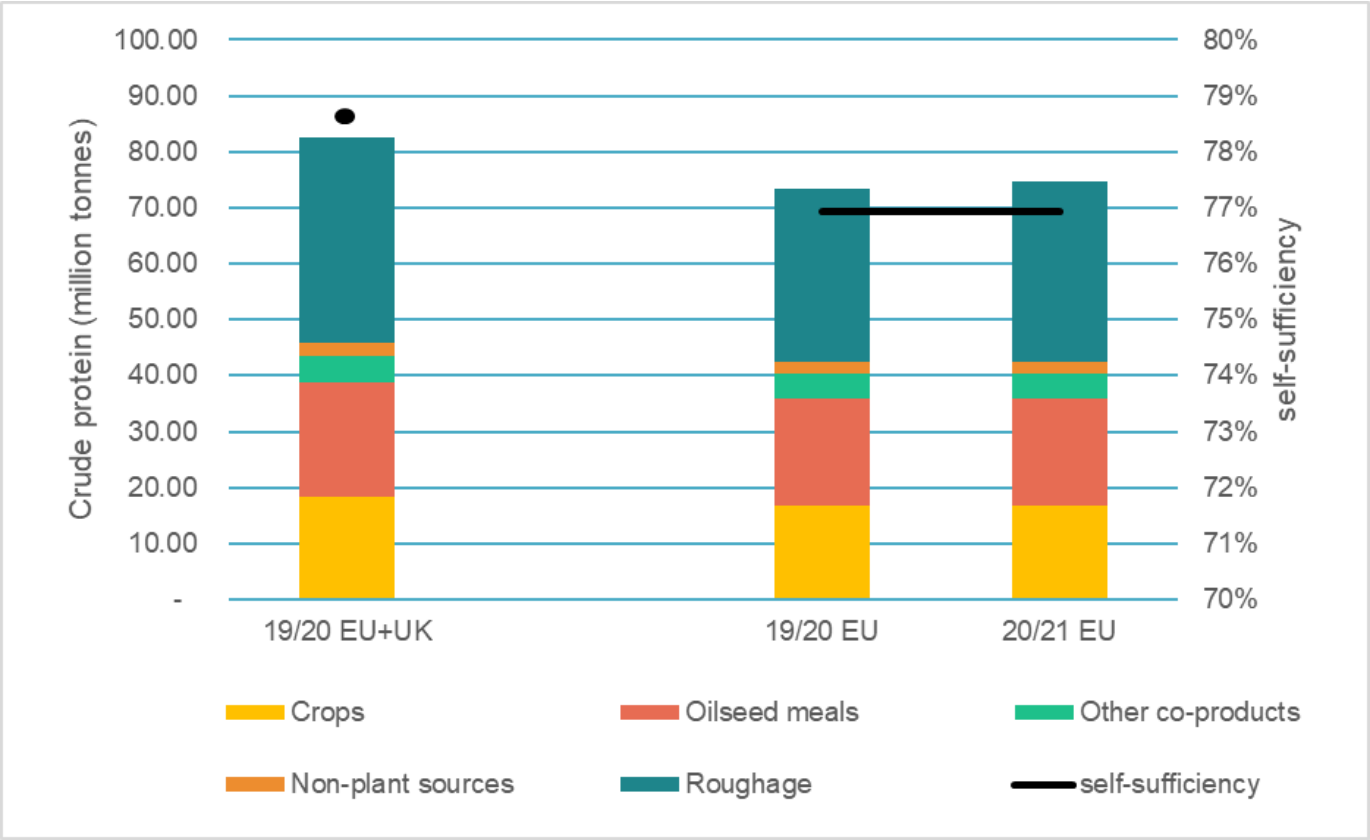
EU Feed Protein Balance Sheet 2020/21

Changes:

- First time forecasting at the beginning of the season
- First balance sheet for EU-27
    - Adjustments on production data from EU-28 to EU-27, in particular, on data for starch, ethanol & beer production. Would board experts have any other suggestions?
    - Import–export figures are based on trend or averages. Would 2019/20 figures be more suitable because of COVID-19 crisis?
- Under the heading ‘Pulses’ a new line: ‘Other protein crops’

Comparison EU-27 vs EU-28



Self sufficiency 1,5% lower

UK: represents 11% of the total EU-28 feed use

…but 16% of the EU-28 roughage consumption

European Commission

EU Feed Protein Balance Sheet 2020/21

September 2020

EU Feed Protein Balance Sheet (forecast)

2020/21	Million tonnes						Protein content (feed use) (G)	Million tonnes (crude protein)			
Protein source	Total EU production (A)	EU imports (B)	EU exports (C)	Total EU domestic use (D)	EU total feed use (E)	Feed use EU origin (F)		EU total feed use (H) = (E) * (G)	Feed use EU origin (I) = (F) * (G)	% feed use of EU origin (I) / (H)	% of total feed use
CROPS					**166.5**	**145.5**		**16.60**	**14.76**	**89%**	**22%**
CO-PRODUCTS					**78.5**	**41.0**		**23.84**	**8.70**	**36%**	**32%**
OILSEED MEALS	28.4	22.1	2.0	48.6	48.3	13.1		19.38	4.56	24%	26%
OTHERS CO-PRODUCTS	30.9	4.1	1.6	33.3	30.1	27.9		4.46	4.14	93%	6%
NON-PLANT SOURCES					**8.0**	**7.8**		**2.05**	**1.91**	**93%**	**3%**
ROUGHAGE					**1104**	**1104**		**32**	**32**	**100%**	**43%**
TOTAL								**75**	**57**	**77%**	

Legend

Low-Pro: Less than 15% protein content	48.90	47.01	96%
Medium-Pro: 15-30% protein content	3.97	3.49	88%
High-Pro: 30-50% protein content	19.53	5.10	26%
Super-Pro: Over 50% protein content	2.12	1.80	85%

There is only limited inter-changeability between proteins from different categories, for instance between proteins from cereals and proteins from soya meal (due to its amino acid pattern, soya protein is used more efficiently than other plant proteins in animal nutrition).

European Commission

2020/21 Crops

September 2020

EU Feed Protein Balance Sheet (forecast)

2020/21	Million tonnes						Protein content (feed use) (G)	Million tonnes (crude protein)			
Protein source	Total EU production (A)	EU imports (B)	EU exports (C)	Total EU domestic use (D)	EU total feed use (E)	Feed use EU origin (F)		EU total feed use (H) = (E) * (G)	Feed use EU origin (I) = (F) * (G)	% feed use of EU origin (I) / (H)	% of total feed use
CROPS					**166.5**	**145.5**		**16.60**	**14.76**	**89%**	**22%**
CEREALS *(of which)*	**274.3**	**26.4**	**39.2**	**261.4**	**161.9**	**141.1**		**15.47**	**13.69**	**89%**	**21%**
Common wheat	115.5	3.5	24.0	95.0	39.5	36.0	11.0%	4.35	3.96		
Barley	55.0	1.0	10.5	45.5	34.8	34.8	10.0%	3.48	3.48		
Durum	7.3	2.5	1.3	8.5	0.4	0.3	12.0%	0.05	0.04		
Maize	63.1	19.0	3.0	79.1	66.5	49.4	8.0%	5.32	3.95		
Rye	8.7	0.0	0.2	8.6	2.6	2.6	11.0%	0.29	0.29		
Sorghum	1.2	0.1	0.0	1.3	0.5	0.4	11.0%	0.05	0.05		
Oats	8.1	0.1	0.2	7.9	5.3	5.3	11.0%	0.58	0.58		
Triticale	11.0	0.0	0.0	11.0	9.0	9.0	11.0%	0.99	0.99		
Others	4.4	0.2	0.0	4.6	3.3	3.2	11.0%	0.37	0.36		
OILSEEDS *(feed use without crushing)* (columns (E) and (F))	**28.4**	**21.0**	**1.1**	**48.3**	**1.6**	**1.6**		**0.45**	**0.45**	**100%**	**1%**
Soya beans	2.8	15.0	0.2	17.6	1.2	1.2	33.0%	0.40	0.40		
Rapeseed	15.8	5.0	0.3	20.4	0.2	0.2	18.8%	0.03	0.03		
Sunflowerseed	9.8	1.0	0.5	10.3	0.2	0.2	14.8%	0.03	0.03		
PULSES *(of which)*	**4.5**	**1.3**	**0.5**	**5.2**	**3.1**	**2.9**		**0.68**	**0.61**	**91%**	**1%**
Field peas	2.2	0.3	0.2	2.3	1.4	1.4	22.5%	0.32	0.31		
Broad beans	1.2	0.1	0.3	1.0	0.9	0.9	26.0%	0.22	0.22		
Lupins	0.2	0.1	0.0	0.4	0.4	0.2	35.0%	0.13	0.08		
Other protein crops	0.8	0.8	0.1	1.6	0.4	0.4	25.0%	0.11	0.11		

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2020/21 Oilseed meals

September 2020

EU Feed Protein Balance Sheet (forecast)

2020/21	Million tonnes						Protein content (feed use) (G)	Million tonnes (crude protein)			
Protein source	Total EU production (A)	EU imports (B)	EU exports (C)	Total EU domestic use (D)	EU total feed use (E)	Feed use EU origin (F)		EU total feed use (H) = (E) * (G)	Feed use EU origin (I) = (F) * (G)	% feed use of EU origin (I) / (H)	% of total feed use
CROPS					**166.5**	**145.5**		**16.60**	**14.76**	**89%**	**22%**
CO-PRODUCTS					**78.5**	**41.0**		**23.84**	**8.70**	**36%**	**32%**
OILSEED MEALS	**28.4**	**22.1**	**2.0**	**48.6**	**48.3**	**13.1**		**19.38**	**4.56**	**24%**	**26%**
SOYA BEAN MEALS *(of which)*	**11.5**	**16.8**	**0.7**	**27.6**	**27.4**	**1.0**		**12.47**	**0.45**	**4%**	**17%**
Soya bean meal (from EU soya bean production)	1.1			1.1	1.0	1.0	43.0%	0.45	0.45		
Soya bean meal (imported soya bean crushing)	10.1		0.7	9.4	9.2	0.0	45.5%	4.19	0.00		
Soya bean meal (traded as such)		16.8		16.8	16.8	0.0	45.5%	7.64	0.00		
Soya bean protein concentrate	0.3			0.3	0.3	0.0	62.5%	0.19	0.00		
RAPESEED MEALS *(of which)*	**11.2**	**0.4**	**0.6**	**11.1**	**11.1**	**7.9**		**3.66**	**2.61**	**71%**	**5%**
Rapeseed meal (from EU rapeseed production)	8.5		0.6	7.9	7.9	7.9	33.0%	2.61	2.61		
Rapeseed meal (imported rapeseed crushing)	2.7			2.7	2.7	0.0	33.0%	0.91	0.00		
Rapeseed meal (traded as such)		0.4		0.4	0.4	0.0	33.0%	0.14	0.00		
SUNFLOWER MEALS *(of which)*	**5.0**	**3.2**	**0.5**	**7.7**	**7.7**	**4.0**		**2.79**	**1.45**	**52%**	**4%**
Sunflower meal (from EU sunflowerseed production)	4.5		0.5	4.0	4.0	4.0	36.0%	1.45	1.45		
Sunflower meal (imported sunflowerseed crushing)	0.5			0.5	0.5	0.0	36.0%	0.18	0.00		
Sunflower meal (traded as such)		3.2		3.2	3.2	0.0	36.0%	1.16	0.00		
OTHER OILSEED MEALS *(of which)*	**0.7**	**1.7**	**0.2**	**2.2**	**2.2**	**0.1**		**0.47**	**0.05**	**11%**	**1%**
Palmkern meal	0.0	1.6	0.1	1.5	1.5	-0.1	16.0%	0.24	-0.01		
Linseed meal	0.4	0.0	0.0	0.5	0.5	0.0	34.0%	0.16	0.00		
Other oilseed meals	0.2	0.0	0.1	0.2	0.2	0.2	37.0%	0.07	0.07		

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2020/21 Other co-products & non-plant sources

September 2020

EU Feed Protein Balance Sheet (forecast)

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OILSEED MEALS	**28.4**	**22.1**	**2.0**	**48.6**	**48.3**	**13.1**		**19.38**	**4.56**	**24%**	**26%**
OTHERS CO-PRODUCTS	**30.9**	**4.1**	**1.6**	**33.3**	**30.1**	**27.9**		**4.46**	**4.14**	**93%**	**6%**
Starch industry's medium protein products (15-30%)	4.0	0.6	0.6	4.0	4.0	4.0	19.0%	0.76	0.76		
Starch industry's super protein products (60-90%)	1.0	0.0	0.0	1.0	0.7	0.7	73.0%	0.48	0.48		
Distillers' dried grains with solubles	3.2	0.8	0.4	3.6	3.6	2.8	30% wheat 27% maize	1.05	0.85		
Wet distillers' grain	6.0	0.0	0.0	6.0	6.0	6.0	5.4%	0.33	0.33		
Wheat bran	7.4	0.0	0.2	7.2	7.2	7.2	15.5%	1.12	1.12		
Citrus pulp	0.0	0.3	0.0	0.2	0.2	0.0	7.5%	0.02	0.00		
Beet pulp pellets	6.0	1.2	0.2	7.1	7.1	5.8	7.9%	0.56	0.46		
Molasses	3.1	1.2	0.2	4.1	1.3	1.3	10.7% beet 4.2% cane	0.14	0.14		
NON-PLANT SOURCES					**8.0**	**7.8**		**2.05**	**1.91**	**93%**	**3%**
(excluding on-farm use)											
Fish meal	0.4	0.2	0.2	0.5	0.5	0.4	65.0%	0.32	0.26		
Whey powder	1.9	0.1	0.8	1.2	0.6	0.6	12.5%	0.07	0.07		
Skimmed milk powder	1.5	0.0	1.0	0.6	0.1	0.1	34.0%	0.05	0.05		
Processed animal proteins	2.4	0.1	0.7	1.8	1.8	1.7	62.3%	1.13	1.05		
Former foodstuff					5	5	9.5%	0.48	0.48		

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2020/21 Roughage

September 2020

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OTHERS CO-PRODUCTS	**30.9**	**4.1**	**1.6**	**33.3**	**30.1**	**27.9**		**4.46**	**4.14**	**93%**	**6%**
NON-PLANT SOURCES					**8.0**	**7.8**		**2.05**	**1.91**	**93%**	**3%**
ROUGHAGE					**1104**	**1104**		**32**	**32**	**100%**	**43%**
Grass	783			783	783	783	2.5%	20	20		
Silage maize	254			254	254	254	2.9%	7	7		
Fodder legumes	66			66	66	66	7.2%	5	5		
Dried fodder	3.3	0.0	2.0	1.3	1.3	1.3	17.0%	0.2	0.2		
TOTAL								**75**	**57**	**77%**	
Legend											
Low-Pro: Less than 15% protein content								48.90	47.01	96%	
Medium-Pro: 15-30% protein content								3.97	3.49	88%	
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