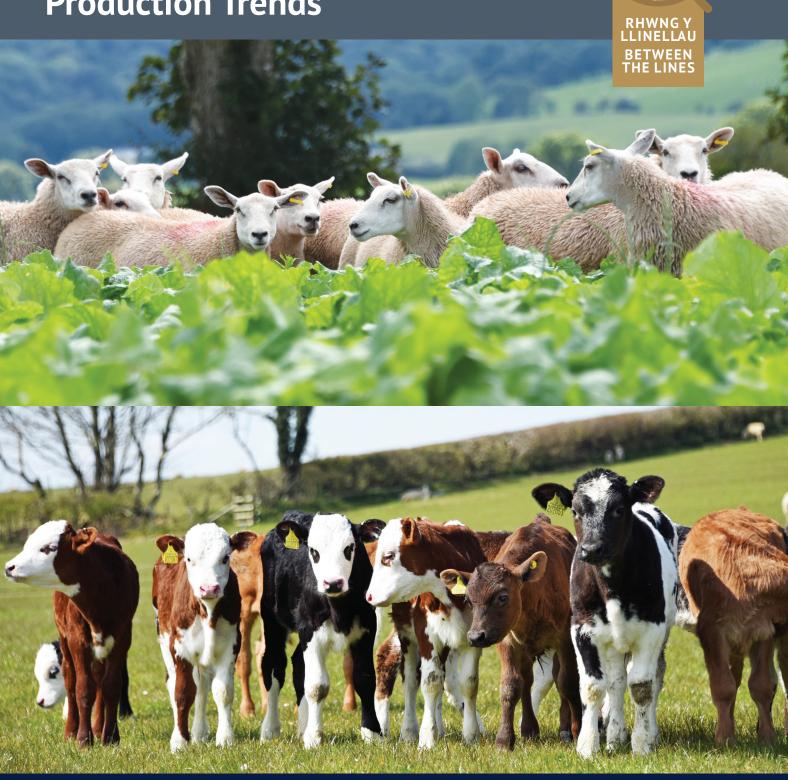


Global Red Meat Production Trends



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Introduction

Global demand and supply levels have a direct impact on the red meat sector both in the UK and in Wales. Trade flows were impacted during 2021 across the World due to a combination of changes in production levels and Covid-19. These changes had an impact on Wales' red meat sector, with the total value of red meat exports from Wales falling 4% on the year to £210.0 million.

The EU Commission medium-term outlook states that global meat consumption is forecast to grow by 1.4% each year, driven by income and population growth, therefore it is important to be aware of the position of other major red meat producing countries across the globa. The *OECD-FAO Agricultural Outlook* also projects the global meat supply to increase during the next decade – with growth in poultry meat production leading this shift.

Consumption levels of beef and sheep meat are projected to remain stable overall, with concern regarding the climate limiting growth. By 2030, beef is predicted to represent 20% of all the protein from meat sources globally, whilst sheep meat will represent 5%. The US is currently the largest beef producing country, and will continue to be so for the foreseeable future, with countries in Latin America also being major producers (*Table 1*). Whilst China is the largest sheep meat producer, New Zealand is currently the dominant sheep meat exporter and is seen to be one of the main influencers on international sheep meat price.

Table 1: Top 5 Red Meat Producers in the World (based on 2019 volumes)

	Beef & Veal	Sheep Meat
1.	US	China
2.	Brazil	Australia
3.	EU	New Zealand
4.	China	Turkey
5.	Argentina	Algeria

Source: USDA, FAO

During 2021, UK farmers experienced firm prices for both cattle and sheep as a result of a tightening in supply and continued strong domestic retail demand from consumers. Whilst finished cattle prices reached historically high levels – over £4.00/kilo – total production of beef for the year fell by almost 5% when compared to 2020.

For the sheep sector, total production recorded a 10% decrease on the year due to a significant reduction in the number of lambs processed. Whilst the availability of both beef and sheep meat on the domestic market was tight, it resulted in a decreased supply being available for export and was therefore one of the main factors behind export volumes for 2021 falling by 22% on the year for both sectors.

This information paper will look to give an overview of current trends, and give an insight on forecasted red meat production trends and their potential impact on the Welsh lamb and beef sectors.



UK Production

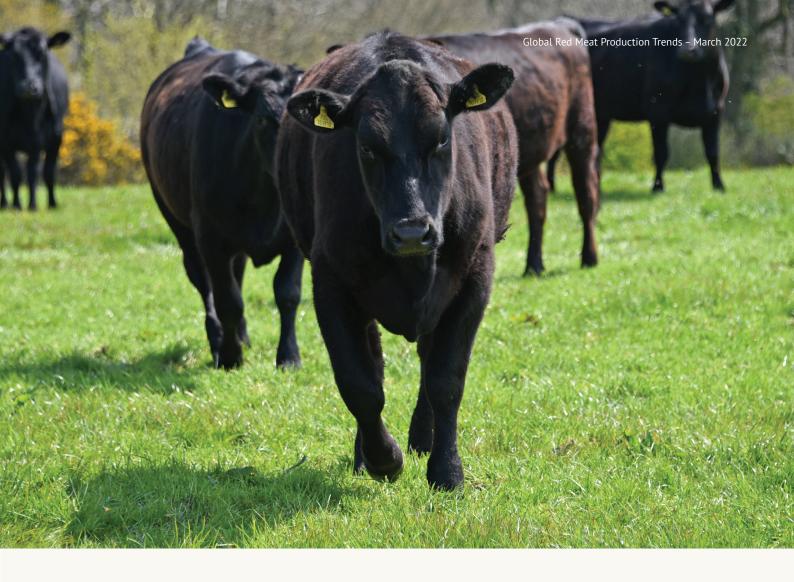
Sheep Meat

Farmgate prices in the UK were supported during much of 2021 by the tight supply of lambs on the domestic market. A total of 12.9 million sheep and lambs were processed at UK abattoirs during the year, which is 11% less than in 2020, and 12% below the 10-year average (2011-2020: 14.5 million) (source: Defra). As a result, the total volume of sheep meat produced during the year stood at 295,900 tonnes – down 10% on the year.

Throughput data would suggest that the number of lambs presented to slaughter so far during the current lamb crop year in the UK (May 2021 to January 2022) is 10% below the previous period at 9.2 million head (whilst production is down 9%). Throughput levels are below what would be expected, given the size of the lamb crop.

The latest Defra UK June survey for 2021 shows that the size of the breeding flock (ewes aged 1 year and over) stood at 15.6 million head – an increase of around 1.7% on the year. From this data, it is forecast that the 2022-23 lamb crop will likely be larger than the current crop. An increase in supply would suggest an increase in overall production, however external factors – such as weather conditions and diseases – also influence the size of the lamb crop in any given year, and therefore it is difficult to account for these factors in any forecast.

Looking further ahead, supplies overall are forecast to remain at a stable level, however changes to future agricultural support may impact production levels.



Beef

During 2021, 888,000 tonnes of beef was produced in the UK (source: Defra). This is 5% less than in 2020, and 1% below the 10-year average (2011-2020: 899,500 tonnes). Whilst production was limited, the UK experienced strong finished cattle and cull cow prices when compared to historical levels.

The reduction in overall production of beef was a result of a 5% decline in the number of cattle processed at UK abattoirs during the year – which totalled 2.7 million head. As has been the trend during the last decade, steers accounted for the plurality (37%) of the total throughput. Heifer throughput in the UK has been elevated during recent years and totalled 795,500 head in 2021 – down 4% on the highs of 2020, but 6% higher than the 10-year average. The suckler cow herd in the UK has been retracting in recent years and stood at 1.5 million head in June 2021 – 1.6% below 2020.

Looking ahead, the herd shows no signs of re-building as prime heifer slaughterings remain elevated.

Cattle population data from the British Cattle Movement Service (BCMS) suggests that the supply of slaughter-ready cattle will remain tight during the first half (H1) of 2022, but the data indicates there will be an increased number of animals available during the second half of the year (H2). Looking further ahead, total calf registrations in GB during 2021 were up marginally on 2020 (by 0.9%) at 2.7 million head. These figures would suggest that supply onto the UK domestic market may increase going into 2023 as these animals mature and come onto the market. Challenges within the sector – such as increasing input costs - may limit further increases in beef production.

EU-27 Production

Sheep Meat

With all 27 countries combined, the EU is the 2nd largest importer of sheep meat in the world due to being only 85% self-sufficient – despite there being over 70 million sheep and goats combined within the EU. New Zealand (NZ) is the EU's biggest supplier of product, however over 90% of sheep meat exported from the UK is destined for EU countries. France is the main export market for the UK, which received over 37,500 tonnes of sheep meat in 2021 (source: HMRC).

In 2020, the EU produced 371,000 tonnes of sheep meat, a 3% decrease on year-earlier levels (source: Eurostat). According to Eurostat data, total production recovered somewhat during 2021 to 374,600 tonnes – up 1% on the year. Production improved in Spain, the EU's largest producer, during 2021 – following the low of 2020 – with a 5% increase to 120,300 tonnes, and accounted for 32% of total production in the EU (figure 1). Production in France also recovered at 81,800 tonnes; however, the production of Irish sheep meat fell by 4% on the year to 63,500 tonnes.

Despite production within the EU recovering somewhat during 2021, overall production remained marginally below the 5-year average. This tightness in product availability would have provided support to farmgate prices across the region during the last year.

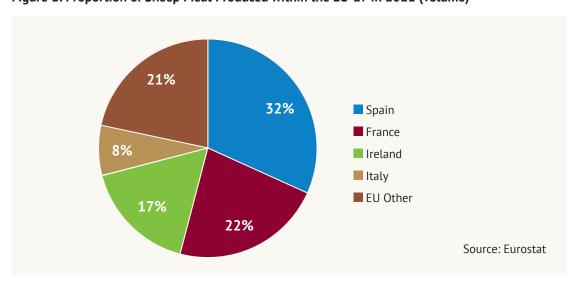


Figure 1: Proportion of Sheep Meat Produced within the EU-27 in 2021 (volume)

The 'European Union Agricultural Outlook for 2021-31' report published in December 2021 by the European Commission forecasts that the volume of sheep meat production within EU countries will increase by 2031. This increase will largely be driven by income support to producers and improving market prices. Following the everchanging consumer patterns, the report also forecasts that the EU per capita consumption of sheep meat will grow slightly and reach 1.4kg per capita by 2031 (although this remains below the 1.7kg reported in 2011). The increased production within the EU will contribute to an overall increase in availability of sheep meat on the global market.

In the shorter term, Bord Bia forecast that an additional 50-60,000 lambs will be carried over into 2022 in Ireland, which will add to supply availability during H1. In addition to this, the Central Statistics Office reported a 4% increase in the size of the Irish ewe flock as of 01 June 2021, and so this may lead to a larger 2022-23 lamb crop in Ireland which would provide some additional supplies – particularly during H2 of 2022.

Beef

Following an overall decline in the herd size during recent years, market prices for cattle across countries within the EU-27 were at historically high levels during 2021 due to a tightening in supply. Around 90% of beef imported to the UK originates from EU countries, with over 70% of UK beef exports destined for the EU – therefore, changes seen in the EU directly influence the UK beef market.

According to Eurostat data, the EU produced 6.8 million tonnes of beef during 2021 – 0.9% less than during 2020, and 2% less than the 5-year average. This reduction in EU beef production would have contributed to the overall tightness in global beef supplies experienced during 2021.

As seen in *Figure 2*, beef production in France accounted for 21% of the total EU volume at 1.4 million tonnes, although overall production was down 1% on the year. Germany – the 2^{nd} largest beef producer in the EU – recorded a 2% decline in beef production at 1.1 million tonnes, whilst beef production in Italy increased by 2% on 2020.

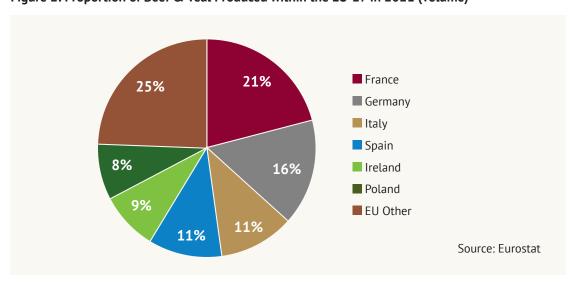


Figure 2: Proportion of Beef & Veal Produced within the EU-27 in 2021 (volume)

The UK is around 80% self-sufficient in beef and veal production, with robust domestic demand for hindquarter cuts. In 2021, the main exporters to the UK in terms of volume were Ireland (accounting for 69% of total beef imports) and Poland (7%), according to HMRC data. Total beef imports from Ireland however were down 3% on the year at 204,000 tonnes – largely due to a tightening in the Irish cattle supply level, with Bord Bia reporting a 6% fall in production in 2021. This fall in supply was reflected in Irish cattle prices, and export levels to the UK in particular.

It is forecast that the tight cattle supplies are set to remain for H1 of 2022, but production will experience some growth during H2 as Irish cattle slaughter will recover by some 3-4%, according to Bord Bia.

The 'European Union Agricultural Outlook for 2021-31' report published in December 2021 by the European Commission forecasts that per capita consumption of beef will fall from 10.6kg in 2021 to 9.7kg by 2031 – largely as a result of consumer choices driven by health, environmental, and economic factors. During the same period, it's expected that the size of the cattle herd will decrease by 7%, which would then lead to an 8% reduction in EU gross beef production and a tightening in beef supply on the EU market.

New Zealand (NZ)

Following the African Swine Fever (ASF) outbreak in China during H2 of 2018, there has been a strong demand for imported pork and other proteins such as beef and lamb from China. As a result, an increased share of NZ sheep meat has been destined for China – with this country receiving 52% of the total volume exported during the year (source: New Zealand Dashboard).

Despite China receiving a large share of NZ sheep meat, NZ continues to be the dominant supplier of sheep meat to the UK, with NZ imports accounting for 69% of total volume during 2021 at 36,400 tonnes (source: HMRC). This volume was down 15% on year-earlier levels however, with freight disruptions and stronger demand from the US also contributing to the decrease in volumes received from NZ. Overall, total lamb exports from NZ in 2021 were down 5% on the year due to a year-on-year fall in the number of lambs processed.

The 'Beef + Lamb New Zealand Lamb Crop 2021' report released during December 2021 estimated that the size of the lamb crop during Spring 2021 (which runs from September to December) would be 0.6% larger than the previous Spring at 22.7 million head. This is partly due to ewes achieving a better lambing percentage of 131.9%. As a result, the number of lambs available for processing during 2021-22 is estimated to increase by 1% to 18.5 million head. Reports suggest that many producers are continuing to re-build their flocks following previous years' adverse weather, and so it's anticipated there will be a tightening in adult sheep supply as producers seek to recover ewe numbers.

So far, the number of lambs processed during the 1st quarter of the current lamb crop (October – December) is estimated to decrease by 1.3% on the year due to feed conditions across the country – however, this number may increase if farmgate prices rise. Total lamb export value for the 2021-22 season is forecast to be 13% higher than 2020-21 due to an increase in production and the value of lamb.

Overall, imports to the UK will likely remain dampened during the coming year, despite a 1% increase in the number of lambs available in NZ. This is due to continued high freight prices, firm demand from China, along with uncertainty regarding the spread of new Covid-19 variants which may also lead to staff shortages. But China has been rebuilding its pig herd at a significant rate and so is becoming less reliant on imported protein. This may re-direct NZ sheep meat once more during the coming years.

At the end of February 2022, the UK signed a Free Trade Agreement (FTA) with New Zealand, which will eventually allow sheep meat and beef to enter the UK quota and tariff-free. This may impact trade volumes during the coming years.



Australia

The UK received 9,250 tonnes of sheep meat from Australia during 2021 – a 7% increase on year-earlier levels (source: HMRC). In terms of share, Australia accounted for over 19% of volumes imported during the year, which is an increase from 14% during 2020. According to MLA (Meat & Livestock Australia), the national flock is forecast to grow by almost 5% on the year to total 74.4 million head in 2022. Favourable weather conditions across Australia are the key drivers behind the predictions for the flock to reach its highest level since 2013. Following on from this, the 2022 lamb cohort is expected to reach 21.6 million head and therefore the production of lamb will increase by 8% on the year to reach 540,000 tonnes in 2022.

MLA's predictions also forecast that the flock size will reach 76.3 million head by 2023, and if production reaches an all-time high of 567,000 tonnes during the same year, this will undoubtedly flow through to higher export volumes. However, high inflation rates in Australia at the moment, along with ongoing Covid-19 impacts, will continue to challenge the domestic market, along with logistical bottlenecks and high international freight costs.

As the Australia-UK FTA comes into effect later in 2022, Australia is optimistic that the recovery of the sheep meat market during 2022 will put them in a strong trading position in the longer term.

In terms of beef, Australia is currently in a rebuilding state due to a higher proportion of the herd being liquidated during the drought period (source: Australian Bureau of Statistics). As a result, there were limited exportable beef supplies from Australia during 2021 as animals were retained for breeding.

Australia has historically been one of the top two exporters of beef to the US, however annual volumes of Australian beef exported to the US were down 38% during 2021 due to a decline in product availability. In comparison; the volume of beef imported to the UK from Australia accounted for less than 1% of total beef imports during 2021.



Brazil

During a typical year, Brazil exports around 20% of its domestic beef production – which equates to over 2 million tonnes of product. The UK received over 21,000 tonnes of beef from Brazil during 2021 – which is a 4,300 tonne decrease on year-earlier levels, and accounted for 7% of total UK beef imports for the year. There were decreased imports to the UK during 2021 due to subdued beef production in Brazil following heightened protein demand from China continuing to influence heifer retention in the country. China also banned Brazilian beef imports during Q4 due to the detection of two cases of Bovine Spongiform Encephalopathy (BSE), and therefore slaughter was delayed. As a result, Brazilian beef production fell on the year, with U.S. Department of Agriculture (USDA) reports estimating that production for 2021 stood at 9.3 million tonnes (down from 10.1 million tonnes in 2020).

Moving forward, beef imports have resumed and China continues to be the main destination for over half of the beef exported from Brazil. Whilst global demand for beef remains strong, the expectation is that Brazil will increase cattle throughput to meet demand.

According to the latest outlook report from report from the USDA, global beef production will stand at 58.2 million tonnes (carcase weight equivalent) in 2022, with Brazil forecast to account for 17% of the total. Brazilian beef will continue to face some pressure, however, following some European supermarket chains refusing to stock the product as news reports linked Brazilian beef production to deforestation of the Amazon.

The United States (US)

Beef export volume and value from the US was the highest recorded during 2021 according to the US Meat Export Federation, and surpassed \$10 billion, as US beef production increased by 3% on the year. Japan continued to be the main destination for US beef, with volumes up 5% on 2020 levels, and the Asian markets accounted for the majority of the growth seen year-on-year. Demand from South Korea continued to rise during 2021 – largely due to growth in the retail sector – which led to a 14% increase in the volume of beef exported from the US to Korea during the year.

According to the USDA, the total number of cattle and calves on US farms as of 01 January 2022 stood at 91.9 million head – down 2% on year-earlier levels. The national herd has been in decline during recent years and is unlikely to recover in 2022 as the number of heifers expected to calve in 2022 is down 3% on the year. North America is also set to record tighter beef supplies during 2022 following periods of drought. For 2022, it is forecast that beef production will fall below 2021 levels, which will put pressure on the availability of beef on the global market.

Due to sustained strong domestic demand in the US along with tighter supplies, imports are expected to remain stable on the year – but high when compared to historical levels. An additional 2,500 tonnes of beef were exported from the UK to the US during 2021, which accounted for 2% of the total volume. There could be an opportunity to further increase volumes during 2022 as import demand is forecast to remain strong.

Summary

The red meat sector faces a number of challenges in 2022 – including the ongoing Covid-19 pandemic, inflation, high freight costs impacting supply chains, changing consumer demands, and changes to UK trading relationships. However, it is forecast that supply on the global beef market will remain tight due to lower production in several key regions such as the US and EU, along with firm import demand from China and the Asian regions. This outlook is positive for the domestic beef market and could provide support to UK trade and farmgate prices.

For the global sheep meat market, it is predicted that supplies will experience a modest recovery as Australia aims to significantly increase production following a near 5% increase in the size of the national flock. In recent years, China has absorbed much of the sheep meat on the global market which has reduced availability of NZ sheep meat to Europe. But the rapid recovery of China's pig herd could lead to an increase in NZ product to be shipped to Europe once more.

Per capita lamb consumption – both on the domestic market and globally – will have an impact on the performance of the sector, with sustainability concerns and price increases playing a key role in consumer choice of red meat.

Russia's invasion of Ukraine in the Spring of 2022 led to grain market prices rising significantly at the end of February as a result of disruptions to wheat, maize and sunflower oil exports from Russia. With some industry reports suggesting that commercial ship movements and use of ports being suspended in both countries, this will inevitably impact trade flows of products. Both Russia and Ukraine are significant grain producers, whilst Russia also imports large volumes of beef.

Disruptions to these trade flows will inevitably impact other markets around the world – including the UK. Although the UK does not directly trade red meat with either Russia or Ukraine, Russia did import over 285,000 tonnes of beef and beef offal in 2021 (source: IHS Maritime & Trade). If this volume of beef is not taken up by Russia due to disruptions from the conflict, there will be a significant volume of additional beef on the global market. Additionally, the conflict is currently preventing the planting and fertilising of Spring crops in Ukraine which will hinder crop supply in the next marketing year.

This rapidly changing situation will therefore have indirect impacts on the red meat sector here in the UK and in Wales – in terms of product movement and trade flows, and the cost of inputs such as feed stuffs, fuel and fertiliser.

As inflation continues to rise at a rapid rate, it is difficult to forecast demand trends for red meat as consumers feel the squeeze on their household expenditure.

Notes

Data obtained from HMRC, Defra, Eurostat, and BCMS were reported at the end of February 2022 and are subject to revision.

Volume data is shown in tonnes (carcase weight equivalent).

Registration data obtained from BCMS does not include 'blank' data.

Glossary

ASF African Swine Fever

Bord Bia The Irish Food Board

Defra Department for Environment, Food & Rural Affairs

EU European Union

FTA Free Trade Agreements

GB Great Britain

HMRC HM Revenue & Customs

UK United Kingdom

USDA United States Department of Agriculture