

HORIZON

Opportunities for the sheep sector



HORIZON

CONTENTS

- 3 Background
- 6 Sheep trade
- 10 Domestic consumer demand
- 17 International consumer demand
- 22 Competition analysis
- 24 Conclusions and implications

Annex 1 – UK trade agreements

Annex 2 – UK market access for sheep meat

Annex 3 – Importance of specification to end product



BACKGROUND

Within this Horizon report, we assess the key opportunities for the sheep sector over the next 10 years. Every six months, the AHDB Market Intelligence team produces a sector outlook, incorporating production forecasts, trade prospects and the consumption outlook. In producing recent outlooks, our attention has turned to the longer-term prospect for sheep meat. Some key changes will occur in the sheep sector. With the issue of the UK exit from the EU now resolved, this is an opportune moment to explore the evidence and understand what needs to be done to grasp the opportunities ahead.

At the time of writing (March 2021), lamb and sheep meat prices are at relative highs. Some unusual supply and demand dynamics, such as higher exports pre-EU exit and coronavirus lockdowns driving domestic retail demand, have driven prices upwards. It is clear that the supply and demand drivers that ultimately determine prices will shift again in future. Nonetheless, the current market highs provide a strong vantage point to look at what lies ahead.

There are around 33.5 million sheep in the UK, spread over 78,000 farm holdings. The average number of sheep and lambs on each holding is 430, although this number hides a wide range of farm sizes. About 10,400 holdings have fewer than 20 head of sheep, and 9,400 have more than 1,000 head.

Sheep are predominantly, but not exclusively, found in the north and west of the UK. These are typically hillier areas with high levels of rainfall. This provides excellent conditions for growing grass and is less well suited to other types of farming. More than half of grazing livestock farms in the UK are in designated less-favoured areas (LFAs) for agriculture.

It is farming at different altitudes that produced the 'stratified system', whereby draft ewes from the uplands are bred with rams from lower altitudes. They produce male lambs for slaughter, but also crossbred females, which are then bred with lowland terminal sires to produce lambs for slaughter. The sheep sector has come to rely less on this flow of genetics down the mountain in recent years, with more lowland flocks breeding their own ewe replacements.

Looking forward, fundamental changes will occur in three key areas which will impact the sheep sector. Firstly, in the area of trade, we know that the UK's trading relationship with the EU and other countries around the world is likely to change. Secondly, we also know that English¹ agricultural policy is shifting, with direct payments to farmers being phased out. Finally, with evidence from consumers, we can see that their attitudes and shopping behaviour continues to change, both at home and overseas. The report aims to explore each of these issues and what they mean for our farming levy payers, others in the supply chain, government and AHDB itself.



Trade

In recent years, any market analysis of UK sheep would have been dominated by EU exit issues. The sector was particularly exposed to the risks associated with a no-deal Brexit. Previous Horizon reports, including **Understanding Brexit: an impact assessment** and **Brexit prospects for UK beef and sheep meat trade**, have explored this in detail.

With more certainty on trade with the EU, we are able to move the debate on. The report explains how the sheep market operates and explores key issues, such as:

- What will the new trading relationship with the EU mean for the sector?
- How important is seasonality of supply and trade to the market?
- What implications will there be from changing sheep meat imports to the UK from countries like New Zealand and Australia?

Agriculture policy

In November 2020, Defra outlined its agriculture transition plan. Central to this transition is an intention to reduce and then stop direct payments, between 2021 and 2028. Instead, government funds will focus on paying farmers to deliver public goods around the environment, improved animal health and welfare, and to reduce carbon emissions. A new Environmental Land Management (ELM) approach, which will incorporate a Sustainable Farming Incentive, will be key.

It is important to acknowledge that basic payments have been important in underpinning the profitability of farming business in England. As outlined in Figure 1, the average basic payment received in 2019–20 was $\pounds 27,800$, which accounted for 60% of the $\pounds 46,000$ average farm business income (a measure of profit). However, the reliance on basic payments is much more significant for the livestock sector, where, on average, farms made losses from their agricultural activities.

For lowland-grazing livestock farms, basic payments average £15,800 and equate to 168% of farm business income. For less-favoured-area (LFA) grazing livestock, basic payments averaged £25,500 and equate to 112% of farm business income. Payments relating to agri-environmental schemes also contribute income to these businesses and these will change through the agricultural transition period as the new Environmental Land Management (ELM) scheme is rolled out.

£46.000 £22,800 £27,800 £9,400 £25,500 £15,800 £2,600 £13.000 £5,900 -£100 All farms Grazing livestock (lowland) Grazing livestock (LFA) Agri-environmental payments Diversified income Agriculture Basic payment scheme

Figure 1. Farm Business Income, England, 2019-20

Source: Farm Business Survey, Defra

The removal of basic payments will present a significant challenge to livestock farms. Many aspects of the new policy are being designed to be open to all farms and should provide a future income stream. However, it is unlikely that most farmers will be able to offset their lost income from basic payments in its entirety through ELM. Later in the report, we discuss issues relating to costs of production on farm and profitability. As direct payments decline, this will squeeze profitability and bring change for many businesses.

Consumer demand

Consumer demand for sheep meat shows differing trends domestically and globally. Within the UK, consumption of lamb has declined over the past 40 years in per capita terms and is now focused on older, more affluent consumers. The report assesses the key issues around domestic consumption, such as consumer perceptions, meal occasions and the importance of the halal market. Opportunities to grow lamb consumption domestically are discussed.

The story is different when we turn to global markets. Here, steady growth is expected over the next 10 years. The picture globally is mixed, with many developed markets, such as the EU, showing similar trends to the UK. However, driven by the dramatic expansion of middle-class consumers, the Asia-Pacific region, and China in particular, is expected to see significant growth. Ensuring the UK has access to the right markets is important. Tariff and non-tariffs barriers to trade are discussed and whether the UK has the technical agreements in place to enable market access to export sheep meat.



SHEEP TRADE

The UK is both a significant importer and exporter of sheep meat. Since 2018, exports have exceeded imports in volume terms, as shown in Figure 2. This is mainly as a result of declining New Zealand imports and declining domestic consumption. If the trends shown here continue, this position as a net exporter will become the norm.



Figure 2. UK sheep meat balance

Source: Defra, IHS Maritime and Trade – Global Trade Atlas®, AHDB *Supplies available for consumption (calculated)

UK sheep meat is exported to a range of countries, where there are technical agreements in place to enable trade (see Annex 2). The EU is currently the most important destination for UK sheep meat, accounting for around 90% of exports in 2020. The new trade deal agreed with the EU means that the UK is now a third country, outside the EU customs union. In effect, this means that UK sheep meat is now 'exported' to the EU rather than simply 'delivered'. This change has brought significant logistical difficulties and an increased administrative burden and cost. Some of the costs currently being experienced will be reduced in time, but the requirements for customs checks and paperwork are likely to persist. These add costs to doing business, impacting on the price competitiveness of UK product in EU markets.

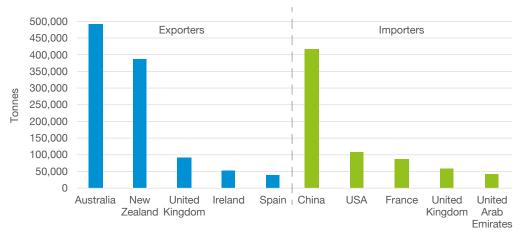
Based on previous **research** funded by AHDB, QMS and HCC, the non-tariff costs for roll-on, roll-off driver-accompanied routes are estimated to rise from 0.4% (when the UK was part of the EU) to between 1–8.2% for chilled lamb carcases. The higher figure is relating to physical checks being applied to the specific load, compared with a probability-based checking.



Global trade

The UK is the world's third-biggest exporter and fourth-biggest importer of sheep meat. Global sheep meat exports are dominated by Australia and New Zealand, while China, the USA and France import the most.

Figure 3. Major sheep meat exporters and importers (in tonnes)



Source: FAO 2019

Australia, New Zealand and Ireland can be considered specialist exporters, with relatively small domestic markets compared with the amount of sheep meat they produce. This means their regulatory, farming and processing systems are heavily focused on producing exactly what their customers overseas need. The biggest market for UK sheep farmers and processors is their own domestic market, although some supply chains are dedicated to export markets, principally in the EU.

Global trade actually creates two opportunities for UK producers. Growing export demand means exports are likely to play a more important role, if we can adapt to changing customer demands both in terms of pricing and product specifications. At the same time, we've seen New Zealand imports declining in recent years as they target other markets. This means there is a bigger share of the UK home market on offer. Nonetheless, the long demand dynamics in the UK versus broader international markets are very different.



Lamb production in the UK is seasonal. Production is highest in the autumn, when new-season lambs come to market in volume. In the first part of the calendar year, supplies are tighter, but more lamb from the southern hemisphere is available to help meet demand. As such, the UK is typically a net importer in the first part of the year and a net exporter in the second. But this is only half the story and trade in both directions takes place every month. This is not just a reaction to the production profile but also to achieve carcase balance.

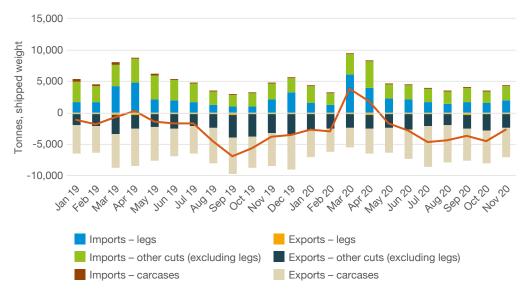


Figure 4. Seasonality in UK sheep meat trade

Source: IHS Maritime and Trade - Global Trade Atlas®, HMRC, AHDB

In its simplest terms, the UK tends to export sheep meat in the form of whole carcases, mainly to France and Germany, while it imports legs and loins, mainly from New Zealand. This is because the cuts that UK consumers prefer the most tend to come from the legs and loins. However, in recent years, New Zealand has been pivoting its export volumes towards the Asian market. If this continues, this creates opportunity for UK farmers through reduced competition in our domestic market, but this opportunity would be clearly focused on legs and loins. As such, it amplifies the carcase balance issue and would mean the UK would have to also increase the exports of other cuts, switching away from the shipment of whole carcases. With this in mind, the experiences of New Zealand in shifting from an export trade focused on whole carcases is worth further consideration.



Case study: New Zealand

When the UK joined the European Economic Community in 1973, New Zealand's sheep sector was largely focused on exporting to the UK. The limits to tariff-free trade to the UK market, which were put in place, were a catalyst for profound change in New Zealand's sheep sector. In 1970, more than 90% of exports were shipped from New Zealand as carcases, but by 2020 this was less than 10%. By investing in cutting capacity, exporters could add more value to each cut within the carcase. By targeting different markets around the globe and identifying those that value specific cuts the highest, New Zealand's exporters were able to more than offset the additional costs of producing those cuts domestically.

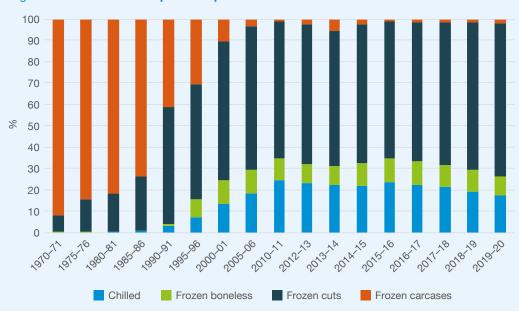


Figure 5. New Zealand sheep meat exports

Source: Beef and Lamb New Zealand Economic Service

Technological advances allowed some product to be shipped chilled, rather than frozen, further adding value. This is possible with long-shelf-life products (84 days compared with 40 in the UK) as a result of exceptional process hygiene and a very effective product chilling. This has been enhanced further with the development of refrigerated supply chains into China in particular. It was New Zealand's trade agreement with China in 2009 that marked the end of its sheep meat quota to the EU being filled each year.

UK consumption of lamb has been falling and so have imports, while production and exports have been steady. So against this background, could the UK learn from the New Zealand approach? A big difference is the size of the domestic market, with around two-thirds of UK lamb consumed domestically, compared with just 1% of New Zealand production consumed in New Zealand. There may be an opportunity in future to focus on sending cuts to markets that offer the highest return, including legs and loins to the UK itself, rather than shipping out whole carcases.

DOMESTIC CONSUMER DEMAND

Within the UK, consumption of lamb has declined over the past 40 years. Data from Defra's Family Food Survey below shows UK meat consumption since the 1980s. The steady decline for lamb is in contrast to the longer-term rise of chicken. We discuss some of the reasons for this later, which include price and pressure from evolving consumer needs and tastes. In particular, the last decade has seen the desire for quick, convenient and healthy meal options intensify. The bottom line is that UK per capita consumption of lamb at home has fallen by 80% since 1980.

Figure 6. Quantity of food purchased for UK households (average g per person per week)

Source: Defra Family Food Survey

Consumption patterns during 2020 took a dramatic shift, due to coronavirus.

Overall, lamb retail volumes were up 4% in the year (Kantar Worldpanel). This was behind the market average for total food and non-alcoholic drink volumes, which were up 11%. However, that was a significant contrast to the pre-coronavirus trend. As restrictions ease and lifestyles adjust to a 'new normal', it is expected that lamb will face continued strong competition from other fresh proteins and plant-based alternatives.

Lamb consumer profile and eating habits

Understanding the shopper profile and how lamb is consumed provides crucial context. Lamb has a heavy proportion of older consumers, with 60% of retail sales from those aged 55+ (compared with 51% for all meat/fish/poultry). In terms of household type, the majority are either retired, older dependants or empty nesters (have children who are no longer living with them). The current consumer profile points to continued contraction of the domestic market. As such, widening appeal to young consumers is important in the longer term.



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Figure 7. Lamb retail sales by consumer demographics

Source: Kantar Worldpanel - Spend (£000) | Actual | Total lamb | 52 w/e

Just under a third (28%) of lamb meal occasions occur on a Sunday – this rises to around half if you look just at lamb roasting joints (Kantar Usage 52 w/e 29 Nov 2020). This highlights the importance of Sunday roasts to overall category performance. The longer-term decline of the traditional Sunday roast is making it increasingly important to evolve lamb's offering into other dishes. Lamb consumption peaks at Easter and Christmas, highlighting a wider opportunity to make lamb more appealing beyond these two key seasonal periods.

Lamb is often seen as a treat and fits well within special occasions in the mindset of consumers. Pre-coronavirus, lamb was more likely to be chosen over other meat, fish and poultry where there were five or more people present – the reason being the meal was a social occasion. Obviously, this was heavily impacted during 2020 due to household restrictions, but in the longer term there is an opportunity as restrictions ease and consumers look to recreate these occasions.

Halal market

The domestic halal market is key for the sheep sector. Although Muslims account for just under 5% of the UK population, they provide notable opportunities for lamb because lamb and mutton consumption is significantly higher among halal consumers than the wider population. More than 60% of halal consumers eat lamb at least once a week, compared with just 6% of the general UK population.

Previous AHDB **research** has highlighted that more than 20% of sheep meat produced in England is consumed by Muslims. Opportunities exist in social events, such as weddings and naming ceremonies and key Islamic festivals (Ramadan, Eid al-Fitr and Eid al-Adha) which happen throughout the year. AHDB highlighted scope for maximising the opportunity with marketing, extended in-store ranging and more premium products in a recent report, **Demand for halal meat, June 2020**.

Processors looking to tap into the growing UK domestic halal market need to understand halal consumers' preference for meat, according to the method of production, point of sale and other quality parameters. For instance, a number of studies have reported that the majority of halal consumers prefer to shop in Muslim-operated retail premises due to trust issues surrounding the authenticity of halal meat. Many mainstream retailers have adapted to this by making provision for Muslim-operated butcher counters in their stores. The method of slaughter also influences consumer choice for halal meat.

Case study: Key Islamic festivals

Eid al-Fitr is the festival of breaking the fast. It is celebrated a day after the end of the 29/30 days of Ramadan. Families usually gather for the Eid al-Fitr celebration and sheep meat is typically used in kebabs and curries. The estimated date for the Eid al-Fitr festival in 2021 is Thursday 13 May, depending on the sighting of the moon.

Ramadan and Eid al-Fitr

Ramadan is the ninth month of the Islamic lunar calendar, during which Muslims abstain from the consumption of food from dawn to sunset. Because the Islamic calendar is a lunar one, the dates for the festivals are not fixed; they move forward 10 or 11 days every year. In 2021, Ramadan is expected to start on Monday 12 April and end on Wednesday 12 May, but this depends on the sighting of the moon.

Ramadan is observed over 29 or 30 days, depending on the sighting of the moon; this is immediately followed by the Eid al-Fitr festival. Many Muslims break the fast with extended family or with communal meals in which lamb is heavily featured. Peak halal meat consumption occurs at this time. Eid al-Fitr is the festival of breaking the fast. It is celebrated a day after the end of Ramadan. Families usually gather for the Eid al-Fitr celebration and sheep meat is typically used in kebabs and curries.

Qurbani/Eid al-Adha Festival

Eid al-Adha is the most important Islamic festival. It is known as the festival of feast. Ten of thousands of animals are procured for the Qurbani/Eid festival annually. For farmers and processors looking to access this market, it is important to note that demand for sheep meat during this festival is split into two categories: meat for the Qurbani charitable giving and meat for the normal Eid festival. Animals for the Qurbani market must meet certain requirements with regard to sexual maturity and other features. There are no specific requirements for meat destined for the Eid-al-Adha market.

The estimated date of Qurbani in 2021 is 20 July. The processing of Qurbani animals must be completed over three days, starting after Eid al-Adha prayers on the tenth of Dhul Hijjah (twelfth month of the Islamic lunar calendar). AHDB has produced **educational materials** on the Qurbani market which can be used by farmers and abattoir operators wishing to access this important market.



Price challenge

The most notable consumer consideration for lamb is its price and consumers' reaction to that, with AHDB research indicating that 64% of consumer agree that lamb is too expensive to eat on a regular basis (AHDB/YouGov Consumer Tracker, Feb 2020). With price already acting as a barrier, the economic fallout from coronavirus could see increased challenges for lamb, pushing it further into the treat/special occasion bracket. Signals are that consumers are increasingly seeking value for money, with 43% of consumers stating they have become more price-conscious in the last month (AHDB/YouGov Consumer Tracker, Nov 2020).

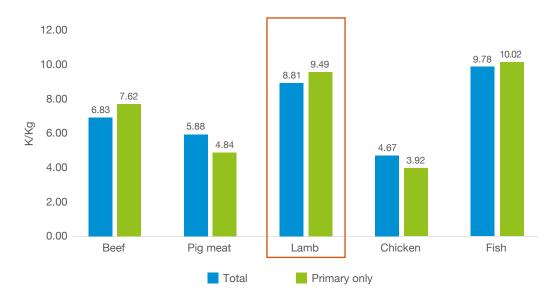


Figure 8. Average price paid by GB shoppers, 52 w/e 27 Dec 20

Source: Kantar, 52 w/e 27 Dec 20

Lamb's price point is a challenge when compared with chicken, beef and pig meat, placing it at the higher end of the scale across meat options. In addition, lamb's price point has also grown the most over the past five years, with the retail average price per kilogram 19% higher than five years ago (Kantar 52 w/e 27 Dec 20). This rate of growth is much higher than beef (+5%), pig meat (+10%) and Chicken (-1%). The price differential is evident when it comes to meat centrepieces, as well as versatile, cheaper products such as mince. This makes it vital that lamb justifies the price point by clearly communicating taste and quality attributes to consumers.

Consumer perceptions

Evidence around consumers' perceptions of lamb highlights a number of strengths and weaknesses. Notable attractions of lamb for consumers are it is 'tasty' (58%) and a 'good source of protein' (50%). However, only 27% of consumers perceive lamb as being 'good for you', with many thinking that lamb can be 'fatty' (57%) (AHDB/YouGov Consumer Tracker, Nov 2020). Given the growing importance of health to many consumers, on which AHDB has published insight previously, this presents a challenge to the lamb market.

Another key area the industry must address is that just 34% of consumers agree that lamb is 'versatile' (AHDB/YouGov Consumer Tracker, Nov 2020).



This is significantly lower than agreement towards other meat choices, such as chicken (78%), beef (64%) and pork (47%). With the increased popularity of 'dish-based' cuisines, such as Italian, Indian, Chinese and Mexican, finding ways to align lamb to more world cuisines may increase relevance for a wider group of consumers. For instance, traditional cuts, such as leg, shoulder and chops, can be used in a variety of Mediterranean, Middle Eastern and North African-inspired dishes, such as tagine and kleftiko.

Lamb fat

Lamb carcases are graded based on the EUROP grid. This system classifies carcases based on fat class and conformation. Different markets have different requirement, so AHDB encourages farmers to identify potential markets or customers first and then produce animals which suit their needs. Most deadweight markets pay up to 21 kg and tend to pay the greatest premium for carcases graded as R3L or better.

In 2020, AHDB data shows that only 57% of GB sheep met the R3L or better 'target specification' – this figure has remained steady over the past five years. Pictured is a supermarket pack showing lamb chops from an overly fat lamb. In addition to the downside in terms of appeal to the consumer, excess fat is a cost for the farmer (in terms of increased feed). It also increases food waste and adds cost to the processor. Further images showing the difference between different lamb carcase specifications are shown in Annex 3.



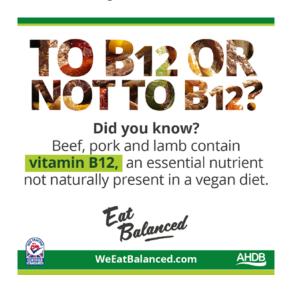
Environment perceptions

The environment is another area of growing consumer interest. Here, most consumers (64%) believe farmers care about the planet (AHDB/Blue Marble Trust Research, 2020). Indeed, many aspects of UK sheep meat production, such as grass-based and extensive, may lend themselves to a good news story on the environment.

In recent years, concerns about the environment, together with health, have become the key reasons why those consumers who limit the amount of meat in their diets choose to do so. Rightly or wrongly, the majority (54%) of consumers believe a vegan diet is more environmentally friendly (AHDB/YouGov Consumer Tracker, Nov 2020). This is one factor behind the recent growth in sales of products marketed as meat-free. There has been a significant volume of new product development (NPD) and new brands within this category.

However, during lockdown, the number of households buying meat-free products dropped by almost two percentage points – while the number of households buying red meat grew in comparison. This is clearly welcome news for the livestock sectors, although the reductions may be temporary. In what is still a relatively small market, the meat-free sector is expected to grow in the longer term. For sheep meat, the message is clear: it is important that the supply chain introduces new products which appeal to consumers and addresses concerns around the environment. Demonstrating and communicating environment credentials to consumers is a must for our industry.

Looking ahead, it is essential that lamb is communicated as a tasty and nutritious product – these were key pillars of AHDB's domestic marketing campaigns, such as 'Lamb hits you in the chops' in 2019 and 'Make it Lamb' in 2020, alongside statements about the health benefits of eating red meat in AHDB's recent 'Eat balanced' 2021 campaign.





Case study: ASDA

Hayley Whittaker

Buying Manager - pork, lamb and offal

"As a supermarket buyer, the key thing which influences my buying decisions for lamb always starts with our customer needs. We look at our product offer and assess what gaps we have and what products are performing for our competitors. For instance, last year we saw that marinaded products were growing in the market. We then work closely with the processor to work out the value offer for customers.

"We have a dual supply arrangement, with lamb coming from the UK and New Zealand. It won't be a surprise that a large proportion of our volume is from New Zealand, because we focus on legs. We over-index on joints, particularly among the older demographic of our customers. They are used to that cut, and there are big sales demand around Easter and Christmas. It wouldn't be possible to meet demand without flexing our supply.

"Carcase balance is an issue, and we are conscious and sensitive to this. There is a need to switch the dial to work out what the barriers are and how we get round them. We do continue to stock some cuts, like rolled breast, to help with overall carcase balance, but customers like what they like and go for certain cuts. We want to get on the journey to change this, but it will take time and we need to get customers on board. There would be a need to re-educate and re-introduce them to other cuts.

"The quality of UK lamb works for us, but the price volatility can be a challenge at times. We need to do our promotional planning two months in advance, so if prices are moving about that can be a challenge. There is greater stability with the New Zealand prices. If we could get greater price stability in the domestic supply, it would give me more confidence to launch product and plan promotions.

"Lamb is one of the more expensive proteins in store, so we try to promote to get people buying the range. Otherwise there would not be many new customers switching to lamb. It has a loyal, traditionally older demographic. We want to drive volume, so need to overcome barriers for all customers."

Case study: Dalehead Foods

Lorraine Fountain

Commercial Manager for lamb

Lisa Magennis

Category Manager for lamb and pork, counters, ready to cook

"In September 2019, we made a decision in conjunction with Waitrose to schedule the transition to 100% British lamb, having already completed the organic transition. This was to be a two-year process. It was partly a corporate social responsibility decision, in terms of supporting British farmers and doing the right thing, but also based on a future understanding of what the world market is going to look like and what relevance New Zealand may have to the UK market in future years. As a premium retailer Waitrose need to maintain a forward-looking offer and risk assess their supply chain, whilst maintaining the highest product quality their customers expect. We wanted to evolve and strengthen our supply chain ahead of the curve and that required some strategic change.

"With some lack of understanding from customers around the "best in season" policy, it was challenging to deliver a consistent and coherent all year round message on quality.

"This transition does not come without some significant challenges. We've had to do a bit of thinking outside the box in terms of how we're going to deliver the Easter peak. So much of Easter is really driven by what customers have been led to believe is the lamb they should choose. The typical behaviour is led by the more traditional shopper and buy in to a deep leg-based promotion. We need to change that mindset to a more sustainable British-based offer, so the lamb offer is balanced and appeals to a breadth of missions and age groups.

"Waitrose has always marketed the whole lamb. It's a fundamental of sustainability. Building towards this transition, we've focused through promotions or editorial pieces on delivering a sustainable and whole carcass message.

"The current lamb price presents a number of challenges. Despite the inflation in New Zealand pricing in recent years, there's considerable divergence between the British lamb price that we are currently experiencing and New Zealand lamb price. Clearly, we have unprecedented experiences in terms of the world market at the moment which has created temporary disruption. However, we know that the Asian population is going to continue to grow and middle class developing world areas who have not had meat in their diet historically will want meat in their diet."



INTERNATIONAL CONSUMER DEMAND

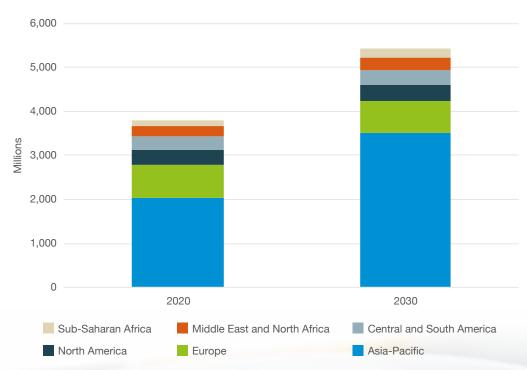
The willingness and ability to pay for sheep meat varies across the globe. As economic income rises, so does demand for meat and dairy products, compared with more staple items in people's diets. During 2020, the global coronavirus pandemic adversely affected economic growth in all regions. However, despite significant uncertainty, the global economy is projected, by the latest International Monetary Fund (IMF) outlook, to grow 5.5% in 2021 and 4.2% in 2022.

Another factor that will drive consumption is population growth. Over the past 30 years, the worldwide population growth rate fell from more than 2.0% per year to 1.5% – a trend expected to continue. But in absolute numbers the world's population is growing faster than ever before. The next 35 years are projected to add another 2.5 billion people, with 90% of these in developing countries (UN World Population Prospects, 2019). China and South East Asia, along with Africa and India, are predicted to experience the biggest population growth between 2015 and 2050.

Surge of the middle class

The combination of economic growth and population growth creates increased demand for meat and dairy products. The interplay between population and economic growth is important, together with the distribution of income. The surge of the global middle class is a trend which captures this. Forecasts show the number of middle-class consumers is expected to grow by more than 40%, to 5.4 billion, over the next 10 years. As shown in Figure 9, the vast majority of the growth will be concentrated in the Asia-Pacific region.

Figure 9. The size of the global middle class, 2020, 2030



Source: Kharas (2017), The unprecedented expansion of the global middle class

This World Bank uses a definition of 'middle class' based on an income range of US\$10–US\$100 per day, which may seem low by Western standards. However, at these income levels, consumers begin to have more disposable income to purchase consumer goods and are open to an increasingly Western diet, with higher levels of protein consumption.

Growth in consumption

Driven by these factors, the OECD and FAO forecast that global sheep meat consumption will grow 1.7–1.9% annually in the coming years, with its share of global meat protein consumption to gradually rise but remain below 5%. The main factor in this upward trend is the developing markets with a rapidly emerging affluent middle class, led by Asia-Pacific, which, according to OECD, will account for 95% of forecast growth in the next decade.

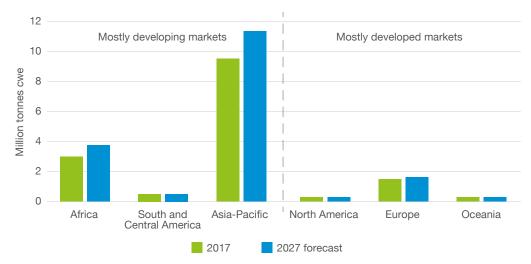


Figure 10. Forecast for global sheep meat consumption

Source: OECD-FAO 2018 Agriculture Outlook Note: East and North Africa (MENA) split across Africa and Asia-Pacific.

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Europe has been the main destination for UK lamb exports, with around one-third of production going to EU countries each year. The main bulk of exports is in the form of fresh whole and half carcases.

With the UK–EU Trade and Cooperation Agreement now in place, the high tariff barriers that UK lamb would have faced entering the EU have been avoided. However, non-tariff barriers and trade friction mean that it is not business as usual. Some of the issues, including physical checks, the requirement for Export Health Certificates (EHCs), advance notification to border inspection posts, rules of origin, labelling and documentation requirements are all part of trading as a third country and supply chains will need to adapt to the new norm. AHDB has published a number of articles and podcasts around these issues in the EU exit section of our website.

UK lamb is generally regarded as a high-quality product, within the trade, with excellent taste and good eating qualities. In addition, it is viewed as 'natural', being produced on mainly grass-based outdoor production systems. UK lamb also has a freshness advantage, being physically closer to EU markets than Australian or New Zealand (NZ) lamb and reaching supermarket shelves 24 hours ahead of Irish lamb (prior to EU exit). The trade friction previously mentioned has eroded this advantage. The EU exit has not benefitted the UK brand within the EU. With labelling requirements to show clearly the country of origin (GB), selling agents in the EU suggest this will present a marketing challenge and may negatively impact demand for UK sheep meat going forward.

Asia-Pacific

The UK currently has limited access to Asia's sheep meat markets. This is because focus has been predominantly on gaining access for pork, due to the high demand and market potential, coupled with freedom from transmissible spongiform encephalopathy (TSE) related restrictions. In a previous Horizon report, **on international buying behaviour**, we highlighted that consumers in China and elsewhere in Asia place great importance on food safety.

China has recently lifted the ban on UK beef exports and Japan has also lifted bans for both beef and lamb. Japan is renowned for its stringent food safety and import controls regime and opening this market is expected to send positive signals to other countries regarding the safety of UK exports. In South Korea, there is no access for sheep meat, due to sanitary and phytosanitary (SPS) issues, but the UK does have access for pork. The tariff for lamb into China is 15%, South Korea 2% (down from 22.5% general tariff through the UK–South Korea trade agreement) and Japan is 0%.

The Asia-Pacific market is dominated by China – the world's largest producer, consumer and importer of sheep meat. Since 2014, China has gradually been lifting restrictions for UK market access, and in 2019, the UK gained access for beef. However, there is a ban on UK imports to China for lamb products due to concerns around transmissible spongiform encephalopathy (such as scrapie). If market access is achieved, in the future the tariff for sheep meat imports into China is 15%, outside of a Free Trade Agreement (FTA).

Lamb consumption in China tends to be predominantly from higher-income consumers and has been steadily increasing as this sector of the population expands. Although per capita consumption at 3.8 kilograms is relatively low compared with pig meat, beef and chicken, this is expected to rise by 28% by 2027 (OECD Outlook 2020). This rapid per capita rise, combined with the size of the population in China, means the increase in demand for sheep meat is likely to rise faster than either domestic supply or that from current importers.

The vast majority of Chinese import demand is currently met by Australia and New Zealand, who account for 98% of total imports. Both of these countries have a scrapie-free status. The signing of FTAs, with associated tariff rate reductions, gives both countries a competitive advantage over other suppliers.

Focusing on domestic production, China has been unable to achieve sufficient productivity gains, hampered by land degradation and resource constraints. The emergence of China as a major importer in recent years has completely transformed the global sheep meat market and driven prices to record levels. Further upward pressure on prices has resulted from the emergence of African swine fever in the pig herd and the subsequent protein shortage in the region.



North and South America

The UK currently has access to the Canadian sheep meat market at zero tariff, but not the USA or Mexico. The World Trade Organisation tariff for lamb to the USA is 0.7c per kilo (equivalent to 0.8% based on a world average import price 2017–20) and to Mexico is 10%.

The USA is not a major producer of sheep meat; between 2001 and 2020, the sheep population decreased from approximately 7 million to 5.2 million head (compared with 33.5 million in the UK). However, the USA is the second-largest importer of sheep meat in the world, importing around 110,000 t each year – Australia (75%) and New Zealand (24%) accounting for most imports. This represents more than half the total US consumption and tends to be premium cuts, especially legs.

Per capita consumption of lamb in the USA is low but is stable and forecast to remain so going forward, according to the FAO. The US Northeast, with its high concentrations of Middle Eastern, Caribbean and African consumers, is a major market for lamb products. The typical lamb consumer is an older, ethnic-minority individual who lives in a metropolitan area and who prefers to eat only certain lamb cuts.

There are non-tariff barriers to access the US market. Regulations currently prohibit UK sheep meat and goat meat imports as a measure designed to reduce and eliminate scrapie within the USA. This measure is known as the 'small ruminants' rule. Countries wishing to gain new access for exports to the USA face a lengthy application process, which includes demonstrating an equivalent level of food safety to the US system.

The UK position has improved in recent years, as, following a multi-species audit that included sheep, the USA lifted its 20-year ban on beef in 2020 and recognised UK meat inspection as equivalent to its own. This means that premises for lamb exports can be added to the UK equivalence once the 'small ruminants' rule is addressed.

The South American sheep meat market is described as a potentially high-value niche market. The UK does not currently export sheep meat to South America, where potential markets are yet to be explored.

Middle East and North Africa

Turning to the Middle East and North Africa, the UK has market access to many markets. The UK has relatively few preferential trade agreements in place, with Egypt and Morocco notable exceptions. However, tariff barriers tend to be quite low, with many of the countries net importers. For instance, the UK currently does not have a trade agreement with the UAE and Saudi Arabia. This means trade takes place under WTO rules, where UK exporters pay the duty set by those countries. A tariff of 5% applies for frozen lamb into both the UAE and Saudi Arabia. In contrast, there are no tariffs applied to fresh lamb.

There are non-tariff barriers which need to be addressed to access these markets. For example, all meat consignments destined to the Middle Eastern market must be accompanied by a halal export certificate issued by an accredited UK halal certification body. There are in excess of eighteen halal certification bodies in the UK, however, only a handful of them are accredited to issue halal export certificates to countries in the Middle East. Processors looking to access these markets must therefore ensure that they select a local certification body that can issue a valid halal export certificate.

The situation in North Africa is slightly different: while there is a requirement for exporters to demonstrate the halal status of meat (usually with a halal certificate), there is no requirement for the UK certification body to be accredited.

The Middle East and North Africa region (MENA) is a key global importing market for sheep meat. There is a strong tradition of consuming sheep meat and demand continues to grow. An increase in per capita consumption of sheep meat is projected, with demand growth tightly linked to the oil market, which heavily influences both the disposable income of the middle class and government spending patterns (OECD, 2019).

Halal and major export destinations

There are opportunities for the export of UK halal sheep meat to the EU, with the major destinations being France, Germany and Belgium. Outside the EU, there is appetite for UK sheep meat in Muslim-majority countries, including countries in the Middle East and Asia. Figures from HMRC show that between 2018 and 2019, there was a 301% increase in the volume of UK lamb exported to the Middle East from animals that were stunned prior to slaughter, in compliance with the relevant halal standards in the Middle East. The volume of fresh and frozen sheep meat exported to the UAE, for instance, increased from 112 tonnes in 2019 to 853 tonnes in 2020. While the volume of UK lamb and mutton exported to the Middle East is relatively low in comparison with Australia and New Zealand, interest in UK lamb is growing across the region. AHDB recently appointed an agent in the region to engage in outreach and other promotional activities in order to highlight UK sheep meat as a high-quality and versatile product.

While the size of the global halal market continues to expand, consumer choices may be influenced by the method of production and other factors. For markets outside the EU, the biggest challenge faced by UK processors is the shelf life of sheep meat. Competing suppliers from some major exporting countries are able to supply sheep meat with a shelf life up to 120 days, due to exceptional hygiene processes, with that of UK products averaging around 40 days. Other factors hindering the supply of UK halal meat to the Middle East and Asian markets include price volatility due to the seasonality of lamb production and exchange rate fluctuations.



COMPETITION ANALYSIS

The UK faces competition from sheep production in other countries and also from other proteins. We know that, in general, the UK is a high-cost producer of high-quality products, but how do we compare in the sheep sector?

The charts in this section show the costs and returns for sheep enterprises on selected typical farms, collated by the agri-benchmark network, of which AHDB is a member. The countries selected in Figure 11 are those the UK trades with or are main competitors in globally traded sheep meat. Farms are mainly family-run, some with additional paid labour. With a little variation, they are all producing lambs for slaughter in the region of 40–44 kg liveweight.

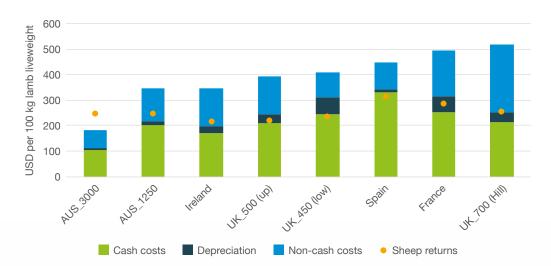


Figure 11. Typical farm lamb production costs and output, 2019

Source: agri-benchmark

The chart shows that most farms have returns lower than their cash costs, which include variable inputs (e.g. purchased feed, fertiliser, veterinary, shearing costs) and overheads (e.g. fuel, machinery repairs, insurance, paid labour, paid rent). The situation is starker when the depreciation of farm machinery and buildings and non-cash costs, such as the value of unpaid labour and the rental value of owned land, is incorporated. Using the full economic costs, only the lowest-cost farm, Aus_3000, is profit-making.

New Zealand is no longer a member of the agri-benchmark network. However, data from previous years repeatedly showed that the costs of production of typical NZ sheep farms was slightly lower than Aus_3000, with similar returns.



The costs of the UK farms, particularly UK_500 and UK_450, are lower than those found on typical farms in Spain and France. However, they are nearly double the level of Aus_3000 and those found on typical New Zealand farms. There may be lessons which UK sheep producers can take from lower-cost producers elsewhere in the world.

New Zealand and Australia have lower costs due to more ewes being managed per full-time labour unit and lower costs for machinery and buildings. Typically, systems are extensive, with rotational paddock grazing practised. Costs on the Ireland farm are also lower; typically, Ireland has smaller farms, worked on a part-time basis and with greater reliance on contractors, thus reducing their machinery costs.

The agri-benchmark/AHDB typical farms

Due to the variety of different systems which operate, it is impossible to identify a single 'typical' farm. As such, three different farms are included, as outlined below:

UK_450

A lowland farm based in Devon in the South West. It is 200 ha, half of which is rented. The 450-ewe flock of Lleyn ewes produces its own replacements and finished lambs sired by terminal sires. There are also 70 spring-calving suckler cows, some heifer calves kept as replacements and the remaining calves finished on farm. The farm feeds home-grown barley.

UK_500

An upland grass farm based in the North East. It is 300 ha, half of which is rented. The 500-ewe flock of Swaledale ewes produces its own replacements, sells some lambs finished and the rest as stores. There are also 65 spring-calving suckler cows, some heifer calves kept as replacements and remaining calves sold as yearling stores for someone else to finish.

UK 700

A sheep-only hill farm based in the North West. It is 195 ha, with the sheep grazing in-bye grassland as well as access to moorland, which is part of a Higher Level Stewardship scheme. The majority of the farm, over 90%, is owned. The 700 purebred Swaledale ewes produce their own replacements, some ewe lambs are sold for breeding and the rest as stores for someone else to finish.

More detail on the farms and information on those shown in other countries can be found on the **agri-benchmark website**.



CONCLUSIONS AND IMPLICATIONS

For UK producers, strong prospects for sheep meat at the global level need to be balanced with our current focus on a contracting domestic market and our EU neighbours. When we look ahead, it's clear that 'doing what we've always done' won't leave us in a strong position to capitalise on the future opportunity. At the same time, using phrases like 'step change' or 'revolution' are ill-suited to a sector where we know gains are incremental and change occurs over many years. Nonetheless, there are some focus areas where the sheep meat sector needs to think and act differently. The following aren't restricted to farmers, incorporating aspects where a range of businesses and organisations in the supply chain (including AHDB) can play their role.

Prepare for policy change

Farmers:

- Consider the costs and benefits of accessing new governmental income sources, such as the new Sustainable Farming Incentive within ELM
- Assess what the phasing-out of direct payments means for the future viability of their farm business. Base this assessment on average market prices over a three- or five-year period (rather than recent prices, which are unlikely to be maintained in the medium to long term)
- Consider accessing shorter-term government programmes, such as Countryside Stewardship funding, which are introduced ahead of the full roll-out of ELM in 2024

AHDB and the supply chain:

- Raise awareness of the policy changes which are occurring
- Support farmers to adapt their businesses to these changes

Government:

- Provide clarity on the new schemes by communicating the details as soon as possible
- Provide evidence around the costs and benefits of involvement
- Consult on possible exit schemes for the industry



Increase market access for sheep meat in overseas markets

AHDB and the supply chain:

- Continue work to improve UK market access in overseas markets, focusing on priority markets
- Work with government to identify and improve new digital solutions to minimise the
 extra costs and administration requirements currently impacting sheep meat exports
 to the EU. For instance, the work to develop Export Health Certificates (EHC) Online
 to replace the current system
- Assess opportunities to shift EU exports from predominantly carcase-based to cuts-based, assuming that solutions to current exporting difficulties are found

Government:

- Work with industry to identify and improve new digital solutions to minimise the extra costs and administration requirements currently impacting sheep meat exports to the EU. For instance, the work to develop Export Health Certificates (EHC) Online to replace the current system
- It would benefit the sheep sector if government prioritised breaking down market access barriers for sheep exports in discussions with other countries
- It would benefit the sheep sector if government ensured preferential access for UK sheep meat exports are included in future trade deals. Trade deals with key markets which have a demand for sheep meat imports (such as China and the US), together with growing markets in the Asia-Pacific region, could be prioritised

Be ready to compete

Farmers:

- Focus on cost of production and business efficiency. Our competitive position analysis shows that controlling overheads and machinery costs should be the initial focus.
 There may be learnings from our previous Horizon report on the characteristics of top-performing farms
- Consider and respond to market demands

AHDB and the supply chain:

- Greater innovation and new product development (NPD) in sheep meat would encourage greater consumption domestically and overseas – particularly for younger consumers
- Assess the export opportunities and barriers to producing fresh lamb products with longer shelf life, in line with Australian and New Zealand competitors

Know what our markets require and reward

Farmers:

- Focus on the needs of the end consumer by delivering lambs which meet the specification of the market which is being targeted
- Consider working with the supply chain to target demand peaks such as Easter,
 Christmas and other religious festivals
- Consider the importance of assurance schemes in addressing the needs of the end consumer

AHDB and the supply chain:

- Utilise evidence around changing consumer needs to inform planning and protect plate share
- Connect with the next generation of lamb consumers, who are willing to pay more
 for the unique intrinsic qualities of lamb, so that we extract the most value from every
 animal, as well as redefining the 'lamb brand' with a younger audience
- Focus on positioning lamb as a positive contributor to wellbeing so it benefits from the growing consumer interest in health. Leverage the sustainability and naturalness of lamb to appeal to a broader consumer base of 'mindful eaters'
- Seek opportunities to increase value in traditional channels such as halal, where the
 opportunity exists to create a premium proposition for 'foodies' that elevates the value
 of cuts through NPD
- Identify opportunities to differentiate the product, where there is demand for this.
 This might involve branding or messaging around quality, provenance or even sheep breed

Government:

 Ensure that there is transparency in sheep meat markets, utilising the powers of the Agriculture Bill where appropriate



ANNEX 1 – UK TRADE AGREEMENTS

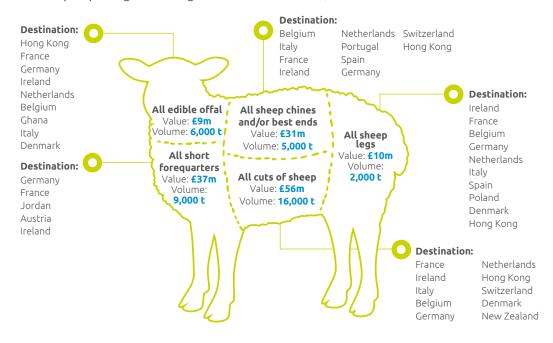
The UK has agreed a number of preferential trade agreements with countries around the world. Most of these are 'continuity' trade agreements which seek to replicate deals the UK benefited from as a member of the EU. The map below details the countries where deals are in place, as well as potential new agreements where negotiations are underway.



Source: UK Government

ANNEX 2 – UK MARKET ACCESS FOR SHEEP MEAT

UK sheep exports go to a range of overseas markets, as shown below.



Total value of fresh/frozen meat plus edible offal: £408,107,387

Source: IHS Maritime & Trade – Global Trade Atlas® – HMRC. Further publication of the trade data is prohibited, unless expressly permitted by IHS Maritime & Trade.

In order to export agricultural goods from the UK, an Export Health Certificate (EHC) is usually required. These are issued to certify the goods have been produced to UK sanitary, phytosanitary and veterinary standards. Below is a list of some of the countries for whom the UK has an export licence. This is not exhaustive but intended to indicate areas where trade takes place:



https://www.gov.uk/export-health-certificates

ANNEX 3 – IMPORTANCE OF SPECIFICATION TO END PRODUCT

Four lamb chops cut from a carcase R3L – 19.5 kg

Four lamb chops cut from a carcase U4H – 26.5 kg



Four chops 454 g



Four chops 705 g



R3L plate waste = 92 g or 20%

Actual edible meat = 362 g or 80%

Source: AHDB



U4H plate waste = 344 g or 49%

Actual edible meat = 361 g or 51%

AUTHORS



David Swales Head of Strategic Insight and Lead Author david.swales@ahdb.org.uk 07747 442974

Many AHDB staff contributed towards the various chapters of this report, including:



Duncan Wyatt Sheep Trade



Steven Evans Domestic Demand



Martin Eccles Domestic Demand



Sarah Baker International demand



Ouafa Doxon International demand



Remi Fourrier International demand



Awal Fuseini Halal



Carol Davis Competitor analysis



Jo Crowley General readability

Produced for you by:

AHDB Stoneleigh Park Kenilworth Warwickshire CV8 2TL

T 024 7669 2051 E comms@ahdb.org.uk W ahdb.org.uk









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AHDB is a statutory levy board, funded by farmers, growers and others in the supply chain. Our purpose is to inspire our farmers, growers and industry to succeed in a rapidly changing world. We equip the industry with easy to use, practical know-how which they can apply straight away to make better decisions and improve their performance. Established in 2008 and classified as a Non-Departmental Public Body, it supports the following industries: meat and livestock (cattle, sheep and pigs) in England; horticulture, milk and potatoes in Great Britain; and cereals and oilseeds in the UK. AHDB's remit covers 72 per cent of total UK agricultural output. Further information on AHDB can be found at ahdb.org.uk

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