3.1 Overview

According to the Central Statistics Office Final Estimate of Output, Input and Income in Agriculture, Gross value added at basic prices in 2019 was approximately €2.9 billion, a 8.5% increase on 2018 figures. Gross output at producer prices totalled approximately €8 billion, with input (intermediate consumption) costs of just over €5.6 billion.

Cattle remained the largest livestock category responsible for 27% of gross output. The estimated value of cattle decreased by 4.9% in 2019 to approximately €2.15 billion. However the volume of output increased by 1.9%.

The estimated value of pigs increased by 18.3% in 2019 to approximately €543 million. The volume of output also increased slightly by 0.4%. The estimated value of sheep increased by 0.8% in 2019 to approximately €261 million. The volume of output increased by 5.8%.

Intermediate consumption decreased in value by -6.5% in 2019 versus 2018 figures, to €5,647.7 million. The main item giving rise to this decrease in intermediate consumption is feeding stuffs, which decreased by -€184.4 million (-11%).
Table 3.1 Estimated Output, Input and Income in Agriculture, 2019

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>% Change 2019 over 2018</th>
<th>Share of GO/Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€m</td>
<td>Value</td>
<td>Volume</td>
</tr>
<tr>
<td>Gross output at producer prices</td>
<td>7,960.9</td>
<td>-3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Cattle and Calves</td>
<td>2,151.1</td>
<td>-4.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Pigs</td>
<td>543.0</td>
<td>18.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Sheep and Lambs</td>
<td>260.8</td>
<td>0.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Poultry</td>
<td>170.4</td>
<td>1.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Milk</td>
<td>2,601.9</td>
<td>1.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Cereals</td>
<td>314.7</td>
<td>9.1</td>
<td>40.5</td>
</tr>
<tr>
<td>Potatoes</td>
<td>156.5</td>
<td>12.3</td>
<td>17.8</td>
</tr>
<tr>
<td>Fresh Vegetables and Fruit</td>
<td>279.7</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Forage Plants</td>
<td>1,064.0</td>
<td>-20.6</td>
<td>1.8</td>
</tr>
<tr>
<td>Other</td>
<td>419.0</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Intermediate Consumption (Inputs)</td>
<td>5,647.7</td>
<td>-6.5</td>
<td>-4.2</td>
</tr>
<tr>
<td>Animal Feed</td>
<td>1,489.9</td>
<td>-11.0</td>
<td>-13.8</td>
</tr>
<tr>
<td>Fertilisers</td>
<td>578.3</td>
<td>-0.7</td>
<td>-7.6</td>
</tr>
<tr>
<td>Energy and Lubricants</td>
<td>439.6</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Maintenance and Repairs</td>
<td>489.9</td>
<td>3.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Forage Plants</td>
<td>1,058.4</td>
<td>-20.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Contract Work</td>
<td>461.2</td>
<td>1.8</td>
<td>-0.6</td>
</tr>
<tr>
<td>Others</td>
<td>1,130.3</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Gross value added at basic prices</td>
<td>2874.0</td>
<td>8.5</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Final Estimates on Output, Input and Income in Agriculture

Table 3.2 Estimated Value (€m) and Volume (000s) of Stock Changes on Farms 2018/2019

<table>
<thead>
<tr>
<th></th>
<th>2018 Value</th>
<th>2018 Volume</th>
<th>2019 Value</th>
<th>2019 Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>-31.6</td>
<td>-80.1</td>
<td>-15.3</td>
<td>-33.8</td>
</tr>
<tr>
<td>Sheep</td>
<td>-18.0</td>
<td>-183.3</td>
<td>0.9</td>
<td>10.9</td>
</tr>
<tr>
<td>Pigs</td>
<td>-3.2</td>
<td>-44.2</td>
<td>3.4</td>
<td>41.1</td>
</tr>
<tr>
<td>Poultry</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Crops</td>
<td>-0.7</td>
<td>13.3</td>
<td>-1.2</td>
<td>-26.8</td>
</tr>
<tr>
<td>Total</td>
<td>n/a</td>
<td>-294.3</td>
<td>n/a</td>
<td>-8.6</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Final Estimates on Output, Input and Income in Agriculture

1 Volume of Livestock is in heads ('000s), volume of crops is in tonnes ('000s)
2 Final Estimate
The results of the December 2019 Livestock Survey indicates that the total number of cattle decreased by 0.5% to 6,559,700. The number of dairy cows increased by 56,700 (+4.1%) while other cows decreased by 2.6% or 25,500. The total number of cattle under 1 decreased by 37,500 (-1.9%) while cattle 2 years and over (excluding cows and bulls) increased by 23,000 (+5.2%). In 2013 the total number of both dairy cows and other cows was 1.08 million head. Since then the number of dairy cows has increased each year while the number of other cows has decreased over this period. In December 2019 there were 1.42 million dairy cows and 956,900 other cows.

Provisional estimates for the total number of sheep was 3,908,300 an increase of 3% on December 2018. The number of breeding sheep increased by 33,100 (+1.2%) while the number of Other sheep increased by 76,700 (+6.9). Sheep numbers have fallen from around five million head at the turn of the century to less than four million now.

Pig numbers increased by 2.6% to 1,613,300. Breeding pigs increased by 1.4% and non-breeding pigs increased by 2.7%.

**Figure 3.1** Cattle, Sheep and Pig Livestock numbers, 2000 – 2019

According to Eurostat data, Ireland’s cattle herd was the 5th largest in the EU in 2019, behind France, Germany, the United Kingdom and Spain. The top 5 countries total 60% of the EU’s total cattle herd. The Irish herd represents 8% of the total European Union’s bovine livestock.

**Figure 3.2** Comparison of Irish and EU Cattle livestock numbers, 2019

**Source:** Central Statistics Office, Livestock Survey

**Source:** Eurostat, Livestock Production
Eurostat data indicates that Ireland’s pig herd was the 15th largest in the EU in 2019. The top 5 countries (Spain, Germany, France, Denmark and the Netherlands) totalled 64% of the EU’s total pig herd. The Irish herd represents 1% of the total European Union’s pig livestock.

Figure 3.3 Comparison of Irish and EU Pig livestock numbers, 2019

Source: Eurostat, Livestock Production

According to the latest available Eurostat data, Ireland’s sheep herd was the 7th largest in the EU in 2019. The top 5 countries (United Kingdom, Spain, Romania, Greece and France) totalled 77% of the EU’s total sheep herd. The Irish herd represents 5% of the total European Union’s sheep livestock.

Figure 3.4 Comparison of Irish and EU Sheep livestock numbers, 2019

Source: Eurostat, Livestock Production

Terms of Trade

The agricultural input price index increased by 2.2% in 2019 compared with 2018. The agricultural output price index was down 1.2% over the same period. Thus, the resulting terms of trade index decreased by 3.4% in 2019. Since 2014 the output index, which is based on the price the farmer receives, has fallen each year apart from 2017, while the input index has increased over the same period resulting in a lower margin for the farmer.
Table 3.3 Terms of Trade, 2014 – 2019  Base 2015 = 100

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>106.8</td>
<td>100.0</td>
<td>95.1</td>
<td>106.5</td>
<td>104.4</td>
<td>103.2</td>
<td>-1.20%</td>
</tr>
<tr>
<td>Input</td>
<td>103.6</td>
<td>100.0</td>
<td>97.9</td>
<td>98.2</td>
<td>102.7</td>
<td>105</td>
<td>2.20%</td>
</tr>
<tr>
<td>Terms of Trade</td>
<td>103.1</td>
<td>100.0</td>
<td>97.2</td>
<td>108.4</td>
<td>101.6</td>
<td>98.2</td>
<td>-3.40%</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Agricultural Price Indices 2019

3.2 Impact of SARS-CoV-2

The lockdown associated with COVID-19 has had a limited impact on farm production in Ireland. However, there has been a sharp drop in the demand for food within the service sector, both here and internationally. This drop has been offset somewhat by increased household food consumption through retail sales.

This reduction in food demand has led to a production surplus, which has been reflected in lower commodity prices in 2020. Although there are signs of price stabilisation, lower prices are expected to persist into 2021, with an associated reduction in the prices paid to farmers.

In the short-term, the ability of farmers to cut production in response to falling prices is very limited, as production decisions for the year have largely been already made. The relatively fixed nature of supply will exacerbate the short-run price reductions, although, as with much forecasting related to the pandemic, this is difficult to forecast accurately.
The average price paid to farmers in 2019 was 33.9c/l.

EU-27 account for 35% of the value of Irish dairy exports.

Milk deliveries in the EU increased by 0.4% from 2018 to 2019.

General Market Situation Ireland and EU 2020

Ireland:
The strong recovery in dairy markets experienced in 2018 continued in 2019 with strong global demand for dairy products underpinning a stable performance by the Irish dairy sector. Whilst the continuing long-term challenges of price volatility, market turbulence and the requirement of balancing product supply with demand remain, the overall performance of the Irish dairy sector in 2019 was strong in the face of competitive international markets. In 2019, Ireland exported dairy products to approximately 140 countries with a value exceeding €5 billion. CSO figures for the year indicate a +12% volume growth and +10% value growth compared to 2018.

Table 3.4 Top 5 Dairy export destinations

<table>
<thead>
<tr>
<th>Ind</th>
<th>Country</th>
<th>Jan-Dec 2019 Exports €000</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy Produce</td>
<td>United Kingdom</td>
<td>€1,031,346</td>
<td>375,221</td>
</tr>
<tr>
<td></td>
<td>Netherlands</td>
<td>€700,328</td>
<td>248,337</td>
</tr>
<tr>
<td></td>
<td>China</td>
<td>€535,876</td>
<td>114,917</td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td>€372,684</td>
<td>107,381</td>
</tr>
<tr>
<td></td>
<td>United States</td>
<td>332,685</td>
<td>52,934</td>
</tr>
<tr>
<td>Top 5 total</td>
<td></td>
<td>€2,972,919</td>
<td>898,790</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Trade statistics 2019
The EU-27 account for 35% of the value of Irish dairy exports in 2019 with 45% to international markets, while the UK accounted for 20%. Other significant export markets include, the Netherlands (14%), China (11%), Germany (7%) and the United States (7%).

Although the ongoing Russian Ban and the threat of global price volatility still remain, other positive international market developments including changing demographic and global demand trends indicate favourable long-term prospects for dairy markets.

**EU:**

Milk deliveries in the EU increased by 0.4% from 2018 to 2019 and in terms of the main product mix, butter and whole milk powder saw production increases of 1%, with a marginal 0.1% increase in cheese production and a 0.3% reduction in skim milk powder.

The key EU market development in 2019 was the continued sale of the remaining Skimmed Milk Powder (SMP) from EU intervention stocks which had been overhanging the EU SMP market for the last few years. This has allowed the SMP price to continue its evolution to a more market-driven basis than in the recent past. However, this position may worsen in 2020/21 with the introduction of an new EU Aid for Private Storage Scheme.

**Production**

2019 was a much more favourable year for grass growth and forage production which contributed to an increase in Irish milk production of 5.3% compared to 2018, with total deliveries exceeding 8.0 billion litres in 2019. Irish milk production represented approximately 5% of total EU milk production in 2019.

*Figure 3.5 EU Milk intake by creameries and pasteurisers, 2019*

*Source: Central Statistics Office - Milk Statistics 2020*
Table 3.5 *Production of Dairy products (000 Tonnes), 2000 – 2019*

<table>
<thead>
<tr>
<th>Year</th>
<th>Cheese</th>
<th>Butter</th>
<th>Skimmed Milk Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>98.5</td>
<td>135.4</td>
<td>78.8</td>
</tr>
<tr>
<td>2001</td>
<td>122.8</td>
<td>129.3</td>
<td>86.3</td>
</tr>
<tr>
<td>2002</td>
<td>115.9</td>
<td>135.2</td>
<td>97.2</td>
</tr>
<tr>
<td>2003</td>
<td>112.0</td>
<td>140.1</td>
<td>78.4</td>
</tr>
<tr>
<td>2004</td>
<td>118.0</td>
<td>136.9</td>
<td>65.9</td>
</tr>
<tr>
<td>2005</td>
<td>118.8</td>
<td>143.0</td>
<td>..</td>
</tr>
<tr>
<td>2006</td>
<td>136.9</td>
<td>139.1</td>
<td>68.5</td>
</tr>
<tr>
<td>2007</td>
<td>140.4</td>
<td>141.4</td>
<td>82.6</td>
</tr>
<tr>
<td>2008</td>
<td>174.5</td>
<td>123.8</td>
<td>55.0</td>
</tr>
<tr>
<td>2009</td>
<td>162.6</td>
<td>120.3</td>
<td>74.7</td>
</tr>
<tr>
<td>2010</td>
<td>171.8</td>
<td>135.1</td>
<td>60.3</td>
</tr>
<tr>
<td>2011</td>
<td>179.9</td>
<td>145.9</td>
<td>66.5</td>
</tr>
<tr>
<td>2012</td>
<td>185.5</td>
<td>145.0</td>
<td>52.3</td>
</tr>
<tr>
<td>2013</td>
<td>182.8</td>
<td>152.1</td>
<td>49.5</td>
</tr>
<tr>
<td>2014</td>
<td>188.4</td>
<td>166.4</td>
<td>70.6</td>
</tr>
<tr>
<td>2015</td>
<td>207.1</td>
<td>187.5</td>
<td>99.1</td>
</tr>
<tr>
<td>2016</td>
<td>205.0</td>
<td>198.7</td>
<td>117.7</td>
</tr>
<tr>
<td>2017</td>
<td>259.4</td>
<td>223.7</td>
<td>119.8</td>
</tr>
<tr>
<td>2018</td>
<td>269.4</td>
<td>237.8</td>
<td>133.8</td>
</tr>
<tr>
<td>2019</td>
<td>278.4</td>
<td>250.8</td>
<td>142.5</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Production of Dairy products, 2019

**Prices, 2018**

The average price paid to farmers in 2019 was 33.9c/l (yearly average including VAT and bonuses paid), down 3.2% from 35.04 in 2018.

**Figure 3.6 Raw Milk Prices Ireland and the EU, 2008 – 2019 (Prices cent per litre)**

Source: EU Commission, Milk Market Observatory (adjusted to cent per litre)
The EU-27 account for 35% of the value of Irish dairy exports in 2019 with 45% to international markets, while the UK accounted for 20%.
Figure 3.7 Dairy Commodity Prices EU, 2009 – 2019 (Prices € per 100kg)

Source: EU Commission, Milk Market Observatory

BREXIT
The United Kingdom including Northern Ireland represents Ireland’s biggest dairy export market by a considerable distance, accounting for 20% of export value (23% of volume) in 2019. An important issue in terms of the Northern Ireland dimension is that a de facto all-island milk market currently exists. Significant volumes of manufacturing milk or primary processed ingredients (such as skim milk, cream, buttermilk, skim concentrate and butter) are taken in from Northern Ireland for further processing. A number of processors also have significant cross border catchment areas in terms of their farmer suppliers.

Trade in certain individual dairy products is also highly dependent on the UK market, in particular cheddar cheese. Some 56% of the cheddar cheese produced in Ireland is exported to the UK, accounting for 80% of their cheddar cheese imports. A ‘hard’ Brexit and the imposition of WTO tariffs on cheddar exports would have a huge impact on current trade and based on tastes in continental Europe, there are very few alternative outlets for this cheddar cheese.
New Markets, 2019
Market access issues are not acute in the dairy sector, though the extension of the Russian Presidential ban on EU food imports to the end of 2020, the uncertainty of the shape of a trading relationship with the UK and NI post-Brexit, and the ongoing COVID-19 pandemic, pose further challenges to the sector.

At the beginning of October 2019, the Office of the United States Trade Representative (USTR) released a list of products to be subjected to additional duties of 25%, including some important and flagship European agriculture products. The additional duties took effect from the 18th October 2019. Irish butter and cheese fall under the categories of dairy products most affected and are subject to additional import duties of 25% ad valorem.

Irish dairy exports to US amounted to 52,934 tonnes worth some €332m in 2019. Some €194 million of Irish butter and approximately €44 million worth of cheese was exported in 2019 from Ireland to the US.

Ireland accounts for almost 90% of EU butter exports to the US.

Sustainability
In 2019 Teagasc issued a Sustainability Report across the main farming enterprises based on the results of the 2017 National Farm Survey (Teagasc National Farm Survey 2017 Sustainability Report). The report examines a range of sustainability matrices such as economic, environmental and different social sustainability indicators for 2017, as well as looking at developments across the 2012-2017 period. Looking at the 2012-2017 time series comparison, on a 3 year rolling average, the main economic indicator trends have been positive for dairying. Looking at the environmental indicators, due to the intensive nature of dairying when expressed on a per hectare basis, emissions have increased over the period. However, on a per Euro of output basis, emissions have remained relatively stable with a slight decline. Environmental emissions intensity has declined for dairying in this period with efficiency gains reducing the intensity of dairying across a range of environmental emissions measurements. Among social sustainability indicators, dairying performed the strongest of all production systems with the exception of hours worked, which showed dairying to have the highest number of average hours worked per annum across the main enterprises.
2018 saw a milestone development for the Irish dairy industry with Kerrygold exceeding €1 billion in retail sales for the first time. The strength of Kerrygold’s performance is demonstrated by the sale of 7.5 million packets of the iconic gold foil each week. It is the no. 1 butter brand in Ireland, the no. 1 butter & cheddar brand in Germany and no. 2 butter brand in the US. Kerrygold Butter is the fastest selling branded product on supermarket shelves in Germany.

The Kerrygold brand is owned by Ornua, a dairy co-operative which markets and sells dairy products on behalf of its members; Ireland’s dairy processors and, in turn, Irish dairy farmers. It is Ireland’s largest exporter of Irish dairy products, exporting to 110 countries worldwide.

Some of the well-known brands Ornua Foods is responsible for include Kerrygold, Kerrygold Dubliner, Pilgrims Choice, Forto and BEO milk powders.

The Kerrygold brand was created by Anthony O’Reilly, then CEO of what was at the time called An Bord Bainne in 1962. Kerrygold was initially launched in the UK in 1962 and has since grown in popularity around the world. The brand has a committed consumer following, including many well known celebrities who have shared their love of it.

The success of Kerrygold is a testament to the work and dedication of all those along the production chain from the dairy farmers of Ireland, who supply milk to their co-ops, to the sales and marketing teams Ornua have all over the world who have ensured that Kerrygold is one of the premium food products in the world.
Highlights

In 2019, Ireland exported dairy products to approximately 140 countries with a value exceeding €5 billion. CSO figures for 2019 indicate a +12% volume growth and a +10% value growth compared to the same period in 2018.

EU-27 accounts for 35% of the value of Irish dairy exports in 2019 with 45% to international markets. Looking at these figures in more depth, the UK accounts for 20% of the value of dairy exports followed by the Netherlands at 14% and China at just under 11%.

Sales of Butter exceeded the €1 billion mark for the second year in a row in 2019 and sales of cheese, whey and skim milk powder also saw significant growth in both volume and value in 2019.

Challenges

The long-term fundamentals of the global dairy market are strong, with growing global demand projected from fast developing countries with increasing middle classes and growing demand for protein. Whilst significant challenges (price volatility, market turbulence, balancing supply/demand and changing societal tastes and demands) have continued throughout recent years, there is confidence that the Irish and EU dairy sector is well placed to gain from the opportunity presented by expanding global demand. However, the need to be able to adapt and respond effectively to changing societal and consumer trends and concerns regarding sustainability, alternative protein sources, the environment and animal welfare, will be a constant challenge for the industry in the years ahead. Furthermore, the increase in the size of the Irish dairy herd in recent years, will, in the context of Ireland’s overall climate change obligations require on-going consideration into future.

The full impact of the Covid 19 pandemic on dairy markets will not be measurable for some time but it is likely that it will provide challenges across the full dairy supply chain as well as market demand for a significant period of 2020.

Ireland Outlook for 2021-2022

Opportunities, globally, for growth in butter, cheese and yogurt still remain positive and are largely being driven by innovation in new flavours, product varieties, portion sizes and pack formats to meet changing consumer demands. Increased focus on health issues will be a critical factor for the future.

The continued strong birth rates demonstrate potential for milk and dairy products, as does the growing ageing population and increased life expectancy.

Irish dairy exports should be able to build on their continued growth into international markets in the short to medium term, with the potential to increase the volume and value of exports into the over 140 countries worldwide which it exports Irish dairy produce to.

As already referenced, the full impact of the Covid 19 pandemic on dairy markets will not be measurable for some time, but it is likely that it will provide challenges across the full dairy supply chain, as well market demand for a significant period of 2020.
EU Outlook for 2021-2022

The EU’s most recent short-term outlook published in April 2020 reports that in 2019, EU milk collection grew by 0.4%, the lowest growth since 2012. The 2020 production growth is expected to be similar. The yearly spring peak for milk collection coincides with the current pandemic. Restrictive measures could challenge collection logistics as well as feed deliveries. In addition, labour force availability considerations may lead to favouring less labour-intensive dairy products.

The 2020 EU cheese consumption might slightly grow (0.3%) and exports could continue increasing, thanks to demand in Asian markets, leading to an overall cheese production increase. However, the closure of restaurants has impacted high-value cheeses, which are mostly consumed outside of home.

Decade review: 2010-2019

The 2010-2019 period has seen enormous change in the Irish dairy sector, with the removal of milk quotas in 2015 the single biggest event of the decade in terms of its impact. Irish milk production has grown from approx. 5.2 billion litres in 2010 to 8 billion litres in 2019, an increase of approx. 52%. In that same time period, based on December CSO livestock survey figures, the number of dairy cows in Ireland has increased from 1.15 million to 1.43 million, an increase of 24%. This has helped drive the value of Irish dairy exports by an additional 127% from €2.2 billion to €5 billion over the decade.
The **Output value** of the cattle sector in 2019 was **€ 2,151.08 million**.

Live exports in 2019 reached over **301,000 head** of cattle.

The average price for **R3 Steers** in 2019 was **365.19 c/kg**.

### General Market Situation Ireland and EU 2019

Beef worth over €2.3 billion or 528,231 tonnes was exported in 2019, a decrease in value of -4% on the previous year. Export volumes reduced by 1% in 2019 from 534,536 tonnes in 2018.

The latest global figures from the FAO indicate that Ireland was the 6th largest exporter of boneless beef and veal in the world in 2017. According to the Central Statistics Office (CSO), the national cattle herd decreased by -33,800 (-0.5%) to 6,559,700. The number of dairy cows increased by 56,700 (+4.1%) while other cows decreased by 25,500 (-2.6%). The total number of cattle under 1 year old decreased by 37,500 (-1.9%) while cattle aged 2 years and over (excluding cows and bulls) increased by 23,000.

In value terms 47% of beef products were exported to countries within the EU, 43% to the United Kingdom and 10% exported to Third Country markets. In terms of volume, 44% of beef products were exported to countries within the EU, 40% to the United Kingdom and 16% exported to Third Country Markets.

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1. FAO: Countries by commodity exports, 2017
2. Central Statistics Office, Livestock survey December 2019
Table 3.6 Top 5 Beef export destinations

<table>
<thead>
<tr>
<th>Ind</th>
<th>Country</th>
<th>Jan-Dec 2019 Exports €000</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef</td>
<td>United Kingdom</td>
<td>€1,009,525</td>
<td>234,291</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>€247,194</td>
<td>54,737</td>
</tr>
<tr>
<td></td>
<td>Netherlands</td>
<td>€200,091</td>
<td>44,541</td>
</tr>
<tr>
<td></td>
<td>Italy</td>
<td>€196,939</td>
<td>28,381</td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td>€145,183</td>
<td>19,989</td>
</tr>
<tr>
<td>Top 5 total</td>
<td></td>
<td>€1,798,932</td>
<td>381,938</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Trade statistics 2019

Live exports in 2019 reached over 301,000 head of cattle, an increase of 22% on 2018 figures. The majority of live bovines’ exports during 2019 were within the EU, with Spain receiving the largest numbers at 90,828 head, followed by the Netherlands at 84,526 head. The single largest third country destination was Libya, with a total of 13,122 head exported during 2019.

According to the EU Commission’s ‘Short-Term Outlook for EU Agricultural Markets. In 2020’, beef production reduced across the EU by 0.9% in 2019. Imports increased by 3.9%, while exports decreased by 3%. Consumption across the EU remained stable in 2019.

The Output value of the cattle sector in 2019 was €2,151.08 million, a decrease of 5% on the previous year.

Table 3.7 Output Value3 (€m) and Numbers (’000s) of Cattle and Calves, 2018/2019

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>20194</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Number</td>
</tr>
<tr>
<td>Live Exports</td>
<td>93.60</td>
<td>247</td>
</tr>
<tr>
<td>Export Slaughterings + Other from 2013</td>
<td>2193.54</td>
<td>1,896</td>
</tr>
<tr>
<td>Levies</td>
<td>17.40</td>
<td></td>
</tr>
<tr>
<td>Total Disposals</td>
<td>2304.54</td>
<td>2,143</td>
</tr>
<tr>
<td>Imports</td>
<td>10.74</td>
<td>11</td>
</tr>
<tr>
<td>Changes in Stocks</td>
<td>-31.64</td>
<td>-80</td>
</tr>
<tr>
<td>Total</td>
<td>2262.16</td>
<td>2,051</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Final Estimates on Output, Input and Income in Agriculture

---

3 Values shown are after deductions for transport costs
4 Final Estimate
Prices, 2019
The average annual price for most categories of finished cattle decreased by approximately 6% relative to the average levels reported for 2018 with a more steep decrease of 9% reported for young bulls. The average price for R3 Steers in 2019 was 365.19 c/kg, which represented a 6% decrease on the previous year, with a high price of 389.13 c/kg recorded during May. The average 2018 price was 389c/kg.

Figure 3.8 Deadweight prices Steer (R3) Prices, 2015 – 2019 (€ per 100 kg)

Irish Average Price Vs. EU2019
Earlier in the year, up to the end of April, the average Irish price was lagging behind the EU average price. An increase in Irish price beef prices resulted in it increasingly outperforming its European counterparts price-wise (on an averaged basis) until late July. The Irish price, which had been falling since the end of May, continued this downward trend until it hit a floor of €3.40 c/kg at the end of August. The price levelled around this point until later in the year when it moved above the €3.50c/kg mark (in December) but it was still underperforming the European average price, which had also improved during this period.

Source: Department of Agriculture, Food and the Marine, Meat Market Report
**Slaughterings, 2019**

During 2019, an average of just over 33,000 cattle were slaughtered each week in Department-approved meat plants, as compared to 34,400 in 2018 and 33,500 in 2017. 1,723,284 cattle were slaughtered in DAFM approved plants in 2019, which is a 4.4% reduction on 2018 levels.

**Figure 3.9 Cattle Slaughterings at Meat Export Premises, 2015 - 2019**

![Graph showing cattle slaughterings from 2015 to 2019]

**Source:** Department of Agriculture, Food and the Marine, Meat Market Report

Irish bovine slaughters accounted for approximately 7% of total EU 28 slaughterings in 2019. The top 5 countries, France, Germany, the United Kingdom, Italy and Spain accounted for 61% of total EU slaughterings in 2019.

**Figure 3.10 Bovine Slaughterings (Thousand Head) by EU Country, 2019**

![Pie chart showing bovine slaughterings by EU country]

**Source:** Eurostat, Slaughtering in Slaughterhouses Annual Data

**BREXIT**

Given Ireland’s dependence on exports in the beef sector, with an average of 90% production exported, 43% of which goes to the UK, the risk posed by the remaining levels of uncertainty around Brexit, and the potential for market displacement from 3rd countries, is significant.
New Markets, 2019

Ukraine (April 2019): A new certificate was agreed which provides for the export of Beef and Beef Offals & Pork & Pork Offals.

Japan (May 2019): The 30-month age restriction for beef was removed. The revised certificate provides for the export of boneless beef derived from cattle of all ages. A new certificate providing for the exportation of Sheepmeat including offal was also agreed.

Barbados (July 2020): A new certificate was agreed which provides for the export of Fresh, Chilled or Frozen Beef and Beef Products. A new certificate has also been agreed for the exportation of Fresh, Frozen or Chilled Pork and Pork Products.

USA: The USDA’s Food Safety Inspection Service carried out a successful re-instatement audit in June 2019 on beef (& pigmeat).

China: A successful beef audit was conducted in late August/early September 2019 with the inspection of 14 applicant beef plants who were subsequently approved in October 2019.

Sustainability

Policy development over the last decade has aimed at improving the economic and environmentally efficiency of individual herds and the national beef herd overall. This is the core aim of the Beef Data and Genetics Programme (BDGP) and the Beef Environmental Efficiency Programmes (BEEP/BEEP-S), which were specifically designed to support and build on the BDGP.

Reviews of BDGP to date indicate that the objectives of the scheme, to improve the genetic merit of the suckler beef herd whilst mitigating GHG emissions, are being met. First, the genetic improvements in the suckler herd are contributing to reducing the GHG emissions intensity from output. Food Wise 2025 sets out targets for the Irish agri-food sector, which includes recognition of the complementary nature of economic prosperity and environmental sustainability. The BDGP scheme is a prime example of this ethos as increased efficiencies are sought in the beef system, which in turn lowers the negative externalities associated with GHG emissions. Second, non-participants are also benefitting from a spillover effect by utilising the
Euro star system and improved awareness of genetic performance, although with a lag effect compared to BDGP participants. These farmers are able to make better informed decisions on their breeding practices, and can also gain from increased efficiency and profitability available in the market. Third, the BDGP scheme is delivering improved performance for higher rated animals. Findings show that profitability increases with higher rated animals, and given the replacement strategies sought as part of the BDGP scheme, the implication is that this increase will be sustained with further improvements predicted.

The evaluation of BEEP Pilot conducted to date indicates that it has helped farmers recognise the benefits of weighing their animals and the data generated has improved genetic evaluations. BEEP shows that the higher replacement index cows have a lower liveweight (circa 20 kilos) than lower index cows but produce a heavier calf (circa 10 kilos) at weaning. The lower weight of the cow is particularly relevant as heavier cows require additional feed which incurs an additional cost for profitability, whereas a heavier calf will generate a higher value output. Overall the cow/calf pair shows a 30 kg swing.

CASE STUDY

Beef Environmental Efficiency Pilot (2019)

The Beef Environmental Efficiency pilot was launched in 2019 aimed at improving economic and environmental efficiencies on farm, through gathering performance metrics, thus facilitating more informed decision making.

The Scheme targeted the weaning efficiency of suckler cows by measuring the weight of their calves pre-weaning as a proportion of the dam’s weight. Cows that produce heavier calves at weaning as a proportion of their own live weight typically have a lower emissions intensity of production. The key factors being the cow’s lower feed requirement and the higher value output from the calf as well as the consequential option to slaughter at a younger age.

16,424 farmers carried out the required weighing and recording, and received payments totalling €15.3 million. The evaluation of BEEP Pilot conducted to date indicates that it has helped farmers recognise the benefits of weighing their animals and the data generated has improved genetic evaluations.

Based on this pilot, a further Beef Environmental Efficiency programme for sucklers (BEEP-S) was developed in 2020. BEEP-S provides support for weight recording, with additional optional measures aimed at improving animal welfare.

Highlights

- €85 million for targeted schemes in Budget 2020 to support sustainable beef farming.
- 14 further beef plants approved in October 2019 to export to the Chinese market bringing the total to 21 approved plants.
- The first two beef producer organisations were established and formally recognised in 2019.
- BeefTalks/Beef Taskforce: The Irish Beef Sector Agreement was reached between stakeholders on 15 September 2019. As part of this agreement, the Beef Taskforce was established to monitor the implementation of the commitments entered into and as a platform for strategic engagement with key stakeholders.
**Challenges**

The challenge of a low margin industry heavily dependent on export markets was acutely felt over the last two years. The low level of income and profitability in Irish beef farming in general, along with the long supply cycle, limits the potential of the sector to absorb shocks.

Increased DAFM supports for the beef sector in 2019 through BEEP and BEAM, as well as a reduction in input costs relative to the previous year, assisted farm incomes in 2019 following difficulties in 2017/8 but finished cattle prices decreased due to adverse market conditions. The average gross margin per hectare on cattle rearing enterprises increased by 4% and by 1% on cattle other (finishing) farms. While Family Farm Income increased by 11% on cattle rearing farms, it reduced by 6% on cattle other farms in 2019.

**COVID-19:** The full impact of the Covid 19 pandemic on beef markets will not be measurable for some time. However immediate challenges center around the significant demand shock already experienced as a result of widespread closures in food service and hospitality industry domestically and internationally. Irish beef exports are estimated to be split 40% retail, 31% food service and 29% manufacturing. A significant amount of manufacturing beef is also destined for food service. For high value steak cuts (previously represented circa 30% of the entire value of the carcase), the reliance on food service is much greater, estimated to be in the region of 60%. An ongoing impact in terms of beef prices and lower levels of slaughter is to be expected.

**Ireland Outlook for 2021-2022**

Short- and medium-term forecasts indicate that lower levels of price are likely to be the continuing reality. The global situation (for example predicted increased output from US, Brazil and Argentina) is likely to put pressure on producer prices throughout Europe but most especially in those Member States dependent on exports, such as Ireland. The challenges faced by Ireland as a major exporter of beef with a high degree of dependency on the UK market must also be acknowledged in the light of Brexit uncertainty.

**EU Outlook for 2021-2022**

EU beef production has recovered since 2015, after three years of reduced supply following the rebuilding of the dairy herd. However, production is expected to return to a downward trend. This is influenced by the reducing cow herd, low profitability, declining beef demand and strong export competition, despite the opening of niche markets. Prices are expected to fall slightly in the short term before stabilising in the longer term.
The latest global figures from the FAO indicate that Ireland was the 6th largest exporter of boneless beef and veal in the world in 2017.
Decade review: 2010-2019
Over the last decade the beef sector has changed structurally due to an increase in the dairy herd following the abolition of milk quotas in 2015 which saw the suckler herd decline, but not to the extent expected (a reduction of 9.1% since 2015 has occurred).

According to the Teagasc National Farm survey, the average Family farm income for cattle rearing farms in 2010 was €7,023 and €9,188 in 2019. Low levels of economic viability and continued dependence on direct payments remains a feature of the sector.

Fig 3.10. Shows the evolution of cattle slaughter in Ireland between 2010 and 2019, the weekly slaughter increased by roughly 10,000 head between 2012 and 2019

Figure 3.11 Bovine Slaughter 2010-2019

Source: Department of Agriculture, Food and the Marine, Meat Market Report

Fig 3.11 shows the evolution of the R3 Steer price over the period, which has varied substantially over the decade.
Fig. 3.12 shows the average R3 steer price per kg from 2010 to 2019.

Source: Department of Agriculture, Food and the Marine, Meat Market Report

Fig. 3.13 shows the export volumes of beef from Ireland which have risen steadily over the decade but have been declining since 2017.
There is a broad acknowledgment of the value of the beef industry to the rural economy, however the challenge of a low margin industry heavily dependent on export markets was acutely felt in 2018-2019. The low level of income and profitability in Irish beef farming in general limits the potential of the sector to absorb shocks. The long supply cycle associated with suckler beef compared to other protein sources also means that there is no short-term mechanism to adjust supply in response to shocks.

Source: Central Statistics Office, Trade statistics 2019
3.5 Sheep and Lambs

The national average price in 2019 was €460.10/100Kg.

In July 2019, sheepmeat access to the Japanese market was finalised.

3.9 million sheep were kept in the country at the end of December 2019.

General Market Situation Ireland and EU 2019

Ireland

Sheepmeat export values were up by 1% to €318 million. Volumes increased by 3%. The number of sheep slaughtered decreased by 7% in 2019 to 2,781,661 head, comprising of 1,634,336 spring lambs, 1,635 light lambs, 739,027 Hoggets and 406,633 Ewes and Rams. The national average price in 2019 was €460.10/100Kg, which was a decrease of 4.5% on the previous year.

Sheepmeat exports worth approximately €318 million, or almost 62,000 tonnes were exported in 2019. In value terms over 71% of Sheepmeat products were exported to countries within the EU, 20% was exported to the UK and 9% exported to third country markets. In terms of volume, a total 40,000 tonnes of sheepmeat products were exported to EU countries, with France receiving the highest amount of 18,548 tonnes.
Table 3.8 Top 5 Sheepmeat export destinations

<table>
<thead>
<tr>
<th>Ind</th>
<th>Country</th>
<th>Jan-Dec 2019 Exports €000</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheepmeat</td>
<td>France</td>
<td>€99,561</td>
<td>18,548</td>
</tr>
<tr>
<td></td>
<td>United Kingdom</td>
<td>€62,801</td>
<td>14,768</td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td>€36,252</td>
<td>6,018</td>
</tr>
<tr>
<td></td>
<td>Sweden</td>
<td>€27,993</td>
<td>5,567</td>
</tr>
<tr>
<td></td>
<td>Belgium</td>
<td>€25,332</td>
<td>3,522</td>
</tr>
<tr>
<td>Top 5 total</td>
<td></td>
<td>€251,938</td>
<td>48,423</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Trade statistics 2019

In terms of the live sheep trade, a total of 461,507 animals were imported from Northern Ireland in 2019. Live sheep exports were considerably reduced in 2019, with a total of 7,161 animals exported, which is a reduction of 11,823 animals on the previous year or a decrease of 63%. The largest export market in 2019 was France, with 4,555 animals exported.

The output value of the Sheep and Lamb sector in 2019 was €260.77million, a 1% increase on 2018 output figures.

Table 3.9 Output Value\(^1\) (€m) and Numbers ('000s) of Sheep and Lambs, 2018/2019

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Number</td>
</tr>
<tr>
<td>Live Exports</td>
<td>2.05</td>
<td>21</td>
</tr>
<tr>
<td>Export Slaughterings</td>
<td>325.74</td>
<td>3,224</td>
</tr>
<tr>
<td>+ Other from 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Slaughterings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Disposals</td>
<td>327.79</td>
<td>3,245</td>
</tr>
<tr>
<td>Imports</td>
<td>50.93</td>
<td>520</td>
</tr>
<tr>
<td>Changes in Stocks</td>
<td>-18.04</td>
<td>-183</td>
</tr>
<tr>
<td>Total</td>
<td>258.81</td>
<td>2,542</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Final Estimate on Output, Input and Income in Agriculture

\(^1\) Values shown are after deductions for transport costs
\(^2\) Final Estimate
EU and Worldwide Trends

Supply remains constrained in the global sheepmeat market, mainly as a result of flock reductions in Australia, and stagnant production in the United Kingdom. Global sheep meat production was expected to recover in 2020, however, it is not clear yet what impact the current Covid-19 outbreak will have on this into 2021.

Prices

The national average price in 2019 was €460.10/100Kg which was a decrease of 4.5% on the previous year.

Figure 3.14 Average Sheepmeat Prices, 2015 -2019 (€ per 100 kg)

Financial Assistance

Financial assistance of €100/farmer has been made available to support the transition to electronic tagging which commenced in June 2019. The Department paid a total of €2.2 million to eligible sheep farmers under the scheme.

Additionally, financial support of up to €15,000 was available towards hardware costs for marts to facilitate their establishment as Central Points of Recording (CPR) for sheep EID. In 2019, the Department approved grant applications for 30 marts to operate as CPRs and a total of €384,761 was paid in 2019.

In the first three years of the sheep welfare scheme (2017-2019), €50.3 million was paid to 18,594 farmers.

Production, 2019

Slaughtering decreased by 7% in 2019 on the previous year with just under 2.8 million head slaughtered.
New Markets, 2019
In July 2019, sheepmeat access to the Japanese market was finalised. Five Irish sheepmeat plants, producing over 90% of Irish sheepmeat, are now approved and listed as eligible for export to Japan.

Sustainability
It has been recognised that working towards improvements in animal welfare is compatible with sustainability in the context of the UN Sustainable development goals\(^3\).

The Sheep Welfare scheme provides support for farmers undertaking actions targeted at making a positive contribution to the welfare of their flock. 2019 was the third year of this initiative. The scheme allows for the collection and generation of valuable data on welfare statistics and practices in sheep farming in Ireland. The data generated by this scheme makes a significant contribution to the Irish sheep industry in terms of its ability to provide large scale data on welfare in Irish flocks. In the first three years of the sheep welfare scheme, €50.3 million was paid to 18,594 farmers.

Sheep farming contributes to both economic and environmental sustainability, in particular on more marginal land, with sheep grazing being an important land management tool in parts of the country where land usage options are relatively limited.

The 2019 National Farm Survey results published by Teagasc identified several sustainability issues across the sector with 30% of sheep farms having a Family Farm Income (FFI) below €5,000. The average FFI for sheep farms was €14,604 across the 14,322 national sheep farms in 2019.

On a per hectare basis, the average gross margin on sheep farms was €669 in 2019. This included a Basic Payment of €245. Additionally, it was reported that the average sized sheep farm was 47 hectares, with a flock size of 133 ewes. In the context of the future sustainability of income levels, small-scale sheep farming and demographics must be considered.

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Challenges/ Brexit

Brexit uncertainty will remain a challenge and thereafter, the adaptation to the changing EU market. Increasing global competition generally will be a challenge in the longer-term as countries such as New Zealand and the Australia continue to hold the majority share in the market. According to Teagasc forecasts, other externalities with the potential to impact on sheep supply include weather events and grazing problems. A significant gap between the EU and world prices will remain as a result of higher production costs and the presence of tariffs. Increased diversification of markets remains a priority.

It is too early to assess the longer terms impact of the Covid19 crisis on the sheep sector.

Highlights

- 71% of sheep meat was exported to EU countries, worth €226 million in 2019.
- The value of sheep meat exports to third countries was million 30 million in 2019.
- France remained Ireland’s most important sheep meat export destination in 2019.
- In July 2019, sheepmeat access to the Japanese market was finalised.
- In the first three years of the sheep welfare scheme (2017-2109), €50.3 million was paid to 18,594 farmers.
Ireland Outlook for 2021-2022

- The outlook for Irish and EU lamb prices for 2019/2020 is stable with global sheep meat prices projected to remain relatively high.
- Sheep feed expenditure in Ireland is forecast to decrease with concentrate prices falling, while the resultant volume of feed use is forecast to remain relatively stable.
- The outlook for Irish lamb prices remains good for 2020, and with a decrease in the direct costs of production, the average gross margin earned from sheep farming is expected to increase in 2020.
- With increased output value forecast, net margin per hectare for the average sheep enterprise is expected to increase in 2020 to €118 per hectare.
- In general, it is forecast that 2020 Irish lamb prices and output will remain largely on a par with 2019 levels, with the caveat as per above that it is too early to assess the long term impact of Covid19.

EU/Global Outlook for 2021-2022

- Global production of sheep meat is expected to increase but at a slower rate when compared to the last decade.
- OECD-FAO Outlook expects real prices for sheepmeat to decline in the coming two years to their 2017 levels.
- For EU sheep meat exports, huge declines in exports to Hong Kong China is compensated by increased exports to other destinations so that EU exports for 2019/2020 are expected to stay relatively stable.
- With increased exports of sheep meat from New Zealand and Australia to China (ABARES 2019, Beef & New Zealand 2019), EU sheep meat imports have declined year-on-year to 2019.
- Production of sheep and goat meat is expected to grow by 5% across the EU by 2030.

Decade Review 2010-2019

- Data from the 2019 census showed a total of 3.81 million sheep were kept in the country at the end of December 2019 compared to 3.12 million (2010 census) in December 2010, an increase of circa 22%.
- Overall number of flock owners in 2010 that had sheep was 32,176 compared with 34,938 in December 2019, an increase of approximately 8.5%.
- According to the Teagasc National Farm Surveys average Family Farm Income on sheep farms was €14,604 in 2019, compared with €12,000 in 2010, an increase of about 22%.
- The national average sheepmeat price for the week commencing 23/12/2019 was €461.21 per 100Kg; the price at the beginning of 2010 was just below €340.
3.6 Pigmeat

Exports of pigmeat increased by 8% to reach a value of €890m in 2019.

Production stood at 304,000 tonnes Carcase Weight Equivalent, a rise of 0.5%.

The national average price for pigmeat at slaughter in 2019 was 164c/kg.

General Market Situation Ireland and EU 2019

Ireland

Pigmeat is the fourth most valuable export of the Irish agri-food industry after dairy, beef and beverages. The Pigmeat sector as a whole has shown remarkable growth in recent years. Exports grew by 8% in value terms in 2019 to an all-time high of €890 million according to Central Statistics Office figures. This equates to approximately 6% of overall food, drink and horticulture exports. While the UK accounts for a 52% share of exports by value, third country markets, which have been steadily expanding in recent years, rose to 31% of total share in 2019.

Table 3.10 Top 5 Pigmeat export destinations

<table>
<thead>
<tr>
<th>Ind</th>
<th>Country</th>
<th>Jan-Dec 2019 Exports €000</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigmeat</td>
<td>United Kingdom</td>
<td>€463,223</td>
<td>103,139</td>
</tr>
<tr>
<td></td>
<td>China</td>
<td>€177,066</td>
<td>86,776</td>
</tr>
<tr>
<td></td>
<td>Denmark</td>
<td>€38,730</td>
<td>13,512</td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td>€34,705</td>
<td>14,806</td>
</tr>
<tr>
<td></td>
<td>Japan</td>
<td>€31,721</td>
<td>9,803</td>
</tr>
<tr>
<td>Top 5 total</td>
<td></td>
<td>€745,446</td>
<td>228,036</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Trade Statistics, 2019
This is illustrated by the significant expansion in Ireland’s pig meat exports to Asia, and to China in particular, where export values more than doubled from €79 million in 2018 to €177 million in 2019 on foot of increased export demand as a result of African Swine Fever (ASF). Domestic retail sales came in at €438 m for the year.

**Figure 3.16 Value of Pig meat Exports, 2015-2019**

![Figure 3.16 Value of Pig meat Exports, 2015-2019](image)

**Source:** Central Statistics Office, Trade Statistics. 2019

The output value of the Pigmeat sector in 2019 was €543.01 million, an 18% increase on 2018 output figures.

**Table 3.11 Output Value\(^1\) (€m) and Numbers ('000s) of Pigs 2018/2019**

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Number</td>
</tr>
<tr>
<td>Live Exports</td>
<td>53.58</td>
<td>479</td>
</tr>
<tr>
<td>Export Slaughterings</td>
<td>410.23</td>
<td>3,447</td>
</tr>
<tr>
<td>Total disposals</td>
<td>463.81</td>
<td>3,926</td>
</tr>
<tr>
<td>Imports</td>
<td>1.58</td>
<td>14</td>
</tr>
<tr>
<td>Changes in stock</td>
<td>-3.18</td>
<td>-44</td>
</tr>
<tr>
<td>Total</td>
<td>459.05</td>
<td>3,867</td>
</tr>
</tbody>
</table>

**Source:** Central Statistics Office, Final Estimate on Output, Input and Income in Agriculture

\(^1\) Values shown are after deductions for transport costs

\(^2\) Final Estimate
EU
EU pigmeat exports grew by 28% in volume terms to reach 2.8 million tonnes. This was largely driven by Chinese import demand due to African Swine Fever and can be expected to continue for the foreseeable future. However, the spread of ASF within the EU will be a major cause for concern throughout 2020, with the confirmation of the disease in Greece bringing the total number, as of May 2020, of Member states with the disease to 11 (Belgium, Bulgaria, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Romania, Italy (Sardinia only) and Slovakia. Western European exporters like Germany, Spain and Ireland have thus far remained ASF-free.

Pigmeat Prices, 2019
Following on from a poor year for prices in 2018, last year saw record highs reached throughout the second half of 2019. Slaughter prices for pigmeat started 2019 at €1.36/kg and finished the year at an all-time high of €1.90/kg, an increase of 40% during the year. Coupled with a favourable feed price, last year was a very good one for Irish pig producers. This situation is mirrored across the EU.

Figure 3.17 Grade E Pigmeat Prices, 2015 – 2019 (Price € per 100kg)

Source: Department of Agriculture, Food and the Marine, Meat Market Report
Financial Assistance
The pig sector does not receive conventional direct support; however, several programmes are in operation to assist the sector.

The TAMS scheme provides grant aid to the pig sector at a rate of 40% to facilitate investment centred upon improving animal health and welfare. Further development of the TAMS Pig & Poultry scheme is expected in 2020, as the intention to increase the investment ceiling for the Pig and Poultry Investment Scheme was announced.

The LEAN Programme, to increase efficiency, was rolled out in 2019 for the sector by DAFM in partnership with Bord Bia, Teagasc and Enterprise Ireland. This programme had a €500,000 budget and will continue to operate in 2020.

Production
In supply terms, Irish pigmeat supplies in 2019 were up slightly on 2018, with 3.4 million head processed by export meat plants.

Live exports (almost entirely to Northern Ireland) dropped by 6% when compared to 2018, totalling just over 437,000 head in 2019. This can largely be attributed to the favourable price situation.

Figure 3.18 Pigmeat Slaughtering, 2015 – 2019

![Pigmeat Slaughtering, 2015 – 2019](image)

Source: Department of Agriculture, Food and the Marine, Meat Market Report

New Markets, 2019
During 2019 Ireland exported pigmeat to over 50 different countries. Ireland has access to a wide range of markets for its pigmeat, however DAFM continues to seek access to remaining markets. Priorities in this regard for 2020 include Mexico and Malaysia. An inspection of Irish pigmeat plants by the Mexican authorities took place in late 2018 and access achieved in May 2020.
Sustainability
Sustainability and the reduction of environmental impact plays a central role in the development of the sector and is a major consideration at all levels of the production chain.

The high level objective of the Teagasc Joint Pig Programme is to enhance the sustainability of Irish pig meat production, taking into consideration improvements in the economic, social and environmental standards spheres. The current research programme covers a broad range of commercially relevant topics, such as nutrition, performance, management, health and welfare.

Ammonia emissions are an environmental concern in the context of pig farming. Agricultural activities account for over 99% of the national ammonia emissions with pigs and poultry accounting for 9.7% (pigs 5.3%, poultry 4.4%). The highest emissions are from animal housing (31.1%), manure land-spreading (30.3%) and manure storage (14.4%).

Under the Industrial Emissions Directive 2010/75/EU, Best Available Technique (BAT) conclusions are mandatory for the Integrated Pollution, Prevention and Control (IPPC) licensing of pig enterprises. Examples of techniques outlined in the BAT conclusions that reduce ammonia emissions include; covering slurry or solid manure during storage; reducing the ratio between the emitting surface area and the volume of the solid manure/slurry store; slurry cooling; use of low emission slurry spreading for manure land-spreading; separation of urine from faeces and air cleaning systems.

The level of sustainability of the sector is becoming ever more important for the reputation of pig farming and as a key factor in consumer preferences and purchasing decisions. In assessing the sector’s performance in this area, it is useful to compare 1990 (Kyoto Protocol base year) with current productivity and input use. Irish pig producers produced 1,350kg of pigmeat per sow in 1990. This output has improved to 2,285 kg of pigmeat per sow in 2017, an output improvement of 70% at a constant efficiency rate for feed conversion efficiency. This was achieved by increased output/sow/year (i.e. 21.9 up to 27.0 pigs produced/sow/year) and increased slaughter weights (82 kg liveweight in 1990 up to 110.8kg liveweight in 2017).
The Pig Industry Stakeholder Group

As the figures above show, the Irish pig industry has in general terms prospered over the last decade. However, it has and will continue to face some significant challenges and there can be no room for complacency. One of the recommendations under the Food Wise Strategy was to bring together a group representing all stakeholders (producers, processors, specialist pig vets, Teagasc and DAFM) in the pig sector, with an independent chairperson, to examine sectoral challenges, informed by extensive consultations with additional experts.

The Pig Industry Stakeholder Group (PISG) was established by DAFM under the independent chair of Dr. Sean Brady in May 2015 and was comprised of pig processors, pig farmers, Teagasc, Bord Bia and DAFM. The group consulted widely and met with or received contributions from a wide range of bodies including DAFM, Bord Bia, Enterprise Ireland, Teagasc, Animal Health Ireland, Meat Industry Ireland, Hermitage Pigs, Irish Farmers Association, Irish Pig Society, processors and retailers, UCD, Veterinary Ireland, Yorkshire Farmers Livestock Marketing Ltd, and a number of pig farmers and private veterinary practitioners.

In 2016 a report on the pig industry prepared by the PISG set out over 60 recommendations to address the challenges facing the industry. The group’s remit was to address these challenges under themes such as biosecurity, animal welfare, quality assurance, antibiotic usage, animal health, Salmonella Control Programme, marketing, feed, the non-intensive sector and other production models.

The PISG Implementation Group met for the first time in late 2016 and began constructing a framework for the practical implementation of the report’s recommendations. The group has met 13 times since then and has become the main forum for the strategic development of the sector. Advances have been made across a range of issues, including the introduction of Animal Health Ireland to the pig sector, the further development of the TAMS scheme in the pig and poultry sector, LEAN processing on Irish pig farms and the reform of the Pig Salmonella Control Programme.

CASE STUDY

Highlights

- Exports increased by 8% to reach a value of €890m in 2019;
- Production rose by 0.5% in weight terms and stayed steady in head terms;
- The UK remains the largest export destination for Irish pigmeat, but exports to China are growing rapidly.
Ireland Outlook for 2021-2022

The final outcome of talks on the post-Brexit trade environment will continue to determine the competitiveness of Irish pigmeat produce in the UK market. Prices are expected to remain relatively high on the back of continuing Chinese demand, benefitting all players in the sectoral supply chain. However, much will depend on the continuing ASF situation both within China and across the EU, trade relations between China and the US and competition from peer exporting nations. Expanding access into new markets such as Mexico and further penetration of lucrative Asian markets like China, Japan and South Korea will be among the primary expansion goals for Irish exporters this year. These and other factors such as farm viability, global market share, legislative changes at European Union level and a stable animal health situation will determine sectoral prosperity in the years to come.

The unprecedented nature of the Covid-19 outbreak creates difficulties in formulating a precise outlook for its effects on the pigmeat sector. However, it may reasonably be expected that export-driven growth will continue in the second half of the year.

EU Outlook for 2021-2022

In terms of outlook, the continuing African Swine Fever situation both within China and across the EU will be the single most important factor, whereby exporting EU nations which remain ASF-free will take a large commercial advantage of the upheaval in the Chinese pig sector and ensuing import demand. The importance of this factor cannot be overstated – before ASF spread to China, it produced almost half the world’s pork and some estimates (Rabobank) suggest that as much as 50% of the Chinese herd (equating to a third of the world’s pigs) may be culled, with the industry taking as long as five years to recover, a process which will also include substantial restructuring.

Decade review: 2010-2019

Over the course of the decade, the value of Irish pig exports rose in volume terms from 134,000 tonnes to 274,000 tonnes, and from a value of €317m to €890m. By any metric this represents a very successful decade for the industry. International markets have become more important (despite the loss of the Russian export market due to sanctions), with China now second only to the UK in terms of importance to Irish exporters. Annual kill has grown steadily over the decade from roughly 2.8 million in 2010 to just under 3.4 million in 2019. Though the price a farmer receives for their produce has been uneven, with some years better than others, overall there has been a rise from an annual average.
In 2019 the output value of the poultry sector was €170.4 million. Poultry production breaches 100m head mark for the first time. Irish poultry exports totalled €293 million in 2019.

3.7 Poultry

General Market Situation Ireland and EU 2019

Ireland

As a value-for-money source of protein-rich food, poultry meat has seen an increase in demand in recent years. Changes to global supply patterns saw a small decrease in the value of exports, and a small increase in the tonnage. However, poultry meat retains a positive perception amongst consumers.

According to CSO figures, the value of Irish poultry exports for the full year fell by 4% to just over €293 million, with the UK (€216m) accounting for 74% of that figure. South Africa was the second most important destination for poultry exports, accounting for 10% or €29 million by value and 22% or 30,900 tonnes by volume. France (€11m), The Netherlands (€10m), Denmark (€8m) and Finland (€5m) completed the top six destinations, accounting for 95% of poultry exports. Ireland exports poultry meat to over 30 countries worldwide. The volume of exports rose by just under 6% from 136,000 tonnes to 144,000 tonnes.
Table 3.12 Top 5 Poultry export destinations

<table>
<thead>
<tr>
<th>Ind</th>
<th>Country</th>
<th>Jan-Dec 2019 Exports €000</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry</td>
<td>United Kingdom</td>
<td>€215,136</td>
<td>83,762</td>
</tr>
<tr>
<td></td>
<td>South Africa</td>
<td>€28,858</td>
<td>30,901</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>€11,263</td>
<td>5,566</td>
</tr>
<tr>
<td></td>
<td>Netherlands</td>
<td>€10,138</td>
<td>6,462</td>
</tr>
<tr>
<td></td>
<td>Denmark</td>
<td>€8,134</td>
<td>11,457</td>
</tr>
<tr>
<td>Top 5 total</td>
<td></td>
<td>€273,530</td>
<td>138,148</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Trade Statistics. 2019

Figure 3.19 Poultry Export Value, 2015-2019

Source: Central Statistics Office, Trade Statistics. 2019

In 2019 the output value of the poultry sector was €170.4 million, a 2% increase on the previous year.

Table 3.13 Output Value (€m) and Numbers (million heads) of Poultry 2018/2019

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Number</td>
</tr>
<tr>
<td>Poultry</td>
<td>167.3</td>
<td>92</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Final Estimate on Output, Input and Income in Agriculture

<sup>1</sup> Final Estimate
EU
Poultry meat production in the EU continued to grow in 2019, this growth is in part due to a +1.6% increase in demand. In 2020 growth is expected to grow by a further +1.2% as customers replace more expensive meats with poultry. However the closure of foodservice businesses which came as a consequence of covid-19 lockdown protocols is expected to affect duck, guinea fowl and quail sales.

In 2019 the price of EU broiler hens remained close to the last 5-year average. At the start of 2020 prices were above 2019 levels due to a tight market supply, and these prices were pushed up further by Covid – 19 stockpiling in mid-March. Prices however fell quickly after March due to a steep drop in Polish prices.

Per capita consumption of poultry is expected to rise in 2020 up to 23.6kg, a 0.2kg increase on 2019 figures.

In 2019, EU poultry meat exports grew by 6.7% due to strong world demand (+2.3% to UK, +9% to other countries). Shipments increased to most of the main destinations, particularly to South Africa (+62%), the Philippines (+40%), Vietnam (+34%) and China (quadrupled).

Source: European commission short-term outlook spring 2020

Poultry Prices, 2019
Prices remained steady throughout 2019. Poultry is normally reared under contract to processors, for a pre-agreed price, and therefore poultry producers are not typically subject to the same price fluctuations as other farmers.

Production, 2019
Irish production hit record levels in 2019, with a total of 106 million birds slaughtered (90% of which were chickens) in Department -approved establishments last year, the first time the 100m mark has been breached.

Figure 3.20 Poultry Slaughtering, 2015 – 2019

Source: Department of Agriculture, Food and the Marine, Meat Market Report
New Markets, 2019
In 2019 Ireland exported poultrymeat to over 30 countries worldwide. Currently DAFM is in the process of applying for market access for a number of additional markets including South Korea and Japan.

Sustainability
The environmental consequences of the use of ammonia, greenhouse gas emissions and slow processing of planning permission applications for new facilities, are all potential issues for the Irish poultry and egg sector. As in other agricultural sectors, issues surrounding energy use will also be of major concern.

Two recently announced initiatives of the Sustainable Energy Authority of Ireland (SEAI): Support Scheme for Renewable Heat (SSRH) and the Renewable Electricity Support Scheme (RESS) provide opportunities for on-farm renewable energy projects in the poultry sector.

The Teagasc Poultry Advisory Service is predominantly a Knowledge Transfer programme that includes the provision of financial appraisal and assistance with the preparation of farm business plans. This service also provides energy audits and recommendations in terms of the most suitable biomass options available to individual poultry farmers.

Highlights
- Production breaches 100m head mark for the first time
- Exports showing strong growth to Thirds Country markets

Challenges
The threat of trade disruption arising from the post-Brexit trading environment is a key concern. Apart from the possibility of a decline in exports to Britain, by far and away the largest destination for Irish poultry exports, its status as a ‘land bridge’ for exports onwards to the continent means it functions as a vital artery for trade to European destinations.

Outbreaks of salmonella and avian influenza in 2019 were a reminder of the need for continuing vigilance against all disease outbreaks and the need for biosecurity to remain at the centre of the sector’s strategy.

Measures taken to control the Covid-19 pandemic such as the closure of restaurants, canteens and other food service outlets, as well as consequential disruption to logistical and production chains, impacted demand in the early part of 2020. The precise extent of the impact restrictions will have in future is uncertain.
Ireland Outlook for 2021-2022

Global trade conditions will continue to play a crucial role in determining the outlook for the Irish poultry sector in the near future. In addition to the challenges caused by Brexit, opportunities may arise should EU restrictions on imports from Brazil continue or expand. Developments such as the EU-Japan free trade agreement could lead to new opportunities in that area and looking to South East Asia, access for Irish poultry formed a key part of discussions on trade missions to Malaysia and Indonesia last year. The widespread public perception of poultry meat as a comparatively healthy and convenient form of animal protein also gives the sector an edge over peer meat sectors. CSO figures show that in 2018, Ireland was 89% self-sufficient in poultry meat, down slightly from 93% the previous year.

Uncertainties regarding the nature of Covid-19-related restrictions make it difficult to forecast the exact impact they will have upon the poultry industry.

EU Outlook for 2021-2022

The EU Outlook for 2018-2030 expects that growing global demand will support increased EU exports, with total EU production expected to rise from 14.2 million tonnes to 15.5 million tonnes in the same period. The continuing appetite of the growing middle class in Asia, and in China in particular, is expected to stimulate growth in poultry exports to those markets for the foreseeable future. In the medium term, all current projections show that global import demand for poultry meat is expected to remain strong.

Decade review: 2010-2019

The past decade saw ever increasing levels of Irish poultry meat production, with the annual slaughter figure rising by 20% to reach 106m head, and the tonnage of production rising by 20% to reach 160,800 tonnes in 2019. In the same period, the value of exports has expanded from €200m in 2010 to €293m last year, showing that by any metric, Irish poultry exports had a prosperous decade. Consolidation and modernisation were also a feature of the period, and the sector is now highly integrated when compared to other Irish meat sectors. The absence of major disease issues during the decade was also to be welcomed.
3.8 Cereals and Cereal Preparations

Ireland’s cereal area in 2019 was 266,700 hectares.

Cereal production in Ireland stood at 2.4 million tonnes in 2019.

The tillage sector is a low emission farming system, 2t of Agricultural GHG (CO2 equivalents)/ha.

General Market Situation Ireland and EU 2019

Ireland:
The cereals sector in Ireland is a major contributor of high quality grain to the feed industry, providing grain for the food and drinks industry and is a key source of seed production. The overall cereal area in Ireland in 2019 was 266,700 hectares versus 261,000 hectares in 2018. Spring Barley remains the main cereal crop with 96,500 hectares in 2019, down from 127,400 the previous year. Overall the arable area continues to fall on an annual basis with the cereal area having reduced by 40,000 hectares since 2013.

In 2019, relative to 2018, weather conditions in Ireland were more favourable to cereal production. However market conditions were less favourable, resulting in a fall in cereal prices. Areas of non-cereal crops have remained at approximately the same level with areas slightly back for Beans & Peas, Beet, Maize and Oilseed Rape. Prices saw a significant drop from 2018, but similar to 2017, as a result of increased production right across the EU. Straw prices have also returned to normal levels following an increase of 50-100% in value in 2018 due to the shortage of supply, primarily as a result of poor straw yields in Spring crops.

The area sown to winter cereals in Ireland for harvest 2020 has fallen approximately 50% on 2018 winter sowings, due to the wet autumn/winter period.
Figure 3.21 Area and Yield per Hectare for Wheat, Barley and Oats, 2008 – 2019

Source: Central Statistics Office, Area, Yield and Production of Crops

Table 3.14 Output Value (€m) and Volume of Cereals (‘000 tonnes) 2018/2019

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Number</td>
</tr>
<tr>
<td>Barley</td>
<td>197.2</td>
<td>960.8</td>
</tr>
<tr>
<td>Wheat</td>
<td>69.6</td>
<td>339.6</td>
</tr>
<tr>
<td>Oats</td>
<td>21.6</td>
<td>101.7</td>
</tr>
<tr>
<td>Total Cereals</td>
<td>288.4</td>
<td>1,402.2</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, Final Estimates on Output, Input and Income in Agriculture

Exports of Irish Cereals & Cereal Preparations totalled approximately €536 million in 2019. This represents a 22% increase on 2018 figures. Ireland’s top 5 export destinations in 2019 were the United Kingdom, the Netherlands, the United States, Australia and Denmark. Imports of Cereals & Cereal Preparations totalled €1.28 billion in 2019.

Figure 3.22 Cereal exports 2016-2019

Source: Central Statistics Office, Area, Yield and Production of Crops

¹ Final Estimate
EU:
Ireland accounts for approximately 1% of EU cereal production. However, grain prices in Ireland are affected by global market price shifts and local weather conditions. The current Covid-19 pandemic is also likely to have an effect on prices here.

The cereals area in the EU28 in 2019 was approximately 56.3 million hectares, up from 55.1 million hectares in 2018, an increase of 2.2% year on year. Production of cereals in the marketing year 2019/20 was 319 million tonnes, up 10% from the previous year.

It is estimated that EU wheat yields in 2020 will be +2.1% and barley +2.8% ahead of the 5-year average. In contrast, important grain producing regions e.g. United Kingdom, France, Germany and Benelux, have had excessively wet conditions and field operations have been hampered. Spring sowings have also been delayed.

There has been significant volatility in all markets, which initially put downward pressure on futures markets for grain and other commodities. However, in recent times there have been upward price movements with consumer demand increasing for flour, pasta etc., in turn raising demands for wheat across Europe. Milling wheat is trading in the region of €190/tonne (@15% moisture) in June 2020.

In EU cereals trade for 2019/2020 the EU was a net cereal exporter of 9.6m tonnes. Exports reached 25.1m tonnes compared to 15.4m tonnes the previous year. Imports were 15.47m tonnes compared to 16.9m tonnes the previous year.

Prices:
The EU wide drought experienced in 2018 led to decreased grain output and increased prices. However, the situation in 2019 saw yields return to near normal levels but with an associated drop in the price of grain of 33% and feed barley ending up with a final price of approximately €140/tonne. Straw prices saw a significant reduction from the highs of 2018. Grain prices have displayed significant price volatility in recent years. The price volatility is primarily due to oversupply in the market place and weather. The decline in tillage area is driven primarily by the lower profitability of tillage farming relative to intensive livestock production and, as a result, land is being converted from tillage to a more profitable dairy sector.

A welcome development in relation to grain pricing was the forward contracts offered by the largest Irish maltster for the 2019 malting barley harvest. This company offered growers a premium price in two tranches for up to 40% of their contracted area. Growers who sold 40% of their contract at the prices available and the remaining 60% of their contract at the lower value of €174/tonne would have achieved an average price of €189.40/tonne which was a premium of almost €50/tonne over feed barley. This premium forward contract price helps to move growers away from the lower value feed markets and boosts the viability of growers within the sector.

![Table 3.15 Agricultural Commodity Prices December 2019](source: European Commission - Commodity Price Dashboard)
Financial Assistance:
The tillage sector has received financial assistance from a number of sources:

- €96 million paid to growers categorised as being primarily tillage farmers from CAP Pillar I budget in 2019.
- The Tillage Capital Investment Scheme (TCIS) under TAMS II covering specific areas of investment for tillage farmers. €12 million has been paid to 813 farmers under the TCIS. In addition, some €5 million has been paid to 170 farmers for tillage investments under the Young Farmer’s Capital Investment Scheme as part of TAMS II, bringing the total expenditure to just over €17 million.
- The continuation of the coupled EU Protein Aid Scheme for 2019 and for the remainder of the current CAP. This coupled payment is worth approx. €3 million per annum to tillage farmers.
- Launch of a strategy for the development of the Organic Food Sector for the period 2019-2025, with provision for the arable sector.

Area, Yield and Production levels, 2019
Production in 2019 returned to near normal levels following the severe dip in 2018 grain output as a result of the extreme drought during that summer. Cereal production stood at 2.1 million tonnes in 2019, a 20% increase on 2018, when production stood at 1.85 million tonnes (Source: Teagasc Harvest Report 2019). However, 2019 production was some 200,000 tonnes below the 5-year average of 2.3 million tonnes. There was a slight increase in the area sown to cereals with, in excess of 267,700 hectares sown in 2019 and 261,600 hectares sown in 2018; this was the first increase in cereal area since 2012. The primary changes were a decrease in spring barley area of approximately 31,000 hectares to 94,636 hectares, an increase in winter barley area of approximately 30,000 hectares to 96,500 hectares, and an increase in winter oats of approximately 6,000 hectares to 16,600 hectares. (Source: CSO – Crops and Livestock Survey June Final Results)

The main drivers for the increase in production was the yield increase in Spring crops, which recovered significantly from a very low base in 2018, and an increase in winter cereal area which tend to result in higher yields per hectare than spring sown cereals. There was also a recovery in straw yields which again were particularly adversely affected in 2018 spring cereal crops.

The area sown to winter crops in the autumn/winter 2019 for harvest in 2020 is significantly lower than 2018, with approximately 50% of the 2018 area sown due to poor weather conditions.
The continued growth in demand for Irish whiskey led to increased demand for distilling grade malt in 2019. Construction works to expand the production capacity at the country’s largest maltings began in 2019 and an increased area of malting barley was grown under contract in 2019.

There may also be opportunities to produce Irish-only rations for the animal feed sector and a number of compound feed manufacturers have produced these rations for the first time in 2019. There are issues with having sufficient protein from native sources in some high protein rations and Irish production will not be able to negate the need for imported protein sources. However, for these rations to be successful they must deliver a premium price from the marketplace for tillage growers, which may be difficult to achieve from some low profitability sectors such as the beef sector.

There may be opportunities for expansion in the value-added food products, particularly in the demand for gluten free oats etc.

There have been developments in relation to proving terroir of whiskeys grown in different geographic areas, while there has also been progress in relation to the use of heritage Irish malting barleys bred in the last century. Specialist craft beers have already been marketed while specialist craft whiskey is undergoing the mandatory aging process.

**Sustainability**

For the tillage sector economic and environmental sustainability go hand in hand. Without economic sustainability you will not have environmental sustainability and these factors are being actively discussed in current negotiations for the next CAP post 2020. Family Farm Income (FFI) on tillage farms stands at €34,437 and is second, but significantly behind FFI on dairy farms which stands at €66,570 (Source: Teagasc NFS 2019). Cereal areas have dropped by 51,000 hectares (16%) since 2012 and stand at 267,700 hectares in 2019 and this is partly
explained by more profitable sectors being able to afford to buy and lease land at a higher value than tillage farmers. Ireland only accounts for 1% of EU production and as such is competing with grain from lower cost production systems on the commodity markets, making Ireland a price taker.

Diversification into producing for higher-value markets is seen as essential for the sector to remain viable. These outlets include the food and beverage sector with barley for brewing and distilling and food grade wheat and oats along with an important seed production sector. Since the abolition of milk quotas in 2015, the more profitable dairy sector has been able to afford to pay more for land purchase/lease than the tillage sector which has also contributed to a reduction in land areas in tillage. Finally, tillage farmers are concerned that their sector is potentially one of the sectors most at risk from convergence and capping proposals in the next CAP with average payments standing at €25,349 and accounting for 74% of Family Farm Income. Reduction in direct payments may render some tillage farms moving from a viable to a non-viable status and could further reduce tillage area following a reduction of 50,000 hectares since 2012.

From an environmental sustainability point of view the tillage sector is a low emission farming system [2t of Agricultural GHG (CO2 equivalents)/ha] when compared to livestock farms 3.4-8.5t GHG/ha. Despite showing the lowest emissions of CO2 per hectare, the tillage industry may have opportunities to further reduce its carbon footprint.
A continuation of the Protein Aid Scheme in the CAP post 2020 would reduce but not eliminate the dependence on imported sources of protein that are mainly GMOs and thus further enhance Ireland’s sustainability credentials. There are added advantages of leguminous protein crops from the point of view that the crop does not require any form of nitrogenous fertilisers because they fix nitrogen from the atmosphere to meet their own requirements and also leave nitrogen in the soil, thus reducing the need for chemical N input in the subsequent crop. It has an added advantage of flowering at a different time to other crops so can provide an alternate food source for pollinators.

Highlighted

One of the highlights for 2019 was a return to normal production following a significant drop in production as a result of the extreme drought encountered in 2018. There was a slight increase of 6,100 hectares in the total area of cereals sown, which is the first increase since 2012. Total cereal production for 2019 stood at 2.1 million tonnes, which was an increase of 250,000 tonnes over 2018 levels. However, the 2019 production was still 200,000 tonnes below the 5-year average of 2.3 million tonnes. Despite the area sown to cereals having dropped by over 50,000ha since 2012, overall output has by and large been maintained.

Positives in the sector in 2019 include the continued high demand for grain to service the high-value food and beverage markets and in particular the malting sector where it is estimated that 230,000 tonnes of barley are supplied annually. The largest maltster in the country has shown a significant commitment to the sector by investing heavily in new facilities to increase output by 30,000 tonnes annually to meet the continued demand for Irish malt from Irish grown barley.

Maize area in 2019 held at 16,600 hectares following a high in recent years of 17,800 hectares in 2018. In 2018, the 50% increase in area was due to sowing windows being missed for cereals and a demand from livestock farmers whose fodder reserves were severely depleted. These trading relationships between the livestock and tillage sectors are important for the sustainability of agriculture as a whole and there are opportunities to further build on these links in areas such as organic manure trading and the already strong trading links in straw.
Challenges

Ireland’s tillage sector only produces approximately 40% of the feed materials required by the feed industry to supply the livestock sector. Despite Ireland being a net importer of cereals, Teagasc have predicted that there are potentially significant negative effects on tillage income in the future as a result of Brexit. Brexit may result in a reduction in the CAP budget, which will mean a reduction in the level of farm payments for all farmers including tillage farmers.

Other challenges facing the sector are:

- General cost/price squeeze over time with an upward trend in the cost of production and stagnant output prices.
- Competition for land from more profitable sectors resulting in a downward pressure on the overall tillage area.
- Negotiating the next CAP while meeting Climate Change, soil/air/water quality and biodiversity ambitions.
- In the next CAP, tillage growers are potentially one of the sectors most at risk from convergence and capping with tillage farmers receiving the highest average Pillar I payment and accounts for 74% of FFI income. A further reduction through convergence and other measures may add additional pressure on the viability of some tillage farms.
- Continuous loss of Plant Protection Products (PPPs) to deal with various pests and diseases.

Ireland Outlook for 2021-2022

As the COVID-19 pandemic continues it is challenging to predict the outlook for 2021-2022 with any degree of accuracy. Consumer demand is currently negatively affected due to general economic uncertainty. It is anticipated that while demand may return to normal for basic food commodities once the pandemic ends, the demand for higher value premium food and beverage products may lag depending on the long-term economic impact.

In the short term as an importer of grain for mainly the feed sector, weaker currency particularly Sterling and the US dollar, will potentially have an adverse effect on grain price. Grain imports to Ireland in 2019 amounted to 3.4m tonnes, of which 2.4m tonnes came from outside the EU.

As a net importer of grain, the price paid to Irish growers is set based on the cost of imported grain, which is competitively priced from lower cost production countries, putting added pressure on the domestic tillage sector.
EU Outlook for 2021-2022

Like the Irish situation, the COVID-19 pandemic and the ongoing uncertainty coupled with the inevitable global economic downturn also makes it challenging to predict the outlook for the EU for 2021-2022. Latest data on global cereal production, which was compiled before the Covid-19 pandemic took hold, forecasts that total grain production for the next marketing year is anticipated to increase to a new record of 2,223m tonnes, an increase of 48m tonnes or +2.2% year on year. Consumption is also expected to reach a new peak at 2,226m tonnes, an increase of 34m tonnes or 1.6%. A modest decrease of ending stocks is anticipated reaching 605m tonnes, or – 0.5% year on year. Thirty three % of production (733m tonnes) will be used for food, forty five % (997m tonnes) will be used for feed and seventeen % (380m tonnes) will be for industrial use.

In terms of the EU, production forecasts for the next marketing year show wheat production at 132.2m tonnes, down 5.4% year on year. This decline is due to overly wet conditions reducing both areas and yield. Barley production is forecast at 53.6m tonnes, down 2.8% year on year. Maize production is forecast at 68.2, up 0.3% year on year.
Decade review: 2010-2019
At the beginning of the decade there was an unusually low area of cereals with approximately 272,300 hectares sown in 2010. This followed a sharp reduction in cereal area sown from 2008 where area sown stood at just over 320,000 hectares. The area sown recovered to a level of 314,500 hectares by 2012, but since then the area has seen a contraction of 15% to the current level of 266,700 hectares. There was a decrease in area sown each year with the exception of 2019 where an increase of 5,700 hectares was observed. Tillage Family Farm Income (FFI) stands at €34,437 but is second to and significantly behind dairying at €66,570 according to Teagasc FFI figures for 2019. The sector continues to face a cost/price squeeze and this along with a move to more profitable systems of production has resulted in a general reduction in tillage areas over the last 10 years. Brexit will pose further challenges and may impact on the future CAP overall budget and other associated effects, not least from possible decreased demand for cereals from the livestock sector.

The diversification into high-value primarily food crops has been a positive and in particular the increase in demand for malting barley, driven from the increased sales of Irish whiskey, has been a welcome boost for the income of those tillage growers with malting barley contracts. While at a much earlier stage in its development than the malting barley industry, food grade oats is another high-value outlet which tillage farmers can avail of to improve their incomes.

There have been dramatic changes with regard to the introduction of regulations such as the Sustainable Use Directive (SUD) and there has been an increased emphasis on Integrated Pest Management (IPM) and other measures that will further improve the environment. There has been a significant change with regard to the number of Plant Protection Products (PPPs) available to growers and also with a limited number of new products coming on stream. To counteract this loss of chemicals to deal with plant diseases, there will continue to be a greater emphasis on plant breeding in order to breed resistance.

The decade saw extremes in terms of weather which will become the norm in the future as predicted in various climate change models. The heavy rainfall of 2012 and the winter of 2017/2018 caused significant problems to growers and especially when combined with the extreme drought experienced in the Summer of 2018, and again with the very wet winter/spring of 2019/2020.

The end of the decade has seen sustainability becoming more and more important with some growers moving towards practices that will aid soil, air and water quality and biodiversity, while reducing emissions contributing to Climate Change. It is likely that many of these actions will be focused on in the next CAP to fulfil the aim of improving agriculture’s contribution to climate change, water/air/soil quality and biodiversity.
3.9 Horticulture and Potatoes

Between, EU supports and national grant aid over €10M was invested in the horticulture sector in 2019.

The Rooster potato was the most dominant variety planted in 2019 representing +60% of production.

The horticulture industry has seen a growth in output value of approx 30% in the 10 years since 2010.

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**General Market Situation Ireland 2019**

The weather in 2019 provided for more favourable growing conditions compared to 2018’s drought, with generally improved yields for all crops. However the wet autumn did impact the harvesting date of some crops.

Market demand in Ireland for produce remained steady across each sub sector, with high demand for some commodities. However commodities such as field vegetables did experience downward price pressure in 2019 following price rises negotiated in 2018.

Whilst the continued recovery in the wider economy and increasing consumer demand for produce and plant-based diets has helped maintain output growth in the sector, labour availability and production costs continue to be challenges for the sector.

2019 saw continued strong investment by the sector with over €10m provided between EU support and national grant aid support, assisting the sector to improve resilience and support sustainable production.

**Mushrooms**

Strong productivity and yield gains within the industry helped to increase output in 2019. The industry continues to implement lean processes that are assisting to drive efficiency gains on farm. The continued uncertainty over Brexit, currency fluctuations and increased competition in the market place remained ongoing challenges for the industry.

The prospects for the mushroom industry in 2020 will be extremely challenging, in particular due to the impact of Covid-19 on the foodservice market.
Fruit and Vegetables

Protected Crop
Overall production and price remained steady, with the demand for both value and premium lines strong in the marketplace in 2019. Customer demands for more sustainable packaging became a critical issue, requiring the sector to invest in the replacement plastic trays in favour of cardboard trays.

Field Vegetables
Most field vegetable producers experienced good increases in yield due to favourable growing conditions in 2019. However, the wet autumn did lead to difficult harvesting conditions and impacted harvesting dates. Having achieved price rises in 2018, the sector experienced price reductions for produce in 2019.

Soft Fruit and Top Fruit
The milder summer of 2019 led to better yield in the soft fruit production with better quality fruits commending a higher price. Top fruit also recorded a price increase, in part due to lower availability of culinary apples that were affected by late frost.

Challenges in 2020 will be rising labour cost and the impact of Covid-19 on seasonal labour availability and demand within the foodservice market.

Nursery Stock
The nursery sector continued to see improvement in 2019 and there is continued optimism within the sector. Increased construction activity from and improving consumer sentiment is increasing demand for amenity plants and landscaping. As the summer weather was disappointing, sales of hardy nursery stock and trees did better in 2019 than summer bedding.

The impact of Covid-19 during peak planting season will have a significantly negative impact on the output and profitability of the sector in 2020.

Potato sector
Potato yields recovered in 2019 following the low yields of 2018. Combined with a slight increase in production area, this contributed to an overall increase in output in 2019. Prices stayed strong until the start of 2019 crop harvest.

The "Rooster" variety is still by far the most dominant variety planted by Irish growers in 2019, representing over 60% of production followed by Kerr Pink and Queens, both around 6% of production.

Figure 3.25 Potatoes - Area Planted, and Yield per Hectare - 2008 – 2019

Source: Central Statistics Office, Area, Yield and Production of Crops
Exports of Irish Fruit and Vegetables totalled approximately €159 million in 2019. This represents a 9% increase on 2018 figures. Ireland’s top 5 export destinations in 2019 were the United Kingdom, Germany, Iceland, Spain and the Netherlands. Imports of Fruit and Vegetables totalled €863 million in 2019. Exports of Fruit and Vegetable based products totalled €158 million in 2019 while imports totalled €509 million.

**Figure 3.26 Fruit and Vegetable exports 2016-2019**

Overall prices remained steady across the sub-sectors with the exception of field vegetable sector, where prices reduced on the back of price increases secured in 2018.

2019 saw continued strong investment by the sector, with over €10m provided between EU support and national grant aid support. This will help the sector to improve resilience and support sustainable production. These supports included €4.2m paid out through the EU producer organisation scheme and €5.8m paid out through the Commercial Horticulture grant aid scheme.

**Sustainability**

The horticulture industry has made significant investment in both infrastructure and equipment and new technology that supports more sustainable production systems.

The industry has invested significantly in climate action measures such as investments in renewable energy such as biomass and photovoltaic systems, reducing energy demand through increased insulation and reducing emissions by switching to cleaner fuels and more efficient boilers. As plant protection products have become limited over time, this has led the industry to develop and invest in innovative practices to combat pest, disease and weed problems. Robust Integrated Pest Management (IPM) strategies are being developed for many horticultural crops, such as the use of mesh covers to limit pest development and protect crops from pest damage, along with the increasing use of natural pest control predators over insecticides. The use of grafted plants to confer inherent disease resistance and use of disease resistant varieties is increasingly used within the sector.

On packaging, the sector is now investing in and using more sustainable forms of packaging.
The EU Producer Organisation Scheme continues to be a vital support for the fruit and vegetable sector. It provides an important mechanism for producers to achieve a more sustainable balance in the supply chain through collaboration and enhanced bargaining power by becoming part of a larger supply base.

In 2019, payments of over €4 million were paid out to Producer Organisations (PO) in the fruit and vegetable sector. These payments provided support to help increase competitiveness, improve market development, and support innovation and environment sustainability. Actions implemented by POs that supported competitiveness included, the implementation of lean processes and investments in new technology that assist improvement in productivity and labour efficiency, as well as provision of best technical advice. In the area of market development, actions included supporting specialist marketing staff to market produce on behalf of the PO, market research and insight data, the cost of quality assurance schemes, as well as the investments that help improve product quality.

On the innovation and environmental sustainability, support was provided to actions where POs collaborated with specialist research institutions to undertake research in areas such as waste valorisation and on sustainable production methods. POs engaged in further environmental actions that supported climate action such as investment in renewable energy in areas such as biomass and photovoltaic systems, as well as reducing usage of plant protection products through investment in more sophisticated environmental control technology.

In 2019 DAFM granted recognition status to a new Producer Organisation in the fruit and vegetable sector, Unigreen PO. This PO has a broad portfolio of crops from protected to field vegetables.
Highlights

- Overall quite a good growing year for the majority of crops with increased yields.
- Market demand for produce remained steady across each sub sector.
- Investment within the horticulture sector increased remained strong, with over €10M paid out between EU supports and national grant aid.

Challenges

- Downward price pressure was experienced by some commodities.
- The wet autumn impacted on the harvesting of crops.
- Availability and cost of labour continue to be a concern.

Decade review: 2010-2019

The horticultural industry is a very dynamic industry that has always operated in an open market. This market has become increasingly international and competitive, and ongoing development of the horticultural industry is dependent on its ability to maintain and extend its competitive advantages in this environment. In spite of these challenges the industry has seen a growth in output value of some 30% in the 10 years since 2010.

This growth has been assisted by the strong investment by the sector in new technologies, infrastructure and equipment that has helped to increase productivity and efficiency. Vital supports such as the EU Producer Organisation Scheme and Commercial Horticulture Grant aid scheme have been critically important to enable the industry sustain the level investment required. Further the innovation within the industry in areas such as new product development has benefited the industry in building export markets.

The changing consumer demands around providence, health, lifestyle and plant based diets has also led to increasing demand for produce both on the home and export markets.
Compound feed production in Ireland for 2019 was 5.1 million tonnes.

Ground limestone usage was down (-25%) on the previous year to 762,865 tonnes.

The quantity of protected urea sold in 2019 was 21,409 tonnes.

**General Market Situation Ireland 2019**

**Ireland:**

Industrial compound feed production in Ireland for 2019 was 5.1 million tonnes, which is 13.6% lower than in 2018. There was also a reduction (-23% in volume) in feed imports compared to 2018 levels. This reflects a return to more normal weather conditions compared to the exceptional weather events of 2018. Compound feed sales in 2019 were still above 2017 levels (+5%). Although weather conditions in 2019 were much more favourable than in 2018, there were some areas that experienced higher than average rainfall, requiring animals to be housed earlier than normal.
Table 3.16 Price Indices for Agricultural Inputs 2016-2018 (excluding VAT)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Prices</td>
<td>-3.5%</td>
<td>-0.7%</td>
<td>4.6%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Feedingstuffs</td>
<td>-1.6%</td>
<td>-1.5%</td>
<td>6.6%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

**Including**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight</td>
<td>-4.4%</td>
<td>2.3%</td>
<td>11.2%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Cattle</td>
<td>0.4%</td>
<td>-2.4%</td>
<td>6.5%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Pig</td>
<td>-2.7%</td>
<td>-1.0%</td>
<td>9.5%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Poultry</td>
<td>-3.7%</td>
<td>-1.2%</td>
<td>2.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Fertilisers</td>
<td>-14.9%</td>
<td>-5.7%</td>
<td>6.0%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

**Including**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight</td>
<td>-18.2%</td>
<td>-5.5%</td>
<td>7.9%</td>
<td>5.4%</td>
</tr>
<tr>
<td>NPK</td>
<td>-13.2%</td>
<td>-6.2%</td>
<td>5.6%</td>
<td>5.3%</td>
</tr>
<tr>
<td>PK</td>
<td>-5.3%</td>
<td>-7.3%</td>
<td>1.0%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

**Source:** Central Statistics Office, Agricultural Price Indices

**EU:**
Industrial compound feed production for farmed animals in the EU for 2019 is estimated at 161.7 million tonnes (-0.9% lower than in 2018). As regards cattle feed, the poor stocks of forages resulting from the 2018 drought and heat waves induced a significant increase in the compound feed demand for cattle in the first quarter 2019. For the remainder of the year, the return to normal weather conditions together with increasing restrictions on phosphorous emissions in certain countries resulted in an annual fall in the demand for cattle feed by 2.3 % for 2019 compared to 2018. The biggest decrease is reported in IE (-15%), followed by UK (-7%). (Source: EC (2019), EU agricultural outlook for markets and income, 2019-2030. European Commission, DG Agriculture and Rural Development, Brussels).

Table 3.17 Expenditure on Intermediate Consumption in Agriculture 2016-2019

<table>
<thead>
<tr>
<th>Year</th>
<th>2016 €m</th>
<th>2017 €m</th>
<th>2018 €m</th>
<th>2019 €m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding stuffs</td>
<td>1,229</td>
<td>1,324</td>
<td>1,680</td>
<td>1,496</td>
</tr>
<tr>
<td>Fertilisers</td>
<td>511</td>
<td>513</td>
<td>582</td>
<td>578</td>
</tr>
<tr>
<td>Energy and lubricants</td>
<td>378</td>
<td>390</td>
<td>424</td>
<td>424</td>
</tr>
<tr>
<td>Forage plants</td>
<td>1,046</td>
<td>1,102</td>
<td>1,299</td>
<td>1,254</td>
</tr>
<tr>
<td>Contract work</td>
<td>372</td>
<td>380</td>
<td>453</td>
<td>453</td>
</tr>
<tr>
<td>Other items of intermediate consumption</td>
<td>1,548</td>
<td>1,602</td>
<td>1,562</td>
<td>1,577</td>
</tr>
<tr>
<td>Total Intermediate consumption</td>
<td>5,084</td>
<td>5,311</td>
<td>6,001</td>
<td>5,783</td>
</tr>
</tbody>
</table>

**Source:** Central Statistics Office, Agricultural Price Indices
Table 3.18 Compound Feedingstuffs Production 2016-2019 (tonnes)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>2,573,113</td>
<td>2,919,301</td>
<td>3,807,225</td>
<td>3,115,864</td>
</tr>
<tr>
<td>Pigs</td>
<td>669,316</td>
<td>692,677</td>
<td>712,581</td>
<td>705,701</td>
</tr>
<tr>
<td>Poultry</td>
<td>655,368</td>
<td>640,562</td>
<td>632,965</td>
<td>630,838</td>
</tr>
<tr>
<td>Sheep</td>
<td>202,790</td>
<td>202,719</td>
<td>247,882</td>
<td>187,160</td>
</tr>
<tr>
<td>Other</td>
<td>415,116</td>
<td>444,103</td>
<td>484,775</td>
<td>459,831</td>
</tr>
<tr>
<td>Total</td>
<td>4,515,703</td>
<td>4,899,362</td>
<td>5,885,428</td>
<td>5,099,394</td>
</tr>
</tbody>
</table>

Source: Department of Agriculture, Food and the Marine

Animal Feed
The volume of compound feedingstuffs produced in 2019 decreased by 13.6% to 5.1 million tonnes, compared to 5.9 million tonnes produced in 2018. 2018 was an exceptional year production-wise, as the amount of feed produced had seen a significant 20% increases on the previous year, primarily as a result of weather conditions in 2018. Production levels in 2019 therefore reflect a more normalised year of feed consumption.

In value terms, CSO data indicates that in 2019 the intermediate value of consumption was €1.496 billion, down from the exceptional 2018 amount of €1.68 billion.

The overall cost of feedingstuffs decreased by 10.7%, from €1.68 million in 2018 to €1.50 million in 2019. The CSO release on Agricultural Price Indices indicates an overall increase in the price of feedingstuffs of 3 % in 2019.

Fertiliser
The sale of fertiliser and lime in Ireland is regulated by both EU and Irish legislation. This legislation ensures that products are labelled accurately and meet minimum nutrient requirements. As part of the DAFM control programme for fertiliser and lime inspection in 2019, a total of 267 samples were taken at manufacturers’ premises (186 fertiliser samples and 81 lime samples). 641 individual analyses were carried out for fertilisers and an ‘out of tolerance’ was recorded for 7.2% of these. There were 243 individual lime analyses carried out and 8.2% of these were ‘out of tolerance’.

One new ground limestone quarry was licensed during 2019. There were a total of 46 active quarries in 2019.
Table 3.19 Fertiliser Production

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (tonnes)</td>
<td>1,365,762</td>
<td>1,359,511</td>
<td>1,377,754</td>
<td>1,510,972</td>
<td>1,670,799</td>
<td>1,500,701</td>
</tr>
<tr>
<td>Phosphorous (tonnes)</td>
<td>778,409</td>
<td>798,303</td>
<td>805,600</td>
<td>899,337</td>
<td>1,005,689</td>
<td>921,818</td>
</tr>
<tr>
<td>Potassium (tonnes)</td>
<td>795,158</td>
<td>807,175</td>
<td>815,204</td>
<td>911,933</td>
<td>1,019,805</td>
<td>941,501</td>
</tr>
<tr>
<td>TOTAL (tonnes)</td>
<td>1,402,878</td>
<td>1,395,399</td>
<td>1,411,913</td>
<td>1,552,809</td>
<td>1,714,729</td>
<td>1,547,082</td>
</tr>
</tbody>
</table>

Source: Department of Agriculture, Food and the Marine

Ground limestone usage was down (-25%) on the previous year to 762,865 tonnes, which reflects the increase in lime use in 2018.

Table 3.20 Ground Limestone Sales 2015-2019

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Limestone sales tonnes</td>
<td>893,730</td>
<td>967,281</td>
<td>737,118</td>
<td>1,020,502</td>
<td>762,865</td>
</tr>
<tr>
<td>% change</td>
<td>10%</td>
<td>8.20%</td>
<td>-24%</td>
<td>38%</td>
<td>-25%</td>
</tr>
</tbody>
</table>

Source: Department of Agriculture, Food and the Marine

Sustainability

DAFM is actively progressing the actions from the all of government Climate Action Plan relating to fertilisers and animal nutrition.

An Animal Nutrition Working Group has been established to review the environmental standards in all livestock rations and to ensure industry-wide engagement in the role of feed supplements and altered crude protein to reduce methane and ammonia emissions. This is a multi-stakeholder Working Group made up of representatives from the feed industry, DAFM, Teagasc and UCD. The Working Group will make recommendations that ensure opportunities for improved feeding practices and diet formulation that allow for environmental standards can be optimised, while ensuring that animal nutrition requirements and feed safety criteria are met. The Working Group is currently undertaking a survey on establishing current protein levels in all livestock rations and trends in protein levels overtime.

There is ongoing engagement with the fertiliser industry with regard to the adoption of protected urea products at farm level. The adoption of protected urea is an integral part of our National strategy for the reduction in GHG emissions from the agriculture sector. A measured approach is being taken by DAFM on this issue with a gradual shift to these products anticipated. The quantity of protected urea sold in 2019 was 21,409 tonnes.

FFGPD has also provided input into the broader DAFM policy areas of sustainability including CAP, environment policy and mechanisms to achieve 2030 climate change targets.
Challenges

The UK remains a significant market for Irish feed, in value and volume terms, for both imports and exports. Trade in animal feed between Ireland and the UK showed an increase in the volume of feed imported from the UK to Ireland. The continuing trend of increasing trade between the two islands is evident with a significant increase in cross-border trade. The effects of Brexit on trade, particularly on imports of feed ingredients and materials, may take some time to be fully reflected throughout the Irish feed sector.

Ireland Outlook for 2021-2022

The continued gradual upward trend in both consumption and prices is anticipated to continue based on current and projected growth patterns.

Decade review: 2010-2019

In terms of feed and fertiliser use in the period 2010 to 2019, the overall trends show an increase in cattle numbers and consequently an increase in compound feed sales, feed imports and fertiliser use. Cattle number increased by 13% in the period between 2010 – 2019, reflecting the increase in the size of the national dairy herd. While compound feed sales and feed imports are largely influenced by grass growth in the main, overall the level of feed imports increased by 12% in the period 2010 to 2019.