Teagasc Submission
- The Future of the Beef Sector in the context of Food Wise 2025

Joint Committee on Agriculture Food and the Marine
Tuesday 28th May, 2019
Outline

- Structure of the Irish Beef Industry
- Challenges facing the industry
- Profitability and technical performance
- Research and advisory priorities
- On-farm demonstration initiatives
- Recent & New Initiatives in Teagasc Beef Research
- Maximising net margin on beef farms
Farm Types: Farm Structures Survey 2016

- Specialist tillage
- Specialist dairying
- Specialist beef production (57%)
- Mixed field crops
- Mixed grazing livestock
- Mixed crops and livestock
- Specialist sheep
- Other

AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY
Specialised Beef Producers

Average Irish Farm Size 32.4 ha

CSO Farm Structure Survey 2016
Agricultural Output Shares 2001-2018

CSO Output, Input and Income in Agriculture
Irish Beef Industry facing many challenges…

- BREXIT
- Climate change policy
- EU trade deals
  - Agreed Canada, Japan, South Korea
  - Still under negotiation Mercosur
  - In the DG Trade diary Australia/New Zealand
- Uncertainty on outcome of CAP reform and changes to distribution of direct income supports
- Beef price fluctuations
- Impact of severe weather events on input costs
Environmental Credentials

- Irish beef production generally low intensity and environmentally friendly reflected in
  - high rates of participation in CAP Pillar II agri-environmental schemes
  - Environmental sustainability metrics from Teagasc NFS and European Commission JRC
Evolution of the Irish cow population

Increasing proportion of beef will be coming from the dairy herd

Source: CSO December Enumeration
Deteriorating Carcass Quality in Dairy Beef

<table>
<thead>
<tr>
<th>Year</th>
<th>AA Sire * FR Dam</th>
<th>FR Sire * FR Dam</th>
<th>JE Sire * FR Dam</th>
<th>JE Sire * JE Dam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% &lt;=280kg</td>
<td>% &lt;= O-</td>
<td>% &lt;=280kg</td>
<td>% &lt;= O-</td>
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<tr>
<td>2014</td>
<td>312</td>
<td>18.1%</td>
<td>11.9%</td>
<td>308</td>
</tr>
<tr>
<td>2015</td>
<td>314</td>
<td>17.0%</td>
<td>13.6%</td>
<td>312</td>
</tr>
<tr>
<td>2016</td>
<td>321</td>
<td>12.2%</td>
<td>14.7%</td>
<td>316</td>
</tr>
<tr>
<td>2017</td>
<td>319</td>
<td>13.6%</td>
<td>16.9%</td>
<td>312</td>
</tr>
<tr>
<td>2018</td>
<td>316</td>
<td>16.1%</td>
<td>20.9%</td>
<td>308</td>
</tr>
</tbody>
</table>

Source: Irish Cattle Breeding Federation

Industry is addressing this:-

- New Dairy Calf to Beef Index (DBI) launched January 2019
- Teagasc research & demonstration farm programmes
Irish Live Calf Exports

- Significant increase in numbers increasing in recent years.
- To date 143,000 calves exported in 2019
- Versus 107,813 by the same date in 2018 (+33% increase)
- Total calf exports in 2018 were 158,000 (+55% increase versus 2017).
- An important outlet for lower genetic merit calves
  - Over two third of all calf exports in 2018 were male progeny of dairy sires
- Act as alternative to a viable Irish veal industry.
- Extremely high animal welfare standards must be adhered to at all times.
Family Farm Income (FFI): includes DPs
2011-2017

FFI remunerates family labour, owned land and capital

Beef sector is the most diverse of all:
• Systems
• FT vs PT
• Skills
• Age
• Motivation profit vs “other”

Teagasc National Farm Survey
Opportunities Exist for Committed Beef Producers

- Small proportion of beef farmers who are making a net profit per hectare (excluding direct payments)
- Potential on a lot of beef farms for improving technical performance
- Profitable beef farms are constantly adaptive and responsive to research and advisory programmes
### Cattle Rearing: Net Margin (€ per forage ha) 2011-2017

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</thead>
<tbody>
<tr>
<td>Top 20%</td>
<td>66</td>
<td>149</td>
<td>48</td>
<td>13</td>
<td>227</td>
<td>220</td>
<td>178</td>
</tr>
<tr>
<td>2nd 20%</td>
<td>17</td>
<td>25</td>
<td>-78</td>
<td>-53</td>
<td>95</td>
<td>71</td>
<td>59</td>
</tr>
<tr>
<td>3rd 20%</td>
<td>-39</td>
<td>-84</td>
<td>-164</td>
<td>-80</td>
<td>-51</td>
<td>-17</td>
<td>-34</td>
</tr>
<tr>
<td>4th 20%</td>
<td>-106</td>
<td>-136</td>
<td>-120</td>
<td>-155</td>
<td>-65</td>
<td>-70</td>
<td>-63</td>
</tr>
<tr>
<td>Bottom 20%</td>
<td>-194</td>
<td>-187</td>
<td>-278</td>
<td>-219</td>
<td>-146</td>
<td>-141</td>
<td>-179</td>
</tr>
</tbody>
</table>
“Improving technical performance and stocking rate improves profitability”
## KPIs continued

<table>
<thead>
<tr>
<th>Key performance indicators (KPI)</th>
<th>National average farms</th>
<th>High performance farms</th>
<th>Difference in net margin per cow</th>
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<tbody>
<tr>
<td><strong>Reproductive KPI’s</strong></td>
<td></td>
<td></td>
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<tr>
<td>Calves weaned per cow/year</td>
<td>0.85</td>
<td>0.95</td>
<td>€87</td>
</tr>
<tr>
<td>Age at first calving (months)</td>
<td>32</td>
<td>24</td>
<td>€50</td>
</tr>
<tr>
<td>6-week calving rate (%)</td>
<td>55</td>
<td>80</td>
<td>€28</td>
</tr>
<tr>
<td><strong>Productive KPI’s</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calf average daily gain to weaning (kg)</td>
<td>1.05</td>
<td>1.25</td>
<td>€86</td>
</tr>
<tr>
<td>Concentrates fed to cow/calf unit annually (kg)</td>
<td>450</td>
<td>200</td>
<td>€52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>€303</td>
</tr>
</tbody>
</table>
“Farmers can make real progress by adopting best technology”.
Teagasc-IFJ BETTER Beef Programme (2012 -2016, n= 35 farms)

Gross Margin (€) Per Ha.

Kg Beef Lw per Ha.

Gross Margin (€ per ha)
Teagasc Green Acres – Dairy Calf to Beef Programme (2015 – 2018; n = 10 farms)

<table>
<thead>
<tr>
<th>Per Hectare Performance (2017 versus 2014)</th>
<th>Average 2017</th>
<th>Average 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stocking rate (LU/ha)</td>
<td>2.5</td>
<td>1.83</td>
</tr>
<tr>
<td>Output (kg/ha)</td>
<td>1,296</td>
<td>759</td>
</tr>
<tr>
<td>Gross output (€/ha)</td>
<td>2,424</td>
<td>1,459</td>
</tr>
<tr>
<td>Total Variable Costs</td>
<td>1,366</td>
<td>946</td>
</tr>
<tr>
<td><strong>Gross Margin</strong></td>
<td><strong>1,058</strong></td>
<td><strong>513</strong></td>
</tr>
<tr>
<td>Fixed Costs</td>
<td>584</td>
<td>553</td>
</tr>
<tr>
<td><strong>Net Margin</strong></td>
<td><strong>475</strong></td>
<td><strong>- 40</strong></td>
</tr>
</tbody>
</table>
Teagasc Research and Advisory priorities

Our goal on beef farms is to improve ……

- Genetic merit
- Reproductive efficiencies
- Grassland management
- Animal health
- Financial performance
- Environmental sustainability
Teagasc Support for Beef Farmers

- Over 300 Knowledge Transfer beef discussion groups with 5,000 beef farmers as members
- Over 100 Business & Technology Beef Advisors giving one to one advise to beef farmer clients
- Teagasc-Irish Farmers Journal BETTER Farm Beef Challenge demonstrating best practice on suckler farms
- Teagasc-Green Acres Programme demonstrating best practice on dairy calf to beef farms
- Involved in the Newford Suckler Demo Farm in Athenry
- Have research demo farms – Derrypatrick Suckler Herd & New Calf to BeefDemo Herd (both in Teagasc Grange)
- World recognised beef research programme with genetics and grassland platforms across livestock centres in Moorepark, Grange and Athenry.
Teagasc Demonstration Initiatives

- Teagasc Derrypatrick Herd (Suckler Beef: Grange)
- Teagasc and Dawn Meats Newford Herd (Suckler Beef: Athenry)
- Teagasc-IFJ BETTER Beef Programme (Suckler and Other Systems) (25 commercial farms)
- Teagasc Maternal Index Herd (Suckler Beef: Grange)
- Teagasc Dairy Calf to Beef Programme (Johnstown Castle)
- Teagasc Dairy Calf to Beef Programme (Grange)
- Teagasc ‘Green Acres’ Dairy Calf to Beef Programme (14 commercial farms)
Recent & New Initiatives in Teagasc Beef Research

- Dairy Calf to Beef Programme Grange
- Anthelmintic resistance in beef cattle
- Effect of floor type and space on performance and welfare of finishers
- Effect of disbudding and castration procedures on the performance and welfare of calves
- Identifying the factors required to address the decline in the reproductive efficiency of beef cows
- Survey of the factors associated with disease and immunocompetence in artificially reared dairy and suckled beef calves
- Effects of suckler cows with different levels of milk production
- Molecular-based biomarkers for Feed Efficiency (FE) in beef cattle
- Impact of grass-based systems on human health and nutrition
- Production and quality attributes of grass-based vs concentrate beef
Net Margin is maximised on beef farms where......

- Focus is on optimising performance per livestock unit farmed through improved grassland management, genetics, reproductive performance and animal health.
- Operating at a high stocking rate— influenced by land type, labour availability and current/future infrastructure.
- Overhead costs match the level of output produced on the farm.
- Direct payments are maximised per hectare.
- Investment in infrastructure allows for the efficient use time and labour for both part-time and full-time farmers.
- The latest innovations from research and advise are incorporated into the farms’ operations.
Thank you