The Irish Agriculture and Food Development Authority
The dairy industry’s contribution to the economy of Ireland’s rural areas

Professor Gerry Boyle, Director Teagasc
David Meredith and Cathal O’Donoghue, Rural Economy and Development Programme, Teagasc

Presentation on the occasion of the Centenary of Arrabawn Co-Op, Nenagh, Co. Tipperary, November 19th, 2013
Outline of presentation

- The farm production and processing contribution of the dairy industry to the economic development of rural areas
- The wider economic contribution of the dairy sector
- Dairying in the Arrabawn catchment
- Concluding comments
Dairying consistently generates by far the highest income of all farm enterprises.
**Dairy income by herd size 2012**

Dairying can provide a good income with relatively modest land and livestock resources.
## Technical Performance Indicators

<table>
<thead>
<tr>
<th>Metric</th>
<th>Average 2011</th>
<th>Average 2012</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (litres per cow)</td>
<td>5,166</td>
<td>4,968</td>
<td>-4</td>
</tr>
<tr>
<td>Milk sales (litres per hectare)</td>
<td>9,897</td>
<td>9,496</td>
<td>-4</td>
</tr>
<tr>
<td>Milk solids (kgs per cow)</td>
<td>367</td>
<td>355</td>
<td>-3</td>
</tr>
<tr>
<td>Somatic Cell Count (‘ooo cells/ml)</td>
<td>246</td>
<td>228</td>
<td>-7</td>
</tr>
<tr>
<td>Concentrate feed usage (kgs per cow)</td>
<td>862</td>
<td>1,011</td>
<td>+17</td>
</tr>
<tr>
<td>Use of grass (number of days in the grazing season)</td>
<td>240</td>
<td>237</td>
<td>-1</td>
</tr>
<tr>
<td>Artificial Insemination (% of farms using AI)</td>
<td>84</td>
<td>83</td>
<td>-1</td>
</tr>
</tbody>
</table>
Costs and profit (c/ltr) for ‘Top’, ‘Middle’ and ‘Bottom’ one-third of farms: 2012 (Teagasc NFS)

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Top</th>
<th>Middle</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrate Feeds</td>
<td>5.4</td>
<td>5.5</td>
<td>7.1</td>
</tr>
<tr>
<td>Pasture &amp; Forage</td>
<td>4.0</td>
<td>4.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Other Direct Costs</td>
<td>4.1</td>
<td>4.2</td>
<td>4.6</td>
</tr>
<tr>
<td>Energy &amp; Fuel</td>
<td>2.0</td>
<td>2.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Hired Labour</td>
<td>0.7</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Other Fixed Costs</td>
<td>7.0</td>
<td>8.0</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>23.1</strong></td>
<td><strong>24.8</strong></td>
<td><strong>28.9</strong></td>
</tr>
<tr>
<td><strong>Net Margin</strong></td>
<td><strong>11.6</strong></td>
<td><strong>8.4</strong></td>
<td><strong>3.0</strong></td>
</tr>
</tbody>
</table>
Location of dairy farming

Highly concentrated in the south and southeast

But widespread throughout rural Ireland

Dairy activity in over 90% of agricultural land districts

Hugely important contributor to the rural economy
Location of dairy processing

- Distribution of processing plants mirrors the pattern of dairy farming

Source: Geodirectory
Increase in dairy activity post 2015

Majority of increase in dairying activity projected to occur in traditional dairy regions

However increases in activity projected to occur across majority of electoral districts

Spatial Disaggregation of Irish Dairy Activity 2
Most viable farms are in dairy farming areas!

Map of Farm Viability

Legend:
- Red: Employment-Holder
- Blue: Employment-Spouse
- Green: Vulnerable

Off-farm Employment [Farmer Couples]

The Irish Agriculture and Food Development Authority
The wider economic contribution of the dairy sector ...
Value of milk = €1.63bn ... 24% of agricultural output in 2012

Source: Value at Current Prices for Output, Input and Income in Agriculture: CSO (2012)
Dairy exports = €2.7 b ... c. 30% of total food exports in 2012

Source: Fact Sheet on Irish Agriculture: DAFM (2013)
Wider economic contribution of the dairy sector 1

- *Direct* contribution (farming and processing) to national income (GDP) about €1.2 b. or c. 0.8% GDP
- *Direct* contribution to jobs about 30,000 (farming and processing)
- Exports about €2.7 b.
- *Indirect* contribution to national income and jobs much more important …
Every 1000 litres of milk generates about €480 of national income throughout the economy … €190 directly (farming and processing) and €290 indirectly (multiplier)

Every 1000 litres of milk generates about 0.014 jobs throughout the economy … 0.006 jobs directly (farming and processing) and 0.008 jobs indirectly (multiplier)

Milk production is thus hugely significant in its direct contribution to income and job creation but its indirect contribution is much more important

Hence it is very much the engine of economic activity in the rural economy
Every 20 cows supports about €48,000 national income and 1.4 jobs.
What’s been happening in the Arrabawn area?
Key metrics for Arrabawn dairying (2012)

- Farm size 65 ha
- Average herd 79 cows
- Yield 4,700 litres
- Total costs … average 23.8 c/ltr … top third = 25 c/ltr … bottom third = 21.5 c/ltr
- Net margin … average 9.4 c/ltr … top third = 12 c/ltr … bottom third = 6.5
Slight decline in the number of farms from 16,334 to 16,026 between 2000 and 2010 (-1.8%)
Overall contraction in the % of specialist dairy farms (quota driven) but Nenagh area still high intensity
Concluding comments

- Dairying has provided by far the best returns for family farms in the Arrabawn region over the generations.
- Its economic importance for the wider rural economy of the region is even more important although sometimes it’s not fully appreciated.
- Specialist dairy activity is likely to become more important post quota.
- A renewed emphasis on farm efficiency and innovation in processing will be necessary to exploit the potential for farm families and the wider rural society.