Agriculture and Food Development Authority

The Irish Agriculture and Food Development Authority
Growing Ireland’s Agri-Food Sector – Preparing for the Abolition of Dairy Quotas

Presentation to Dairy UK Growth Agenda Seminar

June 26th 2013, London

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Director
Teagasc

The Irish Agriculture and Food Development Authority
Outline

- Food Harvest 2020 – targets and implementation
- Achievability of FH dairy targets
- Initiatives by public and private sector to support expansion
- Risks to expansion
Food Harvest 2020

A vision for Irish agri-food and fishers

Food Harvest 2020.

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Economic Growth – Food Harvest 2020

**Overall Vision**

**Act smart**
- Prioritise R&D
- Improve skill levels
- Maximise adoption of best practice
- Foster creativity and entrepreneurship
- Rationalise and collaborate at industry level
- Improve focus on consumer preferences
- Review institutional support and regulatory burden

**Think green**
- Prioritise environmental protection
- Capitalise on natural advantages and resources
- Build environmental credibility through research and actions
- Develop an umbrella ‘Brand Ireland’
- Satisfy consumer requirements and preferences
- Conserve biodiversity
- Align sustainability across the supply chain

**Achieve growth**
- Increase the value of primary output in the agriculture and fisheries sector by €1.5 billion by 2020
- Increase value-added output by €3 billion by 2020
- Achieve an export target of €12 billion by 2020

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Ambitious Food Harvest 2020 Targets

- National

  Increase the value of primary output in overall sector by €1.5 billion - 33% increase

  Raise the sector’s value-added by 40% from €7.9 to €11 billion

  Exports for the sector to rise to €12 billion - a 42% increase

- Sectoral

  50% increase in volume of milk produced and processed by 2020

  40% output value growth target for the cattle (40%?) and sheep sectors and a 50% output value growth target for the pig sector
FH2020 Implementation

- High level (Cabinet) national commitment to agri-food sector

- High Level Implementation Committee chaired by Minister and involving all relevant State Agencies

- Quarterly targets set for State and private sector actions

- Encouragement of greater collaboration across the sector

- Targeting of State support on priority areas

- Encouragement of industry leadership to focus on restructuring and R&D investment
### Irish dairy industry to 2020 - clear vision and strategy

**Industry Vision**

- FH2020

**Lessons from Expansion**

- The Irish Dairy Industry 1975-1985
- The New Zealand Dairy Industry 1984-2010
- Opportunities for expansion in milk production

**Avenues to increased milk production**

- Cow numbers
- Stocking rate
- Milk yield /cow
- Land area

**Strategic Priorities**

- Milk production efficiency
- Milk Quality
- Increase Grass DM production
- Environment
- Finance availability
- Education/training

**To increase Irish milk production by 50% by 2020**
Lessons from expansion: Irl vs. NZ

- 1975 to 1985 milk production in *Ireland* increased by 5.7% per year:
  - 49% increase in milk yield/cow
  - 11% increase in cow numbers
  - 47% decrease in dairy farm numbers

- 1986 to 2010 milk solids in *New Zealand* increased by 4.4% per year:
  - ~100% increase in cow numbers
  - 30% increase in milk yield per cow
  - 55% increase in land area allocated to dairying
Avenues to increased milk production

1. Cow numbers
2. Milk yield /cow
3. Stocking Rate
4. Land area
1. Increased dairy cow numbers

- 3% Increase in dairy cow numbers/year likely
- Last year a record 380,000 female calves were born to dairy bulls implying 95,000 extra dairy cows by 2015 or well over 3% p.a.
2. Increased milk yield per cow

- 2% Increase in Milk Yield/Cow/Year likely
- In line with international trends
- ROI EBI increasing by 10 units per annum
- Increased genetic merit + earlier calving + longer lactations + more mature herds
3. Increased stocking rate

- Big scope to increase SR
- National rate at 1.9 cows/ha is well below 2.37 (NL), 2.4 (DK) and 2.8 (NZ)
- Low SR substantially due to the relatively low milk quota available/ha.
- A modest increase in the SR from 1.9 to 2.1 cows/ha would increase milk production by over 10%.
4. Increase land area allocated to dairying

Geographic distribution of New Entrant dairy farmers (2009-2011) in relation to existing specialist dairy farms

Map: Reamonn Fealy, Teagasc, 2011
Data: Brendan Horan & Roberta McDonald, Teagasc
Statistical Data: Census of Agriculture 2000, CSO

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## Anticipated ROI dairy stats by 2020

<table>
<thead>
<tr>
<th></th>
<th>Average 2007-2009</th>
<th>2015</th>
<th>2020</th>
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</thead>
<tbody>
<tr>
<td>Milk Delivered (m litres)</td>
<td>4,950</td>
<td>5,837</td>
<td>7,450</td>
</tr>
<tr>
<td>Cow Numbers (000)</td>
<td>1,100</td>
<td>1,125</td>
<td>1,350</td>
</tr>
<tr>
<td>Milk Yield (litres/cow)</td>
<td>4,631</td>
<td>5,187</td>
<td>5,520</td>
</tr>
<tr>
<td>Protein %</td>
<td>3.33</td>
<td>3.38</td>
<td>3.42</td>
</tr>
<tr>
<td>Fat %</td>
<td>3.82</td>
<td>3.91</td>
<td>3.97</td>
</tr>
<tr>
<td>Dairy Farmers</td>
<td>18,970</td>
<td>18,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Average Herd Size</td>
<td>58</td>
<td>63</td>
<td>75</td>
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Potential growth in milk supply at regional level 2020

- Average national potential increase in milk supply estimated at c. 50%
- Range from 0% to 76.92%
- The South and the South East in particular Cork, Limerick, Waterford, Tipperary, Wexford, Kilkenny, Carlow and Wicklow have the highest expansion capacity
Initiatives by dairy sector actors to support expansion

- Major investment by dairy cos in new production and innovation facilities
- Public support for production research through establishment of 3 new (+ 2 in planning) Dairy Research Demonstration Farms
- Public support for expansion of membership of Dairy Discussion Groups – 1/3 of Irish dairy farmers are now members of Discussion Groups
- Public support for food research re functional foods, processing technology and novel foods
- New educational and training programmes established for Professional Dairy Farm Managers and New Entrants
- Collaboration with Irish Food Board (Bord Bia) to carbon footprint dairy and beef sectors and in the development of an advisory tool (“Carbon Navigator”) to deliver on farm improvements in the footprint with a view to rigorous verification of claims to underpin “Origin Green” marketing initiative
Mobilising research, extension and education/training to support expansion
Research and extension operational model

140,000 Farmers

Research Farms
- Curtin’s
- Derrypatrick
- Athenry
- Kilkenny

45,000 Clients

14,000 Discussion Group members

BETTER farms
- Beef – 37
- Sheep – 10
- Dairy – 37

14,000 Discussion Group members

45,000 Clients

140,000 Farmers

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Risks to expansion

- Low milk price and/or volatile prices
- Restricted access to finance
- Environmental limitations (Chart)
- Failure to achieved improved efficiency at farm level (table)
- Fragmented processing sector (Chart)
- Failure to innovate sufficiently (Chart)
GHG Emissions from Irish Agriculture under FH2020 Scenario

Source: Teagasc 2011

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## Efficiency targets for ROI dairy sector 2020

<table>
<thead>
<tr>
<th></th>
<th>Current Average</th>
<th>Expected Average in 2020</th>
<th>Best performance</th>
</tr>
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<tbody>
<tr>
<td>Milk Yield (kg/cow)</td>
<td>4,902</td>
<td>5,420</td>
<td>5,600</td>
</tr>
<tr>
<td>Milk Solids (kg fat plus Protein)</td>
<td>358</td>
<td>407</td>
<td>468</td>
</tr>
<tr>
<td>Protein and Fat %</td>
<td>3.37/3.94</td>
<td>3.43/4.08</td>
<td>3.65/4.70</td>
</tr>
<tr>
<td>Mean calving date</td>
<td>14&lt;sup&gt;th&lt;/sup&gt; March</td>
<td>5&lt;sup&gt;th&lt;/sup&gt; March</td>
<td>14&lt;sup&gt;th&lt;/sup&gt; Feb</td>
</tr>
<tr>
<td>EBI of dairy female born (€)</td>
<td>119</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>SCC (‘000)</td>
<td>252</td>
<td>200</td>
<td>&lt;200</td>
</tr>
<tr>
<td>6-Week calving rate (%)</td>
<td>55</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td>Stocking Rate (cows/ha)</td>
<td>1.9</td>
<td>2.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Concentrates/cow (kg)</td>
<td>875</td>
<td>750</td>
<td>400</td>
</tr>
<tr>
<td>Herbage utilized (kgDM/ha)</td>
<td>7.3</td>
<td>10.0</td>
<td>13.2</td>
</tr>
<tr>
<td>Cows/labour unit (numbers)</td>
<td>50</td>
<td>75</td>
<td>100</td>
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Irish Milk Utilisation 2012

Whole Milk Utilisation

- Cheese: 31%
- WMP: 4%
- Other: 7%
- Butter: 58%

Skim Milk Utilisation

- SMP/BMP: 26%
- Proteins: 44%
- Others: 30%

Source: IDB
Thank You