Future Skills Requirements of the Food and Beverage Sector

20 November 2009
Study Objectives – Food & Beverage Sector

• Conduct economic profile

• Describe current & future drivers-of-change

• Profile composition of those employed

• Review 3rd level & agency provision - education & training courses

• Identify the current & future skill gaps

• Assess relevance of education/training initiatives in other countries

• Make recommendations to address the identified gaps

Expert Group on Future Skills Needs

Forfás
Profile - Food and Beverage Sector

• Gross Value Add €6.9 b (2007), 4% national GVA

• Exports
  - €8.2 b (2008)
  - Increase of €1.2 b since 2003
  - Predicted to grow to €9.5 b by 2011 (Bord Bia)

• Employment
  - 50,000 people employed directly in 2008
  - further 60,000 indirect
  - plus 120,000 farmers

• 586 enterprises (2006) - 93% Irish owned
  - The 7% foreign owned. - 25% of employment
## Profile - Food & Beverage Sub-Sectors

### Sub-sector – GVA & number of employees

<table>
<thead>
<tr>
<th>Sector prospects</th>
<th>Meat</th>
<th>Fish</th>
<th>Fruit &amp; veg</th>
<th>Dairy</th>
<th>Grain / animal feeds</th>
<th>Drinks</th>
<th>Other foods</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVA</td>
<td>€745m</td>
<td>€93m</td>
<td>€81m</td>
<td>€854m</td>
<td>€160m</td>
<td>€1,512m</td>
<td>€3,516m</td>
<td>€6,961m</td>
</tr>
<tr>
<td>Employees</td>
<td>14,300</td>
<td>2,000</td>
<td>1,500</td>
<td>4,500</td>
<td>2,500</td>
<td>4,300</td>
<td>13,000</td>
<td>42,100</td>
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<tr>
<td>Sector prospects</td>
<td>↑↓</td>
<td>↑</td>
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</table>
Of 50,000 employees in sector in 2008:

- Higher proportion of men than women – 70% vs 30%

- 39% (20,000) employed at ‘Plant/Machine Operative’ level

- 62% (30,000) - low or no level of formal 2nd level education – 11% higher than national average

- Proportion of employees with low–level education in decline

- Those with 3rd or 4th level qualification increasing

- Significant reliance of non-Irish nationals – 24% vs 11% nationally
Drivers of Change

• Consumer trends
• Health & wellbeing
• Sustainability & ethical concerns
• Consolidation of retailers
• Policy
• Technology
Education & Training Provision – 3rd level

- Education & Training provision improved considerably since 2003 & is responsive to enterprise needs

- Significant number of new or enhanced courses since 2003
  - 121 programmes at 3rd level
  - 67 undergraduate
  - 25 executive education
  - 29 post-graduate

- Majority concentrated in one area – ‘Food Science & Technology’
- Approx. 1,000 graduates pa in food-related skills – almost double since 2003
- Overlap in volume of provision in Food Science & Technology area

- Evidence of greater collaboration with industry
- Greater flexibility of delivery at postgraduate & executive education level

- Room for improvement re mix in programmes content & gaps in thematic areas
- Industry – graduates with general sense of needs of business in addition to specialist expertise
<table>
<thead>
<tr>
<th>Development Agency</th>
<th>Area of Focus</th>
<th>Programmes /Interventions</th>
</tr>
</thead>
</table>
| EI                 | ► Management/capability development  
► Innovation  
► Internationalisation / Exports  
► Technology | 29 (2)        |
| Bord Bia           | ► Market entry / development  
► Thought leadership  
► Networking | 22 (1)        |
| Teagasc            | ► Food safety  
► Innovation  
► Quality management  
► Dairy  
► Specialist training | 36 (3)        |
| BIM                | ► Entrepreneurship  
► Management training | 2            |
| FÁS                | ► Meat / seafood Processing  
► Food safety | 22            |
| Irish Exporters Assoc. | ► Export advice  
► International channel management | 2 (1)        |
| **Total**          |                                                   | **113**                   |
Gaps Identified by State Development Agencies

- R&D, New Product Dev/ existing product renovation in SMEs
- Up-skilling of operatives in basic skills
- Commercial awareness
- Business skills for owners and managers in SMEs
- Dealing with multiples
- Brand management
- Financial, commercial & business acumen across all functional areas
- Succession & second tier management development
<table>
<thead>
<tr>
<th>Thematic Area</th>
<th>Skills Gaps</th>
</tr>
</thead>
</table>
| **Internationalisation**   | ► Commercial & negotiation skills  
                              | ► Key account management  
                              | ► Economic & regulatory aspects  
                              | ► Brand management |
|   ► Dealing with the multiples  |   ► Portfolio management |
|   ► Doing business overseas  |   ► Ability to understand non-runners |
| **Innovation**              |   ► Awareness & understanding regulatory environment  
                              |   ► Industrial design  
                              |   ► Commercial / business case assessment  
                              |   ► Identification of deep consumer / market insights  
                              |   ► Incremental / existing product development |
|   ► Commercial assessment of innovation projects  |   ► Lean / WCM / Six Sigma with food sector experience  
                              |   ► Process diagnostics and control, “super-skilled” technicians, crafts  
|   ► Understanding the retailers needs  |   ► Bespoke SCM in-service programmes -tailored & specialist delivery  
                              |   ► General lack of awareness of SCM at graduate level  
|   ► Identification & interpretation consumer insights  |   ► Financial/commercial/IT expertise -deliver financial info. across ops  
                              |   ► Finance modules at third level  
|   ► Transfer of knowledge  |   ► Significant gaps at CEO, senior & middle management, Tier 2  
                              |   ► Leadership & entrepreneurship not adequately covered on graduate programmes  
                              |   ► Communication skills |
| **Lean manufacturing**      |   ► Productivity gains & operational efficiency  
                              |   ► Cultural shift within an organisation |
| **Supply chain management** |   ► Central distribution  
                              |   ► Efficiencies in supply chain  
                              |   ► Managing working capital levels |
| **Financial and commercial acumen** |   ► Financial/commercial/IT expertise -deliver financial info. across ops  
                              |   ► Finance modules at third level |
| **Leadership**              |   ► Developing leadership skills  
                              |   ► Succession planning |
|   ► Developing leadership skills  |   ► Leadership & entrepreneurship not adequately covered on graduate programmes  
                              |   ► Communication skills |
|   ► Succession planning  |   ► Financial/commercial/IT expertise -deliver financial info. across ops  
                              |   ► Finance modules at third level |
Summary Overview

- 62% employees- no formal qualification or only secondary education
- Approx. 121 courses offered by HEIs - some significant overlaps
- A further 113 initiatives on offer by development agencies
- Cos. need to engage more with colleges/development agencies
- 3rd level institutions/dev. agencies need to communicate & promote their service offerings with students & industry
- Some new interventions are required
<table>
<thead>
<tr>
<th>Overview</th>
<th>Operative</th>
<th>Graduate</th>
<th>Middle Management</th>
<th>Senior Management</th>
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</thead>
<tbody>
<tr>
<td>Internationalisation</td>
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</tr>
<tr>
<td>Innovation</td>
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<tr>
<td>Lean Operations</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>Supply Chain Management</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>3</td>
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<tr>
<td>Financial/ Commercial acumen</td>
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<tr>
<td>Upskilling Operative / Supervisory Cohort</td>
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<tr>
<td>Special Initiatives</td>
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Recommendations

- **Forum** - address ongoing skills, training & development needs of the industry *(DAFF)*

- **Operatives & Supervisors (FÁS)**
  - Operative and supervisor accredited upskilling programme (transferable skills)
  - Operative Technician Accreditation Programme (recognise on the job skills, competencies & experience)
  - ‘Craft Accreditations’ for operatives (e.g., deboning, chocolatiers, cheese-making)

- **SCM initiative** - tailored & promoted to food sector to improve competitiveness *(EI)*

- Develop ‘**Supply Partner Networks**’ comprising retailers (with Irish operations), FMCG, Logistics & warehousing companies *(Bord Bia)*

- **Management**
  - Fast-track the dev. of graduates to take on ‘head of function’ roles *(FÁS)*
  - ‘Leadership 4 Growth’ programme to be tailored & marketed to CEOs/MDs in food cos. *(EI)*
  - Widespread promotion & roll-out of programmes like EI’s ‘Transform Programme’ to middle management in Food & Beverage sector *(EI)*
  - Develop bespoke modularised interventions to improve commercial acumen of line managers, functional heads *(EI, Bord Bia, Teagasc)*