



Food Harvest 2020 Terms of Reference and Committee Membership

Terms of Reference

“The Committee will prepare, and present to the Minister for Agriculture, Fisheries and Food, a draft strategy for the medium-term development of the agri-food (including drinks) fisheries and forestry sector for the period to 2020. The strategy will outline the key actions needed to ensure that the sector contributes to the maximum possible extent to our export-led economic recovery and the full development of the smart economy.

The strategy report will be short and specific and will focus on recommendations addressed to all the key players in the sector. It is not expected to contain detailed analysis of the sector, but will draw on analysis already prepared, including the discussion and background papers available on www.agriculture.gov.ie/2020strategy, and such other material as the Committee considers relevant. The Committee will also have access to the submissions made in the public consultation process being launched contemporaneously with the Committee.

It is expected that the draft strategy will be presented to the Minister in June 2010.”

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Department of Agriculture, Fisheries and Food.
Bord Bia, Teagasc and Enterprise Ireland

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Vision and Targets



2020 Vision & Targets

Agri-food and fisheries is Ireland's largest indigenous industry, a sector with long historic provenance and one which, today, collectively employs some 150,000 people with an annual output of over €24 billion, and a significant weighting of activity in rural and coastal communities.

The sector has seen a shift over the last number of years from commodities-based supply to one that is increasingly brand centred and consumer focused. The industry can identify a number of significant positives in its evolution.

It operates to world-class standards in the areas of food safety and animal welfare. It has built a multi-billion-export industry by engaging with the diverse demands of consumers and consistently meeting the exacting specifications of some of the world's most prestigious retailers and food service providers.

This acknowledged, the sector operates in an environment of considerable challenge. For farmers and fishermen, the disparity between the cost of production and remuneration is a critical issue for ongoing viability. At the processor and manufacturing level, a perceived lack of scale, fierce international competition, international retail consolidation and changing consumer demands are challenges which require concerted action.

In a decade that begins in extremely difficult economic circumstances, farmers and fishermen have taken the brunt of a dramatic fall in returns in many sectors. Irish food and drink exports continue to struggle with currency fluctuations and a recessionary trading environment in key markets. It would be understandable if such concerns coloured a longer-term assessment of prospects ahead.

However, while the years leading to 2020 will see a continuation of some of these challenges, the most compelling picture that emerges of the decade ahead is one of opportunity. In particular, the opportunity for the Irish agri-food industry to grow and prosper sustainably through the delivery of high quality, safe and naturally based produce.

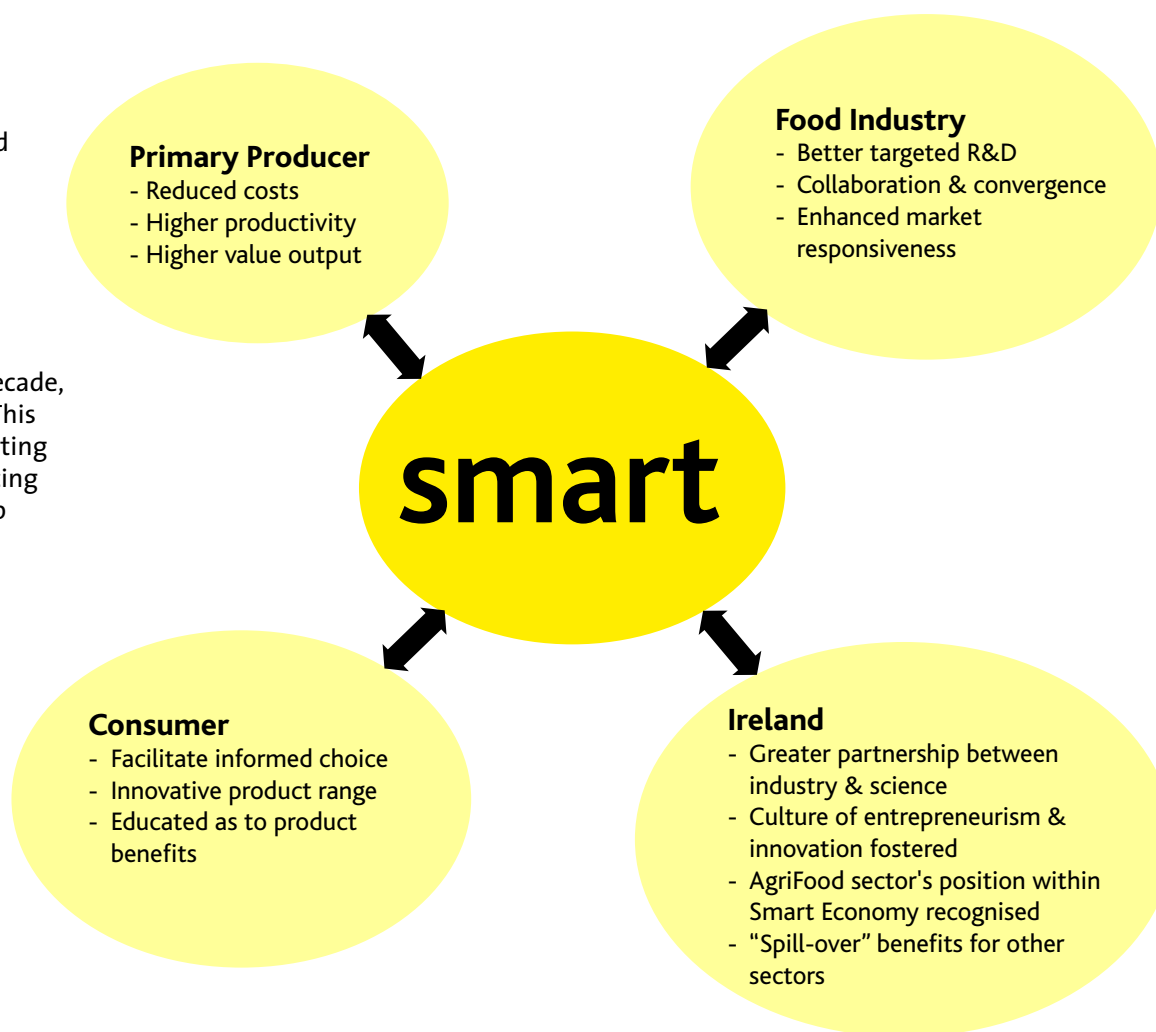
A sustainable agricultural sector requires that the highest possible returns are secured for the high-quality food produced. To achieve this, Ireland needs to address a number of structural challenges to meet the competitive challenge of the international marketplace. It also must focus particular resources on the opportunity presented by consumers who demand the highest quality in production and environmental standards, expect clear visibility on sustainability issues and, crucially, are willing to pay a premium for this.

This report offers a vision of this future. Grounded in facts and a careful analysis of industry, consumer and global trends, it identifies the opportunity for a dynamic, forward looking agri-food industry. It envisages a sector that can reap considerable rewards if it works and acts 'smartly' so as to make the most productive use of Ireland's rich natural 'green' resources in a way that is both economically viable and sustainable in the future.

Smart: The Approach

The development of the smart economy is a foundation Government policy for economic renewal. To prosper and develop in the coming decade, the Irish agri-food and fisheries industry must itself become 'smart'. This involves developing new working relationships in the food chain, piloting new product streams, targeting its resources at new markets, enhancing levels of productivity and competitiveness, and developing leadership positions across a range of sectors.

In short, it must invest in ideas, knowledge and skills, encourage innovation and creativity, and recognise new opportunities for collaboration across the food supply chain and with other competitors.

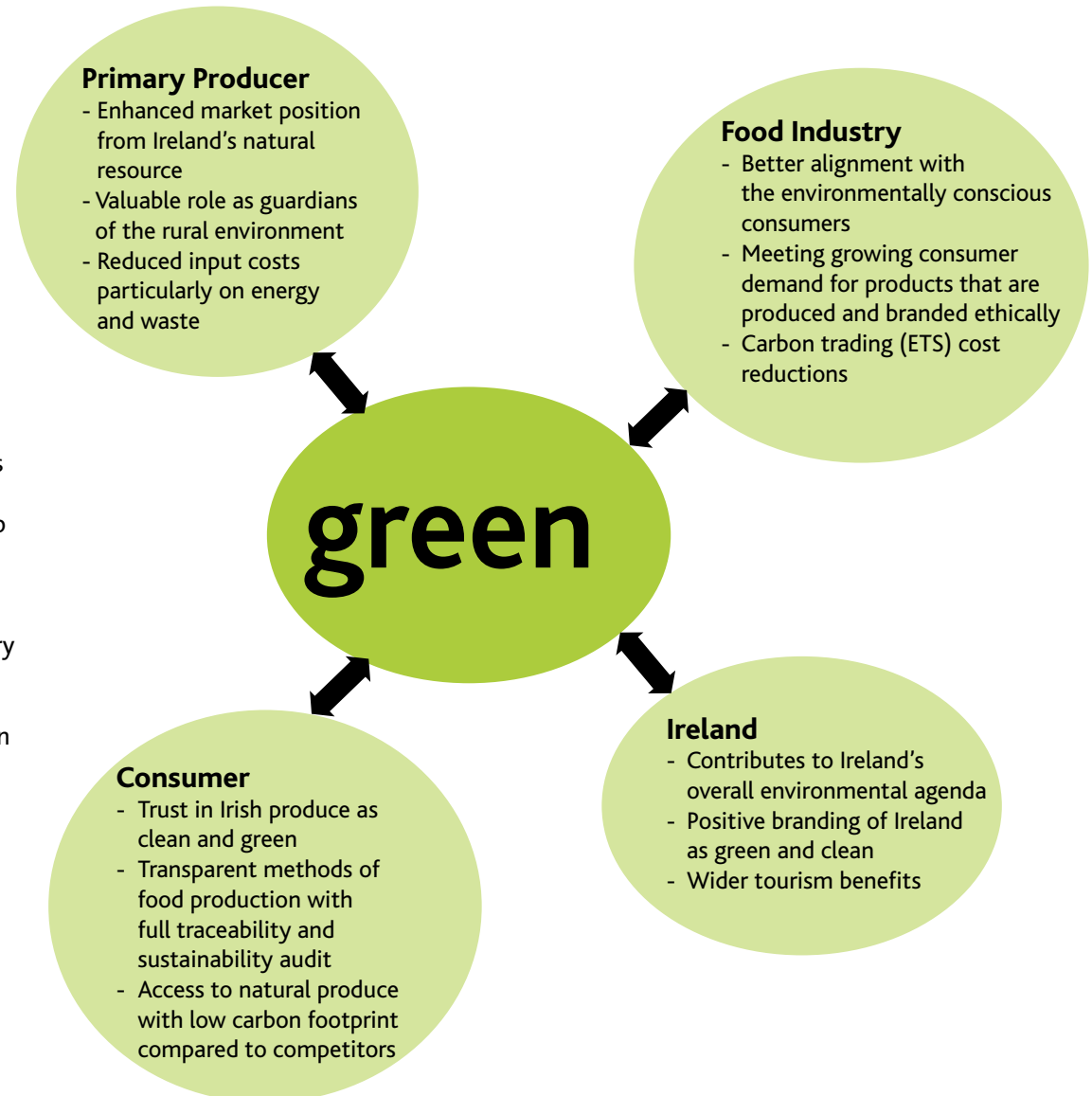


Green: The Opportunity

Ireland's historic association with the colour green is linked to our unspoilt agricultural landscape and our temperate climate. The modern use of 'green' to identify concern for the natural environment has, for some time, been recognised as representing a natural marketing opportunity for Irish agri-food to build on. This relationship must be refined and communicated effectively over the coming decade, to demonstrate Ireland's commitment to the principles of sustainability and the implementation of world-class environmental practices.

Ireland's extensive, low-input grass-based production systems are the foundation of its green credentials, while fish farming in Ireland, although a much more recent undertaking, has also shown considerable determination to minimise its negative environmental impacts.

Through sustained investment, a collaborative interdisciplinary approach and focused marketing, Ireland can become synonymous with the production of environmentally sustainable and welfare friendly products. This should result in consumers in key markets recognising implicitly that, by buying Irish, they are choosing to value and respect the natural environment.



The Global Context

In the years to 2020, an increase in demand for food must inevitably follow surging global population growth. In 1999, the world's population crossed the six billion threshold for the first time; in 2012, it will reach seven billion and by 2025, eight billion. In tandem with this, rapid economic development in countries such as Brazil, Russia, India and China, is creating sophisticated new consumer audiences who demand new and diverse food solutions. Meanwhile, in the more mature EU and US markets, consumers will increasingly seek out and pay a premium for foods with clear and credible health, wellness and sustainability attributes. The opportunities for naturally produced Irish food and drink products are considerable, provided the industry remains competitive and committed to robust and best-in-class environmental protection.

To meet this potential, the Irish agri-food and fisheries industry must put smart thinking at the core of both its strategy and action. Irish companies must seek new markets, develop new product streams that meet changing consumer demand, as well as finding new ways to assert Ireland's environmentally friendly credentials to target the premium end of the market with high-value products.

Ireland's pre-existing strengths as a food producer are considerable but there is little room for complacency. Taking the smart approach invites us to consider new approaches to demonstrating these credentials. In this regard, consideration should be given to the merits of promoting a more holistic marketing image centred around the concept of 'Brand Ireland', which could link Ireland's role as a natural food producer with its obvious attraction as a tourist destination. Recognising that all visitors are representative of our consumers and customers, the Irish food industry could declare itself open to inspection by saying to visitors, in the friendly, informal way that is both quintessentially Irish and modern, 'come visit us'

Regardless of the target market, improving competitiveness across all market segments must be a priority. Producers must look at using new and emerging systems of sustainable production, while recognising that increasing economies of scale and production efficiency are central to reducing cost. At industry level, consolidation is needed if companies are to compete with the major players that currently dominate global markets.

Food Harvest 2020 foresees Irish companies increasingly recognising that sharing resources through strategic initiatives will be central to knowledge generation, pursuing consumer and market trends, and making the best use of its human capital. Consolidation, collaboration and 'co-opetition' will be central to this.

Co-opetition refers to the strategic decision of companies to work co-operatively in markets where pooling resources would be most effective, while remaining competitors in markets where this remains a pragmatic option. Examples of co-opetition would include members of a supply chain working together to improve quality and/or reduce costs, or firms working together to supply a large customer.

In the smart vision of enlightened new approaches, Irish companies need to recognise that in an environment of reduced exchequer funding, the research, creativity and innovation paradigm that is fundamental to growing high-value exports requires new ways of working together at industry level. This will prove fundamental to ensuring the industry generates increased employment opportunities in processing and production, improves income stability and secures reasonable returns for primary producers and for business.

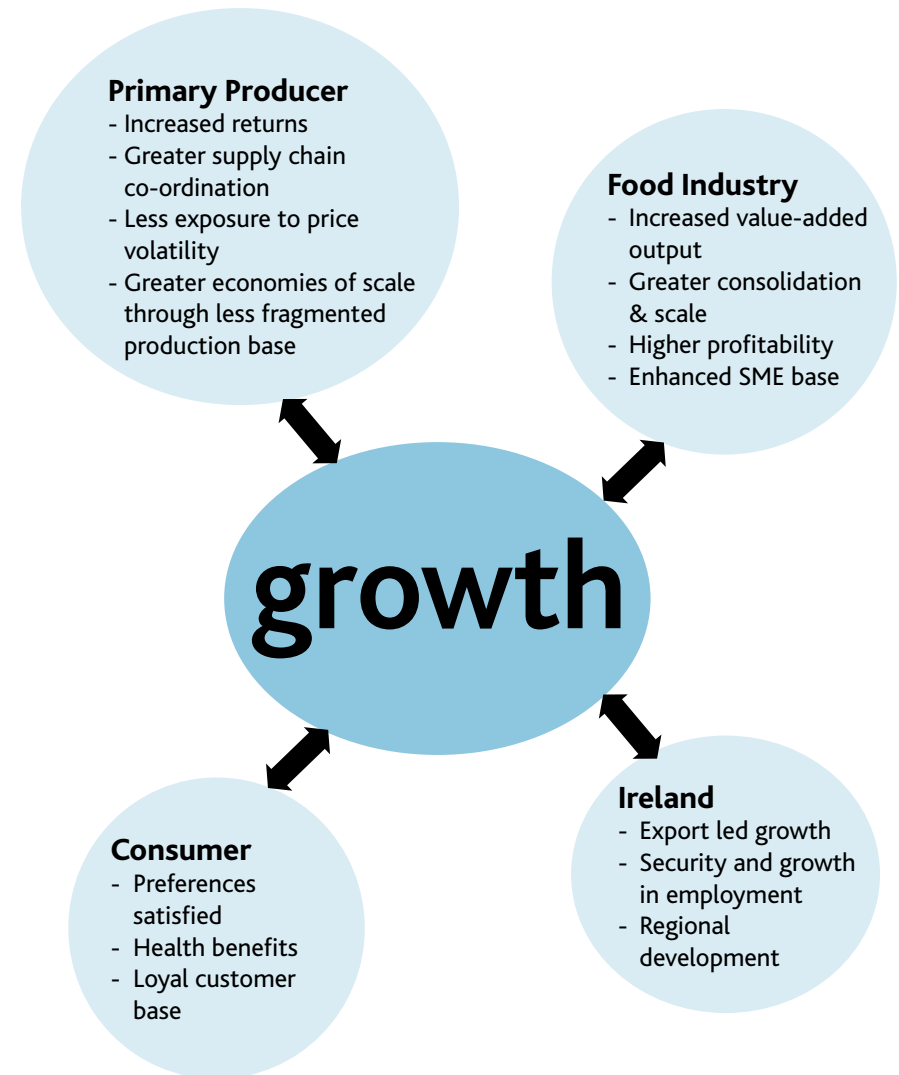
Verified environmental quality in the farming, fishing and the food processing sector will be at the heart of smart, green growth. Recognising that enhanced environmental controls are essential to maximising export returns, industry will work collaboratively to ensure the environment is protected and, if possible, improved.

Sustainable Growth: The Goal

As Ireland's agri-food and fisheries sector sets out to meet changing customer expectations and retailer demands in the coming decade, the rewards of a smart, green approach will be most clearly measurable in sustainable growth.

Minimising input and distribution costs, while verifying the environmental credentials and fundamental quality of Irish food and drink products are critical steps to the sector's overall ability to deliver long-term profitability. Sustainable growth will also depend on addressing fragmentation, consolidation at processing level, engaging in new product development, and coordinated and resourced marketing campaigns, including those under an umbrella brand for Ireland.

The vision in this report is of a dynamic, consumer-responsive sector, which can achieve sustainable growth despite the continuing challenges of volatility in input costs and world food prices. A food industry model that leverages innovation to deliver high quality, efficiently produced outputs is central to this.



Growth targets for 2020

On the basis of available data, the Committee believes that the following targets are achievable by 2020:

- Increasing the value of primary output in the agriculture, fisheries and forestry sector by €1.5 billion. This represents a 33% increase compared to the 2007-2009 average.
- Increasing the value-added in the agri-food, fisheries and wood products sector by €3 billion. This represents a 40% increase compared to 2008.
- Achieving an export target of €12 billion for the sector. This represents a 42% increase compared to the 2007-2009 average.

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

National and International Context

2020



National and International Context

Importance of Agri-Food and Fisheries Sector at a glance

Contributes gross annual output approaching €24 billion

Directly employs over 150,000 people

Provides the outlet for the produce from Ireland's 128,000 family farms

Represents 60% of manufacturing exports by indigenous firms

Domestically sources 71% of its raw materials

2.1 Overview

The agri-food and fisheries sector is Ireland's most important indigenous industry. It is widely recognised as having a key role to play in Ireland's export-led economic recovery. With €7bn in exports the sector currently accounts for over half of manufacturing exports, by Irish owned firms and serves in excess of 160 export destinations.

The vision of this report is to increase this export value to €12 billion by 2020.

The geographical distribution of the agri-food and fisheries sector is highly significant in any assessment of its future wealth and employment generation potential, as it plays a particularly important role in the socio-economic fabric of rural and coastal communities.

The role of farming in the stewardship of the natural landscape has become far more visible over the last decade and provides a robust platform for the future development of rural Ireland that is economically viable, socially inclusive and environmentally sustainable.

Substantial investment in agriculture, marine and food research over the past decade has allowed Irish companies to build up wide-ranging expertise particularly in key dairy and beef sectors. This investment is a springboard for a future strategy of innovation and differentiation by Ireland's large, dynamic and innovative food companies, many of which are significantly established in export markets.

Through investment and innovation, meat and dairy, Ireland's traditional leading export sectors, have been strengthened and safeguarded, but also, augmented by world-leading expertise in ingredients, infant formula and other functional and prepared consumer foods. Major investment in marketing in the alcoholic beverage sector has increased the international market penetration of Irish spirits to over 100 countries and created a cadre of key brands with worldwide recognition.

The emergence of a significant artisan food sector, responding to consumer demands for locally produced, hand-crafted food products, has brought a new stream of entrepreneurs into the sector with many rapidly developing from micro entities into small and medium-sized food companies which have been highly effective ambassadors for Irish food culture abroad.

Undoubtedly, there are challenges facing the industry over the next decade. However, addressing these in a coordinated and strategically focused 'smart' manner will unlock the considerable potential that exists to increase output and the overall value of the agri-food and fisheries sectors to the Irish economy.

This process will increasingly recognise that the potential for Irish agriculture and fisheries to create employment must extend beyond the strict definition of 'food production' to incorporate cultural products linked to the environment and tourism. The last decade has seen the successful development of niche tourism in the areas of food and marine tourism, agri-eco trails and the craft industry. An integrated agri-food-tourism strategy has the potential to serve a growing demographic of tourists interested in authentic, culinary experiences from food trails to cookery courses. Doing so will highlight the fact that successful rural resource management is an everyday part of the Irish agri-food industry.

Underpinning all these developments must be a competitive and environmentally sustainable food production system. In the context of emerging climate change and international food security goals, Ireland's future competitiveness will be influenced by the manner in which it can effectively address and manage both of these challenges together.

Globally, management challenges will intensify, as increased food production is needed to support a growing world population. In this context, the Irish agri-food and fisheries industry, operating in 'smart' mode will recognise that environmental sustainability not only underwrites long-term growth but is, in itself, a powerful marketing tool. A major opportunity

for Ireland is to find ways to differentiate itself and take the lead in a market increasingly demanding low carbon food products.

2.2 National Fiscal and Economic Context

Although this report stresses the need to look beyond the current economic challenges, it is important to recognise that any evolving framework must be grounded in national fiscal realities. This places stringent financial parameters in terms of the overall level of State funding available for development, particularly in the short to medium term. Any envisaged reprioritisation of policy emanating from the report will be on the basis of a reallocation of existing resources as opposed to making any new sources of state funding available.

Short-term economic prospects must be viewed in the context of exchange rate risks that have weighed disproportionately on the negative side in the recent past. The weakness of Sterling relative to the Euro, especially in 2009 and early 2010, has been seen to cause particular difficulties for Irish exporters in terms of maintaining competitiveness in Ireland's primary export market. It has also affected their ability to compete with UK exporters in other key markets.

The document *Building Ireland's Smart Economy: a Framework for Sustainable Economic Renewal* sets out Government policy for addressing the current economic challenge. Its approach on increasing competitiveness, investing in innovation and research, developing a sustainable green economy as well as its fiscal policy are reflected in this report.

2.3 World and EU Commodity Markets to 2020

International commodity markets have been characterised by significant price volatilities, which are expected to continue in the short to medium term. Over the coming years, price volatility will be driven by supply shifts, climate change, oil prices, energy policies (such as commitments to biofuels production) and developments in agricultural and trade policies. However, despite the ongoing international recession and heightened market uncertainty, the global outlook for agriculture is positive. From an Irish perspective, more positive market prospects in the medium to long term are based on increased global demand for dairy products, a growing shortfall in EU beef supply, economic development and population growth in developing countries and, within the EU and the US, the specific demands of an ageing and affluent population.

2.4 EU Policy Framework to 2020

The Common Agricultural Policy will provide the main policy framework for development of the primary agriculture and agri-food industries to 2020 and beyond. Formal negotiations have yet to begin on the CAP after 2013 and it is unlikely that full details of any new arrangements for the CAP will be agreed until late 2012. Thus, for the present, there is a degree of uncertainty as to the level and shape of future support for the sector.

The Irish Government is strongly focused on protecting the CAP budget and Ireland's share of EU funding in the upcoming negotiations. The Committee concurs with these aims. With respect to the specific measures within the CAP, the Committee would emphasise the importance of using whatever national discretion is allowed to underpin the strategies outlined in this document, which focus on enhancing our competitiveness and ensuring the long-term sustainability of the sector.

Agriculture can have significant impacts on the environment, including the provision of environmental services, such as biodiversity, flood and drought control, and as a carbon sink. Of course its impact can also be negative, accordingly from an EU, and indeed Irish policy perspective, it is imperative that the CAP is framed so that its rules are compatible with environmental requirements. Furthermore, the Department of Agriculture, Fisheries and Food (DAFF) will continue to meet its obligations under EU Directives such as the Water Framework and Birds and Habitats Directives thereby enhancing compliance with environmental laws. In the area of climate change, DAFF and its agencies will both continue research investments and enhance efforts to improve uptake of existing mitigation technologies.

The international trade policy framework, as determined through WTO and regional trade agreements, is also of enormous importance to the sector. It is therefore vital that Ireland's key agri-food interests continue to be fully reflected in the Government's input to these negotiations.

The Common Fisheries Framework (CFP) is the main policy driver for fisheries, seafood processing and aquaculture. This policy is also currently being reformed and the new Common Fisheries Policy will come into force in 2013. The delivery of a supportive policy framework at EU level will be critical for the future of Ireland's seafood sector and for ensuring that it can retain access to and grow the resource base on which the industry is wholly dependant.

Growth and Competitiveness

2020

A thick, light blue wavy line originates from the bottom left corner of the frame. It curves upwards and to the right, then loops back to the left, and finally curves again towards the right, ending near the year '2020'.

Growth and Competitiveness

3.1 Overview

Over the coming decade, smart growth will depend on improved productivity, increased scale, targeted research, and enhanced skills and organisational capabilities. Businesses will improve scale and returns through rationalisation and collaborative working.

Growth will also emerge through green principles that include a better alignment with the preferences of the environmentally conscious consumer, maximising renewable resources to reduce waste and input costs, and actively embracing audited, sustainable food production systems.

The matrix on the following page identifies the key competitiveness and growth issues impacting on individual sectors. Across the board, however, a commonality of competitiveness issues can be identified that permeate through primary and processing level. The internal and external nature of the constraints are also identified, and areas, which the industry itself is best positioned to address, are clearly identified.



Main Factors Affecting Growth and Competitiveness

C Critical I Important S Supporting IN Internal to industry EX External to industry

	Primary Production					Industry		Primary Control
	Meat	Dairy	Fisheries	Forestry	Cereals/ horticulture	Primary processing	Valued-added food & beverage	Internal / external to industry
Input Costs and the Business Environment								
Energy	S	I	C	C	I	C	C	EX
Waste mgmt/ utilities	I	I	S	S	S	C	C	IN/EX
Labour	I	I	I	S	I	C	C	IN/EX
Professional fees	I	I	S	S	S	I	S	EX
Export Credit Insurance	-	-	-	-	-	I	I	EX
Access to Capital	C	C	C	C	C	C	C	EX
Sectoral Regulation	I	I	I	I	I	I	I	EX
Industry Configuration								
Scale/ Restructuring	C	C	C	C	C	C	C	IN
Access to land	C	C	-	C	C	-	-	IN/EX
Productivity levels	C	C	C	C	C	C	C	IN
Organisational Capability	-	-	I	-	-	C	C	IN
Retail Concentration/ supply chain	I	I	I	I	C	I	I	IN
Sterling risk	I	I	I	I	I	C	C	IN/EX
Sustainable supply chain	C	C	C	C	C	C	C	IN
Knowledge Infrastructure								
Skills, training & education	C	C	C	C	C	C	C	IN/EX
Research & innovation	C	I	I	I	I	C	C	IN/EX
Technology Transfer	C	C	I	I	I	I	C	IN/EX
Market Knowledge	S	S	I	-	C	I	I	IN
Responsiveness to Consumer Trends	S	S	S	-	S	I	C	IN
Branding & labelling	S	S	I	-	S	C	C	IN/EX
Policy Environment								
International Agreements	C	C	C	I	C	C	C	EX
Market Access	S	S	S	-	S	I	S	EX
Environmental Policy	C	C	C	C	C	C	C	EX
Food Security	S	S	S	-	S	S	S	EX
Institutional Support Framework	I	I	I	I	I	I	I	EX

Funding for the Sector

In the short term, liquidity and access to suitable credit lines is a key management issue for the food industry. Examination of possible ways of managing risk in the sector is imperative in the context of the greater volatility exhibited by commodity markets in recent years.

- ➔ The possible role of new risk management strategies such as a greater reliance on farm insurance systems to cover production and market risks should be examined by DAFF and relevant stakeholders, particularly in the context of the CAP post-2013 deliberations.
- ➔ Irish banks, in conjunction with relevant Government Departments (DAFF and the Department of Finance), should examine the scope for the increased use of mechanisms such as chattel mortgages and invoice discounting.
- ➔ DAFF should examine the increased targeting of State supports to the sector with a view to further promoting competitiveness and sustainability.
- ➔ The provision of credit to the farming, fisheries and primary processing sectors and to food and beverage SMEs should be specifically monitored with a view to ensuring that the growth of viable businesses is not inhibited through lack of credit. Credit supply solutions should be supported through the work of both the Credit Review Office and the Credit Supply Clearing Group.
- ➔ Government should consider the specific needs of the food and beverage sector in its deliberation on an export credit insurance scheme.

Improving the Skills Set

A key determinant of the future success of the Irish agri-food sector will be the people that work in the sector. There is an ongoing need to attract the best people to the sector and to enhance the leadership and management skills of those working in the industry.

Knowledge of and responsiveness to changing consumer preferences will be key to maintaining a competitive edge. The level of knowledge and general awareness in relation to environmental protection and sustainability must also be improved throughout the sector. Overall, the knowledge base of those working in the industry will have to be continuously updated and developed at all levels. The universities, institutes for technology, Enterprise Ireland and Teagasc will play a key role in the development of human capital. The recommendation contained in this strategy to improve the knowledge infrastructure at both farm and industry levels reflect the Expert Group report on *Future Skills Needed In The Irish Food And Beverage Sector* published by Forfás in 2009.

Creating New Knowledge

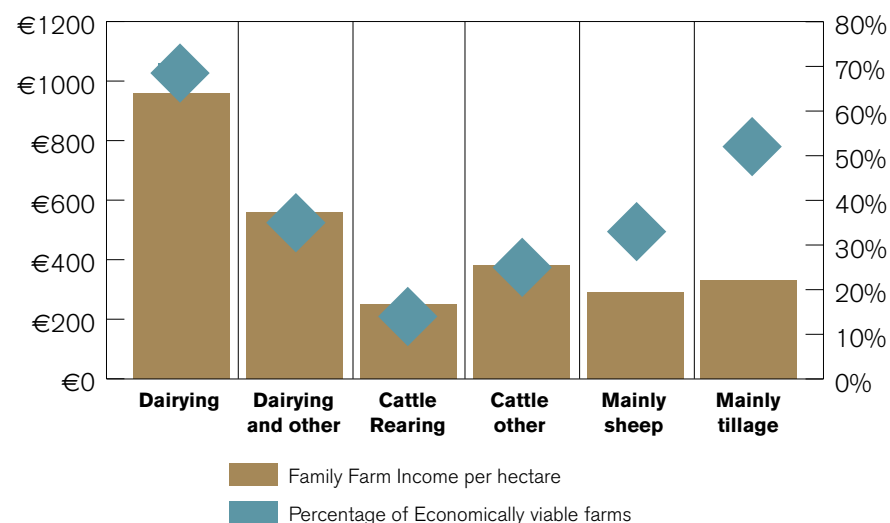
Teagasc, the Marine Institute, the universities and other third level institutions have a crucial role in creating and disseminating new knowledge to augment the profitability and sustainability of the Irish agri-food and fisheries industries. Targeted research and the creation of new knowledge are essential to the achievement of smart and green growth across the sectors.

Partnership with industry will be key to the transfer of the knowledge and new technologies that will underpin science-based innovation, profitability, competitiveness and sustainability. The focus must be on the delivery of results with rapid potential for economic and social impact, while aiming to protect human health, enhance nutrition and lessen environmental and climate change impacts.

3.2 Farm Level Competitiveness and Growth

Total gross output from Ireland's 128,000 farms was valued at €4.7 billion in 2009. The need for restructuring at farm level is evident from the data from the National Farm Survey, which identifies lack of profitability as a major issue on the majority of Irish farms. (Figure 1)

**Figure 1: Family Farm Income per hectare (include Direct Payments)
Percentage of Economically Viable* Farms, 2008**



Teagasc National Farm Survey and Secretariat analysis

* Note: An economically viable farm is defined as one having (i) the capacity to remunerate family labour at the average agricultural wage, and (ii) the capacity to provide an additional 5 per cent return on non-land assets (Frawley and Commins, 1996). The 2007 average agricultural wage of 14,908 has been used to calculate the proportion of farms in each sub-category that are economically viable.

Notwithstanding the important role that these farms play in maintaining the rural landscape and in the provision of public goods, it is evident that increasing scale, improved productivity and market orientation are essential to sustain future growth in the sector. Only farms operating to the highest standards of efficiency and sustainability will be capable of meeting the competitive challenges of the future.

The restructuring process that has characterised Irish agriculture in recent years needs to be accelerated. Market realities dictate that a strong commercial perspective is pivotal to improving viability and ensuring sufficient returns and long-term growth. If the necessary steps, at individual and State level, are not taken to improve scale and to increase profitability, the future of the sector will be jeopardised.

A sector-by-sector analysis forms a key part of this report and addresses sector specific issues that should be considered in conjunction with these sector wide recommendations.

Addressing Farm-Level Challenges

Restructuring

- DAFF should specifically target competitiveness and viability in any future measures for the sector.
- DAFF should consider policy options to address increasing fragmentation. These would include support mechanisms to aid consolidation, such as the introduction of targeted roll-over relief for land sales.
- DAFF, in conjunction with other relevant Departments, should identify and remove impediments to land mobility, with particular emphasis on those in current EU and State schemes. Any remaining obstacles to partnership formation or other new models of farming should be removed.

- ➔ DAFF should target all future schemes and supports, which have limited funding, at those producers with best potential for growth and competitiveness, and in particular at younger farmers with relevant qualifications and sound business plans.
- ➔ DAFF should liaise with relevant Departments with a view to maintaining current tax/policy incentives to encourage long term development of the sector including long-term land leasing, agricultural relief, retirement reliefs, stamp duty and stocking reliefs.

Competitiveness and Knowledge Transfer

- ➔ Teagasc should improve the level of dissemination and adoption of available knowledge and best practice options on farm competitiveness. Specific benchmarks should be established and reported upon in terms of progress and comparisons with key competitors.
- ➔ Relevant agencies should increase adoption levels of best practice in animal health and breeding.
- ➔ All relevant stakeholders should place a greater strategic emphasis on advisory programmes, such as Teagasc BETTER FARM, which focuses on low-cost production methods.
- ➔ DAFF should ensure that its public good research programmes (FIRM, RSF, COFORD) will be focused on priorities identified in this report and continue to facilitate the building of capacity and capability in the research institutions whilst also encouraging inter-institutional and institute-industry collaboration.
- ➔ DAFF should continue to promote active involvement of researchers from institutes and industry in relevant international research projects, consortia and initiatives including, in particular, the EU's Framework Research Programme.
- ➔ Teagasc agricultural research should prioritise the following areas: i) animal breeding; ii) grass breeding, evaluation and utilisation, iii) environmental research relating to climate change and water quality, iv) tillage and bio-energy research and v) economic analysis of policy change and market developments on agriculture and farming.
- ➔ DAFF, in conjunction with relevant stakeholders, should establish a key stakeholder group to develop the Irish dairy and beef sectors into global leaders in the genomics field and develop communication channels to encourage uptake at farm level.
- ➔ Relevant stakeholders should give consideration to the establishment of an inter-agency, third level institute and industry forum, chaired by DAFF, to discuss and address the sector's ongoing skills, training and development needs.
- ➔ The importance of commercial and management development skills is increasing and should remain a core part of the training courses provided by Teagasc and the agricultural colleges.
- ➔ Eligibility criteria for State support should include the attainment of higher minimum levels of education or training as well as ongoing participation at advisory and extension options.
- ➔ DAFF should establish structures to facilitate greater input and resources from the agriculture industry into the design and structure of primary research programmes.
- ➔ Consideration should be given to innovative funding mechanisms to support agricultural production research including co-financing by industry.
- ➔ With the aim of ensuring the competitiveness and viability of Irish production, DAFF should monitor and appraise policy, trade and commercial developments at EU and other relevant levels with respect to the use of existing and emerging technologies in areas such as biotechnology and genetically modified organisms (GMOs).

- DAFF, in conjunction with other Departments and State agencies such as Teagasc, County Enterprise Boards, FÁS and LEADER, to develop programmes to encourage farm diversification including innovation vouchers, agri-tourism, eco-tourism, etc.



3.3 Industry Level Growth and Competitiveness

The Irish agri-food and fisheries industry's continued ability to compete on both the home and export market is critical to the viability of the industry to 2020 and beyond. Competitiveness must, therefore, remain a key consideration. This, in addition to the configuration of the industry and the capability of leadership within it, are perhaps the three most important determinants of its future success and ability to reach the goals of the report.

The industry sector-specific issues, addressed later, should be considered in conjunction with the following overall recommendations.

Addressing Industry-Level Challenges

Input Costs and the Business Environment

- Enterprise Ireland and Forfás should benchmark Irish industry against key international competitors to illustrate the main input and regulatory factors affecting competitiveness and recommend approaches towards dealing with the challenges.
- State and industry must address the key input costs of energy, waste and labour to achieve greater alignment with the costs of our international competitors.
- Industry should urgently pursue alternate CHP and other renewable energy options.
- The current DAFF/Enterprise Ireland/Bord Bia supports for Lean Manufacturing and Management Development should be expanded.

Industry Configuration

- ➔ Key players should develop a plan to consolidate and rationalise capacity in the primary processing sector by the end of 2010 and cooperate in measures to achieve its implementation by 2015.
- ➔ In the interim, industry should explore mechanisms for collaboration to gain strategic advantage.
- ➔ Future State support for the primary processing industry must prioritise innovation and projects addressing current structural weakness.
- ➔ DAFF will engage with the Competition Authority to highlight the sector's global operations and the comparative scale of its main competitors.
- ➔ Relevant State agencies such as Enterprise Ireland should focus on increased employment in a targeted cohort of food and beverage companies.
- ➔ Relevant State agencies such as Enterprise Ireland should support SMEs with a comparative advantage in niche markets and which offer job creation potential.

Knowledge Infrastructure

- ➔ Industry and State should prioritise implementation of the relevant findings of the report on *Future Skills Requirements of the Food and Beverage Sector*.
- ➔ Industry should avail of existing supports to increase the skills base within the sector, particularly in relation to lean manufacturing, innovation, commercial skills (foreign language, marketing, selling, exporting, financial) environment and leadership.
- ➔ Having considered international benchmarks, the Committee believes that industry investment in R&D should be doubled by 2020 in line with the following targets:

Broad Sector	Current Average	2020 Target
Beverages/Bakery	0.5%	1.0%
Dairy Functional Foods	0.5%	1.0%
Consumer Foods	1.1%	2.0%
Primary Meats	0.5%	1.0%

Monitoring of Progress

- ➔ A well coordinated approach by all the key players, both State and private, will be essential to achieve the objectives outlined in this strategy. Consideration should be given to establishing a high level forum or group, led by DAFF, which could facilitate joined up action, act as a "clearing house" for any issues that arise, and recommend any adjustments to the strategy in light of experience. It is important that any such group should have the highest possible level of both political and industry support.

3.4 Environmental Sustainability

Environmental sustainability is an essential requirement for the food production systems of the 21st century. This presents a challenge and an opportunity for Ireland, given that there are already significant marketing and trading advantages as a result of our 'green' image. The **Food Harvest 2020** vision is for an Irish food and drink industry that is innovative, efficient, and a global leader in environmentally sustainable production.

To achieve this, Ireland must build on the strengths of its current green image and commitment to good agricultural practices. Issues of environmental sustainability should be managed in a manner that is verifiable to internationally recognised standards, and provide enhanced marketing opportunities. Areas of action include:

- Promoting sustainable pasture-based farming and soil management.
- Contributing to sustainable energy requirements.
- Developing new green technologies that improve water quality.
- Reducing the carbon intensity of agricultural activities and enhancing carbon sinks.
- Contributing to protecting biodiversity and achieving biodiversity targets.
- Ensuring environmentally sustainable production practices for seafood and aquaculture.

Ireland needs to maximise the food production strengths that are intrinsic to the Irish agri-food and fisheries industry, especially our grass-based production system and high quality marine environment. A concrete example is Ireland's abundant natural supply of fresh water, which represents a unique resource and a sustainable competitive advantage. Family farms, which play a key role in maintaining Ireland's

rural landscape, constitute another significant advantage in terms of biodiversity maintenance.

The new Agri Environment Options scheme will play a key role in keeping a critical mass of farmers engaged with programmes of landscape maintenance, biodiversity, water quality and climate change. Building on earlier agri-environmental schemes, this scheme can provide a foundation for the development of a system of accreditation for farmers to demonstrate that they are farming to environmental standards that go beyond the basic requirements of good farming practice. Again, this can be a significant and credible resource in the marketing of Irish food and drink products.

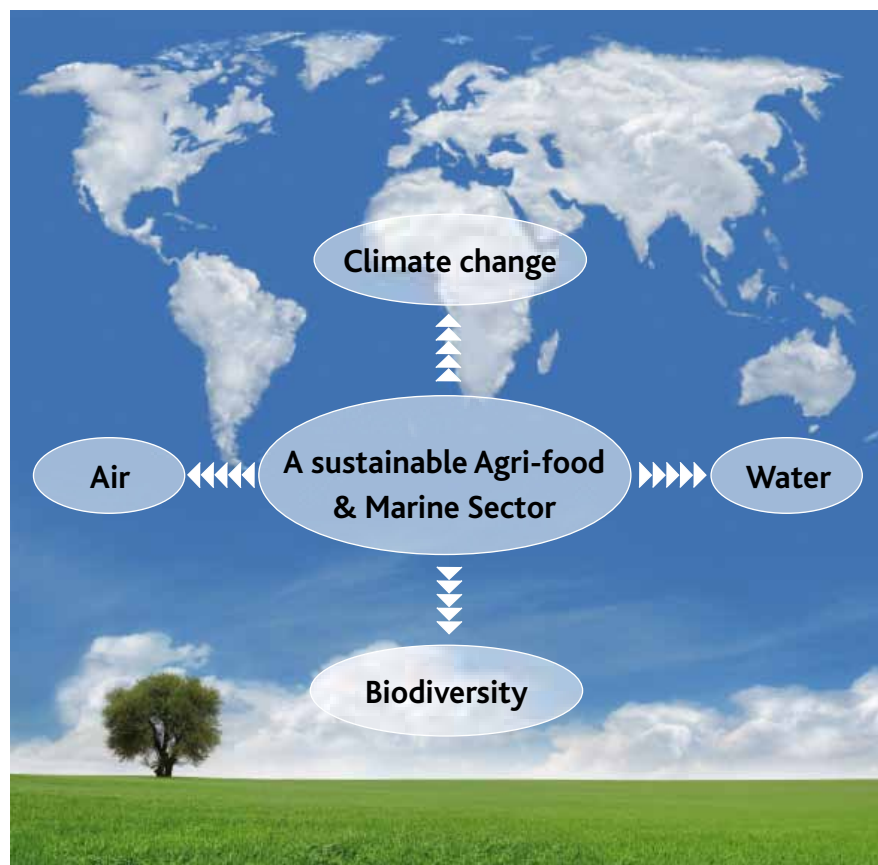
Notwithstanding the above, it is important to recognise that agriculture, fisheries and forestry activities can negatively impact on water, soil and air quality as well as on biodiversity. Meeting the ambitious growth targets set out in this vision means meeting, head on, these environmental challenges as well as reducing the carbon intensity of Irish agriculture and ensuring Irish agriculture plays its full part in reducing our overall greenhouse gas (GHG) emissions.

Livestock production systems are a source of greenhouse gases such as methane and nitrous oxide. However, livestock production systems based on rain-fed permanent pasture compare favourably with other livestock production systems, as soil carbon uptake can be maintained or enhanced by appropriate management approaches. Systems and tools to support, assess and measure this are required so that this can be verified and the strongest possible message can be developed and included as part of the national marketing strategy for sustainable food production.

Key Environmental Issues

The main environmental issues facing the Irish agri-food and fisheries sector are highlighted in Figure 2.

Figure 2: Key Environmental issues facing the Irish Agri-Food & Fisheries Sector



Climate Change

Climate change is recognised as the biggest environmental challenge that we collectively face, in relation to both reducing GHG emissions and addressing the adverse impacts of future climate conditions. The Environmental Protection Agency (EPA) projections, based on provisional Teagasc activity projections, indicate that the GHG emissions from the agriculture sector will be 8.5% below 1990 levels by 2012. The analysis of Irish agriculture's greenhouse gas technical and economic mitigation potential, based on currently available technologies, provides for a further 4% reduction in emissions.

However, it should be noted that preliminary estimates of the emissions that will follow the increased output envisaged in some sectors by 2020 indicate the potential to increase the emissions from the sector. For instance, a 12% rise in GHG emissions could result from the increased output envisaged in the national dairy herd. This increase in emissions can only be moderated through 'research investment' and by the improved transfer of technologies to farm including research and advice on management interventions to enhance carbon uptake in soils. Teagasc is playing a central role in the area of knowledge transfer through a number of mechanisms including the extended use of discussion groups and both the Better Farm Programme and farm open days.

There is a need to assess how various land uses, coupled with soil and land management can enhance soil carbon sequestration in a measurable, reportable and verifiable manner so as to inform future land use and land management strategy. This will optimise the contribution of soil carbon sequestration to reducing the carbon intensity of the sector. Forestry options will have a key role to play in helping Ireland meet its overall emissions targets. This proposed assessment could be linked to the EPA research programme which aims to improve annual reporting of GHG emissions and sinks to the EU and the United Nations Framework Convention on Climate Change (UNFCCC), help position Ireland as a leader in climate change sciences, building on its strategic location, geography, scale and environmental advantages. This will serve to underpin and strengthen the concept of a smart, green Ireland.

DAFF funded research undertaken by Teagasc, the universities and other research establishments can also play an important role in this regard. Moreover, DAFF led participation in the emerging Joint Programming Initiative on “Agriculture, Food Security & Climate Change” and in the NZ-led Global Research Alliance of Agricultural Greenhouse Gases will also play a role in determining the nature of future Irish research in the area and, importantly, in leveraging knowledge and harnessing technologies developed in other countries to deal with this challenge.

A sustainability audit mechanism is a required element of effective management systems. This could link practices to the national emissions inventory and life-cycle analysis (LCA), which demonstrate the level of carbon intensity associated with the production of Irish food and drink products. The LCA approach used must be internationally recognised, ideally employing Irish expertise. Of equal importance is the need to ensure that, where possible, farmers will be given the appropriate advice and information to enable them to alter their production methods in order to reduce their carbon intensity per unit of product and at the same time make them more profitable.

Future land use and agricultural and water management systems must consider potential impacts of climate change. These impacts may provide opportunities for existing production systems and for new crops. The adverse impacts of climate change on the sector must also be considered and appropriate plans elaborated for adaptation of the sector. These issues need to be explored in the context of ongoing improvements in the understanding of climate change.

Research in the area of GHG emissions from agricultural systems presents a business opportunity for Ireland in the development of new technologies that will be required to measure and reduce emissions from the sector. Ireland has developed significant internationally recognised expertise in this area. A market for this expertise and technologies will emerge as the need increases to reduce emissions associated with food production worldwide.

Protecting Water Resources

Ireland's waterways are one of our major natural resources, playing host to a multitude of different species that enhance our ecosystem. Plentiful availability of water offers a significant competitive advantage to agriculture, but is a resource that must be carefully managed. Improving water quality status is a national priority for Ireland with the EU Water Framework Directive (WFD) being the main driver to achieving 'good status' for surface and groundwater by 2015.

However there are a number of technical challenges, which means that achieving water quality objectives by 2015 may be unrealistic in some geographical areas. These challenges include slow natural rates of water quality recovery, which may range up to 20 years, and certain ground conditions. For this reason, Ireland's River Basin Management Plans (RBMPs) have set 2021 as a more realistic deadline by which many water bodies, impacted by activities that include agriculture, can be restored to good status. Current RBMPs will be reviewed in 2013, with a second set of plans to be introduced in 2015.

For agriculture, the Nitrates Regulations are the primary measures of the Water Framework Directive under which it will play its role in improving Ireland's overall water quality. Compliance with the Nitrates Regulations has been supported by significant public expenditures under the Farm Waste Management Scheme. Studies such as, the EPA review of the Nitrates Regulations and the Teagasc operated Agricultural Mini-Catchment programme, are due to be completed from 2012 onwards. These will indicate the effectiveness of those agricultural measures in reducing pollution of water by nitrates and phosphates from agricultural sources.

It is also possible that research and development in the coming years will help develop solutions that are based on natural resources often generated on the farm. Techniques using biological materials are being developed to improve the management of soiled water on farms. These solutions, using natural resources, can also be developed to solve pollution and water quality problems generated outside the farm gate. This type of research could ultimately lead to job creation in the sector as well as providing financial spin-off through valuable intellectual property rights. An integrated approach, encompassing improved efficiency of fertiliser use (organic and chemical) and management of farm-generated manures can address the simultaneous challenges of nitrogen and phosphorus losses from land to water.

Protecting Biodiversity

Biodiversity is a key issue for consideration in relation to environmental sustainability in the growth of all sectors. Ireland has a valuable resource in terms of our land and marine biodiversity and soil quality. The National Biodiversity Plan is designed to protect and halt the loss of biodiversity and to meet obligations under the EU Birds and Habitats Directives and the UN Convention on Biological Diversity. Despite these commitments, the EU and Ireland have fallen short of these targets and commitments and significant improvements are required. These provide a challenge but also an opportunity to show real progress and improved 'green credentials'. To show this progress, better monitoring is required at both local and national level, which could feed back to help prove legitimacy in green product claims.

While biodiversity conservation is an imperative in its own right, it may also offer opportunities in the future for food producers who could utilise biodiversity conservation initiatives as an opportunity to add value to food products. Organic, as well as so-called 'conservation grade' food is an attractive ethical concept for many consumers and a potential source of commercial opportunities.

There are obvious direct benefits to food producers from healthy wildlife populations, which form the basis of production in the case of sea fisheries, as well as indirect benefits through ecosystem services such as through pollination of crops by bees and other insects and natural pest control by birds of prey.

Air Emissions

The main gas emitted from agriculture in this category is ammonia, which is linked to acidification and eutrophication of ecosystems. It has implications for the health of affected ecosystems and is linked with the issue of biodiversity conservation. It also has a connection with climate change and water management where the common link is loss of nitrogen from agricultural systems.

A sustainability audit mechanism, mentioned above in relation to climate change, also has a use in relation to transboundary gases, as improved use of manure and reduced fertiliser inputs are the main management strategies to reduce this emission. Thus, improvements relating to transboundary gases will be achieved through improving efficiency of production and will be an important criterion in establishing the environmental credentials and sustainability of Irish production.

Renewable Energy

Important and challenging EU and national targets exist, as a response to concerns about climate change and energy security, and these will advance the development of renewable energy. The agricultural sector can play a significant role in addressing both issues from the renewable energy perspective. Non-food crops can make a contribution to emissions reduction in the agriculture sector through the provision of low or carbon neutral indigenous fuels. Both willow and miscanthus are potential low carbon fuels and Ireland's climatic and soil conditions are suitable for their production. They also offer an opportunity for diversification in the sector and entry to an expanding energy market. The guaranteed price supports – indexed and offered on a 15-year basis via Renewable Energy Feed-In Tariffs (REFIT) for biomass combined heat and power and biomass combustion, including co-firing of biomass in the three peat powered stations – is a significant boost and will help to underpin the viability of the bioenergy sector and boost confidence for longer term investments.

While opportunities for renewable energy should be exploited where possible, care is required to ensure no conflicts with environmental sustainability requirements, food security, and with other industries. Specific examples would be the need for improved planning in marine and terrestrial environments to ensure renewable developments do not compromise fisheries or biodiversity interests. Sound application of new and existing measures such as a strategic environmental assessment and the Marine Strategy Framework Directive provide tools to help avoid these potential conflicts.

Forestry also has a key role to play in the bioenergy area as a source of biomass for heat and energy generation. This role is already evident in the significant expansion in the use of wood biomass in recent years.

Anaerobic digestion (AD) is a proven technology to produce renewable energy in the form of biogas from organic waste and farm products or by-products. It has many potential benefits for the agriculture sector, including more efficient re-cycling of nutrients from intensive farming operations and providing an alternative use for grass. These processes will produce renewable electricity and heat, while, at the same time, providing an alternative farm income source and potentially generating employment in rural areas. The viability of anaerobic digestion to take organic farm waste or farm crops will be determined by the model chosen, that is, whether it is at farm level, co-operative level or regional level, and whether it is producing combined heat and power or just power. The guaranteed price supports via REFIT for AD announced in May 2010, indexed and offered on a 15-year basis, will be a significant help in developing the technology in Ireland.

The main barriers identified for electricity grid access for bioenergy projects and bioenergy development are:

- the high cost,
- the large variability in cost depending on location and
- the complex process and time required to achieve a connection offer.

However, the Commission for Energy Regulation decision paper, *Treatment of Small, Renewable and Low Carbon Generators outside the Group Processing Approach*, produced in July 2009 has significantly improved access to the grid for bioenergy projects. This decision results in small, renewable and low carbon generators that fulfill public interest criteria, being processed outside the Group Processing Approach (GPA) without interaction studies.

Finally, opportunities exist for farmers to install wind turbines to convert wind energy into electricity to meet on-farm requirements and to feed surplus electricity into the national grid. This is a technology that can fit into the natural landscape and will not interfere with agricultural activity. However, care needs to be taken to avoid any potential conflict with biodiversity.



Image courtesy of Bord Bia

By embracing and promoting environmental sustainability in food production, Ireland can position itself as a world leader in emerging international trends. A smart approach will seek to link sustainability with increased industry efficiency while, at the same time, clearly articulating the benefits to consumers as a market positioning strategy that supports premium returns to the sector and encourages best practice.

To ensure that the potential identified in this strategy is achieved, the following is recommended:

- DAFF should continue to recognise and support the important contribution of family farms and enterprises to the provision of environmental public goods.
- Continued investments in research should be made to develop technologies and approaches required to make Ireland a world leader in science based sustainable agricultural and food production.
- An industry-research-agency partnership should be directed to developing a food standard based on a standardised carbon life-cycle analysis.
- Teagasc must ensure that farmers are given the appropriate advice and information, based on quality research, to enable them to refine their production methods to reduce carbon intensity and further improve environmental performance.
- DAFF and Teagasc should investigate further the carbon sequestration potential associated with afforestation.
- DAFF and Teagasc should continue to support the agricultural mini-catchment programme beyond 2012.
- DAFF, in conjunction with industry should improve the environmental management of our waters, both coastal and inland, to protect the sector and its image.

- DAFF, in consultation with other relevant parties, to lead Irish involvement in related international research activities such as the Joint Programming Initiative on “Agriculture, Food Security & Climate Change” and in the NZ-led Global Research Alliance of Agricultural Greenhouse Gases.
- Establishing sustainable commercial value from wild marine aquatic resources should be a key objective of the sea fisheries sector.
- Industry, in conjunction with relevant State bodies, should examine options with regards to the development of sustainability related marketing standards for Irish food in relation to conservation grade food.
- DAFF should develop pilot projects and a pilot forum on renewable energy, including a regional anaerobic digester for farm and industry waste should be initiated.
- DAFF should continue to work with relevant Departments, Bodies and Agencies to address the barriers that exist to connections to the electricity grid for bioenergy products.
- Farm-level developments such as installation of renewable energy generators (wind/solar) should be encouraged by DAFF and DCENR.
- DAFF should lead a strategic environmental assessment on the impact of the recommendations of this report and a coherent plan should be put in place to offset increased GHG emissions prior to implementation.

3.5 Customer & Consumer Focus

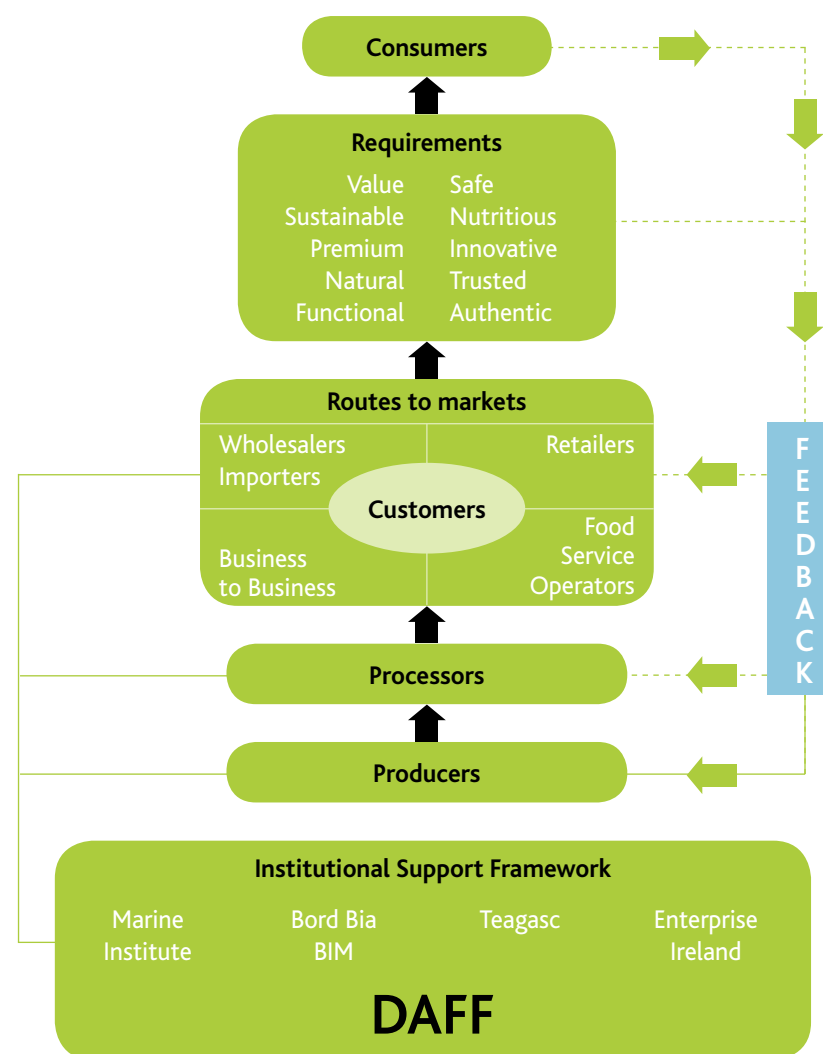
In-depth knowledge and understanding of consumer preferences and trends will help agri-food and fisheries businesses better predict and prepare for their future opportunities. While the current focus on value and smart purchasing decisions is likely to remain for the foreseeable future, premium opportunities for growth will re-emerge. In the EU in particular, consumers are likely to seek a greater connection with the food they buy, while products that deliver on health and wellness will also continue to grow in importance.

A framework where consumers and the requirements they articulate are a focus for all stakeholders on the supply and value chain is illustrated in Figure 3. It highlights the importance of continuous feedback and discourse between all stakeholders and the consumer to understand and respond effectively to current future needs in terms of product presentation and differentiation as well as addressing consumer issues, sustainability, nutrition, and authenticity.

An important strategic theme emerging in consumer consciousness is that of environmental sustainability. This primarily incorporates environmental concerns but also reflects growing interest in issues of simplicity, authenticity, heritage and animal welfare. Product offerings that capitalise on these trends must be credible and proven. Rising consumer demand for organic products also offers potential growth opportunities and fits well within the sustainability agenda.

To benefit fully from these emerging consumer trends, the Irish food and drink industry requires access to ongoing research both domestically and internationally as well as investment in innovation to ensure it can offer the range and quality of products required by consumer.

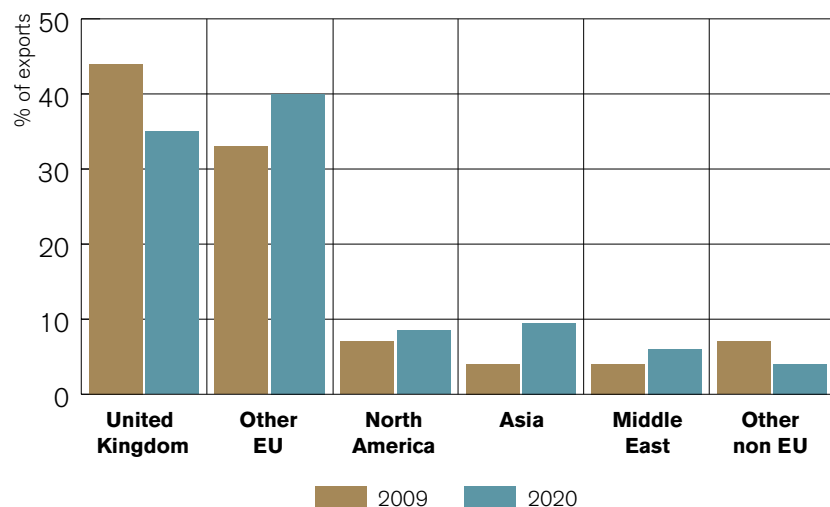
Figure 3: A Consumer Focussed Framework



2020 Market Focus

The UK will continue to be a major export destination for Irish food and drink products. Nonetheless, there will be a significant shift in focus from the UK to eurozone markets over the coming decade, where currency exchange rate is not a risk factor. As a mature market, this region will require a significant focus on product differentiation and distribution capability. Emerging markets in Asia, will provide the potential to more than double exports to the region. This changed market focus is illustrated in the Figure 4 below.

Figure 4: Exports By Destination 2009 & 2020*



* Projected Estimates

The ability of individual processors to optimise particular routes to market has, in the past, been limited by their level of market knowledge, their ability to develop distribution expertise and their scale relative to competitors. In addition, resources that can be dedicated to distribution or in-market sales and market development are often scarce. As companies seek to grow and expand their customer base in overseas markets, it is essential to ensure that their logistics practices are still fit for purpose and appropriate to their target channel or customer base. Exporters also need to benchmark their costs against their competitors in order to drive efficiencies and identify areas for potential cost savings.

These issues are made more important by ongoing consolidation in the retail sector, which requires suppliers of sufficient scale to meet demand and adapt to the increasingly international nature of procurement practices. The growth in market share of private label products is set to continue and will require a different relationship with retailers than branded offerings.

For Irish food and drink exporters, the challenge is to develop the level of market knowledge necessary to build sales in key categories and to maintain a strong focus on meeting emerging customer and consumer needs. The future success of Irish companies in this sector relies to a large extent on their ability to be part of a market-led food retail sector.

Brand Ireland

The green and natural reputation of Ireland, and of its food and drink production, has evolved naturally and, in many cases, spontaneously, over many decades. The international success of Irish brands such as Kerrygold, Bailey's and Jameson demonstrate that powerful global brands can be centred on Irish food and drink outputs and, also, the huge market advantages that can be gained by clear and sustained product differentiation. For the food and drink industry, there is now a clear need to copper-fasten this reputation and take ownership of its potential. To harness the powerful environmental messages that Irish food and drink products can convey, the creation of an umbrella brand for Irish food and drink is recommended. The steps that would underpin its development include:

- Detailed market research into varying consumer trends.
- A marketing strategy to emphasise the green and natural reputation of Irish food and drink.
- A credible scientific basis for product claims.
- Emphasis on branding and differentiation of Irish food and drink products.
- The highest standards of food safety and traceability implemented in all participating products.

The complexity involved in delivering on such an umbrella brand or concept is undoubtedly high, with a considerable realignment of State, industry and producer required. It is accepted that a three-to-five year timeframe would be required to fully implement this plan. However, if the environmental credentials of Irish food and drink are to be recognised on the world stage, a coherent, unified message encompassing all sectors of the industry is essential.

Credibility is key if the potential identified in market and consumer trends are to be realised. Key steps necessary to progress the development of a Brand Ireland include:

- Government action in articulating, advocating and getting sectoral buy-in for a 'green' model for Ireland.
- A sustainability audit of Irish agri-food with particular reference to grass-based rain fed livestock production, for use as a benchmark against competitor suppliers.
- Teagasc-led scientific research which underpins Ireland's sustainability claims and validates the environmental and nutritional benefits of grass-based rain fed production.
- Bord Bia-led research clarifying the consumer relationship with sustainability issues.
- An industry-led focus on research and innovation in areas of health and wellness as a means for growth in a mature EU market.
- Industry-academic development of market knowledge and language capabilities to help expand market share in key locations. The Bord Bia Marketing Fellowship Programme provides an example of this.
- Processors continuing to build strategic partnerships along the supply chain, particularly with retailers.
- Investigation of possible linkages with Tourism Ireland in marketing of Ireland.
- Continued identification of target markets and access opportunities through DAFF's Market Access Group, involving industry and Bord Bia.
- Collaboration between DAFF and the food industry to protect and enhance the current high standards of food safety in Ireland.
- Continuous improvement and operation of the highest standards of animal health and welfare by livestock producers.

- It must be recognised that the development of a persuasive and widely recognised Irish brand will require significant investment in time, effort and funding. It is therefore recommended that a steering group should be established to oversee the development of the brand and to report regularly to industry, producers and Government on progress. This group should develop a realistic plan for the gradual development of the brand over a three to five year timeframe with clear milestones and benchmarks and a feasible funding arrangement.
- When established, this steering group should develop a strategy to address issues such as integrating current marketing activities ('Ireland, the Food Island', 'Love Irish Food', etc.) with the proposed new Brand Ireland as well as how to avoid dilution of strong existing brands.

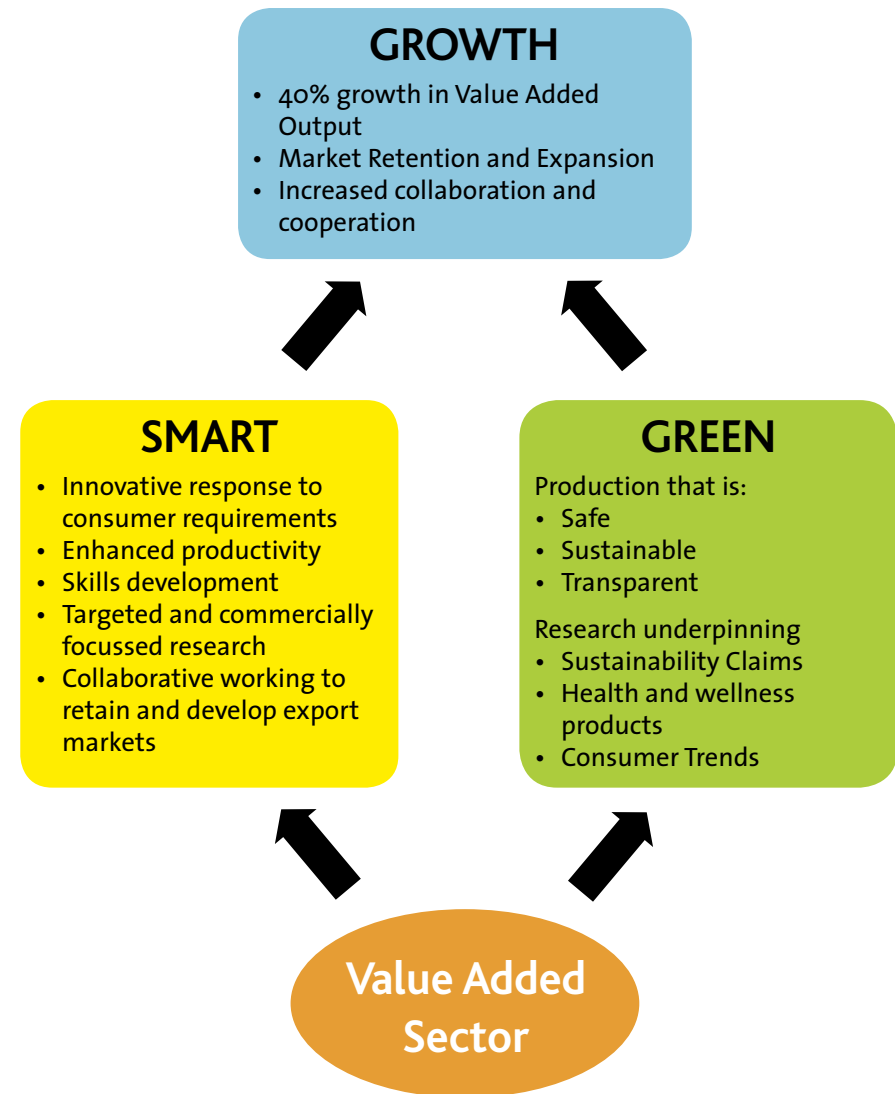


Image courtesy of Bord Bia

3.6 Value-Added Food and Beverage Sector

Value-added food and drink manufacturing, beyond primary processing, can range from infant formula and functional ingredients through to alcoholic beverages and prepared consumer foods. Value-added meat products and artisan foods can also be considered part of the sector. The continued development of value-added foods on the home and international markets is key to delivering a sustainable agri-food economy. Sales of these products are less likely to be impacted by fluctuations in commodity prices while processing Ireland's raw material supply domestically fundamentally supports wealth and employment creation in the rural economy.

There are a small number of large Irish companies currently delivering export-focused growth in this sector and these will continue to grow in the future. However, new foreign direct investment (FDI) entrants and SMEs with a potential to upscale will be the driving force behind increased employment levels in the sector. Accelerating the growth of an optimal number of SMEs to large company size and a greater focus by SMEs and artisan producers on niche markets such as functional foods and organics will be highly significant in delivering regional growth and employment creation.



To meet its goals, the value-added sector will need to focus on enhancing productivity, developing its internal skills base and improving organisational and management capability. A focus on market research, innovation and new product development will also be vitally important if it is to capitalise on evolving consumer trends. The development of new brands, which can emulate the success of Ireland's small cadre of global food and drink brands will be an important benchmark of success.

On the basis of available data the Committee believes that, working from a 2008 baseline, that growth of 40% in the added value output of the food and beverage sector is achievable by 2020. This will require action in the following areas:

Competitiveness

- ➔ With a view to generating sustainable export led growth in the sector, a 20% improvement in cost competitiveness relative to that of our trading partners is a priority for the food and drink sector. It must be implemented through the following;
 - Where appropriate and feasible, relevant Departments and agencies should seek to address structural issues with a view to ensuring reductions in the input cost base particularly in the areas of energy, transport, waste costs and the regulatory burden,
 - Industry should avail of existing supports and focus on investment in enabling technologies and lean manufacturing, to boost productivity and reduce unit labour costs,
 - Industry should prioritise the provision of management development programmes.
- ➔ The Committee endorses the findings and the recommendations of the report of the Expert Group on *Future Skills Needed In The Irish Food And Beverage Sector* and calls for their full implementation by all relevant stakeholders.

- ➔ Enterprise Ireland and other State bodies should target expansion of high value SMEs and other growth opportunities, including the attraction of new or additional investment from multinational companies in Ireland.
- ➔ Encouragement of an entrepreneurial approach to the development of high potential start-up food businesses and dynamic artisan producers.

Innovation

- ➔ The Committee endorses the recommendations in the *Report of the Innovation Task Force* and underlines their particular relevance to the food industry.
- ➔ Industry must prioritise investment in consumer-focused innovation and new product development.
- ➔ To build on the work of the existing industry-led food research committee, inter-agency collaboration is required to formalise a strategic, commercially focused research agenda for the value-added sector.
- ➔ Bord Bia should continue in-depth consumer trend and lifestyle analysis with a focus on products that promote health and well being.
- ➔ Industry should double the level of resources committed to R&D activities as a percentage of turnover.
- ➔ Relevant bodies should focus on the improvement of commercial orientation by better targeting of research on emerging market opportunities and developing consumer trends.
- ➔ Linkages and collaborations between research institutions and industry organisations, such as in Food for Health Ireland, must be developed, so that the activities of research institutions are grounded in the downstream requirements of a competitive food and drink industry.

- ➔ Research and innovation resources in different institutes (state agencies, and universities) should work closely to maximise their synergies and increase overall effectiveness. This is currently exemplified through the recently announced Teagasc UCC Strategic Alliance in Food Research

Market Development

- ➔ Industry should examine the potential for building partnerships and working collaboratively in new markets.
- ➔ Industry should work to reduce exchange rate exposure through market diversification and joint ventures with local companies.
- ➔ Better utilisation of marketing expertise and mentoring programmes where appropriate should be advanced by industry.
- ➔ Substantial research to underpin and substantiate sustainability claims that will assist the Brand Ireland concept.
- ➔ A collaborative industry drive is needed to achieve a greater share of branded products on export markets, ultimately using Brand Ireland as appropriate.
- ➔ Bord Bia should expand its successful marketing fellowship programme to build the sector's marketing capacity.
- ➔ Industry should initiate graduate internship programmes along the lines of Bord Bia's marketing fellowship programme.
- ➔ Industry will need to focus on the opportunities to deliver the range of products required by leading retailers and manufacturers in the area of private label and to further leverage existing brands and relationships.
- ➔ The further development of farmers' markets and food tourism will provide opportunities for diversification and added value for smaller enterprises in particular. This potential should be explored by relevant stakeholders.

- ➔ Bord Bia and industry should make the optimal use of Ireland's protected Geographical Indications, and to identifying further designations. Ireland has not exploited this opportunity to any significant extent to date.

Artisan Food Sector

The emergence of Ireland's artisan food sector, supported by growing consumer demand for speciality food products and a strong entrepreneurial spirit, has resulted in a significant rise in the number of small food companies operating in Ireland. Most of these companies are owner managed, in many cases have a strong farming basis, and produce a diverse range of products. The level of innovation evident in many of these companies can provide the seeds for the next generation of Irish food and drink offering. The artisan sector also offers the potential to enrich Ireland's tourism while, in turn, tourism can be a vehicle to enhance the image of Ireland and Irish food production internationally.

To build on the success of the artisan sector to date, it is recommended that:

- ➔ Bord Bia, DAFF and Teagasc working together with other Departments and tourism agencies to:
 - Encourage and support market-led food entrepreneurship from the earliest stages of development,
 - Promote sustainable and locally embedded food procurement policies and systems,
 - Promote and broaden the opportunities, including local markets, for consumers and visiting tourists to purchase local food,
 - Conserve and promote distinctive local food traditions at EU level and with bodies such as the TASTE Council and Slow Food,
 - Explore possibilities for mentoring by larger companies to support artisan companies achieve market distribution and build their customer base.

Recommendations by Specific Sector

2020



Recommendations by Specific Sectors

4.1 Beef

Irish beef and livestock production makes an extremely important contribution to the overall Irish economy, with a current annual output value of some €1.9 billion.

Progressive initiatives to position Irish beef in higher value EU markets have proved very successful. Having previously been sold primarily in third country commodity markets, Irish exporters are now in a position where 99% of beef is exported within EU. Irish beef is currently stocked by over 70 European retailers with annual exports valued at €1.5 billion. Additionally, live exports averaging around 200,000 per annum are valued at €160 million. Live exports which operate at the highest standards of animal welfare, are and are likely to continue to constitute a valuable outlet in the future. However, opportunities to adding value in Ireland, including through young bull beef and rose veal production should be considered in more depth. By finishing these younger cattle at home the possibility exists to add value, potentially in the region of €300m, in Ireland.

The key challenges facing the sector are to maintain Irish beef's premium position in EU markets and to close the price differential between Irish and other premium competitors in the UK and EU.

There are undoubtedly significant challenges in relation to farm level profitability, as illustrated in Figure 1 on page 18. New smart approaches throughout the supply chain can deliver enhanced efficiencies and improved product quality, leading directly to growth in output value. Central to this will be the role played by a higher number of increasingly efficient, market orientated beef producers.

A viable suckler cow beef herd of sufficient size is fundamental for the development of the beef industry and the Irish Cattle Breeding Federation (ICBF) has indicated that the profitability of the existing suckler cow herd could be increased by €200 million by 2020. This would be achieved through a combination of better quality cows and breeding, achieving slaughter carcass weights at a younger age and better carcass quality. In addition, genetic advances offer the potential to deliver greater profitability at farm level through enhanced productivity and disease resistance.

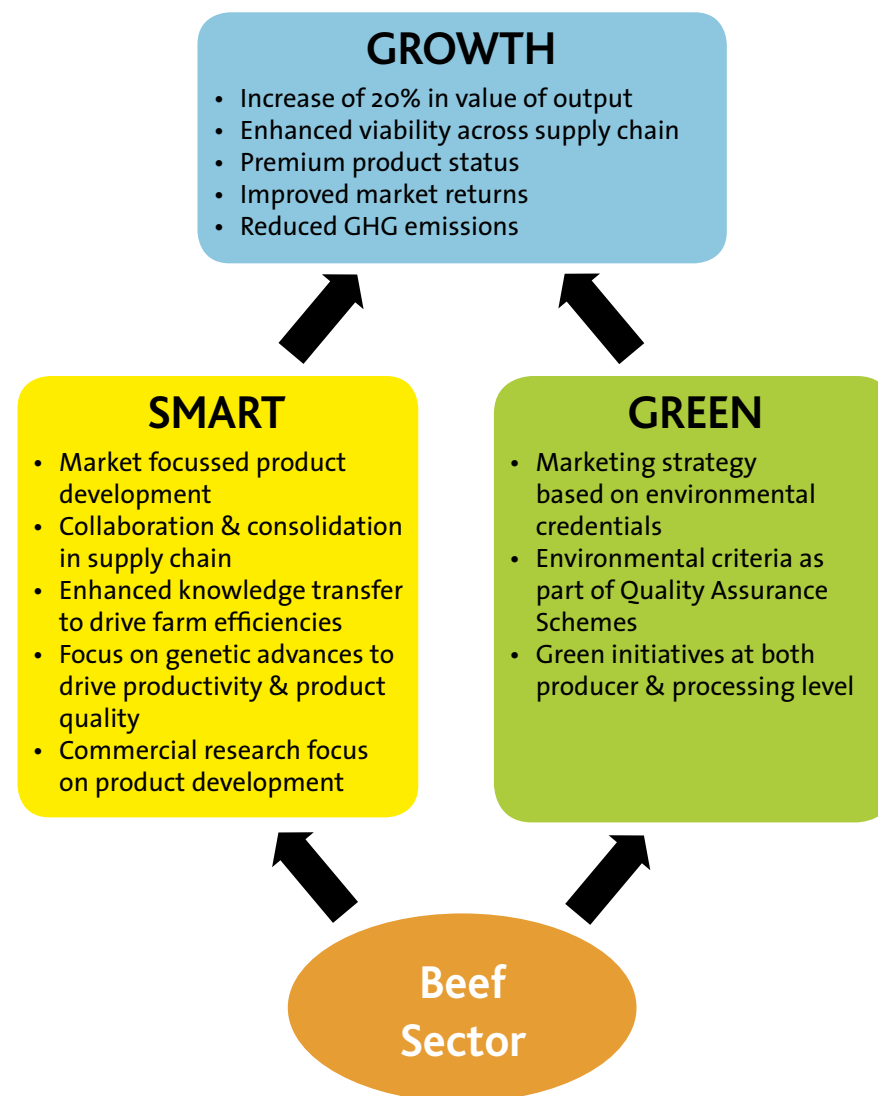


Image courtesy of Bord Bia

Genomics also has the potential to play a role in identifying desirable product qualities that will add value in the marketplace. Some of this technology is already in place, while further advances are expected in the coming years and this will provide the opportunity for Ireland to take a lead position in this area. Meanwhile, an important spin-off of the significant growth expected in the dairy sector will be an increased supply of calves for rearing and finishing.

Teagasc initiatives, such as the Better Farm Beef programme (in conjunction with the Farmer's Journal), highlight the significant growth potential when best practices are adopted at farm level. Increased product differentiation, based on predominantly grass-based Irish beef, has the potential to build on the success of current marketing strategies and concepts such as Brand Ireland, when delivered. Collectively, these can provide enhanced returns to the producer and close the current price differential for beef in high-value EU markets.

On the basis of available data the Committee believes that a growth of 20% in the output value of the sector is achievable by 2020 (using the average of the years 2007 to 2009 as a baseline).



Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the beef sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Farm Competitiveness

- ➔ DAFF and the livestock industry should continue to support ICBF in its programme of genetic improvement and product quality. The Suckler Cow Welfare Scheme is also playing an important role in this regard.
- ➔ Collaboration between DAFF and Animal Health Ireland (AHI) should continue, to improve animal health and reduce losses due to animal disease.
- ➔ An industry group involving Teagasc, ICBF and commercial operators should be established to position the Irish dairy and beef sectors as global leaders in the genomics field and to develop communication channels to encourage uptake at farm level.
- ➔ Stakeholders should make use of the beef quality payment system grid to facilitate a focus on carcase quality and maximise returns for beef producers.
- ➔ In the light of the fact that the great majority of beef farm enterprises are currently loss making, DAFF, Teagasc and the farm organisations should consider the best route to viability for the largest possible number of beef farmers. In this regard, consideration should be given to measures which, together with appropriate industry measures, could help to support beef cow numbers and encourage winter fattening.

Technology and Knowledge Transfer

- ➔ DAFF, Teagasc and producers should endeavour to continually improve knowledge dissemination and adoption of best practice in beef production through initiatives such as the Better Farm Beef programme (in conjunction with the Farmer's Journal).
- ➔ Strong collaboration between State agencies is required to ensure that relevant research outputs are applied at farm level, especially through the greater use of the BETTER farms programme and discussion groups.
- ➔ Primary producers must be encouraged to optimise efficiency by adopting new technology and best commercial practice. Attendance at relevant discussion group meetings, farm walks and demonstration events should be built into the conditions of new schemes as appropriate.

Production Systems

- ➔ Given that steer and heifer production will continue to be the mainstay of domestic beef production, and with a view to improving the economics and environmental impacts of this sector, Teagasc should direct its efficiency focus towards encouraging a reduced slaughtering age and more efficient grass and feed based systems.
- ➔ Given the improved feed conversion efficiency offered by young bull beef production, market-led production systems for young bulls from both the beef and dairy herd should be encouraged through enhanced research with clear price incentives that result in animals being finished to meet market specifications.
- ➔ Greater research efforts and strong communication programmes from Bord Bia and Teagasc should be developed to outline the opportunities and requirements for profitable domestic production systems for calves from the dairy herd.

- ➔ Research must continue into strategies to reduce GHG emissions in the sector, with involvement in international research initiatives on the issue - this research should include efforts to identify new technology based mitigation strategies, efforts to improve all GHG related herd management parameters (breeding, fertility, nutrition, etc) and efforts to improve quantification of all emissions and mitigation efforts.

Processing

- ➔ In order to remain competitive, the Industry should ensure that processing capacity in the beef sector matches producer output. This should be a guiding objective both for any State intervention in the sector and for industry participants.
- ➔ In light of the likely need for significant consolidation in the beef processing sector, DAFF should engage with the Competition Authority to ensure that the necessary action can be taken within competition rules.
- ➔ DAFF should review the meat inspection system, with a view to achieving the most cost-effective system consistent with ensuring consumer confidence and regulatory compliance.
- ➔ The processing sector, with the support of the relevant State agencies, needs to embrace consumer-led product and packaging innovation to increase value-added beef and sheepmeat exports.

Marketing

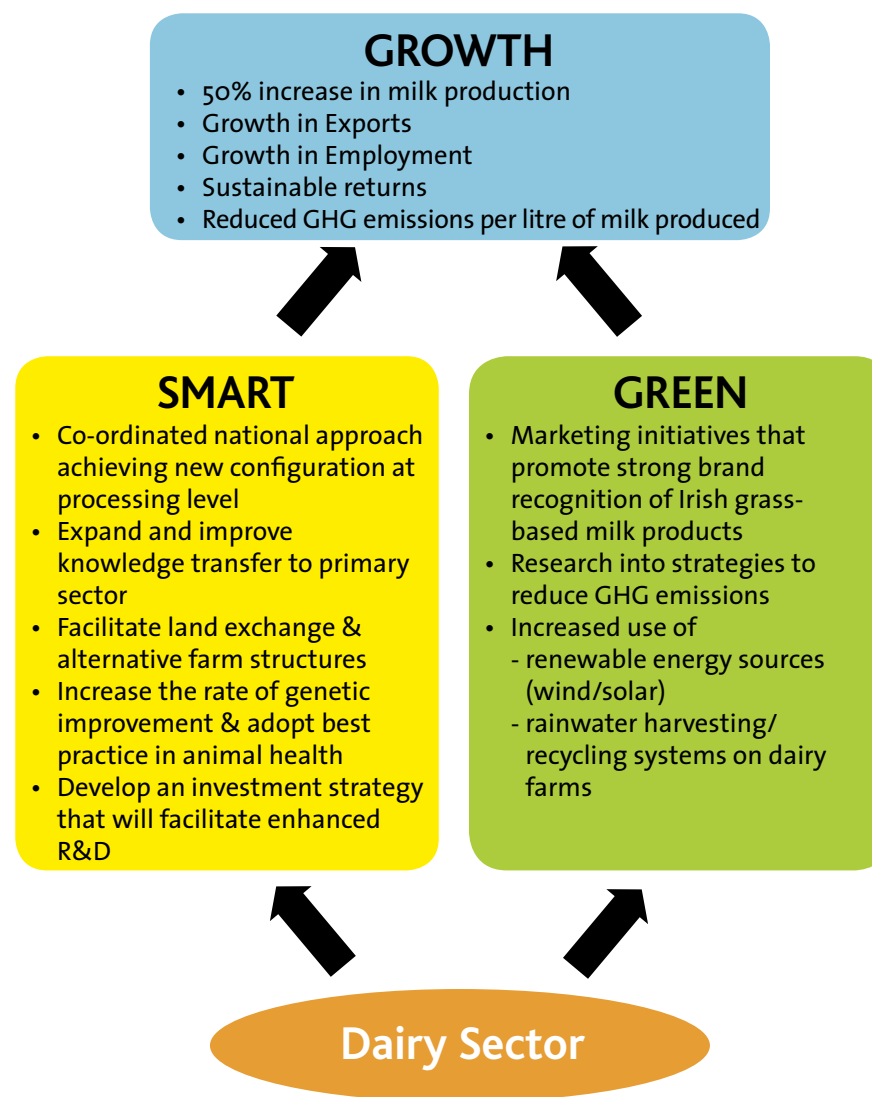
- ➔ Initiatives to position Irish grass-fed beef as a premium product in high value EU markets should continue. Specific efforts should focus on reducing the current price gap between Irish beef and premium products in these markets.
- ➔ Given the potential to position Irish grass-fed beef as a premium product in US markets, developments with regards to market access issues in this market should be continually monitored.
- ➔ Bord Bia's current strategy of differentiation and premiumisation to extend to 2020.
- ➔ The positive environmental, human-health and animal-welfare attributes associated with grass-fed beef and sheepmeat should be credibly established with a view to building them into marketing opportunities for Ireland. In addition, environmental criteria should be built into Quality Assurance schemes.
- ➔ Producers, processors, retail and foodservice operators should examine the potential for forward contracts within the supply chain with a view to providing clearer market signals and price stability to all involved.
- ➔ In recognition of the emergence of valuable by-product markets, the industry, in conjunction with Bord Bia, the Department of Foreign Affairs and DAFF, should identify a list of target markets for which access for Irish beef, beef offals and breeding stock should be secured. DAFF's Market Access Group, involving industry and Bord Bia should also continue to identify and target market access opportunities for Irish beef including live exports.

4.2 Dairy

Prospects for the dairy sector in the medium to long term are positive. Given projections for significantly increased demand, the abolition of EU milk quotas in 2015 presents a real opportunity for the Irish dairy sector, with a significant potential for increased milk production. The sector also possesses a significant cost advantage in the form of an environmentally sustainable rain fed grass-based production system, which allows milk to be produced efficiently for much of the year.

However, for the sector to flourish at optimum level, efficiency gains will be crucial at primary and processing level, as, while prices are expected to rise, simultaneous increases in the costs of agricultural production are also projected. The achievement of a significant increase in milk output requires in the first instance a milk price level and farm cost structure that will provide viable farm incomes and sustain the family farm model. Effective measures at EU level to mitigate price/income volatility will also be important, while at a national level, the issues of land availability and optimum processing capacity will have to be addressed.

On the basis of available data the Committee believes that a target of a 50 per cent increase in milk production by 2020 (using the average of the years 2007 to 2009 as a baseline) would be realistic and achievable, and that this will set the foundation for further expansion in subsequent years. This 2.75 billion litre increase would enhance the primary output value of the sector by about €700 million with further downstream benefits in the form of increased dairy product values, export earnings and employment. The report recommendations are designed to support the realisation of this potential growth and to provide a sustainable return for competitive producers and processors.



Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the dairy sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Milk Processing

- ➔ The processing industry must move towards a small number of scaled operators who have the scale and culture to drive efficiency and value added in line with key international competitors who have already achieved consolidation.
- ➔ The processing sector must ensure that processing capacity meets the expected increased milk supply post quotas.
- ➔ Given that indicative costings are believed to be in the region of €400m, the industry at all levels must engage on alternative options for financing the expansion in capacity to process anticipated volume growth, including investigating efficient solutions to the processing of milk during the period of peak seasonal milk supply.

Farm Competitiveness

- ➔ The future of the sector requires a co-ordinated national approach. DAFF should facilitate this through establishment of an activation group to encourage stakeholder engagement.
- ➔ Producers, with the support of state agencies and AHI, should adopt a best-practice approach to animal health to facilitate improvements in the quality of milk being produced.
- ➔ DAFF and livestock industry should continue to support Teagasc and ICBF in their programme of genetic improvement, including the application of new and emerging genomic technologies that will contribute to a more profitable dairy farming sector.
- ➔ The Industry should support AHI in its mission to enhance value for livestock farmers and the agri-food industry through superior animal health.
- ➔ In the run up to quotas being abolished in 2015, DAFF should implement a more flexible and fully national Milk Quota Trading Scheme for the remainder of the milk quota regime.

Technology Transfer

- ➔ Teagasc should set a target of ensuring that 9,000 progressive milk suppliers are participating in vibrant discussion groups, implementing advanced production techniques and preparing management accounts for their enterprises as underpinned by the Dairy Efficiency Programme.

- DAFF and Teagasc should encourage primary producers to optimise efficiency by adopting new technology and best commercial practice. Attendance at relevant discussion group meetings, farm walks and demonstration events should be built into the conditions of new schemes as appropriate.
- Training schemes and college education programmes at all levels must be critically examined to ensure appropriate practical/technical content, and a greater focus on business and project management skills.

R&D and Marketing

- The processing sector, supported by Enterprise Ireland, Teagasc and third level institutions, must develop an investment strategy that will facilitate more commercially focussed R&D.
- R&D should be targeted to new product and process development with a greater focus on product areas with added-value potential, such as nutraceuticals and functional foods.
- The relevant State agencies should develop fresh marketing initiatives that promote strong brand recognition of Irish grass-based milk products, possibly in the context of a more focused application of the 'Ireland - the Food Island' concept to the dairy sector.
- Research must continue into strategies to reduce GHG emissions in the sector, with involvement in international research initiatives on the issue. This research should include efforts to identify new technology-based mitigation strategies, efforts to improve all GHG-related herd management parameters (breeding, fertility, nutrition, etc) and efforts to improve quantification of all emissions and mitigation efforts.



Image courtesy of Bord Bia

4.3 Sheep

In common with all major producers across the EU, Ireland's sheep sector has witnessed downward pressure on production over recent years with reductions in flocks and pressure on income. However, it is expected that over the coming years demand on the European market will outstrip production levels, which could provide opportunities for exporting countries such as Ireland. This should provide the potential for better returns provided the industry can continue the market and product diversification evident over recent years. At producer level there is likely to be improved price prospects provided an increased focus on production efficiency and product quality is evident.

When domestic consumption is included, it is estimated that the Irish sheep industry is currently worth around €250 million, with over two thirds of output exported. With a renewed commercial focus by the sector, building consumption on the domestic market and through the implementation of the recommendations listed underneath a growth in output value of 20% is achievable by 2020.

Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the sheepmeat sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Farm Competitiveness

- DAFF should continue to support investment in sheep fencing and handling facilities to reduce labour costs through the RDP Programme.
- The sector must improve the uptake of new technology on farms through the greater use of discussion groups and the Teagasc BETTER farms programme for sheep.

- DAFF and the sector should strongly support Sheep Ireland, which has been established to develop a new breed improvement programme.
- The processing and production sectors must collaborate to improve the focus on quality production through the adoption of more discerning carcase classification systems by means of mechanical grading and transparent price reporting systems.
- The relevant State agencies and Teagasc must improve the focus on meat quality through initiatives such as the Bord Bia Lamb Quality Assurance Scheme.
- The Committee endorses the findings and the recommendations of the Malone report and calls for their full implementation by all relevant stakeholders.

Processing

- In order to remain competitive, the Industry should ensure that processing capacity in the sheepmeat sector matches producer output. This should be a guiding objective both for any State intervention in the sector and for industry participants.
- The processing sector, with the support of the relevant State agencies, must increase product and packaging innovation to increase the added value of sheep exports.
- The sector should extend its product range, including the marketing of 'local' lamb to the domestic market, with support from the relevant State agencies.

Marketing

- DAFF and Bord Bia should continue to promote lamb in the home and export markets, and also facilitate the diversification of exports from a dependence on exports of lamb carcasses to more processed cuts.
- DAFF should support EU initiatives to secure EU promotional funding for generic lamb promotion to promote EU lamb consumption.
- DAFF and the relevant State agencies should develop marketing opportunities centred on the positive environmental attributes of sheep farming.

4.4 Horticulture

The horticulture and potato sector contributed approximately €370 million to farm output in 2009. The sector makes an important economic contribution and generates significant ancillary employment in areas such as preparing, packing produce, distribution, retail, garden design & landscaping.

The domestic retail and food service markets are the most important markets for Irish fresh horticulture produce. However, mushrooms destined for the UK market represent a major export with a value in excess of €100million. Amenity products which comprise 20% of total production, are focused to a large extent on the domestic market. The main exports are Christmas trees, nursery stock & cut foliage.

The sector faces competitive pressures, particularly due to high input costs, notably energy, competitively priced imports, lack of scale and limited development in innovation.

Notwithstanding this, the sector has potential for further development. The food service market offers opportunities to replace imported product with home grown seasonal produce, to supply into the organic market and to diversify to meet ethnic food demands. Bord Bia's recent review of the amenity sector identified the need to innovate, to develop new products and services and markets. It considered that the best way to do this was through a coordinated approach where businesses, both large and small would combine resources to exploit new opportunities.

Horticulture has been transformed in the past decade by technological advances. Technology and advances in plant genetic research offer new products, new production methods and new approaches to the market. Maximising this potential requires a greater integration between state agencies, research institutes and industry. Existing development programmes and schemes should be looked at, and restructured, if necessary, to assist the commercialisation and adoption of new developments in horticultural technology, with the objective of facilitating and assisting entrepreneurs take advantage of the opportunities arising from emerging technology and the intellectual property associated with it.

Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the horticulture sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Restoring Competitiveness

- DAFF should encourage greater participation in the development of producer organisations to facilitate greater bargaining power in the marketplace and to encourage the adoption of new technologies and best practice at sub-sectoral level.
- The industry must continually adapt its production methods both to minimise environmental effects and to benefit from adopting green technologies.
- Relevant state agencies should foster product and production innovation, the adoption of emerging technologies and plant breeding.
- Processors should invest in specialised plant and equipment to improve labour productivity, working conditions and the quality of output.
- DAFF should review funding under the Horticultural NDP with a view to maximising the uptake of green technology, including water recycling, energy from waste and innovation based on plant production.
- The relevant Departments should review existing programmes and supports in relation to the horticulture sector, and should identify any changes in legislation or in the scope and type of measures required to develop the industry and associated businesses.

Branding and Marketing Issues

- DAFF and the relevant State agencies should further promote the health benefits of fruit and vegetable consumption as part of a healthy lifestyle.
- Bord Bia should identify opportunities in relation to new products, e.g. herbs, indoor fruit production, mini potatoes, ornamentals and develop consumer awareness of domestic varieties.
- Bord Bia-led market research should explore the opportunities for production of non- traditional fruit and vegetables.



Image courtesy of Bord Bia

4.5 Organic Production

While the organic sector in Ireland is relatively small in relation to agriculture as a whole, the sector does represent an opportunity for growth. The annual value of the domestic market is approximately €100 million with some 1,500 operators engaged in organic production. Unlike many sectors of horticulture, and indeed the industry as a whole, where the trend is towards consolidation, organic production is particularly suited to small-scale production.

Incentives introduced by the Government in the form of the Organic Farming Scheme and the Schemes of Grant Aid for the Development of the Organic Sector have been crucial in facilitating recent upward trends in organic production. Currently, a significant percentage of the Irish organic food market is comprised of imports. This is largely due to the fact that both the organic tillage and horticulture sectors are underdeveloped. There is also very considerable scope for exports of organic red meat. The organic sector therefore offers real opportunities for Irish farmers and food processors. The Committee believes that this significant growth potential can be realised by focussing on both:

- import substitution in areas where Ireland is under-producing at present, and
- large export markets such as the UK and Germany. With a current organic market exceeding €2 bn, the UK provides significant export opportunities.

Based on these opportunities, the Committee endorses the targets set out in the Programme for Government. An increase in organic land use to 5% from the current level of just over 1% is ambitious and will require actions in a number of areas including promotion, marketing, innovation, research and product development.

Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the organic sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

- DAFF should continue to directly support the sector through the Organic Farming Scheme and the Schemes of Grant Aid for the Development of the Organic Sector.
- Bord Bia should continue to build consumer awareness of the availability of Irish organic produce through National Organic Week campaigns and the National Organic Awards.
- Bord Bia should develop export markets and enhance the profile of the Irish organic produce by attending major European food fairs such as Biofach.
- Teagasc should continue to carry out sector specific research, innovation and product development.

4.6 Pigmeat

The pigmeat sector contributed approximately €300 million to farm output in 2009. With 470 commercial pig production units producing 2.8 million pigs, the Irish pig industry makes a valuable contribution to farm income, employment and export earnings. As pork consumption worldwide is expected to grow steadily over the period to 2020, the challenge for the Irish industry is to share in that growth. The main barrier to growth is low profitability at both producers and processor level, coupled with high feed, energy, compliance costs and environmental constraints. While there is likely to be a reduction in the number of farmers producing pigs, it is envisaged that unit size, already large by European standards, is likely to increase.

The report broadly concurs with the views expressed in the Pig Industry Development Strategy in terms of the potential for positive growth. If the potential that worldwide growth in demand represents is fully capitalised upon and the profitability gap can be addressed, a target of 50% growth in the value of output by 2020 (using the average of the years 2007 to 2009 as a baseline) may be achievable. This would primarily be on the basis of improved sow productivity and a significant increase the size of national sow herd.

As with all the sectoral analyses, the recommendations to realise the potential of the pigmeat sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3

Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the pigmeat sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Competitiveness

- The industry must continually adapt its production methods to minimise environmental effects.
- DAFF should convene a forum of relevant stakeholders including tillage farmers, pig producers and pig processors to investigate economies and efficiencies that could be achieved through enhanced cooperation in these sectors.
- Teagasc should enhance its programme of benchmarking pig herd performance to both monitor progress and support a revitalised programme of knowledge transfer. Producers, with the assistance of Teagasc, must focus on increasing sow productivity through the adoption new technologies and best practice.
- DAFF should review the pigmeat inspection system, with a view to achieving the most cost-effective system consistent with ensuring consumer confidence and regulatory compliance.

Branding and Marketing

- ➔ Industry and producers should extend their participation in the Bord Bia Piguemeat Quality Assurance Scheme.
- ➔ All stakeholders should continue to ensure that Ireland is free from Aujeszky's disease and pursue the overall achievement of 'white list' status on animal disease.
- ➔ DAFF should lead efforts towards obtaining market access to additional countries, that represent potential new viable outlets for Irish pigmeat, through negotiating the veterinary conditions for trade with these countries.

Environmental and Welfare issues

- ➔ The Committee welcomes the provision of grant aid for the sector to facilitate compliance with EU animal welfare regulations through the sow housing (animal welfare) scheme supported through the Rural Development Programme.
- ➔ The industry should urgently investigate alternative waste usage and disposal options from the pig sector, such as energy/heat production and anaerobic digesters

4.7 Cereals

Approximately 12,000 cereal growers, half of which are specialised, produce Ireland's cereal output. The relatively small size of the sector belies the important contribution it makes to agriculture and to the economy as a whole. More than two-thirds of the grain Ireland produces is used for animal feed purposes, while the remainder is a valuable raw material for Ireland's brewing, distilling and flour milling industries.

While growers face significant pressures in the period to 2020 including those associated with price volatility, climatic and disease issues, the medium term projections on EU markets are positive due to a relatively well-balanced cereal market. Furthermore, world market cereal prices have been projected to settle at higher levels than seen in the last decade. However, competitive pressures, such as high input prices, small and fragmented scale of holdings and the cost of rented land, place Irish growers at a disadvantage when compared with our competitors.

Conversely, domestic demand would rise on the basis of the predicted increase in numbers in the livestock, dairy and pig sectors to 2020. This increase in demand together with the fact that Ireland is only 80% self-sufficient in grain means there are opportunities to increase production without significantly affecting market prices. Furthermore, the yield potential of good Irish tillage land is among the highest in the world, while alternative biofuel-related uses exist for cereals on international markets. However the sector is currently facing a significant profitability problem due to continuing high costs. Optimising yields, tackling high costs and targeting higher priced domestic markets will be necessary to reverse the declining production trends. Retention of an indigenous malting barley industry is also important for the sector.

Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the cereals sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Restoring Competitiveness

- ➔ Growers should place a greater emphasis on diversification in the tillage crops grown, with greater consideration given to beans, peas, oilseeds, biomass crops etc. to increase overall returns per hectare.
- ➔ A greater level of winter sowing should be examined by Teagasc and growers as these crops are higher yielding and would spread the use and cost of machinery.
- ➔ The possible role of new risk management strategies such as a greater reliance on farm insurance systems to cover production and market risks should be examined by DAFF and relevant stakeholders, particularly in the context of the CAP post-2013 deliberations.
- ➔ DAFF should convene a forum of relevant stakeholders including tillage farmers, pig producers and pig processors to investigate potential economies and efficiencies that could be achieved through enhanced cooperation in these sectors.
- ➔ Increased targeted use of slurry should be promoted as it remains an effective means of reducing overall fertilizer costs, but also has environmental benefits when undertaken with, for example, pig or poultry producers.
- ➔ Industry needs to urgently prepare for the impact of the new EU pesticide regulations to ensure the sustainability of crop production in Ireland.

- ➔ Teagasc should continue to undertake research into low input, more efficient and more environmentally friendly production systems and ensure that relevant research is applied at farm level.
- ➔ DAFF in conjunction with relevant agencies should examine the feasibility of Ireland becoming a source of basic or semi-basic seed for Europe.
- ➔ Teagasc should continue to provide an impartial research programme on the issues of GM crop cultivation to policy makers, tillage farmers, and the general public, in order that Ireland can engage in scientific discussions on new crop technologies and be to the forefront of technology should EU policy on GM crop cultivation alter and broader acceptance of the merits of GM technology emerge.
- ➔ Research should be undertaken into high value areas such as biopharmaceuticals, bioplastics and bioremediation.

Branding and Marketing Issues

- ➔ The focus of the Irish Grain Assurance Scheme should further highlight its benefits, in terms of its guarantee of quality and safety.
- ➔ Price risk management, including forward selling, is a necessity in a globalised market and industry must further develop these instruments.
- ➔ Farm organisations should promote farm to farm sales of grain as an efficient alternative route to market for both cereal growers and livestock feeders, adding value for growers while reducing costs for feeders.

4.8 Poultry

Poultry output has held up well in recent years in spite of the severe competition from imports. The output value of poultry production is around €150 million annually, with €120 million from poultry meat and €30 million from eggs. Unlike most other sectors, the poultry sector is entirely domestically focussed with strong competition from imports an ongoing issue. It is estimated that under half of overall poultry meat consumed in Ireland is produced here, with 85% of eggs consumed Irish produced.

Despite pressure on profit margins for poultry producers, opportunities to reduce costs and increase efficiency do exist in the sector. There is scope for some reduction in transport costs. Furthermore, greater efficiencies could be achieved through cost effective energy use in terms of increased scale and volume of modern housing facilities for birds as well as improved food conversion rates and an improvement in the quality of birds produced. Availing of these opportunities can help maintain the viability of producers and lead to a 10% increase in the value of poultry output by 2020

Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the poultry sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Restoring Competitiveness

- The industry should implement zoonoses legislation rigorously in order to ensure ongoing consumer confidence.
- DAFF and Teagasc should promote research into, and adoption of, new technologies and practices aimed at improving efficiency, increasing return on investment and improving environment protection.

- The Committee endorses the provision of grant-aid for adaptation to enriched cage and free range systems as part of the revised Rural Development Programme.
- Encourage the industry, with the support of Enterprise Ireland, to invest in innovation and value-added output.

Branding and Marketing

- Bord Bia should continue to promote the poultry and eggs Quality Assurance Schemes in order to prevent displacement by imported poultry meat.
- DAFF should negotiate veterinary conditions for trade with third countries identified by exporters as potential new viable outlets for poultry.



Image courtesy of Bord Bia

4.9 Seafood

Growth Potential and Targets

The Irish seafood sector currently has an annual estimated sales value of €700 million and employs 11,000 people mostly in peripheral coastal communities. While the Irish seafood sector faces major immediate challenges, the potential exists to capitalise on strong demand to increase revenue to €1 billion and employment to 14,000 full-time equivalent jobs by 2020 in sea fisheries and aquaculture, with a 78% increase in aquaculture volume production.

The catching sector consists of pelagic, demersal and shellfish fisheries. The principal growth potential lies in increasing unit value through improved quality, better marketing and additional processing, additional non Irish landings to Ireland and limited development of new species. The aquaculture sector comprises finfish and shellfish farming enterprises. Ireland has an excellent environment for the production of high quality farmed fish and shellfish and it is principally on the basis of quality that the sector can compete successfully.

Sector Specific Issues

The review currently underway of the Common Fisheries Policy, due to be completed by 2012, is of critical importance to the future of the sector for the next decade, particularly with respect to access to resources for the Irish industry. Production of wild fish is regulated at national and EU levels. International obligations to have fishing rates at a Maximum Sustainable Yield (MSY) by 2015 may lead to reductions in allowable catches for some stocks in the short term. As stocks recover these reductions should be reversed by 2020. This transition will pose particular challenges in the intervening period.

88% of the fish caught in the Irish EEZ zone is by non-Irish vessels. Trends in fuel prices suggest it will be more advantageous for more non-Irish vessels to land in Ireland than in their home countries, which if available for sale in Ireland would benefit domestic processors.

Profitability of the catching sector is heavily impacted by trends in fuel costs, global trade patterns and world prices for seafood products.

Apart from pelagic species, a fragmented domestic sales structure, lack of scale and the large scale commodity export of unprocessed fish currently leads to limited domestic added value and poor producer prices for many Irish producers. The Irish fish processing sector in 2010 consists of 200 firms, 50% of which have a turnover of less than €1 million each. A lack of scale, higher production costs and inconsistency of product supply adversely affect the profitability of the sector



Image courtesy of Bord Bia

Aquaculture growth is currently constrained due to licensing and funding difficulties arising from challenges in meeting EU environmental requirements.

Recommendations:

Supporting Innovation, Restructuring and Added Value

- ➔ The twin development and research strategies for seafood, "Steering a new course, a Strategy for a Restructured, Sustainable and Profitable Seafood Sector 2007-2013" and "Sea Change, a Marine Knowledge, Research and Innovation Strategy for Ireland 2007-2013" supported by DAFF, BIM, Marine Institute, Bord Bia, EI and industry should continue to guide immediate priorities, consistent with available resources.
- ➔ The share of catch being processed by Irish companies should be progressively increased, adding value in Ireland. While seeking to maximise landings from Irish vessels, sourcing additional supply for Irish processors from non-Irish vessels should be encouraged.
- ➔ The development of innovative, consumer oriented seafood products should be supported by BIM Seafood Development Centre and Teagasc Ashtown Food Research Centre.
- ➔ The R&D programmes on marine biotechnology development and marine functional foods underway by the Marine Institute should be continued and intensified.

Competitiveness

- ➔ While recognising the place of specialist processors serving niche markets, restructuring and enhanced co-operation within the production, sales, marketing and processing areas should be supported by specific programmes.
- ➔ The skills levels in the sector should to be augmented by focused technical training and boosting of management competence through the introduction of training, mentoring programmes and Graduate Placement programmes.

Marketing

- ➔ There should be a greater integration of the seafood sector into the Irish food sector and treatment of it as such.
- ➔ The implementation of quality and traceability labelling including voluntary labelling and certification for Irish fish products should be accelerated by the sector with appropriate supports from BIM and Bord Bia to differentiate Irish products on domestic and export markets.
- ➔ At EU level, Ireland should press for amendments to the Common Organisation of the Markets (CMO) to make it mandatory to give full details of origin of product to the consumer to differentiate Irish seafood from imports.

Catching Sector Management

- ➔ The implementation of a specific Inshore Fisheries Management framework should proceed as speedily as possible, to allow sustainable management of high value inshore stocks, consistent with conservation requirements.
- ➔ DAFF, and the Sea Fisheries Protection Authority (SFPA), should work with the seafood sector to develop simplified, effective administration systems for the sector, consistent with EU regulations and conservation requirements.

Aquaculture Management

- ➔ The relevant Departments and state agencies should resolve current difficulties related to Aquaculture licensing, to facilitate timely issuing of new and renewed aquaculture licenses consistent with EU conservation directives. This will underpin existing investments and underpin additional investment.
- ➔ The Marine Institute in conjunction with Bord Iascaigh Mhara should work with industry to research and develop inshore and offshore aquaculture and alternative species on a commercial and profitable scale.

Environmental Issues

- ➔ Ireland, principally through the Marine Institute, should continue taking a leading role in improving the quality of marine science related to water quality and wild fish stocks.
- ➔ The Irish seafood sector, with DAFF, BIM and MI, should promote the development of long-term management plans for fish stocks having regard to the need for environmental and social sustainability.
- ➔ The industry, supported by BIM and MI, should continue to develop environmentally sustainable fishing and aquaculture production methods to secure a sustainable resource base and to underpin the development of a smart, green and clean image which contributes to the overall strategy for the food industry.

4.10 Forestry & Bio-Energy Crops

Forestry, through the afforestation schemes in place since 1996, makes a number of direct and in-direct contributions to the wider economy which can be divided into timber and non-timber varieties. For every one million euros in expenditure in the forestry sector, it is estimated that a further €850,000 in expenditure is generated in the rest of the economy. Overall, net trade in timber remains negative indicating an increasing opportunity for import substitution. Wood, as a source of renewable energy continues to grow in importance, and will play an important part in meeting the Government's targets for renewable energy especially as it is already the largest source of renewable energy in Ireland.

Apart from the benefits accruing to biodiversity, leisure and recreation, carbon sequestration is by far the biggest non-production benefit. The role of Irish forests is key to the country meeting its international climate change targets. Carbon sequestration by eligible forests in Ireland is currently estimated at 2.074 million tonnes per annum. In order to sustain production and processing of timber from Irish forests, a well-balanced age structure is required at the national level. This means that the decline in planting levels in recent years will need to be reversed.

The development of a bioenergy industry depends on a number of factors including evolving bioenergy policies and supports and continued investments in research, development and innovation. These issues require continued close co-operation with the Department of Communications, Energy and Natural Resources. DAFF has been providing support to farmers to establish some non-food crops through a Bioenergy Scheme since 2007.

A number of support mechanisms are currently in place to develop a market for solid biofuels in Ireland. The Reheat and Greener Homes schemes have generated interest in using biomass-heating fuels. New opportunities and market outlets are emerging for miscanthus and willow crops, as more businesses and households switch to biomass heating systems. Ireland's climatic and soil conditions are very suitable for planting of these crops and offer a new rural economic activity as well as entry for agriculture into a large expanding energy market. These crops can deliver positive outcomes in terms of reduced CO₂ emissions and, potentially, deliver extra sources of income for rural communities. There may also be scope for other bioenergy crops such as eucalyptus.

A vibrant non-food crops industry would provide Irish farmers with added income streams. Given a favourable environment for development, Irish farmers can make a substantial contribution towards meeting Government targets and policies in the bioenergy and non-food crop sector.



Recommendations

As with all the sectoral analyses, the recommendations to realise the potential of the forestry and bioenergy sector should be considered in tandem with the general farm and industry level recommendations set out in Section 3.

Restoring Competitiveness

- ➔ DAFF and Industry should further explore measures to bring about a significant increase in the annual afforestation level per annum to 2020. DAFF will continue to examine more efficient methods of increasing the planting level in view of its urgency. The Committee recommends the adoption of the target planting rates for afforestation to be agreed in the parallel Forestry Review due to report by end-2010.
- ➔ Industry should promote producer groups in order to reduce management costs and increase the marketability of timber from private forests.
- ➔ DAFF should continue to support the provision of the forest road network, while also evaluating new infrastructure systems.
- ➔ Industry and representative organisations should support operator training and education.
- ➔ Teagasc and the relevant third-level institutions should ensure relevant and up-to-date training to meet new developments.
- ➔ DAFF should continue to support the growing bioenergy sector through the Bioenergy Scheme, co-funded by the EU under the Rural Development Programme.
- ➔ Supply chain mechanisms should be developed to ensure biomass crops are brought to market and full market returns realised.

- ➔ The relevant state agencies, growers and the timber-processing sector should collaborate to improve and develop the timber supply chain to reduce costs and increase efficiencies.
- ➔ DAFF should lead an intensive marketing campaign on the benefits of farm forestry, including supplying the bioenergy market to attract new entrants.

Environmental issues

- ➔ DAFF and the relevant State agencies should continue to research the ability of forestry to sequester carbon and the extent to which it can help to reduce Ireland's greenhouse gas emissions from agriculture and the non-emissions trading sector in general.
- ➔ DAFF and the relevant State agencies should consider the development of a national certification standard for sustainable forestry management.
- ➔ The Industry should plant more broadleaf varieties to improve biodiversity and leisure benefits.

Research and Development

- ➔ The timber processing industry should invest in R&D and innovation to assist product development and forestry management.
- ➔ Teagasc should continue to research the potential of crops to provide energy and develop efficient production, harvesting and storage methods.
- ➔ DAFF, via the COFORD research programme, should continue to support sustainable and competitive forestry practices and policies that contribute to building and maintaining a knowledge economy and scientific research in a vibrant forestry sector

2020



Department of
**Agriculture,
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