Department of
Agriculture,
Food and the Marine
An Roinn
Talmhaíochta,
Bia agus Mara

LOCAL ROOTS GLOBAL REACH

Food Wise 2025

A 10-year vision for the Irish agri-food industry

Local Roots Global Reach

Food Wise 2025

A vision for growth for the Irish agricultural economy for the next 10 years.

Terms of reference for the 2025 Agri-Food Strategy Committee

The Committee will prepare and present to the Minister for Agriculture, Food and the Marine, a draft strategy for the development of the agri-food sector for the period up to 2025. The strategy will outline the key actions required to ensure that the agri-food sector maximises its contribution to economic growth and exports in an environmentally sustainable manner over the coming decade, building on the progress achieved under Food Harvest 2020. The Committee will also be tasked with considering employment creation opportunities within the sector and advising on measures that could deliver further jobs.

The Committee's report will be short and specific and will focus on key recommendations addressed to all the lead players in the sector. It is not expected to contain detailed analysis of the sector, but rather will draw on analysis already prepared, including the background papers available on the Department's website at **www.agriculture.gov.ie/2025strategy** and such additional material as the Committee considers relevant. The Committee will also have access to all submissions made as part of the public consultation and to further discussion papers to be prepared by the Committee secretariat. It is expected that the draft Agri-Food 2025 Strategy will be presented to the Minister in July 2015.

Committee Members

The composition of the Committee is as follows:

- Chair: John Moloney
- Helen Brophy, Director of Executive Education at UCD Michael Smurfit Graduate Business School
- Laura Burke (CEO and Chair) of EPA
- Carmel Cahill, Senior Counsellor, OECD Trade and Agriculture
- Kieran Calnan, Chair of BIM
- Michael Carey, Chair of Bord Bia
- Vincent Carton, CEO / Managing Director, Cartons
- Noel Cawley, Chair of Teagasc
- Vincent Cleary, Managing Director Glenisk
- John Comer, President of ICMSA
- Donal Dennehy, Operations Director, Danone Ireland
- Michael Dowling, Chairman-designate, Kerry Group PLC
- Eddie Downey, President of IFA
- Siobhan Egan, Senior Policy Officer, Birdwatch
- Pat Glennon, Managing Director, Glennon Brothers
- Jim Hanley, Chief Executive, Rosderra
- Michael Hoey, Managing Director, Country Crest
- John Horgan, Chief Executive, Kepak
- Alan Jagoe, Progressive farmer
- Martin Keane, President of ICOS
- Caroline Keeling, Chief Executive, Keelings
- Tony Keohane, Chairman, Tesco Ireland
- Patrick Kent, President of ICSA
- Kevin Lane, Chief Executive, Irish Dairy Board
- Anna Malmhake, Chairman and CEO, Irish Distillers Pernod Ricard
- Tom Moran, former Secretary General of the Dept of Agriculture, Food and the Marine
- Larry Murrin, CEO of Dawn Farm Foods
- Sean O'Donoghue, CEO of Killybegs Fishermen's Organisation
- Kieran O'Dowd, ex President of Macra Na Feirme
- John O'Reilly, Food Analyst, Davy's
- Larry O'Reilly, Cereal farmer
- Prof Dolores O'Riordan, Director of the Institute of Food and Health (UCD)
- Terence O'Rourke, Chair of Enterprise Ireland
- Eddie Power, Managing Director, 2 Sisters Food Group
- Prof Paul Ross, Prof of Research (UCC)
- Siobhan Talbot, Group Managing Director, Glanbia
- Secretariat: Department of Agriculture, Food and the Marine. Bord Bia, Teagasc and Enterprise Ireland

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A vision
for growth
2015 2025

Content

A vision for success

Food Wise 2025 sets out the practical ways in which aspirations for growth can be made tangible and the sector supported as it strives for new levels of success in the decade ahead.

Ireland's agri-food industry is on a journey, one that is connecting local communities across the island to vast and diverse food markets around the globe. Building on what has been a largely successful decade to date, Food Wise 2025 is setting out a vision of the industry continuing along this course of growth, recognising the importance of strategic foresight if emerging opportunities are to be fully realised in the decade ahead.

Agri-food is Ireland's oldest and largest indigenous industry, deeply embedded in the landscape, history and personality of the country. It encompasses everything from primary agriculture to food and beverage production, from fisheries and fish processing to forestry and forestry outputs. Its strategic importance to the Irish economy, its roots in local communities and its strengthening global reach (the industry provides quality, safe and nutritious food to consumers in at least 175 countries around the world) make it a sector unlike any other. A renewed focus on export growth, combined with a longstanding commitment to excellence, have, in recent years, created a host of new opportunities for established industry players as well as emerging entrepreneurs. With the agri-food sector now recognised as one where ambition and investment are rewarded, Food Wise 2025 sets out the practical ways in which aspirations for growth can be made tangible and the sector supported as it strives for new levels of success in the decade ahead.

Our wealth and potential as an island begins in the earth beneath us and the sea around us. Agri-food is embedded in local communities across Ireland in ways that no other industry can match. It is the main economic driver in many rural areas and, in terms of direct and indirect employment and wealth creation, its impact across the country is unparalleled. Its standing as Ireland's largest indigenous industry is more than a question of economic ownership. The agri-food sector uses more domestic inputs than any other sector of the economy and, as farmers, fishermen, forest owners and food businesses supply their goods and services, their actions add to the common good in often underappreciated ways. They are custodians of Ireland's natural landscapes and its environmental riches, while their support for local community activities underwrite Ireland's social and cultural wellbeing in countless ways.

Food and Beverages Exports 2014

This firm rooting in the local is, of course, only one side of the story. The sector's focus on international export markets has been a longstanding one, but the more recent renewal in export growth has been unprecedented and has led to a dramatic shift in perceptions around the industry. Building on strong macro economic trends, Irish food and drink exports grew strongly in the years 2010 to 2014 and, against the context of domestic and global recession, the sector's achievements were striking. Agri-food is now firmly positioned at the heart of Ireland's journey to economic recovery. This dual aspect of the industry – its distinctive contribution to local economies and its growing international footprint is underlined by the fact that net foreign earnings generated from agri-food exports are greater than non agri-food sectors of the economy.

Against this positive backdrop, Food Wise 2025 has been conceived as providing both vision and strategy for the future development of the sector. It builds on a successful lineage in this regard. Five years ago, the Department of Agriculture, Food and the Marine (DAFM) launched Food Harvest 2020, which set out smarter and greener ways to deliver sustainable growth and recommended a suite of actions, on a sub-sectoral basis, to support the industry's development.

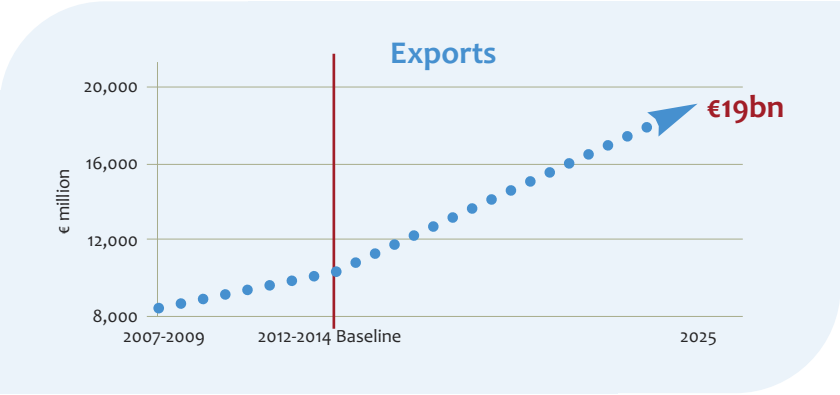
Like Food Harvest 2020, Food Wise 2025 has been informed by a committee of industry stakeholders and can be viewed as a framing document and a statement of intent. It represents the shared voice of an industry striving to create a business and regulatory environment in which the extensive growth opportunities of the next 10 years can be fully capitalised on.

It is appropriate to recall that, at the time of the launch of Food Harvest 2020, Ireland's agri-food sector had come through a particularly difficult period and the vision painted of an industry that could capitalise on growing global demand for high quality, safe and nutritious food seemed a distant one to some. Five years later, Food Wise 2025 reflects an industry with a far stronger sense of its own capacity and a clearer picture of where the opportunity ahead lies (it is 'wise' therefore both to its own strengths and to the demands and opportunities of the marketplace). Globally, that demand continues to grow, bringing with it an increasing requirement for more sophisticated food solutions, particularly among the emerging middle classes of Asia and Africa.

The learnings of the last few years, then, are not simply that the world wants more food but that the opportunity for Irish agri-food is in meeting this demand at the upper end of the market. Irish food and drink exporters will find their greatest opportunities where they provide offerings that target different life-stage requirements, fit into the lifestyle choices associated with convenience and well being, and provide products with clear nutritional and health benefits.

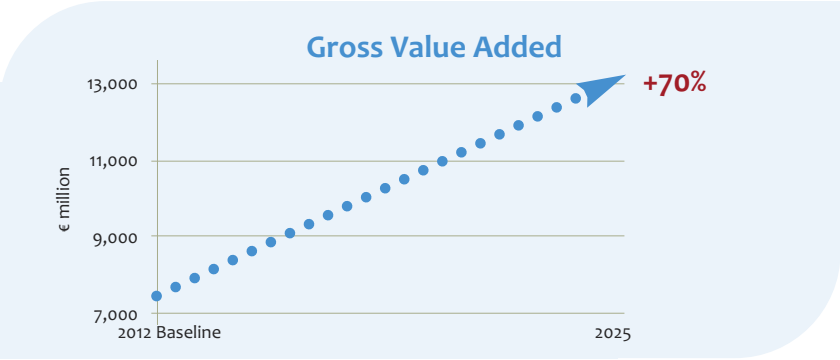
Food Wise 2025 sets out how Ireland and the Irish agri-food sector can grow by refining its focus around these objectives. It does so recognising, at all times, the importance of the industry committing to processes that are sustainable – economically, socially and environmentally.

The industry's export value has the potential to grow to €19bn per annum by 2025, a figure that would represent an 85% increase from the current three-year average.



The opportunity

Food Wise 2025 identifies significant growth opportunities across all sub-sectors of the Irish agri-food industry. Cumulatively, it projects export have the potential to grow to €19bn per annum in value by 2025, a figure that would represent an 85% increase from the current three-year average. This export growth will be driven chiefly by expansion in dairy, beef, seafood and consumer food and drinks exports. Within these sub-sectors the role of value-added products in delivering innovative food solutions to consumers will be pivotal, and will be equally significant whether Irish companies are active in existing mature markets such as the UK or emerging markets such as China. Such developments will result in projected growth in Gross Added Value for the sector of 70% up to 2025.



This projected growth will further cement the agri-food sector's position as a strategically pivotal sector of the Irish economy. As the data alluded to earlier illustrates, economic growth within agri-food has a proportionally more positive impact on communities, both directly and indirectly, than other sectors. The substantial increase in exports and in value added outputs will, firstly, increase direct employment in the sector, with the potential for 23,000 additional jobs to be created up to 2025. The distribution of these jobs across the country will ensure a significant further spin off in terms of the creation of indirect employment.

Sustainability

Food Wise 2025 recognises that a significant increase in food production cannot be considered in isolation from its environmental impact, in particular regarding concerns associated with the depletion of natural resources and the potential impact on climate change. To address this, future food production systems must be as focused on managing and sustaining our natural resources as they are on increasing production. Making the right choices now will ensure that Ireland is well positioned to deliver sustainable growth far into the future.

Ireland comes to this challenge with a number of natural advantages, key among them being a temperate climate which favours a grass-based livestock production system that is more efficient and environmentally sustainable compared to alternative intensive feed systems.

In a fast changing, and unpredictable, world, such comparative advantages cannot be taken for granted. Food Wise 2025 puts particular emphasis on harnessing the broad experience, expertise and knowledge of the Irish agri-food sector and in ensuring this collective wisdom is used to deliver future growth in ways that emphasise the improvement, development and adoption of sustainable processes, using natural resources in a manner which protects them into the future . A guiding principle that Food Wise 2025 will seek to embed at all levels of the agri-food industry is that environmental protection and economic competiveness are equal and complementary: one will not be achieved at the expense of the other. Food Wise 2025 also recognises that the three pillars of sustainability - social, economic and environmental - are equally important and carry commensurate weight. As the sector continues to develop and grow, the view that development must be undertaken within a framework of sustainability must become further embedded in the industry.

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Food Wise 2025 enthusiastically supports the development of technologies and processes that increase productivity, resulting in more efficient use of limited resources. This strategy must be based on the latest scientific evidence and must ensure that the aims of delivering public goods, economic growth and sustainable rural local communities work hand in hand.
In the development of the Food Wise 2025 strategic document, a Strategic Environmental Assessment and an Appropriate Assessment for Natura 2000 areas were conducted in parallel. This environmental analysis helped inform the Food Wise 2025 report.

Delivering growth

Food Wise 2025 identifies a number of areas that require strategic action if the industry is to capitalise on, deliver and maximise the growth opportunities in the years to 2025. In particular, it highlights the need for:

- the attraction, retention, and development of talent right along the supply chain, supported by training that will foster the necessary technical and entrepreneurial skill sets;
- a greater focus on market development that is consumer-insight driven, to ensure Irish products are targeted at the right markets, and the right segments within those markets. These consumer insights will help the sector understand where its opportunities lie in emerging market opportunities, allowing businesses to focus on exports that deliver the best returns;
- productivity improvements that are driven by innovation and the adoption of the latest technologies; and
- value addition to sustainably produced primary materials, which will support local employment growth, ensure the viability of local producers and protect the environment and natural resources.

Food Wise 2025 identifies a number of actions that will facilitate this growth and addresses these areas specifically under the headings of human capital, competitiveness, market development and innovation. These crosscutting actions are complemented by a number of additional sector specific recommendations to support the development and growth of specific sub-sectors of the industry up to 2025.

Consumer insights will help the sector understand where its opportunities lie in emerging market opportunities, allowing it to focus on exports that deliver the best returns.

Human capital

The agri-food sector will only achieve its full growth potential if it can address the skills needs within the industry. This will involve investment in people currently working in the sector, a commitment to knowledge transfer that brings technological and process advances to the industry, and recognition of the need to attract people with the relevant skills into roles within the industry. The agri-food industry offers a host of exciting and rewarding career opportunities but needs to do a better job in communicating its appeal. The pace of change, and the level of new opportunity with agri-food is demonstrated by the fact that the industry can now be viewed as a platform and a partner in the development of other sectors of the economy such as pharma, tourism, bio-economy, biotechnology, bio-energy, IT including big data and precision technologies. These interfaces were largely the stuff of aspiration only five years ago, but now an emerging dialogue between agri-

An emerging dialogue between agri-food and other industries should see an exciting spill over of new opportunities.

food and other industries should see an exciting spill over of new opportunities. The potential to attract new expertise and talent into the industry and to develop new spin off businesses and even new sub-sectors is an opportunity that should be enthusiastically explored in the decade ahead.

At producer level, the improved profitability and viability of enterprises will remain a pressing concern in the decade ahead. This will be driven by the adoption of the latest production technologies and processes, and by improving the financial management capabilities of producers. Such developments will, however, require enhancements and investment, in terms of knowledge transfer and educational supports.

At processing level, the opportunity presented by potential growth of 85% in exports are self-evident and the industry must focus on attracting and rewarding highly motivated and skilled people to achieve these ambitions. The future success of the agri-food sector will require the application of the latest technologies, the best financial management expertise, the capacity to absorb new innovations, marketing and language capabilities, and operational skills in management, marketing production, technical support, R&D and engineering. The agri-food sector will compete with others for the people with these skillsets, and it will be clear that realising the ambitious growth projections for the sector are, to some extent, dependent on its success in this regard.

Innovation

Research, Development and Innovation (RDI) are key drivers of competiveness and central to maintaining competitiveness in the long term. A wide range of state agencies and research institutions deliver high-quality research related to agri-food production and forestry, however, Food Wise 2025 has identified some challenges faced by the sector in relation to RDI.

These centre on gaps that exists (i) between translating research into commercial products and (ii) on the capacity within the sector, both at producer and company levels (in particular SMEs), to absorb new research and innovation. In addressing these challenges, Food Wise 2025 argues that an increased focus on consumer demands and insights must be central to future investment in research and innovation. This greater focus should improve the rate of translation of research into commercial outputs on markets. In this context, Food Wise 2025 recommends that the development of a Centre for Consumer Insight be pursued by relevant sectoral stakeholders. Such a centre would identify key consumer trends and insights in specific markets and inform the industry on further product innovation and product development research. The goal would be to develop solutions that would be easier to commercialise and would focus on value-added solutions driven by market demand.

An increased focus on consumer demands and insights must be central to future investment in research and innovation.

Market development

To fulfil the diverse demands of global markets, the Irish agri-food sector must better understand the specific needs and requirements of consumers in specific markets. With this in mind, it is essential that market and product development be driven by a focus on consumer insights and consumer needs. If the sector is to maximise the growth opportunity presented by increasing global demand for food, industry players must understand these demands and their particular permutations in the markets they are entering. Only when production decisions are driven by high-level consumer insight will the sector be able to confidently say that marketing and sales resources are being applied in the most productive manner.

Food Wise 2025 recognises that part of the process of engaging with new markets is promoting Ireland as a source of food to audiences who may not have a clear understanding of the country and its unique culture, environment and people. Developing Ireland's reputation and building better recognition of the country in these markets will be crucial to opening doors for Irish companies, particularly those entering these markets for the first time. Irish food and drink products sometimes represent the first direct experience of Ireland among consumers in emerging markets, meaning they also represent a significant opportunity to promote Ireland itself. There are clear overlaps between promoting Irish food and drink and identifying the country as a tourist destination and these potential synergies should be further exploited. Food Wise 2025 recommends that relevant Government agencies collaborate more closely to develop the image and reputation of Ireland in emerging markets. Harnessing this positive reputation of Ireland in this way represents an astute and cost effective way to maximise the benefit of marketing spend for the entire Irish economy.

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Competitiveness

As a small, open economy and one that is particularly reliant on exports to drive growth and job creation, Ireland requires a continued focus on competitiveness in its global marketplaces. The impressive export growth achieved by the agri-food sector over the last five years, and its potential for continued expansion, have required, and will continue to demand, concerted efforts to improve competitiveness and productivity.

Food Wise 2025 stresses the need for ongoing improvements at producer and processing levels. At producer level, it should be clear that future profitability and viability will be driven by productivity improvements through the adoption and application of cutting-edge sustainable processes and technologies. Therefore investment in the development of new technologies that create more sustainable production systems must be a cornerstone of achieving future growth at primary production level. In addition, the requirement for economies of scale at producer level will need to be addressed. This will require measures to support land mobility and consolidation in agriculture, as well as access to additional raw material in the seafood sector.

At processing level, the industry must continue to manage its cost base and adopt new processes that will drive efficiencies and maintain competitiveness on the domestic and international markets. While significant opportunities will emerge in new markets as a result of growing affluence, these markets will continue to be competitive in terms of value and price, meaning Irish agri-food companies will have to compete on these terms. Investment in innovation and human capital will be key drivers of competitiveness in the sector and will enable businesses to adapt to market conditions and adopt best practice in delivering food solutions in global markets.

Future profitability and viability will be driven by productivity improvements through the adoption and application of cutting-edge sustainable processes and technologies.

Food Wise 2025 sets a course for Ireland's agri-food industry that is ambitious, informed and achievable.

Conclusion

Food Wise 2025 sets a course for Ireland's agri-food industry that is ambitious, informed and achievable. In transitioning from the goals of Food Harvest 2020 to Food Wise 2025, there is a clear recognition that our learnings as an industry over the last number of years have been significant.

This is a sector that is wiser in terms of its own resourcefulness and capability, and much clearer in its understanding of the scale of the opportunity around it. This is also an industry that is more competitive and more confident in its outlook than at any other time in its past.

The projections set out by Food Wise 2025 will build on the achievements of the last few years, but for the agri-food industry to truly realise its potential, it will need to move beyond a course of growth that is steady and incremental. New resources and new thinking will be needed as businesses enter larger and more dynamic trading environments. As the industry embraces new levels of growth, it will also be required to show an absolute commitment to the principles of sustainability, recognising that gains in productivity must not be at the expense of the environment.

The Food Wise 2025 Committee looks forward to a decade of growth for the industry, recognising that, while there will be challenges, the commitment and resolve of the industry's stakeholders to achieve these projections are not in doubt and Department of Agriculture, Food and the Marine will lead a dynamic implementation process to deliver on the ambition of Food Wise 2025.

The vision of thriving primary producers and agri-food businesses at the heart of vibrant communities across the country is one everyone in the industry can share.

On the basis of available data, the Committee believes that the following growth projections are achievable by 2025:

- Increasing the value of agri-food exports by 85% to €19 billion.
- Increasing the value added in the agri-food, fisheries and wood products sector by 70% to in excess of €13 billion.
- Increasing the value of Primary Production by 65% to almost €10 billion.
- The creation of an additional 23,000 direct jobs in the agri-food sector all along the supply chain from primary production to high value added product development.

Growth projections for 2025

Chapter 2
International Context

Macroeconomic Environment

Post 2008 financial crisis the global economy continues to recover albeit in an uneven and unspectacular manner with significantly different rates of recovery and stabilisation in different regions. There are clear divergences in economic growth recovery between more advanced economies and emerging economies. While the US economy continues to strengthen with unemployment rates dropping back to pre 2008 figures the transition to a post quantantive easing (QE) environment in the US and indeed UK will result in continued uncertainty in these markets for the foreseeable future. In addition, the recovery in the Eurozone countries remains fragile with unemployment rates remaining high in many EU Member States, the medium term threat of high structural unemployment levels and economic growth levels challenged by continued uncertainty around banking and fiscal policy.

Growth prospects for OECD countries in the period up to 2015 are expected to be maintained at the current level of an average 2.2% per annum. In the non-OECD area, medium term prospects for emerging economies have been revised slightly downward with China and India expected to grow on average 7% and 6.4% per annum, respectively, over the next ten years. Although impressive compared to developed economies, these rates are below the growth rates experienced during the previous ten years.

Exchange Rate Fluctuation

Recent exchange rate fluctuations underline the ongoing economic volatility in global markets in particular in Eurozone countries and represents an ongoing challenge for the Irish agri-food sector given the large export component to the value of the sector. While in the short term recent drops in the value of the euro are positive for Irish exports to UK and third countries it is clear that over the medium to longer term the Euro is likely to recover therefore reducing competitiveness of Irish exports on UK and non-EU markets and this volatility is likely to remain a constant external factor for the sector. The sector must therefore maintain and improve its overall international competitiveness to minimise the risks associated with currency fluctuations.

Energy Price Volatility

Volatility in global energy prices is also likely to remain a consistent feature in the global economy over the coming years. It is clear that recent very low oil price levels are not sustainable and future energy price volatility will remain a constant challenge over the next ten years and beyond. This must be taken into account in the context of the international competitiveness of the sector on export markets.

EU Policy Framework

Negotiations on a major reform of the Common Agriculture Policy (CAP) and Common Fisheries Policy (CFP) covering the period 2014-2020 were completed in 2013. Moreover the current Multiannual Financial Framework (MFF) for the EU budget fixes budget ceilings for EU agricultural spending up to 2020. In terms of EU policy, therefore, stability can be expected as far as 2020. Beyond that date, the position is less clear and it is difficult to predict with any certainty what the policy drivers may be from an EU context beyond 2020, although the shape of CAP is likely to remain similar to what it is today with greater emphasis on payment equality and on sustainability.

The reformed CAP provides for the expiry of milk quotas from 2015, the progressive rebalancing of direct payments between and within Member States and the introduction of additional agri-environmental requirements both in Pillar 1 and Pillar 2. The focus of the CFP is to provide the framework for the long term sustainability of fish stocks, the continued economic viability of fishing fleets and fish processing, to support coastal communities and to contribute to a fair standard of living for the fisheries sector including small scale fisheries.

With the exception of the tillage sector, the predominance of permanent grassland in Ireland will cushion most Irish farmers from the effects of the greening obligations in the current CAP reform package. However, longer-term, there may be pressure to tighten the definition of permanent grassland that may increase the impact on Irish farmers.

The Irish model for redistribution of direct payments is designed to ensure that the direct payments system is made fairer and more equitable while at the same time ensuring that the level of redistribution of payments between farmers is not of a scale that could jeopardise the achievement growth objectives. Given the extent of EU Member States operating or moving to flat rate direct payments, beyond 2020, it could be expected that further reforms will follow the trajectory of further redistribution between farmers towards a flat rate.

A review of the MFF is due to commence in 2016 with a view to its completion by 2017. Bearing in mind the extent of negotiations that were needed to reach agreement on the existing MFF, it is difficult to see much appetite during the review for major changes in EU Member States' contributions, in overall funding or in allocations between budget headings in respect of the current MFF. Thus, it is to be expected that the funding currently allocated to the CAP and CFP in the existing MFF will remain in place until 2020.

However, the 2016 review will inevitably feed into negotiations for a revised MFF from 2020 onwards. In that respect there is no absolute guarantee of retention of existing funding levels for the CAP beyond that point. There will be pressure particularly from the net contributor Member States to reduce (or at least limit) the EU budget and of course there will be competing pressure for funding between competitiveness, cohesion, agriculture and possibly other headings. It is too early to predict the outcome of these negotiations but Ireland will be seeking to maintain funding levels for CAP beyond 2020.

UK renegotiation of relationship with EU

UK is the biggest destination for Irish agri-food exports and therefore the issues associated with any possible UK exit from the EU and UK renegotiation of its relationship with EU must be monitored and managed to minimise potential negative impacts. The terms of any renegotiation or exit would be important from Ireland's perspective but there could be possible implications in a number of areas such as animal health, plant health, food labelling, state aids, competitiveness, veterinary restrictions, cross border trade with Northern Ireland and trade with Great Britain, EU budgetary implications and knock-on effects for CAP budget and adjustments to the EU Common Fisheries Policy.

International Climate Change Policy

Reducing the extent of future climate change by limiting the amount of greenhouse gases being emitted, and by increasing the rate of removal of CO_2 from the atmosphere is a significant global challenge. The agriculture, forestry and other land use sector is responsible for 24% of the global emissions, thus to reduce its impacts on climate change there is clear need to develop robust mitigation strategies that can lower emissions and deliver a low carbon future. The United Nations Framework Convention on Climate Change (UNFCCC) provides the framework for international policy development on actions to address climate change through mitigation and adaptation and it has targeted major reductions in GHG emissions with developed countries including Ireland expected to play a leading role.

Geo-political Instability

In recent years there has been increased political instability in many regions of the world, the current economic embargoes associated with the conflict in Ukraine highlight the impacts geo-political tensions can have on trade. Therefore given the sector's reliance on export markets, market decisions and new market development strategies should take into account potential risk mitigation measures in those markets in order to reduce the potential for sudden market disruption for Irish exports.

International Trade Regulatory Environment

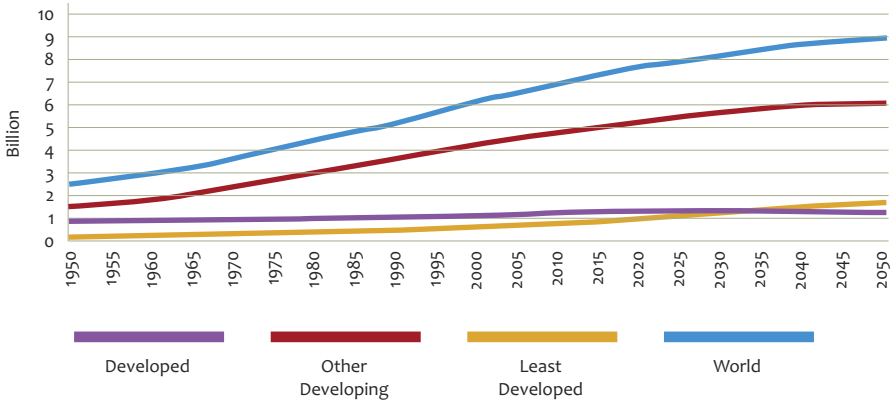
Ireland is an open trading economy and international trade agreements can provide significant benefits through increased market access and reduced tariffs. This can facilitate and contribute to Irish agri-food export growth, particularly post 2015 and the lifting of the milk quotas when outlets for increased production will need to be targeted at new and emerging markets.

These agreements do however also present challenges in terms of our defensive interests, in particular given the importance of the EU market for Irish beef exports, the potential conclusion of international trade agreements represent significant challenges/risks for specifically the beef and pigmeat sectors. The conclusion of a WTO Doha Development Agenda and EU bilateral/plurilateral trade agreements (TTIP-US and Mercosur agreements) would result in significant increases in preferential EU beef import quotas, significantly increasing competition for Irish beef exports to EU markets, particularly if the increased preferential quotas are disproportionally applied at the high value end of the market. While these negotiations remain difficult and a timeframe for their conclusion uncertain, there will continue to be strong commitment at EU level for their conclusion, and there is an expectation that some or all of these negotiations will be agreed in the medium term (within 5 years and therefore within the time span of 2025 Strategy). Ireland must continue to press for the framing of any agreements on beef in a way that does not allow the high value end of the market to be disproportionately targeted.

Demographics

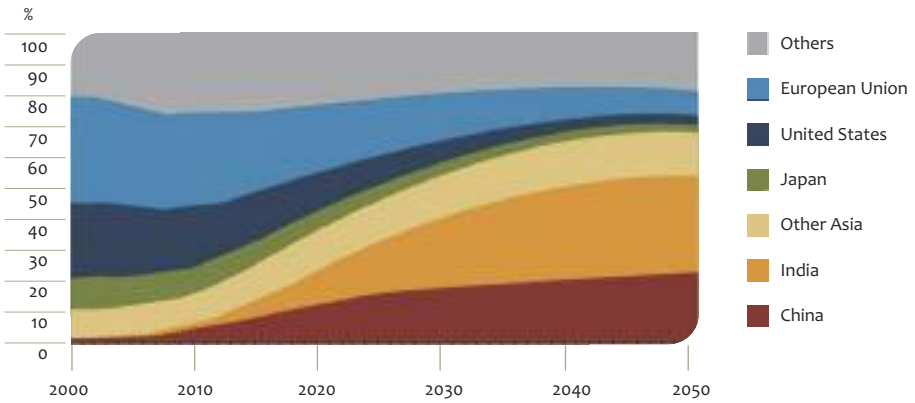
World population is expected to grow by over a third, or 2.3 billion people, by 2050, although this is a slower rate of growth than the one seen in the past four decades during which it grew by 3.3 billion people, or more than 90 percent. Nearly all of this growth is forecast to take place in developing countries with sub-Saharan Africa's population growing fastest (+114 percent) and East and Southeast Asia's the slowest (+13 percent).

Population growth



In addition to the projected overall global population growth, an estimated 3 billion consumers will join the middle classes over the next 20 years, with the middle classes in India and China estimated to reach in excess of 50% and 20% respectively of their total populations by 2050. Value will remain key to future purchasing decisions in these emerging middle income markets.

Shares of global middle-class consumption, 2000 - 2050



Source: OECD

Feeding a world population of 9.1 billion people in 2050 will require increasing overall food production by some 70 percent by 2050 from 2005 levels. Therefore, the demand for agricultural and seafood products is expected to remain firm over the next decade. Rapidly growing Asian economies are expected to account for the greatest share of additional consumption with their ever increasing middle classes, while saturated levels of food consumption and declining population growth rates will result in much slower consumption growth in North America and Europe. Changing consumer tastes and preferences in developed markets will, however, lead to significantly higher growth rates in the consumption of food that meets specific requirements (e.g. sustainably produced, more natural characteristics, 'free from 'labelled, etc.). Substantial population growth in Africa will also drive significant increases in total global consumption.

Changing dietary preferences drive firm global demand for Protein

The demand for meat, fish and dairy protein products will increase substantially through the next decade, as higher income levels and increasing urbanisation in developing regions allow consumers to raise the level of protein intake in their diets relative to starches.

Global meat consumption is projected to increase by 1.6% p.a. through the next decade, resulting in more than 58 Mt of additional meat consumed by 2023. Consistent with the trend through the past decade, developing countries will consume more than 80% of the additional meat (predominantly poultry and pork), in part due to substantially higher population and income growth relative to developed countries, but also due to the fact that per capita meat consumption in developed regions is already high.

Demand for dairy products will continue to expand at a rapid rate through the next decade. Per capita consumption of dairy products in developing countries is expected to increase by 1.2% to 1.9% p.a., with the expansion in demand reflecting robust income growth and further globalisation. By contrast, per capita consumption in the developed world is projected to increase by between 0.2% and 0.9%.

Current FAO estimates, based on income and population growth, foresee a requirement for an extra 40 million tonnes of seafood by 2030. Seafood consumption will also benefit from the shift in global economic gravity towards the east where there is a strong cultural preference for seafood.

Chapter 3

National Context

Ireland towards 2025

National Context – Strengths / Weaknesses/ Opportunities / Threats

The Irish Agri-food industry comprises the primary agriculture, food and beverage, fisheries, fish processing, forestry and forestry processing sectors. This industry is the main indigenous industry in Ireland, using Irish raw materials, being predominantly in Irish ownership and spread geographically widely across the country. These sectors combined make a very significant contribution to the economic, social and environmental wellbeing of the country.

The agri-food industry in Ireland currently provides employment for 163,000 people, with food and beverage manufacturing enterprises accounting for €26 billion of total turnover, comprising 26% of all manufacturing turnover and generating 12.7% of total merchandise exports. The sector accounts for 7.2% of Gross Value Added (GVA) at factor cost and 8.4% of total employment. At primary production level, some 140,000 farm families are involved in production of output valued at more than €7 billion. Together the beef and dairy sectors account for almost 70% of this output value.

A SWOT analysis identifies clear challenges and opportunities which must be addressed and supported so that strengths are enhanced and to create the environment for the industry to thrive.

SWOT

Strengths

- Sustainable Production Systems (grass based)
- Favourable Animal Health Status
- EU Single Market Access
- Benchmark industry leaders
- Research Eco-system
- Proximity to productive fishing grounds

Weaknesses

- Scale including lack of raw material for seafood, beverages, forestry sectors
- Land Mobility
- Levels of R&D Investment by Private Sector
- Cost Competitiveness
- Skills gaps - Capability and Availability all along supply chain
- Access to Finance

Opportunities

- Growth in global demand for nutritious food.
- Growth in demand for new products associated with latest consumer trends
- Green/Sustainable Reputation
- Expansion in Dairy, Meat, PCF and Seafood Sectors
- Potential for new Foreign Direct Investments (FDI)

Threats

- Price Volatility/Lack of Profitability
- Foreign exchange fluctuation
- Supply Chain Disruption due to potential disease or food safety risks
- Challenging Green House and Air Emission targets
- Global competition
- Biodiversity loss and reduced water quality
- Fish stock depletion

The recent economic and financial crisis has re-enforced and emphasised the importance of this sector to the Irish economy. Irish food and beverage exports have continued to perform well against all other sectors of the economy over the last number of years. While Irish merchandise exports as a whole grew by almost 4% between 2009 and 2014, food and beverage exports rose to a record high of almost €10.5 billion, representing a 45% increase since 2009. This export focussed growth underlines the strategic importance of the agri-food industry to the Irish economy and demonstrates the sector's resilience through this economic crisis despite the many challenges faced by producers and agri-food companies.

Given the indigenous nature of the sector its resilience is even more significant as the sector is dispersed widely throughout the country and is therefore providing economic benefits to many rural areas, in fact the sector is the main economic driver of many rural and regional areas. The impact of direct jobs in the sector is multiplied across the wider economy and this multiplier is greater for the agri-food sector than other economic sectors as a result of the high volume of indigenous inputs used by the sector.

This geographic spread across the country further emphasises the importance of the sector to Ireland and the Irish economy. It is in this context that the sector must be regarded and recognised as a strategically important economic sector for Ireland. This strategic importance and the significant potential for future growth by the industry make it imperative that the sector continues to be fully supported by all stakeholders – Government, state agencies, producers, agri-food companies and processors. The potential of the industry to grow jobs, to increase exports, to enhance sustainable production, to innovate and develop new products and bring economic growth to all parts of the country represents an enormous opportunity for Ireland, an opportunity which can increase the wellbeing of the country exponentially.

This strategy identifies critical actions and approaches which will provide this strategic and economically important industry with the best environment and tools to fulfil the substantial potential growth opportunities which exist over the next 10 years, while acknowledging that certain fiscal constraints remain as a result of the recent economic crisis.

Chapter 4
Sustainability

Ireland's agri-food sector through its farmers, fishermen and forestry owners manages the vast majority of the natural resources in Ireland. This places the sector in a unique position of delivering many public goods and social benefits which contribute to the wellbeing of the country. Irish producers are playing, and must continue to play, a vital and positive role in the protection and the potential further enhancement of Ireland's landscapes, waterways, biodiversity and air quality, while measures such as the discard ban and the setting of fishing levels on the principle of maximum sustainable yield are directed at ending overfishing and protecting the marine environment. The future development of the diverse agri-food sector in Ireland must therefore continue to be based on policies and approaches which enhance the provision of these public goods and maximise the continued economic, social and environmental sustainability of these natural resources.

In a global environment which is facing many challenges including an ever increasing demand for food, increasing constraints on natural resources and the emerging challenges of Climate Change the Irish agri-food sector is well placed to continue to play an important role in meeting these challenges at national, EU and global levels. This is due to the sector's capacity to produce high quality, safe, nutritious foods and products in an environmentally sustainable manner while at the same time delivering economic growth in rural areas and coastal areas.

Ireland does however face significant challenges in meeting some national and international environmental targets for air quality, biodiversity and water quality. Agriculture has a key role to play in contributing to meeting these targets. Meeting Greenhouse Gas (GHG) and ammonia emission reduction targets will be particularly challenging, but arresting biodiversity losses and continuing the improvement of water quality while increasing production will be equally demanding.

These challenges must be addressed if the growth potential of the sector is to be realised in an environmentally efficient and sustainable manner. The ambition of this strategy is that the sector is not only committed to meeting its various obligations set out in the framework of relevant environmental legislation, but also the sector aims to achieve higher standards to underscore its sustainability credentials. The continued growth of the Agri-food sector must be based on sustainable intensification, a concept included in the conclusions of the October 2014 EU Council on the 2030 EU Climate and Energy Policy Framework.

Sustainable intensification leverages the strengths of the sector by improving productivity while using natural resources in a manner which protects them into the future. This will require the ongoing strong commitment of the sector to adapt through embracing and applying the latest innovations, new technologies and processes.

A key fundamental underpinning the sector's continued growth potential is our grass-fed livestock production system which provides a significant comparative advantage in terms of cost competitiveness and environmental efficiency. These production methods ensures the highest quality safe raw materials are produced for export to markets around the world while doing it in a more environmentally efficient manner than production systems used in other parts of the world.

In an expanding production scenario, in particular in the dairy, and seafood sectors, as envisaged moving towards 2025, the environmental challenges will be greater, with increased inputs and competition for limited land and marine resources being key pressures. If Ireland wishes to remain a world leader in the production, management and marketing of low-carbon, high-quality sustainable food, then significant efforts will be required to maximise production efficiency whilst minimising the effects on the environment and declines in biodiversity.

The appropriate nurturing and strengthening of the sustainability credentials of Ireland's production systems in parallel with increases in production levels will ensure that the comparative advantages of the sector are maximised for the Irish economy and environment into the future. The sustainability credentials of the sector must continue to be measured and benchmarked to underpin their validity and ensure that these credentials can continue to be enhanced, underwritten by strong records and data. This will require continued investment in monitoring systems, investment in science based research which demonstrates that Irish production systems are environmentally sustainable, the rollout of new technologies and production processes, the transfer of knowledge to all actors in the supply chain so that the necessary productivity efficiencies are achieved while being focussed on delivering sustainability and maximising enhanced economic, social and environmental benefits from the sector.

A guiding principle to meet these sustainability goals will be that environmental protection and economic competiveness will be considered as equal and complementary, one will not be achieved at the expense of the other. The three pillars of sustainability - social, economic and environmental - are equally important and carry commensurate weight ensuring that as the sector continues to develop and grow this development will be undertaken in the context of addressing environmental challenges.

The 2025 strategy is focussed on developing technologies and processes which support a vision of sustainable intensification. This strategy will support continued investment in environmentally sustainable approaches to agriculture, food and forestry production based on the latest scientific evidence and targeted at delivering public goods, economic growth and supporting the development of sustainable rural and coastal local communities.

Science-based research programmes provide the basis for technology transfer to stakeholders. Further development of scientific knowledge will help close the verification gap and demonstrate that Irish producers are producing milk, meat, fish and crops in an environmentally and economically sustainable manner. This scientific verification can, in turn, further bolster Ireland's green credentials in the context of anticipated environmental pressures from expanding production. As such Ireland should aim to be a world leader in sustainable agriculture and in doing so lay out a framework to scientifically underpin Origin Green. Improved knowledge transfer and improved policy integration will be important in communicating research findings, which is crucial in order to effectively increase the use of scientific-based knowledge to influence the uptake of best management practices by producers.

In parallel to the development of the 2025 strategy the Department of Agriculture, Food and the Marine commissioned an Environmental Analysis, incorporating a Strategic Environmental Assessment and an Appropriate Assessment. This analysis was informed by a scoping consultation period which included a scoping workshop with key stakeholders. The Environmental Analysis has helped inform the 2025 report.
This strategy proposes the following recommendations and actions to support the sustainable growth of the sector up to 2025.

Recommendations/Actions

Recommendation

Recognising Agriculture's role in ongoing National, EU and International Climate Change and Energy Policy Development

Actions

- DAFM to finalise a sectoral plan for agriculture and forestry to inform the National Mitigation Plan under the National Climate Action and Low-Carbon Development Bill.
- At EU level continue to promote and seek agreement on an Agriculture, Forestry and Other Land Use (AFOLU) approach to the treatment of the land sector in UN climate change negotiations and continue to support discussions on agriculture under the Convention's Subsidiary Body for Scientific and Technological Advice (SBSTA).
- DAFM to continue active participation in multi-stakeholder 'Global Alliance for Climate Smart Agriculture' which is promoting the application of climate smart approaches to agriculture production systems.
- DAFM to continue to work closely with DCENR, as part of National Bioenergy Plan discussions, to assess supply side issues related to the potential of bioenergy from the agriculture and forestry sectors and develop farm-scale renewables. DAFM will continue to support afforestation and mobilisation measures under the Forestry Programme 2014-2020 and encourage the innovative use of animal by-products (ABP) for energy production.
- As part of EU Climate and Energy Framework (CEF) 2030 negotiations DAFM will continue to seek acknowledgment of realistic ambition for agriculture and clarity on the role of other land uses as a mitigation tool in Ireland and in particular its role in contributing to the achievement of overall emissions targets to 2030.
- DAFM in conjunction with other agencies should maximise their use of scientific expertise to actively engage in international networks and research groups to find new ways to account for and reduce emissions.

Recommendation
Measurement of Ireland's environmental sustainability credentials

Actions

- Continued updating on an annual basis of Teagasc National Farm Survey sustainability indicators, including further development of a wider spectrum of appropriate indicators and activity data to more accurately measure environmental sustainability and contribute to development and enhancement of GHG and ammonia inventories.
- Review and update key agri-environmental indicators, the accuracy of which are crucial to a) understanding trends in how nutrient losses to water and to air are partitioned, and, b) to assisting the cost-effective targeting of mitigation measures.
- Update Teagasc's Marginal Abatement Cost Curve for Irish agriculture on a more frequent basis to ensure the latest technological developments help inform an assessment of a wider range of GHG mitigation measures that could be rolled out at farm level.
- Continue to enhance and roll out at farm level the Carbon Navigator Initiative which provides online software to assist farmers in understanding how their farms produce GHG emissions, identify mitigation capacity and to set targets and a pathway to reduce emissions. Teagasc in conjunction with other stakeholders to examine whether the navigator tool could be used to measure other important environmental parameters such as biodiversity.
- Bord Bia to further develop the range and depth of sustainability information collected for beef, dairy and other primary agricultural sectors using its auditing infrastructure
- Seafood sector to adapt and enhance the existing independent third party verified standards such as BIM's Quality Assurance Programmes, Marine Stewardship Council (MSC), Aquaculture Stewardship Council (ASC), organic certification and green manufacturing to facilitate measurement of its environmental credentials.

Recommendation
Further Development and Enhancement of Origin Green Programme

Actions

DAFM to work with Bord Bia and other stakeholders on the future evolution of the Origin Green Programme and to further develop and enhance its effectiveness as watermark brand and key marketing tool of the Irish Agri-food sector's environmental sustainability credentials based on a suite of quantitative measures. Investment in science and technology must continue to support the ambition of the Origin Green Programme to ensure it remains underpinned by a strong scientific evidence base.

At producer level -

- Examine how monitoring and measurement in areas such as soil health, nutrient management, biodiversity, animal health, herd performance and welfare and sustainable sources of animal feed can be used to enhance effectiveness of Origin Green.
- Improve knowledge transfer and exchange to farmers by developing a network across all State agencies and relevant advisory bodies to deliver clear, coordinated science-based advice on how farmers can adopt sustainable practices that deliver both environmental and economic benefits.
- Ensure ongoing funding is made available through national programmes to assist in securing farmer engagement with sustainable practices. This should build on RDP schemes such as Beef Data Genomics and Knowledge Transfer Groups.
- Develop a messaging programme to communicate the benefits of Origin Green membership to farmer stakeholders to ensure greater adoption and engagement with the programme.
- Prioritise the process of bringing fishermen into the Origin Green programme using BIM's responsible fishing standards and other environmental programme as an entry point.
- Highlight farm profitability measures that can be achieved from participation in Origin Green programme.

At industry level -

- Continue to develop and enhance the quality assurance standards required for Origin Green.
- Leverage Origin Green to drive real efficiencies/improvements in respect of energy usage, waste water and food and packaging waste.
- Increase direct engagement and support offered to companies developing their sustainability plans in order to achieve the target of 450 verified members. Recruit additional Origin Green advisors to ensure the required level of engagement is delivered.
- Continue to build on the corporate social responsibility on the sustainability elements of Origin Green with particular focus on health and wellness.
- Play its part in delivering appropriate messaging and promotion of Origin Green to producers and suppliers.

Recommendation

Improvement of Environmental footprint of Sector

Actions

- Sustained and intensive monitoring of the interface between agri-economic growth and agri-environmental sustainability through continuation and enhancement of the DAFM-funded Teagasc Agricultural Catchments Programme.
- DAFM to work closely with all stakeholders to ensure that the scientific findings from the Agricultural Catchments Programme are integrated fully and appropriately into agri-environmental policies.
- DAFM to continue close cooperation with Department of Environment, Community and Local Government (DECLG) and the EPA on the delivery of the Water Framework Directive, in particular on development of the second phase River Basin Management Plans.
- Teagasc to develop and rollout a Nutrient Management software tool to enhance cost-effective use of feed, fertiliser and slurry to minimise nitrogen (nitrate, ammonia and nitrous oxide) and phosphorus losses.
- Introduce knowledge transfer programmes to improve and broaden awareness levels on the efficient use of nutrients on farms, thereby reducing losses of valuable and costly nutrients to water and to air, so providing for economic and environmental sustainability goals.
- The feasibility of mainstreaming environmental resource efficiency into a mandatory component of minimum agriculture qualifications to be examined.
- Teagasc to develop soil specific advice for both organic and inorganic manure use to take account of mineralisation across soils to help inform optimal fertiliser application rates and timing.
- Teagasc to carry out a soil nutrient census to track soil fertility trends.
- DAFM to work closely with responsible agencies to monitor potential localised/regionalised impacts of dairy herd expansion on water quality and to develop mitigation measures, in conjunction with the scientific findings from the Agricultural Catchments Programme.
- Teagasc to enhance PastureBase Ireland tool as a resource to help improve grassland and nitrogen management and increase grass utilisation.
- Following on from engagement and adoption of the Origin Green programme at farm level, participants in the Bord Bia Quality Assurance Schemes to work to deliver improvements in their carbon footprint, added to the subsequent calculation of improvement on these farms at a macro national level.
- Seafood Development Programme 2014-2020 (SDP) to provide a framework to take action against the decline of fish stocks through improved fisheries management and the focused implementation of landings obligation requirements.
- DAFM, SFPA and Industry to develop a suite of measures to promote changed behaviour which will minimise juvenile catch and protect vulnerable stocks.

- BIM, with support from MI and in collaboration with the SFPA, to intensify its programme of gear selectivity and technical conservation measures, particularly to fulfil landing obligation requirements.
- Deliver enhanced stock knowledge and sustainability through the €40m funding allocated to marine science through the SDP.
- Take actions under the SDP to improve the environmental sustainability of the inshore fisheries sector.
- DAFM and Horticulture growers to consider the establishment of an industry and government supported fund to enable relevant research data to be obtained to allow a greater range of more environmentally efficient plant protection products to be authorised for use on various horticultural crops grown in Ireland.

Recommendation

Develop and support Agri-food processing sector in delivering sustainable processes and outputs

Actions

- EU Environmental Aid Scheme 2014-2020 to be targeted at supporting Agri-food companies to invest in initiatives which aim to deliver improved environmental and energy efficiency, increase their uptake of renewable energy technologies and environmental protection systems and research alternative possibilities in relation to energy efficiencies and technologies.
- As part of the Europe 2020 strategy, BIM will introduce schemes in compliance with the EMFF to support investments in equipment or in fishing or aquaculture vessels aimed at reducing the emission of pollutants or GHG and/or increasing energy efficiency. This may include support for the modernisation and replacement of fleet engines.
- At SME level increase the level of environmental awareness relating to regulatory compliance and development of basic management systems related to environmental performance through EI GreenStart programme.
- Enterprise Ireland will develop the capability of food company managers to drive environmental efficiencies and achieve improved sustainability, through customised management development programmes and through the Green Plus element of Enterprise Ireland Business Process Improvement Grants.
- Enterprise Ireland to invest in in-company innovation processes, R&D and NPD development programmes, and to support the human and capital infrastructure requirements of that absorptive capacity.
- Policies and measures to support the mitigation benefits of forest-based biomass and wood products should be established by relevant Departments and agencies.
- Demand side and supply chain mechanisms should be developed to ensure biomass crops including forest and wood products are brought to market and full market returns realised however demand side measures must not over incentivise particular end users as it may distort market competition.
- Horizon 2020 is a key source of vital funding and scientific benchmarking for Irish researchers and companies. EI with DAFM to increase the level of participation of Irish companies in the programme.

Recommendation

Implementation of Environmental Elements of Ireland's National Programmes and the EU co-funded Rural Development Programme 2014-2020

Actions

- Uptake of GLAS should be maximised to help enhance the natural environment through, inter alia, retaining carbon stocks in the soil, margins/habitat preservation and improving water quality to ensure compliance with the Water Framework Directive. Uptake on other RDP initiatives such as, organic farming, priority freshwater pearl mussel catchment sites and the Burren farming for conservation project should also be maximised as separate key RDP enabling instruments to achieve environmental objectives.
- Invest in evidence-based monitoring and research of agri-environment measures to demonstrate the environmental outputs and identify areas for improvement and/or additional measures.
- Ongoing research, development and validation of green technologies by research bodies to deliver practical solutions to improve water quality.
- Promote widespread uptake of on-farm capital investment grants as part of RDP 2014-2020 especially for low emission slurry spreading equipment, farm nutrient storage and animal housing which will help lower emissions and improve water quality.

- Aim to maximise the number of suckler farmers participating in the Beef Data and Genomics Programme which will help raise awareness of and mitigate GHG emissions from the sector, improve production efficiency and herd quality for suckler sector which will deliver climate change benefits as well as productivity and competitiveness gains.
- Maximise uptake of allocated funding for the Forestry 2014-2020 Programme to help increase afforestation levels to capture carbon, and sustain the production of forest-based biomass to meet renewable energy targets.
- With appropriate wider stakeholder involvement, identify any critical gaps in current funding programmes that are blockages to the achievement of key environmental objectives to help optimise the structure of future alternative funding programmes.
- In relation to the LIFE programme, DAFM will maintain close contact with DECLG, DAHG and other relevant stakeholders to ensure that any biodiversity, climate or water quality actions are appropriately targeted and implemented

Recommendation

Prioritise Research Funding on Sustainability of Irish Food production

Actions

- Agri-food research funding to prioritise research which:
  - Provides evidence base to quantify the economic, social and environmental sustainability of Irish food production systems and to assess the vulnerability of these systems to climate change.
  - Support strategies and technologies to reduce the impact of food production on water quality.
  - Identifies and evaluates tailored measures which impact positively on biodiversity.
  - Develops and assesses existing and emerging technologies for reducing ammonia and GHG emissions and carbon sequestration in Ireland's soils, biomass and agricultural systems.
  - Informs a policy review to be initiated on the effects of ammonia restrictions on future increases in livestock numbers and on the demography within the national herd.
  - Develops a holistic approach to data capture, modelling and sustainability assessment of Irish farming and aquaculture systems, including the provision, utilisation and exploitation of verifiable data on the environmental impact and sustainability of grass-based food production and aquaculture in Ireland.
  - Supports the health and nutrition benefits of seafood and grass-based food production.
  - Provides scientific advice and strengthens coherence between public programmes and to inform policy decisions on the benefits of bio-economy solutions.
  - Strengthens environmental measurement and monitoring capacity in particular the potential for sensor and other new emerging technologies.
  - Investigates the ability of a wide range of land use options to sequester carbon.
  - Develops sectoral farm management tools and management systems that optimise on-farm resource use efficiency. These should be aimed at translating the principles of sustainable intensification into tangible practices and at providing the knowledge base for many of the aforementioned recommendations on "Improvement of environmental footprint of the sector".

Recommendation

Implementation of 2025 strategy actions in context of sustainability

Actions

- As part of the 2025 implementation phase DAFM will work closely with relevant agencies to ensure appropriate monitoring across all sectors of the agri-food industry on the environmental impacts of 2025 strategy including possible impacts at regional level. This implementation process will include evaluation and assessment of the delivery of sustainability and mitigation actions set out in the strategy report.
- DAFM and all state agencies involved in the Agri-food sector will enhance their collective coherence with wider Government policy in respect of implementation of measures, such as RDP measures and Origin Green, to address environmental and sustainability issues.

Chapter 5
Growth Opportunities

There are significant opportunities for growth in the next 10 years for the Irish Agri-food sector with increasing global food consumption levels, growing incomes, and increasing sophistication of consumers with demands for food to deliver lifestyle benefits and innovative solutions for different life-stages. The key opportunities for the Irish agri-food relate to:

a) Global Food Demand/Demographics/Economic Prosperity

b) Consumer Trends

c) Sectoral Growth

- **Dairy Sector Post Quota Regime**
- **Meat Sector**
- **Prepared Consumer Foods (PCF) Sector**
- **Seafood Sector**
- **Whiskey and Craft Beer Sector**
- **Horticulture**
- **Forestry**
- **Tillage/Cereals**

a) Global Food Demand/Demographics/Economic Prosperity

Changes in demographics and economic prosperity around the world will drive increased global demand for food, food which is safe, health enhancing, sustainably produced and of high quality. These demographic changes will also result in shifts in consumer lifestyle habits and dietary demands of consumers. Consumers are increasingly demanding more nutritious foods and different food formats. In broad global terms, there will be further diversification of diets away from traditional cereals to a more protein-rich diet. Ireland, as a leading producer of livestock and seafood products is well positioned to contribute to meeting this increased demand. Consumption trends in particular in the growing emerging markets, will continue to move towards processed and prepared foods, widening the spread between farm gate/producer and retail prices of food items and challenging food producers to fulfil the aspirations of better informed and wealthier consumers in these markets.

This opens up significant potential for Irish agri-food exporters to enter new markets and grow their share of exports. In addition to non-EU market opportunities, it is clear that EU markets in particular the UK market, will continue to be the largest destination for Irish agri-food exports up to 2025, the single EU market and the harmonised EU market rules provide easy access for these Irish exports. EU markets are high value markets and while these markets are mature there still remains significant scope for Irish food products to deliver the new innovative solutions with high value addition to meet EU consumer demands, demands which are evolving and becoming ever more sophisticated and diversified in particular the development of functional foods.

These mature markets will therefore continue to be core markets for Irish agri-food products for the next ten years, and when aligned with the huge potential for growth in exports beyond EU markets based on positive global demographics and the positive economic development of regions outside of Europe and North America, the Irish Agri-food sector is presented with exciting and varied growth and market expansion opportunities.
The key emerging markets for potential growth are China, South East Asia, Middle East and Africa which have rapidly growing demand for high quality and safe food as a result of demographic changes and growing middle class income earners.

b) Consumer Trends

Global consumers, in particular in mature developed markets and the growing middle classes in emerging markets, are becoming increasingly sophisticated and are demanding products to fulfil a growing range of functional and life stage needs from health and wellbeing (vitamin and protein enhancement, healthy aging), nutricueticals, sports nutrition, early years child and infant nutrition, convenience foods and in addition food which can be shown to be natural, sustainably produced and meets a range of 'free from' requirements. Consumer trends are evolving quickly but Ireland's capacity for producing high quality, safe, nutritious and sustainable food mean the Irish agri-food sector is well placed to meet these new consumer needs. The development of food solutions to fulfil these needs present opportunities for significant value addition by the Irish agri-food sector. The main trends over the next ten years will include:

Health and Wellness

Improved health and wellbeing is increasingly a focus of consumers who are struggling with lifestyle diseases, dietary intolerances and poor nutrition. At the same time, attitudes to health are ever more holistic, with many consumers looking for natural, organic and preventative solutions. The role played by food and beverages will be enhanced through both a deeper understanding of individual needs and responses, and advances in leveraging ingredients' functional benefits which deliver the nutritional requirements of consumers and address issues such as lack of quality nutrients, increases in obesity and lifestyle diseases. There are different solutions demanded for different stages of life which present opportunities for product development and innovation around healthy aging, early years child nutrition, sports nutrition and healthy lifestyles.

Convenience Foods

Changing lifestyles including changes in work and lifestyle balance mean mealtimes will increasingly be under pressure, and consumers' involvement in preparing their own food is set to decline. This will redefine how eating and drinking fits into consumers' lives. Therefore there needs to be significant shifts and innovations in food and beverage products and offerings, routes-to-market, and business models. There is demand for far more sophisticated, time-saving food solutions that retain health and nutritional benefits and this demand represents significant opportunities for the PCF sector in Ireland.

New Retail Routes

Consumers are increasingly open to new ways to purchase food. This is driven by functional needs such as convenience and bargain-hunting, as well as more emotional desires like the search for tradition, experience and authenticity. Technology has had significant impact on this, enabling the formation of new and evolving business models. Companies are increasingly harnessing the opportunity that online and mobile technologies provide, streamlining the purchase, delivery and creation of food products, and also raising awareness of pop-ups and street food occasions. Recently there has been an expansion of discounters and diversification of their stock, a rise in convenience retailing, growth of online grocery shopping and increased food entrepreneurialism.

In this context the development of a functioning domestic consumer retail market must be pursued to encourage innovation investment by agri-food companies and producers. This issue should also be pursued at EU level.

b) Consumer Trends

Consumer Preferences

There is a growing demand for food which is perceived to be more natural, the provenance of which is known, has been sustainably produced and which can be shown to meet a range of 'free from' requirements. In developed markets this offers by far the most promising prospect for growth in consumption but in time developing markets will be characterised by similar trends. Ireland is in a strong position to capitalise on this growing trend.

Food as Identity

The 'average' core consumer will no longer be easy to define as the complexity of the marketplace increases and fragmented consumer profiles will become the new normal. For some consumers, particularly millennials, food will play a much greater role in lifestyle choices. Technology enabled group connectedness, through social media and mobile technologies, facilitates peer recommendations and increasingly influences consumption choices. This has led to increased sophistication and diversification of food culture and food experiences.

Building Trust Chains

Repeated high profile food scares and scandals worldwide have led to decreased trust in producers and an awareness of the dangers of complex supply chains. To rebuild this trust, consumers look for ways to ensure quality and value for all involved in the process using transparency and traceability.

Squeeze on Middle Market Brands

Wages continue to stagnate in many markets, even as the global economy regains some of its previous momentum. In this environment, many consumers are making more considered and researched purchases. This has led to a reduction in demand for middle range products by consumers, who are choosing to spend on premium in certain categories and save with discounters or own brands in others. To adapt, companies will increasingly pursue innovation at the high and low value ends of the market. This can be seen by the crunch on middle-market brands, the rise of the savvy consumer and challenge to existing brands from private label and challenger brands. Well established and strongly resourced brands, however, remain important in strengthening processors' positions within the supply chain.

c) Sectoral Growth

Dairy Sector Post Quota Regime

The abolition of the EU Milk Quota regime presents the Irish dairy sector with the freedom to realise its full potential in terms of output, export earnings, rural employment and investment but this growth must be undertaken in a sustainable manner and not at the expense of the environment and our natural resources.

The increased availability of high quality and safe raw material provides great potential for further developing the dairy processing industry and expanding its capabilities to deliver innovative product solutions to address the demand from global consumers.

In particular the consumer driven added value component of the Irish dairy processing sector represents an area of great potential. There are multiple benefits to adding value domestically, including volatility mitigation and retention of the value added in the domestic sector. Industry will need to continually examine the scope for movement along the spectrum from a more commodity oriented product towards focussing on adding value domestically. Consumer products, ingredients or concepts that meet the consumer need in the marketplace in areas such as healthy ageing nutrition and sports will command a premium price and provide opportunities for new market development and these opportunities represent huge potential for this sector to contribute significantly to the future economic growth of the Irish economy.

Industry in conjunction with the research community must seek a collaborative approach in advancing near to market research and new product innovation to make progress in this area.

On export markets, the ongoing development and enhancement of a unique selling point for Irish dairy produce is a critically important element for the development of the sector, particularly in the context of the need to maximise market returns for increased production in competitive markets world-wide. It remains clearly evident, from engagement with potential customers for Irish dairy products that the sustainability message inherent to the sector in Ireland has a strong resonance.

Industry, in conjunction with relevant agencies must collaborate where possible in targeting such markets, focussing where appropriate on specific geographic markets with a view to broadening and deepening dairy export trade.

Meat Sector

Global forecasts for increased demand for protein, in particular protein from meat, and increased economic prosperity in many emerging markets present opportunities for increased exports of high quality, safe and sustainable Irish meats to international markets.

The strong reputation of Irish grass fed beef production in traditional markets is an asset which can be further exploited and leveraged in the period to 2025 to ensure greater penetration of high value markets both in the EU and in third countries.

The expansion of the dairy herd will have a knock on effect on the beef sector in that additional beef from that expansion has the potential to increase beef output by between 5% and 10%. It is important that the best available breeding technologies are used to ensure that the value of this output is maximised for the sector and for the economy.

It is, however, beef from the suckler herd that has principally driven our success on international retail markets. There is considerable scope for growth in the value of that beef output, even with static breeding herd numbers, through the use of the best available technologies. Encouragement for the uptake of these technologies is, therefore, of great importance. It is equally important, however, to try to ensure that suckler cow numbers are at least maintained at close to current levels. This requires improved profitability at farm level through maximising returns from penetration of premium markets.

Growth in the pig and sheep sectors will come from improved technical efficiencies, while significant growth opportunities will also be offered by the sharp increase in consumer demand.

Prepared Consumer Foods

The PCF sector is emerging from a difficult period due to reduced consumer demand during the recent economic downturn. The recovery of the domestic and international economy is however creating opportunities for growth and despite the economic crisis exports estimated at over €2.1 billion have grown by 18% since 2009. There are huge opportunities for this sector to expand its customer base over the next ten years through accessing new markets and continued innovative product development.

Unlike the beef and dairy industries which are broadly export orientated, the PCF sector is also heavily reliant on the domestic market and there are significant opportunities for import substitution and to significantly increase the sector's 40% share of the domestic market. Developing a strong domestic base with high market penetration at home is also an essential precursor to internationalisation. Smarter, more strategic retailer-supplier relations are required if the Irish PCF sector is to achieve further growth and scale.
To meet ambitious growth targets the PCF sector requires significant investment in new technologies, plant infrastructure, capability, R & D and innovation programmes. However current funding options are limited and restrictive.

The application of innovative solutions to address the financial and retailer issues will allow the sector to capitalise on its growth potential and increase exports and its share of the domestic market.

Seafood sector

In common with the broader food sector, the seafood industry will benefit from the projected increasing global demand for food produce over the coming decade. Current FAO estimates are that world consumption of fish will grow by an average annual consumption of 17 kg per person per annum resulting in a requirement for an extra 40 million tonnes of seafood by 2030. This industry will also benefit from the shift in global economic gravity towards the east where there is a strong cultural preference for seafood.
In addition to benefiting from these economic trends, the growing health and wellness trends augurs well for increased seafood consumption. Seafood has a marketing unique selling point as it is a versatile, convenient and protein source with specific and recognised health properties which resonate with the modern consumer.

Export markets for seafood are growing rapidly and many large markets have a supply deficit. Europe has a 70% dependence on seafood imports. China is the world's largest importer of seafood and is predicted to become a €15.5 billion seafood import market by 2020. The United Arab Emirates imports 75% of its seafood products while the USA imports 90%, by weight.

Finally, the ability of the sector to capitalise on this growth potential is assisted by its natural advantage of being adjacent to some of the most productive fishing ground in the EU. Ireland 's share of the 1.2 million tonnes of fish caught in these waters amounts to around 25% or 315,000 tonnes.

In summary, the growth opportunity in the seafood sector for the coming decade lies in developing greater processing scale so as to capitalise on the expanded supply of raw material which will be available to Irish processors from the increased output from aquaculture and from the landing into Ireland of quota compliant catch from other countries fishing in the waters around Ireland. In addition, the intention is to reduce the level of seafood product which is exported in commodity form to significantly below its current 70% level and to develop our advantage in the marine biotechnology field.

Whiskey and Craft Beer Sector

Exports for the beverages industry rose in 2014 to €1.2 billion driven by a continued increase in the exports of Irish Whiskey which has increased by 60% since 2009. The alcoholic beverage industry in Ireland accounts for 75% of total beverage exports and is broken down into different sectors; spirits (which includes the European Geographical Indications Irish Whiskey, Irish Cream and Irish Poteen/Poitín), Beer and Cider manufacture. Ireland exports drinks to over 125 markets worldwide. Alcohol beverage exports are high value, branded products and are not susceptible to the fluctuations of the global commodity markets.

Investment in the beverages sector has been growing at a substantial rate due to expansion in the whiskey sector and consolidation and investment in the beer sector. One challenge that must be met is the significant working capital finance needed to fund the minimum 3 year maturation process in the whiskey sector.

There are huge opportunities for growth in the whiskey and craft beer sector with plans to double whiskey exports and increase the number of microbreweries to 100. Emerging markets in Asia and the explosion of the craft alcohol market in the United States provide Irish companies with enormous potential to expand.

The ability of the sector to develop new markets will remain a key challenge and the alcoholic beverage industry needs a strong base of dairy farmers and grain growers supplying inputs to both the brewing and distilling sectors.

Horticulture

The horticulture sector contributed over €400m to agricultural output in 2014. The sector makes an important economic contribution and generates significant ancillary employment in areas such as preparing, packing produce, distribution, retail, garden design and landscaping.

Technology and advances in plant genetic research offer the potential for new products, new production methods and new approaches to the market for horticultural products which will drive growth and opportunities for the sector. There is a need to assist commercialisation and adoption of developing horticultural technology, to facilitate entrepreneurs to take advantage of the opportunities arising from these emerging technologies and the intellectual property associated with them.
The development and adaption of these technologies present the sector with the potential to grow its output value to over €500m in the medium term.

Forestry

Forests play an important economic, environmental and social role in Ireland making a significant contribution to the Irish economy, currently estimated at €2.3 billion and an increasingly important role in rural development not only through the diversification of farm income but also through the provision of rurally based employment both of which contribute to rural stabilisation and viability.

The Irish sawmilling and board manufacturing sector is competitive internationally and has developed major export markets over recent years, including Britain and France but also much further afield. Demand for all wood products remains strong, further growth is anticipated in the years to come as overseas markets for Irish sawn wood and panel board products continue to expand.

With increasing reliance on the export market, the importance of investment in innovation, research and development and added value will be crucial to realising growth opportunities. Ireland, with growth rates of certain species well in excess of those achievable in some European countries, also has a strong comparative advantage in the growing of wood fibre. It is vitally important that we continue to build this advantage by developing our forest genetic resources by the use of appropriate species and suitable site types.

Tillage Sector

Tillage crop production in is based on the provision of feedstuffs to the livestock sector and critical raw material to industries such as malting, milling, sugar, breakfast cereal and distilling. Over the next decade there will be growth opportunities for the tillage sector in areas such as increasing demand barley and malt for distilling due to the planned expansion by Malsters and increased demand for oats due to their health and nutritional benefits. Outside of the cereals sector growth opportunities include increased support for protein crops as part of EU recognition of the need to develop native protein sources, increasing interest in the use of oilseed rape oil as a food ingredient for cooking and salads including potential for exports of the processed oil and in the case of sugar beet industry to explore whether the likely development of the sugar and ethanol markets would justify farmer and industry investment.

Whey Protein Isolate Case Study

Whey, a by-product of the production of cheese, has come a long way in the last 15 years. Today, due to investments in sophisticated processing technology, and a greater understanding of human nutrition, WPI (whey protein isolate) with 90% protein is a core nutritional ingredient for the sports nutrition industry, which was estimated to be worth $10.1bn globally in 2014 and it is growing at 11% a year.

WPI is an extremely pure high protein powder which is fat free. Its nutritional profile of essential amino acid gives the ideal combination to help build and repair muscle. It is very popular among athletes due to its ability to be digested very rapidly and help return the post-workout body back from a catabolic (muscle-wasting) state to an anabolic (muscle-building) state, and it commands a premium price from consumers.

Glanbia has become the leading provider of whey based nutritional solutions globally. Glanbia owns the number one Business to Consumer (B2C) global sports nutrition brand family and controls an estimated 12% share of the highly fragmented global sports nutrition market.

Glanbia Ingredients Ireland (GII), a joint venture company of Glanbia Co-op and Glanbia plc, has invested significantly in the production of high quality WPI. In November 2012, GII opened its Whey Protein Isolate facility in Ballyragget, Co. Kilkenny. This €21m investment produces high quality WPI using a state-of-the-art micro-filtering technology, which produces a clean, natural flavour.

Bio-Marine Ingredients Ireland

Ireland is currently a small player in the context of world seafood. However, given the huge resources around our coast, the sector has major ambitions for sustainable growth in terms of value added product in the food ingredients and in the health and sport nutrition markets.

In that context, the €40 million project by Bio-Marine Ingredients Ireland (BII) to build a world class bio-marine ingredients plant in Donegal, is a key game changer.

This joint venture between Irish fishing interests, and Norwegian partners, aims to process up to 50,000 tonnes of raw material annually to extract high-end proteins, oils and calcium for use as food ingredients, nutritional supplements and later medicinal ingredients. As the business evolves, other products such as marine collagen and gelatin will be developed.

This project combines the commercial know–how of a specialist science and technology company with a stable supply of raw material, which is currently used for low value fishmeal.

BII hope to go into full production by end 2016 and to use cutting edge marine –pharma technology to convert this low value raw material into high value food ingredient and novel products which meet the demands of the international marketplace for high quality, healthy protein products.

Silver Hill Farm

For well over 50 years, Silver Hill Foods has been at the forefront of duck breeding and production from their base in Emyvale Co Monaghan. The award winning Silver Hill duck is synonymous with quality, not just in Ireland, but as far afield as Singapore and Mainland China, where it is commonly known as "The Mother of all Duck".

The company is owned by the Steele Family and all aspects of our duck production are owned and controlled by Silver Hill Foods from breeding, egg production, hatching and selection to processing and cooking. It's worth noting there are only a small amount of companies who actually breed ducks commercially, but Silver Hill are one of the only one that keeps its breed and stock entirely to itself, where others sell their breeds to competitors. One of the main reasons for the quality of the product is the genetic consistency of the breed that is produced every day.

The company is the pioneer in sorting feathers and down on this side of the world. We use state of the art machinery and processes to ensure we produce the finest down quality. For many years the company's feather and down products were used in the vibrant furniture upholstery in Co Monaghan. And now we find that Silver Hill duvets and pillows are the preferred choice of many 5 Star Hotels around the world.

Environmental sustainability forms an integral part of the Company's' philosophy and the company was one of the first business's to successfully become a member of Bord Bia's Origin Green initiative. Innovation and differentiation ensures the company continues to grow in turnover and employment and continue its success of exporting more than 75% of its output.

AWARD WINNING DUCKS FROM THE STEELE FAMILY FARM

Walsh Whiskey Distillery

Established in 1999 and based in Carlow, Walsh Whiskey Distillery blends quality Irish ingredients to produce premium spirit drinks. The company has over the years built up a business exporting craft Irish Whiskey to 36 countries worldwide. Its products have won gold in international competitions and a 94.5 rating in Jim Murray's Whisky Bible.

The company has worked closely with the development agencies since its establishment. Qualitative consumer research was undertaken in the US, Germany and Korea to develop a branding to connect with the target market on a more personal level. This established that packaging was of utmost importance in positioning The Irishman brand and that the pack needed to 'work harder' to connect with its consumer target.

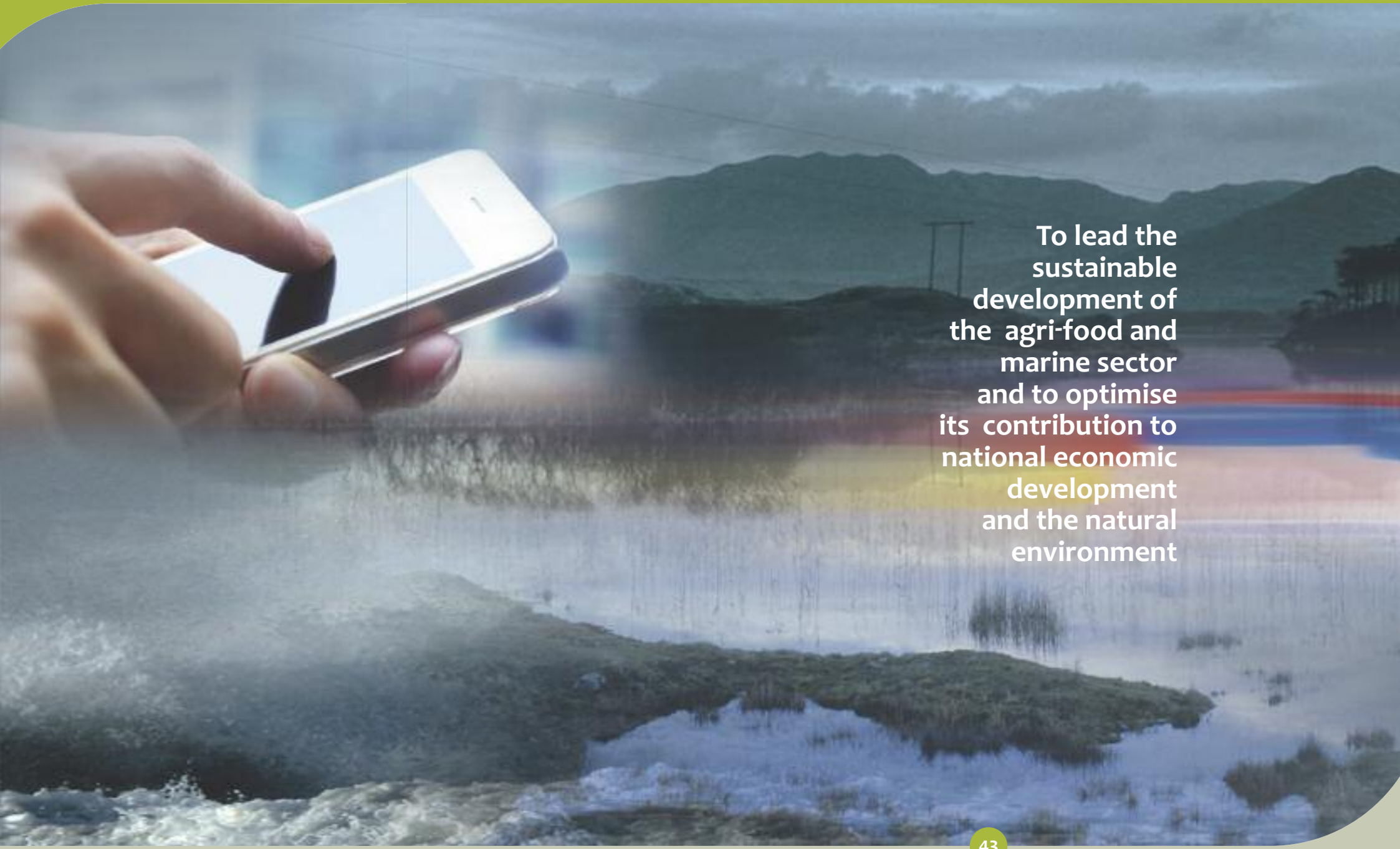
Subsequent re-design of bottling, label and packaging delivered over 150% brand growth on shelf at little additional marketing budget and, together with the detailed feasibility study into setting up a distillery, laid the foundations for investor interest in partnering expansion. Walsh Whiskey Distillery drew on a strong group of experienced industry and market advisers in exploring options and the challenge of developing a robust business which could deliver sustained market growth into the future.

The development of a partnership with Illva Saronno, a family company renowned in the international spirit drinks trade, paved the way for the decision by Walsh Whiskey Distillery to build a new distillery.

WALSH
WHISKEY DISTILLERY

The Walsh Whiskey Distillery is an example of the potential to develop a second tier of Irish Whiskey distilleries. It is also one model to defray the cost of raising capital to build and sustain a brand, to produce Irish Whiskey to the standard required by the protected Irish Whiskey Geographical Indication and to fund stocks for the minimum three year maturation period or longer as required.

Walsh Irish Distillery has plans also for a visitor centre which would have the potential to generate additional jobs and tourists and linkages with food and whiskey trails.



To lead the sustainable development of the agri-food and marine sector and to optimise its contribution to national economic development and the natural environment

Chapter 6

Delivering Growth

Human Capital

The development of the Irish Agri-food sector over the last 50 years has been supported by and led to the development of a wide range of expertise and knowledge in both private and public sectors and across all levels of the sector. This skills and knowledge base provides a valuable and solid footing for the continued development of the sector and there is a clear need to ensure that those working in the food and beverage industry are valued and recognised as key to the industry's success.

If the sector is to build on the strong base and reach its optimum future potential growth, manage the challenges associated with competitiveness, profitability and volatility and nurture an environment supporting innovation it will need to both retain the current high quality, knowledgeable and experienced people it has developed and attract new ambitious educated and motivated people. The sector faces challenges and there are skills gaps which must be filled across the sector and up and down the supply and value chains to enable the potential of the sector to be realised.

The ability of the sector to retain, access and attract the best talent to address these skills gaps represents a key challenge towards 2025 and will define the capacity of sector to realise 2025 growth, development and sustainability targets. As the agri-food sector becomes more knowledge-intensive, education and skills development are even more critical for success and there must be an emphasis on up-skilling and training ambitious people to drive the future development of the sector.

Human Capital

The sector therefore needs to:

a) attract, retain and develop talent capability through developing a structured career learning and development pathway that would facilitate progression from entry to senior leadership levels and
b) promote itself as a career path of choice among school leavers and university graduates, as a modern sector with exciting opportunities in agri-food sector business expansion, innovation, marketing, consumer insights, research and technological development and nutritional product development.

The sector is also increasingly a platform for supporting other sectors of the economy including pharma, tourism, bioeconomy, biotechnology, bioenergy, health and wellness and the synergies with these other industries provide exciting possibilities to attract new well educated talent to the agri-food sector and to provide potential crossover opportunities with these sectors. The attraction of the right talent will require the industry and state agencies to have in place attractive and comprehensive educational and training supports which are targeted at developing the skillsets required to maximise the profitability and sustainability of the sector all along the supply chain from producer level to those delivering product solutions for high value export markets and all stages in between.

There are a range of skills gaps which could constrain the industry's future growth and there must be significant investment in education, knowledge transfer and training programmes if the required levels of expertise and skills are to be in place to support the development of the sector. This strategy will therefore support the development of measures and programmes which provide producers, processors and exporters with support to develop the human capital needed to realise the opportunities and address the challenges they face including the need to improve productivity, adopt new processes and technologies, improve financial planning and business development capabilities, product innovation and research, deliver environmental efficiency and sustainability, marketing and market development.

At producer level, the strategy will support the development of ongoing and lifelong education, training and knowledge transfer programmes to give farmers, fishermen and forest owners the tools and skills to develop their business enterprises, maximise their profitability and utilise their resources in the most productive sustainable manner by enabling them to integrate the latest technologies and processes into their day to day operations. Family farms must also increasingly utilise the skills of all family members to assist in the development of their farm business enterprises.

At processing level the focus of the strategy will be on allowing Irish agri-food companies to develop to their maximum potential by helping them to attract and access the human capital they need to grow their companies through product or process innovation, increased capacity to absorb new technologies and product research, develop leadership and corporate governance expertise, financial planning and business expansion acumen and through enhanced marketing capability to develop new markets for their products.

Some consideration also needs to be given to enhancing national capability in laboratory-based science required to safeguard the food chain, both within private commercial enterprises and publicly-funded entities. State-funded laboratories should explore collaborative approaches in developing new skillsets and more efficiently implementing new technologies.

This Strategy focuses on harnessing the capabilities of state agencies, educational institutes and industry to develop the skills of the Irish Agri-food sector, the skills which will provide the tools to the sector to maximise sustainable growth and enable the sector to deliver large numbers of jobs and indigenous economic growth for the Irish economy over the next ten years.

Human Capital

Skills Needs

Producer Level

At primary producer level profitability and viability will be driven by highly skilled farmers, fisherman and forest owners. There is a need to provide ongoing training to all producers to ensure that at each stage of development of the primary producer businesses the appropriate skillsets and knowledge are applied. These include:

- Financial and business development management skills to drive expansion and profitability of the business enterprises including tools to manage price/income volatility and ensure producers are financially fit;
- Knowledge transfer of latest research, technological innovations and processes which will drive productivity, efficiency and profitability including application of latest sustainability and environmental efficiency measures, animal health practices, health and safety measures and animal welfare practices;
- Availability of skilled additional labour units for expanding farms;
- Management training to lead staff/employees;

Recommendation/Actions

Education Programmes

- A review of existing level 5 and 6 further education awards and curricula in agriculture and associated curricula should be undertaken. Teagasc will undertake this review under the auspices of Quality and Qualifications Ireland (QQI), in consultation with a wide body of stakeholders to ensure that they are both fit-for-purpose and to future proof them in terms of emerging industry needs.
- This review should identify for each career step the essential skill sets for different roles and produce a competency matrix which identifies the skillsets and the education and training requirements to reach them.
- Teagasc to seek delegated authority to make education awards as part of new Quality and Qualifications Ireland (QQI) structure. This would allow more flexible and responsive development of future agricultural education programmes.
- Review and further develop eligibility criteria for agricultural education programmes to allow for more flexible access for young non-agricultural graduates to agriculture education programmes.
- Teagasc to continue to calibrate its education function to match the needs of industry, for example through the development and introduction of customised short training programmes along the lines of the recently introduced milking skills training for operatives.
- Continued Professional Development of Professional Agricultural Advisors to ensure that the most up to date environmental and sustainability science-based knowledge and best practice underlies the operation of Schemes.
- Continued Professional Development for Agricultural Advisors to include knowledge transfer, specific to water quality protection and improvement, from the Agricultural Catchments Programme
- Consideration of innovative methods for agricultural education delivery, such as using participatory training methods such as on-farm placement modules, e-learning and other best practice as part of the entrant and adult programmes.
- Increase enrolments in Level 6 Advanced Dairy Programme and Professional Diploma in Dairy Farm Management and seek to fast track entry to the latter in association with UCD.
- Explore the possibility of developing an applied leaving certificate course in agriculture.
- Certification system to be introduced to cover crew training and qualification on board fishing vessels

Human Capital

Recommendation/Actions

Knowledge Transfer

- Maintain an effective, independent, national advisory service providing a locally-based contact point for all farmers through farmer education, consultation and a wide range of communication and influencing activities, using appropriate mechanisms to optimize service delivery to farmers.
- Full implementation of Knowledge Transfer measures of RDP 2014-2020 to up skill producers and agricultural advisors including:
  - Development of Knowledge Transfer Groups to optimise producer productivity and profitability in the beef, dairy, equine, poultry, sheep and tillage sectors;
  - Support for European Innovation Partnership Operational Groups to strengthen linkages between the results of research and innovation and their implementation at farm level;
  - Supports for Continuous Professional Development of professional advisors on an ongoing basis to further develop their knowledge base;
  - Targeted On-Farm Advisory Service to deliver specific advice to farmers on important animal health and welfare issues; and
  - Provide specific advice on environmental, bio-diversity and climate change issues to help contribute to the development of a more sustainable agri-sector.
- Teagasc to prioritise the development of a new Dairy Expansion Service to deliver one to one services to support dairy farm businesses in planning and monitoring their dairy expansion operations.
- Expansion of the current discussion group model to provide access to up to date research and information, in the areas of grassland and soil management; genetics and breeding; financial management/business planning and price volatility management; animal health and welfare; environment and farm safety. This should to be backed by a number of commercially operated beef demonstration farms.
- Implement a third phase of the Teagasc/Farmers Journal BETTER Farm Beef Programme with an emphasis on transferring best practice in management and breeding to the maximum number of farms.
- Develop specialised Knowledge Transfer programmes to upskill farmers who are employing extra labour units in areas such as improving current farm practices; employing staff; responsibilities as an employer.
- Develop targeted extension campaigns on financial fitness dealing with volatility management, business planning and investment planning.
- Further development of simple software tools to support financial and business planning at farm level to encourage uptake in usage of these tools which support budgeting, viability and financial decision making at farm level.
- Teagasc to continue to develop its 'Options Plus' programme for improving off-farm income generation of farmers and to link farm families with the variety of learning opportunities provided by other agencies including the ETBs, LEOs, LDCs, third level institutions and Social Welfare including the development of a communication tool which contains a calendar of skills training opportunities on a regional basis.
- Teagasc to establish a pig farm manager course.
- Consider the development of a Poultry advisory and research service, in partnership with industry to support poultry farm management.
- Enhance hill farming systems by promoting greater integration with lowlands sheep producers through the formation of joint hill/lowland knowledge transfer groups.
- Launch a knowledge transfer measure with an emphasis on promoting and developing the use of Integrated Pest Management principles in the tillage and horticultural sectors
- Establish knowledge transfer groups for malting barley growers
- Teagasc to develop a Technology Outreach Service to support rural-based agri-professionals in delivering services to farmers.

Human Capital

Skills Needs

Agri-Food Companies

The processing sector has a number of challenges and skillset needs which must be addressed if food companies are to develop and reach their potential towards 2025 these include:

- The need to attract and develop management and leadership capability.
- Lack of 'in-company' capability to accelerate market development and direct market access.
- Capability to access finance through business and financial planning expertise.
- Lack of technical capacity to absorb new research and innovation from research bodies.
- Inability to develop management teams, implement succession planning, plan for mergers and acquisitions and professionalise corporate governance structures.
- Limited ability to attract and access third level graduates with skillsets to address these gaps.
- Lack of skilled operatives in certain key areas such as engineering, maintenance and technicians.

Recommendation/Actions

- Reconvene the Expert Group on Future Skills for Industry and update the report on Future Skills Needs in the Food and Drinks sector at management, financial, innovation and operational levels.
- DAFM, through its research funding programmes (Stimulus, FIRM and CoFoRD), to continue to support the development of the new thought and technology leaders for the agri-food sector through supporting agri-food Masters and PhD students on suitable scientific and impactful research projects.
- The DAFM funded Agri-Food Graduate Development Programme to be used as a platform to develop a model to deliver continuous professional development to graduates in agri-food companies through short themed modular courses and work placed Masters and PhD programmes.
- To ensure food clients have the essential capabilities and capacity in place to support ambitious international growth strategies Enterprise Ireland will continue to develop customised management programmes around key themes of Leadership and Management Development, Operational and Manufacturing development capacity, International Sales and Marketing, Innovation and Entrepreneur Development, to inspire ambitious business leaders and equip them with the tools and techniques to grow their businesses. These programmes include Leadership for Growth, Innovation for Growth, Platform for Growth, Business Processing Offer, Foodworks and Competitiveness Improvement Programme.
- Enterprise Ireland to develop a portfolio of business-focused executive development programmes in partnership with the third level sector which include a focus on building specialist business and leadership capability at middle-management level in order to support the development and retention of future leaders within the agri-food sector.
- Enterprise Ireland to develop Leadership for Growth (L4G) Alumni Master Classes that are tailored to address the need of clients.
- Enterprise Ireland will promote and develop Gradhub's Graduate Business Growth Initiative (Graduate Placement) to assist indigenous food and drink SMEs to scale and grow their businesses through the introduction of graduate talent.
- To increase innovation capability and absorption capacity across the sector Enterprise Ireland, in association with the relevant research institutions will design and develop a Food Innovation Fellowship programme to increase and embed technical capability within food companies.
- Enterprise Ireland's Innovation 4 Growth programme will support companies to implement innovation practices, processes and culture with a focus on market led innovation.
- Expansion of the competency and professional development of small businesses through the evolution and strengthening of structured platforms such as Food Academy, Food Works, Vantage.
- Teagasc will develop an industry-based Walsh Fellowship Postgraduate scheme to enhance the scientific absorption capacity of the food SME sector.
- Explore formal opportunities to transfer learnings from food and drink production to new sector entrants via mentoring, training and skills transfer by Industry, Skillnets, universities, schools and Agri Aware.
- Enterprise Ireland and Bord Iascaigh Mhara (BIM) to continue to develop a series of tailored executive development programmes in the Seafood sector to prioritise leadership and management development, technical development (including safety and green manufacturing), and sales and marketing.

Human Capital

Skills Needs

Marketing

The potential of the sector to access new markets will require expertise and the development of the marketing capabilities of the sector.

Recommendation/Actions

- Greater capacity must be developed around marketing and branding with a focus on increasing the number of international marketing graduates employed in the sector. Explore opportunities for industry co-funding/sponsorship to significantly increase these resources on the ground and extend the sector's market reach.
- Continue to build on the Bord Bia 'Marketing Fellowship' and 'Food Marketing Graduate' programmes to deliver high quality talent to the food industry.
- Build on the Origin Green Ambassador programme to engage with targeted customers to build awareness and understanding of Ireland and the Origin Green programme.
- Communicate benefits of working in the food and drink industry throughout school, undergraduate and postgraduate programmes.
- Bord Bia to establish a Market Placement programme which assigns Irish graduates to global target customers. The programme will create a group of graduates skilled in best practice which they will bring back to Irish industry upon their return. The placement will also serve to raise awareness and understanding amongst host companies of Ireland and its industry capabilities.
- Enterprise Ireland and Bord Bia to collaborate with industry on the development of a pilot support programme for agri-food companies to support overseas business development initiatives.
- BIM to build market scaling of companies through its co-opetition programme

Skills Needs

Health and safety

Recommendation/Actions

- DAFM, Teagasc and the Health and Safety Authority to continue to support educational initiatives supporting behavioural change at farm level in respect of safety in particular as part of knowledge transfer groups and level 6 (green cert) education.
- Engineered solutions to safety, such as those available under the Farm Safety scheme, to remain a priority in grant aided investment programmes, where available.
- BIM to provide an enhanced programme of training for crew of fishing vessels with a strong focus on safety at sea.

Skills Needs

Languages

Recommendation/Actions

New market development will require improved foreign language capability of Irish companies to facilitate access to new markets.

- Bord Bia to implement the undergraduate Language Bursary Programme to improve the language proficiency of graduates coming from degree programmes strategically important to the food and drink industry such as Agricultural Science, Food and Nutritional Sciences and Food Marketing and Entrepreneurship.
- Consider better engagement with existing young Irish diaspora living in foreign markets as a potential source for recruiting talent and skills through better harnessing of networks and data from Irish Embassy networks.

Competitiveness

Given the focus of the Irish Agri-food sector on global markets and exporting high quality sustainable food, maintaining the sector's competitiveness internationally is crucial if market growth opportunities are to be realised. Given that over 80% of Irish food production is exported, and therefore exposed to international price and exchange rate volatility, managing and maintaining our international competitiveness is a key fundamental for the future development of the sector

While Ireland's economy ranks quite highly in global competitiveness tables it is still considered to be less competitive than some of our main competitors on global agri-food export markets such as Netherlands and New Zealand or Norway and Scotland for seafood products. This presents challenges for the sector and requires a clear focus on measures to mitigate and address the relatively high cost base (labour and utilities), development and attraction of new skills and talent, development of scale at producer level to drive viability and at processor level to drive the ability to compete on global markets, increased investment in innovation, increased access to finance and the application of latest innovative processes and technologies to drive sustainable productivity gains.

Ireland has comparative advantages in terms of our sustainable, grass-fed production system (which results in low feed costs for cattle, dairy and sheep farmers), our positive business environment including the level of corporation tax, a strong foundation and reputation in science based innovation and product development and access to a young educated population. These advantages must be enhanced and used to ensure the international competitiveness of the sector is maintained and improved.

At farm level, challenges associated with price and income volatility require farmers to focus on improving profitability for their enterprises by managing input costs and maximising the price received from the market. This margin maximising approach will support continued improvements in the economic viability of full and part time family farm enterprises into the future and the development of vibrant rural economies. Farmers must adopt, and be encouraged to adopt, the latest technologies and processes to increase sustainable productivity which will result in increases farm level profitability. Increases in productivity will drive the continued development of Irish farm business enterprises, making them more sustainable and maximising their contribution to regional and local rural economies.

Irish family farms are facing particular challenges related to the scale of their operations and the fragmentation and structure at farm level which are limiting the capacity of the sector to develop sustainable and viable business enterprises. The age profile at farm level, while lower than the EU average, is still heavily skewed towards older male farmers. More young, well educated people than ever before are interested in farming, but these structural issues make it difficult for new entrants to access farmland. This strategy will promote measures to address these problems, including measures to improve the scale of farm businesses, encourage succession planning, promote collaborative arrangements and increase women's involvement in farm decision making. Collaborative farming arrangements, which refer to newer models of farming such as farm partnerships, share farming and

Competitiveness

contract rearing, should become the norm to aid succession management, improve land mobility and encourage optimum use of land. Recent changes of the income tax measure to encourage more longer-term leasing are welcome, and now the focus must be on achieving a greater shift from the dependence on conacre letting to longer term lease arrangements which will encourage greater investment in improving the productivity of rented land.

There is a need to achieve better integration of family farms into local economies by increasing their diversification by creating more open farms, developing agri-tourism opportunities and increasing the range of goods and services provided to local communities. This will allow many family farm enterprises to improve their profitability and provide on-farm employment opportunities for the next generation of farmers.

EU CAP direct payments provide vital income support for farmers, and act as an important cushion against commodity price volatility. While CAP payments are secure until 2020, there will be further EU budget negotiations and another round of CAP reform for the period starting in 2021. There will be increasing pressure on the CAP Budget from within the EU. If past trends continue, payments are likely to be more strongly linked to the provision of public goods such as environmental protection and biodiversity. The realities of an increasingly globalised market, a market which will continue to be liberalised as new international trade agreements are concluded, will be that Irish producers are increasingly in direct competition for global market share with their counterparts in other leading agri-food producing countries. In this environment Irish farmers will therefore need to concentrate on ensuring that they control costs, improve sustainable productivity and diversify where possible to maximise their profit margins and build strong sustainable farm business enterprises.

At processing level the sector also faces a number of competitiveness challenges in particular labour and utility costs, access to finance, lack of scale, insurance and legal costs, regulatory costs and lack of investment in innovation and research. The sector's ongoing ability to grow and develop both on domestic and international markets requires a clear focus on maintaining and improving competitiveness. Ireland has relatively high labour, energy and other utility costs and the Irish agri-food sector is particularly affected by these higher costs as it is a labour and energy intensive sector. As the overall economy continues its steady renewal it is important that the competitiveness gains and corrections achieved in recent years are not undermined. The focus in the agri-food sector in particular should be on improving productivity, investing in innovation and human capital and on controlling regulatory, input and production costs. Lean tools and techniques are very important in the context of this agenda helping companies to address competitiveness issues within their businesses by building the capability of their people to identify problems and improve operations.

Growth in the agri-food sector requires the commitment of the sector to develop new processes which will deliver productivity gains and innovative new high value-added products which will increase market share both domestically and on global markets. This will require industry, Government and state agencies to maintain a focus on addressing competitiveness issues across the economy and in particular across the agri-food sector.

The development of innovation, research and human capital are important tools which will allow the Irish agri-food sector to remain competitive and this strategy includes a series of measures to support improvements in these areas. Education and knowledge transfer mechanisms provide critical paths for ensuring that farm and agri-food business enterprises are using the latest technologies and production methods to maximise their productivity and margins, and have access to financial management skills to allow them drive their enterprises on a viable basis.

Competitiveness

Recommendations/Actions

At Producer Level

Recommendation
Development of measures to manage impacts of price/income volatility

Actions

- Processors should prioritise the development of fixed price contract arrangements and other volatility management tools for their suppliers to mitigate against the impacts of price volatility on both producers and processors.
- DAFM to continue to support and pursue an adequately funded Common Agriculture Policy post 2020 and seek to maintain income supports at least at current levels.
- DAFM and industry to progress development of producer organisations in beef and horticulture sectors.
- DAFM and industry to explore mechanisms to improve transparency around pricing and costs.
- DAFM to review the possibility of developing a mechanism to minimise risk for processors and give farmers confidence regarding price including possible mutual funds such as a reinsurance scheme.

Recommendation
Ongoing review and updating of Agri-Taxation measures to address competitiveness issues

Actions

- The Agri-taxation Working Group to continue to examine and consider new actions which will help deliver:
  - Increased land mobility and productive use of land.
  - Improved farm succession including intergenerational partnerships.
  - On wider agriculture policies and schemes, such as supporting investment to assist new entrant young trained farmers, environmental sustainability, on-farm renewables, alternative farming models such as farm partnerships, leasing, contract farming and responses to increasing income volatility.
  - Scope for an energy efficient SEAI scheme for non-incorporated farm businesses.
  - Assistance to farmers to deal with the consequences of price volatility such as income averaging.
- Department of Finance and DAFM to improve dissemination of information on taxation incentives including engagement with advisors, tax consultants and accountants.
- DAFM and Department of Finance to undertake a review of capital, taxation and other incentives available to the seafood sector and to make initial recommendations by end 2015.

Recommendation
Aid farm restructuring and land mobility

Actions

- DAFM should ensure that any future schemes and supports do not accentuate land mobility challenges and instead target those producers with best potential for growth and competitiveness, and in particular younger farmers with relevant qualifications and sound business plans.
- DAFM should continue to take account of formally recognised collaborative farming arrangements in the design and implementation of its schemes and supports to ensure individuals are not disadvantaged by participating in these models of farming.
- Explore greater use of joint approaches with DAFM, Teagasc, industry and professional stakeholders in engaging with the farming community to embrace longer-term leasing and collaborative farming arrangements to help resolve land mobility challenges.

Competitiveness

Recommendation

Prioritisation of sustainable productivity improvements at producer level

Actions

- Improve the use of genomic technologies and better breeding to improve the sustainability of the National herd, including by:
  - Increasing the level of data recording at farm level.
  - Increasing the use of breeding indices in purchase decisions.
  - Increasing the level of genotyping across the national herd to allow for robust, genomics based breeding indexes.
  - Application of commercially focused breeding indices and sexed semen to increase the beef characteristics of the increased output from the dairy herd and thereby ensuring these animals best meet market specifications.
- Teagasc and other research providers to develop measures such as improved grazing management practices, increase soil fertility and sward renewal to increase grass utilisation by 2t/ha on livestock farms.
- Teagasc, other research bodies and industry to develop the use of precision technologies applicable to pasture based production.
- BIM to bring forward strategies/programmes to address irregularity in the supply of seed mussels into the bottom grown mussel sector. Continued research into the development of indicators for HNV farming that would allow targeted support for such farming systems.

Recommendation

Improve access to finance for agriculture, forestry and seafood producers and Agri-food companies

Actions

- DAFM will continue to explore additional innovative funding mechanisms and financial instruments, specific to the Agri-food sector, to complement existing mechanisms such as ISIF, SBCI and EIB, with a view to improving further competition in relation to credit provision. Appropriate delivery and distribution mechanisms will be considered including the potential for a dedicated Agri-food sector fund.
- DAFM to encourage the EU Commission to review State Aid Regulations in the context of the development potential of the Irish agri-food sector and the sector's strategic importance to the Irish economy.
- In the light of its current fragmented structure and low financial capacity, EI and BIM to develop a financial model for seafood sector which provides funding opportunities that both increase scale and deliver commercial return. These will be tailored to meet the specific needs of the seafood sector.

Recommendation

Development of scale at processing level

Actions

- Industry to consider how best to optimise use of the processor asset base and all forms of rationalisation including possibilities for collaboration in processing, joint ventures, product specialisation.
- To drive entrepreneurship, Enterprise Ireland will create a new funding offer to incentivize a small number of scalable food and beverage start-ups.
- To develop scale Enterprise Ireland will develop a new client engagement model that is focussed on scaling ambitious companies. This model will be: company-led, focussed on the leadership team, benchmarked against best-practice, to indicate key areas of focus, and will be implementation focussed, with advisers, mentors and peers working together.
- Enterprise Ireland will continue to develop customised management development programmes to develop in-company capability to ensure that they have the Leadership, Management and operational skills to capitalise on growth opportunities and scale internationally.
- EI will continue to work with Development Capital Funds/Banks/Alternative sources of finance to ensure that scaling businesses are adequately funded.
- To develop scale and export capability in the seafood processing sector, BIM, Bord Bia and EI to work collaboratively to scale up companies in the pelagic, whitefish and shellfish sectors and to bring a number of companies to PLC level.

Competitiveness

Recommendation
Influence national initiatives targeted at addressing cost competitiveness in Irish economy

Actions
- DAFM and industry to pursue solutions to cost competitiveness issues for Irish Agri-food sector specifically energy, waste, regulatory costs, in National Competitiveness Council.
- To build competitiveness Enterprise Ireland will continue to promote and develop the Lean Business offer to help agri-food companies to adopt world class manufacturing standards and to drive productivity growth through skill development and Lean re- engineering.
- Enterprise Ireland to promote its competitive fund for SMEs to support a strategic initiative focusing on capital and technology acquisition leading to productivity and competitiveness.

Recommendation
Encourage Foreign Direct Investment(FDI) in Agri-food sector to locate in Ireland

Actions
- EI and IDA will cooperate to target a select number of multinational clients for large mobile investments.
- EI to explore FDI opportunities via partnerships and Joint Venture approaches between Irish processors and MNCs in particular in areas such as life-stage nutrition

Recommendation
Develop communications, transport and logistics infrastructure to improve competitiveness

Actions
- DAFM, as part of interdepartmental and stakeholder initiatives such as the National Competiveness Council, to promote the need to develop rural broadband, port, road and airport infrastructure development.
- Industry to conduct a study into improving transportation and logistics links with the UK market for Irish Agri-Food and beverage companies to identify opportunities to increase supply chain efficiency and reduce costs.

Recommendation
Develop on-farm diversification

Actions
- Teagasc 'Options' programme to continue to support on-farm diversification measures and programme impacts to be monitored and measured.
- DAFM to roll out female entrepreneur development programme.
- To complement the current Marine Leisure and Tourism schemes, DAFM in conjunction with stakeholders to develop an agri-food tourism measure with an emphasis on food, beverage and eco-trails pairings.

Market Development

The global evolving market environment while complex, presents enormous potential opportunities for Irish producers. With these opportunities come some challenges which the sector must recognise and address if the opportunities are to be realised fully. Global markets represent global competition and continued international trade liberalisation will lower trade barriers and Irish goods will increasingly be competing for market share with other food exporting countries. This should drive the sector to address cost competitiveness and productivity issues which will allow Irish products compete on international markets and ensure investment in innovation, research and development by the Irish agri-food sector is driven by consumer insights.

In order to achieve the growth opportunities which are available to the Irish agri-food sector over the next ten years there needs to be a focus on market development underpinned by appropriate resources to prioritise market opportunities and the development and protection of Ireland's credentials and systems of producing high quality, safe and sustainable food.

As globalisation and modern global communications infrastructure continue to reduce the distance between producer and consumer, there is a growing imperative and necessity for future expansion of the sector to be driven by in-depth consumer insights thus ensuring Ireland is producing what the customer wants in the most innovative and efficient manner. This will result in Irish products being targeted at the most appropriate markets, market segments and delivering maximum value addition and benefit to the Irish economy.

This market prioritisation analysis must be driven by in-depth consumer demand insights, to ensure the sector has the tools to make investment and market decisions based on clear understandings of consumer trends and market conditions for different markets and specific segments of markets they wish to explore. This market analysis must also include an assessment of the regulatory environments in potential new markets to avoid wasting resources on markets which are unlikely to be opened due to political reasons.

A key fundamental underpinning the sector's ability to access and grow exports in international markets is Ireland's reputation for producing sustainable, safe and high quality food. The systems supporting this reputation must be enhanced and re-enforced to protect this reputation.

Market Development

Recommendations

Recommendation
State Agencies to review the deployment of human resources in overseas locations to maximise support for trade development and realisation of market opportunities, in consultation with industry stakeholders.

Actions
- DAFM, Bord Bia and EI to explore synergies and priorities for the deployment of human resources in specific markets, including possibilities for relocation, new posts and new offices based on market prioritisation which considers growth possibilities, consumer insights, political stability of regions/countries and the market access regulatory environment.
- DAFM and agri-food state agencies to enhance linkages with other government agencies including Department of Foreign Affairs and Trade embassy network, IDA, DJEI – Tourism Ireland and leverage the resources in these agencies to support the Irish agri-food sector in accessing new markets.
- DAFM to review and assess the assignment of Agri-food Attaché posts in the context of supporting industry trade development opportunities and priorities.
- Bord Bia to increase market presence in emerging markets with particular focus on Asian and African countries.
- Bord Bia to continue to build Ireland's reputation and raise the awareness of Ireland with key customers globally through the Origin Green Ambassador and Market Placement programmes.

Recommendation
State Agencies to support market prioritisation and targeting.

Actions
- Establish mechanisms to support market prioritisation strategies and market decision making through provision of consumer insights in specific regional and country markets including by exploring the feasibility of establishing a Centre for Consumer Insights.
- Bord Bia to continue to invest in innovative buyer contact initiatives and inward buyer visits across all existing markets and introduce into emerging markets.
- Bord Bia to maintain support for Marketplace 2018 and broaden focus on emerging markets and to deliver 50% of buyers from non EU markets.
- Bord Bia to enhance its lead generation programme across all regions to deliver market and business prospects.
- DAFM to optimise the use of strategic trade missions to emerging markets to ensure market entry conversion.
- Industry to pursue and seek joint venture/partnership opportunities to enhance market access opportunities.

Market Development

Promoting 'Ireland' in New Markets

Many of the high potential growth markets for Irish agri-food exports are outside of EU and other developed countries and are therefore in regions which may not be familiar with Ireland's strong reputation for producing high quality, nutritious and safe food but even more fundamentally than this many of the consumers in these markets are not be familiar with Ireland's identity as a country with a strong distinctive culture and a green and natural environment. Ireland, with its unique culture, friendly people, natural landscapes and attractive environment needs to be marketed in a distinctive manner in these regions so that when Irish agri-food companies enter these markets there is already a recognition, knowledge and image of Ireland which resonates with consumers, marking out what makes Ireland special and why Ireland is a country which can be trusted to deliver high quality goods. There is a strong connection between this perspective of 'Ireland' and the Irish tourism and agri-food sectors. These two economic sectors are key indigenous industries driving export growth and they are interlinked and provide complementary benefits to each other, this complementarity must be capitalised on so that both sectors gain maximum benefits for the economy.

The strategy recommends actions to develop markets and support the sector in realising the global market growth opportunities. These opportunities include increased commitment of resources by agri-food government agencies to market development, development of the knowledge and recognition of 'Ireland's image' in potential markets, enhancement of the Origin Green Programme as a watermark of Ireland's sustainable food production systems and the further enhancement and protection of Ireland's world class food safety status.

Recommendation

Government Departments and State Agencies to enhance cooperation on promoting Ireland's positioning in emerging export markets

Actions

- Establish an interdepartmental group to develop complementary approaches across Government agencies to promote 'Ireland' in emerging distant markets and to promote synergies between Irish tourism, agri-food and culture.
- Develop promotional marketing material to sell Ireland's - positive green environmental credentials, modern young well educated economy, research capacity, food environment (high quality, food safe) including positive imagery, social media and videos.
- DAFM to explore with relevant state agencies measures to better link in the agri-food sector with the experience of tourists, including the promotion of food, beverages and marine trails.
- Build on the success of marketing Irish Whiskey and beers internationally by demonstrating the linkages of these products to the wider agri-food sector.

Market Development

Origin Green

Origin Green is Ireland's sustainability charter tapping into Ireland's existing reputation as a grass-based, green and dynamic food and beverage supplier and assisting Ireland's food and beverage industry to become a world leader in high-quality sustainable production.

While the current focus is on Origin Green as a Business to Business (B2B) brand there is potential for Origin Green as the platform upon which the broader recognition and promotion of world leading Irish food and beverages will be built. Origin Green will therefore continue to build and evolve – becoming a Business to Consumer (B2C) as well as B2B watermark brand and key marketing tool– so that consumers in Ireland and more widely on international markets come to recognise it as evidence of the high quality food and drink sustainably produced in Ireland.

Transparency and safe supply chains are a critical component of the Origin Green ambition. Consumer trust in where their food comes from and how it is made is vital for manufacturers, retailers and indeed the reputation of Ireland's food and drink industry. Producers recognise the priority that should be given to transparency throughout the supply chain. Without safe and transparent supply chains, the vision for the Irish food and drink industry cannot be achieved. Indeed there is clear strategic advantage in a well-developed trust chain that has credibility in the eyes of consumers.

Recommendation

Further enhance Origin Green Programme as a tool to measure and demonstrate in domestic and global markets Ireland's credentials as a producer of sustainable, safe, nutritious and high quality food.

Actions

- Bord Bia to develop a messaging programme to communicate, in partnership with industry, the benefits of Origin Green membership to producer stakeholders to ensure greater adoption and engagement with the programme by producers across all agri-food production sectors.
- Bord Bia to develop a mentoring programme to work with verified members to help them articulate their sustainability efforts to key customers and stakeholders and to gain recognition in the marketplace.
- Bord Bia to enhance the Origin Green Ambassador programme building ongoing relationships with targeted customers to increase awareness and understanding of Origin Green and drive a preference for Ireland as a sustainable source of supply.
- Bord Bia to expand scope of programme to include retail and foodservice sectors by developing charters relevant to each sector.
- Provide further funding for consumer insight to identify and understand how consumer differences across geographical markets will impact on Origin Green messaging around sustainability to allow the brand to transition from B2B to B2C.

Market Development

Animal Health Status

Healthy animals are more efficient at transforming farm inputs into food outputs, thus maximising farm profitability and supporting competitiveness. Ireland's animal populations have in general a favourable animal health status. This, however, is subject to risk factors – some external as well as inherent risks associated with a wide and varied producer and manufacturing base. As Ireland moves towards a greater sustainable intensification of production to fulfil its growth targets any associated potential animal health issues must be addressed and managed appropriately to ensure risks are controlled.

Given the value of Ireland's animal health status to the industry in terms of accessing export markets and producing high quality raw materials the preservation and protection of this status must be supported by both public and private sector actors. There is therefore a need for greater focus on and delivery of improved animal health which provides both private and public goods and provides a rationale for public intervention, through public/private partnerships, to address animal health issues in a cohesive and coordinated way. In the absence of such a sustained coordinated approach, the industry could be held back from realising the benefits of addressing endemic contagious diseases and risks from exotic diseases.

Recommendation

Continue to enhance and support Ireland's animal health status and reputation for producing safe, high quality food.

Actions

- DAFM, in consultation with stakeholders, to formulate a National Farmed Animal Health Strategy for Ireland which will provide the framework for an evidence based, co-ordinated and collaborative approach to animal health matters in support of on-farm productivity, processor efficiency and export markets.
- DAFM and industry to build on the recent substantive progress towards the eradication of bovine Tuberculosis, by setting an ambitious target of eradicating tuberculosis from the cattle herd in Ireland by 2030.
- Reflecting the need for strong leadership and involvement by all stakeholders in sustaining such progress and pursuing this objective, a high level national industry forum will be put in place to provide coordinated industry leadership in support of the DAFM executive team. The forum composition will represent the interests of farmers, industry, and government. Its role will be to review the strategic programme on an ongoing basis, facilitate agreement on appropriate new programme measures and targets and ensure the constructive participation by all parties in sustaining progress towards eradication.
- Industry and state agencies continue to enhance support for Animal Health Ireland and agree an equitable sustainable funding model that will sustain the organisation over next ten years.
- AHI and relevant stakeholders to address already identified animal health related production inefficiencies associated with endemic disease on Irish farms by:
  - Completing the BVD eradication programme within an established timeframe.
  - Maintaining progress on the SCC Cellecheck programme and achieving the programme objective target of continuing to improve milk quality.
  - Evaluating the results of the Johnes' Disease Pilot programme with a view to putting in place a sustainable voluntary Johnes' Disease control programme.
  - Evaluating benefit/cost of initiating programmes and, where appropriate, develop and bring forward strategies/programmes aimed at addressing the current levels of
    1. Calf mortality
    2. Dairy cow lameness
    3. Fertility rates in suckler herds
    4. Sheep genetics and breeding

Market Development

- DAFM to support the carrying out an economic appraisal by Teagasc of the benefit/costs of implementing a compulsory national IBR eradication programme for consideration by AHI and its stakeholders with the expectation that if the outcome shows a favourable return on resource deployed that a national eradication programme will be initiated by 2019.
- DAFM and industry to progress and improve the return to producers and their advisors relevant data arising from ante and post mortem inspection at meat plants, in support of optimising on-farm productivity, through improved animal health.
- Recognising global societal concerns relating to the threat to human and animal health of anti-microbial resistance, and in that context, the need to ensure prudent use of anti-microbials in animal production systems, DAFM will, in consultation with stakeholders, continue to advance its action plan and develop implementation strategies for veterinary practitioners and farmers in relation to anti-microbial usage.
- DAFM should enjoin industry stakeholders to enhance existing systems for surveillance of animal diseases to facilitate early detection of new/emerging and exotic disease and to provide a more robust evidence base substantiating marketing claims about the animal health and welfare status of the national herd/flock and supporting disease control at farm level.
- MI to support actions that promote an expanded range of treatments for pests in salmon fisheries.
- DAFM and agencies to promote the development of new medicines and measures to strengthen control of sea lice on salmon farms.
- State agencies to continue to advance shellfish safety monitoring and science.

High Food Safety Status

Irish agriculture and food production is produced to the highest international standards of quality and food safety and Irish food safety and traceability systems are recognised as among the very best in the world. All along the value chain there are rigorous, robust and comprehensive testing and monitoring regimes. This status is fundamental to the continued growth of international markets for Irish goods and will need to be maintained and enhanced if the 2025 growth forecasts are to be achieved.

EU legislation provides a regulatory framework for dealing with recognised risks to the food chain and ensures harmonised standards across EU member states, facilitating intra-community trade. However, by definition, controls prescribed in legislation are inflexible and do not provide specific safeguards against new and previously unforeseen risks. In addition, the EU cannot legislate for all known hazards to the food chain. Consequently, the Irish Agri-Food industry may be exposed to specific risks for which current EU regulations do not provide adequate safeguards. No single entity has the capacity and authority to anticipate and mitigate these new and emerging threats to the food chain. Therefore in keeping with best international practice, multi-stakeholder collaboration by DAFM, FSAI and industry is required and this must be seen as a shared responsibility of both public and private concerns.

Recommendation

The Irish Agri-food industry should enhance its strong credentials in food safety through a public-private collaboration aimed at anticipating and mitigating new and emerging risks to the food chain.

Action

- DAFM, FSAI and industry to combine resources and intelligence gathering capacity to improve monitoring and predictive capacity which will result in more timely responses to food safety threats which may arise and ongoing communication.
- Review laboratory capacity to ensure effectiveness to address potential disease outbreak or food scares
- Prioritise research to ensure the development of state of the art methodologies to identify and assess the risks with biological and chemical contamination of food and develop the controls to mitigate against these risks.
- Prioritise research to ensure that the Irish food industries have the best available technologies and systems that will assist in identifying and controlling risks arising from microbial and chemical contaminants.

Innovation

Innovation will continue to be a key driver of competitiveness and growth for the Irish Agri-food sector. The development of new technologies, products and processes will drive productivity improvements, sustainability and growth in the sector over the next ten years. Ireland must continue to increase investment in research and development in particular to increase the levels of private sector investment in RDI. This investment should be directed at the most relevant areas to ensure that production efficiency is maximised and value added to our agri-food produce so that our products are competitive on domestic and international markets which we are targeting to deliver economic growth.

The Irish infrastructural research and development network in the agriculture and food areas is extensive and has embraced much change over the past 15 years. The principal research institution types within the Irish research and development infrastructure, namely Teagasc, the University network, the Institutes of Technology, Marine Institute and Department of Agriculture, Food and the Marine, adopt a multi-disciplinary approach, with specialist units in each of the four key research areas: agriculture, food, marine and forestry. The primary Agri-food sector can therefore be considered to be well served by broad research infrastructure. In addition the Government's Research Prioritisation Action Group has identified that two of the fourteen priority areas be related to agri-food sector– 'Sustainable Food Production and Processing' and 'Food for Health'. A strategic research and innovation agenda for these two areas (SHARP – Sustainable Healthy Agri-Food Research Plan) was developed in 2014.

RDI in the agri-food sector also faces some key challenges with the current system and ensuring that research investment delivers maximum economic returns. There are gaps in terms of transforming scientific research into commercial returns and in terms of the ability of Irish companies given their lack of scale in many cases to deliver in house innovation and to absorb the high quality research developed by our research institutes. Bridging these gaps will be crucial if Ireland is to realise maximum benefits from the investment it is making in agri-food research. Ireland is a leading exporter of food products, products which are being demanded by consumers around the world. However these consumers have very different demands/requirements depending on the country or region they live in and/or depending on their life-stage. As consumers are the ultimate purchasers of Irish food products the development of the Irish food sector must be focussed on delivering what these consumers want. The sector must also recognise and pre-empt the challenges in the decade ahead to retain and secure competitive advantage.

It is this consumer led focus which must be a key driving force of ongoing and future investment in innovation, research and development. Everything the sector does should have a focus on delivery for the customer who will consume Irish products so product innovation must have those consumer requirements at their heart and those consumer requirements must be the basis for investment in innovation. This consumer focus will improve the success rate of translating research outputs into commercial products on domestic and international markets. At present, while Irish research institutes are rated well in terms of delivery of scientific research the translation of this research to markets solutions is not maximising commercial returns.

Innovation

At producer level Ireland has been at the forefront of developing many new agriculture production technologies and processes in particular related to grassland management and livestock breeding this innovation is enhancing the productivity and sustainability of our production. If the sector is to achieve the growth targets for the next ten years in a sustainable manner there must be continued development of new innovative approaches to producing more while protecting and managing our natural resources. Equally important will be mechanisms for rolling out these technologies and processes to the maximum number of producers, this will be crucial to efforts to support producer profitability and viability.

At processing level there is a need for increased investment by companies in innovation and Research and Development to ensure that management teams in companies are familiar with and adopt state of the art innovation processes and practices and that production processes are continuously improved with an emphasis on Lean principles and that the Irish agri-food sector continues to develop products that the market and consumers want. There are significant opportunities for Irish agri-food companies to bring new products to domestic and international markets. In addition to increased and better targeted investment in research, development and innovation the industry must tackle the issue of lack of capacity to absorb research in particular in SMEs. This requires greater emphasis on a commercially focused science and innovation base involving investment in people, infrastructure and training. A more collaborative approach between industry and science must be adopted both on agenda setting and delivery of outputs respecting both industry craft and academic know-how.

This strategy is proposing a number of actions to develop human capital and structures which enable SMEs to access the resources to allow them absorb the latest technologies and product development and allow them to access the global and domestic market opportunities which exist.

Recommendations/Actions

Recommendation

Future Agri-food research to be informed by consumer insights to improve translation of research output into commercial products on market.

Actions

- Bord Bia to explore with industry the potential for development of a Centre for Consumer Insight which should provide consumer insight to inform future investment in research and development by Irish agri-food research bodies. This may include:
  - Investment in a physical space that is creative and inspirational, and accessible to international visitors and consumers who will be involved in the consumer research.
  - Invest in the technology that underpins the Centre for Consumer Insight and partner with private enterprise that will support the initiative with their intellectual expertise, share their global connections and innovation experiences so that it is a state of the art, outward looking, and world class facility.
  - Increase the number of marketing specialists in areas of qualitative research, data mining and analysis, brand and innovation specialists.
  - Communicate benefits to all stakeholders to maximise engagement.
- Bord Bia to continue to partner with major domestic retailers on supplier development programmes including Taste Bud and Food Academy initiatives.
- Centre for Consumer Insight to inform market validation of future publically funded research investments.

Innovation

Recommendation

At producer level prioritise research and innovation investment in processes and technologies which improve productivity and sustainability of production.

Actions

ActionsProgress research investment areas identified in SHARP with particular emphasis on:

- The primary production research activities of national research bodies, including Teagasc and academia, to be focussed on grass land productivity, animal breeding/genetics, soil nutrient usage, animal health improvements, crop production, economic analysis of Irish agriculture, food ingredient, product and process innovation.
- Teagasc in collaboration with relevant HEIs and others to research emerging precision technologies, data analytics, sensor technology, DNA technology and possibilities for mining big data to improve decision making, availing of existing resources and capabilities.

Recommendation

Improve coordination between Industry, State Agencies and Research Institutions to support the delivery of research which will deliver commercial outputs and products.

Actions

- Establish a high level core team to review current Agri-food sector innovation capacity, the utilisation of this capacity and to better market the Irish agri-food sector's innovation capabilities.
- DAFM, Enterprise Ireland and other research funders to work collaboratively to implement SHARP with oversight from National Agri-food Research and Innovation Group (NAFRI).
- NAFRI to review coordination of agri-food research technology centres to ensure resources are applied most efficiently including exploration of how best to join up existing centres of excellence - Food Health Ireland, Nutramara, Dairy Processing Technology Centre, proposed Meat Technology Centre and the potential centre of excellence for PCF, Beverage and Horticulture sectors while maintaining consistency through EI Technology Centre programmes.
- DAFM through the FIRM programme to further collaborate with Enterprise Ireland and other resercgh funding providers to ensure the required spectrum of agri-food research activity is funded to develop the underlining technologies and capabilities which can be leveraged to create commercial outputs and facilitate involvement in externally funded initiatives notably the EU Horizon 2020 RTD programme.
- Continue to promote and increase joint industry and public sector investments in research projects which will improve the commerciality of research outputs.
- Create a virtual multi- campus centre of excellence for seafood development in Ireland, including BIM's Seafood Development Centre, Teagasc's Ashtown facility and third level institutes, to provide a co-ordinated, seamless product development experience for seafood entrepreneurs.
- DAFM in conjunction with state agencies and industry partners to develop a "SMART NAUTRIENTS" research programme to support high value products from seafood.
- DAFM, Marine Institute and Industry to develop further research programmes on the potential of marine species of fish, shellfish and seaweed as possible high value sources of pharmaceutical, cosmetic and renewal energy products

Innovation

Recommendation

Improve capacity of Agri-food companies to absorb Research and innovation output from Research bodies

Actions

- Teagasc to develop proposals for a Food Innovation Hub at its Moorepark campus to promote greater collaboration between industry and public research, and deliver a step change in innovation activity in the food industry.
- Teagasc will lead research in collaboration with other research institutions and industry to derive applications from the significant state investment in foods for health. This will build on initiatives such as the APC, FHI, and Nutramara.
- Teagasc and the dairy industry to complete the €10 million upgrade of Moorepark Technology Limited pilot plant.
- Enterprise Ireland will create an FDI and Innovation Portal to improve connectivity across the Irish innovation system for Food and beverage companies.
- Enterprise Ireland to continue to support the evolution of FHI and DPTC to allow the centre to realise long term full potential.
- Enterprise Ireland to develop the Meat Technology Centre initiative in association with meat industry, DAFM, Teagasc and academia, with a view to launching in early 2016.
- Enterprise Ireland will continue to engage with Industry, DAFM, research providers and other relevant stakeholders to establish a food/test incubation technology centre of excellence to support PCF, Beverage and Horticulture sectors with a focus on pilot stage production, packaging innovation, product reformulation and be a portal to global best practice research data of interest to these sectors.
- Industry and EI should continue to drive an industry-led network of Irish Agri-food companies which access Research Bodies in a collaborative/partnership manner on specific innovation/research challenges.
- The DAFM funded Agri-Food Graduate Development Programme to continue to upskill agri-food graduates for employment through enhancing industrial knowledge, business and personnel management, leadership, communication and advanced research and innovation skills.
- DAFM to continue to partner with the Irish Research Council's employment-based Research Programme to facilitate the placement of post-graduate research students in agri-food enterprises.

Inspect4 – An innovative crate design which allows for much safer and efficient restraining of cattle for tasks such as hoof trimming

Sectoral Briefs

Dairy

Strengths

- Low cost grass fed production
- Low carbon intensity production and sustainability credentials
- Reputation for world class food safety standards
- Access to 130 export destinations
- High levels of recent investment at processing and farm level
- World class research capability

Weaknesses

- Comparative lack of scale at processing level
- Commodity product mix
- Seasonality of production
- Skills availability
- Low rate of land mobility

Opportunities

- Production expansion with end of milk quotas
- Scope to move up value chain with focus on more B2C, IF, ingredients and nutrition products
- Increased importance of third country markets (China, Africa, Gulf, US)
- Green sustainable systems allowing for differentiation and branding
- Somatic Cell Count – cellcheck to improve quality

Threats

- Food safety incident
- Animal disease outbreak
- Cross contamination
- Raw material supply
- Extreme price volatility
- Failure to protect and measure the impact on the natural environment

Dairy

The dairy industry is one of Ireland's most important indigenous industries and is central to the agri food sector. It is an export driven sector with exports of dairy products and ingredients valued at over €3bn in 2014. With the quota regime now consigned to history, the freedom to realise the full potential of the dairy sector in terms of output, export earnings, rural employment and investment is upon us.

The vision of Ireland's growth proposition in the dairy sector is and will be based on strong foundations; a competitive advantage conferred by a natural, grass based production system that supports sustainable intensification; a strong international reputation for high standards of quality and food safety; and on the kind of global demographics that mean demand for dairy and other food products will increase significantly in line with increasing population and affluence. This shared vision can in many respects be seen to have been borne out of the cross sector planning and foresight that was invested into preparation for a post quota environment. This is also reflected in the large scale investment made by processors and farmers in the last five years, amounting to €2billion. Underpinning these factors are the kind of resilience and ingenuity that has seen our dairy co- ops build global brands and reputations.

Ireland is renowned both for its relatively high productivity and for being an early adopter of new technologies at producer level. A major feature of production in Ireland is the seasonality of milk supply, caused by farmers adjusting the date of calving to maximise the use of grazed grass in the cows' diet in an attempt to produce milk at as low a cost as possible.

While there are undoubted expansionary and growth opportunities for dairy farmers in the post-quota which have brought much welcomed optimism and positivity to the sector, such sentiments needs to be grounded in pragmatism and focus on the important metrics that will bring enhanced profitability at farm level and which also respect the natural environment. Expansion and growth of the dairy herd and milk output in an unbridled manner is not a prescription endorsed by this Strategy, it is important that focus is instead placed on improving the real drivers of profitability; grassland management, breeding/ herd fertility and cost control. Thus in harmony with this Strategy's vision of sustainable intensification, increased emphasis must be placed on metrics such as optimum stocking rate, grass grown, milk solids per hectare and levels of concentrates fed. Otherwise we risk eroding our competitive advantage as well as damaging the environment.

Historically, Ireland's dairy product mix was weighted towards commodity output. More recent years have been witness to an increased emphasis on adding value, for example as with infant formula production and ingredients for same, higher value premium cheeses and butters as well as nutrition products and ingredients. Notwithstanding this the fact remains that in comparison to the processing sector of our major competing dairy export countries Ireland's processing industry is both fragmented and comprises of smaller scale processors. This compares to the situation in Denmark where Arla processes over 90% of the milk pool or the Netherlands where FrieslandCampina processes over 60% of the milk pool.

In this context, an overriding consideration for the dairy sector will be the need to continually improve processing competitiveness, increase scale and improve cost efficiency through consolidation, where feasible, to encourage collaboration between processors to optimise costs and investment. The promotion of diversification of the dairy product mix into higher value products as well as the diversification and deepening of our export trade into new and existing markets represent two sides of the same coin in terms of realising the dairy sector's export potential.

Dairy

The increased production of infant formula products has evolved significantly in Ireland over the recent past, as illustrated in the graphic. Furthermore, it is clear that products with a nutrition focus represent a growing and increasingly mainstream market. A number of Irish companies have already invested significantly in the sector on foot of this increased potential. Continued research and innovation by the Irish dairy sector into areas such as sports or functional food nutrition will create opportunities for moving up the value chain and facilitating expansion which will be of benefit to the overall indigenous economy.

The opportunity for the dairy sector is immense with increases in global population and the 'middle classes' plus more westernised diets in the fast developing world. Whilst hugely important, these demand led factors will not of themselves underpin the success of Ireland's efforts if we are not best in class in terms of the products that we supply. By best in class we mean safe, high quality and sustainably produced, and being able to verify these criteria objectively, credibly and most importantly, to the satisfaction of international customers.

The priority actions for the dairy sector are:

1. **Driving on-farm competitiveness**
2. **Managing price volatility**
3. **Environment and sustainability**
4. **Furthering our reputation on international markets**
5. **Added value through research and innovation**

Actions:

All milk producers should be strongly encouraged to carry out grass measurement as the efficient use of grass is one of the key advantages of the Irish dairy sector

Strategies should be developed to increase the fertility of Irish grassland soils in order to address deficiencies in P, K and lime

Dairy farmers should set a target of increasing grass utilisation to 10 tonnes/ha

Continue to leverage the benefits of genomic technology to help maintain the rate of genetic improvement in the dairy sector to maximise resource use efficiency and lower emissions

Industry stakeholders need to ensure that sexed semen continues to be rolled out to Irish dairy farmers and that continued research in the technology is undertaken

Dairy

Increase the number of farmers that complete profit monitors or other cost management tools

An increased awareness among milk producers and others in the dairy sector in relation to the key issues surrounding fixed price contracts and financial management skills should be facilitated, including an increased use of cash flow budgeting and monitoring tools to help cope with milk price volatility

Processors should prioritise the development of fixed price contracts and other volatility tools for their suppliers. Equally dairy exporters should develop fixed price contracts from the customers back to the exporter

The issues around the possibility of developing a mechanism including mutual funds such as a reinsurance scheme should be examined to minimise risk for processors and give farmers confidence regarding price

The Government will ensure that the tax system as it specifically applies to farmers should remain under review to establish if there is further scope to take account of income volatility faced by dairy farmers

Engagement by processors, producers and the Department with the Milk Market Observatory should be enhanced

Origin Green will be a key marketing tool and should be fully supported at all levels of the industry within an ambitious time frame. The verifiable sustainability credentials of Irish dairy products will be a key marketing advantage under this programme and Ireland will be positioned as a leading supplier of sustainable dairy products across all markets

Industry will continue to focus on the development of value added products whilst ensuring, insofar as possible, that the maximum value possible is retained indigenously

In line with the findings of the Report on Smart Ageing which was presented to Government in April 2015, opportunities for the development of dairy based foods in this sector will be examined

Ireland's success in added value sectors such as farmhouse, artisan and higher end cheeses and butters will continue to be recognised, developed and encouraged

The scope for continuous efficiency improvements must be continuously pursued against competitive benchmarks

The response to environmental challenges in areas such as emissions, water quality and biodiversity must be centrally co-ordinated and must highlight Ireland's key leadership role in balancing more intensive production with environmental concerns

The Sustainable Dairy Assurance Scheme (SDAS) must include all dairy farmers as an immediate priority

Beef

Strengths

- Grass reared, welfare friendly production system
- Specialist suckler beef production
- Cattle and beef traceability systems
- Credible and sustainable quality assurance scheme
- High penetration of high-end retail outlets across the EU
- Strong reputation in traditional markets
- Capacity and capability to meet demand

Weaknesses

- Land transfer, mobility and structural issues
- Low profitability at farm level and dependence on direct payments
- Skill gaps at all levels of the supply chain
- National cost competitiveness, especially utilities and labour
- Lack of scale across the sector combined with demographic factors
- Dependency on the UK market while the reputation of Irish beef is less well known in new and developing markets

Opportunities

- Global growth in protein demand
- Developing a brand image for Irish beef based on superior attributes to secure additional markets and price premiums
- Building Ireland's reputation for beef production in new markets (USA, Africa and Asian markets, particularly China) which can absorb any increased production
- Use of genomics, breeding indices and sexed semen to improve beef quality output from the dairy herd and technical efficiencies in the suckler herd
- Potential markets for niche high grade products
- Fifth quarter and meat by-products

Threats

- Impact of animal disease incident
- Food safety incident
- Health image of beef products
- Raw material supply changes linked to dairy expansion
- Failure to adopt carbon efficient practices
- Potential negative impacts of trade deals
- Future CAP reform

Beef

The beef sector is among the most important Irish indigenous industries. There are over one hundred thousand farms contributing to beef production in Ireland. The Irish sector is mainly broken into suckler producers, fatteners and cattle finishers, with about 1.75 million head of cattle sent for slaughter in Irish meat processing plants and slaughterhouses in 2014. Beef accounts for 34% of the gross output of the agriculture sector (excluding forage). Beef exports in 2014 amounted to 524,000 tonnes, worth €2.27 billion, representing a 50% increase in value compared to 2010.

Ireland exports 90% of the beef produced here. It is the biggest net exporter of beef in the EU and the 5th biggest in the world. In addition to beef exports, Ireland also has a strong live export trade to Europe and beyond, with over 236,000 animals being exported in 2014 worth over €172million.

It is beef from the suckler herd that has principally enabled us to succeed on international retail markets. It is important, therefore, at least to maintain, and make more profitable, the current level of suckler beef production. The sub-sector, however, remains under considerable economic pressure. This underlines the importance of maintaining current support for suckler farming and improving it in the future linked to clearly defined technical improvements.

The strong reputation of Irish grass fed beef production in traditional markets (not necessarily all international markets) is an asset which can be further exploited and leveraged in the period to 2025 to ensure greater penetration of high value markets both in the EU and in third countries. Increased innovation in all aspects of the processing and marketing of beef products has the potential to deliver increased returns across the supply chain.

The priority actions for the beef sector are:

1. **Driving on-farm competitiveness**
2. **Enhanced supply chain interaction and information flows**
3. **Furthering our reputation on international markets**
4. **Adding value through R&D**
5. **Environment and sustainability**

Actions

Increase fertility levels and decrease calving intervals in suckler herds

Facilitate the rapid operationalisation of all aspects of the Beef HealthCheck programme, including batch-level, herd-level and geographic reporting

Facilitate the further development of resources and information to encourage livestock producers to place an economic value on the biosecurity of their holdings

Leverage the benefits of the recent adoption of genomics technology in the beef sector to improve the genetic quality of the national breeding herd though inter alia, maximising participation in the Beef Data and Genomics Programme, to help lower emissions and improve farm competiveness

Exploit potential of genomics to add value at farm level by improving breeding and at processing level in areas such as meat quality and meat tenderness

Beef

Further develop the potential use of sexed semen for breeding selection and improving genetic profile and profitability of the proportion of the beef herd coming from the dairy sector

Intensify the level of research aimed at informing the formulation of the breeding indexes used in the sector and the distribution of the traits therein

Focus on net margin per hectare as a measure of profitability and kilograms of beef produced per hectare as a suitable measure of efficiency

Increase the number of livestock farmers in Knowledge Transfer Programme

Develop infrastructure through knowledge transfer programmes and farmer education to ensure improved grassland management. This will include increasing the proportion of grassland farmers participating in weekly grass measurement from 1,250 today to 3,000 by 2020 and 5,000 by 2025

Support research efforts and knowledge transfer tools to better utilise the beef output from the dairy bred calves in a systemised manner

Review mechanism for linking the knowledge developed on Teagasc/Farmer's Journal BETTER Farm Beef Programme and the new Suckler Cow demonstration farm in Athenry with widespread application at farm level

Develop a uniform approach to the supply of clean cattle underpinned by research in this area

Increased level of communication and engagement with and between processors and producers in terms of marketplace developments

Explore options to increase data availability on traded volumes by channel across the whole supply chain, to increase transparency and better inform stakeholder understanding of market returns

Increase and expand contractual supply arrangements between producers and processors

Focus on assisting the production of the market required carcass specification and production systems which are designed to maximise return both to the farmer and the processing industry

Engage with retail customers to develop a partnership approach to the production of Irish beef, ensuring a harmonised and collaborative approach to market specifications, price points and farm management practices

Develop sectoral indicators, analysis and service delivery models which differentiates the sector in terms of farm size/labour requirement of farmers in the industry

Develop further and build a strong brand image for Irish beef capable of securing a significant price premium at retail and food service market outlets

Develop markets for fifth quarter products through enhanced marketing capabilities and through enhanced market access

Dedicated and adequately resourced DAFM beef market access team to identify, develop, reinforce and secure new third country markets as well as supporting the trade in live exports

Defend interests of the Irish beef sector in international trade agreements pursued by the EU, particularly in light of competitive threat posed by the US and Mercosur

Beef

Investigate and develop viable alternative markets for the additional prime cattle arising from dairy herd expansion

Building on the launch of Irish beef into the US, implement a strategy for the premium positioning of Irish beef as sustainable and grass fed resulting in a growth of exports into high end retail and foodservice outlets

Investigate opportunities for including animal welfare standards and human health benefits of grass fed beef in the marketing messages for Irish beef

Explore options for increased returns from meat and bone meal, and tallow through industry and agency R&D

Develop early warning/surveillance systems, vaccines and intervention strategies for the rapid recognition, prevention and control of livestock diseases

Explore options for alternative funding models for research in the sector, including contributions from the industry

Complete the establishment of the Meat Technology Centre

Explore research projects on the advantages of Irish grass fed beef systems in comparison with other production systems with regards to animal welfare, health and taste along with any other relevant areas. This should include a consideration as to the definition of 'grass fed'

Consider the merits of developing a standing national resource with expertise in the field of animal health economics and disease modelling

Ensure the availability of the appropriate skills throughout the supply chain, including providing adequate training in butchery skills to the processing sector

Seek to maintain support for suckler producers in the current CAP arrangements and prioritise that support in future negotiations on the post 2020 policy

Any increased support for suckler cow production should be conditional on quantity and technical efficiency improvement

Competitive financing packages required for acquisitions to improve foreign market presence.

Seek to ensure origin labelling requirements across all sectors reflect the appropriate balance between consumer demand and increased cost to consumers and industry

Seek to minimise the impact of mandatory labelling requirements on the competitiveness of Irish exports on EU markets

Increase farmer participation in Beef and Lamb Quality Assurance Scheme (BLQAS) to 90% in terms of proportion of output by 2025

Develop strong reputation for quality and environmental sustainability of Irish beef with customers, competent authorities in target markets and NGOs building on the Sustainable Beef and Lamb Assurance Scheme (Origin Green) and optimise the use of this brand reputation in the market place

Sheep

Strengths

- Grass based production systems
- Good export performance
- High net value added product
- Breed improvement programmes
- Credible and sustainable quality assurance scheme
- Positive socio-economic and environmental impact in hill/mountain areas

Weaknesses

- Seasonality of supply
- Viability of sheep farming is heavily dependent on direct supports to the producer
- Higher age profile of sheep farmers
- High relative price point at consumer level
- Lack of significant third country markets outside the EU

Opportunities

- Securing access to new markets in Asia, Africa and North America
- Growing ethnic population
- Growing demand in China is leading to reduced NZ imports into Europe
- Expand its product range and exploit the image of sheepmeat as a particularly natural healthy product

Threats

- Food safety incident
- Disease outbreak
- Difficulty to maintain consumption levels
- Failure to protect and measure the impact on the natural environment

Sheep

Primary output from the sheep industry is currently worth about €230 million, a value which has grown significantly in recent years. Over two thirds of output is exported - exports in 2014 totalled 44,759 tonnes, with a value of €218m. A significant factor which has driven this value growth has been the move towards boneless product. It is estimated that 65% of our sheep meat exports is in the form of boneless/break out product.

The sheep sector is heavily dependent on the export market as the domestic consumption is usually only about 30% of overall production. The core markets remain France and the UK with the French market usually representing double that of the UK. This reflects the strong demand and reputation in France for Irish lamb and also the consumer preference in the UK for British product. The growth markets in Europe are Sweden, Germany and Belgium with Sweden for example now representing our third most important market.

Outside the EU market, opportunities are more limited with Hong Kong being the primary destination of Irish sheepmeat followed by lower volume markets in North Africa. Securing access to Canada in 2013 has delivered new business and efforts to open the markets in US and China are ongoing.

The application of the latest scientific knowledge to the business of sheep breeding in Ireland is only in its infancy in comparison to programmes for beef and dairy. The establishment of Sheep Ireland and the buy-in from stakeholders is improving matters. The Sheep Technology Adoption Programme introduced by DAFM has played a major role in encouraging technology adoption at farms while also requiring participants to undertake a number of farm tasks. These farm tasks make use of the best technologies available to sheep farmers in Ireland while also encouraging improved breeding through the use of a Sheep Ireland performance recorded ram. It is intended that this work will be continued through the Knowledge Transfer groups for sheep farmers under the Rural Development Programme 2014 - 2020.

Sheep

Actions:

Genetic improvement: focus on ewe fertility and on breeding resilience and resistance to diseases which impact on the productivity of flocks, such as foot-rot and on improving the consistency of product supplied to processors

Work collaboratively with processors, Bord Bia, Teagasc and Sheep Ireland to modify the very seasonal nature of Ireland's sheepmeat supply, and maintain our presence, and access to markets throughout the year

Increase farmer participation in Beef and Lamb Quality Assurance Scheme (BLQAS) to 90% in terms of proportion of output by 2025

Add value to exports by further moving from exporting entire carcases to pre-packaged boneless cuts through wider market access

Engage further with Sheep Ireland on the design and implementation of breeding indices based on marketing insights

Increase sheep farmer participation in Knowledge Transfer Programmes

Enhance hill farming systems by promoting greater integration with lowland sheep producers

DAFM to continue to support and engage with Sheep Ireland on their work to drive better genetic gain for the flock

Underpin and further improve Ireland's sheep traceability system

Teagasc to undertake a review of their sheep research and advisory programmes

Improve the consumer perception of lamb with the younger demographic as a healthy, convenient protein choice

Build a strong brand image for Irish lamb based on its sustainable grass based production to secure outlets and price premium

Implement generic promotion of lamb across France, Belgium and Germany and compete for further EU funding post 2017

Develop a Carbon Navigator tool for sheep producers

Develop strong reputation for quality and environmental sustainability of Irish beef with customers, competent authorities in target markets and NGOs building on the Sustainable Beef and Lamb Assurance Scheme (Origin Green) and optimise the use of this brand reputation in the market place

Pigmeat Sector

Strengths

- Premium quality product with full traceability
- Value-added capability
- Strong genetics capability
- Increasing global demand driven by emerging economies
- Strong domestic market for Irish product
- Credible and sustainable quality assurance scheme

Weaknesses

- Reliance on imported feed means Irish pig sector is a feed 'price-taker'
- National cost competitiveness i.e. energy, labour and transport
- Margins remain under pressure
- Small unit size relative to competitors
- Lack of investment/access to finance
- Animal health issues

Opportunities

- Pigmeat is the most consumed meat worldwide
- Potential growth on domestic market
- Presence in diverse markets can provide a platform for entry into new markets
- Development of Irish Pork Brand
- Extending market access in China to all pigmeat products
- Pig genetics to develop better breeding stock

Threats

- Scale of competitors
- Increasing input costs
- Food safety incident
- Import displacement
- Disease outbreaks
- Failure to protect and measure the impact on the natural environment

Pigmeat Sector

The Irish pigmeat industry accounted for almost 8% (excluding forage) of the output value of the agri-food sector in 2014 and is the third most important sector after dairy and beef. There are approximately 440 commercial pig producers producing about 3.5 million pigs annually. The pig industry supports approximately 7,000 jobs including production, slaughter, processing, feed manufacture and services.

Although, demand for pigmeat worldwide continues to increase the industry faces challenges from high feed and energy costs. The reliance on imported feed poses a continuing challenge for the sector due to volatility in cereal prices. In order to remain competitive, the industry requires a highly skilled, trained workforce and must achieve higher levels of efficiency.

The threat of disease outbreak in the sector underscores the ongoing focus on animal health and disease prevention and control strategies. The Rural Development Plan (TAMS II) includes funding targeted at improved farm animal health and welfare, in addition to funding for housing, investments in energy, water meters and medicine dispensers which will benefit the sector.

The Irish pig sector competes in an international environment. Producers and processors face ongoing challenges from both other EU and international competitors and they must continually innovate and improve to maintain their presence in the international marketplace. They are also reliant on existing markets remaining open (the closure of the Russia market in 2014 is an example of the volatility which market closures can bring). However market access opportunities secured by DAFM in Vietnam and the Philippines are helping to off-set the effects of closures elsewhere.

The research and targeted promotional work being carried out by a wide range of stakeholders, together with the acknowledgement of the quality, sustainability and competitiveness of Irish pig meat will help to position the sector in the future. The payment by pig producers of a levy must be acknowledged as a significant contributory factor here and a review of the levy should take place.

Actions:

Investment in pig production facilities particularly energy efficiency to reduce input costs

Collaboration with the tillage sector to create commercial opportunities for pig manure

Explore feasibility of alternative slurry usage and disposal options, such as anaerobic digestion

Explore opportunities for greater use of quality assured produce in food service

Engage further with non intensive sector to ensure standards of bio-security are understood and implemented

Explore extension of country of origin labelling to loose and processed products

Stakeholder group to examine the challenges associated with animal health / welfare within the pig industry and to bring forward a recommended plan for collective action

Agreement on and implementation of revised Pig Salmonella Control Programme

Use Origin Green in trade marketing to develop preference for and to distinguish Irish produce in international markets

The industry to scope out an effective marketing message with Bord Bia

Invest and strengthen the position of the Quality Mark on the domestic market positioning pigmeat as a versatile, healthy option with consumers

Roll out a carbon footprinting assessment and improvement programme for pigs

Opening of upgraded pig research facility in Moorepark with prompt dissemination of research findings to the industry

Support pig farms by researching grain varieties in the tillage sector for feed use

Poultry

Strengths

- Low cost protein in retail and food service markets
- Strong domestic market demand for fresh Irish product
- Diverse presence in international markets for by-products and fifth quarter offals
- Farm to fork traceability, Bord Bia Poultry
- Credible and sustainable quality assurance scheme

Weaknesses

- Cheap imports
- Irish production not at 'complex' scale
- Over-reliance on domestic market
- Feed prices are significant input costs due to import charges
- Majority of product in food services sector consists of cheaper imports

Opportunities

- Market access to China and growing utilisation of fifth quarter and by-products
- Global protein markets
- Consolidation of sector to complex scale
- Food origin labelling may give Irish product a competitive advantage
- Value-added by-products

Threats

- Competition from imports sourced in Thailand
- Uncompetitive input costs
- Food safety incidents
- Disease outbreaks
- Lack of investment at farm and production level
- Failure to protect and measure the impact on the natural environment

Poultry

The poultry sector is an important sector in the Irish economy accounting for almost 2% of agricultural output and about 6,000 jobs primarily in rural areas.

Poultry is considered a cost-effective, versatile and healthy source of protein and consumption has continued to grow over the last few years. The predominant outlet for Irish chicken is the Irish retail market, where there is strong demand for fresh raw Irish product although, the vast majority of poultry meat sold in the food service sector is imported.

The poultry sector has faced considerable challenges in recent years from rising feed and energy costs combined with significant pressure from unlabelled cheaper imports. The sector is small scale and highly vertically integrated from breeding stock to final processing. However, it competes with international enterprises which are larger in scale and avail of economies of scale by producing large volumes of product at lower marginal cost. There are opportunities in the sector to reduce costs and increase efficiency through increased scale and modern housing facilities as well as improved food conversion rates. On a broader scale, for Ireland to develop a more competitive chicken industry, the poultry industry may consider operating at 'complex' scale i.e. breeding farms, hatcheries, growing farms, feed mills and slaughter plants operating at scale (1.3m to 1.5m birds per week) which would allow for a more cost effective operation at each stage of this integrated chain. With the introduction of country of origin labelling in 2015, Irish processors may grow their share of the domestic market and increase exports of fresh chicken to the UK.

Approximately 60% of the Irish poultry market in value terms consists of chicken fillets. Therefore Asian meat demand and prospective market access to China pose huge growth potential for Irish poultry meat exporters due to demand of fifty quarter products, legs and wings.

Eggs sector

The egg sector accounts for about €49m of agricultural output. There are about 250 egg producers and about 800 people employed in the sector including packing and ancillary activities. About 85% of eggs consumed are home produced. Egg producers have shown themselves to be efficient and progressive. Irish eggs enjoy an excellent salmonella status and most producers are participants in the Bord Bia Egg Quality Assurance Scheme which requires meeting strenuous standards on quality and traceability.

Poultry

Actions:

Improved animal health, welfare and bio-security awareness and implementation through on-farm investment and training

Investment in poultry production facilities particularly energy efficiency to reduce input costs

Exploit the opportunities afforded by country of origin labelling

Consideration of an 'industry insurance fund' to assist producers and processors in the event of disease outbreak

Consideration of development of 'chicken complexes' to allow the industry to operate on a more economic and efficient scale with greater integration and collaboration

Explore opportunities for the increased use of quality assured produce in food service

Collaboration with processors to build on commercial opportunities and drive returns from fifth quarter

To implement the recommendations arising from whole of the supply chain consultation process to address the issue of Campylobacter at farm, processing and distribution levels

Provide funding under the Rural Development Programme to up-grade existing buildings and funding to support the construction of new housing and ensure animal welfare and safety

Examine the extension of country of origin labelling to loose products

Invest and strengthen the position of the Quality Mark on the domestic market

Incorporate sustainability criteria under the Origin Green programme into the Poultry Products Quality Assurance Scheme (PPQAS)

Roll out a carbon footprinting assessment and improvement programme for poultry

Prepared Consumer Foods (PCF) and Alcoholic Beverages Sector

Strengths

- Origin Green
- High regulatory and food traceability standards
- Iconic drinks brands
- Blue chip customer base
- Processing capability and reasonable scaling potential

Weaknesses

- Over-reliance on UK and EU markets
- Low profitability and relatively high cost base
- Cost of route to market
- Funding and access to/cost of credit
- Low level of innovation investment and product development

Opportunities

- Large EU and wider EMEA market and related scaling opportunities
- Develop a centre of excellence in Prepared Consumer Foods/Horticulture/beverage innovation
- Growth potential of whiskey and craft beers
- Agri-food tourism
- Consumer and market focussed insights to develop brands and products

Threats

- Competitiveness
- Regulatory and fiscal policies out of line with competitors
- Small scale relative to buyers and increasing retail concentration
- Rise of private label
- Increased imports
- Food safety incident
- Failure to protect and measure the impact on the natural environment

Prepared Consumer Foods (PCF)

The PCF sector[1] **is any company** producing value-added food and beverages selling domestically or internationally and includes prepared consumer foods, ingredients, value-added seafood, value-added horticulture and non-alcoholic beverages.

The PCF sector employs around 20,600 people and the latest figures shows that it has a gross output of €4billion. There are approximately 500 manufacturing units in Ireland. 76% of these are small companies, employing 4,950 while 19% are medium sized and 5% are large companies employing 8,850 and 6,800 respectively.

This sector is emerging from a difficult period due to reduced consumer demand during the downturn. Domestic and international recovery is beginning to create opportunities for growth. Exports estimated at over €2.1 billion[2] have grown by 18% since 2009; however these are still below peak 2006 levels. There are huge opportunities for this sector to expand its customer base through new markets and continued product development. Domestic sales are valued at €1.9bn and command a 40% share of the domestic PCF market. However, imports are growing strongly, at around 46% in the past decade; the current trade deficit is of the order of €700 million. This strategy must capitalise on the existing opportunities for import substitution and significantly increase the sector's 40% share of the domestic market.

Barriers to PCF Growth

PCF companies operate in a harsh environment due to its limited home market and high cost basis. Despite the challenges, the sector has proven remarkably resilient in the face of significant sterling depreciation and a prolonged recession. Over the longer-term, a number of factors will prevent the sector from achieving its potential.

These include:

- Commercial market failure in developing appropriate financial instruments, venture capital and state-supported funds
- Restraints on state support making incentives less attractive than those available to competitor countries;
- Reduced competitiveness due to a high domestic cost base and a more onerous regulatory burden
- A high degree of retail concentration in the domestic grocery sector
- Low levels of investment in PCF-specific research and development infrastructure;

To meet ambitious growth targets, the PCF sector requires significant investment in new technologies, plant infrastructure, capability, R & D and innovation programmes. However current funding options are limited and restrictive. Existing EU State Aid rules, unfavourable commercial lending terms and an absence of Venture Capital and private venture funding in the sector have made it difficult for PCF companies to make the necessary enhancements and act as a barrier to entry for new companies in the sector. The Irish Strategic Investment Fund (ISIF) has an important role to play in creating opportunities for the PCF sector to access suitable funding to support its strategic development.

Once innovative solutions are put in place to address the financial and retailer issues, the industry will be able to capitalise on its growth potential and increase exports and its share of the domestic market.

1 PCF companies fall under a number of NACE and CN code headings. However, some of these NACE codes include products from the wider prepared foods sector. Accordingly, infant nutrition products, fat-filled milk powder, other dairy produce used as a manufacturing ingredient and concentrates have been removed in order to correctly describe the scope and size of the PCF sector. (This covers part of NACE codes 1051, 1086, 1089 and certain CN codes from the 0403 and 1901 categories)

2 Figures from A 10-year Vision for Prepared Consumer Foods (PCF) 2014

Prepared Consumer Foods (PCF)

Actions:

All companies to sign up to Origin Green initiative

Increase industry expenditure on R&D and innovation by setting a target of a 10% increase in funding per annum

Government agencies in consultation with the industry to align the definition of PCF and co-ordinate their approach accordingly

Develop a sectoral strategy for food and drink SMEs, which sets out supports, targets and best practice for the entry, development and progression of these companies to 2025

Continue to work directly with indigenous companies to identify new export market opportunities and develop services and supports for companies to facilitate export growth

Implement the Competition and Consumer Protection Bill when enacted

Drive greater participation by the sector in the Innovation Voucher and Innovation Partnership Programmes

Continue and expand the Employment and Investment Incentive Scheme (Enterprise Ireland) and Seed Capital Scheme to encourage more investment in small PCF companies

Bord Bia to maximise the use of Origin Green and their Quality Assurance programmes to differentiate Irish produce

Continuation and possible expansion of the Foreign Earnings Deduction (F.E.D.)

Alcoholic Beverages Sector

The alcoholic beverage industry in Ireland is broken down into different sectors; spirits (which includes the European Geographical Indications Irish Whiskey, Irish Cream and Irish Poteen/Poitín), Beer and Cider manufacture. Beverages exports exceed imports and there is a high domestic content in alcohol exports. Ireland's alcohol export performance reflects the strong performance in recent years of Irish Whiskey. There is further potential to increase alcohol exports and to diversify markets.

Prepared Consumer Foods (PCF) and Alcoholic Beverages Sector

Actions:

Establish discussion groups for malting barley growers

All companies to sign up to Origin Green initiative

Increase industry expenditure on R&D and innovation by setting a target of a 10% increase in funding per annum

Industry to continue to highlight the value to the national economy of the drinks sector and work to reduce the fiscal and regulatory burden

Industry and state agencies to work collaboratively to develop an Irish Whiskey and food pairing trail as a major tourist attraction and to differentiate Irish food and drink produce

Develop fiscal and other revenue generating initiatives which will enable the Irish Whiskey industry to fund the minimum three year maturation process

Industry to work with D/ECLG and EPA to improve waste recycling levels, facilities, implementation and to measure change on an ongoing basis

Assist development of new industry entrants by structured knowledge transfer systems including mentoring, training and skills transfer

Continue to support, protect and promote Ireland's spirit GIs (Geographical Indications)

Develop a sectoral strategy for food and drink SMEs, which sets out supports, targets and best practice for the entry, development and progression of these companies to 2025

Continue to work directly with indigenous companies to identify new export market opportunities and develop services and supports for companies to facilitate export growth
Facilitate the growth of the premium drinks categories by providing market knowledge for the US market
Continuation and possible expansion of the Foreign Earnings Deduction (F.E.D.)

The CSO/DJEI survey to track the Business Expenditure on R&D (BERD) performance of the PCF sector

Prepared Consumer Foods (PCF) and Alcoholic Beverages Sector

Artisan/Small Food Business

The Artisan/Small Food Business sector is highly fragmented and encompasses a diverse range of foods. 'Artisan' businesses are micro-enterprises with a turnover up to €2m, employing fewer than 10 people and producing food in limited quantities (weekly av. under 1,000 kg or litres) using skilled craftspeople, a traditional method, and characteristic ingredient(s) produced within 100km. (FSAI Guidance Note 29[3]). Small Food Businesses have a turnover not exceeding €3.5m.

Evidence suggests that the sector can have a significant impact on local economies as businesses are typically owner managed and closely linked to local farms. The emergence of Ireland's Artisan/Small Food Business sector, supported by growing consumer demand for niche food and drink products and a strong entrepreneurial spirit, has featured an increase in the number of food companies. This resurgent interest in, and receptiveness to locally sourced foods, local food networks and short supply chains has also led to an evolution of food markets and festivals now taking place in Ireland. These markets often act as incubation units for start-up food and drink businesses and dynamic artisan producers who begin trading at their local market.

3 https://www.fsai.ie/publications_food_marketing_terms/

Actions:

Creation of civic and festival markets similar to the English Market in Cork and Harvest Festival in Waterford in our major cities and towns.

Expansion of Dublin Food Chain initiative to other cities.

Create a pipeline of companies growing beyond Artisan/Small Food Business definition via the introduction of both bespoke 1:1 and group multi-level supports across strategic planning, marketing and marketing finance (for example Ascent, Superbrands and Step Change Fund).

Introduce a new support programme for Direct to Consumer producers aimed at enabling producers to extend their local and regional business reach and resulting in a pipeline for new entrants to the Artisan Food Market at Bloom.

Increase the opportunity for successful meet the buyer occasions through market focused relationship development with distributors, specialist retailers, and other retail and foodservice buyers on the domestic and international markets.

Annual investment in and delivery of small business specific consumer and market insights.

Formal opportunities to transfer learnings from craft food and drink production to new sector entrants via food apprenticeships and placements

Horticulture

Strengths

- Expert grower base to produce a wide range of horticultural products for both food and non-food amenity use
- Quality and presentation of Irish horticultural produce
- Proximity to large UK market and the export positioning of Irish mushroom sector
- Bord Bia Quality assurance schemes and Bloom established as major promotional channels
- Growing consumer awareness of environmental issues

Weaknesses

- Small domestic market and lack of scale versus international competitors
- High cost base and labour intensive industry
- Limited co-operation in a number of industry sub-sectors and prevalence of short term supply contracts
- Lack of product branding
- Limited Plant Protection Product range versus international competition

Opportunities

- Health benefits / lifestyle trends
- Import substitution of key lines and new export market opportunities
- Adding value through innovation and new product development
- Expanding of branding to better identify Irish produced horticultural products
- Capitalise on retailer and EU promotion of horticultural produce

Threats

- Retailer power and consolidation of buying power and international import competition
- Lack of investment
- Reduced consumer demand for traditional vegetable products and potatoes
- Industry capacity to align production planning with changing consumer demands and the vagaries of climate
- Loss of critical expertise from industry grower base in line with industry consolidation and lack of new entrants and inadequate training
- Failure to protect and measure the impact on the natural environment

Horticulture

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 €115 million. Amenity products are focused to a large extent on the domestic market. The main exports are Christmas trees, nursery stock and cut foliage.

There is a very open market for horticultural products and the Irish industry has to compete with others who in some cases have a significant competitive advantage both in terms of scale and a lower cost base. The competitive pressures faced by the horticultural sector in particular are high input costs, notably energy and labour, competitively priced imports, lack of scale and limited development in innovation. The proposed Competition and Consumer Protection Bill and the associated legislation should improve fairness for individual growers and packers preparing produce under contract for the market.

The priority actions for the horticulture sector are:

1. **Output value to grow further to over €500m and deliver 1,000 FTE jobs**
2. **Maintain and where possible increase value per unit sold**
3. **Maintain and increase production area and diversify production in response to market**
4. **To promote increased consumption of fresh fruit and vegetables to the recommended target of five or more a day**
5. **To promote the sustainability credentials of the horticultural industry**

Climate change will likely affect the Irish horticultural industry in a number of different ways. There is a need to increase research in this area to allow the industry prepare for these changes. There is a need for training for the use of meteorological data recorded in the UK. Ireland can currently access the data but does not have the expertise to analyse and interpret it. To address the challenges associated with this, it is necessary to develop the necessary skills set which are not currently available.

Horticulture

Actions:

Producers to support and fund the Horticulture Industry Forum actions

Industry and Bord Bia to provide matching funding to support EU funded promotional campaigns

Teagasc and growers to explore the use of precision technologies to accurately map crop input requirements

Potential for production of Irish potato chips and a variety of vegetable based crisps and snacks

All horticultural processors and packers to sign up to Origin Green

Increase supply chain inspections of country of origin labelling for fresh fruit and vegetables

Simplification of the mutual recognition process of plant protection products within the EU

Implement joint industry and EU funded promotional campaigns in the mushroom and potato sectors where the target audience is the younger demographic and key messages will include health and convenience

Industry and Bord Bia to discuss and progress with the amenity sector (including the retail outlets) seeking joint industry and EU funds for promotional campaign(s) around gardening

Implementation of the Food Dudes Programme and developing the delivery model to make it available to all national schools who wish to participate in it on an ongoing basis

To examine opportunities for collaboration with other Departments and state agencies in the promotion of fresh produce and its role in a healthy, balanced diet

To develop Bloom further as the major showcase of Irish Horticultural production, landscape design and construction

To roll out the Origin Green programme to horticulture producers with business and environmental measures that will underpin the sustainability credentials of the industry

Develop a strategy to maximise opportunities in relation to supplier relations, import substitution and below cost selling in the retail horticultural market

Establish an industry funding mechanism (levy) to promote horticultural products

Review the Terms and Conditions of those employed in the horticultural sector

Explore the potential for expanding evidence informed ‘food in schools’ programmes

Cereals/Tillage

Strengths

- Local demand for high energy and high protein feeds to supplement grass based diets in growing dairy feed market
- High yield potential
- Small scale of Irish sector means it can target high value export markets
- Premium market for malting barley
- Developing market for wheat and barley to supply the distilling industry.
- Nutritional and health benefits

Weaknesses

- High disease pressure, small and fragmented holdings resulting in high production costs.
- Limited tillage research capacity
- Technology deficit for some crops
- Lack of trading standards for inter farm trading of crops
- Limited land availability with a high proportion of production on

Opportunities

- Expansion in feed demand post milk quota using home produced feed sources
- Increased demand for malting barley and wheat by drinks industry
- Greening under CAP will promote more crop rotation
- Development of lifestyle enhancing niche products
- Expansion in production of native protein feedstuffs

Threats

- Vulnerable to increasing input costs
- Lack of efficiency on farms
- Cheap imports of GM crops
- Land availability
- Disease
- Failure to protect and measure the impact on the natural environment

Cereals/Tillage

The cropped area in Ireland extends to 368,000 ha or 8% of the area farmed. Cereals account for the main acreage under tillage at around 300,000 ha. The national tillage sector is compact, comprising approximately 11,000 growers, of whom 4,000 have tillage as the primary farm enterprise. It is estimated that a further 15,000 people are employed in the crop based food processing sector. Annual combinable crop output amounts to between 2.0 and 2.5 million tonnes accounting for approximately 1% of EU production. Irish cereal yields are among the highest in the world and, despite reaching a plateau in recent years, have the potential to increase by up to 1% per annum.

Tillage crop production in Ireland has traditionally been based on the provision of feedstuffs to the livestock sector and feedstock to industries such as malting, milling, sugar, breakfast cereal, distilling and food.

75% of the annual national cereals harvest is used to produce animal feedstuffs with the remainder of the harvest going to feeding on-farm, production of seed, export, or use in the food and industrial sector. The farm sector has also developed cheaper processing options for direct on-farm use of cereals, such as crimping and wholecrop, and the production of feed crops like triticale, forage maize, fodder beet and kale for livestock feed.

Over 50% of tillage production in Ireland is carried out on leased or rented land and this is one of the most significant features of the sector, with implications for expansion, profitability and capacity to compete with other farming enterprises.

Actions:

Improve sustainability and reduce the costs of crop production through the improvement of soil management techniques including: appropriate cultivation selection, weed control and maximising the value of organic manures

Increase the proportion of cropped area under malting barley and wheat to meet the demand from distillers, maltsters and brewers, including craft breweries seeking to source a native malt supply

Increase output of wheat and feed barley to support increased demand from the livestock sector and increase production of forage maize to meet anticipated demand for forage and nutrient requirements from the dairy sector

Increase production of protein crops annually to provide source of native traceable protein for feedstuffs

Increase the use of rotations and break crop production in response to meeting CAP greening requirements and to developing domestic and export markets (oats, oilseed and pulses)

Form partnerships with intensive livestock producers to avail of organic manures to reduce fertilizer costs, improve biological activity and improve soil fertility

Continue to examine whether the likely development of the sugar and ethanol markets would justify farmer and industry investment in the redevelopment of a sugar beet industry in Ireland

Cereals/Tillage

Develop processing facilities for the production of high value products for the export market such as; oats for the 'health and wellness – human nutrition' category and cold–pressed oilseed rape for the human nutrition market

Increase inclusion rate for native malting barley in craft beer production through sourcing of suitable malts and malting barley varieties

Increase the use of Irish grown potatoes for specialist use such as processing and salad markets

Expand crop variety evaluation programmes to identify high yield varieties of malting barley, wheat, oats and protein crops to support farmer and industry actions

Promote the use of superior crop varieties through the seed certification system. This will ensure that seeds of the highest quality are available to growers

Roll out Origin Green programme to tillage producers to underpin the sustainability credentials of the industry

Identify break crop opportunities and ensure their development by putting in place a cohesive development plan for growers, industry research and technology transfer and policy makers

Establish a new industry grouping to ensure achievement of targets for protein crops, break crops and oilseed rape

Examine the feasibility of expanding the seed potato production sector to take advantage of national high-health status and increase exports of seed Develop marker- and genomics-assisted breeding to aid the development of crops better suited to Irish tillage systems

Seafood

Strengths

- Proximity to key fishing grounds
- Strong marine science capability
- Good market diversification supported by involvement in Origin Green
- Clean, green image of Atlantic waters

Weaknesses

- Small scale, fragmented industry with lack of large processing facilities
- Lack of continuous raw material supply
- Over-emphasis on commodity product
- Poor industry competitiveness and leadership

Opportunities

- Increasing global demand with supply deficit
- Attract increased landings into Ireland
- Upscale and diversify production
- Stock recovery through CFP programmes

Threats

- Stock depletion in wild fisheries
- Slowness/uncertainty of aquaculture licence determination
- Seafood safety issues and farmed fish diseases
- Failure to scale, diversify, innovate and invest
- Failure to protect and measure the impact on the natural environment

Seafood

The seafood sector, whose sales are currently valued at €850 million and represents around 5% of total food and beverage exports, has huge potential for expansion. Its growth opportunities revolve around:

- Rising global demand for product with a supply deficit
- Proximity to productive wild fisheries resource which could be landed in Ireland
- Potential to increase the level of value added product
- Opportunity to achieve strategic advantage in the marine biotechnology field

The industry's ability to capitalise on its advantages is constrained by a number of factors. The critical factors are the scale, fragmentation, leadership and management skill deficits within the processing sector, supply constraints, the emphasis on commodity rather than value-added product and capacity limits in respect of aquaculture production.

These long standing and well recognised challenges have inhibited the growth and profitability of the sector for some time. A strategic change of direction is required to convert these opportunities into growth and the focus of this report is to set out clear tangible actions which will deliver this growth potential. These actions are focused around three key themes

In addition to food production, there is a growing opportunity for Ireland to achieve a strategic advantage in the marine biotechnology field. Our strengths in this area lie in our extensive and high quality marine resources, a recognised capacity in marine biological sciences R & D and strong technological capabilities in the food, pharmaceutical, medical devices and nutraceutical spheres. The importance and market potential of this emerging area has been recognised by the EU and domestically under the National Research Prioritisation Exercise and the integrated marine plan "Harnessing our Ocean Wealth".

A blueprint for the development of the sector is provided by Ireland's €241m Seafood Development Programme 2014-2020 which the European Commission is expected to adopt later in 2015. Significant measures are proposed under that programme for the development of the fisheries, aquaculture and processing sector. Equally important is the robust framework in the Common Fisheries Policy to deliver fish stocks to maximum sustainable yield levels by 2020 at the latest, the eco-system based approach to fisheries management and the regulatory commitment to achieve good environmental status by 2020.

While the majority of these key actions will be fully aligned with this Seafood Development Programme, there is a strong view that a range of additional actions and investments are needed to allow the sector reach its full potential by 2025. In particular, substantial further private investment, circa €300 million, over and above the Seafood Development Programme fund will be required to achieve the necessary scaling in the processing sector. Further public investment will also be required in additional infrastructure in Fisheries Harbour Centres to facilitate increased landings.

Finally the major sectoral change will not happen unless there are structural changes in BIM and appropriate resources made available for implementation. Most importantly, BIM should, in the absence of risk capital, have the ability to make strategic investment, to prime the sector, when required.

The seafood sector has three priorities:

1. **Expand the raw material base**
2. **Enhance the industry's structure and skills**
3. **Optimise product added value, export markets and environmental sustainability**

Actions:

Commission an independent review of the existing aquaculture licensing system involving all key stakeholders, to identify the current shortcomings and bottlenecks (legislative, resource and logistical), to report by early 2016 and implement necessary changes to the aquaculture licensing system as a matter of priority

Develop a strategy to expand shellfish and aquaculture production taking account of the carrying capacity of bays

Develop and initiate practical and competitive measures to attract additional landings into Irish ports and continue to invest significantly in necessary infrastructure at the Fishery Harbour Centres

Develop a strategy with practical and implementable actions to deliver scale in the key seafood sectors, including food ingredients

Develop a strategic plan with practical and implementable actions to significantly increase the quantity of seafood added value across all main species groups. This strategy should complement the strategic plan to deliver scale in the key seafood sectors, including food ingredients and should, at a minimum reduce the level of produce sold in commodity form from 70% to below 50%

Progress participation and engagement of Origin Green with seafood companies with the aim of bringing all seafood companies under the programme by 2016

Improve the environmental sustainability of the sector including fishermen gear sensitivity and replenishment of depleted inshore stocks

Give renewed priority to R & D into seafood based new product development, food ingredients and functional foods. This research should also include both harvested wild and farmed seaweeds and their by-products.

Forestry

Strengths

- Competitive, export oriented sawmilling and wood products sector
- Young, highly productive forest estate
- Comparative advantage in growing trees
- Strong technical competence
- Highly mechanised contractor resource

Weaknesses

- Low level of forest cover and disperse nature of forest estate and associated harvesting and transport costs
- Areas of low productivity forest
- Decline in rate of afforestation
- Private forests sector slow to embrace forest certification
- The state is the dominant supplier of logs and the dominant user of small roundwood

Opportunities

- Innovation and research deployment along the forest chain
- Employment growth
- Increased contribution of forest-based biomass, carbon sequestration and wood products use to reduce climate change mitigation
- Expansion of the forest estate to sustain wood production and environmental benefits

Threats

- Fall off in wood harvest
- Impact of catastrophic storms/weather events
- Diseases /pests on forestry plants
- Lack of continuity in funding to support the expansion of the forest estate
- Lack of investment in innovation and research
- Potential impact of climate change on a mainly exotic species based forestry resource

Forestry

Forests account for almost 11% of the land area of the country and support a vibrant, export-oriented forest products sector with over 75% of the output of Ireland's timber processing sector, and 80% of wood based panels being exported. Forestry plays an increasingly important role in rural development not only through the diversification of farm income but also through the provision of rurally based employment both of which contribute to rural stabilisation and viability.

We now have an internationally competitive sawmilling and board manufacturing sector. In response to a collapse in domestic demand for materials arising from the economic difficulties which we are now emerging from, the sector developed major export markets, including Britain and France but also much further afield.

After wind energy, wood fuels are the largest contributor to renewable energy generation in Ireland, while forests' contribution to climate change mitigation through carbon sequestration and the use of wood products form an important element of the national climate change strategy. Latest estimates show that, after taking harvest and wood use into account, forests established since 1990 will remove from the atmosphere a net 3.4 million tonnes in 2015; by 2025 the rate of removal is projected to be in the region of 4.7 million tonnes. Afforestation not only supports Ireland's approach to land-based climate change mitigation but also helps to reduce dependence on fossil fuels and supports the transition to a low carbon economy. It is estimated that over a million cubic metres, one third of the annual harvest, is used for energy purposes in one way or another. As outlined in Forests, products and people, published by the Department in 2014, forests also provide a range of public goods ranging from biodiversity to forest-based recreation – it is estimated that there are 18 million visits to Irish forests per annum.

The industry must continually strive to increase its competitiveness in what is a global market for wood and wood products. Efficiencies along the supply chain must continue to be examined and cost saving/control measures introduced. The combination of innovation and value added, coupled with an accurate forecast and flexible supply chain, maximising the most valuable products, and the removal of barriers to wood mobilisation will, as outlined in the COFORD Wood Mobilisation Report, enhance the industry's wood paying capability, thereby leveraging increased roundwood production.

Forestry

Actions:

Increase the forest area in accordance with sustainable forest management principles, to support long term sustainable roundwood supply through an increase in the annual afforestation level to 15,000 ha from 2021, subject to demand and the availability of funding

Sustainably manage the forest resource, including genetic resources through the introduction of a national forest management planning system and state support for seed stand management and the establishment of seed orchards thereby ensuring the provision of a full range of timber and other benefits

Ensure that afforestation, management of existing forests and the development of the forest sector are undertaken in a manner that enhances their contribution to the environment, takes account of the Environmental Report of the Forestry Programme 2014-2020, and fulfils their capacity to provide public goods and services

Increase the roundwood harvest to 4.6 m cubic metres by 2025. Produce a new all Ireland roundwood production forecast. Develop a flexible and environmentally responsible roundwood supply chain to enhance the competitiveness of the processing sector and the production of high value products

Support the development of a competitive, innovative, value-added and market focused sector

DAFM should explore innovative financial and funding mechanisms to encourage greater level of institutional investment in afforestation and in mobilising wood supply from the existing private forest estate

Ensure that the tax treatment of forestry does not act as a disincentive for the achievement of national policy goals in particular forest cover, roundwood supply to industry and climate change mitigation

Maintain a healthy forest environment through sustainable forest management and through early detection and control measures for pests and diseases

Ensure the availability of suitable programmes of education and training across the sector and research programmes targeted at identified needs. The importance of investment in training, research and development is recognised and the strategic actions focus on a more co-ordinated overall approach in these important areas

Forest products, forest services and the management of the forest resource must have a strong, market-led, quality focus

Local Roots Global Reach

Department of
Agriculture,
Food and the Marine

An Roinn
Talmhaíochta,
Bia agus Mara