



**Food and Agriculture Organization
of the United Nations**

Africa-Ireland building inclusive and sustainable food value chains

WORKSHOP REPORT

6–8 February 2018

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Acronyms

AADF	Africa Agribusiness Development Fund
ACORNS	Accelerating the Creation of Rural Nascent Start-Ups programme
AU	African Union
AUC	African Union Commission
CAADP	Comprehensive Africa Agriculture Development Programme
CAP	Common Agricultural Policy
CEO	Chief Executive Officer
CSR	Corporate Social Responsibility
DAFM	Department of Agriculture, Food and the Marine of Ireland
DIT	Dublin Institute of Technology
DCU	Dublin City University
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GHG	Greenhouse Gas
GNP	Gross National Product
GYCC	Gambia Youth Chamber of Commerce
HLIC	High Level Implementation Committee
ICBF	Irish Cattle Breeders Federation
ICT	Information and Communications Technology
IFAD	International Fund for Agricultural Development
LULUC	Land Use and Land Use Change
MFI	Microfinance Institution
MTI	Meat Technology Ireland
NGO	Non-Governmental Organization
RDP	Rural Development Programme
RYAF	Rwanda Youth in Agribusiness Forum
SCBI	Strategic Banking Corporation of Ireland
SFSI	Sustainable Food Systems Ireland
SMEs	Small and Medium Enterprises
UCD	University College Dublin
UCC	University College Cork
USDA	United States Department of Agriculture

Executive summary

The profile of Irish agriculture holds particular interest for developing countries intending to invest in the agri-food sector as a pathway for poverty reduction and employment generation for young people. Until the 1970s, the Irish farming sector held a number of similarities to that of many developing countries today: with over a quarter of the population employed on small farm holdings with little access to value addition opportunities and mass emigration from rural areas.

During the 1990s, Ireland's food sector began a rapid transformation process. Today, it is a world-leader in food-safety, traceability and environmental sustainability, penetrating high-value food markets in the EU, Asia and the US.

While the transformation of the Irish sector holds a number of valuable lessons for developing countries, there are also a number of common challenges related to sustainability, gender and nutrition where knowledge exchange on respective initiatives can potentially lead to synergies.

Against this background, the 'Building Inclusive and Sustainable Food Value Chains' workshop was hosted by the Department of Food, Agriculture and the Marine (DAFM), Ireland at their main offices in Dublin from 7 to 9 of February 2018. The high-level policy meeting, organized by the Food and Agriculture Organization (FAO) in collaboration with the African Union Commission (AUC) and DAFM, was designed to exchange lessons on building sustainable and nutritious agri-food sectors and identify how FAO and the AUC can contribute to knowledge exchange on the topic. Ten African countries represented the Africa region at the workshop with various thought leaders from the public and private sector participating. This report represents a summary of workshop findings by the FAO organizers.



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A field trip preceded the workshop, and included a visit to a start-up small family enterprise (Teeling Whiskey) and Ireland's Agriculture and Food Development Authority (Teagasc). The field visits gave participants insights into the Irish agrifood landscape and the predominant role that research and food science plays in the pre-competitive space of the sector. Key figures and facts are¹:

- The agrifood sector plays a central role in Ireland's economy and includes approximately 700 food and drinks companies exporting to more than 160 countries worldwide.
- The sector employs approximately 150 000 people and research shows that Ireland's investment in agriculture translates into a far bigger return than investment in other sectors.
- Dominant sectors are dairy and cattle, with beef and milk production currently accounting for around 58 percent of total agricultural output.
- Agricultural land is farmed by 139 600 farms, with an average size of 32.5 hectares.

¹ Key figures and facts sourced from the presentation given by the Assistant Director of Research, Mr Declan J. Troy, Irish Agriculture and Food Development Authority (TEAGASC).

- Since 2007, the value of Irish exports has grown by 39 percent.
- Over the last 30 years, agriculture's share of GNP has declined due to the rapid growth in the non-agricultural economy, reflecting broad-based economic development.
- While one third of total farms in Ireland are economically viable, two thirds require supplementary income.
- Brexit represents the sector's greatest challenge currently and has the potential to significantly impact farm incomes.

The field visit was followed by three days of panel sessions on: 1) the formulation and implementation of the Irish agri-food sector strategy, the AUC's regional agribusiness strategy and national agricultural growth strategies; 2) mainstreaming sustainability into agriculture; and 3) attracting young people and female talent to the sector. The event culminated with a meeting led by the Deputy Prime Minister of Ireland, Mr Simon Coveney.

Workshop discussions generated important findings for the AUC's agribusiness strategy, and FAO's Strategic Programme on Food Systems in Africa and beyond. Each session topic culminated in a number of lessons described in each section of the report. A synthesis of these lessons are as follows:

Developing a sustainable broad-based strategy process: A robust strategy process that aligns industry and non-industry stakeholders around the same vision requires cooperation at two primary levels: first, between government bodies so that cross-sectoral policy and public support initiatives are aligned, and second, across industry so that the pre-competitive space can be leveraged. The Irish case demonstrates the importance of developing consecutive strategies that build upon the strengths and lessons of past experiences, and which can withstand successive changes in government leadership. Furthermore, setting and respecting hard deadlines was also highlighted as an important tool to motivate stakeholders by demonstrating progress early in the process.

Integrating research, development and education programmes: An integrated national approach to research and education accelerates knowledge absorption across the entire chain, and provides a continuous flow of high-quality expertise to all aspects of industry. Resolute public sector support to agriculture and food research bodies also ensures the integrity of research findings for industry and consumers. In Ireland, seventy percent of funding for research in the agriculture sector is derived from public funding, with the Agriculture Research and Development Authority (Teagasc) ensuring that findings respond to market concerns and that research outputs are exploited by industry. An integrated approach also means that public-private partnerships can be formed for training and education programmes to ensure that the human capital needs of the sector are served. An example of this is Ireland's Origin Green Ambassador programme, which is co-managed by the Irish Food Board and the University College Dublin and co-funded by industry. In Africa there are an increasing number of initiatives that aim to integrate research, and education linked to private sector needs. The ENABLE Youth Programme, for instance set up by the African Development Bank, targets and encourages young unemployed graduates to pursue a career in agribusiness through linkages to incubation research centres.

Engaging the private sector in environmental sustainability: Placing environmental sustainability at the core of strategic industry growth ensures trade-offs between environmental protection and economic progress are managed and minimized. A business enabling environment that prioritizes and fosters sustainability is also shown to drive innovation and improved competitiveness at both the sector and firm levels. Initially, this may require proving the business case for sustainability in order to attract private sector engagement. For instance, the central tenet of Rwanda's Green Growth Strategy and Ireland's FoodWise 2025 has been regular monitoring to evaluate and record progress so corrective actions are taken, with economic gains demonstrated periodically in order to secure engagement from the private sector.

Placing value addition at the core of the food industry's transformation: Value addition is the driving force behind the transformation of Ireland's industry and is built on the understanding that food is part of agriculture. Capturing as much value as possible in each process has allowed the country to advance from selling generic food commodities to exporting high quality branded products with a world class reputation in food safety and traceability. The impetus for value, in turn, is created by consumers and originates in their personal needs and desires which are also shaped by cultural circumstances. It is important thus to make sure that food is produced in a way that aligns with people's values. Interventions from Zambia also highlighted the government's strategic shift away from focussing on increased productivity to investing in value addition for maize, rice and cassava, reflecting government approaches across the region to increase investment in food manufacturing.

Attracting young people and female talent to the sector: Attracting and training young women and men in the agricultural sector requires partnerships between institutes of education and the food industry. Education programmes and the private sector, need to tap into young people's and women's ambition to succeed in the industry, by offering career progression and diversified job opportunities across the sector. Programmes such as the Gambia Youth Chamber of Commerce and Ireland's Accelerating the Creation of Rural Nascent Start-Ups programme are examples of important avenues for young people and women to develop confidence in the sector and to learn from the experiences of other businesses.

Field trip

Teeling – firm-level insight into branding, sustainability and standards

A visit to a start-up family enterprise and the country's national research facility (Teagasc), allowed participants witness first-hand how the food and drinks industry and research institutes complement each other. While exploring the processing operations of [Teeling Whiskey](#),² participants were able to pose questions about the process, and the enabling environment within which the company operates. A growing affluent market segment has created demand for hand-crafted locally produced whiskey blends. Building on family experience and investments in the whiskey industry, two brothers opened the first new distillery in Dublin for over 125 years. Participants learnt that the company business model is built on:

- association of Ireland with expertise in whiskey distilling based on long-standing international brands such as Jameson, Bushmills and Powers;
- focus on high value brands, over volume, with the company continuously striving to create novel blends: the facilities were designed in a way that allows up to 25 percent of annual production to be dedicated to new recipes;
- compliance with benchmarked voluntary standards for foods and drinks industry set against best practices;
- innovations through recycling waste supported by the national sector-wide sustainability programme Origin Green, discussed in more detail in Session 4 of the workshop.

During the site visit, the whiskey-making process was explained in stages and delegates witnessed each step; milling, mashing, fermentation and distillation as they progressed. The distillery's recipes and blends are inspired from old traditions which are the core of its various innovations such as individual fermentation techniques. The company takes advantage of the increasing demand for hand-crafted, unique whiskey by tapping into the famous Irish distilling techniques and craftsmanship.

Applying a sustainability lens to their business model has enabled Teeling to diversify business units out of their waste recycling system. All of their energy needs are sourced from 100 percent renewable energy sources, and the business continuously reviews its operations to identify means to drive down energy use, using, for instance, heat recovery at multiple stages of its operations. The sustainability lens helps the company to drive down costs, while also responding to its consumers' demand for a greener product.

The sustainability component of the business model also supports Teeling in targeting a high-value and growing niche market. The approach allows the company to reinvest in ongoing innovation and sustainability, strengthening the company's emphasis on product value and brand, over a business model that focusses on volume and price.

Teagasc – an integrated approach to research in agriculture

The distillery tour was followed by a visit to Teagasc, the Irish Agriculture and Food Development Authority, which provides integrated research, advisory and education services to the sector and rural communities in Ireland.

Mr Declan Troy, Assistant Director of Research and Director of Technology Transfer and Ms Fiona Thorne, Senior Research Officer at Teagasc provided an overview of the Irish agriculture and Teagasc's role in the sector (see key figures and facts in Executive Summary). The mission of Teagasc is to "support science-based innovation in the Irish food sector that will underpin profitability, competitiveness and sustainability" and its model is shaped by four goals:

1. Improve the competitiveness of agriculture, food and the wider bio-economy.
2. Support sustainable farming and the environment.
3. Encourage diversification of the rural economy and enhance the quality of life in rural areas.
4. Enhance organisational capability and deliver value for money.

² A food company was initially identified but due to unforeseen events, Teeling Whiskey kindly stepped in and opened up their premises to the African delegates.

Teagasc has seven Research Centres based around the country, each focused on different parts of animal or food production sectors in Ireland. The Teagasc Ashtown Food Research Centre, based near the capital city Dublin, which the participants visited, is primarily a meat research centre but also focuses on flour research, food safety and horticulture. Its facilities include: a pilot scale abattoir and boning hall, glasshouses, mushroom tunnels, consumer taste panels, and food safety research.



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Seventy percent of Teagasc's funding comes from the government whilst the remaining thirty percent is earned from research contracts, extension fees and trading income. Teagasc focuses on responding to the increasing need for technological innovations by industry and policy makers, while at the same time exploiting global opportunities such as improving food shelf life, promoting sustainability or developing IT-tools in food handling. Creating added value for the benefit of the food industry is at the core of the organization's activities. Milk, for instance, is a generic Irish commodity and can be produced easily but does not translate into significant value for the sector. Scientific technology, however, has allowed for value to be added and transform the product into more profitable goods such as infant formula or whey protein extraction from dairy waste. Box 1 also briefly describes demonstration visits by delegates to horticulture greenhouses and mushroom dark-houses.



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BOX 1. Applied consumer driven research for mushroom and strawberry growing

Mushroom growing is worth 100 million to the Irish market, with a six-week return on investment. The mushrooms are grown without pesticides, in a highly hygienic environment. As such, they are susceptible to disease which can also be spread by pickers. Delegates learnt about difficulties the industry is facing in finding people to carry out manual repetitive work. To support industry address this constraint, Teagasc is testing how manual labour can be removed from the picking process. Strawberry production is facing similar challenges and delegates were able to visit green-houses where new technologies for growing strawberries off the ground are being tested in order to address the arduous work involved in strawberry picking. Earlier trials showed the technology impacted on taste, adversely affecting market sales. The research is therefore retrialing the technology to ensure the taste demanded by the market is retained for 'off-ground' grown strawberries.

Research at Teagasc is motivated by providing solutions to modern-day food systems challenges such as waste, losses and pollution. As opposed to traditional academia, all research conducted must consider the consumer insight. This ensures all findings have a specific link to market demand and the scientific output can be commercially exploited. Moreover, the role of Teagasc is to transform research results and evidence into information that can be easily assimilated by farmers and companies.

As such, Teagasc engages with the industry by offering its expertise, resources, infrastructure or intellectual property to Irish or international organizations for the benefit of the Irish economy. This is facilitated through the development of a [technology market portfolio](#) which is updated on a six-month basis. Food companies can use the portfolio to become familiar with products and tools such as novel technologies, technical services, pilot plant facilities, and key contact points. Intellectual property, for instance, can be exploited by businesses through joint development or licensing opportunities. [Food Innovation Gateways](#) events are also organized twice per year to bring Irish food companies together, facilitate their engagement with Teagasc and promote the delivery of solutions for the food industry.

Despite an enviable track record in supporting the growth and competitiveness of the Irish food industry, the agency is continually pushing the bar to ensure that research results are absorbed by its clients to accelerate sustainable growth. Mr Troy highlighted a number of barriers stalling innovation and preventing technology transfer. These include a lack company investment in research, limited capacity of companies to assimilate information, and consumer and industry conservatism in food science.

The issue of Brexit makes it even more urgent for businesses to engage with knowledge providers, given that currently 35 percent of the country's food exports supply the UK market.

Mr Troy's presentation emphasized the importance of having a common knowledge base shared by all stakeholders including farmers, industry, consumers, researchers, and a strategic partnership built on trust and collaboration. Meat Technology Ireland ([MTI](#)), for instance, is a unique example of this type of collaboration. Co-funded by the government agency, Enterprise Ireland, and nine meat companies, MTI offers a pre-competitive space, where industry can collaboratively carry out research on improved technologies for beef and sheep meat, providing consumer focused research to processors and farmers. One area of MTI's work, for example, is exploring the potential of genomics to add value either at farm level by improving breeding or at processing level by

improving meat quality and tenderness. Genomics involves the analysis of cattle's DNA to identify the most efficient breeds for a sustainable sector. Box 10 below provides more background details on the concept of genomics.

By pooling the knowledge and talent of all the players involved, MTI represents a valuable driver of exports and value addition in the sector. See Box 2 for a more detailed overview of the MTI initiative. Collaboration with other research centres or academic organizations is also essential for the work that Teagasc carries out. Mr Troy highlighted the importance for industry to benefit from specialised education and for training institutions to supply appropriately skilled human resources that can take research findings and apply them to the sector's needs.

To conclude, the Irish case shows that "all players have a responsibility to implement best practices based on good science" for the benefit of the industry and in turn, their own.

BOX 2. Meat Technology Ireland overview

Meat Technology Ireland (MTI) emerged from a five-year research vision from IBEC's Meat Industry Ireland industry group which was presented to Enterprise Ireland to obtain funding. It is an industry-led initiative that aims to build a strategic research and innovation base in beef and sheepmeat processing in Ireland. The centre acts a 'one-stop shop' for meat processing research, co-ordinating all beef and sheepmeat processing research needs.

MTI is hosted by Teagasc at its Ashtown Food Research Facility in Dublin with Dublin Institute of Technology (DIT), Dublin City University (DCU), University College Cork (UCC) and the Irish Cattle Breeders Federation (ICBF) involved as research providers. The initiative is led by nine companies; ABP Ireland, Ashbourne Meat Processors, Dawn Meats Group, Glanbia (Ireland), Hilton Foods Ireland, Irish Country Meats, Keepak Group, Liffey Meats, and Slaney Foods International.

The programme is delivered through six strategic research pillars which have been defined by the commercial requirements of the MTI member companies. The involvement of nine major rival beef and sheepmeat processing companies, in this industry-led collaborative innovation initiative is a clear demonstration of the industry's commitment to delivering on the growth potential of the sector and its strategic role in future economic development.

Field trip findings

A business enabling environment that prioritizes and fosters sustainability drives innovation and improved competitiveness at firm level. Participants learnt that food and drinks companies can rely on a national public-private partnership that promotes sustainability within the sector, providing companies such as Teeling with incentives and benchmarks for more efficient resource management.

Geographical association combined with knowledge from a traditional family-enterprise provides the basis for a strong business model in the food and beverage industry. The Teeling business model demonstrates that innovative firms and modern brands can grow out of a long-standing family tradition and knowledge of a product. The business can also leverage the geographical association that Ireland has with whiskey distilling.

Research and development can provide the neutral pre-competitive space required for food companies to collaborate. Collaboration between traditional competitors (co-opetition) has developed as a workable strategy for Ireland given its small country status, with hundreds of small family farms and food businesses addressing common challenges. Meat Technology Ireland, described in Box 2, is an example of this type of collaboration. The initiative reveals how traditional competitors have come together to invest in industry research to benefit the entire sector.

Public sector support to agriculture and food research bodies ensures the integrity of research findings for industry and consumers. Seventy percent of funding for research in Ireland is derived from public funding.

An important role of Teagasc is to ensure that findings respond to market concerns and that research outputs are exploited by the industry.

An integrated national approach to research and education accelerates knowledge absorption across all stages in the chain, and provides a continuous flow of high-quality expertise to all aspects of the industry.

Under the national FoodWise Strategy, discussed in detail in Opening session section below, directors of national research, policy makers and industry leaders meet regularly to discuss targets related to national research goals. The integrated approach also reinforces investments in human capital and entrepreneurial science driven by farm-to-fork initiatives, such as the 'BETTER Farm' programme; regular research publications in international peer reviewed science journals; and business school programmes in Sustainable Business. Collectively, these activities foster innovation and accelerate growth in the food sector. Sessions 4 and 5 describe the programmes mentioned here in more detail.

Opening session – setting the scene

The Building Inclusive and Sustainable Food Value Chains workshop was hosted by the Department of Food, Agriculture and the Marine (DAFM) in Dublin 7 - 9 of February 2018. The high-level policy meeting, organized by the Food and Agriculture Organization (FAO) in collaboration with the African Union Commission (AUC) and DAFM, was designed to exchange lessons on building sustainable and nutritious agri-food sectors and identify how FAO and the AUC can contribute to knowledge exchange on the topic. Eleven African countries were represented at the workshop by various thought leaders from the public and private sectors. The workshop was chaired by Mr Damien McLoughlin, Associate Dean, University College Dublin Michael Smurfit Graduate Business School.

The event was opened by Mr Andrew Doyle, Minister for State for Agriculture, Food and the Marine; with interventions from Mr Komla Bissi, CAADP Advisor, AUC, and Mr Divine Njie, Deputy Director Food Systems Programme, FAO. The panellists highlighted the importance of the agrifood sector which has been the backbone of both Africa and Ireland's growth.

BOX 3. Ireland's competitive advantages in the agriculture sector

- maritime climate favouring sustainable, grass-based production systems;
- highest proportion of grassland in Europe; translating into carbon efficiency in dairy and beef production;
- no water scarcity concerns;
- high quality marine environment;
- world leading food safety and traceability systems.

Participants heard that a series of ten year strategies, the latest being Food Wise 2025, has been the driving force behind Ireland's successful story. Building off a number of competitive advantages, described in Box 3, the coherence and implementation of the strategies have allowed the country to build a dynamic agrifood sector.

Over the past two decades, Ireland has become a leader in the export of high-value food, in particular beef and dairy products. Because of its small domestic market, Ireland exports almost 90 percent of its produce. Its leading position in sustainable food production and exports motivates the country to share lessons learnt for the benefit of other nations in their pursuit of sustainable and nutritious agri-food industries.

The African continent³ has also dedicated important efforts into boosting agricultural growth and unlocking private sector opportunities in agriculture. 2014 marked the 10th anniversary of the Comprehensive African Agriculture Development Programme (CAADP), which brought the region's heads of state together to commit to the Malabo declaration under a revised set of goals for agriculture to be achieved by 2050.

FAO has been working with both the AUC and Ireland to strengthen Africa's position in several key strategic areas. DAFM's support to the area of Inclusive Business Models linking small farmers to rurally based small food enterprises has contributed to emphasizing the importance of these actors in food systems and poverty reduction.

More recently, FAO in collaboration with the AUC has begun to look at Ireland's own experience in developing its agri-food sector and explore how lessons can be shared with the Africa region. In this regard, an important area of learning is Origin Green. Globally, Origin Green is the first nation-wide agricultural sustainability programme constructed on the basis of a unified public and private sector vision for the food and drinks industry. FAO was first exposed to the Origin Green initiative in 2014 with a visit from Mr Aidan Cotter, former CEO of Bord Bia. This was followed by an FAO mission to Ireland to better understand how the sustainability programme works in practice. The learnings on Origin Green and Ireland's broader Agricultural Strategy (FoodWise), were also shared at a side event at the FAO Governing Council in October 2016, attended by over 120 government representatives from around the world.

Ireland and countries across sub-Saharan Africa face a number of similar challenges that include, for instance, aging farming populations, lack of women owned agro-enterprises, and climate change. The intention of this workshop was to facilitate an exchange of lessons on these issues and identify actions that can support synergies in addressing common challenges affecting the development of sustainable food systems.

³ Represented at the workshop by ten countries including Cameroon, the Gambia, Uganda, Nigeria, Kenya, Rwanda, Zambia, Togo, Ghana, and Ethiopia.

Session 2. The evolution of Ireland's family farming agri-food sector – takeaways for the agri-food sector in Africa

The session delved into Ireland's agri-food sector transformation over the past 20 years and identified key success factors as well as challenges encountered during the process to allow for the formulation of lessons for the African countries. Panellists included Ms Siobhan Dowling, Assistant Principal Officer, Economics and Planning, DAFM; Mr John Malone, former Secretary General, DAFM; Mr Larry Murrin, CEO, Dawn Farms; Mr Alexander Evans, Head of the School of Agriculture and Food Science UCD; and Mr Divine Njie, Deputy Director Food Systems Programme, FAO.

The keynote presentation delivered by Ms Dowling set the scene by examining the process behind the formulation of Ireland's recent series of strategies in the sector.

FoodWise 2025 is the fourth in a rolling series of strategies and sets out a ten year plan for the agri-food sector, building upon the achievements of its successor, Food Harvest 2020. The learnings from the formulation of the Food Harvest (2015) provided the basis for FoodWise (2025) and the understanding that the process needed to incorporate a more inclusive stakeholder network, increasing the number of members from 12 under Food Harvest to 35.

FoodWise is built upon the concept that *"environmental protection and economic competitiveness are equal and complementary - one cannot be achieved at the expense of the other"*. FoodWise contains over 400 action points that explain in detail the steps to be taken to achieve the growth projections of the 2025 strategy. Milestones and targets are tied to responsible individuals who report to the Strategy's committee every two months. Four cross-cutting themes shape the strategic recommendations laid out in the plan:

1. innovation and focused investment in research and development;
2. human capital in order to attract, retain and upskill the best people to work in the sector;
3. competitiveness to drive efficiency in the farming and food industry;
4. market development to grow existing markets and develop new ones;
5. sustainable production and supply chains.

The strategy was developed by a Committee consisting of 35 leading figures from the industry which was chaired by Mr John Malone, former Secretary General of DAFM. Members included representatives from research organizations, business schools, private sector including multinationals and local food processing firms, government agencies, cooperatives or farmers' organizations, retail, individual farmers, and nutrition groups. Due to its size, the committee was divided into five groups covering: meat and cereals; milk and infant formulae; seafood; prepared foods, horticulture, beverages and retail; environment, forestry and climate change.

While the whole committee met eight times during the duration of the development process, the five groups held additional pre-meetings with the Chair, as well as other organizations and individuals from the industry. The strategic process was open for public consultation and [47 submissions](#) were received from a wide range of stakeholders, described in Box 5. The questionnaire designed to assist the public in formulating feedback covered the following:

- has Food Harvest 2020 delivered on its vision for the Agri-Food Sector in Ireland?
- sustainability / climate change
- global market context including opportunities for Foreign Direct Investment
- competitiveness and innovation
- risks

The public consultation submissions were reviewed by the committee, informing the foundation for many of the recommended actions which are now listed in FoodWise 2025. A comprehensive environmental analysis of the strategy was also developed, ensuring environmental impacts and concerns were taken into consideration in the final plan. The prioritization process involved all members listing three aspirations for FoodWise, with ten final priorities agreed upon for retention under the strategy. The [final implementation strategy](#) was published in December, 2015 together with the [Strategic Environmental Assessment](#).

To guide implementation, a High Level Implementation Committee (HLIC) was established comprising the Irish Food Board (Bord Bia), the national agriculture research body (Teagasc), and Enterprise Ireland. Chaired by the

Minister for Agriculture, Food and the Marine, implementation was monitored regularly. The HLIC was also informed by an Environmental Sustainability sub-group to monitor the adoption of sustainability recommendations and a Meat Implementation sub-group to focus on the actions.

In December 2017 the entire industry, represented by 580 people, was convened in the national sports stadium to assess achievements and prepare for the challenges ahead. Ultimately, the success of the strategic process is reflected by industry's ownership of FoodWise, which is used as a practical tool to guide sectoral, sub-sector and enterprise strategies.

The presentation delivered by Ms Dowling also describes a set of principles that guided the strategic process as outlined in Box 4. Annex 3 contains a detailed overview of the strategy process since 2014.

BOX 4. Strategic Principles for developing an agrifood sector strategy

Local roots to global reach is based on a long-standing history of strong traceability credentials starting at family farm enterprises and targeting international food value chains.

War on talent to attract human capital to the sector is considered key for innovation and competitiveness.

Joined-up thinking embedded in the strategy makes sure that policy stays relevant to industry, even during changes in government leadership.

Open door policy for industry has led to an improved and collegial public-private sector relationship.

Hard-deadlines, and tracking systems on targets and accountability avoids the repetition of past mistakes where strategies were based on sub-sector planning and shopping lists.

No strength without unity means that the strategy needs to be representative and inclusive of all actors in the sector. The approach is based on the vision that "what's good for the sector, is good for the farm and agro-enterprise."

BOX 5. Developing and Implementing Food Wise 2025 – Figures and Facts

Growth projections to be achieved by 2025 are as follows:

- increase the value of exports by 85 percent;
- increase the value of primary production by 65 percent;
- increase value added by 70 percent to over €13 billion;
- deliver a further 23,000 jobs in the agri-food sector.

To-date, of the 368 actions that were due to commence by 2017:

- forty-six percent have been achieved or substantial action has been undertaken.
- forty-nine percent have commenced and are progressing.
- three percent are at commencement stage with the expectation that they will be achieved in the timeframe associated with them.
- two percent actions have not yet commenced.

See Annex 3 for a more detailed overview of the process behind Food Wise 2025.

Session findings

The plenary discussion, led by Ms Mary Shelman, raised the following points.

Cooperation between government bodies is essential for ensuring alignment of policy across sectors. The establishment of the High Level Committee to oversee implementation, ensured cross-sectoral alignment across policy and legislative reforms, state initiative and grants, and private sector needs and actions. The approach demonstrates the embedded nature of the agri-food industry in Ireland's economy and the commitment across state agencies for ensuring that actions and results across sectors are consistent and reinforce one another.

Private sector collaboration within and across sectors directs scarce resources towards objectives that can leverage the most gains for the entire industry. By choosing to work together, businesses are able to benefit from the type of industry knowledge that would otherwise not be accessible. For this to happen, trust must be established between competitors. The MTI programme presented during the Teagasc visit, and discussed in Box 2 above, is one such example.

Aligning industry and non-industry stakeholders around the same objectives fosters a common vision and ambition. Building trust and communicating the message that industry growth can translate into positive outcomes for all actors help to develop a common vision and ambition for the sector. To build trust with the private sector and civil society, the Irish government employed an open door policy and all actors including private sector representatives, appreciated that politicians were approachable and provided answers to questions or doubts.

The elaborate nature of strategy formulation and implementation calls for hard deadlines, strict prioritization and resolute chairing. A well-respected chair able to achieve broad consensus, and clearly communicate the desired objectives, was key in managing the diverse stakeholder group. Setting and respecting hard-lines was also important, so that stakeholders were motivated by progress early in the process. Prioritization was an important tool used to focus sub-sectoral actions.

Placing environmental sustainability at the core of industry growth ensures trade-offs between environmental protection and economic progress are managed and minimized. The strategy ethos that *“environmental protection and economic competitiveness are equal and complementary...”* ensured that the analysts and actors responsible for environmental protection were central to the drafting of the strategy which has translated into an industry characterized and driven by sustainable practices.

Session 3. Continental Agribusiness Strategy – driving Africa’s inclusive agricultural growth in the context of the 2014 Malabo Declaration

Session 3 was moderated by Ms Noma Mhlanga, Agribusiness Economist with FAO and focussed on pan-regional and national initiatives that support the growth of Africa’s agrifood sector. Panellists included Mr Ko’pep Dabugat, Co-ordinator, CAADP Non-State Actors Coalition; Mr James Wanjohi, Technical Advisor to Principal Secretary, State Department of Agriculture, Kenya; Ms Evelyn Ohanwusi, Interim Head, Youth in Agribusiness Office, International Institute of Tropical Agriculture; Mr Shadreck Mungalaba, Director-Cooperatives, Ministry of Commerce, Trade and Industry, Zambia; and Ms Stepanka Gallatova, Agro-industries Officer, FAO.

The session was opened by Mr Mark Kofi Fynn, Agribusiness Advisor to the AUC, who gave an introduction to the region’s five-year Continental Agribusiness Strategy. The current strategy has built on learnings from the Comprehensive Africa Agriculture Development Programme (CAADP) process which reveal that the region’s agri-food sector has not achieved sustainable and inclusive growth due to:

- volatile commodity prices;
- limited ability of African countries to transition from trading in basic commodities to higher value added products;
- limited private sector engagement in agribusiness policy and strategy formulation;
- limited access and linkages to markets for smallholders, women and youth.

The Continental Agribusiness Strategy has been developed to enable *“the creation of a conducive environment for increased inclusive agribusiness and agro-industry in response to market driven private sector investments and businesses in Africa”*. The framework is built on seven strategic pillars:

1. policy practice
2. agriculture productivity and resilience
3. value chain and agro-industry development
4. markets and trade
5. strengthening adoption of technology and innovation
6. facilitating partnerships
7. promoting innovative financing.

The first ten years of CAADP implementation have seen limited commitment from the private sector. As such, the current strategy has now shifted its focus to agribusiness development and commodity led agro-industrialization. Special attention is dedicated to developing the capacity of agri-food Small and Medium Enterprises (SMEs) through several actions:

- creating and strengthening youth platforms to encourage young people take part in policy making;
- facilitating training, mentorships and apprenticeships;
- facilitating B2B platforms for young entrepreneurs;
- supporting the commercialization of innovative technologies;
- facilitating market linkages with domestic and foreign suppliers of agricultural commodities and services;
- developing a dynamic knowledge management system for agribusiness incubation, including online portals and other ICT solutions.

The Continental Agribusiness Strategy reflected at the national level

Interventions from African delegates examined how different initiatives in Africa have taken the region-wide Agribusiness Strategy from concept to practice at the national level. For example:

- Due to its wide range of climatic conditions stretching from the ocean to semi-arid areas and highlands, Kenya benefits from a broad variety of agricultural outputs. On completion of a value chain mapping to identify the country’s comparative advantage at a regional level, eighteen value chains were selected for

incubation. The incubation centres have been set up by the government in partnership with investors and the private sector.

- Zambia has recently shifted its focus from enhancing productivity to adding value. Part of this strategy includes transferring the mandate for cooperative development to the Ministry of Commerce, Trade and Industry in order to facilitate the capacity building of cooperatives and prepare them for the important role in agro-processing. The government has also facilitated the acquisition of 2000 machines for farmers' cooperatives to process maize, rice and cassava. Progress has already been achieved, with numerous contracts signed with schools and universities, in addition to exporting activities to the Democratic Republic of Congo.
- The [ENABLE Youth Programme](#) has been set up by the African Development Bank in partnership with the International Institute of Tropical Agriculture which aims to support young unemployed graduates to pursue a career in agribusiness. Young people are linked to incubation centres for training on inputs, production, processing, and distribution as well as in business development. Access to credit is also facilitated through risk sharing mechanisms and by designing products targeting the youth in partnership with financial institutions. The success of the programme varies across countries and thus, alignment and discussions with governments, have been important to ensure its success.

Session findings

On examining the cases presented, participants reiterated the importance of coordinated action between research agencies, industry and the public sector to develop a common knowledge base and research agenda. New learnings from the session discussion revealed:

In order for strategies to evolve and achieve their long-term objectives, they need to withstand changes of government leadership. Participants learnt that to maintain continuity in sector strategy implementation, stakeholder interaction needs to go beyond institutional mandates and remain focussed on the long-term vision for the sector. The Irish case demonstrates the importance of developing consecutive strategies that build upon the strengths and lessons of past experiences, and that can withstand successive changes in government.

Placing emphasis on the role of small agro-processors in rural areas creates off-farm employment for young people, attracts investment and new technologies to communities, and adds value locally to agricultural commodities. The AUC and national initiatives described a range of efforts focussed on supporting agro-entrepreneurship and rural enterprise development which governments and supranational institutions regard as one of the main drivers of rural employment, food security, and poverty reduction.

Each actor in the strategy development process needs to be enabled to fulfil their respective role in stimulating sustainable growth in the industry. It was emphasized that the private sector should be enabled to fulfil their role in employment generation in rural and urban communities and adding value to agricultural produce. The public sector can invest in pre-competitive research which may not be immediately attractive for private sector investment, with research agencies informing the decision-making processes, and education institutes providing the human capital.

Session 4. Mainstreaming sustainability into agriculture

The fourth session discussed the respective roles of the public and private sectors in promoting sustainability. Panellists included Ms Providence Mavubi, Embedded Investment Advisor at the Ministry of Agriculture and Animal Resources in Rwanda; Mr Jean Baptiste Hategekimana, Chairman at the Rwanda Youth in Agribusiness Forum; Ms Edwina Love, Principal Officer at DAFM; Mr Martin Hofler, Sustainability Development Manager at the Irish Food Board (Bord Bia); Mr David O'Flynn, Head of CSR at Dawn Meats Group Ireland; and Ms Sibeal Bird, Origin Green Ambassador.

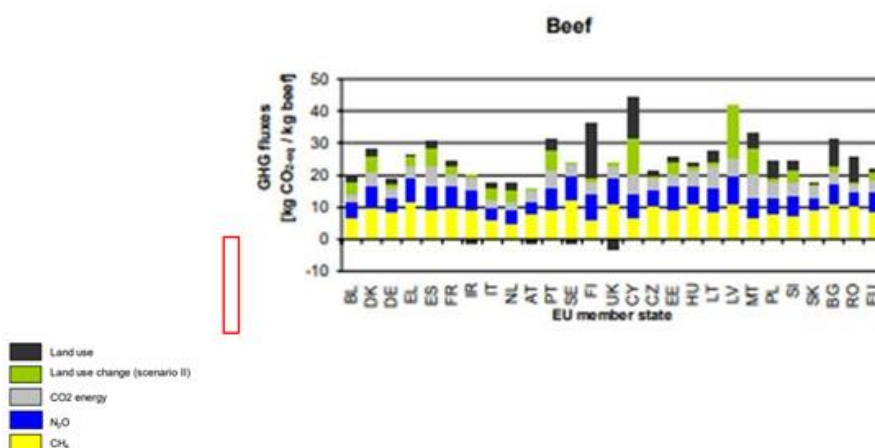
The keynote, delivered by Ms Edwina Love, explained that agriculture and its related activities are the highest emitter of greenhouse gases (GHG) such as CO₂ or N₂O in Ireland, accounting for about 33 percent of national emissions. This figure reflects the importance of agriculture to the Irish economy. The risk of disruption to agricultural activities from climate change has increased with the number of extreme events such as flooding in recent years. Climate change in Ireland has also caused the:

- mean annual surface air temperature to increase by approximately 0.8 °C over the last 110 years;
- average annual national rainfall to increase by approximately 60 mm or 5 percent in the period 1981 to 2010, compared to the 30-year period 1961 to 1990.

BOX 6. Ireland and GHG emissions efficiency

There are a number of factors that can affect the efficiency of a beef production system, including the diverse range of feeds (maize/cereals/soy etc.). In Irish beef systems, the largest share (approx. 90 percent) of feed is from grass. As such, output is still relatively high but comparatively lower than the high input systems. However, the contribution of grass based systems to GHG emissions related to land use and land use change (pasture changing to tillage) is very small compared to the high input/output systems. This is because the crops that are used in high input systems require intensive land management like tilling/harvesting/ploughing etc., which essentially removes carbon that is stored in the soil and therefore contributes to GHG emissions (see the grey and green shading in the graph). The biggest share of GHG emissions in a pasture based system is from enteric methane which is a result of the digestion system of beef animals.

The countries with the lowest emissions per kg of beef are as diverse as Austria (14.2 kg CO₂-eq/kg) - low input/output, grass based diets, and the Netherlands (17.4 kg CO₂-eq/kg) - high input/output and high reliance on imported feeds. While the Netherlands save emissions especially with low methane and N₂O rates, indicating an efficient and industrialized production structure with strict environmental regulations, Austria outbalances the higher methane emissions by lower emissions from land use and land use change (LULUC) indicating high self-sufficiency in feed production and a high share of grass in the diet. The same applies for the Irish system. The figure below measures total GHG fluxes of EU-27 livestock products in 2004, calculated with a cradle-to-gate lifecycle analysis with CAPRI.



Source: The Joint Research Centre (2010) available at:

https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2010/livestock-gas/exec_sum_en.pdf

While emissions from agriculture peaked in 1998, these have decreased to below the 1990 level since 2002. This reflects the success of measures under the European's Union Common Agriculture Policy (CAP) which has led to a gradual decline in livestock numbers and fertilizer use. Estimates also suggest that this trend will continue and significant improvements are expected to be achieved by 2030. Dairy and beef production in Ireland, compared to EU counterparts, are recognized as being highly efficient in terms of GHG emissions as described in Box 6. Guided by CAP, Ireland is implementing various initiatives to address climate change under a series of measures described in Box 7.

BOX 7. Measures that Ireland is implementing to further address climate change

- sustainable intensification of food production to reduce the carbon intensity of food, such as through efficient multi trait animal breeding strategies;
- efficient use and recycling of nutrients which optimise nitrogen use efficiency and reduce losses of reactive nitrogen to the environment;
- feeding strategies that maximise the efficiency of grass based production systems;
- improvements to animal health and welfare;
- using ICT in agriculture to aid delivery of sustainable intensification;
- sustainable land management that contributes to climate change mitigation and sustainable management of soil and forest carbon stocks.

Source: PowerPoint presentation delivered by Ms Edwina Love.

In accordance with Article 4 of the Paris Agreement to achieve a balance between anthropogenic emissions and the removal of greenhouse gases by sinks by the second half of this century, the country is striving to become cost effectively carbon neutral, while not compromising its capacity for sustainable food production. The Irish Rural Development Programme, described in more detail in Box 8, is an example of an initiative which contributes to this goal, through the promotion of farmers' engagement in biodiversity while increasing productivity.

BOX 8. The Irish Rural Development Programme (RDP)

The **Rural Development Programme (RDP)**, worth almost €4 billion over seven years, is strongly targeted towards environmental benefits, including knowledge transfer programmes, which will bring the latest innovative sustainability research and practices directly to farmers. The RDP allows the participation of farmers in practices that can deliver towards the fulfilment of environmental and biodiversity goals whilst increasing productivity. For example, the establishment and maintenance of landscape features can assist with achieving other environmental objectives related to land, such as water and biodiversity management, in addition to carbon sequestration benefits.

Source: PowerPoint presentation delivered by Ms Edwina Love.

Origin Green

Ireland's most ambitious project to mainstream sustainability is Origin Green (OG), the country's food and drink sustainability programme. Led by Bord Bia, OG is a voluntary initiative that brings together the Irish food industry – from farmers to food producers, retailers to foodservice operators – with the common goal of sustainable food production.

The overall ambition of the Origin Green programme is that farms and food manufacturing businesses throughout Ireland sign up to the sustainability agenda, making measurable commitments to producing in a sustainable manner, with progress independently assessed and verified.

At farm level, audits are carried out under Bord Bia's Sustainability Assurance Scheme for beef, dairy, horticulture and eggs. Each week, more than 100 farm auditors undertake almost 800 independent farm audits. On beef and dairy farms, for example, an audit of farms is conducted across a wide range of areas including animal welfare,

food safety, general environment criteria and animal welfare. Additional sustainability criteria is also collected through a farm survey inclusive of farm greenhouse gas emissions, biodiversity, water measures, energy efficiency, soil management and socio-economic factors. Following each audit, the farmer receives notification of the results in a feedback report on the farm's performance, with reassessments every 18 months. In conjunction with a farm advisor, the farmer will use the report to look at practical day-to-day management practices that are relevant to the farm as it helps identify the potential financial and environmental impact from further improving performance. This allows farmers to make informed decisions on improving the sustainability of their farms while also improving their efficiency and viability.

Box 9. Public-private partnership in training and education

MSc in Business Sustainability

MSc in Business Sustainability in collaboration with University College Dublin and the Irish Food Board has been created to strengthen the position of Irish agri-food companies in sustainable food supply. Applicants are chosen based on their potential to become industry leaders and once selected, they become 'Origin Green Ambassadors'. The purpose of the programme is to highlight the sustainability credentials of the Irish Food and Drink Industry through the national sustainability programme - Origin Green. The programme involves a six-month immersion in the principles and application of sustainability in the food industry. These initial six months in University are followed by a number of six-month placements with global food companies. The purpose of the placements is two-fold – firstly the Origin Green ambassador contributes to the host organisation's sustainability objectives and targets, while gaining valuable insights into advancements in global sustainability. Secondly, they also have an opportunity to spread the word about the Origin Green Programme and Ireland's sustainability credentials. The industry knowledge that ambassadors gain during their international placements is also fed back to the Irish industry partners who finance the Master's programme.

BETTER Farm Programme

Dawn Meats, a national meat processor in Ireland, initiated the **BETTER Farm Programme** to bring knowledge to a small group of beef farmers and support them in implementing change at the ground level. BETTER Farm is run in collaboration with Teagasc who works with the thirty-two participants to improve production systems and adopt the latest technology. The Irish Farmers Journal reports two to three times per year farmers' progress. The scheme was so successful when initially implemented that other industry competitors have since come on board to improve on-farm efficiency.

Since the programme encompasses the entire supply chain, food companies are encouraged to commit to a mandatory mix of areas including raw material sourcing, manufacturing processes and social sustainability. The mandatory areas, from which targets are set, form the basis of a business's 3-5 year sustainability plan. The plan is independently verified by international inspection, testing and verification specialists to ensure the targets are viable and robust. Each plan is reviewed annually and monitored for progress against the set targets.

At present, over 200,000 carbon assessments have been completed on Irish beef and dairy farms, and Origin Green has over 330 companies with independently verified and annually monitored sustainability plans. These members represent 90 percent of total Irish food and drink exports.

Box 9 describes private-public sector collaboration on education programmes that respectively target equipping the private sector with professionals in sustainability and educating farmers implement change on the ground.

Rwanda's Green Growth Strategy

Ms Providence Mavubi and Mr Jean Baptiste Hategekimana provided insights into Rwanda's efforts towards mainstreaming sustainability, with a presentation on the country's [Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development](#) (GGCC). The strategy builds on the country's Vision 2050 framework which envisages Rwanda as a developed climate-resilient, low-carbon economy, with agriculture and industry having minimal impact on the environment within the next 35 years. Practically, the GGCC supports industry, including agriculture and the food sector, adapt to climate change, reduce pressure on the environment and promote economic growth. Rwanda is highly vulnerable to climate change due to its reliance on rain-fed agriculture, and similarly to Ireland, the country is exposed to extreme events such as floods and draughts, disrupting agricultural activities and affecting productivity. The GGCC strategy encompasses fourteen programmes, five of which target the agricultural sector:

1. sustainable intensification of small-scale farming;
2. agricultural diversity of markets;
3. integrated water resource management;
4. sustainable land use management;
5. sustainable forestry, agroforestry and biomass.

BOX 10. Rwanda Youth in Agribusiness Forum (RYAF)

RYAF is a young people's forum set up to transform the agricultural sector from subsistence to commercially-oriented farming by stimulating the youth to engage in agribusiness. Its aim is to advocate for young people, provide capacity-building to over 2000 members and link them to different growth opportunities in the agricultural sector. The forum's experience reveals that many young people have the needed skills, capacity or educational background for a career in agriculture but they are not able to sell their competencies. As such, the forum is now dedicating efforts towards facilitating the creation of partnerships between investors, as one of the main challenges for young entrepreneurs is raising start-up capital. Since the initiative is not yet gender-balanced, the forum is planning to increase the number of female members by offering women-targeted incubation programmes.

Rwanda has also taken a series of important steps to promote businesses' engagement in environmental issues. One example is FONERWA, Rwanda's Green Fund, a strategic tool that allocates at least 20 percent of its financial resources to the private sector. The private sector has a primary interest in environmental sustainability as economic growth in Rwanda is heavily dependent on the use of natural resources and land-based economic activities. The government engages in continuous discussions with the private sector to ensure that policy formulation is achieving buy-in from businesses on the topic of sustainability. Attention is also given to demonstrating the financial benefits generated from sustainability by putting in place monitoring and evaluation systems to develop statistics showing economic growth and profitability.

The Session also discussed the importance of youth in promoting sustainability in the sector, with Box 10 describing the Rwanda Youth in Agribusiness Forum (RYAF) initiative, which offers incubation support to young female and male agro-entrepreneurs.

Session findings

Building the business case for sustainability and creating value around transparent credentials builds private sector engagement. Central to the tenets of Origin Green and Rwanda Green Growth Strategy has been the messaging to companies that sustainability measures strengthen the competitiveness of firms and the sector. Regular monitoring and evaluation ensures progress is recorded, corrective actions are taken as required, with economic gains demonstrated. Both Food Wise 2025 and Rwanda's Green Growth strategy have put in place audit systems to monitor progress. Monitoring should also be done at the level of smaller scale programmes, which in Ireland is carried out through the BETTER Farm programme discussed in Box 9. Periodic evaluation of farmers' progress in Ireland revealed that savings in the amount of €5,000 per year can be made with efficiency practices in place: representing a stimulus for farmers to further engage in sustainability.

Public-private partnerships in training and education programmes will contribute to ensuring that the sustainability goals and human capital needs of the sector are addressed. Boxes 9 and 10 describe how both Rwanda and Ireland are respectively investing in customized education programmes that respond to the human capital needs of a modern and sustainable sector. Ireland's MSc in Business Sustainability, while co-managed by

the Irish Food Board and the University College Dublin, is co-funded by industry. In doing so, industry is encouraged to engage with education institutions to communicate the needs of the private sector with respect to sustainability needs.

Developing a formal, strategic plan on paper is important for outlining objectives and responsibilities for advancing the sustainability agenda. Having a well-developed and comprehensive strategy on paper shows commitment and establishes clear targets to be achieved. In Rwanda's case, for instance, having the Green Growth Strategy document helped mobilise funds from donors such as agricultural financing from the Moroccan government. Participants noted that having a transparent plan with ambitious economic and sustainability goals also encourages the involvement of the private sector.



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Session 5. Intra-country knowledge transfer and peer-to-peer learning in the agri-food sector

The last session of the day discussed knowledge transfer and the learnings from the previous two days. A presentation was given by Mr John Rae, Project Manager, Sustainable Food Systems Ireland (SFSI), a consultancy group that combines the expertise of five government agencies (DAFM, Teagasc, Enterprise Ireland, Food Safety Authority of Ireland and Bord Bia) on areas that cover food safety, animal health and welfare, genomics, food enterprise development, innovation and research systems, extension and knowledge transfer, and sustainability. SFSI works with partners including FAO and the World Bank, providing technical assistance on the aforementioned areas.

The presentation focussed on how the role of genomics in Ireland contributes to the beef and dairy sector's sustainability goals. Outlined in Box 10, the genomics programme focusses on breeding the most efficient animals, for example, in terms of milk yields, quality, (fat, protein), and fertility. Benefits that the programme has brought include:

- increased efficiency of animal production;
- increased smallholder profitability;
- rural development through increased viability of farming sector;
- whole value chain improvement with improved raw material designed for market;
- better milk yield, better milk quality (fat & protein);
- meat to fit marketplace not vice versa;
- increased animal welfare with healthier animals;
- reduced GHG.

BOX 10. The Beef Data and Genomics Programme

The process involves analysing the DNA of animals to identify the most efficient for breeding in order to improve the genetics of future generations of cattle. Data analysed, for instance, includes milk yield, quality (fat, protein), calving interval (fertility), longevity and health for dairy, and calving interval, carcass quality, milk, health and temperament for beef. The Beef Data and Genomics Programme has been established to improve the profitability of beef farmers while also reducing GHG emissions. Genetic improvement is permanent and cumulative. From zero genetic gain between 2000 and 2013, the programme has reached €25 profits since its inception.

The country's focus on developing its beef sector is also based on cultural considerations as keeping beef cattle is an important practice in rural areas. The initiative is one of the largest beef genomics programme in the world with 1.2 million cattle genotyped today and 2.5 million cattle genotyped by 2020. The target of the programme is to achieve cows that are more profitable, sustainable and carbon efficient – the animals are ranked from 1 to 5 as follows:

Stars	Repl. Index	Cow weight	Calf wean weight	Calving interval	Progeny carcass weight	CO ₂ output
5	€108	669 kg	336 kg	403 days	358 kg	3 355 kg
4	€86	680 kg	324 kg	407 days	356 kg	3 432 kg
3	€60	690 kg	319 kg	411 days	356 kg	3 475 kg
2	€43	691 kg	315 kg	416 days	357 kg	3 502 kg
1	€12	739 kg	309 kg	423 days	357 kg	3 552 kg

Session findings

The session discussion again reiterated the value of collaboration between research, the public and private sectors with the following additional lessons highlighted:

Value addition is the driving force behind the transformation of the industry and is built on the understanding that food is part of agriculture. Capturing as much value as possible in each process has allowed Ireland to advance from selling generic food commodities to exporting high quality branded products with a world class reputation in food safety and traceability. The impetus for value, in turn, is created by consumers and originates in their personal needs and desires which are also shaped by cultural circumstances. It is important thus to make sure that food is produced in a way that aligns with people's values.

International development organizations require a more coordinated approach to support sustainable agrifood sector strategy development. Participants highlighted that the advice offered to governments by international development organizations is often contradictory. More interactive dialogue among donors and development organizations is required in order to avoid confusion and facilitate the creation of consistent messaging and clear strategies.

A national cross-agency consulting group is an efficient institutional set-up for accessing expertise from countries with a range of skills to offer. The SFSI discussed in the session acts as a one-stop-shop for actors that wish to access technical expertise from public agencies, universities and the private sector in Ireland, and could be replicated by other countries with skills and knowledge to offer on sustainable agrifood sector development.

Session 6. Shaping the future of leadership in the agri-food sector – learning from targeted programmes and female agri-entrepreneurs

The first session of the last day of the workshop explored the themes of female leadership, youth engagement and talent development in the agri-food sector. Panellists included Ms Paulina Addy, Deputy Director of the Women in Agricultural Development Directorate in the Ministry of Food and Agriculture, Ghana; Ms Kasazi Nyendwa, Managing Director Lotuno Enterprises in Zambia; Mr Baboucarr Kebbeh, CEO, the Gambia Youth Chamber of Commerce; Ms Sinead McPhillips, Assistant Secretary DAFM, Ireland; Ms Ailbhe Gerrard, Brookfield Farm Hiveshare; and Ms Brigid Riley, Fernwood Floral Design.

The discussion revealed the important role women and young people play in agribusiness and value addition activities. Panellists listed presentations covering two national initiatives implemented in Gambia and Ireland, both of which promote the role of young people and women in agriculture. The session also heard the testimonies of three female agri-entrepreneurs and their challenges and successes in the sector.

Mr Kebbeh presented the Gambia Youth Chamber of Commerce initiative (GYCC) which engages in conversations with the youth to ensure their voices are heard by policy-makers. The Government of Gambia promotes the topic and supports the GYCC initiative to develop policies on entrepreneurship, placing emphasis on the role of women in business. The programme includes a start-up incubator programme. GYCC primarily supports youth-led businesses in the agricultural sector, organizing exhibitions, business development trainings, online mentorships programmes and capacity building. The programme is open to all Gambian young entrepreneurs and fees vary depending on the services offered.

Ms McPhillips provided an overview on the Accelerating the Creation of Rural Nascent Start-Ups programme (**ACORNS**) of Ireland. The programme is now in its third year, with participants reporting increases in sales, exports and employment creation. The initiative is funded under the Rural Innovation and Development Fund, through DAFM, providing access to knowledge, support and networking opportunities to early-stage female entrepreneurs in rural Ireland. Participants are chosen based on their potential to grow their business and their commitment to engage in the programme's activities.

ACORNS involves interactive half-day round-tables on the themes of Marketing & Sales, Finance and Strategy development and implementation carried out over a six-month period. Round-tables involve groups of eight peers mentored by a female lead entrepreneur who offers her time on a voluntary basis. The round-tables offer participants the opportunity to share challenges with peers and reflect on ways to improve their businesses. Box 11 describes some of the benefits the panellists mentioned from participating in the programme.

BOX 11. Benefits from participating in the ACORNS programme

- creative mentors encouraging 'out of the box thinking' supporting mentees to find innovative solutions to business challenges;
- peer support and encouragement to pursue the objectives set during round-tables;
- group diversity bringing multiple perspectives to a challenge, thus allowing participants to analyse their business from different angles;
- experiences sharing on being a woman entrepreneur in a male-dominated industry;
- established peer relationships that continue after the end of the programme.

Ms Ailbhe Gerrard, Ms Kasazi Nyendwa and Ms Brigid Riley presented their experiences as businesswomen in the agricultural sector.

- Kasazi shared her story as a business woman in Zambia, where she started processing fish into sausages in 2013. Initially, her product was not well-received on the market due to cultural beliefs related to catfish. After various trials and taste testing she reworked the recipe into a more culturally accepted and successful product.

Her product portfolio now also includes fish powder, fish oil and fish crackers. Her products target a growing middle-class market that is interested in healthier food and less red meat consumption. Since introducing a new improved recipe and more professional packaging, the business has grown and now supplies supermarkets and hotels. Kasazi takes every opportunity to sensitize consumers to the importance of fish as a healthy alternative to red meat.

Kasazi received a loan from a Micro-Finance Institute for a previous business venture. However, the interest rates were extremely high, with repayments impeding the growth of her company. As a result, she has relied on personal savings and reinvested profits for the fish processing firm. She also received a grant from IFAD which has been important for the growth of the company. Kasazi has benefitted from the support, trainings and mentorship offered by the Zambia Development Authority, and the Making Markets Matter training programme supported by Cornell University. Moving forward, Kasazi plans to focus on acquiring certification that will open up more lucrative formal markets in Zambia and the South African region. The firm has two permanent staff and many part-time women working in processing.

- Ms Brigid Riley is a graduate of the ACORNS programme. Brigid returned to Ireland from the US to open her business, Fernwood Floral Design. Building on her credentials and experience in fashion design and events planning, her business grows and harvests sustainable indigenous 'slow' flowers. The concept of 'slow' flowers is an alternative niche market to the commercially grown flowers from South America and Africa that require heavy chemicals to maintain freshness during transportation to the Dutch flower market. She began her business with savings and a family loan, targeting weddings, cafes, shops and alternative events that value indigenous flowers and the absence of heavy chemicals found in industrial flowers. The business is tapping into the very lucrative and growing speciality flower market. She shares a website and network with the 'Flower Farmers of Ireland'. Brigid explained that access to credit is not a problem if a loan application is supported by a financially sound business plan. She works on her own but plans to recruit one employee by mid-year.
- Ms Ailbhe Gerrard, also a graduate of ACORNS, explained that she was previously employed in the construction industry, and later retrained in sustainable food production systems and organic agriculture. Similarly to Brigid and Kasazi, she invested her own savings to start her farm business, and since its inception has received a number of grants to help grow the business. Brookfield Farm Hiveshare produces organic honey and sheep, plants trees and also farms ten hectares of conventional barley. She is passionate about her business in honey as she feels it connects people directly to supporting biodiversity. Clients can buy shares in the farm's hives, with shareholders receiving packs of honey. Ailbhé has received grants off Heritage Ireland and matching funding grants from public sector agencies. Ailbhé shared that she started out with very little knowledge about the business, but with ambition and vision she has managed to learn her trade and grow the business. She offers seasonal employment.

Session findings

Attracting and training young women and men in the agricultural sector requires partnerships between institutes of education, the public sector and the food industry. Participants highlighted that in addition to attracting new talent, industry also needs to ensure that it retains its existing youth through opportunities for career progression. This can be done by forging partnerships with technical and university programmes that build the skills and ambition of young people to remain and succeed in the industry. There is a growing number of training programmes across Africa and in Ireland that offer a range of career options within the agriculture sector to attract young people to the industry. Programmes range from short courses to upgrade the skills of farmers in new farming practices to doctorate programmes in food science and innovation. Programmes such as ACORNS, GYCC and the Zambia Development Authority are examples of important avenues for young people and women to develop confidence in the sector and to learn from the experiences of other businesses.

The public sector needs to balance its support on agriculture productivity and exports with investment in value addition that responds to consumer demand for locally produced healthy food. Growing middle-class demand for convenience foods in Africa is opening up many opportunities for value addition which is being captured by women entrepreneurs in the region. Women are attracted to value addition due to their traditional

knowledge of bottling, preserving, and cooking food in the home. However, while the agriculture sector is targeting productivity, opportunities to professionalize small food enterprises are being missed. The programmes described in this session are important vehicles for informing policy and for training individuals on areas such as correct food hygiene practices, enterprises registration and food certification.

Access to investment from the public sector is possible with the strong financial plans based on a market-oriented business model, but high interest rates in Africa make commercial bank loans inaccessible to small companies. All of the entrepreneurs participating in the workshop discussed how they used savings to start-up their businesses. They also all referenced receiving investment grants and loans from a range of public sector agencies or banks on submission of strong financial business plans. Commercial banks in Africa, however, typically charge very high interest rates (between 11 percent – 22 percent) making loan products difficult to access for most small agro-enterprises.



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Session 7. Strategic lessons for building sustainable agri-food sectors across Africa and next steps

The session consolidated key learning opportunities and next steps from the two-day's discussions. Mr Aidan O'Driscoll, Secretary General, DAFM; Mr Mark Kofi Fynn, Agribusiness Advisor to the African Union Commission; Mr Divine Njie, Deputy Director Food Systems Programme, FAO; and Mr Damien McLoughlin, Associate Dean, UCD, shared their thoughts on how the successes and struggles of the Irish food-sector might contribute to a sustainable path for growth in the African region.

The discussion was opened by Mr O'Driscoll, past Chair of the Committee on World Food Security from 2000 to 2002, who provided remarks on the transformation of the agri-food sector in Ireland over the past 20 years. He shared, for instance, the Department's investment in ensuring the strategic committee was led by the private sector. He added that the process required a lot of political bravery at the time as it was a new, yet to be proven, approach. Instrumental to the strategy's design and implementation was a well-respected chair, with a mandate to keep all members engaged in the process.

Mr O'Driscoll shared that on the eve of the launch of the Food Harvest 2020 Strategy, some stakeholders voiced reservations about its design. Causing concern among the strategy's partners, he described how the process could have been easily derailed, but the impetus and political will managed to address the issues, which led to a stronger strategy in the long-term.

Mr O'Driscoll encouraged delegates to continue to support and invest in the agricultural sector, describing how, during Ireland's times of crisis and high unemployment, international economics advisors recommended divestment out of agriculture. Today, agriculture remains the country's strongest indigenous sector, with growth set to generate billions of revenue and thousands of jobs for the country in the near future.

A dynamic discussion between the panellists and delegates highlighted the following key takeaways:

- High standards and authentic guarantees of safety and sustainability are the foundation of growth in the modern agrifood sector. The government can facilitate the development and achievement of those standards.
- Policy needs to be formulated in a highly inclusive way to allow all actors fulfil their role and benefit from the growth of the industry.
- Entrepreneurs need to be valued and supported in their role as innovators to foster the development of a dynamic and high-tech sector.

Next steps

The transformation of Ireland's agriculture sector over the past two decades offers many relevant learnings for countries in Africa, with workshop participants from Ireland voicing their commitment to sharing that learning with the region. Workshop discussions also highlighted the variety of challenges that Ireland and the Africa region share, particularly with respect to delivering on the SDGs, attracting young people to the sector, promoting women's entrepreneurship and leadership, and reducing the impact of growth on the environment. The AUC and FAO voiced their commitment to supporting knowledge exchange between the Africa region, and countries with strong and sustainable agricultural sectors, such as Ireland. A number of tentative ideas, described in Box 12, were shared during the course of the three days as a basis for follow-up collaboration between Ireland, the AUC and FAO.

Closing remarks – Deputy Prime Minister of Ireland, Mr Simon Coveney

The workshop culminated with a meeting led by the Deputy Prime Minister, Ireland, and former Minister for Agriculture, Mr Simon Coveney, and representatives of Irish Aid who presented their thoughts on current and future possible exchange opportunities between Africa and Ireland.

Mr Coveney described the transformation of the Irish economy from a famine-struck country to a nation now characterised by a vibrant and globally recognized agrifood sector: Ireland produces and exports ten times more food than its population can consume.

A combination of mono-cropping, potato disease and policy failure led to four years of starvation, death and emigration between 1845 and 1849 - a period which is widely known as the Irish Great Famine. During this period, Ireland lost a quarter of its population and today it is the only western European country with a smaller population than in 1800. While the event left its mark on Ireland's land use, social practices and culture, the country has put its best efforts into ensuring that it is not anymore defined by the Great Famine.

Sharing experiences and best practices was a key factor in the transformation that took place over the past century. Ireland's agrifood offering has dramatically evolved from a limited number of generic commodities to numerous world class brands built on high quality Irish ingredients. Superior food such as high end beef or artisan cheeses are the product of good science, farming and marketing. The industry's growth has been upheld by a desire to continuously learn how to farm more efficiently and add significant value.

The government is further committed to responding to consumers' needs and ensuring the development of a future-oriented industry. As such, the food industry is now focusing on creating partnerships in different parts of the world in order to open up business opportunities for both Ireland and other countries. In this context, Africa's growing demand and increasing populations represent a valuable asset to tap into. Ireland, in turn, can contribute with lessons learnt from its experience as a country that has undergone a successful transformation from famine, subsistence farming, and commodity exports to a high value-added industry driving economic growth.

Such a collaboration, for instance, is already being established with Kenya. One target area is the potato value chain. Ireland is exporting high quality seeds to the country and sharing best practices in husbandry to ensure the produce is marketed at the right time by Kenyan farmers. The final ambition of the project is to transfer processing techniques and ultimately, bring further value addition to the sector.

The **[African Agribusiness Development Programme](#)** (AADP) was also presented. The project is a joint initiative between DAFM and the Department of Foreign Affairs and Trade and is open to Irish companies seeking joint ventures with African businesses. Its aim is to promote agrifood growth, create markets for local produce and support trade between Africa and Ireland. Valid Nutrition, a company based in Malawi and producing 'ready-to-use' nutrient dense foods from locally grown peanuts and Irish skimmed milk, shared how the AADP programme is supporting the company with its research and investment in Africa.

In conclusion, Mr Coveney highlighted that Ireland is fully committed to sharing its lessons and knowledge on agrifood sector development, and to leveraging partnerships between European and African agri-businesses as a path for prosperity, food security and sustainable growth in both regions.

BOX 12. Possible next steps

The event allowed for the identification of next steps for FAO and development partners in ensuring the continuation of knowledge exchange between Africa and Ireland. Possible areas for collaboration are as follows:

1. The Africa Union Commission will convene the Permanent Secretaries of Agriculture in June 2018. A side event was proposed with high-level representatives from Ireland spanning industry, education and the public sectors to share learnings on the evolution of the sector with African counterparts. The outcomes of the meeting could feed into Ireland's broader plan for engagement at the national and regional level through the AUC.
2. The Africa Agribusiness Development Fund (AADF) aims to link Irish and African businesses in the agriculture sector. A bottleneck for the programme is Irish firms' ability to identify suitable businesses in Africa. Structured collaboration with FAO and the AUC could provide the AADF, and its grantees, access to knowledge about potentially suitable firms, the local economic and cultural context as well as policy architecture.
3. Building on lessons and creating synergies with the AADF, it is also proposed to support an Irish-Africa agribusiness mentoring programme, possibly tapping into existing Africa incubator initiatives that work with FAO and the AUC. The mentoring programme could, for instance, be a learning precursor for companies potentially interested in availing of the AADF. The programme would require a focal point, located in Ireland and familiar with the agri-food sector and food businesses, to identify those companies most interested in engaging in mentoring in Ireland. Support on the Africa side can be provided by FAO's regional and sub-regional offices in Ghana, Ethiopia, Zimbabwe, Senegal and its national offices across the region, in collaboration with Irish embassies and the AUC.
4. Ireland is currently partnering with the Government of Kenya to strengthen its Dairy, Fisheries and Beef Value chains. To accelerate results and impact, FAO can support the initiative by leveraging ongoing agribusiness related activities in Kenya and convening relevant local partners, knowledgeable about the local context, and who can support the process. Lessons from this collaboration can also be replicated in the region through FAO field projects in other countries. This initiative could also provide important insights into mentoring between state and semi-state institutions on strategic and policy development for the agri-food sector.
5. FAO will enter into a contract with the Smurfit Business School, UCD on the development of a high-level executive training to be delivered in 2019 on sustainable agri-business strategic management. The training and its outputs could be viewed as a follow-up to Activity 1 above. It could also be later expanded to form part of the mentoring programme, in conjunction with local universities to ensure the embeddedness and sustainability for upgrading local learning.

Annex 1. Workshop agenda

DAY 1 (February 6th): **Field Trip African Delegates.** Before beginning workshop discussions, the field trip will provide African participants with the opportunity to visit and speak with private sector actors and public institutions operating in the agri-food sector in Ireland.

08:50-09:00 Meet with John Rae (SFSI) at Buswells Hotel reception area

09:00-12:00 Visit Teeling Whiskey company premises.

12:00-14:00 LUNCH

14:00-16:00 Visit to Teagasc Ashtown Food Research Centre

Teagasc - the Agriculture and Food Development Authority - is the national body providing integrated research, advisory and training services to the agriculture and food industry and rural communities.

Teagasc has seven Research Centres in total, each focused on different parts of animal or food production sectors in Ireland. Teagasc Ashtown Food Research Centre is primarily a meat research centre but also focuses on flour research, food safety and horticulture.

Facilities include: Pilot Scale Abattoir & Boning hall, Glasshouses, Mushroom Tunnels, Consumer Taste Panels, Meat, Flour and Food Safety Research.

Meet with: Mr Declan Troy, Assistant Director of Research and Head of Technology Transfer

DAY 2 (February 7th)

Venue: Department of Food, Agriculture and the Marine, Kildare Street, Dublin 2

08:30-9:00	ARRIVAL AND REGISTRATION
09:00-09:40	Opening Session <i>Workshop Chair: Mr Damien McLoughlin, Associate Dean, UCD Michael Smurfit Graduate Business School</i> Welcome and Introductory Remarks: <ul style="list-style-type: none">• Mr Andrew Doyle, Minister of State for Agriculture, Food and the Marine• Mr Komla Bissi, CAADP Advisor, African Union Commission• Mr Divine Njie, Deputy Director Food Systems Programme, FAO
09:45-11:15	The evolution of Ireland's family farming agri-food sector – takeaways for the agri-food sector in Africa <i>Moderator: Ms Mary Shelman, Strategic Advisor and Thought Leader in the Global Agri-food Sector</i> Ms Mary Shelman, the internationally recognised thought leader in the global agri-food sector, will lead past and current representatives from Government, Research and Development and the Private Sector in the sharing of insights on critical success factors that have led to the transformation of Ireland's agri-food sector over the past 20 years. The discussion will culminate in an exchange with African counterparts on possible lessons for the region. Opening Remarks: Mr Aidan O' Driscoll, Secretary General, DAFM Presentation by: Ms Siobhán Dowling, Assistant Principal Officer, Economics and Planning Panel: <ul style="list-style-type: none">• Ms Siobhán Dowling, Assistant Principal Officer, Economics and Planning• Mr John Malone, former Secretary General, DAFM• Mr Larry Murrin, CEO, Dawn Farm Foods• Mr Alexander Evans, Head of the School of Agriculture and Food Science UCD• Mr Divine Njie, Deputy Director Food Systems Programme, FAO
11:15-11:45	COFFEE BREAK AND PHOTO
11:45-13:00	Continental Agribusiness Strategy – Driving Africa's Inclusive Agricultural Growth in the context of the 2014 Malabo Declaration Mr Mark Kofi Fynn, Agribusiness Advisor to the African Union Commission will present the region's five-year strategy for the sector, followed by interventions from representatives from Africa's private sector and national governments. This 'fishbowl' session will invite inputs to the discussion from the rest of the African delegation. <i>Moderator: Ms Noma Mhlanga, Agribusiness Economist, FAO Ethiopia</i>

Opening Panel:

- Mr Ko'pep Dabugat, Co-ordinator, CAADP Non-State Actors Coalition
- Mr James Wanjohi, Technical Advisor to Principal Secretary, State Department of Agriculture, Kenya
- Ms Evelyn Ohanwusi, Interim head, Youth In Agribusiness Office, International Institute of Tropical Agriculture
- Mr Shadreck Mungalaba, Director-Cooperatives, Ministry of Commerce, Trade and Industry, Zambia
- Ms Stephanie Gallat, Agro-Industries Officer, FAO

13:00-14:00 LUNCH

14:05-15:30 Mainstreaming sustainability into agriculture

How can the private sector be encouraged to play its part in promoting sustainable practices across the sector, and what is the role for the public sector? Panellists will describe national initiatives focussed on this topic and some of the success and struggles experienced during their implementation.

***Moderator:** Ms Mary Shelman, Strategic Advisor and Thought Leader in the Global Agri-food Sector*

Panel:

- Ms Providence Mavubi, Embedded Investment Advisor at the Ministry of Agriculture and Animal Resources, Rwanda
- Mr Jean Baptiste Hategekimana, Chairman, Rwanda Youth in Agribusiness Forum
- Bord Bia representative
- Origin Green member company

15:30 -15:45 COFFEE BREAK

15:45-16:45 Intra-country Knowledge Transfer and Peer-to-Peer Learning in the agri-food sector. An interactive working group session on modalities for peer-to-peer learning.

16:45-17:00 PLENARY WRAP-UP – INTRODUCTION TO DAY 2.

18:00-19:30 Networking event – Hosted by Bord Bia (Irish Food Board).

DAY 3 (February 8th)

08:30-09:00 INTRO AND RECAP FROM DAY 1

09:00-10:45 Shaping the future of leadership in the agri-food sector

This session will explore the themes of female leadership, youth engagement and talent development in the agri-food, with panellists discussing approaches for addressing these issues which are of growing concern to African countries and Ireland.

Moderator: *Mr Moussa Djagoudi, Agribusiness Economist, FAO*

Opening panel:

- Ms Aishling Cronin, Assistant Principal, DAFM, Accelerating the Creation of Rural Nascent Start-ups (ACORNS)
- Ms Ailbhe Gerrard, Brookfield Farm Hiveshare, Ireland
- Ms Brigid Riley, Fernwood Floral Design, Ireland
- Ms Paulina Addy, Deputy Director of the Women in Agricultural Development Directorate, Ministry of Food and Agriculture, Ghana
- Mr Baboucarr Kebbeh, Chief Executive Officer, The Gambia Youth Chamber Of Commerce
- Ms Kasazi Nyendwa, Managing Director, Lotuno Enterprises, Zambia

10:45-11:15 COFFEE BREAK

11:15-12:45 What strategic lessons can Africa take from cases like Ireland and what are the next steps for FAO and partners in supporting the continuation of knowledge exchange?

Moderator: *Ms Mary Shelman, Strategic Advisor and Thought Leader in the Global Agri-food Sector*

This session will consolidate key learning opportunities and next steps from the two-day's discussions. **Mr Aidan O'Driscoll, Secretary General, DAFM**, and past Chair of the Committee on Food Security, will lead with his thoughts on how the successes and struggles of the Irish food-sector might contribute to a sustainable path for growth in the Africa region. Remarks will also be shared by representatives from the African Union Commission and FAO on their roles in the transformation process, before opening up to plenary and concluding with possible next steps regarding knowledge exchange opportunities.

12:45-13:00 CLOSING REMARKS

13:00-14:00 LUNCH

14:30-16:00 Side event - presentation on current Irish-African agri-food initiatives **Tánaiste Simon Coveney, Deputy Prime Minister of the Republic of Ireland** **Venue:** Department of Foreign Affairs and Trade, Iveagh House, Dublin 2

Annex 2. Participants list

Name	Title
Aidan O'Driscoll	Secretary General, Department of Agriculture, Food and the Marine, Ireland
Aishling Cronin	Deputy Director, Department of Agriculture, Food and the Marine, Ireland
Andrew Doyle T.D.	Minister of State, Department of Agriculture, Food and the Marine, Ireland
Anthony Morrison	President, Ghana Chamber of Agribusiness
Atem Ernest	Co-Founder and CEO of Agro-Hub Company Ltd., Cameroon
Baboucarr Kebbeh	Chief Executive Officer, The Gambia Youth Chamber Of Commerce
Clodhnaigh Conlon	Sustainable Agribusiness Consultant, FAO, Rome
Damien McLoughlin	Professor of Marketing and Associate Dean, UCD Michael Smurfit Graduate Business School, Ireland
David O'Flynn	Head of CSR, Dawn Meats Group, Ireland
Divine Njie	Deputy Strategic Programme Leader, Food Systems Programme, FAO, Rome
Edward Katende	CEO, Uganda Agribusiness Alliance (UAA)
Elena Teodora Ilie	Agribusiness Consultant, FAO, Rome
Evelyn Ohanwusi	Interim Head, Youth in Agribusiness Office, International Institute of Tropical Agriculture
Helen Brophy	Director of Executive Education, UCD Michael Smurfit Graduate Business School, Ireland
James Healy	National President, Macra na Feirme, Ireland
James Wanjohi	Technical Advisor, Ministry of Agriculture, Kenya
Jean Baptiste Hategekimana	Chairman, Rwanda Youth in Agribusiness Forum
Jim Kinsella	Senior Lecturer, University College Dublin School of Agriculture and Food Science, Ireland
John Malone	Former Secretary General, DAFM, Ireland
John Rae	Project Manager, Sustainable Food Systems Ireland (SFSI)
Kasazi Lotuno Nyendwa	Managing Director, Lotuno Enterprises, Zambia
Komla Bissi	CAADP Pillar II Advisor to the African Union Commission
Kop'ep Kevin Dabugat	Coordinator, CAADP Non-State Actors Coalition
Larry Murrin	CEO, Dawn Farm Foods, Ireland
Laté Lawson-Simlen	Managing Director, Afrik Excel, Togo
Mark Kofi Fynn	Agribusiness Advisor to the African Union Commission
Mary Shelman	Strategic Advisor and Thought Leader in the Global Agri-food Sector

Meabh Conaghan	Senior Development Executive at Enterprise Ireland, the Business Development State Agency
Moussa Djagoudi	Agribusiness Economist, FAO, Ghana
Nomathemba Mhlanga	Agribusiness Economist, FAO, Ethiopia
Padraig Brennan	Manager for Sustainability Development with Bord Bia, the Irish Food Promotion Board
Pamela Byrne	Chief Executive, Food Safety Authority of Ireland
Paulina S. Addy	Deputy Director of the Women in Agricultural Development Directorate, Ministry of Food and Agriculture, Ghana
Providence Mavubi	Embedded Investment Advisor at the Ministry of Agriculture and Animal Resources, Rwanda
Shadreck Mungalaba	Director of Cooperatives, Ministry of Commerce, Trade and Industry, Zambia
Sibéal Bird	Origin Green Ambassador, University College Dublin Smurfit Business School
Sinéad McPhillips	Assistant Secretary, Department of Agriculture Food and Marine, Ireland
Siobhan Kelly	Programme Advisor, Food Systems Programme, FAO, Rome
Stephanie Gallat	Agro-Industries Officer, FAO, Rome

Annex 3. Food Wise 2025 process note

Strategy Committee:

The Committee of 35 experts from the agri food sector was chaired by Mr John Moloney (ex CEO of Glanbia).

The 2025 Agri Food Strategy Committee meetings were very substantive with a wide range of speakers who were leaders in the fields of consumer insights, competitiveness, innovation and sustainability. The public consultation process also fed into the process and many of the actions in Food Wise 2025 are from submissions received from a wide and diverse range of organisations and individuals.

Environmental Analysis of Food Wise 2025:

An Environmental Analysis of the 2025 Agri-Food Strategy (incorporating an Appropriate Assessment and a Strategic Environment Assessment) was carried out in a parallel process as the 2025 Agri Food Strategy. The successful tenderer worked closely with the Department and the 2025 Committee to ensure that this environmental analysis is incorporated into the process of preparing the final Agri-Food 2025 Strategy Report.

The successful tenderer made presentations to the Committee and submissions from interested Departments and parties were made and examined by both the Department and the consultants. As part of the process, all text for the final Strategy report was proof read for environmental concerns and impacts.

Final Report - Food Wise 2025:

Food Wise 2025 was officially launched by the Taoiseach on the 2nd July 2015.

The draft Environmental Analysis of the 2025 Agri-Food Strategy was also launched by Minister Coveney at the same time. There was an eight week public consultation on the draft Environmental Analysis of the 2025 Agri-Food Strategy with the final report of the Environmental Analysis of Food Wise 2025 presented to Minister Coveney the end of November 2015.

The Department published the Food Wise Implementation Plan in December 2015 in response to the Final Environmental Analysis Report and forms the final part of the Food Wise strategy process. It sets out a robust implementation process, to be driven by a High Level Implementation Committee (HLIC) involving all relevant Government Departments and State Agencies, and chaired by the Minister for Agriculture, Food and the Marine.

Implementation of Food Wise 2025:

The Department is committed to designing a robust implementation process to monitor progress and deliver on the ambitious projections in Food Wise 2025. Implementation of Food Wise will be driven by the High Level Implementation Committee (HLIC), chaired by the Minister of Agriculture, Food and the Marine and with participation from MB members, other Government Departments and relevant State agencies.

The HLIC has met 15 times to date. Two sub-groups have been established under the auspices of the HLIC namely:

- An Environmental Sustainability sub-group which focuses specifically on monitoring and driving the sustainability recommendations.
- A Meat Implementation Group has just been established which will focus on the 84 meat actions.

Behind all of these primary recommendations, there are multiple action points – **over 400 in all** – setting out in detail what needs to happen to achieve the growth projections by 2025. There are also specific action points for the various sectors including dairy, beef, sheep, pig meat, poultry and eggs, prepared consumer foods, alcoholic beverages, horticulture, cereals, seafood and forestry. These specific action points complement the cross-cutting themes of the strategy in terms of using innovation, enhancing market development, ensuring sustainability and addressing competitiveness.

Environmental protection and economic competitiveness are equal and complementary: one cannot be achieved at the expense of the other. An Environmental Sustainability Sub-Committee of the HLIC has been established to monitor and drive the implementation of the sustainability actions.

Steps to success 2018

The third progress report of Food Wise 2025 entitled Steps to Success 2018 was launched in July. It outlined what the Department and its agencies have achieved in three years and what they plan to achieve over the next 12 months.

Progress on each of the recommendations in Food Wise is measured on a quarterly basis. As of July 2018, of the 375 actions which were due to commence by 2018 or are ongoing actions, 74 percent have been achieved or substantial action has been undertaken; and a further 26 percent have commenced and are progressing well.

Food Wise Conference: Challenge, Ambition, Opportunity

DAFM hosted the successful conference, Food Wise: Challenge, Ambition, Opportunity in Croke Park on 4 December 2017. 580 people attended the event.

The purpose of hosting the conference was:

- 1. to acknowledge the achievements of the sector in recent years under the Food Harvest 2020 strategy and its successor Food Wise 2025; and**
- 2. to assess and prepare for the challenges ahead.**

There were four sessions:

- 1. Global Markets Insights**
- 2. Policy Drivers**
- 3. Environment Sustainability and Agri-Food**
- 4. Food Wise: Impact in a new era.**

The conference provided a forum to review progress to date, understand the significant challenges ahead, including in particular Brexit and environmental challenges, and renew the Government's commitment to provide an enabling environment for the sustainable growth of the sector.

Minister Creed stated at the Conference in December that he intended to lead a step up in the work of the Food Wise High Level Implementation Committee. Food Wise 2025 is a living strategy which can and must react and adapt to developments both inside and outside our sector. It should respond to changing circumstances while remaining loyal to the core vision and objectives of the plan itself.

All information relating to Food Wise 2025 is available at www.agriculture.gov.ie/foodwise2025

SUSTAINABLE MARKETS, AGRIBUSINESSES AND RURAL TRANSFORMATIONS [SMART]

FAO's work on agrifood systems falls under the SMART (Sustainable Markets, Agribusinesses and Rural Transformation) programme.

Agrifood systems are currently undergoing a rapid transformation driven by urbanization, globalization, diet diversification, concentration, and expansion of food markets and trade, among other underlying trends. Coping with these changes requires a broader systems perspective that emphasizes agrifood value chain coordination, value creation and the institutional setting in which value chains operate. This cannot be done without embracing agribusiness development.

In support of agribusiness and food value chains, FAO focuses on enabling environment aspects and on building the capacities of ministries of agriculture to effectively engage with private sector partners, especially on the following public objectives: inclusion of farmers and Small and Medium Agricultural Enterprises (SMAEs), investment promotion and increased efficiency. FAO's agribusiness work includes the development and dissemination of a series of tools and policies used to stimulate agrifood industry and food value chain development and support the inclusion of smallholder farmers and small rural food enterprises in rapidly transforming agrifood systems in developing countries. The main policy issues include:

- Responsible contract farming for inclusive market access
- Developing sustainable food value chains ([SFCVs](#))
- Public-private partnerships or public-private-producer partnerships
- Fostering territorial approach as a means to attract transformative investments in agribusiness
- Encouraging small and medium enterprise development
- Institutional procurement programmes

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