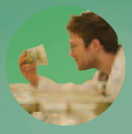


2008-2010

Teagasc Statement of Strategy

Supporting Science-Based Innovation in Agriculture and Food

teagasc

Agriculture and Food Development Authority

Contents

Introduction

Professor Gerry Boyle
Director

Dr Noel Cawley
Chairman

This is the fourth Teagasc Statement of Strategy, setting out how the organisation will deploy its resources over the next three years to meet its organisational goals. Following on from Teagasc 2030 (Foresight exercise) it signals the first of the directional changes required to improve the support of agriculture and the food industry over the coming years.

Our Statement of Strategy takes account of a number of key relevant national and international documents, reports and policy statements. In particular, we have taken into account the Department of Agriculture, Fisheries and Food's (DAFF) Statement of Strategy, the EU Commission's Rural Development Policy 2007-2013, the National Climate Change Strategy 2007 – 2012, the OECD Review of the Irish Public Service 2008 and Towards 2016, the Ten-Year Framework Social Partnership Agreement 2006-2015.

This document sets out the high level vision, goals and strategic actions for the organisation (Section I), while Section II contains background and contextual information. Its primary purpose is to signpost the major new developments to be implemented to ensure that Teagasc will continue to be a vibrant and relevant organisation. Detailed information on planned and actual annual outputs and activities are set out in our Business Plans and Annual Reports.

This strategy has been framed against a background of a much-changed public sector budgetary context. Teagasc's grant-in-aid has been reduced for 2009, and the likelihood is that further reductions will follow. The key implication for the strategic direction of Teagasc is that we will be required to pursue an agenda of activities that is absolutely focussed on the priorities of our stakeholders as they are likely to evolve over the next three years. We also commit to use the resources available to us in the most effective and efficient manner that is possible in the pursuit of these priorities through the provision of a high quality service to all our customers.

While our current work programme addresses many of the emerging priorities, we need to address major new challenges over the next few years. These include the absolute requirement to focus on the utilisation of cost-saving strategies in primary agriculture in the light of prospective changes in the level and volatility of commodity prices. Overcoming the challenges confronting commercial agriculture in the face of the "climate change" agenda and key EU environmental directives will require additional resources.

In both agriculture and food research, we need to aggressively pursue the opportunities presented by the exploitation of the biosciences. These include accelerated animal and crop breeding programmes and the development of functional foods in support of the national policy on foreign direct investment. In rural development, we need to prioritise on-farm/off-farm diversification to combat the much-reduced employment opportunities that are likely to prevail off-farm.

Teagasc 2030 envisions the agri-food sector and the wider bioeconomy as becoming a key player in the development of the economy against a background of food and energy scarcity. The development of usable knowledge capital and inovation will be the central strategy in realising this vision. Teagasc's role is to help and support the realisation of this vision by Ireland's farmers and food processors.

To adhere to the challenging Teagasc 2030 agenda and the new budgetary context, Teagasc is committed to adaptation and change. A commitment to excellence at all levels is foremost and a willingness to do all that is necessary to maximise our impact on the stakeholders that we serve and to whom we are accountable will enable us to rise to these challenges with confidence. This Statement of Strategy is a signal of our intent as far as the next three years are concerned.

Section I
VISION AND STRATEGY

1. Mandate, Vision, Mission and Values

1.1 MANDATE

Teagasc was established under the Agriculture (Research, Training and Advice) Act 1988 which states that the principal functions of the organisation shall be:

- "To provide, or procure the provision of educational, training and advisory services in agriculture, including such educational, training or advisory services in agriculture as may be specified by the Minister for the purpose of giving effect to any directive, regulation or other act adopted by an institution of the European Communities".
- "To obtain and make available to the agricultural industry the scientific and practical information in relation to agriculture required by it".
- "To understand, promote, encourage, assist, co-ordinate, facilitate and review agricultural research and development (including research and development in relation to food processing and the food processing industry)".

This mandate gives Teagasc responsibility for meeting the knowledge and technology needs of the entire food chain and the scope to integrate research, advice and education services to deliver the innovation support necessary for a secure future in the agri-food sector.

Within Teagasc 2030, the vision, mission, goal and values for the Agri-Food Sector and Teagasc are:

1.2 VISION FOR IRISH AGRI-FOOD SECTOR

'The agri-food sector will be a core element of an Irish bioeconomy that will be knowledge-based, innovation-driven, market-led and internationally competitive and which will enhance the quality of life of all the people of Ireland'.

1.3 VISION FOR TEAGASC

'To be internationally recognised for providing excellent science-based innovation support for the agri-food sector and the wider bioeconomy'.

1.4 MISSION STATEMENT

'To support science-based innovation in the agri-food sector and wider bioeconomy that will underpin profitability, competitiveness and sustainability'.

1.5 VALUES

We aim to be 'responsive, flexible and accountable and work in partnership with other organisations to meet the needs of our clients and stakeholders'.

2. Goals

Teagasc 2030 sets out a positive long-term outlook for the agri-food sector as part of a broader bioeconomy that produces not only food, but also raw ingredients for energy and bioprocessing. This Statement of Strategy is consistent with Teagasc 2030, the DAFF goals and the EU thematic axes on rural development policy.

GOAL 1

Improve the Competitiveness of Agriculture, Food and the Wider Bioeconomy

This Goal is the main focus for the food, dairy, beef, sheep, crop, forestry, horticulture and pig programmes, supported by economic and rural research, in the promotion of competitive and profitable agricultural production and processing. Programmes are focussed on helping Irish producers and processors gain a competitive advantage – for example, through the expansion of grass-based dairy production and the development of high value functional foods. This goal is consistent with priorities identified in Teagasc 2030* to provide support for science-based innovation in core food production and processing and value-added food processing.

GOAL 2

Support Sustainable Farming and the Environment

This Goal is the main focus for the soil, environment and good farm practice programmes, supported by economic and rural research, to underpin the competitiveness and sustainability of agriculture. Immediate challenges here include climate change and water quality. This goal is consistent with priorities identified in Teagasc 2030 * to develop agri-environmental products and services.

GOAL 3

Encourage Diversification of the Rural Economy and Enhance the Quality of Life in Rural Areas

This Goal is the main focus for rural development and non-food crop programmes supported by economic and rural research, to promote the development of emerging new rural and land-based economic activity. This goal is consistent with priorities identified in Teagasc 2030* to provide support for the development of the energy and bioprocessing sector.

GOAL 4

Enhance Organisational Capability and Deliver Value for Money

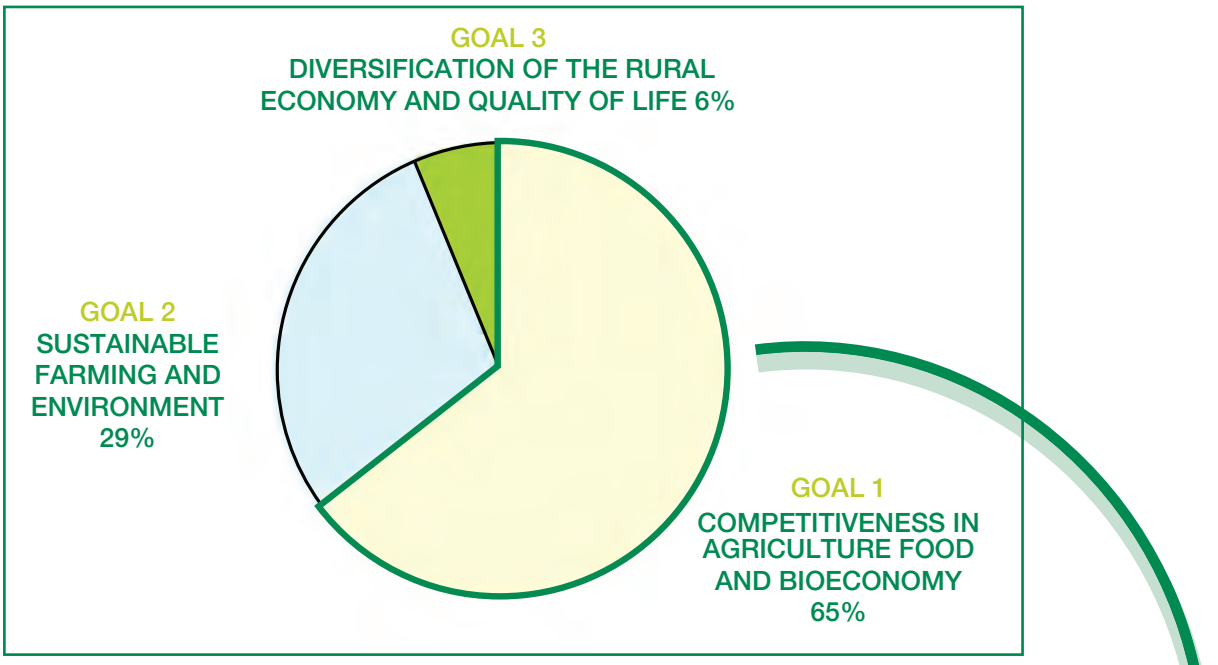
This Goal is relevant to the whole organisation and is led by our national administrative and corporate functions. It will ensure that the organisation continues to develop the three key organisational capabilities set out in Teagasc 2030*: leadership, partnership and accountability and governance.

Teagasc 2030* has set out four pillars (Pillar 1, 'Food Production and Processing', Pillar 2, 'Value-Added Food Processing', Pillar 3, 'Agri-Environmental Products and Services', and Pillar 4, 'Energy and Bioprocessing') for the future bioeconomy. These pillars are linked to our organisational goals as set out in the sub-text above.

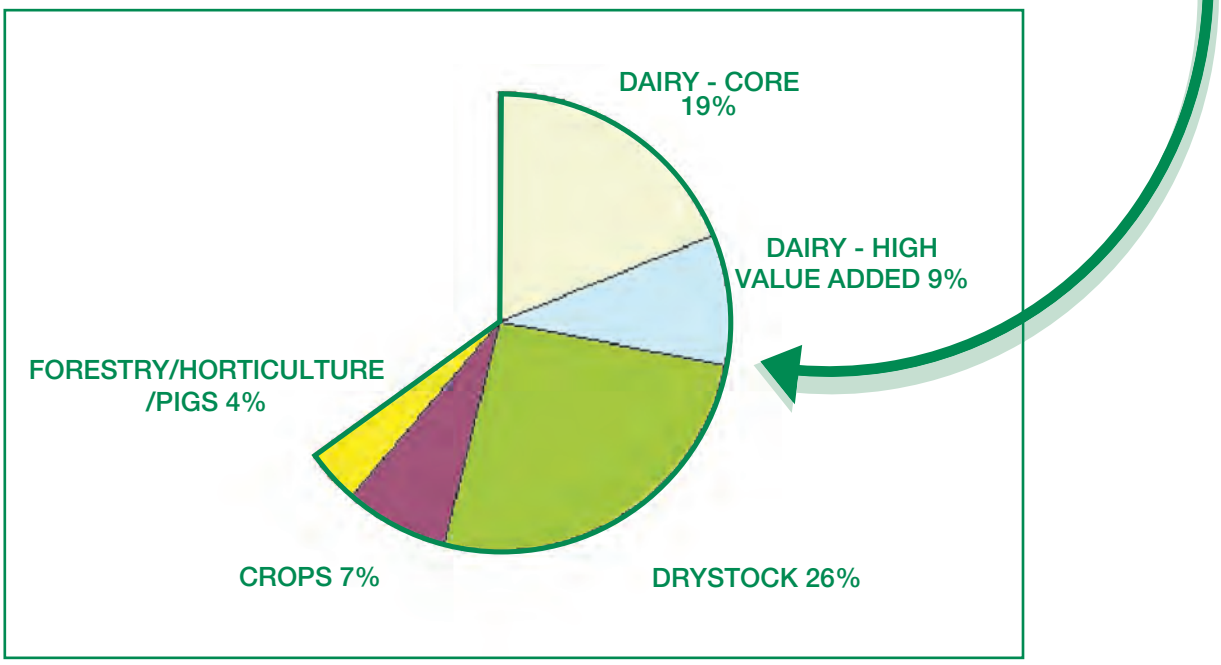
Detailed explanations of each of the pillars can be found in the Teagasc 2030 report at www.teagasc.ie

2.1 Benchmark Allocation of Resources

The allocation of resources to achieve the Teagasc Organisational Goals is presented below.



Further detail on the allocation of resources to the programme areas within Goal 1 is shown below.



Goal 1: Improve the Competitiveness of Agriculture, Food and the Wider Bioeconomy

This will be achieved through support for science-based innovation in food production and processing to underpin the continued development of a profitable, competitive and sustainable sector attractive to new entrants.

OUTLOOK

Core Agriculture and Food Production

Teagasc recently published 'road maps' (www.teagasc.ie) that set out medium-term targets and technology requirements to 2015 for the seven main agricultural land-using sectors: dairy, beef, sheep, pigs, tillage, horticulture and forestry. In summary, it is expected that the value of dairy, tillage, horticulture and forestry will expand, pigs will be maintained at current levels while beef and sheep numbers will contract.

Core Food Processing

The outlook for food processing is that in the medium-term milk production will increase, beef output will remain relatively static and energy and commodity prices are likely to remain higher (although more volatile) than previous historic levels. The food processing sector will continue to be reliant on high quality raw material and core process technologies for mass market products. An increase in output volume of dairy products focusing on milk powders, cheese and ingredients for infant formula is expected.

High Value-Added Food Processing

The European and world functional food markets are estimated to grow annually at over 6% and 10%, respectively, over the coming years, responding to changing consumer needs in taste, convenience and health concerns, and producing a more diverse range of dairy, meat, marine and cereal-based products for consumers around the world. Specialised ingredient manufacturers will be innovative in the development and customisation of ingredients for formulated foods from a variety of dairy and non-dairy sources. However, success in this market will require access to fully validated, clinically proven bioactive ingredients.

Teagasc Support

Teagasc will support the achievement of this goal through an emphasis on science-based innovation that will involve the deployment and appropriate integration of resources in three areas: "knowledge creation and procurement" (research), "knowledge dissemination" (advisory and innovation) and "knowledge absorption" (education and training). The strategic actions and the associated activity indicators that will be employed to measure performance are as follows:

Strategic Actions	Key Output / Activity Indicators
1.1 Core Food Processing - Research Conduct research that underpins innovation and quality in food commodity products, promotes profitable utilisation of by-products, facilitates efficiencies in processing and the supply chain, and ensures the highest standards of product safety.	• Number of publications in high impact journals*. • Number of articles in media. • Number of knowledge transfer events held and attendance. • Amount of income from external funding.
1.2 High Value-Added Food Processing Conduct research that supports innovation in the development of functional foods with validated health claims and engage in proactive technology transfer/partnerships with highly innovative companies to facilitate commercial exploitation of key intellectual property (IP).	• Number of publications in high impact journals*. • Number of articles in media. • Number of knowledge transfer events held and attendance. • Amount of income from external funding. • Number of IP agreements. • Number of contracts/agreements with industry.
1.3 Core Food Processing - SME Technology Support Service Develop a food SME technology support service staffed by dedicated researchers, technologists and technicians to provide a professional technology transfer service to client companies.	• Number of clients. • Level of engagement with clients. • Amount of income from clients.
1.4 Core Agriculture and Food Production - Agriculture Research Conduct research to provide cost effective and sustainable knowledge and technologies in the areas of • Dairy, Cattle and Sheep • Crops and Bioprocessing (also Goal 3) • Forestry (also Goals 2 and 3) • Horticulture • Pigs. Horizontal areas of research and innovation across the various commodity areas include: • Grassland • Soils and Environment (also Goal 2) • Economics and Rural Research (also Goals 2 and 3) • Organic Food Production (also Goal 3).	• Number of publications in high impact journals*. • Number of articles in media. • Number of knowledge transfer events held and attendance. • Amount of income from external funding.

Strategic Actions	Key Output / Activity Indicators
1.5 Core Agriculture and Food Production - Advisory and Innovation Support clients in the adoption of technology that promotes innovation and competitiveness through programmes delivered by specialist advisers, business and technology advisers and good farm practice advisers (part).	• Number of contracted clients. • Number of discussion groups. • Number of events and attendance. • Number of profit monitors.
1.6 Core Agriculture and Food Production - Education and Training • Support research, advisory and innovation programmes by providing an education and training programme that develops and delivers a range of quality assured further and higher education courses for school leavers and adult learners. • Provide an opportunity for post graduate training through the Walsh Fellowships Programme.	• Number of participants. • Number of new courses. • Student satisfaction rates. • Number of PhDs completed.
1.7 New Approaches to Research, Innovation and Education • Deliver technology to our clients through the development of information hubs for knowledge transfer (BETTER farms). • Enhance integration and multi-disciplinary capability through the development of Technology Platforms in key areas such as biosciences and grassland. • Improve the quality of learning through the use of Discussion Groups linked to Benchmark Farms. • Enhance the leadership capability of young farmers through a leadership programme in association with Macra na Feirme.	• Number of BETTER farms in place. • Number of events held and attendance. • Number of technology platforms established and projects initiated. • Number of benchmarking farms and associated discussion groups. • Number of students who complete leadership training.

**Journal Impact Factors for publications to be obtained from the Thomson Reuters ISI Web of Knowledge*

EXPECTED IMPACT

All programmes and activities under Goal 1 are expected to improve profitability and competitiveness through technology adoption. Some key high level impact indicators are set out below.

Key Impact Indicators for Goal 1	
1.a Increased competitiveness of core food processing.	• Improved technical efficiency. • Enhanced value added.
1.b Increased high value-added food processing.	• Growth of functional food sector.
1.c Increase in competitiveness of core food production.	Increased output value and improved technical efficiency for the dairy, beef, sheep, crops, horticulture and pig sectors through the adoption of innovative practices and technologies – examples include: • Increase in EBI (Economic Breeding Index) • Target increased output of beef /hectare • Benchmark for lambs sold/hectare • Improved output of crops/hectare • Improved output of timber/hectare • Increased grass intake/head • Benchmarks for production costs for each production system.

RESOURCE ALLOCATION

It is anticipated that the overall allocation of resources to this goal will decline. Within this total, a somewhat greater allocation will be spent on the dairy and value-added food sectors.

Examples of Partnership and Collaboration

FOOD FOR HEALTH IRELAND

The Teagasc Food Research Directorate was to the fore in developing the concept for the new Enterprise Ireland funded 'Food for Health Ireland' research programme. It comprises a state investment of €20 million with four dairy companies involved - Dairygold Food Ingredients, Glanbia Nutritionals, Carbery and Kerry Ingredients Ireland. A consortium of research institutions will tackle the research agenda agreed between the dairy companies. The research consortium is led by UCC, the administrative base for the centre, and also includes Teagasc, UCD and UL. The overall long-term strategy for the centre is to maximise the commercial value of milk produced and to support the sector which directly employs 46,000 people.

BETTER FARM BEEF PROGRAMME

Teagasc, the meat processing industry, the Irish Farmers' Journal and individual beef farmers have teamed up as part of a new initiative called the 'Teagasc/Irish Farmers' Journal BETTER Farm Beef Programme' to encourage more producers to adapt the best production technology on their farms. This initiative by the advisory and research directorates will use these commercial farms as information hubs to demonstrate what can be achieved by adapting best practices in grassland management, better breeding strategies and timely financial and performance measurement. Working in partnership with the industry, who are funding two dedicated advisers, will ensure that the work is relevant to commercial beef producers in Ireland.

Goal 2: Support Sustainable Farming and the Environment

This will be achieved by providing farmers with the knowledge and skills to operate in a profitable, competitive and sustainable way and by supporting policymakers in designing, implementing and evaluating environmental programmes targeted to different types of farms addressing issues such as climate change, water quality, biodiversity and soil quality.

OUTLOOK

The environment and the production of environmental goods and services will take on a new emphasis in the future as agriculture in Ireland faces rapid change in response to new agricultural, economic and environmental policies e.g., decoupling, cross-compliance, WTO-liberalisation, Nitrates Directive, Water Framework Directive, climate change and the proposed Soil Framework Directive. Concurrently, economic trends and price fluctuations for agri-products and inputs, such as energy and fertilizer, bring a new urgency to nutrient and energy efficiency.

TEAGASC SUPPORT

Teagasc will support the achievement of this goal through an increased emphasis on science-based innovation involving the deployment and appropriate integration of resources in three areas: 'knowledge creation and procurement' (research), 'knowledge dissemination' (advisory and innovation), and 'knowledge absorption' (education and training). Emphasis will be placed on the achievement of 'double-dividend' or 'win-win' outcomes, so that future farming can be both commercially and environmentally sustainable. The strategic actions and the associated activity indicators that will be employed to measure performance are set out below.

Strategic Actions	Key Output / Activity Indicators
2.1 Research Conduct research to provide cost effective and sustainable knowledge and technologies in the areas of: • Soils and Environment (also Goal 1); • Forestry (also Goals 1 and 3); and, • Economics and Rural Research (also Goals 1 and 3).	• Number of publications in high impact journals*. • Number of articles in media. • Number of knowledge transfer events held and attendance. • Amount of income from external funding.
2.2 Advisory and Innovation Support clients in the adoption of practices that promote participation, compliance and the development of environmental products, through targeted programmes delivered by specialist advisers, REPS advisers and good farm practice advisers (part).	• Number of REPS clients. • Number of REPS and FEPS plans. • Number of derogation plans. • Number of fertilizer plans. • Number of events and attendance.

Strategic Actions	Key Output / Activity Indicators
2.3 Education and Training • Support research, advisory and innovation programmes by providing an education and training programme that develops and delivers a range of quality assured further and higher education courses for school leavers and adult learners. • Provide an opportunity for post graduate training through the Walsh Fellowships Programme.	• Number of participants. • Number of new courses. • Student satisfaction rates. • Number of PhDs completed.
2.4 New Approaches to Research and Innovation • Establish an agricultural catchments programme to evaluate the efficacy of the nitrates action programme and support the retention of the national derogation. • Enhance integration and multi-disciplinary capability through the development of a Technology Platform in Environment.	• Agricultural catchments programme in place and results produced • Technology platform established and no. of projects initiated

**Journal Impact Factors for publications to be obtained from the Thomson Reuters ISI Web of Knowledge*

EXPECTED IMPACT

All programmes and activities under Goal 2 will promote sustainable farming and enhance the environment. Some key high level impact indicators are set out below.

Key Impact Indicators – Goal 2	
2.a Enhanced environmental practices	• Improved efficiency in the use of inorganic and organic nutrients particularly N and P. • Cost effective strategies to address greenhouse gas emissions from agriculture. • Improved farm and forestry biodiversity. • New agri-environmental products and services. • New soil information systems that contribute to enhanced production and environmental performance on farms. • Increase in number of farmers applying slurry at optimum spreading dates using low emissions technology.

RESOURCE ALLOCATION

It is anticipated that the overall expenditure on this goal will increase over the period of the strategy. Within this total, a somewhat greater allocation will be spent on research activities that mitigate emissions to water and air.

Examples of Partnership and Collaboration

AGRICULTURAL CATCHMENTS PROGRAMME

The Agricultural Catchments Programme is based on a partnership approach and aims to support productive agriculture while protecting water quality. To achieve its objectives, it brings together Teagasc, the Department of Agriculture, Fisheries and Food, the Department of the Environment, Heritage and Local Government and farmers, both in the catchments and through the farm organisations. The programme, funded by DAFF, and run by Teagasc, integrates research, advice and education and works with farmers to implement the Nitrates Action Plan measures and evaluate their environmental and economic effects. The programme has its own dedicated advisers who will provide intensive advice to farmers in the catchments with support from their colleagues locally and nationally while Teagasc environment, production and rural economy research staff will link closely with programme researchers to maximise its impact.

Goal 3: Encourage Diversification of the Rural Economy and Enhance the Quality of Life in Rural Areas

This will be achieved by providing integrated research, advisory, innovation and education services to new and emerging diverse rural and land-based economic activities, as well as providing economic research to support rural policy makers.

OUTLOOK

An increase in 'on-farm/off-farm' diversification is anticipated to combat the reduced employment opportunities in the wider economy. Increased diversification of the rural economy is also likely in areas such as forestry, energy and bioprocessing, artisan food and organic food production. Quality of life in rural areas is becoming increasingly important and will be part of the Advisory Service Options Programme and the Rural Economy Research Programme.

TEAGASC SUPPORT

Teagasc will support the achievement of Goal 3 through science-based innovation that will involve the deployment and appropriate integration of resources in three areas: 'knowledge creation and procurement' (research), 'knowledge dissemination' (advisory and innovation) and 'knowledge absorption' (education and training). The strategic actions and the associated activity indicators that will be employed to measure performance are as follows.

Strategic Actions	Key Output / Activity Indicators
3.1 Research Conduct research to provide cost effective and sustainable technologies in the areas of: • Crops and Bioprocessing (also Goal 1); • Forestry (also Goals 1 and 2); • Organic Food Production (also Goal 1); and, • Economics and Rural Research (also Goals 1 and 2).	• Number of publications in high impact journals*. • Number of publications in media. • Number of knowledge transfer events held and attendance. • Amount of income from external funding.
3.2 Advisory and Innovation Support clients in the establishment and development of new innovative rural-based business through programmes delivered by specialist advisers and good farm practice advisers (part).	• Number of clients. • Number of options plans. • Number of events and attendance.
3.3 Advisory and Innovation Develop programmes with local development agencies to encourage on-farm/off-farm diversification.	• Number of programmes with local development agencies.

Strategic Actions	Key Output / Activity Indicators
3.4 Education and Training Provide an education and training programme for new and existing producers to increase scale and diversity, and improve quality.	• Number of participants. • Number of new courses. • Student satisfaction rates.

**Journal Impact Factors for publications to be obtained from the Thomson Reuters ISI Web of Knowledge*

EXPECTED IMPACT

All programmes and activities under Goal 3 will promote diversification and an improvement in the quality of life in rural areas. Some key high level impact indicators are set out below.

Key Impact Indicators – Goal 3	
3.a Value of Rural Innovation	• Amount of on-farm/off-farm activity.
3.b Diversified Land Use	• Increased area and value of forestry. • Increased biomass production. • Increased area of organic production.

RESOURCE ALLOCATION

It is anticipated that the overall expenditure on this goal will increase somewhat over the period of the strategy.

Examples of Partnership and Collaboration

BIOENERGY

Teagasc researchers and advisers will continue to take a lead role in developing the bioenergy sector in Ireland, bringing together the various players in this fledgling industry. Through its network of contacts with growers, intermediate processors and final energy consumers, Teagasc will continue to encourage the developments of an integrated supply chain to meet the growing demand for alternative renewable Biofuels. Teagasc works in partnership with the various government departments along with the other organisations and agencies to support the entrepreneurs in this new industry.

Goal 4: Enhance Organisational Capability and Deliver Value for Money

This will be achieved by managing the organisation's resources and capabilities to ensure we deliver a quality service to our customers while meeting our corporate responsibilities and deliver value for the public funds entrusted in Teagasc through high standards of accountability and governance.

OUTLOOK

There will be ever increasing demands on the organisation to deliver our programmes to a high standard of accountability and governance. The change in the state of the public finances places a new emphasis on improving efficiency, effectiveness and impact, and will be the key components of programme design in all areas.

TEAGASC SUPPORT

It is the responsibility of all staff to work to a high standard of accountability and governance. In particular, staff in the national administration and corporate and management services functions have a responsibility to lead particular areas of governance to ensure compliance with the following:

- the Code of Practice for the governance of state bodies;
- the occupational safety health and welfare at work legislation;
- the public service modernisation agenda; and,
- commitments under national pay agreements – Towards 2016.

Head Office staff are grouped as set out below to deliver work programmes that meet these and many other regulatory requirements.

• Scientific Services (Fellowships, Post Doctorates, Intellectual Property, Library, Science Writing)	• Finance
• Change Management (Evaluation, Customer Service & Access, Business Planning & Risk Management)	• Human Resources
• Health and Safety (including joint initiative on farm safety with HSA)	• ICT
• Property Services	• Staff Training and Development
• Public Relations and Customer Communication	• Internal Audit
• Foresight and Strategic Planning	• Human Resources

These units work closely with all staff throughout the organisation in order to ensure that the goals are achieved. The strategic actions and the associated activity indicators that will be employed to measure performance are set out below.

Strategic Actions	Key Output / Activity Indicators
Enhanced Efficiency of Operations	
4.1 Review administrative processes (in particular, procurement and payment processes) and explore and develop opportunities for a shared service approach to delivery.	• Savings targets achieved.
4.2 Improve capacity for collaboration through the implementation of a new data management plan using document management and improved web content management across the organisation backed up by improved data security.	• Extent of adoption of document management system. • High success in security audits.
Staff Motivation and Deployment of Resources	
4.3 Develop a new HR strategy – prioritising flexibility, mobility and the establishment of a common professional grading structure.	• Strategy and process in place.
4.4 Create capacity to deploy staff to high priority programme areas through identification and ceasing of low priority area	• Process in place. • Number of staff redeployed.
4.5 Implement appropriate structural changes to improve the co-ordination of the research function, develop the capacity for innovation and knowledge transfer and ensure that education and training programmes are delivered efficiently and effectively.	• Plan approved and implemented.

Enhanced Strategic Capability	
4.6 Improve and rationalise our network of offices and buildings to provide facilities that have a high standard of energy efficiency, access, health and safety to ensure quality service is delivered to our customers.	• % of facilities up to standard.
4.7 Strengthen stakeholder consultation to ensure that all programmes are directed and supported properly.	• Number of groups and meetings.
4.8 Evolve the role of National Partnership to provide improved support for organisational change.	• Number of change issues supported.
4.9 Make provision for appropriately focussed staff training programmes to enhance organisational capability including formal training and exchanges/sabbaticals.	• % of staff training budget used for this purpose.
4.10 Enhance Audit and Evaluation Programmes to provide suitable information for programme assessment and prioritisation of resources.	• Number of approved reports and usage.
4.11 Implement Foresight 2030 by enhancing strategic capability and ensuring that the issues set out in Teagasc 2030 are embedded in all aspects of organisational business planning.	• Progress in implementation.

EXPECTED IMPACT
The impact of the programme of strategic actions on this goal.

Key Impact Indicators – Goal 4	
4.a Efficiency	• Reduction in resources spent on overheads and support.
4.b Customer Service	• Internal and external customer satisfaction rates.
4.c Audit and Evaluation	• Number of significant issues resolved.

RESOURCE ALLOCATION
Through improved efficiency gains it is anticipated that overall expenditure on this goal will decrease somewhat over the period of the strategy.

Examples of Partnership and Collaboration

FARM SAFETY
Teagasc, the Health and Safety Authority and the Farm Safety Advisory Committee are working together to reduce farm accidents and fatalities through the provision of advice and training to farmers.

EDUCATION
The Teagasc Education and Training Directorate works in partnership with seven of the institutes of technology to offer students the opportunity to pursue higher level courses. New collaborative initiatives with UCD and other third level organisations to develop new course offerings are being pursued. Teagasc has a strong relationship with FETAC, the government awarding body for the majority of the courses runs by Teagasc.

SECTION II
CONTEXT AND BACKGROUND

3. External Context

Teagasc contributes to many areas of scientific work and collaborates with numerous agencies. The following are the major policy documents/reports that influence Teagasc programmes and services and which have informed the development of this Statement of Strategy.

3.1 Policy Documents and Reports

1. *Teagasc 2030 - Foresight Report*	www.teagasc.ie	2008
2. *Department of Agriculture, Fisheries and Food Statement of Strategy 2008-2010*	www.agriculture.gov.ie	2008
3. *Value for Money Review of the Food Institutional Research Measure*	www.agriculture.gov.ie	2008
4. *OECD Review of the Irish Public Service 2008*	www.bettergov.ie	2008
5. *An Agreed Programme for Government - June 2007 Department of An Taoiseach, Dublin*	www.taoiseach.gov.ie	2007
6. *National Development Plan 2007 – 2013*	www.ndp.ie	2007
7. *The Rural Development Strategy and Programme 2007-2013*	www.pobail.ie	2007
8. *Sea Change - a Marine Knowledge, Research & Innovation Strategy for Ireland 2007-2013*	www.marine.ie	2007
9. *National Climate Change Strategy 2007 – 2012*	www.environ.ie	2007
10. *Bioenergy Action Plan for Ireland*	www.dcmnr.gov.ie	2007
11. *FP7- The Seventh Framework Programme for Research and Technological Development 2007-2013*	www.ec.europa.eu	2007
12. *Lisbon Declaration*	www.eua.be	2007
13. *Towards 2016, Ten-Year Framework Social Partnership Agreement 2006-2015*	www.taoiseach.gov.ie	2006
14. *Steering a New Course, Strategy for a Restructured, Sustainable and Profitable Irish Seafood Industry 2007-2013*	www.bim.ie	2006

15. Strategy for Science Technology and Innovation 2006-2013	www.entemp.ie	2006
16. Strategic Technology Platform (STEP) for Agri-Food Technologies	www.forfas.ie	2005
17. European Technology Platform on Food for Life - The Vision for 2020 and Beyond	ftp.cordis.europa.eu	2005
18. Report of the Agri-Vision 2015 Committee	www.agri-vision2015.ie	2004
19. Building Ireland's Knowledge Economy: The Irish Action Plan for Promoting Investment in R&D to 2010	www.entemp.ie	2004
20. Ahead of the Curve: Ireland's Place in the Global Economy. Report of the Enterprise Strategy Group. Forfás, Dublin, (O'Driscoll Report)	www.forfas.ie	2004
21. Prepared Consumer Foods Strategy 2003-2006	www.agriculture.gov.ie	2003
22. Strategic Development Plan for the Irish Dairy Processing Sector (Prospectus Report)	www.prospectus.ie	2003
23. The Demand and Supply of Skills in the Food Processing Sector	www.skillsireland.ie	2003
24. Luxembourg Agreement	www.agriculture.ie - (summary)	2003
25. National Biodiversity Plan	www.environ.ie	2002
26. EPA 2020 Vision - Protecting and Improving Ireland's Environment EPA Strategy	www.epa.ie	2000

3.2 Major External Drivers of Change

POLICY DEVELOPMENTS

Teagasc's strategic actions are in line with national objectives for the agri-food sector as set out in the *National Development Plan 2007-2013, Agri-Vision 2015* and the Department of Agriculture, Fisheries and Food's Statement of Strategy 2008-2010. Our overall strategy is consistent with Government plans for the development of the knowledge economy and the continuing demands for public service modernisation.

The most immediate policy influence on our Statement of Strategy is the restrictive budgetary environment foreseen over the next three years. This will require us to focus clearly on our objectives and to organise ourselves to achieve these objectives. Teagasc's overall goal as set out in Teagasc 2030 is to 'help build sustainable rural communities'. We seek to achieve this goal through the provision of 'support for science-based innovation in the agri-food sector and wider bioeconomy'.

Policy developments at EU and international level also impact on our strategic direction. The reform of the CAP in 2003 constituted a fundamental change in how the EU supports the farm sector, introducing direct income payments (Single Farm Payment) and decoupling the link between subsidies and production. In this new environment, market forces increasingly drive the production decisions of farm and food businesses, while greater support is given to the production of public goods, including the preservation of biodiversity and the protection of our water, soil and air quality. The CAP Health Check will further break the link between direct payments and production and thus allow farmers to follow market signals to the greatest possible extent. In particular, opportunities will arise for expansion in the dairy sector during the transition to the proposed full abolition of milk quotas in 2015.

Agricultural policy at European level will continue to address new challenges. It must ensure a secure supply of safe, high quality food, address climate change, encourage opportunities for the production of bioenergy and industrial raw materials, while ensuring more efficient management of land resources and the preservation of biodiversity.

These new challenges, which have been considered in the Teagasc Foresight Report 'Teagasc 2030' will require the agri-food sector of the future to become more fully integrated into the 'knowledge economy'. The future competitiveness of the sector is dependent on its ability to be innovative in meeting the fast changing needs of markets.

FOOD SAFETY, QUALITY AND SECURITY

Consumers around the world are increasingly demanding more information about food production methods and expect full traceability in respect of consumable products. They are also becoming more aware of the health aspects of food and food production and this is now one of the most powerful forces for innovation in the food and beverage industry. Other drivers of food consumption are ethical concerns regarding animal welfare, environmentally-friendly production and compliance with fair production and trading conditions.

Food security will be a key policy issue in the coming years. After more than 30 years of European policy initiatives designed to deal with food surpluses, European consumers are becoming increasingly concerned about its food security in light of climate change, competing demands of crops for energy and a rising global demand for food.

SAFETY, HEALTH AND WELL-BEING

Research continues to identify links between good safety and health practice and good farm management and productivity. The importance of an understanding of this link is essential to

achieve an efficient and productive farming sector. There is clarity and certainty around the regulatory requirements in safety and health. There will be a need to ensure systems exist to support and encourage compliance with these requirements.

AGRICULTURAL MARKETS

As price support declines in significance, the market place will become pre-eminent for agricultural commodities. Advances in income will be dependent on the capacity of the sector to improve productivity and enhance the scale of production. The international markets for food production are growing, thanks to population and income growth in the large economies of China and India. Current estimates indicate that global food consumption will double over the next 30 years, driven by population growth and rising prosperity, especially in the emerging economies.

THE RURAL ENVIRONMENT

Agriculture, forestry and maritime activities affect our water, air, soil and biodiversity and protecting these natural resources is a priority under the CAP. Ongoing CAP reform is relevant to sustainable land use through a variety of policy mechanisms (e.g., cross-compliance, less-favoured areas, Natura 2000, high-nature-value farmland, forestry, and agri-environmental schemes). There is considerable uncertainty about CAP reform post-2013, but there is likely to be more environmental regulation to protect water, air, soil and biodiversity, especially if these natural resources are exposed to new threats.

In many cases, environmental sustainability will coincide with the aims of production systems striving for high nutrient efficiency. As energy and fertilizer costs increase, there will be a strong incentive to develop production systems that retain and recycle nutrients, thereby, reducing energy and fertilizer costs.

New and as yet unknown pressures on the environment may come from new bioeconomic sectors, such as biofuel and industrial feedstock production and on-farm green-energy production from wind or new biochemical processes.

ADVANCES IN SCIENCE AND TECHNOLOGY

Science and technology is essential to the agri-food sector, enhancing its capacity to compete globally. Knowledge generation (research), and knowledge transfer (advice), are crucial to creating and adding value. Key enabling technologies have the power to transform food production and processing and open up new opportunities for farms and firms in the broader economy. The convergence of the agri-food sector with key enabling technologies, such as nanotechnology, computer science, life sciences and robotics, presents tremendous potential for transforming food and non-food production. This convergence could also improve the sector's environmental sustainability.

The agri-food sector's long-term viability depends on maintaining and building capacity in existing areas, such as food and ingredient formulation, sensory science, food safety and environmental science. The agri-food sector will also need to strengthen its capabilities in a number of new and novel technologies (e.g., biotechnology and nanotechnology). However, there has been significant consumer opposition to some technologies and this must be considered in any future strategy. There will be a need to demonstrate benefit to the consumer and provide the necessary information to allay fears both in terms of personal and environmental safety and to underpin consumers' informed decision-making.

RURAL AND FARMING POPULATION

Within agriculture, we expect to see a continued trend towards two contrasting types of farm: large-scale full-time farms and small-scale part-time ones. Approximately 40% of farmers will retire in the next 10 years and almost all farms will change hands at least once by 2030. The

extent of part-time farming will depend on the willingness of successors to continue to hold at least one other job and the availability of additional local employment. Factors that promote or hinder the transfer of agricultural resources, such as farm succession and the availability of off-farm employment, will be crucial in facilitating farm restructuring and shaping the future of the agricultural sector.

EMERGING NEW MARKETS

Our natural resources will no longer simply produce food for humans and livestock, although this will continue to be the central economic activity. In future years, we will increasingly look to our natural resources to provide our energy and fibre needs. Indeed many of the products derived from fossil fuels that we now depend on are likely to be provided from renewable bioresources. We are entering a phase in our economic development where the bioeconomy will be pre-eminent. This sector encompasses the current agri-food sector as its most significant component, but added to it will be newly emerging sectors such as bioenergy, biofibre and biopharma.

Another dynamic element will be high-value-added processing in areas such as infant foods, functional foods and nutraceuticals. These sectors will be driven by indigenous and foreign multi-national food companies with strong in-house research and development capacity.

Our natural resources permit not only the production of physical products, but also the provision of services such as recreation and tourism and are becoming increasingly appreciated because of their intrinsic value in areas such as natural beauty, biodiversity and water quality. The preservation and enhancement of these will require continued public subvention because of their public-good nature.

CLIMATE CHANGE

With agriculture contributing 28% of Ireland's total greenhouse gas emissions, the sector is part of the escalating agenda on climate change. This agenda will require the farm business sector to adapt to any effects of climatic conditions to ensure economic viability, while at the same time continuing to improve sustainable practices to reduce agriculture's impact on greenhouse gas (GHG) emissions. This demand must, however, be considered in the context of a growing world population and increased demand for food.

On the other hand, forestry is a vital carbon sink and the current national forestry estate absorbs about 6% of national greenhouse gas emissions annually. An increased afforestation programme would offer major potential to abate the effects of GHG emissions further as well as bringing other socio-economic benefits.

THE NEED FOR INNOVATION

The issues discussed above will pose significant challenges and opportunities for food, agriculture and the rural economy. For Ireland's agri-food sector to thrive in the future, its activities must become more fully integrated into the 'knowledge economy'. Continuous investment in research and innovation is crucial to achieving this goal.

The new emphasis on the biosector will require a growing emphasis on our knowledge capacity to deliver profitability and competitiveness for the producers and processors of our natural resources. Teagasc, in collaboration with a range of partners will support these exciting developments. We will also undertake the necessary structural and programme adjustments that will enable us to respond with agility, focus, and relevance to change so that we can provide support for innovation through the integrated delivery of research, advisory and education and training services.

4. Internal Environment

TEAGASC 2030

In May 2008, Teagasc launched the report on a major foresight exercise undertaken in collaboration with key industry stakeholders. The exercise aimed to identify a broadly-shared vision for the agri-food sector in 2030 and to determine its research, innovation and support priorities.

This Foresight Report is, in effect, an outline of the strategic direction that the organisation needs to take if it is to continue to support Ireland's agriculture and food sectors in light of the challenges and opportunities that lie ahead. It is not a forecast of the future, but an outline of the challenges and opportunities that the agri-food sector is likely to face in the next quarter century or so, such as food and energy security, climate change and environmental sustainability. The role of Teagasc as a publicly-funded organisation is to support our largest indigenous sector to overcome the challenges and exploit the opportunities.

Now, Teagasc itself must become more innovative to keep pace. The key to achieving this will be to ensure the continued upgrading of our scientific capabilities, better integration of our research, advisory and education services so as to transfer knowledge more effectively, together with more focused stakeholder participation, better priority setting and more flexible resource allocation within a structure that will enable the organisation to become more efficient and responsive.

TOWARDS 2016 AND PARTNERSHIP

The operating environment for Teagasc is influenced by government policy and Teagasc will continue to respond to initiatives that promote more effective management of the public service and provision of the best possible service to our internal and external customers. Partnership principles will continue to underpin many of the processes through which we develop our policies and procedures, and these principles have been endorsed further in the latest national agreement, 'Towards 2016'.

5. Key Partnerships

Teagasc is committed to working in partnership with all sectors of the agriculture and food industry at home and abroad in the delivery of its research, advisory and education programmes. This partnership approach ensures that the organisation's resources are used to best effect. Partnerships continue to be fostered and enhanced with the following organisations and agencies:

GOVERNMENT DEPARTMENTS

Teagasc works closely with its parent Department (Department of Agriculture, Fisheries and Food (DAFF)) to ensure that its programme of activities meets the needs of the sector and is consistent with government policy. It also works closely with a number of other departments including:

Finance	Enterprise, Trade and Employment
Education and Science	Environment, Heritage and Local Government
Community, Rural and Gaeltacht Affairs	Communications, Energy and Natural Resources

GOVERNMENT AGENCIES

Teagasc maintains close linkages with the following agencies:

Science Foundation Ireland	Food Safety Promotion Board
Enterprise Ireland	Bord Bia
Forfás	FÁS
Environmental Protection Agency	FETAC and HETAC
The Marine Institute	National Qualifications Authority of Ireland
BIM	Health and Safety Authority
Food Safety Authority	Local Development Agencies

EU AND OTHER INTERNATIONAL LINKAGES

Teagasc has a number of bilateral agreements with institutes around the world.

HIGHER EDUCATION INSTITUTIONS IN IRELAND

Teagasc has developed an extensive network of formal and informal collaboration with its University and Institute of Technology counterparts particularly through the Walsh Fellowship Scheme and HETAC approved agricultural training courses.

INDUSTRY REPRESENTATIVE BODIES

In the planning and review of its programmes Teagasc liaises with stakeholders through a number of representative groups in all the major programme areas.

JOINT PROGRAMMES WITH INDUSTRY

Teagasc works with all major Irish agri-businesses on joint programmes that focus on improving production efficiency and product quality consistent with market requirements.

LOCAL DEVELOPMENT AGENCIES

Teagasc co-operates with and supports Regional and Local Development Agencies in the implementation of new initiatives in rural areas.

NORTH-SOUTH LINKAGES

Teagasc will continue to advance co-operation with the agri-food development agencies in Northern Ireland on matters of mutual interest. Ongoing content will be maintained with agri-food, research and development and education/training bodies and any opportunities for co-operation that would yield mutual benefit will be explored.

6. Resources

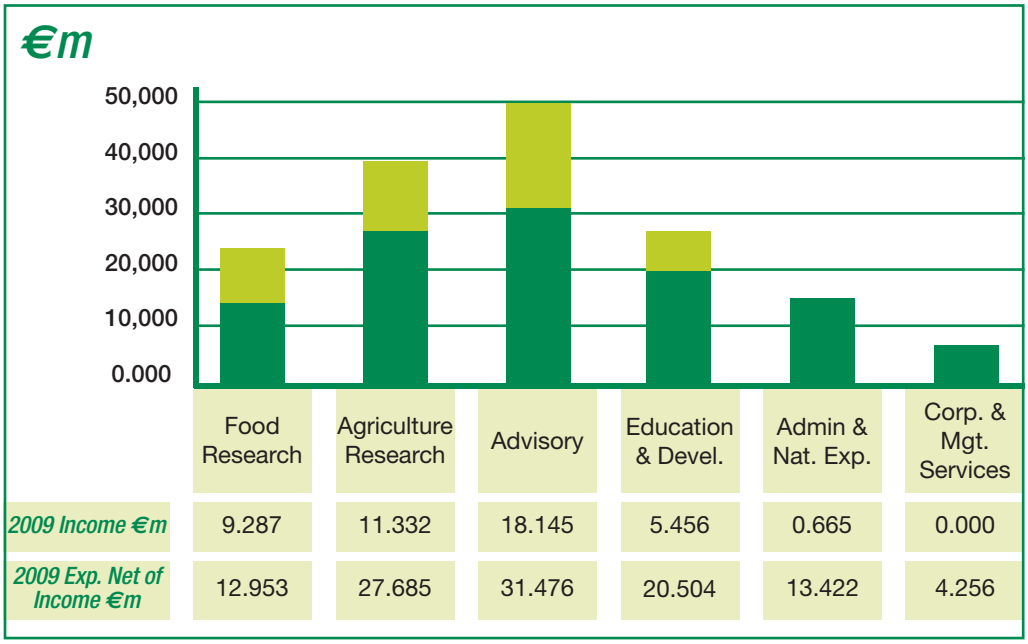
STAFF RESOURCES

Staff in Teagasc (1,620 staff full-time equivalents made up of a mix of permanent and contract) are organised into six directorates as shown on the organisation chart in Figure 6.1.

ALLOCATION OF RESOURCES BY DIRECTORATE

The 2008 operational budget indicates how resources are allocated to each of the six Directorates.

Directorate - Operational	Exp. €m	Income €m	Exp. Net of Income €m
Food Research	22.240	9.287	12.953
Agriculture Research	39.017	11.332	27.685
Advisory	49.621	18.145	31.476
Education & Development	25.960	5.456	20.504
Administration & National Expenditure	14.087	0.665	13.422
Corporate & Management Services	4.256	0.000	4.256
TOTAL	**155.181**	**44.885**	**110.296**



Note: Expenditure presented here includes 'Current Capital' and excludes Pensions

FIGURE 6.1 - TEAGASC ORGANISATION CHART – SEPTEMBER 2008

Note. This chart may change in 2009 as significant structural changes are currently being proposed to improve the co-ordination of the research function, develop the capacity for innovation and knowledge transfer and ensure that education and training programmes are delivered as efficiently and effectively as possible.

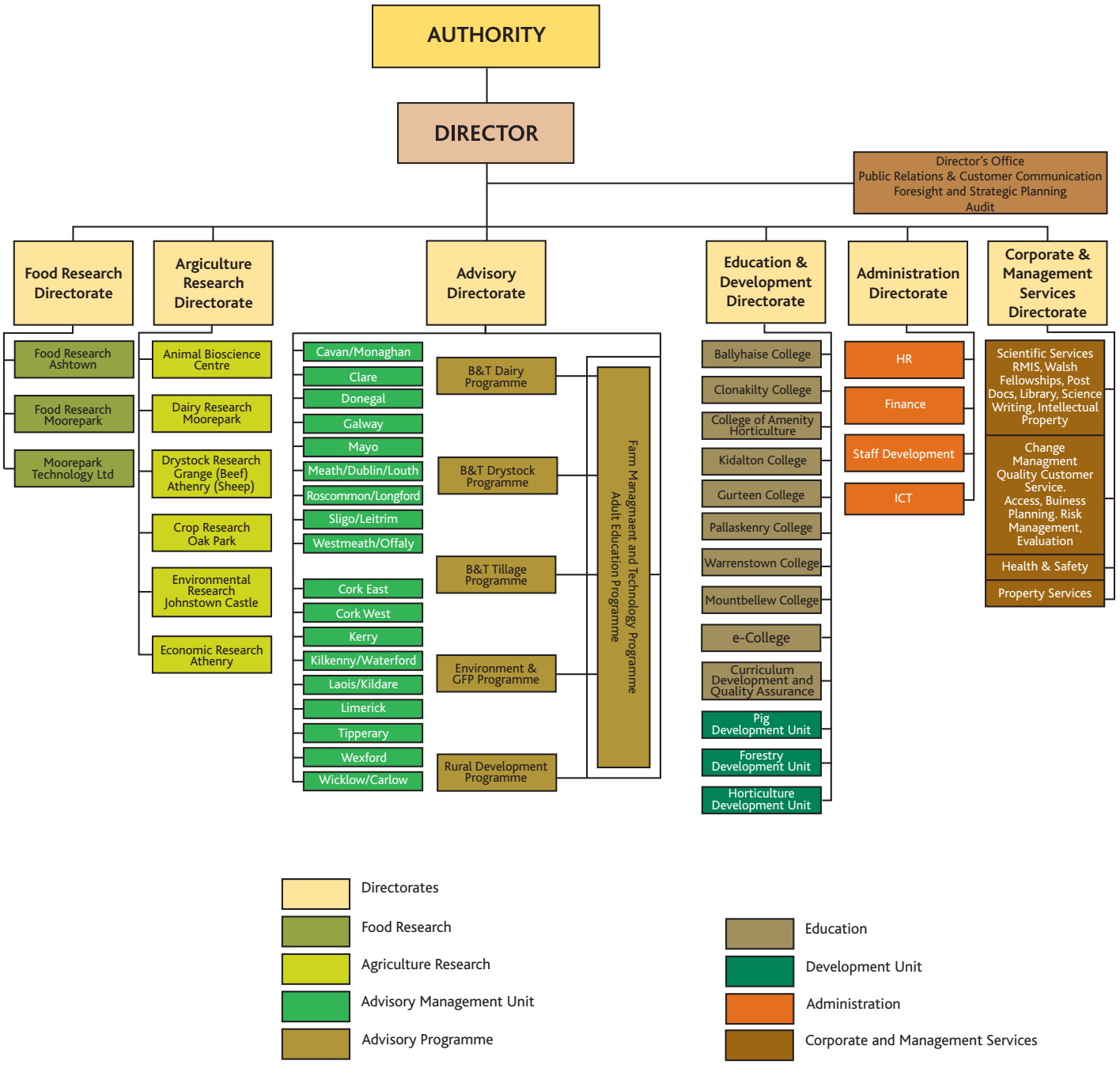


FIGURE 6.2 TEAGASC LOCATIONS – SEPTEMBER 2008

7. Definitions and Explanations

BETTER FARMS (BUSINESS, ENVIRONMENT, TECHNOLOGY THROUGH TRAINING, EXTENSION AND RESEARCH)

BETTER farms will be set up to involve key stakeholders (farmers, researchers, advisers and industry) in a collaborative project to identify relevant profit-enhancing technologies, experiment with and validate (or otherwise) these technologies prior to the wider adoption of these technologies, and to identify areas for further research.

BIOECONOMY

The bioeconomy, encompasses the traditional agri-food sector as well as a wide range of novel activities (food and non-food) that can now be generated from our natural resources of land, forestry and the marine. The bioeconomy is extremely dependent on knowledge generation so is also referred to as the Knowledge-Based Bioeconomy (KBBE).

EU THEMATIC AXES

The three "thematic axes" set out by the EU Commission to support Rural Development policy for 2007-2013 are as follows:

Axis 1: improving the competitiveness of the agricultural and forestry sector;
Axis 2: improving the environment and the countryside; and,
Axis 3: improving the quality of life in rural areas and encouraging diversification of the rural economy.

ENVIRONMENT AND GOOD FARM PRACTICE

The Teagasc Advisory Good Farm Practice Programme is built around our REPS service to farmers. Over half of our customers already participate in REPS, and Teagasc is the largest provider of REPS services to Irish farmers. Teagasc REPS planners are positioned to assist a further 10,000 clients to join REPS 4 between now and 2013. In addition, a comprehensive support service for farmers renovating farmyards and improving their farms is also provided.

INNOVATION

Innovation is the key to the delivery of services provided by Teagasc. By innovation we mean the conversion of knowledge into value. The key role of Teagasc is to create and/or source information and “package” it for our clients as “useable knowledge” so that they can exploit it to operate in a profitable and sustainable way. Innovation has two elements:

- Doing New Things (using new knowledge/approaches)
- Doing Things Better (using existing knowledge).

AGRICULTURAL CATCHMENTS PROGRAMME

The agricultural catchments programme is based on a partnership approach that aims to support productive agriculture while protecting water quality. It brings together Teagasc, the Department of Agriculture, Fisheries and Food, the Department of the Environment, Heritage and Local Government and farmers, both in the catchments and through the farm organisations.

TECHNOLOGY PLATFORMS

Technology Platforms are research programmes of national strategic importance (e.g., grassland) that will be multi-disciplinary, where researchers, advisers and stakeholders will come together to identify the priorities and research projects that will give Ireland a competitive advantage. The programmes will have clear goals and strict time limits for the delivery of workable and profitable solutions of benefit to our stakeholders.

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Agriculture and Food Development Authority