



Agri-Food and
Biosciences Institute[®]

2011
2012
**ANNUAL
REPORT**
& STATEMENT
OF ACCOUNTS

Agri-Food and Biosciences Institute
Annual Report and Accounts
For the year ended 31 March 2012

Laid before the Northern Ireland Assembly
under the Agriculture (Northern Ireland) Order, 2004
by the Department of Agriculture and Rural Development
on the 12th November 2012

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FOREWORD FROM THE CHAIR



Mr Seán Hogan, AFBI Chair

It is my pleasure to introduce this, the sixth, Annual Report and Statement of Accounts for the Agri-Food and Biosciences Institute (AFBI) for the 2011/12 financial year.

Six of the founding AFBI Board members retired on 31 March 2012 and I would like to record my appreciation to Professor David McDowell, Professor Stewart McNulty, Professor Grace Mulcahy, Mr James Noble, Mr John Rankin and Mr Michael Walker for their invaluable contribution to AFBI during its first six formative years. I am pleased to welcome Professor Bill McKelvey (Deputy Chair), Professor Cecil McMurray, Professor Patrick Murphy, Mrs Sarah Havlin, Mr Ken Millar and Mr David Lindsay to the Board from 1 April 2012.

During the year AFBI obtained approval from DARD and the Department of Finance and Personnel for its new Corporate Plan covering the 4 years up to and including 2014/15. A major organisational review of AFBI was also carried out and I am grateful to the Strategic Investment Board for their financial support and participation in that review, and am looking forward to the implementation of the accepted recommendations in the coming year.

It was my pleasure to welcome Mrs Michelle O'Neill to AFBI Hillsborough in May 2011 shortly after her appointment as Minister of Agriculture and Rural Development (DARD). During the year AFBI successfully delivered its assigned statutory, R&D and specialist advice work programme for DARD.

The Institute has also increased its non-grant in aid income to approximately 30% of total revenue despite the generally adverse economic environment and a reduction in total staff numbers. I congratulate the Executive and staff of AFBI on this significant achievement. As the pressures on public finances continue, this income will help sustain staff numbers and scientific capacity so that AFBI can continue to deliver services to DARD and its other public and private sector customers in the most effective and efficient manner possible.

Although the economic outlook remains challenging, the success of the Institute during the past year indicates that AFBI will continue to provide scientific services of the highest international standards to its growing range of public and private sector customers.

A handwritten signature in blue ink, which appears to read 'S. Hogan', followed by a long horizontal flourish.

Mr Seán Hogan
Chair

CHIEF EXECUTIVE'S REVIEW



Prof Seamus Kennedy, AFBI Chief Executive

There is now growing recognition of the crucial importance of the agri-food industry to the Northern Ireland economy. The Agri-Food and Biosciences Institute (AFBI) has continued to provide essential scientific support to the Department of Agriculture and Rural Development (DARD) and the industry during the year as they address the challenges of food security, animal and plant health, water quality, the environment, renewable energy, marine and freshwater fisheries and the economic downturn.

I am pleased to report that AFBI has successfully delivered the programme of statutory, diagnostic / surveillance, R&D and specialist advice work assigned to it by DARD while continuing to grow its commercial business. The highlights of the Institute's work presented in this report reflect the

continued efforts of a dedicated staff in delivering high quality services to government and a wide range of private sector customers.

A particular highlight of the year has been the major increase in non-grant-in-aid income to a record level of £16.8m as compared to £14.7m in the previous year. This achievement has resulted from significant increases in R&D contract income, analytical testing and vaccine royalties, and is all the more significant as it occurred against a backdrop of a reduction in overall staff numbers during the year. This income significantly enhances the skills base and capacity for scientific work within the Institute.

Notable highlights during 2011/12 included the official recognition of the Crossnacreevy Plant Testing Station by the European Union for its work in registering new varieties of ryegrass and clover. AFBI's transmissible spongiform encephalopathy testing programme passed the one millionth test mark and the first all-island animal disease surveillance report, prepared by AFBI and the Department of Agriculture, Fisheries and the Marine (DAFM) veterinary laboratories service, was jointly launched by the DARD Minister, Michelle O'Neill and her DAFM counterpart Simon Coveney. The importance of quality to the work of AFBI was reflected in the extension of ISO 17025 accreditation to a significantly wider range of analytical tests.

AFBI staff participated in several new European Union Framework and INTERREG IVA R&D projects including the INTERREG "INIS Hydro" marine hydrographic survey and the "ANSWER" project on the use of short rotation coppice willow for bioremediation of contaminated water. Participation



EU recognition for work at AFBI Crossnacreevy




Joint Ministerial launch of all-island veterinary report

in such projects is essential in ensuring that AFBI maintains and further develops state of the art skills and technologies that can be applied to the statutory and emergency response work it carries out for DARD and the range of scientific services it provides to commercial customers.

An important development during the year was the completion of an organisational review of AFBI. I am grateful to the Strategic Investment Board (SIB) for financial support and also to DARD, SIB and the AFBI Board for representation on the review Steering Group. Following consultation with staff and Trade Union Side, implementation of the accepted recommendations will be taken forward in the coming year so that AFBI has the senior management and organisational structures required to allow it to further develop as a leading scientific organisation in the years ahead.

Finally, I would like to thank all members of AFBI staff for their continued commitment and dedication which has allowed the Institute to further develop its business during the year. I remain confident that AFBI can continue to provide scientific services of the highest international standard to DARD and its wide local, national and international customer base.



Professor Seamus Kennedy MVB PhD MRCVS
FRCPATH
Chief Executive and Accounting Officer

Date: 24 October 2012

1 Millionth TSE test at Veterinary Sciences Division



Launch of the ANSWER project at Belfast City Hall





MANAGEMENT COMMENTARY

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Scope

The Agri-Food & Biosciences Institute presents its accounts for the financial year ended 31 March 2012. The Institute was formed on 1 April 2006 with the amalgamation of the Department of Agriculture and Rural Development (DARD) Science Service division and the Agricultural Research Institute of Northern Ireland, which was a separate Non-Departmental Public Body (NDPB) funded by DARD. AFBI is established under the Agriculture (Northern Ireland) Order, 2004, as a DARD NDPB.

Accounts Direction

The accounts have been prepared under the Accounts Direction given by the Department of Agriculture and Rural Development, with the approval of the Department of Finance & Personnel, in accordance with the Agriculture (Northern Ireland) Order 2004.

Vision

To be an internationally recognised and successful centre of excellence for scientific research and services within the sphere of biosciences.

Our mission

AFBI's mission is to deliver effective, high quality scientific services in the bio-sciences field to local, national and international public and private sector customers.

Corporate Objectives

- To sustain and grow our business spectrum.
- To deliver high quality, cost-effective scientific, economic and emergency response services to our customers.
- To be the preferred partner or contractor in our delivery of local, national and international scientific services.
- To maintain the necessary skills and resources to be able to provide services, including an emergency response that meets the agreed requirements of customers.
- To seek to continually improve the management of our business and deliver services which are value for money.

AFBI has an important role in assisting DARD to achieve its objectives. DARD's objectives are:

Objective 1:

Improving performance in the market.

Objective 2:

Safeguarding animal fish and plant health.

Objective 3:

Maintaining and investing in the environment.

Objective 4:

Building a successful rural economy and society.

AFBI supports DARD's objectives by delivering:

- statutory, analytical and diagnostic work;
- research and development;
- specialist scientific advice;
- an emergency response capability in the context of animal and plant disease outbreaks and other emergencies in the food and environment areas.

Funding

AFBI is an NDPB sponsored by DARD and is funded through Grant-in-Aid. The Grant-in-Aid is voted in DARD's Estimate and is subject to Assembly control. AFBI's current and capital expenditure form part of DARD's Resource DEL and Capital DEL respectively. AFBI also raises funds through receipts generated in the course of its operating activities. In 2011/2012 the grant-in-aid amounted to £40.1m including £484k for capital which was provided as budgetary cover in 2010/11 but drawn down in 2011/12 (2010/2011: £44.1m).

Relationship with DARD

AFBI's main point of contact is the Sponsor Branch (ASB) in the department. Regular meetings are held with the Sponsor Branch where matters relating to corporate governance, performance measurement, budgets, financing and accountability matters are discussed. A wider customer-contractor relationship also exists between AFBI's science delivery branches and the policy branches in DARD who specify DARD's required work programme.

AFBI's responses to the quarterly monitoring rounds, Comprehensive Spending Reviews are all routed through ASB.

Relationships with other Government Departments and agencies

AFBI has signed Service Level Agreements to provide services to DCAL and FSA NI. It also does a significant body of work for DEFRA and its agencies and NDPBs.

Relationships with educational establishments
AFBI continues to co-operate on projects with both local universities and has also developed close working relationships with universities and institutions in the United Kingdom and in the Republic of Ireland, Republic of India, People's Republic of China and the United States of America.

Marketing

As part of AFBI's Marketing and Business Development Strategy, AFBI has focused on promoting its specialist services and research capability in targeted markets locally, nationally and internationally. Locally, the Institute has continued to work with consortia of local companies, research providers and Invest Northern Ireland to develop proposals for two Invest Northern Ireland-sponsored Centres of Competence; the Centre for Renewable Energy Research and the Centre for Agri-Food Innovation. These initiatives, if funded, will help deliver significant collaborative R&D partnerships between local industry and research providers in Northern Ireland.

AFBI has continued to develop opportunities for international cooperation in order to access scientific capability through formal agreements. These agreements significantly increase the knowledge base available to local industry through its contact with AFBI, as well as generating revenue for AFBI from collaborative R&D and other opportunities. In the past year AFBI has developed new co-operation agreements with partners in Europe, Asia and the Middle East.

Performance

The table below summarises performance against AFBI's 2011/12 business plan targets. The commentary beneath the table highlights key outcomes achieved or exceeded in year, as well as some key targets either partially achieved or not achieved.

	AFBI 4-Year Corporate Goal	Number of Target Outcomes	Number of Target Outcomes Fully Achieved*	Number of Target Outcomes Partially Achieved*	Number of Target Outcomes Not Achieved
1	Successfully deliver the assigned work programme to the Department of Agriculture and Rural Development (DARD) and in so doing support DARD in achieving its objectives	10	4	5	1
2	Provision of scientific support to DARD and other government departments and agencies in managing the impact of animal and plant health, food and environmental emergencies	8	4	3	1
3	Actively manage AFBI's commercial portfolio and in so doing build our reputation as a customer-first organisation**	12	6	3	1
4	Sustain and develop AFBI's knowledge base and position AFBI as a leader in the delivery of innovation and scientific support to the agri-food sector	10	9	1	0
5	Invest in our people and ensure that the best systems and processes are in place to manage our organisation efficiently and effectively	11	7	3	1
6	Ensure the long-term financial sustainability of AFBI	11	6	5	0
		62	36	20	4

*Including targets fully/partially achieved outside target date but within year.

**Note that 2 targets were placed on hold in year.

Corporate Goal 1.

During 2011/12, AFBI continued to meet targets for the delivery of test results to DARD. R&D projects were also reported to the department in line with the department's Evidence and Innovation Strategy milestones.

Targets for agreeing the structure of a Strategic Cost Model (SCM) were partially achieved and as such the model was not used to cost the 2012/13 Assigned Work Programme (AWP). The SCM will be a powerful tool in enabling AFBI to cost and report on the AWP delivered to DARD; the model will be developed to completion in 2012/13 and used to cost the 2013/14 AWP.

Corporate Goal 2.

AFBI's ability to respond to emergency situations was tested through scenario based exercises in 2011/12. AFBI's Incident Management Plan (IMP) was also tested and the results of this exercise were used to refine AFBI's approach to dealing with a major disruption to business operations.

Contingency plans were reviewed in year and a number of plans were updated as a result. The review highlighted a number of areas where additional plans will be produced and whilst a target for developing these in 2011/12 was not met, these will be produced during 2013/14.

Corporate Goal 3.

AFBI's non-Grant in Aid revenue reached £16.8 million for 2011/12 as compared to £14.7 million in 2010/11. This equated to an increase in revenue of 17% per Full Time Equivalent (FTE), exceeding the target for the year which was to increase non-Grant in Aid revenue by 5% per FTE. A Research Support Manager was appointed and whilst a target for appointing a United States representative was not met, this target was subsequently met after the year end.

Corporate Goal 4.

AFBI continued to focus on delivering innovation and scientific support to the agri-food sector through commercialisation and knowledge transfer activity. AFBI continued to promote its Intellectual Property Policy amongst staff. This policy highlights how new scientific know-how and knowledge should be managed by AFBI to ensure that it is captured and commercialised effectively. AFBI's senior management continued to meet with representatives from CAFRE to ensure that CAFRE's requirements in respect of knowledge transfer activities were met by AFBI.

AFBI's target to publish 80 scientific papers in peer reviewed journals was exceeded with 103 papers being published. Work to develop a Science Strategy was partially achieved with a Science Strategy sub-committee being established under the AFBI Board. Divisional Science Strategies were drafted; however the production of an overall Science Strategy will be progressed in 2012/13.

Corporate Goal 5.

In 2011/12, a series of activities and events were delivered to help embed Business Continuity Management within AFBI. Awareness sessions were delivered to the AFBI Board, Heads of Branch and other staff with incident management responsibilities, including the Incident Management Team and Incident Management Action Team. Business Unit Resumption Plans were developed and implemented across 10 AFBI Business Critical Operations.

AFBI's Risk Management Strategy was revised and approved by the AFBI Board in 2011/12 with a new format Corporate Risk Register being produced as a result. A target to have an AFBI HR Strategy in place was not met, however the actions in the draft strategy were being actively managed pending approval of the strategy in 2012/13.

Corporate Goal 6.

Savings targets agreed with the department were delivered in 2011/12 and AFBI produced unqualified accounts for the 2010/11 year. Staff continued to set market based prices for commercial work, in-line with AFBI's Charging and Costing Policy.

Whilst targets for reviewing financial management information and delegating a greater degree of budgetary responsibility and control to Branches were only partially met, collectively, Divisions remained within budget limits for the year. Branch budgets were also rebalanced during the year and the institutes overheads were reviewed in 2011/12 with no overall change being required.

AFBI Board

AFBI is managed by a Board which has responsibility for providing strategic leadership to the organisation, ensuring that it fulfils the delivery objectives set by the Department of Agriculture and Rural Development (DARD) and for promoting the efficient and effective use of staff and other resources by AFBI.

The main responsibilities of the Board are: to ensure that AFBI meets its agreed objectives and targets as set by the DARD Minister, and set down in the Management Statement and Financial Memorandum;

- to provide strategic leadership in the formulation of AFBI's strategy for the discharge of its responsibilities, taking account of the Minister's and DARD's priorities, as outlined in the science and technology strategies and in Service Level Agreements (SLAs) set by DARD and other AFBI customers;
- to ensure that effective arrangements are in place to provide assurance to DARD and the Minister on risk management, governance and internal control;
- to communicate AFBI's strategy and services to stakeholders in NI and beyond;
- to understand and articulate science and research and development needs and advise the Chief Executive on drawing these requirements into the formulation of a strategic plan for AFBI;
- to oversee AFBI's functions, including encouragement of the highest standards in the disbursement of finance, and the efficient and effective use of staff and other resources throughout AFBI;
- to represent AFBI to its key audiences, for example industry, academic institutions and other research providers, locally, nationally and internationally;
- to engage with the Minister and DARD on matters pertaining to the work of AFBI and its strategic direction and input to the overall DARD strategic objectives;
- to identify and assess current and future developments in the agri-food and rural economy sector, and to recommend opportunities to expand into new markets and innovations to meet customers' needs.

Role of the Chairperson of AFBI

The Chairperson is responsible to the Minister. The Chairperson ensures that AFBI's policies and actions support the wider strategic policies of DARD and that AFBI's affairs are conducted with probity. The Chairperson shares with other AFBI Board members the corporate responsibilities set out in the Management Statement and Financial Memorandum (MSFM), and in particular for ensuring that AFBI fulfils the aims and objectives set by DARD and approved by the Minister. The Chairperson shall also set performance measures for the board corporate and individual board members and carry out a performance appraisal of each member annually and submit these appraisals to DARD. The Chair's appraisal is carried out by the DARD Permanent Secretary on behalf of the Minister.

Board Members

Members are appointed in accordance with the Office of the Commissioner for Public Appointments (OCPA) NI Code of Practice. The terms of appointment of members are for either three or four year periods, with the Chair appointed for four years. The Chair receives an annual remuneration of £24,970 and is expected to commit approximately 40 days per annum to the post. The Deputy Chair receives £10,405 and has a commitment in the region of 20 days per annum. Members are expected to commit in the region of 15 days per year and receive £3,745.

Completion of Term of Office

The following completed their term of office on 31 March 2012.

Prof David McDowell
Mr James Noble
Mr Michael Walker
Prof Stewart McNulty
Prof Grace Mulcahy
Mr John Rankin



Mr Seán Hogan
Chairperson



Prof David McDowell
Deputy Chairperson



Prof Grace Mulcahy



Prof Stewart McNulty



Mr James Noble



Mr John Rankin



Mr Michael Walker

Chairperson Mr Seán Hogan is the current Chairman of the Agri Food & Biosciences Institute and Northern Ireland Water. His former appointments include non-executive directorships with the Northern Ireland Transport Holding Company, Warrenpoint Harbour Authority and the Southern Health & Social Services Board, and Chairmanships with Newry & Mourne Health & Social Services Trust and Designate Chairman with the Education & Skills Authority. He currently is a Fellow of the Institute of Directors, the Institute of Sales & Marketing Management and the Chartered Management Institute.

Deputy Chairperson Professor David McDowell lives in Carrickfergus. He holds a PhD from the University of Ulster, is a Chartered Biologist and a Fellow of the Society for Biology. Professor McDowell currently leads Food Microbiology Research at the University of Ulster. He is also Chair of the Advisory Group, ProSafebeef and a member of the UK Advisory Committee on the Microbiological Safety of Foods.

Professor Grace Mulcahy lives in Co Wicklow. She qualified as a veterinary surgeon from University College Dublin (UCD), from where she subsequently gained a PhD. She is currently Professor of Veterinary Microbiology and Parasitology and Dean of Veterinary Medicine at UCD and is a Foundation Diplomate of the European College of Veterinary Parasitology. Professor Mulcahy is also a member of the Veterinary Council of Ireland, a voluntary position.

Professor Stewart McNulty lives in Belfast. He qualified in veterinary medicine from Trinity College, Dublin, from where he also gained a PhD. Professor McNulty retired as Chief Veterinary Research Officer with DARD Science Service in 2001. He is a former member of the Health Promotion Agency Board, NI, a voluntary position.

Mr James Noble lives in Newtownards. He has an MSc from Queen's University and several qualifications in dairying. Mr Noble has previously held a number of public appointments and is currently a Board Member of the Livestock and Meat Commission and Chairman of the Northern Ireland Transport Holding Company Pension Trustees.

Mr John Rankin lives in Newtownards and has run his own dairy farm for over 40 years. He is a former President of the Ulster Farmers Union and a former ARINI Trustee, a voluntary position. He has recently retired as Chairman of NFU Mutual NI Regional Advisory Board, he is a previous member of the Agricultural Wages Board and a past Board member of the NFU Mutual.

Mr Michael Walker lives in Newtownabbey. He is managing director of his own consultancy company, providing scientific advice on appellate casework to the UK Government Chemist, and solving chemico-legal problems in food, air, water and the toxicology of alcohol, drugs and allergens. He works closely with ASEP in Queen's University and is a member of the Food Standards Agency's Northern Ireland Advisory Committee. His previous posts included resident Public Analyst in Northern Ireland and Chief Executive of Forensic Science Northern Ireland. Michael was a founder board member of the Food Standards Agency. He is qualified BSc MSc MChemA FIFST CChem FRSC.



Mr Trevor Hinds



Mr Seamus McCaffrey



Mr Alan McKeown



Mrs Hilda Stewart



Mrs Hilary McCartan



Mr Bob McCann

Mr Trevor Hinds lives in Cultra, Co Down, and has been an Executive Resourcing consultant for more than twenty years. He is a Member of the Chartered Institute of Personnel and Development, a member of the Institute of Directors and a past President of the Rotary Club of Belfast. Trevor has a wide range of senior executive experience in both the Commercial and Voluntary sectors in Northern Ireland, having formerly been General Manager and Company Secretary of International Factors NI Ltd, a wholly owned subsidiary of Bank of Ireland, and the Director of Executive Resourcing in PricewaterhouseCoopers. He has been reappointed as a member of the Drainage Council for NI, is a Board member of Bryson Future Skills, a wholly owned subsidiary of the Bryson Group, and is a Board member and Trustee of Mindwise, the Northern Ireland Mental Health charity.

Mr Seamus McCaffrey lives in Irvinestown. He is a practising accountant and a livestock farmer at Irvinestown. He is past Chair of Business in the Community's Western Team and a past member of the Western 'Investing for Health Partnership', representing the interests of the private sector along with other members from the statutory and voluntary sectors. Mr McCaffrey is a past Chair of the Ireland-Poland Business Association, an all-island trade association

Mr Alan McKeown is Group Business Development Director at Dunbia, one of the UK and Ireland's largest meat processing businesses headquartered in Dungannon. Mr McKeown holds a first class honours degree in Biochemistry and has previously worked as a management consultant for PricewaterhouseCoopers and Accenture. He lives in Cookstown, and has a keen interest in all aspects of agriculture and rural affairs.

Mrs Hilda Stewart lives in Randalstown and is actively involved in the family farm partnership. She has an MSc in Sustainable Rural Development from Queen's University Belfast. Mrs Stewart is currently Chair of the CAFRE College Advisory Group (CAG). She has previously held a number of public appointments and voluntary positions including World President of the Associated Countrywomen of the World and Chairman of the Federation of Women Institutes of Northern Ireland.

Mrs Hilary McCartan is a Chartered Accountant by profession and lives in Belfast. Mrs McCartan has over 20 years post qualifying experience in executive and non-executive roles in the private and public sectors. Mrs McCartan has three other public appointments. She is a Member of the Probation Board for Northern Ireland, a Commissioner on the Northern Ireland Legal Services Commission and a Non-Executive Director of the Business Services Organisation (DHSSPS).

Mr Bob McCann lives in Newtownabbey. He is a Chartered Certified Accountant and has a broad management background having held a number of senior management posts in both the private and public sectors, including Group Financial Controller and General Manager (Finance) in NIE, and Director of Finance in the IT company Sx3. He is currently a Non-Executive Director in the Northern Health and Social Care Trust, Chair of the Audit and Risk Committee for NI Commissioner for Children and Young People, Independent Member of the NI Housing Executive Audit Committee, member of the Solicitors Disciplinary Tribunal, and a member of the NI Valuation Tribunal.

Board Sub-Committees

There are four sub-committees of the Board.

Remuneration Committee

The role of the Remuneration Committee is to advise the AFBI Board in respect of the remuneration of members of the Senior Management Team (SMT) and to provide recommendations to the Board on the implementation of AFBI's Rewards to Staff incentivisation scheme. Whilst the terms and conditions of employment and remuneration of all AFBI employees are in accordance with the overall terms and conditions of the NICS, as described above, any proposed changes to the overall framework are also subject to review and scrutiny by this Committee.

Non-executive chair

Professor David McDowell

Non-executive director

Professor Grace Mulcahy

Non-executive director

Mr Jim Noble

Audit Committee

The Audit Committee advises the Board and Accounting Officer on issues of risk, internal control, governance and any material items affecting the accounts.

Non-executive chair

Mr Bob McCann

Non-executive director

Mr John Rankin

Non-executive director

Mr Trevor Hinds

Other Attendees

Head of Internal Audit

DARD Internal Audit

Northern Ireland Audit Office

AFBI Sponsor Branch

Chief Executive Officer, AFBI

Head of Corporate Services, AFBI

Head of Finance Branch, AFBI

AFBI Board Strategy Sub-Committee

The role of the AFBI Board Strategy Sub-Committee is to assist the Executive in developing a Science Strategy for AFBI. In particular, to:

- Identify and prioritise areas of existing scientific work which are of strategic importance to AFBI.
- Identify and prioritise areas of existing scientific work which are of lower strategic importance to AFBI and which could therefore be reduced or ceased in order to transfer resources to work of higher priority.

Non-executive chair

Mr Michael Walker

Non-executive director

Prof Stewart McNulty

Non-executive director

Mr Alan McKeown

AFBI Board Finance Sub-Committee

The role of the AFBI Board Finance Sub-Committee is to support the Board in its responsibilities for the oversight of financial management including, in particular, the review of financial plans and budgets as well as financial monitoring.

Non-executive chair

Mrs Hilary McCartan

Non-executive director

Mrs Hilda Stewart

Non-executive director

Mr Seamus McCaffrey

Management Board

The executive board of the Institute were as follows:

Chief Executive Officer

Professor Seamus Kennedy

Deputy Chief Executive Officer

Dr Michael Camlin

Acting Deputy Chief Executive Officer

Dr Arthur Gilmour¹

Acting Deputy Chief Executive Officer

Dr John Davis²

Acting Deputy Chief Executive Officer

Dr Walter Crozier³

Acting Deputy Chief Executive Officer

Dr Alistair Carson⁴

Acting Deputy Chief Executive Officer

Dr David Bryson⁵

Acting Head of Corporate Services

Mr Joel Ferguson⁶

¹Dr Arthur Gilmour retired on 10 October 2011.

²Dr John Davis was Acting Deputy Chief Executive Officer from 10 October 2011 to 10 December 2011.

³Dr Walter Crozier was Acting Deputy Chief Executive from 11 December 2011 to 11 February 2012.

⁴Dr Alistair Carson was Acting Deputy Chief Executive from 12 February 2012 to 31 March 2012.

⁵Dr David Bryson was Acting Deputy Chief Executive from 1 April 2011 to 31 March 2012.

⁶Mr Joel Ferguson was Acting Head of Corporate Services from 1 April 2011 to 31 March 2012.

The Management Board meets at least monthly with a standing agenda covering finance, resources, operational management, health and safety and business development. The minutes of these monthly meetings are available on AFBI intranet.

Role of the Accounting Officer

AFBI's Chief Executive is designated Accounting Officer for the NDPB by the Departmental Accounting Officer and as such is accountable to Northern Ireland Assembly for AFBI's use of resources as set out in the Management Statement/Financial Memorandum (MSFM).

In particular, the Accounting Officer shall ensure that:

- AFBI's strategic aims and objectives support DARD's wider strategic aims and current PSA objectives and targets;
- the financial and other management controls applied by DARD to AFBI are appropriate and sufficient to safeguard public funds and for ensuring that AFBI's compliance with those controls is effectively monitored ('public funds' include not only any funds granted to AFBI by the Assembly but also any other funds falling within the stewardship of AFBI);
- the internal controls applied by AFBI conform to the requirements of regularity, propriety and good financial management; and
- any grant-in-aid to AFBI is within the ambit and the amount of the Request for Resources and that NI Assembly authority has been sought and given.

Details of Significant Interests Held by the Management Board Members

The Management Board Members do not hold any other directorships or any other significant interests which may conflict with their management responsibilities.

Remuneration of auditors

The auditors have not been instructed to undertake any non-audit work.

Financial results for the year

AFBI's operating cost statement shows a net operating cost of £39,919k (2010/11: £40,042k). Within this net position AFBI raised income of £16,821k (2010/11: £14,733k).

Service level agreements are agreed with FSANI and DCAL securing funding in these important areas of work. AFBI presented monthly financial reports to the AFBI Board and reviewed expenditure against budget at the Senior Management Team Meetings to ensure that AFBI's expenditure did not exceed its budgeted resources.

At the year end the net assets of AFBI is £16,295 (at 31 March 2011: £12,179k).

Treatment of pension liabilities

The treatment of pension liabilities is described in the accounting policy Note 1 under the heading of Pensions in the Remuneration Report on page 71.

Events since the End of the Financial Year

There have been no significant events since the end of the financial year which would affect the results for the year or the assets and liabilities at the year end.

Future Funding

The outcome of the Comprehensive Spending Review 2010 to 2013 determines the amount of funding available to AFBI over the next three years.

In view of the current economic climate and the coalition government's determination to reduce the deficit, further cuts in funding are anticipated. AFBI continues to face price increase in energy and other costs. The impact of these factors requires AFBI to realise increased income from other commercial sources and to increase the efficiency of its operations.

AFBI is committed to widen its funding base and increase its level of funding year on year. AFBI has finalised a marketing strategy to maximise AFBI's commercial role and maintain and enhance its customer base.

AFBI continues to develop its relationship with Invest NI and the EU to realise significant new sources of funding through these agencies.

Other Matters

Career Development

AFBI continues to promote opportunities for career development internally and during the course of this year a total of 43 staff have achieved promotion in a wide range of disciplines and grades.

One of AFBI's strategic objectives is to grow and sustain a high performance business through attracting and developing talented people.

In support of this objective, AFBI's Learning and Development Unit provide expert advice on learning and development opportunities covering the diverse range of skills required across the organisation.

This Unit also administers AFBI's Assistance to Study programme which has provided support for 40 staff this year in their pursuit of professional qualifications specific to AFBI's business.

Recruitment

AFBI continues to develop its workforce in line with its business aims which has resulted in a total of 16 new appointments this year, covering grades across the scientific, administrative and industrial disciplines. This number reflects both permanent and temporary appointments.

Work Experience

AFBI is committed to providing work experience opportunities for students at all levels to assist them in developing the key skills required to be successful in today's working environment.

Twenty students in higher education were appointed through AFBI's Work Placement scheme and were allowed the opportunity to develop key work-related skills through a relevant, supervised work placement programme. Work experience was also given to 118 students covering a range of areas within AFBI.

Sickness absence

AFBI had an operational objective of an average of 8.9 working days lost per staff member. NISRA have provided a provisional figure of 9.6 days but have advised that the final figure will not be available until the end of November 2012.

Sustainability

The Executive's Programme for Government 2008-11 identified sustainability as a cross cutting theme and stated that building a sustainable future was a key requirement of our economic, social and environmental policies and programmes.

DARD is the lead department within the NI Sustainable Development Implementation Plan for strategic objective – Promote Sustainable Land Management. AFBI assists DARD in the achievement of this objective through the conduct of underpinning R&D on production of biomass and renewable energy, nutrient management bioremediation of farm and municipal effluents and greenhouse gas production by livestock and soils.

Other key actions in 2011/12 included:

AFBI Estate

In all its land-based operations, AFBI ensures that it maintains land in good agricultural and environmental condition.



Grass trials at AFBI Crossnacreevy

As much of AFBI's estate comprises energy inefficient buildings, DARD has set up a project board to determine a right sized, fit for purpose estate that AFBI should occupy. This board has developed a draft Strategic Outline Business Case (SOBC) for submission to DFP for approval.

Energy Usage

AFBI has developed a baseline of energy usage across all its sites, against which future consumption will be measured. Efforts will continue to be made to reduce energy consumption both from the viewpoint of saving costs and reducing the carbon footprint.

Environment and Renewable Energy Centre, AFBI Hillsborough

With the need to reduce green house gas emissions, reduce dependence on fossil fuels and increase our energy security, activities at the Environment and Renewable Energy Centre (EREC), have been on-going with a strong focus on sustainability.

The EREC delivers heat and electricity to the Hillsborough site from biomass and solar sources. The main sources of biomass are animal manures, short rotation coppice willow, forest residues and miscanthus grass. An anaerobic digester supplied with animal manures and silage produces biogas which generates about 25 kW of electricity and heat through a combined heat and power generator. About 12kW of electricity is supplied by an array of photo cells.



Photo-voltaic cells at the EREC at AFBI Hillsborough

About 500kW of heat is delivered around the site through a district heating system, generated from the combustion of biomass at the EREC. The majority of this is derived from plantations of short rotation coppice (SRC) willow, forest brash and miscanthus grown on site. The SRC willow is fertilised by farmyard waste water (environmentally sound and sustainable solution to waste water accumulation) negating the requirements for fertiliser imports improving the sustainability of such an intensive biomass energy crop. Hot water is also supplied to the dairy parlour by solar panels.

The introduction of renewable energy to the Hillsborough site has been significantly responsible for the decrease in heating oil imports by, on average, 35% over the years 2009/2010/2011. The production of electricity on site accounts for approximately 10% of electricity usage on the site. The total yearly carbon saving is estimated to be in the region of 175 tonnes of carbon.

Carbon reduction

AFBI has taken the appropriate measures to ensure it is compliant with the Carbon Reduction Commitment Energy Efficiency Scheme. AFBI has established baseline information of the breakdown of carbon output across individual AFBI sites. This will be used to measure any future reduction in the carbon output.

Waste

Clinical waste: Under existing legislation, AFBI is obliged to incinerate all clinical waste. AFBI is reviewing its current autoclaving facilities with a view to reducing the volume of clinical waste that has to be transported off-site for incineration.

Other waste

Recycling measures are in place for a proportion of AFBI's waste in relation to paper, cardboard, plastics, metal and wood.

Fisheries

AFBI participates in the international marine fisheries stock assessment process, working closely with DARD, DEFRA and industry to bring forward the best scientific basis for fisheries management advice. AFBI's stock assessment work is complemented by a well-focused and relevant R&D programme, including important work in partnership with industry across a diverse range of areas such as herring surveys and gear trials.

The marine science programme in the Irish Sea and adjacent waters is underpinned and supported by a comprehensive biological oceanography and marine environmental monitoring programme, aiming to understand the processes driving fish production as well as wider ecosystem structure and function. This work is being expanded in the context of a wider requirement to co-ordinate marine science at UK level, in line with the recently published UK Marine Science Strategy, which AFBI contributed to.

A specific initiative, which AFBI is leading jointly with Cefas, seeks to establish a Western Shelf oceanographic observatory, to integrate the various oceanographic/environmental monitoring and research programmes across a wide range of UK and other institutions. A further development of this initiative is the establishment of a UK-wide integrated monitoring and observational network (UK-IMON) of which AFBI is a key member.

Social

AFBI does not have a policy covering corporate and social responsibility.

Internal Audit

An independent firm of auditors continue to provide Internal Audit services to the AFBI Accounting Officer and provides senior management and the AFBI Audit and Risk Committee with assurances of the adequacy of AFBI's systems of internal control and risk management.

The DARD Internal Audit unit also carries out audits of AFBI to provide assurances to the DARD Accounting Officer, DARD Sponsor Branch and the DARD Audit and Risk Committee that AFBI complies with the terms of the Management Statement and Financial Memorandum and other relevant legislative requirements.

Risk Management

AFBI has a risk management strategy and associated risk registers subject to scrutiny by the Institute's Internal Auditors. Risks are reviewed monthly at a divisional level and reported monthly on an exception basis to the SMT and the AFBI Board. The Corporate Risk Register is reviewed quarterly by the Audit and Risk Committee and Internal Audit reviews the risk management process every year.



Trials of fishing gear aboard the RV Corystes

Performance Assessment of the AFBI Board

Arrangements are in place for an annual self assessment exercise by the AFBI Board to review and refine the objectives of the Board. The Chair of the AFBI Board also sets targets for the AFBI Board and assesses the performance of the individual Board members on behalf of DARD Sponsor Branch. The performance of the AFBI Chair is assessed by DARD Sponsor Branch.

Compliance with HM Treasury Code of Good Practice on Corporate Governance

AFBI complies with the HM Treasury Code of Good Practice on Corporate Governance and generally complies with the Combined Code on Corporate Governance 2003. All the directors of the AFBI Board are non-executives and the Audit and Risk Committee and the Remuneration Committee chairs and members are all non-executives.

Supplier Payment Policy

AFBI is committed to the Better Payments Practice Code as set out in Annex 4.6 of Managing Public Money and is subject to the Late Payment of Commercial Debt Regulations 2002. AFBI shall comply with the British Standard for Achieving Good Payment Performance in Commercial Transactions (BS 7890). DAO (DFP) 12/08 refers.

Payment is regarded as late if it is made outside the agreed terms, or 30 days after the receipt of a valid invoice where no terms are agreed. In response to the current economic position, the Department for Business Enterprise and Regulatory Reform (BERR) announced in October 2008 that the Central Government was committed to paying businesses in 10 days.

AFBI managed to pay 78% (2010/2011 78%) of the invoices on AFBI's behalf in accordance with the agreed terms or within 30 days.

Security of Personal Data

AFBI is committed to the safeguarding of personal data and has set in place appropriate measures to ensure its security. Detailed information has been made available to staff on the intranet site on the type of information which is considered to be

private data and how it should be handled.

All members of staff have been advised that it is their personal responsibility to ensure that any document with sensitive information, including personal data, is appropriately secured and to ensure that, and in the case of data held electronically, appropriate access controls are put in place to prevent unauthorised access, whether accidental or deliberate, by others. There were no incidents of loss of personal data during the year.

Disabled Employees

It is the Institute's policy to give equality of opportunity when considering applications from disabled persons. The Institute complies with all existing legislation in respect to its disabled employees and has recently completed a Disability Action Plan.

Equality of Opportunity

The Institute's policy is to give all eligible persons an equal opportunity for employment and advancement on the basis of their ability, qualifications and aptitude for the work.

Employee Involvement

AFBI maintains regular communications and contact with staff and managers through meetings, team briefings, seminars, bulletins and postings on the intranet. It also has well established arrangements for formal consultation with recognised Trade Union representatives on all significant developments affecting staff.

Health and Safety

AFBI complies with all relevant Health and Safety legislation and where practicable with all Health and Safety best practice. AFBI has a team of dedicated Health and Safety advisers and a system of health and safety committees throughout the Institute.

Audit of Accounts

The financial statements are audited by the Comptroller and Auditor General for Northern Ireland. As Head of the Northern Ireland Audit Office, he and his staff are wholly independent of the Institute and findings are reported to Northern Ireland Assembly. The annual fee for the audit of financial statements for 2011/2012 was £40,000 (2010/2011: £32,500).

Disclosure of Information to the Auditor

All information deemed by the auditor to be relevant to their investigations is made available. The Chief Executive, as AFBI's Accounting Officer, has taken all steps to make himself aware of any relevant audit information and to establish that the auditors are aware of that information and have access to it.



AFBI SCIENCE

AFBI Innovations



Crowds at the National Ploughing Championships in Co Kildare

AFBI Innovations has been established to support AFBI staff in taking new discoveries from AFBI's science base through the commercialisation process and to find markets for the Institute's new services and inventions. The objective of AFBI Innovations is to assist scientists in matching problems in the industries we serve with solutions discovered in our laboratories and in the field. We will then seek to "productise" these solutions, in the form of products or bespoke services. AFBI Innovations is currently progressing implementation of a 3 year Business Development and Marketing Strategy.

Key Services and Expertise

- A Research Support Office was established to assist staff with research and contract support. RSO's initial focus has been on working with research scientists to establish links and relationships with internal and external customers; to identify appropriate funding partners; to participate in events to profile AFBI expertise; to anticipate future developments and create dialogue with policy makers.
- AFBI Innovations supports scientists with legal advice on commercial agreements and contracts, management of confidentiality and Intellectual Property.
- DARD is managed as a prime customer with the appointment of a DARD Business Manager. The DARD Business Manager is heavily focused on developing and agreeing a work programme for all DARD work and managing interactions with DARD policy branches.

- AFBI Innovations is responsible for supporting staff in complying with the AFBI IP Policy and applying the Rewards to Staff Policy.
- Supporting scientists to commercialise novel technologies and services through developing market assessments and commercialisation plans.
- Corporate Communications are responsible for Press Liaison services, Marketing and Brand management and Event management.

Key Customers / Sectors

AFBI Innovations is the "portal" for communication internally and externally, providing staff with a contact point for accessing commercialisation support and providing potential clients with an initial gateway into AFBI.

Key Achievements in 2011-2012 Year

- Managed the north-south Ministerial launch of the All-island Animal Disease Surveillance Report at the National Ploughing Championships in Co Kildare.
- Organised a High Pressure Processing open day to showcase AFBI's capabilities to local industry.
- Managed the issue of over 110 news articles, and over 50 media interviews and statements.

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Emergency Planning, Safety & Estate Branch

This Branch of AFBI was formed in March 2011 with the appointment of the Emergency Planning, Safety and Estates Manager. It encompasses the former Health & Safety and Estate business units and the overarching management of all aspects of emergency planning for the Institute including Incident Management, Business Continuity, and Contingency Planning.

Key Services and Expertise

- Facilities Management across the six AFBI sites at Crossnacreevy, Hillsborough, Loughgall, Newforge Lane, Omagh and Stormont;
- Site security co-ordination;
- Co-ordination of AFBI's participation in the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES);
- Health and Safety advice;
- Incident Management;
- Business Continuity Management; and
- Contingency Planning (for provision of an emergency response capability to DARD and other bodies) in conjunction with scientific divisions.

Key Customers / Sectors

All AFBI business units and associated administrative and scientific staff are the key customers for the key services undertaken. In support of these services the Branch works with a range of stakeholders including DARD Branches (e.g. AFBI Sponsor, Estate, Business Support, Central Management, and Science Advisory), DFP Divisions (Central Procurement, Properties, and Information Strategy & Innovation), NI Environment Agency, Health & Safety Executive NI, NI Fire & Rescue Service, NI Ambulance Service, and Belfast City Council Emergency Planning Service.

Key Achievements in 2011-2012 Year

- AFBI Site Security Policy: Developed and published.
- Capital Minor Works - Examples: AFBI-Hillsborough feed mill roof replacement and commencement of works on beef house roof replacement; VSD-Omagh main building – refurbished roof surface; VSD-Stormont Contingency Facility refurbishment.



Emergency planning exercise at AFBI Newforge

- Defects Reporting System: For AFBI-Newforge and Stormont sites alone approximately 1,000 defects reported and remedial actions taken.
- Estate Maintenance: Approximately £2.5M planned preventative maintenance, associated remedial works and reactive maintenance undertaken through DARD Estate Branch.
- Health & Safety Training: E-learning package of Health & Safety training courses launched on AFBI E-Learning Portal. This innovative approach to learning provides a flexible and convenient method to bring health and safety training to AFBI staff via the AFBI intranet.
- Business Continuity / Incident Management: Business Unit Resumption Plan (BURPs) template piloted across the three scientific business units, Agricultural & Food Economics Branch, and Corporate Services Division business units.
- Incident Management Exercises: Three exercises undertaken in association with the NI Fire & Rescue Service (Very Scary Disease – VSD-Stormont June 2011; Glow in the Dark – AFESD-Newforge Sept 2011; Shipshape – RV Corystes Jan 2012); Exercise Galileo carried out with AFBI Incident Management Action Team (IMAT) Dec 2011.

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Human Resources

The HR Branch was established in 2008 to provide strategic and operational support for the delivery of all human resource related functions to the AFBI Senior Management Team and its staff. This service has been structured in conjunction with the role of HRConnect. The HR Branch administers its responsibilities in accordance with the Northern Ireland Civil Service (NICS) Terms & Conditions, in conjunction with the AFBI Management Statement and Financial Memorandum.

Key Services and Expertise

Employee Relations and Management of Attendance

- Support for all personnel related functions from appointment through to retirement
- Attendance and Welfare

Workforce and Succession Planning

- Responsibility for workforce and succession planning to ensure the filling of all approved vacancies within agreed timeframes

Learning & Development and Performance Management

- Administration of all L&D functions in support of delivery of approved L&D requirements and in accordance with "best value for money"

Equality and Equal Opportunities

- The administration of all Equality responsibilities
- Supporting the provision and implementation of Equality Policies
- The completion and submission of Equality reports to relevant bodies

Key Customers / Sectors

The HR Branch provides support for all staff, administrative and scientific, across AFBI business units, as well providing input to the Senior Management Team and the AFBI Non-Executive Board. In support of these services the Branch works with a range of stakeholders including our sponsor department DARD and other core departments, Principal Civil Service Pensions Scheme (PCSPS NI), HRConnect, Occupational Health Service (OHS), Health & Safety Executive NI, and the Equality Commission.



Key Achievements in 2011 – 2012 Year

Employee Relations and Management of Attendance

- Reviews of Management of Attendance and Performance Appraisal Systems conducted and enhancements introduced
- Investor in People Post Recognition Review process supported

Workforce and Succession Planning

- 43 career development opportunities (internal and external) successfully completed

Learning & Development and Performance Management

- 40 staff availed of Assistance to Study programmes ranging from PhD to HNC qualifications
- Work experience opportunities given to 118 students during the year
- Internal learning and development training capacity increased and a number of service wide training requirements delivered in-house

Equality and Equal Opportunities

- AFBI Equality Unit established and promoted across the institute
- AFBI Equality Scheme being developed
- All Equality Commission returns delivered within agreed timescales

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VETERINARY SCIENCES DIVISION

The Veterinary Sciences Division (VSD) successfully delivered programmes of work in the areas of animal health and food safety to the Department of Agriculture and Rural Development (DARD) and a range of other customers during the year.

As quality is extremely important to all scientific organisations, VSD successfully increased the scope of its ISO 17025:2005 accreditation so that the vast majority of analytical testing in the Division is now accredited to ISO 17025:2005. VSD's ability to accredit additional tests in two of its Branches has been considerably enhanced by the award of five "flexible scopes" of accreditation – recognition of the confidence that the United Kingdom Accreditation Service (the UK's National Accreditation Body) has in the management of quality in the division.



Maria Guelbenzu helping customers at the Balmoral Show

In addition to successfully delivering DARD's work programme, VSD scientists won several new contracts to deliver research and analytical services for a range of clients. For example, the Chemical Surveillance Branch was awarded a substantial contract over four years, for the provision of marine biotoxin testing of shellfish produced and harvested in Northern Ireland's coastal waters. Three contracts were awarded to the Virology Branch to support research work on the development of prototype vaccines against porcine bocaviruses, on the development of natural alternatives to antimicrobial growth promoters, and on the use of novel nanoparticles as vaccine carriers. These projects were funded by Invest Northern Ireland,



the EU Framework 7 programme and DARD's Research Challenge Fund.

The volume of submissions to the Division's Cattle Health Scheme and animal disease diagnostic service increased substantially in 2011/2012, reflecting an increased level of interest by the industry in animal disease control.

VSD scientists are internationally recognised as sources of expert advice. During the year, on-site consultancy services were delivered in a wide range of countries, including the USA, Bangladesh and Georgia. VSD staff also provided expert advice to the European Commission's Food & Veterinary Office, acting as national experts in audits of Canada and Moldova. Similarly, VSD staff acted as invited speakers at range of scientific & veterinary conferences in Belgium, Spain, USA, France and hosted meetings for the local North of Ireland Veterinary Association and Association of Veterinary Surgeons Practising in Northern Ireland.

Bacteriology Branch

The Bacteriology Branch undertakes an integrated programme of statutory, analytical and research work, on the major veterinary bacterial pathogens of animal and public health significance. Much of the work underpins important DARD animal disease control programmes in areas such as bovine tuberculosis and brucellosis. Other areas of work include food-borne zoonoses (*Salmonella*, *Campylobacter*, *E. coli*), paratuberculosis, botulism, mycoplasmosis and a DNA genotyping service. The Branch also includes a National Reference Laboratory (UK-NI) for animal salmonellosis and provides a number of services to other VSD Branches including central autoclaving and wash-up facilities, media production and monoclonal antibody work.



Preparing bacteriological cultures

Key Services and Expertise

- Statutory, diagnostic, and other testing for a range of bacterial pathogens
- Provision of a range of R&D services to DARD and other customers, including multidisciplinary projects involving molecular diagnostics, genetics, test development, animal disease models, immunology, experimental design and epidemiology (ISO 90001 certified);
- Molecular diagnostics and molecular epidemiology including genotyping ('strain typing) of *Mycobacterium bovis*, *Brucella abortus* and other bacteria;
- Cattle DNA genotyping, monoclonal antibody development and production, central services and media production;
- Expert advice to DARD, other Governments bodies and the agri-food industry.

Key Customers / Sectors

The majority of the work of the Branch is statutory and other testing, along with supporting R&D, for DARD, our major customer. This work supports important animal disease control and eradication programmes in areas of animal and public health significance, and ultimately helps underpin NI's

important agri-food industry. Other customers include a range of research funders such as the EU, Science Foundation Ireland, Food Standards Agency as well as testing and other services for commercial companies.

Key Achievements in 2011-2012 Year

- ISO 17025 accreditation completed for all of the major statutory tests
- All statutory testing was delivered in line with agreed targets.
- Four literature reviews on bovine tuberculosis (commissioned by DARD) were completed and published on the DARD internet
- Branch staff were project leaders on 10 externally funded R&D projects and other contracts. These included projects on *M. bovis*, *Mycobacterium avium paratuberculosis* (MAP), *Campylobacter* and botulism.
- Work commenced on two new DARD Evidence and Innovation projects
- *Brucella* culture, molecular typing and DNA forensic work continued to make a significant contribution towards Brucellosis eradication

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Chemical Surveillance Branch's major objectives are to underpin the aims and strategies of our customers by providing high quality statutory and analytical services alongside innovative world acclaimed R&D functions. CSB is the UK National Reference Laboratory (NRL) for residues of a wide range of veterinary drugs and for marine biotoxins. Tests are carried out for residues of licensed veterinary drugs and illegal compounds in meat products and animal feeds. Shellfish are monitored for the presence of harmful natural toxins. This work is supported by strategic method development which introduces novel analytical methods into the testing programmes, as required.



Preparing oyster samples for analysis

Key Services and Expertise

- Statutory random and targeted surveillance of agricultural commodities for residues of licensed veterinary drugs and illegal compounds (ISO17025 accredited);
- Statutory monitoring of shellfish for the presence of marine biotoxins (ISO 17025 accredited);
- Provision of R&D solutions to customers (ISO9001 certified);
- Consultancy & analytical services to governments & industries worldwide;
- Investigating the causes of chemical residues in the agri-food and providing solutions for the local industry.

Key Customers / Sectors

CSB provides scientific services to government in Northern Ireland (NI) and the UK, testing food of animal origin under the National Surveillance Scheme (NSS, based on annual NI production). In addition to this scheme, CSB assists its customers in carrying out supplementary testing programmes. These are undertaken to assure the safety of NI produce and to support the industry in NI, which is heavily dependent on exports (~80% of product being exported from NI). EU and UK law requires that non-compliant results are investigated and

appropriate measures taken to identify and exclude non-compliant livestock, and their products, from the food chain. CSB monitors shellfish on behalf of the Food Standards Agency and undertakes end product testing on behalf of Northern Ireland producers. CSB provides consultancy services to industry & government locally as well as globally.

Key Achievements in 2011-2012 Year

- All performance targets for veterinary drug and shellfish toxin analysis were met.
- CSB provided training, analytical & consultancy services, antibody and specialised reagent production, for a range of customers.
- CSB, in conjunction with Cefas, Fera and SAMS; has won the FSA contract for the provision of official controls on shellfish for four years with a possible one year extension.
- Continued programme of method development and external accreditation.
- Successfully participated in proficiency testing schemes.
- Grew its customer base for local, national and international consultancy and analytical services.

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Immunodiagnostic Branch

The primary output of the Immunodiagnostic Branch is the provision of high throughput testing programmes for a wide range of important animal diseases, including bovine brucellosis, BSE, scrapie, bluetongue virus, equine infectious anaemia, Aujeszky's disease virus, enzootic bovine leucosis, maedi visna, avian viral and mycoplasma diseases (including Newcastle disease virus and avian influenza). The Branch provides support for the Northern Ireland agri-food industry through close liaison with our customers, providing laboratory services as part of animal health programmes with the aims of promoting animal health and facilitating national, EU and world-wide trade in animals and animal products from Northern Ireland.

Key Services and Expertise

- Provision of testing (DARD and commercial) for important animal and poultry diseases.
- Provision of automated high throughput testing for cattle brucellosis and BSE.
- Provision of advice to customers on animal disease testing.
- Development of improved serological tests for animal and poultry diseases.
- Antigen and antiserum production.
- Contingency planning for major epizootic disease outbreaks.

Key Customers / Sectors

- Our key customer is DARD, which is the regional Competent Authority charged with implementing Community Law in relation to Animal Health and Welfare.
- Other customers of the Branch include veterinary practitioners, farmers, agri-businesses and commercial companies.

Key Achievements in 2011-2012 Year

- Ongoing support to DARD and industry in demonstrating freedom of disease from important animal and poultry pathogens.
- Ongoing support to DARD and industry for BSE surveillance, including rapid turn-around testing of samples from human consumption cattle and sheep. The unit tested its one millionth sample during 2011/12.
- The Branch undertook an *actinobacillus pleuropneumonia* and porcine respiratory and

reproductive syndrome virus (PRRS) survey on behalf of a private practitioner to ascertain antibody levels to these pathogens within the NI pig herds. The results for APP correlate well with signs of clinical disease and is now available as a useful tool for the monitoring of health status of pigs. The results from the PRRS survey have provided useful information to DARD and industry on disease prevalence in NI.

- Support of DARD strategic plan for eradication of brucellosis. In particular, the Branch staff continue to work closely with DARD Veterinary Service in high risk areas to prevent disease breakdowns. The Branch has also contributed to ongoing investigations of fraud.
- Support of DARD and industry strategic policy for the eradication of Aujeszky's disease virus has resulted in an application to EU for Annex I status for Northern Ireland. This is being pursued as an all-Island disease freedom strategy.

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TSE testing at AFBI Stormont

Disease Surveillance & Investigation Branch

The main work of Disease Surveillance and Investigation Branch (DSIB) is animal disease surveillance, carried out for DARD. This work is undertaken at the Veterinary Sciences Division sites at Stormont, and Omagh, Co Tyrone.

A large volume of diagnostic submissions facilitates surveillance for epizootic, notifiable and zoonotic diseases and the monitoring of changing patterns in endemic diseases. Private veterinary practitioners, poultry organisations and fish farmers contribute to the cost of operating this service through invoicing for diagnostic submissions.

DSIB issues laboratory reports on all diagnostic submissions to vets and fish farmers, and produces a quarterly animal disease surveillance report for DARD. These reports are also published in the *Veterinary Record* and on the AFBI website so that private veterinary surgeons are aware of current trends in animal diseases in Northern Ireland.

Key Services and Expertise

- **Statutory functions.** The branch carries out statutory work such as the confirmatory diagnosis of BSE, scrapie and tuberculosis, and investigation of suspected outbreaks of epizootic viral diseases such as avian influenza, Newcastle diseases and swine fever. It also performs forensic examinations in support of DARD investigations of fraud.
- **Commercial work.** Most of the blood testing carried out under the commercial AFBI Cattle Health Scheme is undertaken in the branch. Similar testing is also carried out for commercial companies on a contract basis.
- **R&D work.** Staff in DSIB provide support to research projects based in other VSD branches and participate in externally funded R&D on anthelmintic resistance of livestock parasites.



Histology of the testis in a TCBZ resistant fluke

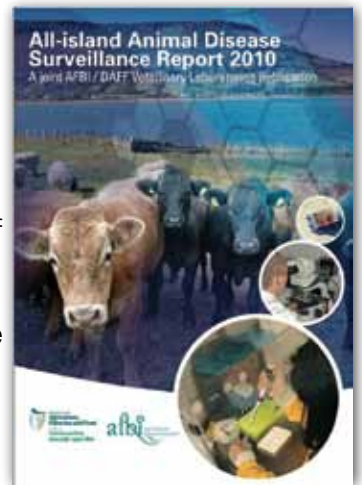
Key Customers / Sectors

DARD, private veterinary practitioners and livestock owners.

Key Achievements in 2011-2012 Year

First All-island Animal Disease Surveillance Report
VSD and DAFF veterinary laboratories have worked together to produce the first All-island Animal Disease Surveillance Report.

This was launched jointly at the National Ploughing Championships by Minister Michelle O'Neill MLA and Minister Simon Coveney TD who also announced the signing of the MOU between AFBI and the Department of Agriculture, Food and the Marine's Backweston Laboratory. VSD continues to provide detailed quarterly animal disease diagnostic surveillance reports to DARD and these are also published in the *Veterinary Record*, the journal of the British Veterinary Association.



Fluke resistant to anthelmintics

The Parasitology Unit of DSIB has recently provided a report on anthelmintic resistance in sheep to a group of 12 farmers who are frequently involved with AFBI Hillsborough in R&D work and who have been co-operating in these parasitological studies. The report has confirmed triclabendazole (TCBZ) resistance in the fluke populations on four of the twelve farms. TCBZ causes failure of mitosis in tissues where active cell division is taking place, so the testis in the treated fluke is depleted of cells, and those that attempt to divide undergo apoptosis.

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Virology Branch

Virology aims to improve the diagnosis and control of viral diseases in avian, bovine, ovine, porcine and aquatic species and to provide the front line emergency response for the diagnosis of major viral disease threats to NI livestock. The Branch possesses an excellent range of skills in virus growth, molecular virology and virus immunology. Additionally, the Tissue Culture Unit, Animal Services Unit and Bio-transport Advice support activities within other VSD branches. The Branch has an extensive R&D and international collaboration portfolio with global contacts on viral diseases in animals and aquatic species with a proven track record in diagnostic test and vaccine development.

Key Services and Expertise

- Epizootic contingency response: molecular detection for major viral diseases (e.g. bluetongue virus, avian influenza and Newcastle disease)
- Fish Disease Unit: testing of aquatic diseases in fish and shellfish, commercial testing and contract research.
- Tissue Culture Unit: support for statutory / commercial diagnostic tests and contract research
- Animal Services Unit: support of diagnostic and R&D programmes through the provision of animal accommodation, maintenance of husbandry and welfare requirements.
- Classical virus isolation in tissue culture systems and eggs
- Development of molecular and immunological diagnostic tests
- Viral pathogenesis, disease modelling and vaccine studies
- Staff expertise in working in containment level 2 & 3 laboratories and animal accommodation

Key Customers / Sectors

As part of its emergency response to DARD for epizootic disease threats, Virology Branch set up molecular PCR tests for Schmallenberg virus. Furthermore, the Branch continues to carry out commercial testing for fish, shellfish and novel poultry viruses along with research for various organisations.



Nano particle analyser at Virology Branch

Key Achievements in 2011-12 Year

- Successful in securing significant R&D contracts with a range of stakeholders including DARD, EU-FP7 and commercial companies.
- Nano-Particle Technology: Virology Branch has been working with a nano-particle technology company and participated in the Northern Ireland Science Park £25k award. This work has further developed with the potential to establish GenSaf as a joint venture company for the development of veterinary vaccines.
- Porcine Virology Unit: described the first detection of kobuvirus in Northern Irish sheep, pigs and cattle
- Avian Virology Unit: Virology patents on avian astroviruses have progressed to discussions with major poultry and diagnostic companies for licensing of the AFBI technology.
- Virology staff made a successful bid to host the European Association of Fish Pathologists meeting in Belfast in 2017.

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APPLIED PLANT SCIENCE AND BIOMETRICS DIVISION

Applied Plant Science and Biometrics Division comprises three Branches, one based at Newforge Lane in Belfast and the other across two field-based sites at Crossnacreevy, Co. Down and Loughgall, Co. Armagh.

Crops Grassland & Ecology Branch and Plant Health & Environmental Protection Branch both undertake strategic and applied research and provide statutory services and specialist advice which, taking into account Northern Ireland's high plant health status and implications for the environment, aims to underpin sustainable economic growth and development in the agri-food sector. Biometrics and Information Systems Branch supports AFBI's IT and network requirements and provides statistical consultancy throughout AFBI for the design and analysis of experiments and trials and develops agri-food modelling and benchmarking computer applications.

During 2011-12, the Division met all its statutory, R&D and specialist advice obligations within the DARD assigned work programme and, in addition, had a very successful year in terms of the delivery of scientific work to a range of other government bodies, external research funders and commercial organisations.

The Division's external non grant-in-aid income for 2011-12 was significantly increased on the previous year. It is pleasing to note that the Division's newly-secured contracts in 2011-12 span a broad



range of sources – delivery of statutory services, new research contracts and specialist commercial services.

The Division has a number of significant long-term contracts and agreements for variety testing, plant breeding, environmental monitoring and pesticide usage monitoring which underpin almost half of this external income. The oldest of these is for variety testing which stretches back over 40 years. During 2011-12 we also celebrated 20 years of association of our forage grass breeding programme with the Netherlands-based Royal Dutch Barenbrug company. Our research portfolio also includes a number of shorter-term contracts for scientific services and research. This year, for example, we secured two new contracts for EU-funded research for Mushrooms "MUSHTV" under FP7 and for Willow Bioremediation "ANSWER" under INTERREG.



Gareth Burns, PhD researcher based at AFBI is presented with award for Best Theatre Presentation by John Downes, British Grassland Society President



Dr Stephen Jess at the National Ploughing Championships explaining how midges can transmit bluetongue

Biometrics and Information Systems Branch

Biometrics and Information Systems Branch (BIS) provides an integrated statistical and IT service in support of AFBI business areas and external customers; co-ordination of AFBI quality assurance and information management.

Key Services and Expertise

Statistical

- design of experiments and surveys;
- analysis, interpretation and reporting of scientific data;
- co-ordination and maintenance of the AFBI ISO9001 quality management system;
- provision of statistical courses.

IT Development

- interactive applications for DARD and the agri-food industry;
- solutions for the efficient and secure management of AFBI scientific and business data;
- management of the AFBI IT Intranet and Internet websites;
- co-ordination of AFBI information management requirements including FOI requests.

IT Systems

- management and support of AFBI IT Infrastructure;
- compliance with public sector data security and access requirements;
- accreditation of the AFBI IT Infrastructure to NICS standards;
- backup and resilience for key AFBI line-of-business IT systems.

Key Customer / Sectors

AFBI scientific and business branches
DARD and other Public Sector Organisations
the agri-food industry.

Key Achievements in 2011-2012 Year

Development of various web-based applications notably:

- Winner of Oxford Farming Conference/Royal Agricultural Society of England Science Award for PiGIS®; incorporation of auto text and email-messaging of PiGIS® reports to producers
- Online Farm Nutrient Management Calculators updated for new version of RB209
- Data processing for BVD Voluntary Eradication Scheme in ROI

- Online Honey Bee Survey 2012
- Vehicle Booking & Hazardous Substances Databases applications for Intranet
- Time Task Recording System reminder application

support to DARD including:

- Land Parcel Identification for the EU Quality Assessment Framework Exercise
- integration with FSA's Food Surveillance System for animal feeds
- Farm Business Survey and pesticide usage surveys
- Timber Production Forecasting for DARD Forest Service
- statistics consultancy to DARD Veterinary Services.

Renewal of AFBI IT Infrastructure accreditation and ISO9001 certification

Implementation of Central IT systems resilience at Newforge and VSD Stormont

600 statistical analyses for AFBI researchers and other clients including:

- multivariate analysis of rose morphology data
- dairy and beef productivity and genetics
- cereal disease data analyses
- climate data modelling of crop yields
- evaluation of Gamma Interferon testing in order to detect bovine TB
- prediction of lamb carcass pay band for commercial customer dependent on sire breed, dam breed, sex and weight
- comparison of TB detection rates for government vets and general practitioners
- preference mapping to correlate instrumental variables with sensory evaluation results for lamb meat
- various statistics analyses for NIEA Water Management Unit.

Branch Contact

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Crops, Grassland & Ecology Branch

The Crops, Grassland & Ecology Branch, located across 3 AFBI centres (Newforge, Crossnacreevy and Loughgall), conducts research into plant breeding, plant testing, horticulture, agronomy, trees, environmentally sensitive farming practices, alternative land uses and diversification options.

Key Services and Expertise

- Field stations at Loughgall and Crossnacreevy
- Statutory plant and seed testing facilities
- Plant breeding programmes for ryegrass and potatoes
- Research to support local mushroom and apple industries
- Renewable energy and bioremediation using short rotation coppice
- Agri-environment monitoring, climate change and upland ecological research.
- Variety trialling for cereals, grass and clover, forage maize and potatoes.
- Industry support directly and through CAFRE.
- Local, national and international research and advice provision across all areas of expertise

Key Customer / Sectors

- DARD for research projects and statutory work including agri-environment scheme monitoring and specialist advice
- Commercial plant breeders
- Local mushroom and apple industries
- Local grassland and arable farmers
- CAFRE advisors
- Other government departments

Key Achievements in 2011-2012 Year

- Two new AFBI-bred perennial ryegrass varieties, **Clanrye** and **Dundrum** and one Timothy variety- **Barrett**- have been added to UK and Ireland Recommended Lists.
- Updated 2011-12 Recommended Lists for cereals, grass and clover, forage maize and potatoes, growers were published in both hardcopy and on the AFBI website.
- Computer model developed to predict yields of forage maize from June temperatures



North Western Cereal Growers at an AFBI trial plot near Coleraine

- Carbon sequestration rates of 0.71 to 2 tonnes of carbon per hectare per annum were determined from the soil profile under grassland in local long-term experiments.
- A new potato seedling (**Pippa**), designed for the increasingly popular 'convenience' market, has been submitted for registration and being fast-tracked for commercial production by AFBI's commercial partner.
- A sycamore tree seed nursery was planted at AFBI Loughgall (in conjunction with Teagasc and the Future Trees Trust) as part of a genetic improvement programme for hardwood trees.
- Secured EU funding to provide research-based solutions for the mushroom industry to deal with two major diseases – *Trichoderma* and Mushroom Virus X.
- Research on intensive production systems for Bramley apples and for pears and the trialling of alternative fruit crops is ongoing with levy support from the NI fruit growers.
- A new EU- funded project, ANSWER is investigating the potential for application of sewage effluent or landfill leachate to short rotation coppice willow.

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Plant Health And Environmental Protection Branch

Plant Health and Environmental Protection Branch conducts research into crop protection, plant product analyses and the impact of agriculture on the environment. A broad range of scientific expertise covers plant pathology, plant physiology, entomology, nematology, microbiology, plant physiology, electron microscopy, molecular biology and material science. Staff provide statutory and non-statutory disease diagnosis and specialist technical advice to policy-makers and industry in the area of plant and animal health.



P. ramorum in infected larch



SafeFood *Cryptosporidium* event at AFBi Newforge

Key Services and Expertise

- Agri-environment monitoring for pesticide usage survey (PUS).
- Renewable energy and bioremediation using short rotation coppice.
- Plant health in field and horticultural crops.
- Pest control strategies including predators, parasitoids and insect vectors.
- Abiotic stress management
- Development of plant nano-materials for functional applications.

Key Customers / Sectors

- Statutory testing, R&D and specialist advice for DARD.
- Local agriculture, horticulture and forestry.
- Amenity turf sector
- Food, biomaterials & agrochemical industries.
- Other government departments and CAFRE advisors.

Key Achievements in 2011-2012 Year:

During the year 7 DARD projects have been approved:

1. Detection and epidemiology of *Phytophthora ramorum*.
2. Molecular diagnostics for plant pathogens.

3. Production of an improved control strategy for non-endemic pathogenic bacteria of potato
 4. Evaluating and safeguarding earthworm ecosystem services to agricultural production.
 5. Production of new diploid forage grasses by microspore culture.
 6. A review of pest management practices in Northern Ireland.
 7. Prevalence, seasonality and management of insect vectors of animal diseases.
- **Biostimulants:** Many plant derived materials can reduce stress caused by biotic and abiotic factors in crop plants. A successful FP7 project (BIOFACTORS) will start in September 2012 to study the integrated action of soil-plant-microbe relationships. A collaborative project with two commercial companies funded by DARD's Research Challenge Fund is aimed at delivering seed treatments for reducing biotic and abiotic stresses.
 - **Grass biorefining:** Pilot scale nanocellulose production trials of nanocellulose have been successfully completed. A collaborative agreement with Queen's University Belfast has been established to initiate studies on high strength composite products. Production trials of polyethylene/nanocellulose composites are in progress.
 - **Pesticide usage:** AFBi continues to monitor crop pesticide usage for the UK Chemicals Regulation Directorate. AFBi have also initiated a contract with Pesticide Control Service in the ROI to provide training and support for the conduct of annual pesticide usage survey.

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AGRICULTURE, FOOD AND ENVIRONMENTAL SCIENCE DIVISION

The Agriculture, Food and Environmental Science Division undertakes statutory testing and monitoring, and basic, strategic and applied research relevant to efficient and sustainable farming, food and fisheries, while conserving and enhancing the terrestrial and aquatic environment. During 2011-2012, the Division provided a wide range of accredited statutory testing and other services in the areas of food microbiology, food chemistry, fish and shellfish fisheries and the environment, for a wide range of public and private sector customers.



Sheep grazing at AFBI Hillsborough

Specialist advice in support of policy formed a significant part of the Division's work for DARD and other government departments. Notable examples included key support to DARD on Less Favoured Area designation to meet EU obligations, and supporting the DARD Minister in the annual fisheries quota negotiations in Brussels.

Important research and development projects carried out in the Division focussed on sustainable farming systems, greenhouse gas emissions from agriculture, water and soil quality and nutrient management, food quality and safety and marine resources. Much of this research was carried out collaboratively with partners located nationally and internationally, including throughout Europe and Asia, and also in collaboration with local industry. The Division's research funding base continued to develop strongly during the year with funders including the DARD Research Challenge Fund, AgriSearch, the Department of Agriculture, Food and the Marine in Ireland, DEFRA, INTERREG, European Fisheries Fund and EU Framework 7.



Chief Minister of the Indian state of Nagaland visits AFBI

The Division's success in drawing funding from a wide range of research funding sources emphasises the excellence of AFBI science, the strengths of our research collaborations and the value of our research to the end user.

The AFBI marine research vessel, the R. V. Corystes continued to deliver a busy schedule of marine survey and research work, mainly in support of DARD marine fisheries responsibilities under the CFP, but increasingly for other customers. Significant external funding for Corystes in 2011-12 came from survey work carried out for DEFRA's Centre for Environment, Fisheries and Aquaculture Science (Cefas) and also seabed mapping under an INTERREG-V award (Inis-Hydro)

During the year over 60 scientific papers from the Division were published in high impact scientific journals. A large number of technology transfer events were also held, including on-farm visits in association with AgriSearch, a technical seminar on culling methods for epizootic disease control and an event on high pressure processing of food. Funding for collaborative studies with food industry partners included a SPARK Award from the Technology Strategy Board and several Innovation Vouchers awarded by Invest NI.

The Division hosted visits by the DARD Minister, the DEFRA Farm Minister, the EU Commission, the EU Parliament Agriculture Committee, and several MEPs and MLAs. The Division also participated in a visit by HRH the Prince of Wales to Kilkeel, when AFBI scientists explained work being carried on jointly with the fishing industry to improve selectivity of fishing gears and on proposals for new research on Irish Sea ecosystems.

Agriculture Branch

The principal focus of Agriculture Branch is scientific research to underpin sustainable livestock and land-based renewable energy systems. Our research is conducted at the 310-hectare AFBI Hillsborough farm with its specialised experimental facilities including the Environment and Renewable Energy Centre. Our resources are increasingly used in collaborative studies with multidisciplinary teams covering environmental, animal health and welfare, food quality and soil chemistry issues. 'On-farm' trials are an ongoing feature of several of the research programmes, helping to further promote the timely uptake of valuable research findings by the industry.



Irish Farm Buildings Association visit to AFBI Hillsborough

Key Services and Expertise

- Extensive range of facilities and scientific expertise in designing and conducting scientific studies related to sustainable livestock systems
- Environment and Renewable Energy Centre to evaluate the relative merits of land-based renewable energy technologies.
- Accredited laboratory facilities for the analysis of feed and forage samples.

Key Customers / Sectors

The main customers of Agriculture branch include:

- EU and government organisations such as DARD, DEFRA and the Department of Agriculture Food and the Marine (ROI).
- Non-government funding bodies such as AgriSearch and Pig Regen Limited
- Local and international commercial companies
- In addressing the research objectives of DARD and our other customers, we provide a sound, scientific basis for government policy on agriculture and the environment and also underpin innovation in the agri-food sector.



Dr Alistair McCracken, Minister Michelle O'Neill and Dr Lindsay Easson at the Renewable Energy Centre

Key Achievements in 2011-2012 Year:

- Research infrastructure developments have led to an increased capacity to monitor greenhouse gas emissions from livestock. In addition a programme of refurbishment for farm buildings commenced.
- Over the year we hosted visits from the DARD Minister, DEFRA Farm Minister, EU Commission, EU Parliament Agriculture Committee, MEPs and MLAs.
- Series of leading scientific and technical exchange events hosted during the period including:-
 - British Grassland Research Conference
 - Technical seminar on culling for epizootic disease control in the poultry industry.
 - Climate Change Committee meeting on the appropriateness of a Climate Change Bill for Northern Ireland.
 - Seven on-farm research events held in association with AgriSearch.
 - Range of agri-food and renewable industry groups visited Hillsborough over the year (over 100 groups).
- 21 papers were published in refereed high impact scientific journals. In addition, 42 conference papers were produced along with 43 press articles.
- EU Framework 7 project on dairying commenced and we are partners in a pig and poultry EU project to commence in 2012/13.

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Research in the Agri-Environment Branch (AEB) addresses land and nutrient management issues to make appropriate and efficient use of resources, while protecting the environment. The integrated research effort covers the impact of nutrients used by agriculture on air, soil and water quality.

Key Services and Expertise

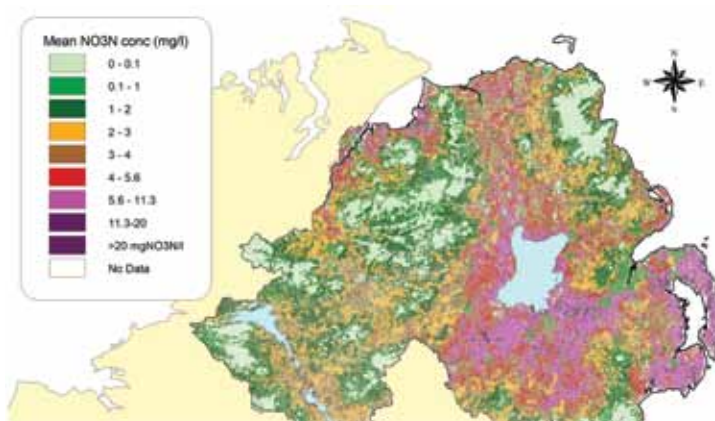
- Improving nutrient management and reducing N and P surpluses in intensive grassland based farming systems.
- Evaluating management options to lower greenhouse gas emissions (nitrous oxide) from fertilisers and manures.
- Expertise in stable isotopes (^{15}N) to investigate nitrogen transformations in soils to lead to improved fertiliser and manure management.
- Monitoring eutrophication of surface waters in Northern Ireland and apportioning the contribution of agriculture to nitrogen and phosphorus losses.
- Defining water quality targets in catchment studies
- Evaluating management options for lowering nutrient losses from soil to water, establishing pathways of loss and critical source areas.
- Expertise in geographic information systems (GIS) to derive nutrient export coefficients by land cover class and soil type.
- Understanding the role of grassland soils in sequestering carbon.

Key Customers / Sectors

Research within the Branch is primarily undertaken for the Department of Agriculture and Rural Development (DARD) and other Government organisations to provide a sound, scientific basis for government policy on agriculture and the environment. The objectives of the research are strongly influenced by legislation, both national and by EU directives, adherence to which is critical to maintaining national and international markets for Northern Ireland produce.

Key Achievements in 2011-2012 Year:

- Key research programmes on greenhouse gas emissions, water quality, soil quality



Mean diffuse nitrate-N concentrations in the Northern Ireland river network

and nutrient management, were progressed with 27 publications in refereed high-impact scientific journals and 37 articles in conference proceedings.

- Provided specialist support to DARD on Less Favoured Area re-designation, using biophysical criteria and quality assurance of the DARD Land Parcel Information System (LPIS) to meet EU obligations.
- Lead partner in an INTERREG IVA project (DOLMANT) to develop ecological lake management tools to help Ireland/Northern Ireland meet its commitments under the Nitrates Directive and Water Framework Directive, especially in relation to cross border shared aquatic resources.
- Continued experimental work, funded by DEFRA and the Devolved Administrations, to improve the UK inventory of greenhouse gas emissions from agriculture, in association with AFBI colleagues and UK collaborators.
- Continued as a partner in the DAIRYMAN INTERREG IVB project - an initiative aimed at improving the competitiveness and ecological performance of dairying in North West Europe.
- Maintained international collaboration with Chinese and other overseas Universities and Research Institutes.

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Fisheries and Aquatic Ecosystems Branch



Geraldine Brady examining fishery samples with Minister Michelle O'Neill in the wet lab aboard RV Corystes

AFBI's Fisheries and Aquatic Ecosystems Branch (FAEB), carries out R&D, monitoring and technology transfer, supporting the sustainable management of fisheries and aquatic resources in Northern Ireland. The Branch undertakes work centred on four main themes, these being marine fish stock assessment, ecosystem health, coastal zone science and freshwater fisheries management.

Key Services and Expertise

FAEB scientists are expert in a wide range of fields, including fish population dynamics, aquatic ecosystems, environmental monitoring and benthic ecology.

- Laboratory facilities include marine chemistry analyses, fish ageing, phytoplankton identification and molecular ecology.
- Our 53m research vessel (R.V. Corystes) is equipped with state of the art technology, including multibeam sonar for seabed mapping, together with a range of specialised fish survey equipment.
- A network of moored instruments provides real-time monitoring of environmental conditions in our sea loughs and adjacent seas and provides

long term data on key environmental variables.

- Freshwater fisheries teams have the capability to assess fish stocks in any of Northern Ireland's lakes and rivers. FAEB is available to respond to freshwater pollution incidents.

Key Customers / Sectors

- Local, national and European governments and government agencies.
- Local and international fishery agencies and organisations.
- Stakeholders (including the fishing industry).
- Local authorities
- The private sector.

Key Achievements in 2011-2012 Year:

- AFBI data demonstrating the healthy state of our Nephrops (Dublin Bay prawn) stocks was deployed by the DARD Minister to successfully oppose large cuts in total allowable catches (TACs) being proposed for 2012 by the European Commission.
- Lead role at UK level in the development of indicators to assess the state of plankton in coastal waters in compliance with the Marine Strategy Framework Directive.
- Contract to provide statutory analysis to the Food Standards Agency, monitoring the occurrence of toxin producing species of marine algae in coastal waters of Northern Ireland
- A new programme to develop a scientific strategy for the sustainable development of Northern Ireland's inshore fisheries was funded by the European Fisheries Fund.
- Commenced work on INIS Hydro, a major seabed mapping initiative funded by INTERREG . The project was launched by the DARD Minister in July 2011.
- Key scientific evidence was provided to DCAL Minister in support of urgent fishery management changes to protect salmon facing poor survival at sea.

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Food Chemistry Branch

Food Chemistry Branch provides innovative research and development, analytical and diagnostic services and specialist advice on the chemistry of food and Northern Ireland.

Key Services and Expertise

Research is conducted on factors affecting the quality of foods, involving sensory and consumer evaluation of eating quality, nutritional quality and the science of flavour, texture, colour and composition. While there is a focus on meat and dairy products, other foods such as fruit and vegetables are also studied. Topics also under investigation are spectroscopic techniques for quality prediction and the fate of contaminants during processing and cooking.

Analyses are conducted of organic compounds, heavy metals and radionuclides in food, animal feeds and environmental samples. Food Chemistry Branch is a contributor to contingency plans for DARD and other government departments in case of emergencies.

Specialist training is provided on these subjects to visitors from industry and overseas.

Key Customers / Sectors

There is an increasing awareness of the importance of food for economic development and to meet the demands of a growing population. Research and analyses are conducted for industry, DARD and other government departments and bodies, in Northern Ireland and Great Britain.

The red meat industry is a key sector for Northern Ireland. During 2011-12 research has been conducted for four of the five main meat plants within NI. Two newly approved DARD / LMC-funded research projects will study the reasons for differences in eating quality between dairy versus beef breeds and the impact of grass fed and outdoor rearing on vitamins in beef and milk. The dairy industry is also of considerable value to the NI economy and a further DARD / industry project is investigating the potential to increase the omega-3 fatty acids in a NI-produced cheese.

Key Achievements in 2011-2012 Year:

In addition to funding from DARD, Food Chemistry Branch brought in an additional £638k funding



during 2011-12. In collaboration with Teagasc and University College Dublin, Food Chemistry Branch contributed to four research proposals submitted to DAFM. Discussions are being held with collaborators and funding organisations on further funding from NI, GB, Australia, New Zealand and USA.

During 2011-12, Dr Ann Fearon visited Kurdistan where she represented AFBI on a trade mission led by Arlene Foster MLA, and a joint venture with University of Mosul is under discussion. Dr Linda Farmer was invited to speak at beef conferences in Warsaw, Paris and Dublin.

The Branch has been pleased to welcome visitors from companies from Northern Ireland, GB, New Zealand and Australia, together with scientists and students from around the world.

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Members of the Northern Ireland trade mission pictured with Minister Arlene Foster, the Kurdistan Minister for Agriculture and Ann Fearon of AFBI

Food Microbiology Branch

Food Microbiology Branch strives to increase the competitiveness of the agri-food industry through the provision of innovative research, analytical and diagnostic services and specialist advice of the highest quality and value. The Branch is the UK National Reference Laboratory for milk and dairy products and is also a designated laboratory for animal protein testing for the presence of *Salmonella* spp in Northern Ireland.

Key Services and Expertise

- Analytical services include statutory testing of food, water and animal feed to comply with Northern Ireland and EU food safety and hygiene legislation. Most of these services are accredited to ISO 17025:2005.
- Expertise in monitoring hygiene of meat processing plants.
- Expertise in novel food processing methods, especially the use of high hydrostatic pressure (HPP).
- Research is focussed on (i) the isolation, identification and typing of foodborne pathogens such as *Campylobacter*, *Mycobacterium avium* subsp. *paratuberculosis*, *Mycobacterium bovis*, *Salmonella* spp., pathogenic *E. coli*, *Listeria* spp. and *Clostridium botulinum* and (ii) survival and growth of pathogens in food processing environments. All research is accredited to ISO 9001:2008.
- Specialist facilities include:
 - High pressure processing facility available for product development work and as a Toll service for industry.
 - Containment level 3 laboratory.

Key Customers / Sectors

- The main customer for the statutory testing services is the public sector.



FMB hosts to Spanish summer placement student, Jara Jeronimo under the EU Universem programme

- Surveys on the microbiological safety of foods are undertaken on an all-island and GB basis on behalf of other public bodies.
- Confidential contracts, using specialist Branch expertise and services, are conducted on behalf of industry (local, national and international). In 2011-12 these included contracts with clients from the dairy, meat, poultry, seafood, fruit and vegetable sectors.

Key Achievements in 2011-2012 Year:

- New contracts focussed on pathogens such as *Campylobacter* and *Listeria* in the agri-food chain were initiated, with funding from various organisations including DARD, the Food Standards Agency and industry.
- Industry collaborative studies on microwave volumetric heating led to a SPARK award from the Technology Strategy Board.
- Thirty-three different companies used the high pressure facility, processing over 26 different foods.
- The branch hosted a one-day HPP event in October 2011.
- Three Innovation Vouchers awarded from Invest NI used for collaborative projects with local SMEs.
- New DARD and industry co-funded project looking at optimisation of the quality of a novel reduced fat Cheddar cheese fortified with Omega-3 fatty acids.

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Dr Margaret Patterson delivers keynote lecture at the 2011 Beijing International Conference on HPP technology

AGRICULTURAL AND FOOD ECONOMICS BRANCH



Agricultural and Food Economics Branch (AFE) has an established national and international reputation for providing high quality socio-economic research to support decision making in the policy, NGO and private sectors. The programme encompasses: sustainability of agri-food systems; environment and climate change; rural development; and policy impact analysis

Key Services and Expertise

State of the art economic modelling within AFE includes:

- Bio-economic farm business models which identify optimal farm business strategies in a changing market and policy environment;
- Non-market valuation methods which explore preferences for environmental and other public goods and quantify monetary values;
- Household decision making econometric models which explore labour supply, time use and human capital investment at the household level;
- Input-output and computable general equilibrium models which evaluate the linkages between economic sectors, interactions between economy and environment and the wider economic impacts of changing agri-food policies;
- Partial equilibrium models which evaluate the sectoral impact of agri-food policy reforms.

Key Customers / Sectors

AFE research provides an evidence base in relevant and accessible formats for stakeholders via policy and practice briefs, reports, research papers, seminars and tailored knowledge transfer events. In 2011-12 the main customers for AFE research were: DARD; Defra; SEERAD, Scotland; and the Environment & Countryside Department, Wales. AFE research covers the dairy, beef, sheep meat, pigs, poultry, cereals, oilseed and liquid biofuel sectors as well as the rural environment and rural society.

Key Achievements in 2011-2012 Year:

- Analysis on the linkages between the energy, biofuel and agricultural sectors in the EU and the impact on the UK agricultural sector of a range of input and output taxes designed to reduce greenhouse gas emissions.
- The incorporation of a Greenhouse Gas sub-model within a microeconomic model of the UK agricultural sectors, enabling the GHG emissions associated with different policy regimes to be quantified.
- Survey of leading food firms in Northern Ireland was conducted focusing on education, training and skills.
- Survey of rural and urban households across Northern Ireland was carried out to examine differences in access to key public services.
- Quantification of the multiplier effects of agricultural support policies on the wider economy of Northern Ireland.
- A structural analysis of greenhouse gas emissions within the food-supply chain of Northern Ireland.
- Eight new research projects fully approved under DARD's Evidence and Innovation research commissioning process.

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ACCOUNTS

Remuneration Report

Chairman and Board Members

The Chairman is appointed for a fixed period of four years, the Deputy Chair for three years and the Board members are appointed for a fixed period of three or four years. Thereafter they are re-appointed in accordance with the Code of Practice.

The remuneration of the Board is set by DARD. Increases are calculated in line with the recommendations of the Senior Salaries Review Body. There are no arrangements in place for the payment of a bonus. Neither the Chairman nor any Board Member receives pension contribution from AFBI or DARD. AFBI reimburses the Chairman and Board members for any incidental expenses incurred for carrying out their duties relevant to the organisation.

Details of remuneration of the Chairman and Board Members

In 2011/2012, the remuneration for members of the Board was-

	2011/12		2010/11	
	Salary (to nearest £1,000)	Benefits in kind (to nearest £100)	Salary (to nearest £1,000)	Benefits (to nearest £100)
Mr Seán Hogan, Chairman	25	-	25	-
Prof. David McDowell	10	-	10	-
Mr Kieran Campbell	-	-	5	-
Dr Michael Hollywood	-	-	6	-
Prof. Grace Mulcahy	4	-	4	-
Prof. Stewart McNulty	4	-	4	-
Mr Jim Noble	4	-	5	-
Mr John Rankin	6	-	5	-
Mr Michael Walker	4	-	4	-
Mr Trevor Hinds	6	-	6	-
Mr Seamus McCaffrey	5	-	4	-
Mr Alan McKeown	4	-	5	-
Mrs Hilda Stewart	5	-	4	-
Mr Bob McCann	6	-	-	-
Mrs Hilary McCartan	5	-	-	-

The following members completed their term of office on 31 March 2011:

Mr Kieran Campbell
Dr Michael Hollywood

The following members completed their term of office on 31 March 2012:

Prof. David McDowell
Mr Jim Noble
Mr Michael Walker
Prof. Stewart McNulty
Prof. Grace Mulcahy
Mr John Rankin

Sub-committees of the Board

The following sub-committees continued to operate during the year:

Audit Committee

Mr Bob McCann, Chair	£1,846
Mr Trevor Hinds	£1,846
Mr John Rankin	£1,846

The Audit Committee advises the Board and Accounting Officer on the issues of risk, internal control, governance and any material items affecting the accounts.

Remuneration Committee

Prof. David McDowell, Chair*	-
Prof. Grace Mulcahy	£313
Mr Jim Noble	£313

* Prof David McDowell, Deputy Chair of AFBI Board does not receive any remuneration for chairing the meetings of the Remuneration Committee.

The role of the Remuneration Committee is to advise the AFBI Board in respect of the remuneration of members of the Senior Management Team (SMT) and to provide recommendations to the Board on the implementation of AFBI's Rewards to Staff incentivisation scheme. Whilst the terms and conditions of employment and remuneration of all AFBI employees are in accordance with the overall terms and conditions of the NICS, as described above, any proposed changes to the overall framework are also subject to review and scrutiny by this Committee.

AFBI Board Strategy Sub-Committee

Mr Michael Walker, Chair	No payment as Committee meets on same day as Board meeting.
Prof Stewart McNulty	No payment as Committee meets on same day as Board meeting.
Mr Alan McKeown	No payment as Committee meets on same day as Board meeting.

The role of the AFBI Board Strategy Sub-Committee is to assist the Executive in developing a Science Strategy for AFBI. In particular, to:

- Identify and prioritise areas of existing scientific work which are of strategic importance to AFBI
- Identify and prioritise areas of existing scientific work which are of lower strategic importance to AFBI and which could therefore be reduced or ceased in order to transfer resources to work of higher priority.

AFBI Board Finance Sub-Committee

Mrs Hilary McCartan, Chair	£1,252
Mrs Hilda Stewart	£1,252
Mr Seamus McCaffrey	£1,252

The role of the AFBI Board Finance Sub-Committee is to support the Board in its responsibilities for the oversight of financial management including, in particular, the review of financial plans and budgets as well as financial monitoring.

Chief Executive and Senior Management Team

Remuneration Policy

At present, the remuneration of the Chief Executive Officer and the Deputy Chief Executive Officers is set in accordance with the Senior Civil Service (SCS) in Northern Ireland which, in turn, is set by the Prime Minister following independent advice from the Review Body on Senior Salaries. The pay award for staff in the Senior Civil Service is comprised of two elements – a base pay uplift and a non-consolidated bonus, both of which are entirely performance based.

At present, the remuneration of the Acting Head of the Business Support Unit is set in accordance with the pay award negotiated with the trade unions for all non-industrial staff in the Northern Ireland Civil Service.

Service contracts

Appointments in AFBI are made in accordance with the Civil Service Commissioners' Recruitment code which requires appointments to be made on merit on the basis of fair and open competition but also includes the circumstances when appointments may otherwise be made. Policy relating to notice periods and termination payments is contained in the Northern Ireland Civil Service (NICS) Staff Handbook.

Duration of notice periods

At present, recruits or promotees to the analogous Senior Civil Service posts in AFBI are required to give three months notice of resignation. The Institute reserves the right to introduce a longer period of notice for individual posts up to a maximum of six months and incumbents will be notified accordingly. This may be likely where the recruitment of the replacement is likely to be a protracted process.

At the time of resignation, the Institute may, by agreement with the member of staff concerned, agree to waive the required notice.

Where the Institute is of the opinion that the appointee is unfit to continue in post or is incapable of adequately performing the duties of the post, it can terminate the appointment with due notice as per the NICS Staff Handbook/Terms and Conditions.

Termination payments

If for any reason other than disciplinary dismissal, the minimum period of notice cannot be given, the member of staff will receive compensation in lieu of the unexpired period of notice. Compensation is not payable when the date of leaving is mutually agreed, for example, in cases of flexible early retirement, approved early retirement, voluntary redundancy or where staff resigns before the end of the notice period.

Salary and Pension Entitlements

The following sections provide details of the remuneration and pension interests of the Senior Management Team of the Institute.

(a) Remuneration (Audited)

	2011 / 2012		2010 / 2011	
	Salary (to the nearest £1,000)	Benefits in kind (to the nearest £1,000)	Salary (to the nearest £1,000)	Benefits in kind (to the nearest £1,000)
Dr S G McIlroy, CEO ¹	-	-	0 - 5	-
Dr M Camlin, DCEO ²	35 - 40	-	50 - 55	-
Dr S Neill, DCEO ³	-	-	5 - 10	-
Prof S Kennedy, CEO ⁴	80 - 85	-	80 - 85	-
Dr A Gilmour DCEO (Acting) ⁵	70 - 75	-	70 - 75	-
Dr D Bryson DCEO (Acting) ⁶	70 - 75	-	70 - 75	-
Mr Joel Ferguson Head of BSU (Acting)	55 - 60	-	55 - 60	-
Dr J Davis ⁷	10 - 15	-	-	-
Dr W Crozier ⁸	10 - 15	-	-	-
Dr A Carson ⁹	5 - 10	-	-	-
Band of Highest Paid Director's Total Remuneration	80 - 85		80 - 85	
Median Total Remuneration	27,633		27,112	
Ratio	2.99		3.04	

¹ Dr George McIlroy was absent on long term sick leave from 30 November 2009.

He subsequently retired on medical grounds on 19 April 2010.

² Dr Camlin took partial retirement on 31 August 2010.

³ Dr Neill was ill-health retired on 31 May 2010.

⁴ Professor Seamus Kennedy was acting Chief Executive Officer and Accounting Officer from 16 December 2009 to 16 January 2011.

He was appointed Chief Executive Officer and Accounting Officer on 17 January 2011.

⁵ Dr Arthur Gilmour retired on 10 October 2011.

⁶ Dr David Bryson retired on 5 April 2012.

⁷ Dr John Davis was Acting DCEO from 10 October 2011 to 10 December 2011.

⁸ Dr Walter Crozier was Acting DCEO from 11 December 2011 to 11 February 2012.

⁹ Dr Alistair Carson was Acting DCEO from 12 February 2012 to 31 March 2012.

Salary:

Salary includes gross salary; performance pay or bonuses and any allowance that is subject to UK taxation. This report is based on payments made by the Institute and thus recorded in the accounts.

Benefits in kind:

The monetary value of benefits in kind covers any benefits provided by the employer and treated by the Inland Revenue as a taxable emolument.

(b) Pensions (Audited)

Name	Real increase in pension	Real increase in lump sum	Pension at end date	Lump sum at end date	CETV at start date	CETV at end date	Employee contribs. and transfers in	Real increase in CETV funded by employer
	To nearest £'000				To nearest £'000		To nearest £	To nearest £'000
Dr M Camlin*	(0-2.5)	7.5-10	30-35	205-210	816	813	544	(33)
Dr S Kennedy	2.5-5	7.5-10	30-35	95-100	552	664	1,224	64
Dr A Gilmour	(0-2.5)	(0-2.5)	30-35	100-105	728	725	559	(10)
Dr D Bryson	(0-2.5)	(2.5-5)	30-35	100-105	747	790	1,061	(21)
Mr J Ferguson	0-2.5	-	5-10	-	20	30	2,040	6
Dr J Davis	0-2.5	0-2.5	25-30	80-85	629	642	172	8
Dr W Crozier	0-2.5	0-2.5	20-25	65-70	441	453	176	8
Dr A Carson	0-2.5	0-2.5	10-15	35-40	168	173	124	3

Notes: Figures in brackets are negative.

There were some discrepancies from last year due to Civil Service Pensions not having an interface and accepting salaries at end date as the pensionable pay which was not necessarily the case. This year's figures are now correct. This along with the change from Retail Prices Index (RPI) to the Consumer Price Index (CPI) as the measure used to update Civil Service pensions explains for the most part the negative 'real increases' in pensions, lump sums and CETV.

During the year, three individuals left on ill-health grounds; the accruing superannuation liabilities amount to £11,660.

Accrued pension and lump sum as at 31 March 11

This is the pension the individual would receive if 31 March 11 were their last day of service. If the individual is in premium or nuvos then they will not receive an automatic lump sum and therefore there is no lump sum to disclose. The accrued pension and lump sum includes any benefits that have accrued from the individual buying added years, added pension or transferring in benefits from another scheme. If a member has a preserved award from a previous NI Civil Service employment, this is included in the calculations.

Real increase in pension and lump sum

This is the increase in the value of the pension over the year taking account of inflation.

Members of premium and nuvos do not automatically receive a lump sum and so there is no disclosure in respect of this.

Members of classic and classic plus receive an automatic lump sum and this has been disclosed.

Cash Equivalent Transfer Values (CETV)

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies.

The CETV figures include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the Civil Service pension arrangements. They also include any additional pension benefit accrued to the member as a result of their purchasing additional pension benefits at their own cost. CETVs are calculated within the guidelines and framework prescribed by the Institute and Faculty of Actuaries and do not take account of any actual or potential reduction to benefits resulting from Lifetime Allowance Tax which may be due when pension benefits are drawn.

The actuarial factors used in calculating CETVs were changed during 2010, due to changes in demographic assumptions and the move from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI) as the measure used to update Civil Services pensions. As a result the CETV in this years report for 31/3/10 will not be the same as the corresponding figures shown in last year's report.

Real increase in CETV

This reflects the increase in CETV effectively funded by the employer. It does not include the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

Civil Service Pensions

Pension benefits are provided through the Civil Service pension arrangements. From 1 October 2002, civil servants may be in one of three statutory based 'final salary' defined benefit schemes (Classic, Premium and Classic Plus). The schemes are unfunded with the cost of benefits met by monies voted by Northern Ireland Assembly each year. Pensions payable under Classic, Premium and Classic Plus are increased annually with changes in the Retail Price Index. New entrants after 1 October 2002 may choose between membership of premium or joining a good quality 'money purchase' stakeholder arrangement with a significant employer contribution (partnership pension account).

Employee contributions are set at the rate of 1.5% of pensionable earnings for Classic and 3.5% for Premium and Classic Plus. Benefits in Classic accrue at the rate of 1/80th of pensionable salary for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement. For

Premium, benefits accrue at the rate of 1/60th of final pensionable salary for each year of service. Unlike Classic there is no automatic lump sum (but members may give up (commute) some of their pension to provide a lump sum). Classic Plus is essentially a variation of Premium, but with benefits in respect of service before 1 October 2002 calculated broadly in the same way as in Classic.

The Partnership Pension account is a stakeholder pension arrangement. The employer makes a basic contribution of between 3.5% and 12.5%, depending on the age of the member, into a stakeholder pension product chosen by the employee from a selection of approved products. The employee does not have to contribute but where they do make contributions, the employer will match this up to a limit of 3% of pensionable salary in addition to the employer's basic contribution. Employers also contribute a further 0.8% of pensionable salary to cover the cost of centrally- provided risk benefit cover (death in service and ill health retirement). Further details about the Civil Service pension arrangements can be found at the website: www.civilservicepensions-ni.gov.uk

The Institute's accounting policy in respect of pensions is at Note 1 to the accounts.



Professor Seamus Kennedy MVB PhD MRCVS FRCPATH
Chief Executive and Accounting Officer

Date: 24 October 2012

Statement on Internal Control

Scope of Responsibility

As Accounting Officer, I have responsibility for maintaining a sound system of internal control that supports the achievement of AFBI's policies, aims and objectives as approved by the Institute's Minister. I am personally responsible for safeguarding public funds and the Institute's assets in accordance with the responsibilities assigned to me in Managing Public Money Northern Ireland.

The accountability arrangements within AFBI encompass stewardship, performance and compliance. Monthly Management Team and AFBI Board meetings, together with quarterly Audit Committee and Risk Management Control Group meetings, support my role as Accounting Officer.

The Purpose of the System of Internal Control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness.

The system of internal control is based on an ongoing process designed to :

- identify the principal risks to the achievement of Institute policies, aims and objectives;
- evaluate the likelihood of these risks being realised;
- assess the potential impact should they be realised; and
- manage them efficiently, effectively and economically.

The system of internal control has been in place for the year ended 31 March 2012 and up to the date of approval of the annual report and accounts, and accords with Department of Finance and Personnel guidance.

Capacity to Handle Risk

I have put appropriate procedures in place to ensure that the Institute has identified its objectives and risks and determined a control strategy for each of the significant risks. Risk ownership has been allocated to staff at the appropriate level where it is controllable and the Institute has set out its attitude to the risk to the achievement of its objectives. The Senior Management Team has ensured that procedures are in place for verifying that risk management and internal control are regularly reviewed and reported on and these activities are appropriately linked to the corporate planning and decision making process. There is a clear chain of accountability linking the senior Heads of Branch in the Divisions, the Deputy Chief Executives and myself. In formal meetings between DARD and AFBI, cross - cutting risks of both organisations have been identified. The Internal Audit teams of both DARD and AFBI have periodically carried out audits on the management of risk.

The Risk Management Strategy has been made available to all staff for guidance on the AFBI intranet and internet sites. This document sets out the necessary organisational roles and responsibilities, along with a framework of the underlying principles of the control system.

The Risk and Control Framework

AFBI now has a well established risk management framework and continues to develop its review and reporting mechanisms. Key components of AFBI's arrangements for effective risk management include:

- **Internal Audit** - AFBI Internal Auditors operate to standards defined in the Government Internal Audit Manual. Annually, the AFBI Head of Internal Audit provides me with a report on internal audit activity in the Institute. The report includes the Head of Internal Audit's independent opinion on the adequacy and effectiveness of the Institute's system of internal control with recommendations for improvement.
- **Risk Management Control Group** - this group, consisting of the Senior Management Team and Divisional Risk Co-ordinators has been set up, and meets quarterly to review all risks and to ensure compatibility between the Corporate Risk Register and the divisional risk registers. The Corporate Risk Register covers areas such as operational, financial and reputational risk and uses a scoring matrix to determine the level of control required for each individual risk.
- **Audit Committee** - the Chair of the Audit Committee reports to the AFBI Board after each meeting of the Audit Committee. The Audit Committee meets and reviews the Corporate Risk Register four times in a year. If there is any significant change to an existing risk or if a new risk were to arise in the intervening period, I would bring this to the attention of the AFBI Board at the earliest opportunity.
- **Finance Committee** - the Chair of the Finance Committee reports to the AFBI Board after each meeting of the Finance Committee. The role of the Finance Committee includes the scrutiny of financial management and holding the Executive to account for the management of financial risks.
- **Deputy Chief Executive Officers (DCEOs)** - a key component of the management of risk within AFBI is the role of the DCEOs. They hold regular meetings with their divisional management teams to review and assess risk management within the divisions and any material changes to the status of any risk is brought to the attention of the AFBI Audit Committee through the Risk Management Control Group and ultimately the AFBI Board for their approval. Risk management is a standing item at the monthly Senior Management Team and AFBI Board meetings.
- **Business Planning** - the business planning process, and individual project planning processes, takes account of risks to the achievement of objectives and these risks are recorded in the appropriate risk register with mitigating and additional management actions allocated to a responsible officer.

Through these key elements of the framework of control and the provision of an annual stewardship statement from each DCEO, the CEO is assured that the necessary controls are in place in each of the business divisions.

Management of Information Risk

As the AFBI Senior Information Risk Owner, I have received assurances from the Senior Responsible Owner (AFBI Head of IT) that adequate controls and measures are in place to enable AFBI's information systems to withstand threats to their confidentiality, integrity and availability. The Senior Responsible Owner has based his statement on the assurances received by him from the AFBI IT Security Officer (Head of IT Infrastructure and Support) in relation to IT security accreditation and, where IT legislative compliance is concerned, he has depended on the AFBI Data Protection Officer & Freedom of Information Coordinator.

Review of Effectiveness

As Accounting Officer, I have responsibility for reviewing the effectiveness of the system of internal control. My review of the effectiveness of the system of internal control is informed by the work of the internal auditors, the executive managers within the Institute who have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter. I have been advised on the implications of the result of my review of the effectiveness of the system of internal control by the Audit Committee and a plan to address weaknesses and ensure continuous improvement of the system is in place.

The Head of Internal Audit has provided me with a report on internal audit activity within the Institute during the year and an annual assurance statement. This indicates that, while overall a satisfactory system of governance, risk management and internal control is in place, there are areas for improvement. The Head of Internal Audit states that his opinion is based upon both the direct audit work performed in 2011-2012 and an evaluation of the adequacy of the Institute's risk management process.

The Institute's Internal Auditors undertook the following reviews during 2011-12 (with the level of assurance provided also shown) :

- Review of IT Systems (March 2012) - Satisfactory
- Estates Management (April 2012) - Satisfactory
- Business Continuity Planning (April 2012) - Satisfactory
- Communications (January 2012) - Satisfactory
- Income Management (June 2012) - Limited
- Budgetary Control and Management Information (June 2012) - Limited

In addition, I have considered the draft findings of a report from the Northern Ireland Audit Office (work is ongoing to agree final recommendations) and the conclusions of a 'Strategic Business Review of AFBI' conducted by KPMG

To enable me to complete this Statement of Internal Control I have also drawn on assurances received from the Head of Internal Audit in the Department of Finance and Personnel on the various components of Enterprise Shared Services including Account NI which was responsible for the Institute's transaction processing arrangements, HR Connect which is responsible for the Institute's human resource management arrangements and IT Assist which is responsible for providing IT support services in the Institute.

Enterprise Shared Services

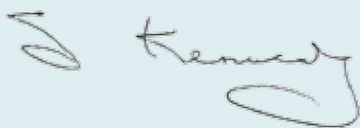
During 2011/12 DFP Internal Audit conducted seven risk based systems audits in Account NI, five risk based systems audits in HRConnect and three risk based systems audits in IT Assist. DFP Internal Audit also conducted a total of thirteen follow ups across Enterprise Shared Services. DFP Internal Audit have provided a substantial assurance in four areas and a satisfactory assurance in all other reviews. The auditors are also satisfied that management have taken positive action on all recommendations made.

Significant Internal Control issues

Through this framework and other management mechanisms, a number of significant issues have been identified. Although the Annual Internal Audit Assurance Report provided an overall 'satisfactory' level of assurance, there were some specific areas of concern identified:

- The requirement to resolve issues relating to the timeliness, usefulness and accuracy of the management information provided to the AFBI Board, the Finance Sub-Committee and the Senior Management Team and the Divisions and the Branches;
- The requirement to address the 'disconnect' between AFBI's Finance Department and AFBI's Divisions and Branches, particularly in relation to the awareness of the senior management of the financial position of their Division;
- The requirement to ensure that roles and responsibilities are clearly established for the monitoring and review of Fisheries Data Collection Framework income received in relation to AFBI's ship;
- The requirement to ensure that AFBI develops a fully documented suite of financial policies and procedures.

I have agreed action plans and associated timetables with the responsible officers to rectify these weaknesses. I monitor the implementation of these actions which are also subject to follow up reviews by Internal Audit and reported through SMT to the Audit Committee. In recognition of the concerns Identified, I have already directed additional resources towards improving internal systems and processes, particularly in relation to financial reporting and income management and intend to work closely with Internal Audit throughout the year to strengthen the overall system of internal control.



Professor Seamus Kennedy MVB PhD MRCVS FRCPATH
Chief Executive Officer

Dated 24 October 2012

Statement of Accounting Officer's Responsibilities

Under the Agriculture (Northern Ireland) Order 2004, the Institute is required to prepare for each financial year, a statement of accounts detailing the resources acquired, held, or disposed off during the year and the use of resources by the Institute during the year.

The statement of accounts is prepared on an accruals basis and must give a true and fair view of the state of affairs of the Institute, its income and expenditure, recognised gains and losses and cash flows for the financial year.

DARD has appointed the Chief Executive Officer of the Institute as Accounting Officer of the Institute, with responsibility for preparing the Institute's accounts and for transmitting them to the Comptroller and Auditor General.

In preparing the accounts, the Accounting Officer is required to comply with the Government Financial Reporting Manual and in particular to:

- a) observe the Accounts Direction issued by DARD, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis;
- b) make judgments and estimates on a suitable basis;
- c) state whether applicable accounting standards, as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the accounts; and
- d) prepare the accounts on a going concern basis.

Note 21 to the financial statements indicates that the Accounting Officer has an ongoing legal claim against the Institute which has been provided for within the financial statements. The details of this provision has not been disclosed to the Accounting Officer during the preparation of the financial statements as this may prejudice any potential settlement. Consequently the Accounting Officer has been unable to fulfil all the duties required and the Principal Accounting Officer in DARD has overseen this aspect of the preparation of their financial statements.

The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which he is answerable, for keeping proper records and for guarding the Institute's assets, are set out in the Accounting Officer's memorandum issued by DFP and published in Managing Public Money Northern Ireland.

Audit certificate

THE CERTIFICATE AND REPORT OF THE COMPTROLLER AND AUDITOR GENERAL TO THE NORTHERN IRELAND ASSEMBLY

I certify that I have audited the financial statements of the Agri-Food and Biosciences Institute for the year ended 31st March 2012 under the Agriculture (Northern Ireland) Order 2004. These comprise the Statement of Comprehensive Net Expenditure, the Statement of Financial Position, the Statement of Cash Flows, the Statement of Changes in Taxpayers' Equity and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

Respective responsibilities of the Chief Executive and auditor

As explained more fully in the Statement of Chief Executive Responsibilities, the Chief Executive is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. My responsibility is to audit and express an opinion on the financial statements in accordance with the Agriculture (Northern Ireland) Order 2004. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Agri-Food and Biosciences Institute's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Agri-Food and Biosciences Institute; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

In addition, I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income reported in the financial statements have been applied to the purposes intended by the Assembly and the financial transactions conform to the authorities which govern them.

Opinion on Regularity

In my opinion, in all material respects the expenditure and income have been applied to the purposes intended by the Assembly and the financial transactions conform to the authorities which govern them.

Opinion on financial statements

In my opinion:

- the financial statements give a true and fair view of the state of Agri-Food and Biosciences Institute's affairs as at 31st March 2012 and of the net expenditure, cash flows and changes in taxpayers' equity for the year then ended; and
- the financial statements have been properly prepared in accordance with the Agriculture (Northern Ireland) Order 2004 and the Department of Agriculture and Rural Developments directions issued thereunder.

Opinion on other matters

In my opinion:

- the part of the Remuneration Report to be audited has been properly prepared in accordance with the Department of Agriculture and Rural Developments directions made under the Agriculture (Northern Ireland) Order 2004; and
- the information given in Management Commentary and the unaudited part of the Remuneration Report included within the Annual Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

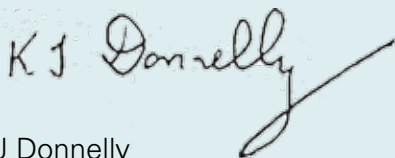
Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept; or
- the financial statements and the part of the Remuneration Report to be audited are not in agreement with the accounting records; or
- I have not received all of the information and explanations I require for my audit; or
- the Statement on Internal Control does not reflect compliance with Department of Finance and Personnel's guidance.

Report

I have no observations to make on these financial statements.



KJ Donnelly
Comptroller and Auditor General
Northern Ireland Audit Office
106 University Street
Belfast
BT7 1EU

Date: 29th October 2012

Statement of Comprehensive Net Expenditure

For the year ended 31 March 2012

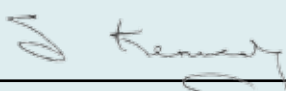
	Note	2012	2011
		£000	£000
Expenditure			
Staff costs	3	27,587	28,087
Depreciation	4	2,902	2,523
Other Expenditures	4	24,972	23,328
		<hr/> 55,461	<hr/> 53,938
Income			
Income from Activities	5	<hr/> (16,821)	<hr/> (14,733)
Net Expenditure		<hr/> 38,640	<hr/> 39,205
Notional Charges	4	1,279	837
Net Expenditure after cost of capital charge and interest		<hr/> 39,919	<hr/> 40,042
Other Comprehensive Expenditure			
	Note	2012	2011
		£000	£000
Net (gain)/loss on revaluation of Property, Plant and Equipment	6	(792)	(83)
Net (gain)/loss on revaluation of Intangibles	7	(19)	(5)
Total Comprehensive Expenditure for the year ended 31 March 2012		<hr/> 39,108	<hr/> 39,954

The notes on pages 67 to 90 form part of these accounts.

Statement of Financial Position as at 31 March 2012

	Note	2012		Restated 2011		Restated 2010	
		£000	£000	£000	£000	£000	£000
Non-current assets:							
Plant and Equipment	6	12,728		11,746		11,841	
Intangible assets	7	354		191		163	
Biological assets	8	1,269		1,108		1,019	
Total non-current assets			14,351		13,045		13,023
Current assets:							
Inventories	11	398		330		282	
Trade and other receivables	12	7,460		7,553		5,948	
Cash and cash equivalents	13	2,403		3		4	
Total current assets			10,261		7,886		6,234
Total assets			24,612		20,931		19,257
Current liabilities							
Trade and other payables	14	(5,954)		(6,696)		(10,621)	
Total current liabilities			(5,954)		(6,696)		(10,621)
Non-current assets plus/less net current assets/liabilities			18,658		14,235		8,636
Non-current liabilities							
Provisions	15	(2,363)		(2,056)		(2,110)	
Total non-current liabilities			(2,363)		(2,056)		(2,110)
Assets less liabilities			16,295		12,179		6,526
Taxpayers' equity							
SoCNE Reserve			12,813		11,156		5,341
Revaluation Reserve			3,482		1,023		1,185
			16,295		12,179		6,526

The financial statements on pages 63 to 90 were approved by the Board on 23rd October 2012 and were signed on its behalf by:


 Professor Seamus Kennedy MVB PhD MRCVS FRCPATH Date: 24 October 2012
 Chief Executive and Accounting Officer

The notes on pages 67 to 90 form part of these accounts.

Statement of Cash Flows for the year ended 31 March 2012

	Note	2012 £000	2011 £000
Cash flows from operating activities			
Net expenditure after cost of capital and interest		(39,919)	(40,042)
<i>Adjustments for non-cash transactions</i>	4		
Notional charges		1,279	837
Increase in provision for bad debts		28	86
Use of bad debt provision		(52)	-
Bad debts written off		2	4
Increase in provisions	15	644	175
Impairment of fixed assets	10	10	1
Change in value of livestock due to births		(111)	(73)
Change in value of livestock due to deaths	8	71	62
(Profit)/loss on disposal of non current assets		(21)	(9)
Profit on disposal of biological assets		(339)	(61)
Release of SoCNE reserve		(57)	(57)
Depreciation and amortisation charges	6, 7	2,902	2,523
Change in market value of livestock	8	(341)	(274)
(Increase) / Decrease in trade receivables	12	117	(1,691)
(Increase) / Decrease in Inventories	11	(68)	(48)
Increase / (Decrease) in trade payables	14	378	(4,558)
Use of provisions	15	(337)	(229)
		<u>4,105</u>	<u>(3,312)</u>
Net cash outflow from operating activities		(35,814)	(43,354)
Cash flows from investing activities			
Purchase of plant and equipment	6	(1,881)	(1,895)
Purchase of intangible assets	7	(130)	(92)
Purchase of biological assets	8	(20)	(35)
Proceeds of disposal of plant and equipment		21	20
Proceeds of disposal of biological assets		579	292
Net cash outflow from investing activities		<u>(1,431)</u>	<u>(1,710)</u>
Cash flows from financing activities			
Grants from sponsoring department		<u>40,062</u>	<u>44,827</u>
Net financing		<u>40,062</u>	<u>44,827</u>
Net (decrease)/increase in cash and cash equivalents in the period		2,817	(237)
Cash and cash equivalents at the beginning of the period	13	<u>(414)</u>	<u>(177)</u>
Cash and cash equivalents at the end of the period	13	<u><u>2,403</u></u>	<u><u>(414)</u></u>

The notes on pages 67 to 90 form part of these accounts.

Statement of Changes in Taxpayers' Equity for the year ended 31 March 2012

	Note	General Reserve £000	Revaluation Reserve £000	Donated Assets Reserve £000	Total Reserves £000
As at 31 March 2010		5,223	1,185	118	6,526
Change in Accounting Policy		118	-	(118)	-
Restated balance as at 1 April 2010		5,341	1,185	-	6,526
Changes in Taxpayers Equity 2010-11					
Grant from sponsoring entity		44,827	-	-	44,827
Net gain/(loss) on revaluation of plant and equipment		-	83	-	83
Net gain/(loss) on revaluation of intangible assets		-	5	-	5
Release of reserves to the SoCNE		(57)	-	-	(57)
Notional charges - Account NI	4	837	-	-	837
Transfers between reserves		250	(250)	-	-
Comprehensive Expenditure for the year		(40,042)	-	-	(40,042)
		5,815	(162)	-	5,653
Balance at 31 March 2011 (restated)		11,156	1,023	-	12,179
Changes in Taxpayers Equity 2011-12					
Grant from sponsoring entity		40,062	-	-	40,062
Net gain/(loss) on revaluation of plant and equipment	6	-	801	-	801
Net gain/(loss) on revaluation of intangible assets	7	-	19	-	19
Relifing adjustment	6	-	1,931	-	1,931
Release of reserves to the SoCNE		(57)	-	-	(57)
Notional charges - IT Assist	4	1,279	-	-	1,279
Transfers between reserves		292	(292)	-	-
Comprehensive Expenditure for the year		(39,919)	-	-	(39,919)
		1,657	2,459	-	4,116
Balance at 31 March 2012		12,813	3,482	-	16,295

The notes on pages 67 to 90 form part of these accounts.

Notes to the accounts for the year ended 31 March 2012

Statement of accounting policies

These financial statements have been prepared in accordance with the 2011-12 Government Financial Reporting Manual (FReM) issued by DFP and the Accounts Direction issued by DARD on 19 April 2006. The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. Where the FReM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the Agri-Food and Biosciences Institute for the purpose of giving a true and fair view has been selected. The particular policies adopted by the Agri-Food and Biosciences Institute are described below. They have been applied consistently in dealing with items that are considered material to the accounts.

Accounting convention

These accounts have been prepared under the historical cost convention modified to account for the revaluation of plant and equipment, intangible assets, biological assets and inventories.

Plant and equipment

1. The Institute does not own any land or buildings but leases them from DARD.
2. Other non-property assets are stated at current cost using appropriate indices to account for the effects of inflation. No independent valuer is involved in valuation of assets. The date of the revaluation is the reporting date of 31 March each year.
3. The threshold for capitalisation is £5,000 excluding VAT.
4. The Institute does not capitalise fixtures, fittings or office furniture.

Assets under construction are carried at cost. Items classified as "under construction" are recognised in the Statement of Financial Position to the extent that money has been paid or a liability incurred.

Donated fixed assets

Donated fixed assets are capitalised at their fair value on receipt and this value is credited to the Statement of Net Comprehensive Expenditure (SoCNE) reserve. Donated fixed assets are valued and depreciated as described below for purchased assets. Gains and losses on revaluations are also taken to the SoCNE reserve and, each year, an amount equal to the depreciation charge on the asset is released from the donated asset charged to the Statement of Comprehensive Net Expenditure. Any impairment on donated assets charged to the Statement of Comprehensive Net Expenditure is matched by a transfer from the SoCNE reserve.

Depreciation

Depreciation is charged on a straight line basis in order to write off the valuation of assets, less estimated residual value, of each asset over the expected useful life.

Assets are generally depreciated from period of acquisition and not depreciated in period of disposal. However, an exception to this practice occurs when AFBI makes a late addition in the financial year. Where the cost of the asset remains unpaid at the date the financial statements are prepared, the depreciation charge for the asset is included in the following year's financial statements.

The useful lives of tangible assets, which are reviewed regularly, are:

Plant	3 to 15 years
Equipment	5 to 20 years
Transport equipment: boats	5 to 15 years
Transport equipment: vehicles	5 to 10 years
Information technology: computers	3 to 6 years

The useful lives of intangible assets, which are reviewed regularly, are:

Software licences	2 to 10 years
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Assets under construction are not depreciated until they are commissioned.

Intangible assets

Software licences are stated at current cost using appropriate indices to account for the effects of inflation. Software assets are depreciated from the period of acquisition and not depreciated in the period of disposal.

Biological assets

Biological assets comprise cattle, sheep, pigs and goats which are used for research purposes. They are categorised according to the attributes used in the market to facilitate their valuation at the reporting date. Cattle were further grouped as follows:

- Beef cattle are grouped by gender, breed and age.
- Dairy cattle are grouped by lactation and breed.

Biological assets are valued at fair value less estimated costs at the point of sale at the end of the reporting period. This is further disclosed in accordance with IAS 41 Agriculture, by showing the aggregate value of purchases, sales, changes in value due to changes in physical conditions of the herd and changes in the value of the herd due to changes in market price.

Changes in value due to changes in physical conditions of the herd represent births which took place during the current financial year. The economic value of these transactions is debited or credited to the Statement of Comprehensive Net Expenditure when they occur.

Changes in value of the herd due to changes in market price represent the difference between the purchase cost or the value brought forward of each animal and the market value at the end of the reporting period. The difference is recognised in the Statement of Comprehensive Net Expenditure.

Inventories

Inventories are valued at the lower of cost and net realisable value.

Research and Development Expenditure

Research and development expenditures include all costs relating to the scientific and technical patent work, education and training necessary to ensure the development, start-up, and commercialisation of new or improved products or processes.

Research expenditure is recognised as an expense when incurred.

Development expenditure on new or substantially improved products is capitalised as an intangible asset and amortised through cost of sales over the expected useful life of the product concerned. Capitalisation commences from the point at which the technical feasibility and commercial viability of the product can be demonstrated and AFBI Management is satisfied that it is probable that future economic benefit will result from the product once completed. This is usually at the point of regulatory filing in a major market and approval is highly probable. Capitalisation ceases when the product is ready for launch.

Cash and cash equivalents

Cash and cash equivalents comprise of cash and deposits with commercial banks. At each year end, the carrying value of cash at bank and in hand approximates their fair value due to their short-term nature.

Operating Income

Revenue is recognised when it is probable that the economic benefits will flow to the Institute and the revenue can be reliably measured. Revenue is recognised as follows:

For sales of services, revenue is recognised in the accounting period in which the services are rendered by reference to stage of completion of the specific transaction assessed on the basis of the actual service provided as a proportion of the total services to be provided.

For sales of goods, revenue is recognised when the significant risks and rewards of ownership of the goods have passed to the buyer and the amount of revenue can be measured reliably.

Royalties, Charter of Ship and Rents receivable: Revenue is recognised on an accruals basis in accordance with the substance of the relevant agreement.

Employee benefits

Under the requirements of IAS 19 Employee Benefits, staff costs must be recorded as an expense as soon as the organisation is obligated to pay them. This includes the cost of any untaken leave that has been earned at the year end. The figure has been based on a specific report run from the Personnel system which calculates the year end balance using leave balances on the system. It is not anticipated that the level of untaken annual and flexi leave will vary significantly from year to year.

Leases

Operating lease rentals are charged directly to the Statement of Comprehensive Net Expenditure over the period of the lease. There are no finance leases.

Financial instruments

The Institute is not allowed to borrow or invest surplus funds as per the Management Statement and Financial Memorandum. Financial assets and liabilities are generated by operational activities and are not held to handle the risk profile facing the Institute in undertaking its operations.

Liquidity risk

The Institute's net revenue resource requirements are financed by the Grant in Aid agreed with the Department of Agriculture and Rural Development, as is its capital expenditure. It is not, therefore, exposed to significant liquidity risks.

Interest rate risk

All the Institute's financial assets and liabilities carry nil rate of interest and it is not therefore exposed to significant interest rate risk.

Foreign currency risk

The majority of the Institute's operations, assets and liabilities are denominated in Sterling. Therefore its exposure to foreign currency risk is not significant.

Grants receivable

Grant in aid represents net funding received from DARD and is credited to SoCNE reserves.

Provisions

The Institute makes provisions for liabilities and charges where, at the Statement of Financial Position date, a legal or constructive liability exists (i.e. a present obligation for past events exists), where the transfer of economic benefits is probable and a reasonable estimate can be made. Where the time value of money is material, the Institute discounts the provision to its present value using a standard government discount rate, which currently stands at 3.5%.

Estimated techniques used and changes in accounting estimates

Provision is made for non government debts greater than 90 days old which are considered doubtful. The effect of a change on accounting estimate is recognised by including it in the Statement of Comprehensive Net Expenditure in:

- the period of the change, if the change affects that period only;
- the period of the change and future periods, if that change affects both.

Value Added Tax

Value Added Tax (VAT) is accounted for in accordance with the Statement of Standard Accounting Practice 5, in the absence of an International Financial Reporting Standard (IFRS). An amount shown net of VAT, except where irrecoverable VAT, is charged to the Statement of Comprehensive Net Expenditure.

Third party assets

The Institute does not hold any third party assets.

Operating segments

IFRS 8 Operating Segments requires the identification of operating segments on the basis of internal reports reviewed by the Institute's Chief Decision Maker in order to allocate resources to each specific segment and assess its performance.

The Institute has completed a review against the criteria set out in IFRS 8 and considers that the disclosure format within the accounts meets IFRS 8 criteria.

AFBI's annual accounts provide more detailed information on programme expenditure than that provided to the Institutes Management Board.

Contingent liabilities

In addition to contingent liabilities disclosed in accordance with IAS 37, the Institute discloses for parliamentary reporting and accountability purposes certain statutory and non-statutory contingent liabilities where the likelihood of a transfer of economic benefit is remote, but which have been reported to the Assembly in accordance with the requirements of Managing Public Money Northern Ireland.

Where the time value of money is material, contingent liabilities which are required to be disclosed under IAS 37 are stated at discounted amounts and the amount reported to the Assembly separately noted.

Contingent liabilities that are not required to be disclosed by IAS 37 are stated at the amounts reported to the Assembly.

Reserves

Revaluation reserve

The Revaluation Reserve reflects the unrealized balance of the cumulative indexation and revaluation adjustments to assets other than donated assets and those funded by grants.

SoCNE Reserve

The SoCNE Reserve represents the Institute's total assets less total liabilities which is not represented by other reserves and financing items.

Pensions

PCSPS (NI)

Present and past employees are covered by the Principal Civil Service Pension Scheme (Northern Ireland) (PCSPS (NI)), which is a defined benefit scheme and is unfunded and non-contributory. The Institute recognises the expected cost of providing pensions on a systematic and rational basis over the period during which it benefits from employees' services by payment to the PCSPS (NI) of amounts calculated on an accruals basis.

All pension contributions are charged to the Statement of Comprehensive Net Expenditure when incurred.

Prior Period Adjustments

The donated asset reserve no longer exists. All donated assets will be recognised as income reflecting the conditions or restrictions placed on their use by the providers. The existing balance on the donated asset reserve has been added to the SoCNE reserve in the current year and previous two years (2010/11 and 2009/10 both restated).

Impending Application of Newly Issued Accounting Standards Not Yet Effective

The Institute provides disclosure that it has not yet applied a new accounting standard, and known or reasonably estimable information relevant to assessing the possible impact that initial application of the new standard will have on the Institute's financial statements.

Segmental reporting

Segmental selection is based on the organisational structure that AFBI uses to make decisions on resource allocation as well as the availability of financial information based on that structure. AFBI has four operational divisions supported by the Corporate Services Division (CSD). The operational divisions are:

Applied Plant Science and Biometrics Division (APSBD) provides statutory services including certification of monitoring for the Department of Agriculture and Rural Development (DARD) of pasture, seeds and plant health, and provides specialist advice on weeds, crop plants, varieties and disease problems. APSBD's research takes account of environmental needs and sustainable economic growth in Northern Ireland's countryside.

Agriculture, Food & Environmental Sciences Division (AFESD) provides scientific support for the growth, sustainability and competitiveness of Northern Ireland's farming, fishing and agri-food industries, and assists the industry to maintain high standards of environmental protection and animal welfare.

Veterinary Sciences Division (VSD) delivers world class veterinary science to the animal, food and fish based sectors of the agri-food industry.

Agricultural and Food Economics Branch (AFEB) carries out economic modelling exercises.

Analysis of net expenditure by segment 2011/12

	AFEB	AFESD	APSBD	VSD	CSD	Total
Gross expenditure	737	15,336	7,990	12,492	18,906	55,461
Notional charges	-	-	-	-	1,279	1,279
	737	15,336	7,990	12,492	20,185	56,740
Income	(292)	(6,477)	(1,816)	(7,818)	(418)	(16,821)
Net expenditure	445	8,859	6,174	4,674	19,767	39,919
Assets	44	7,930	2,931	7,505	6,203	24,612
Liabilities	(151)	(1,549)	(2,458)	(1,979)	(2,180)	(8,317)

Segmental reporting (continued)

Analysis of net expenditure by segment 2010/11

	AFEB	AFESD	APSBD	VSD	Corp Services	Subtotal	Other	Total
Gross Expenditure	635	15,483	7,438	12,827	14,308	50,691	3,247	53,938
Notional charges	-	-	-	-	-	-	837	837
	635	15,483	7,438	12,827	14,308	50,691	4,084	54,775
Income	(212)	(4,739)	(1,348)	(6,681)	(1,753)	(14,733)	-	(14,733)
Net Expenditure	423	10,744	6,090	6,146	12,555	35,958	4,084	40,042
Assets	54	7,036	2,716	2,209	8,916	20,931	-	20,931
Liabilities	(136)	(1,078)	(323)	(1,486)	(5,729)	(8,752)	-	(8,752)

Staff numbers and related costs

Staff costs comprise:

	Permanently employed staff		Others		Total	
	2012	2011	2012	2011	2012	2011
	£000	£000	£000	£000	£000	£000
Wages and salaries	21,244	21,545	647	738	21,891	22,283
Social security costs	1,622	1,638	-	-	1,622	1,638
Other pension costs	4,074	4,166	-	-	4,074	4,166
Sub Total	26,940	27,349	647	738	27,587	28,087
Less recoveries in respect of outward secondments	(92)	(92)	-	-	(92)	(92)
Total net costs	26,848	27,257	647	738	27,495	27,995

Pension scheme details

PCSPS (NI)

The Principal Civil Service Pension Scheme (Northern Ireland) (PCSPS(NI)) is an unfunded multi-employer defined benefit scheme but the Agri-Food and Biosciences Institute is unable to identify its share of the underlying assets and liabilities. A full actuarial valuation was carried out as at 31 March 2007. In accordance with FReM, full actuarial valuations should be carried out every four years. However, formal actuarial valuations for unfunded public service pension schemes have been suspended by HM Treasury on value for money grounds while consideration is given to recent changes to public service pensions and while future scheme terms are developed as part of the reforms to public service pension provision. The primary purpose of the formal actuarial valuations is to set employer and employee contribution rates, and these are currently being determined under the new scheme design. Details can be found in the PCSPS(NI) resource accounts.

For 2011-12, employers' contributions of £4,074,278.69 were payable to the PCSPS (2010-11 £4,165,984.10) at one of four rates in the range 18 to 25 per cent (2010-11: 18 to 25 per cent) of pensionable pay, based on salary bands. The scheme's Actuary reviews employer contributions following a full scheme valuation. The contribution rates reflect benefits as they are accrued, not when the costs are actually incurred, and reflect past experience of the scheme.

Employees can opt to open a partnership pension account, a stakeholder pension with an employer contribution. Employers' contributions were paid to one or more of a panel of appointed stakeholder pension providers. Employer contributions are age-related and range from 3 to 12.5 per cent (2010-11: 3 to 12.5 per cent) of pensionable pay. Employers also match employee contributions up to 3 per cent of pensionable pay. In addition, employer contributions of 0.8 per cent of pensionable pay, were payable to the PCSPS to cover the cost of the future provision of lump sum benefits on death in service and ill health retirement of these employees.

Two persons (2010-11: 3 persons) retired early on ill-health grounds.

Average number of persons employed

The average number of whole-time equivalent persons employed during the year was as follows.

	Total 2012	Total 2011
Permanent Staff	809	833
Other	36	35
Total	845	868

Other staff are defined as agency staff employed on a temporary contract.

Reporting of Civil Service and other compensation schemes - exit packages

	Number of Compulsory Redundancies	Number of Other Departures Agreed	Total Number of Exit Packages by cost band
<10,000	-	-	- (2010-11: -)
10,000 - 25,000	-	3	3 (2010-11: -)
25,000 - 50,000	-	1	1 (2010-11: -)
50,000 - 100,000	-	2	2 (2010-11: -)
100,000 - 150,000	-	-	- (2010-11: -)
150,000 - 200,000	-	-	- (2010-11: -)
Total number of exit packages	-	6	6 (2010-11: -)
Total resource cost	-	201,980	201,980 (2010-11: -)

Redundancy and other departure costs have been paid in accordance with the provisions of the Civil Service Compensation Scheme (Northern Ireland), a statutory scheme made under the Superannuation (Northern Ireland) Order 1972. Exit costs are accounted for in full in the year of departure. Where the Institute has agreed early retirements, the additional costs are met by the Institute and not by the Civil Service pension scheme. Ill-health retirement costs are met by the pension scheme and are not included in the table.

4. Other Expenditure

	Note	2012		2011	
		£000	£000	£000	£000
<i>Depreciation</i>					
Depreciation	6	2,799		2,454	
Amortisation	7	103	2,902	69	2,523
<i>Other Expenditure</i>					
Lease of land and buildings		6,653		6,671	
Laboratory consumables		2,288		2,149	
Ship operating costs		2,012		1,991	
Rates and water		1,824		1,219	
Irrecoverable VAT		1,346		1,218	
Contracted out services		1,238		1,178	
Other expenses		1,226		671	
Electricity		1,127		1,014	
Lab equipment maintenance and other expenses		876		1,206	
Gas		697		720	
Animal feed and veterinary expenses		669		607	
Training, conferences and library expenses		651		663	
Provision provided for in year	15	644		175	
Apparatus, glassware and minor equipment		560		408	
Royalty administration fees		497		312	
Repairs and maintenance		442		587	
Clinical and other waste disposal costs		439		364	
Travel and subsistence		285		311	
Oil		265		295	
Telephone		232		384	
Motor and tractor expenses		199		203	
Postage, printing and stationery		173		223	
Computer support		170		192	
Plants, shrubs, fertiliser		155		143	
Carbon Reduction		137		-	
Legal costs and compensation		133		116	
Marketing and advertisements		76		50	
External Audit fees		72		39	
Protective clothing		72		63	
Change in value of livestock due to deaths	8	71		62	

4. Other Expenditure (continued)

	Note	2012		2011	
		£000	£000	£000	£000
Hire of plant and vehicles		67		76	
Livestock expenses		65		62	
Internal Audit fees		44		29	
Rent of land and buildings		41		61	
Increase / (decrease) in Debt provision		28		86	
Consultancy costs		11		184	
Impairment of fixed assets	10	10		1	
Hospitality		5		4	
Bad debts written off		2		4	
(Profit)/loss on disposal of non current assets		(21)		(9)	
Release from SoCNE reserve		(57)		(57)	
Change in value of livestock due to changes in physical conditions of the herd	8	(111)		(73)	
Change in market value of livestock	8	<u>(341)</u>	24,972	<u>(274)</u>	23,328
<i>Notional charges</i>					
Notional charges			<u>1,279</u>		<u>837</u>
			<u>29,153</u>		<u>26,688</u>

In Northern Ireland, VAT cannot be reclaimed on research performed for Government Departments or on work which is grant funded. As a proportion of AFBI's work is research for Government Departments and/or is grant funded, it cannot claim back all VAT. The "Irrecoverable VAT" line is the amount of VAT which AFBI cannot claim from HMRC. This VAT expense should ideally be expensed to the various Government / grant funded projects. However, the agreed process with HMRC is complex and AFBI are currently investigating means by which it can accurately allocate the expense to individual projects.

The Institute reclassified several prior year expenditure classifications in line with NIAO audit recommendations.

5. Income

	2012	2011
	£000	£000
Income from analytical, diagnostic work and research contracts	10,171	8,267
Royalties	5,248	4,056
Sale of general produce and livestock	1,066	928
Charter of the ship	128	131
Refunds	100	1,245
Recoveries in respect of outward secondments	92	92
Rents receivable	16	14
Total	<u>16,821</u>	<u>14,733</u>

Royalty income is received gross of a 10% administration fee. The administration fee is then paid over on receipt of a VAT invoice.

The 2011 refund balance relates to VAT reclaim for period 1 April 2006 to 31 March 2010.

Fees and charges

A detailed analysis of fees and charges information is not provided as the full cost of each service provided does not exceed £1m.

Income from the Single Farm Payment has been reclassified to "Income from analytical, diagnostic work and research contracts". This resulted in a change to the prior year comparative.

6. Plant and Equipment 2011/12

	Information Technology	Plant & Machinery	Boats & Motor Vehicles	Assets Under Construction	Total
	£000	£000	£000	£000	£000
Cost or valuation					
At 1 April 2011	2,169	25,595	4,306	-	32,070
Additions	155	674	218	127	1,174
Disposals	-	-	(46)	-	(46)
Impairments	(68)	-	-	-	(68)
Revaluations	-	1,869	40	-	1,909
At 31 March 2012	2,256	28,138	4,518	127	35,039
	Information Technology	Plant & machinery	Boats & Motor Vehicles	Assets Under Construction	Total
	£000	£000	£000	£000	£000
Depreciation					
At 1 April 2011	(1,712)	(16,368)	(2,244)	-	(20,324)
Charge for the year	(190)	(2,222)	(392)	-	(2,804)
Relifing adj	-	1,665	155	-	1,820
Disposals	-	-	46	-	46
Impairments	34	-	-	-	34
Revaluations	-	(1,064)	(19)	-	(1,083)
At 31 March 2012	(1,868)	(17,989)	(2,454)	-	(22,311)
Carrying Amount					
At 31 March 2012	388	10,149	2,064	127	12,728
Carrying Amount					
At 31 March 2011	457	9,227	2,062	-	11,746
Asset financing:					
Owned	388	10,149	2,064	127	12,728
Finance Leased					-
On-balance sheet PFI contracts					-
Carrying Amount 31 March 2012	388	10,149	2,064	127	12,728

* Plant & Machinery includes a donated asset of scientific equipment with a carrying value of £4,000 at 31 March 2012.

6. Plant and Equipment 2010/11

	Information Technology	* Plant & Machinery	Boats & Motor Vehicles	Total
	£000	£000	£000	£000
Cost or valuation				
At 1 April 2010	2,195	23,354	4,238	29,787
Additions	32	2,239	17	2,288
Disposals	(113)	(30)	(13)	(156)
Impairments	-	(48)	(1)	(49)
Revaluations	55	80	65	200
At 31 March 2011	2,169	25,595	4,306	32,070
	Information Technology	Plant & machinery	Boats & Motor Vehicles	Total
	£000	£000	£000	£000
Depreciation				
At 1 April 2010	(1,512)	(14,574)	(1,860)	(17,946)
Charge for the year	(279)	(1,802)	(373)	(2,454)
Disposals	107	24	13	144
Impairments	-	23	1	24
Revaluations	(28)	(39)	(25)	(92)
At 31 March 2011	(1,712)	(16,368)	(2,244)	(20,324)
Carrying Amount				
At 31 March 2011	457	9,227	2,062	11,746
Carrying Amount				
At 31 March 2010	683	8,780	2,378	11,841
Asset financing:				
Owned	457	9,227	2,062	11,746
Finance Leased	-	-	-	-
On-balance sheet PFI contracts	-	-	-	-
Carrying Amount 31 March 2011	457	9,227	2,062	11,746

* Plant & Machinery includes a donated asset of scientific equipment with a carrying value of £61,000 at 31 March 2011.

7. Intangible assets

Intangible assets comprise of software licences.

	£000
Cost or valuation	
At 1 April 2011	593
Additions	130
Disposals	-
Impairments	-
Revaluation	35
At 31 March 2012	758

	£000
Amortisation	
At 1 April 2011	(402)
Charge for the year	(98)
Relifing adj	112
Disposals	-
Impairments	-
Revaluations	(16)
At 31 March 2012	(404)

Carrying Amount	
At 31 March 2012	354

Carrying Amount	
At 31 March 2011	191

	£000
Cost or valuation	
At 1 April 2010	491
Additions	92
Disposals	-
Impairments	-
Revaluation	10
At 31 March 2011	593

	£000
Amortisation	
At 1 April 2010	(328)
Charge for the year	(69)
Disposals	-
Impairments	-
Revaluations	(5)
At 31 March 2011	(402)

Carrying Amount	
At 31 March 2011	191

Carrying Amount	
At 31 March 2010	163

8. Biological Assets

	2012 £000	2011 £000
Livestock at Fair Value		
Valuation as at 01 April	1,108	1,019
Purchases	20	35
Decreases due to sales	(240)	(231)
Changes in value due to deaths	(71)	(62)
Changes in value due to changes in physical conditions of the herd	111	73
Changes in value due to changes in market price	341	274
Valuation as at 31 March	<u>1,269</u>	<u>1,108</u>

9. Financial Instruments

As the cash requirements of Agri-Food and Biosciences Institute (AFBI) are met through Grant-in-Aid provided by DARD, financial instruments play a more limited role in creating and managing risk than would apply to a non-public sector body. The majority of financial instruments relate to contracts to buy non-financial items in line with AFBI's expected purchase and usage requirements and AFBI is therefore exposed to little credit, liquidity or market risk.

10. Impairments

Computer hardware decreased in value by £34k during the year. £10k was debited to the Statement of Comprehensive Net Expenditure and the remaining £24k was debited to the Revaluation Reserves to reverse an existing revaluation surplus in respect of the revalued assets. In 2010/11, plant & machinery decreased in value resulting in a £1k debit to the Statement of Comprehensive Net Expenditure.

Breakdown of impairments by category

	2012	2011
	£000	£000
Computer hardware	10	-
Plant & Machinery	-	1
	<hr/> 10	<hr/> 1

11. Inventories

	2012	2011
	£000	£000
Feedstuffs and sundry stocks at Hillsborough and Stoney Road	285	206
Consumables at Newforge and Stoney Road	113	124
	<hr/> 398	<hr/> 330

12. Trade receivables and other current assets

	2012 £000	2011 £000
Amounts falling due within one year		
Trade receivables	2,676	3,610
Other receivables	626	1,029
Prepayments and accrued Income	4,158	2,914
	<hr/> 7,460	<hr/> 7,553
	2012 £000	2011 £000
Amounts owed by:		
Other Central Government bodies	2,339	2,640
Local Authorities	5	5
NHS Bodies	1	24
Public Corporations	-	17
Non Government	5,115	4,867
	<hr/> 7,460	<hr/> 7,553

Other receivables includes £546k due from HMRC. This is in relation to the recalculation of VAT returns for financial years 08/09 - 09/10 using a revised methodology agreed by HMRC.

13. Cash and cash equivalents

	2012 £000	2011 £000
Balance at 1 April	(414)	(177)
Net change in cash and cash equivalent balances	2,817	(237)
Balance at 31 March	<u>2,403</u>	<u>(414)</u>

The following balances at 31 March were held at:

Cash in hand	3	3
Cash at bank	2,400	(417)
Balance at 31 March	<u>2,403</u>	<u>(414)</u>

14. Trade payables and other current liabilities

	2012	2011
Amounts falling due within one year	£000	£000
Bank overdraft	-	417
VAT	374	111
Other taxation and social security	9	7
Trade payables	35	46
Other payables	10	7
Capital creditors	837	1,540
Accruals and deferred Income	4,689	4,568
	<u>5,954</u>	<u>6,696</u>

	2012	2011
	£000	£000
Amounts owed to:		
Other Central Government bodies	1,652	1,916
Local Authorities	2	2
NHS Bodies	-	-
Public Corporations	39	38
Non Government	4,261	4,740
	<u>5,954</u>	<u>6,696</u>

15. Provisions for liabilities and charges

	Legal £'000	Decommissioning Costs £'000	Equal Pay £'000	Early Departure £'000	Injury Benefit £'000	Total £'000
Balance at 1 April 2011	1,606	90	360	-	-	2,056
Provided in the year	426	-	-	148	223	797
Provisions not required	(143)	(10)	-	-	-	(153)
Provisions utilised in year	(337)	-	-	-	-	(337)
Balance at 31 March 2012	1,552	80	360	148	223	2,363

	Legal £'000	Decommissioning Costs £'000	Equal Pay £'000	Total £'000
Balance at 1 April 2010	1,101	100	909	2,110
Provided in the year	779	-	-	779
Provisions not required	(45)	(10)	(549)	(604)
Provisions utilised in year	(229)	-	-	(229)
Balance at 31 March 2011	1,606	90	360	2,056

Provisions have not been discounted as these relate to payments due to be paid in the near future.

Legal

This relates to personal injury legal cases and an intellectual property claim. Legal claims are assessed by independent solicitors and a provision of 100% of the likely maximum claim value is made. This percentage is to be reviewed on an ongoing basis to ensure it continues to represent a reasonable estimate of the expenditure on such claims.

Decommissioning costs

This relates to a piece of equipment which holds radioactive material and as such falls under the High Activity Sealed Radioactive Sources (HASS) Regulations 2003. The material is used by AFBI in the course of its business. The provision is required to cover the cost of compliance with HASS Regulations when the equipment is disposed of.

Equal pay

This relates to the NICS Equal Pay Settlement and revised pay scales for Administrative Assistants, Administrative Officers, Executive Officers IIs and all analogous grades. The provision was calculated by Northern Ireland Statistical Research Agency (NISRA) based on liability from 1 April 2006 when the Agri-Food and Biosciences Institute was created.

Early Departure

This relates to pension payments to staff members who took early retirement. AFBI are required to make the payments until the individuals reach 60 years of age.

Injury Benefit

This relates to payments to staff members who have suffered an impairment to earnings as a result of an injury that has been sustained within the context of one of the qualifying conditions outlined within the legislation governing the scheme, which is known as the Civil Service Injury Benefit Scheme (NI) (CSIBS(NI)). Injury benefit is paid when a qualifying injury impairs the individual's earning capacity.

16. Capital commitments

	2012	2011
	£000	£000
Contracted Capital Commitments at 31 March not otherwise included in these financial statements		
Assets under construction	88	-

17. Commitments under leases

Operating leases

Total future minimum lease payments under operating leases are given in the table below for each of the following periods:

	2012 £000	2011 £000
Obligations under operating leases comprise:		
<i>Land and buildings</i>		
Not later than one year	6,652	6,652
Later than one year and not later than five years	26,608	26,608
	<u>33,260</u>	<u>33,260</u>
<i>Photocopiers</i>		
Not later than one year	16	12
Later than one year and not later than five years	12	9
	<u>28</u>	<u>21</u>

18. Commitments under PFI contracts

The Institute had no PFI contracts during 2011/2012.

19. Other financial commitments

The Institute has no financial commitments at the year end.

20. Contingent liabilities disclosed under IAS 37

The NICS Equal Pay settlement covered the period from 1st February 2003 to 31st January 2009. As AFBI came into existence on 1st April 2006 the Equal Pay provision included in Note 15 covers the period 1st April 2006 to 31st January 2009, this is in accordance with legal advice. Any liability in relation to the period from 1st February 2003 to 31st March 2006 is subject to the outcome of any decisions which may be taken by the affected parties.

21. Related-party transactions

The Department of Agriculture and Rural Development is the sponsor department of the Institute with which it had various material transactions during the year and is regarded as a related party. DARD's executive agencies also had transactions with the Institute.

In addition the Institute had some transactions with other government departments and central government bodies. Most of these transactions have been with Northern Ireland departments and their executive agencies such as DFP (including CPD and Pensions Branch), DCAL, DOE, FSA (NI), HMRC, DEFRA & Northern Ireland Water.

Within the provisions (Note 15) there is an amount in respect of an ongoing legal claim for which the Chief Executive is a potential beneficiary.

Two members of the AFBI Board are employed by organisations to whom AFBI provides scientific research services, Dunbia and University College Dublin (UCD). In accordance with IAS 24 (2010) the transactions that occurred within the financial year and any balances at year end are shown below:

	Dunbia		University College Dublin (UCD)	
	2012	2011	2012	2011
	£000	£000	£000	£000
Revenues generated during the year	215	190	80	17
Expenditure incurred during the year	-	-	-	-
Net value of transactions at year end	215	190	80	17
	2012	2011	2012	2011
	£000	£000	£000	£000
Amount owed to AFBI	112	116	-	-
Amount owed by AFBI	-	-	-	-
Net balance at year end	112	116	-	-

Other than the above, no Board member, key manager or other related party has undertaken any material transactions with the Institute during the year.

Any other compensation payments issued to the AFBI Board in relation to IAS 19 Employee Benefits are disclosed within the Remuneration Report.

22. Third-party assets

The Institute does not hold any third party assets.

Notes

Notes

Scientific excellence in Northern Ireland... ...serving the world



AFBI's mission is to maintain and enhance its reputation as a world-class scientific institute, delivering proven value to government and other customers.

AFBI provides research and development, analytical and diagnostic services, and scientific advice in agriculture, food, animal and plant health, marine and fresh water ecosystem management and the agri-environment.

Our customers include a range of local, national and international commercial companies, Northern Ireland and United Kingdom Departments, Agencies, and associated bodies and the European Union.

We pride ourselves on the quality and breadth of our scientific expertise and maintain appropriate quality assured accreditation standards.

AFBI has various national and international reference laboratories.

AFBI maintains a cutting edge skills and technology base to fulfil its statutory obligations including provision of rapid, scientific response capabilities for DARD and other Departments during emergencies.

AFBI scientists have long standing experience and internationally recognised standards of providing evidence-based scientific advice to Government policy makers and commercial decision makers.

We are the partner / contractor of choice for many local, national and international bodies.

A major aim is to support industry by providing a "one-stop shop" for diverse specialist expertise and facilities.

AFBI's expertise includes:
Veterinary diagnostics; animal health and welfare; food science; crop and livestock systems; biometric traceability; plant breeding; biometrics and statistics; agricultural economics; renewable energy and non food crop agronomy; oceanography; fish stock management, aquatic and land based ecosystem management of natural resources.

AFBI has facilities sited across Northern Ireland which include modern laboratories and secure animal accommodation and has a purpose built marine research vessel. The facilities have "state of the art" equipment required to resolve scientific problems and produce sophisticated and reliable results.

Technological capabilities include:
molecular technologies; light and electron microscopy; mass spectrometry; pathogenesis studies; biosensor technology; seabed mapping and minimal processing technologies.

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